VANCE COUNTY TAX DEPARTMENT



SCHEDULE OF VALUES 2024

COMPONENTS OF A REAPPRAISAL

To accomplish the task of valuing all parcels within a county as of the January 1 reappraisal date, the methodology of mass appraisal rather than the methodology of single-property appraisals must be utilized. Mass appraisal is the systematic appraisal of groups of properties as neighborhoods. This is accomplished by using standardized procedures and statistical testing. In a mass appraisal system, the assessor must make valuation judgments about groups of properties rather than single properties. The assessor must be able to develop, support and explain standardized adjustments in a valuation model among use classes, construction types, neighborhoods, and other property groups. The guide used for this is the uniform schedule of values. The schedule of values is made up of schedules, standards, rules, tables, and other factors used to apply the correct value to parcels. The schedule of values serves as the county's mass appraisal model and is implemented by means of a computer assisted mass appraisal system (CAMA). Incorporated in the schedule may be building cost figures derived from national data that have been adjusted to reflect local costs, local cost studies, qualifying arms-length sales, and income and expense formulas. This schedule of values sets forth values for appropriate unit of measurement for use in appraising land and buildings. For example, land may be valued by a set amount per square foot, lot, acre, or homesite, depending on the highest and best use, while a dwelling is typically valued using an established amount per square foot. The land unit per appropriate unit of measurement also will vary depending on the neighborhood in which the land is situated. Factors that warrant adjustments are also set forth in the schedule of values for various types of property. The schedule typically authorizes adjustments to land value based on factors such as home-site size, excess acreage, road frontage, topography, zoning, the presence of easements and other factors. A county's schedule also typically prescribes ranges of characteristics and corresponding percentage adjustments for recognized factors.

Mass appraisal for ad valorem purposes entails many of the same principles as an independent fee, single-property appraisal. Mass appraisal techniques, however, emphasize valuation modules (expressed as equations, tables and schedules), standards of practice, and statistical quality control. A reassessment program consists of these subsystems:

- 1. A data management system
- 2. A sales analysis system
- 3. A valuation system
- 4. An administrative system

These subsystems are independent of each other. For example, the valuation system uses information maintained in the sales analysis and data management systems and produces output (valuations) required by the administrative system in the production of tax bills.

DATA MANAGEMENT SYSTEM

The data management system has components for collection, entry, editing, organization, conversion, storage, and security of property characteristics and ownership. Quality control of this system is very important because the accuracy of the values determined depends on the reliability of the data from which they are generated. In addition, data collection, conversion, and maintenance are the most expensive aspects of any reappraisal program. Special care must be given to the thought and planning required of managing logic to minimize cost.

Data maintenance is the protocol for creating new parcels, capturing, and valuing new construction, and making changes to the current property database. The maintenance protocol consists of three components:

- 1. County land records system: the daily creation of new parcels from the recording of "splits" (dividing of an existing parcel), combining existing parcels, and the recording of new subdivision plats feeds the second component.
- 2. Permits and inspections: as the appraisal staff receives notice of new permits and inspections, property record cards are accessed, and new data is collected. Staff receive this information and monitor the construction progress and make determinations of the percentage of construction completed as of January 1 each calendar year.
- 3. Periodic re-inspection of all properties: routine field visits are supplemented with information obtained from the latest Orthophotography and provided by property owners as part of the annual listing abstracts and requests from taxpayers for review or appeal.

SALES ANALYSIS SYSTEM

The sales analysis system has components for sales data collection, sales screening and processing, ratio studies, and sales reporting. Assessment/sales ratio studies are the primary tool for measuring mass appraisal performance. They are invaluable for monitoring appraisal results, identifying reappraisal priorities, adjusting valuations to the market, and assisting the administrative system in planning and scheduling.

Ratio studies and sales reports draw on values produced by the valuation system and on property characteristics maintained in data management.

VALUATION SYSTEM

The valuation system (CAMA) consists of mass appraisal applications of the three approaches to value and/or allows for various adjustments that recognize specific aspects of each approach. The three approaches are:

- 1. Cost Approach: requires maintenance and application of computerized cost schedules and equations, depreciation schedules, and indexing factors. This data comes from contractors, building material suppliers, etc.
- 2. Sales Comparison Approach: applications include multiple regression analysis and model building for automated comparable sales analysis.
- 3. Income Approach: will require income multipliers and overall rates. The information to generate this comes from rental, leasing, sales, etc., data provided by owners and tenants.

The optimum results of the valuation system will be to consider all three approaches to value, as appropriate to property type, and determine which method(s) produces the best results for the final appraisal. Properly executed, any of the three approaches to value will yield creditable results, however the sales comparison and income approaches are highly dependent on available data. Of the three approaches, only the cost approach can be uniformly applied with limited data.

The economy can affect the number of arm's length sales occurring in the market. A general county-wide reappraisal depends on data being available from a wide variety of sources in order to properly apply each of the three approaches to value. Even when an abundance of relevant data is available for applying the sales comparison approach and the income approach, that data may also be utilized in refining the cost approach. In the absence of relevant data prior to the final determination of reappraisal values, the cost approach becomes the more reliable approach for all property types. Below is a comparison of the three approaches to value and when best to apply them.

		INDUSTRIAL/
<u>RESIDENTIAL</u>	COMMERCIAL	SPECIAL PURPOSE
1.Sales Comparison	1.Sales Comparison	1.Cost
2.Cost	2.Income	2. Sales Comparison
3.Income	3.Cost	3.Income

THE ADMINISTRATIVE SYSTEM

The administrative system is comprised of a variety of functions and activities, each of which requires information from sales analysis, valuation, or data management systems and produces products used by the administrative system.

IN-HOUSE REAPPRAISAL

An in-house reappraisal is a major effort requiring careful preparation, the support of county management and the Board of County Commissioners, adequate time, and sufficient funds. In preparing a schedule and reappraisal, the assessor's office should include the relationship between the daily operations of the assessor's office and the reappraisal program. Adequate time to cover probable delays and contingencies to deal with unforeseen problems must be taken into consideration. Even though the reappraisal process should be viewed as separate from daily operations, existing staff, duties, responsibilities, and priorities must be modified and additional staff may be required.

In order to complete the revaluation in a timely manner, we required outside support from an NCDOR approved vendor. Upon putting out a request for proposal, we reviewed our responses and selected Vincent Valuations LLC. Vincent was tasked with data collection, developing the schedule of values, consulting, providing residential and commercial appraisal support, and appeals support. They would work alongside in-house staff in all tasks.

SUMMARY

General reappraisals of real property are required, by statutory authority, to be performed on an octennial plan (eight-year cycle). Many counties adopt a shorter cycle via a resolution by their respective County Board of Commissioners. The current trend in North Carolina is a four-year cycle for reappraisal with counties to hire and train the staff to perform an "In-House" reappraisal as opposed to "contracted" from outside the county lines.

As understood by the assessor's office, an effective reappraisal requires careful planning, a realistic analysis of the present state of the assessment records and values, and the resources needed to conduct the appraisal. As such, reappraisals are a costly, highly visible, and politically sensitive undertaking. However, since the real property staff in the assessor's office understand its own resources and the technical requirements of the task, they are committed to conducting the most fair and equitable reappraisal possible. The success of this endeavor depends on the leadership of the assessor's office, an informed public awareness, and committed management support.

For an assessor to undertake their responsibilities and duties properly, they must be familiar with the legal framework in which to perform their function. The legal frame-work sets the guidance and rules to follow for a reappraisal. Some general statues, but not all, are included in this section. Others will be included in this schedule as applicable.

STATUTORY REQUIREMENTS

GS 105-286. Time for general reappraisal of Real Property.

- (a) Octennial Cycle. Each county must reappraise all real property in accordance with the provisions of G.S. 105-283 and G.S. 105-317 as of January 1 of the year set out in the following schedule and every eighth year thereafter unless the county is required to advance the date under subdivision (2) of this section or chooses to advance the date under subdivision (3) of this section.
 - (1) Schedule of Initial Reappraisals. Division Five - 1976: Vance
 - (2) Mandatory Advancement. A county whose population is 75,000 or greater according to the most recent annual population estimates certified to the Secretary by the State Budget Officer must conduct a reappraisal of real property when the county's sales assessment ratio determined under G.S. 105-289(h) is less than .85 or greater than 1.15, as indicated on the notice the county receives under G.S. 105-284. A reappraisal required under this subdivision must become effective no later than January 1 of the earlier of the following years:
 - a. The third year following the year the county received the notice.
 - b. The eighth year following the year of the county's last reappraisal.
 - (3) Optional Advancement. A county may conduct a reappraisal of real property earlier than required by subdivision (1) or (2) of this subsection if the Board of County Commissioners adopts a resolution providing for advancement of the reappraisal. The resolution must designate the effective date of the advanced reappraisal and may designate a new reappraisal cycle that is more frequent than the octennial cycle set in subdivision (1) of this subsection. The Board of County Commissioners must promptly forward a copy of the resolution adopted under this subdivision to the Department of Revenue. A more frequent reappraisal cycle designated in a resolution adopted under this subdivision continues in effect after a mandatory reappraisal required under subdivision (2) of this subsection unless the board of county commissioners adopts another resolution that designates a different date for the county's next reappraisal.

GS 105-273(13). Definitions

Real property, real estate, or land. - Any of the following:

- a. The land itself.
- b. Buildings, structures, improvements, or permanent fixtures on land.
- c. All rights and privileges belonging or appertaining to the property.
- d. A manufactured home as defined in G.S. 143-143.9(6), unless it is considered tangible personal property for failure to meet all of the following requirements:
 - 1. It is a residential structure.
 - 2. It has the moving hitch, wheels, and axles removed.
 - 3. It is placed upon a permanent foundation either on land owned by the owner of the manufactured home or on land in which the owner of the manufactured home has a leasehold interest pursuant to a lease with a primary term of at least 20 years and the lease expressly provides for disposition of the manufactured home upon termination of the lease.

GS 105-296(b). Powers and duties of assessor.

Within budgeted appropriations, he shall employ listers, appraisers, and clerical assistants necessary to carry out the listing, appraisal, assessing, and billing functions required by law. The assessor may allocate responsibility among such employees by territory, by subject matter, or on any other reasonable basis. Each person employed by the assessor as a real property appraiser or personal property appraiser shall during the first year of employment and at least every other year thereafter attend a course of instruction in his area of work. At the end of the first year of their employment, such persons shall also achieve a passing score on a comprehensive examination in property tax administration conducted by the Department of Revenue.

GS 105-299. Employment of experts.

The Board of County Commissioners may employ appraisal firms, mapping firms or other persons or firms having expertise in one or more of the duties of the assessor to assist him or her in the performance of such duties. The county may make available to such persons any information it has that will facilitate the performance of a contract entered into pursuant to this section. Persons receiving such information shall be subject to the provisions of G.S. 105-289(e) and G.S. 105-259 regarding the use and disclosure of information provided to them by the county. Any person employed by an appraisal firm whose duties include the appraisal of property for the county shall be required to demonstrate that he or she is qualified to carry out such duties by achieving a passing grade on a comprehensive examination in the appraisal of property administered by the Department of Revenue. In the employment of such firms, primary consideration shall be given to the firms registered with the Department of Revenue pursuant to the provisions of G.S. 105-289(i). A copy of the specifications to be submitted to potential bidders and a copy of the proposed contract may be sent by the board to the Department of Revenue for review before the invitation or acceptance of any bids. Contracts for the employment of such firms or persons shall be deemed to be contracts for personal services and shall not be subject to the provisions of Article 8, Chapter 143, of the General Statutes.

(1939, c. 310, s. 408; 1971, c. 806, s. 1; 1973, c. 476, s. 193; 1975, c. 508, s. 2; 1983, c. 813, s. 4; 1985, ARTICLE 19.

- GS 105-317. Appraisal of real property; adoption of schedules, standards, and rules.
 - (a) Whenever any real property is appraised, it shall be the duty of the persons making appraisals:
 - (1) In determining the true value of land, to consider as to each tract, parcel, or lot separately listed at least its advantages and disadvantages as to location; zoning; quality of soil; waterpower; water privileges; dedication as a nature preserve; conservation or preservation agreements; mineral, quarry, or other valuable deposits; fertility; adaptability for agricultural, timber-producing, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value except growing crops of a seasonal or annual nature.
 - (2) In determining the true value of a building or other improvement, to consider at least its location; type of construction; age; replacement cost; cost; adaptability for residence, commercial, industrial, or other uses; past income; probable future income; and any other factors that may affect its value.
 - (3) To appraise partially completed buildings in accordance with the degree of completion on January 1.
 - (b) In preparation for each revaluation of real property required by G.S. 105-286, It shall be the duty of the assessor to see that:
 - (1) Uniform schedules of values, standards, and rules to be used in appraising real property at its true value and at its present-use value are prepared and are sufficiently detailed to enable those making appraisals to adhere to them in appraising real property.
 - (2) Repealed by Session Laws 1981, c. 678, s. 1.
 - (3) A separate property record be prepared for each tract, parcel, lot, or group of contiguous lots, which record shall show the information required for compliance with the provisions of G.S. 105-309 insofar as they deal with real property, as well as that required by this section. (The purpose of this subdivision is to require that individual property records be maintained in sufficient detail to enable property owners to ascertain the method, rules, and standards of value by which property is appraised.)
 - (4) The property characteristics considered in appraising each lot, parcel, tract, building, structure and improvement, in accordance with the schedules of values, standards, and rules, be accurately recorded on the appropriate property record.
 - (5) Upon the request of the owner, the Board of Equalization and Review, or the Board of County Commissioners, any particular lot, parcel, tract, building, structure

or improvement be actually visited and observed to verify the accuracy of property characteristics on record for that property.

- (6) Each lot, parcel, tract, building, structure and improvement be separately appraised by a competent appraiser, either one appointed under the provisions of G.S. 105-296 or one employed under the provisions of G.S. 105-299.
- (7) Notice is given in writing to the owner that he is entitled to have an actual visitation and observation of his property to verify the accuracy of property characteristics on record for that property.
- (c) The values, standards, and rules required by subdivision (b)(1) shall be reviewed and approved by the Board of County Commissioners before January 1 of the year they are applied. The Board of County Commissioners may approve the schedules of values, standards, and rules to be used in appraising real property at its true value and at its present-use value either separately or simultaneously. Notice of the receipt and adoption by the Board of County Commissioners of either or both the true value and present-use value schedules, standards, and rules, and notice of a property owner's right to comment on and contest the schedules, standards, and rules shall be given as follows:
 - (1) The assessor shall submit the proposed schedules, standards, and rules to the Board of County Commissioners not less than 21 days before the meeting at which they will be considered by the board. On the same day that they are submitted to the board for its consideration, the assessor shall file a copy of the proposed schedules, standards, and rules in his office where they shall remain available for public inspection.
 - (2) Upon receipt of the proposed schedules, standards, and rules, the Board of County Commissioners shall publish a statement in a newspaper having general circulation in the county stating:
 - a. That the proposed schedules, standards, and rules to be used in appraising real property in the county have been submitted to the Board of County Commissioners and are available for public inspection in the assessor's office; and
 - b. The time and place of a public hearing on the proposed schedules, standards, and rules that shall be held by the Board of County Commissioners at least seven days before adopting the final schedules, standards, and rules.
 - (3) When the Board of County Commissioners approves the final schedules, standards, and rules, it shall issue an order adopting them. Notice of this order shall be published once a week for four successive weeks in a newspaper having general circulation in the county, with the last publication being not less than seven days

before the last day for challenging the validity of the schedules, standards, and rules by appeal to the Property Tax Commission. The notice shall state:

- a. That the schedules, standards, and rules to be used in the next scheduled reappraisal of real property in the county have been adopted and are open to examination in the office of the assessor; and
- b. That a property owner who asserts that the schedules, standards, and rules are invalid may except to the order and appeal therefrom to the Property Tax Commission within 30 days of the date when the notice of the order adopting the schedules, standards, and rules was first published.
- (d) Before the Board of County Commissioners adopts the schedules of values, standards, and rules, the assessor may collect data needed to apply the schedules, standards, and rules to each parcel in the county

G S 105-283. Uniform appraisal standards.

All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words "true value" shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used. For the purposes of this section, the acquisition of an interest in land by an entity having the power of eminent domain with respect to the interest acquired shall not be considered competent evidence of the true value in money of comparable land.

Authors Notes: The Machinery Act of North Carolina has been provided as an integral part of these Uniform Schedules of Value, Standards, and Rules. All applicable standards not recited in this text are included by reference.

In addition to the specific statutory direction and appellate court rulings, it is necessary to be well-versed with the nature of appraised values of property and with the basic economic principles that serve as the foundation of the valuation process.

APPRAISAL THEORY

An appraisal 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, 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.

CONCEPT OF PROPERTY

The definition of property should begin the discussion of assessing value. Property is associated with the right of any person to possess, use, enjoy and dispose of a thing. Property, then, is a broad term expressing the relationship between owners and their rights in and to possessions. In appraising real property, the parcel to be appraised includes the rights inherent in ownership of the property and should be included in the opinion of value rendered by the reappraisal.

All property may be divided into two major categories-real property and personal property. Real property is defined as the sum of the tangible and intangible rights in land and improvements. This refers to the interest, benefits, and rights inherent in the ownership of physical real estate. Real estate is the physical land, and everything permanently attached to it. Personal property consists of moveable items not permanently affixed to, or part of, the real estate and is commonly known as "personal" or "chattels".

Real estate may be divided into two categories-land and improvements. Land is defined as the surface of the earth together with everything under its boundary and everything over it. Improvements (land improvements, such as paving, fencing, structures, and landscaping etc.) consist of immovable items affixed to and becoming part of the real estate. "Permanently affixed" refers to the original intent of the owner and economic life of the improvements.

Defining the term "affixed' has been the subject of much litigation, and the courts are subject to change the meaning. In general terms, personal property annexed to land is called a fixture. Chattels that have been annexed to land are called a fixture.

These chattels that have been annexed to the land, to lose their character as chattels, become real estate for ad valorem tax purposes. In determining the nature of the annexation of personal property, there are two basic considerations: first, the adaptability of the personal property to the use part of the realty; and second, the person by whom the annexation is made and his interest in the land and the personal property.

Courts have held that, if the chattel is affixed to the land so that it loses its original physical character and cannot be restored to its original condition as a practical matter, it loses its nature as personal property and becomes real property. Two tests relied upon to determine if personal property becomes real estate are: first the intention of the person who put the item in its place; and second, whether the item may be removed from the real estate without damaging either the item or the real estate. Also, to be considered are the use of the item and the generally accepted conveyance of the item in real estate transactions.

In identifying property, a distinction must be made between that of tangible and intangible property. Tangible property consists of actual physical property. Intangible property is evidence of ownership of property rights. Some examples of intangible property are patent rights, copyrights, notes, mortgages, deeds of trust, and stock certificates.

BUNDLE OF RIGHTS

Real estate and real property are often used interchangeably. 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 the owner so chooses. Law guarantees these rights, 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, 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 lays 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 that 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 that he seeks to estimate.

For Ad Valorem Tax purposes, the value sought is generally market value. North Carolina Machinery Act describes market value as follows:

GS 105-283 All property, real and personal, shall as far as practicable be appraised or valued at its true value in money. When used in this Subchapter, the words "true value" shall be interpreted as meaning market value, that is, the price estimated in terms of money at which the property would change hands between a willing and financially able buyer and a willing seller, neither being under any compulsion to buy or to sell and both having reasonable knowledge of all the uses to which the property is adapted and for which it is capable of being used. For the purposes of this section, the acquisition of an interest in land by an entity having the power of eminent domain with respect to the interest acquired shall not be considered competent evidence of the true value in money of comparable land.

VALUE IN USE AS OPPOSED TO VALUE IN EXCHANGE

We have stated that there are several 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. In a sense, value in use embodies the object premise, which maintains that value is within the object. This concept easily accommodates cost. While with value in exchange the subjective element is accentuated. Value in exchange, being the primary concern for the assessor, reflects the actions and reactions of buyers, sellers and investors and is considered market value.

In any discussion of value, a comparison of the terms "cost" and "price" is useful. Cost may be defined as the sacrifice made in the acquisition of property and commonly reflects the perspective of the buyer. Either the purchase of an existing property or the construction

of a new property may incur cost. Price may be defined as the amount of money given, expected or arrived at arranging for the exchange of property. Cost and price may be the same, but not necessarily. An example would be: a purchaser pays \$200,000 to buy a property, it may be stated that the property cost \$200,000. However, while price is defined in terms of money, cost is expressed as a sacrifice. A sacrifice may be in terms of money, labor, or time. Also, when property is sold, the price may be either above or below the owner's cost.

MARKET VALUE

The terms "value" and "market value" though similar are not the same. There are many different definitions for market value provided by statutes and constitutions of all fifty states for property taxation and realtors used to market property. The assessor must adhere to the definition of market value as stated in *G S 105-283* (see section on statutes) and decisions rendered by the North Carolina Appellate Courts.

The following important points regarding market value should be noted:

- 1. It is the most probable price.
- 2. It is not the highest, lowest, or average price.
- 3. It is expressed in terms of money.
- 4. It implies a reasonable time for exposure to the market.
- 5. It implies that both buyer and seller are well-informed of the uses to which the property may be put. It requires an arm's length transaction in the open market.
- 6. It requires a willing buyer and willing seller, with no advantage being taken by either buyer or seller. Neither buyer nor seller placed in a position of having to purchase or sell to avoid legal action or dispose of property. This is a constraint against consideration of foreclosures and short sales.
- 7. It recognizes the present use as well as the potential use of property.

Note: In analyzing sales of property, close attention is paid to identifying all transactions that are the result of a foreclosure or short sale. Such sales are not retained for further consideration in determining the schedules set out elsewhere in this document, and neither will they be considered in analyzing the reappraisal results via the State-mandated assessment/sales ration study. For a complete list of conditions, that the North Carolina Department of Revenue distributes to all 100 counties to be used in determining qualified or disqualified sales (not consider an arm's length transaction).

PRINCIPLE OF HIGHEST AND BEST USE

The way in which property is used, or could be used, plays an essential role in determining its market value. An assessor recognizes this as the 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 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 that 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 that must yield a certain return to the investor. This return will be dependent upon the levels of economic rent that 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 to consider the present use and follow development rather than anticipate it.

Just as everything changes with time, the highest and best use of property will change. The character of a neighborhood may be altered, thereby creating demands for different uses. The assessor periodically reviews conclusions as to highest and best use and revises them according to the data that are collected. As an example, zoning, one of the restraints on use, may be changed, which changes the allowable use.

BASIC PRINCIPLES OF VALUE

Certain principles are generally accepted as having a direct effect on the modern concept of value evolving from economic doctrine. It should be emphasized that these principles rarely, if ever, can be considered in isolation. It is typical to conceive them in an interrelated setting, for they tend to complement and accompany one another. These principles, after considering the interrelationship among them, result in the highest and best use.

The following principles are essential to appraisal function:

PRINCIPLE OF ANTICIPATION

Market value is the present worth of all the anticipated future benefits to be derived from the property. Income stream and amenities may be considered benefits. Anticipated future benefits are those benefits anticipated by the market. Past sales of the property and past income are important only when they are an indication of what may be expected in the future. The principle of change works in conjunction with the principle of anticipation.

PRINCIPLE OF BALANCE

The principle of balance, when applied to a property, states that maximum market value is reached when the four agents of production – labor, coordination or management, capital, and land attain a state of equilibrium.

PRINCIPLE OF CHANGE

The principle states that market value is never constant because economic, social, and governmental forces are at work to change property and its environment. Because change is continuous, the estimate of market value is valid only on the effective day for which it is made. This principle works in conjunction with the principle of anticipation.

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 that may or may not occur.

PRINCIPLE OF COMPETITION

This principle states that when substantial profits are being made, competition is created. This leads to the aphorism that profit tends to breed competition and that excess profit breeds ruinous competition.

PRINCIPLE OF CONFORMITY

The principle of conformity states that maximum market value is reached when a reasonable degree of economic and social homogeneity is expected in the foreseeable future. As applied to improvements, reasonable homogeneity implies reasonable similarity, not monotonous uniformity. Similarity in age, income, background, etc., is conformity when applied to residents. In understanding the neighborhood concept in mass appraisal, conformity is essential and works with the principles of progression and regression.

PRINCIPLE OF CONSISTENT USE

This principle states that the property must be valued with a single use for the entire property. Property valued on the basis on one use for land and another for the improvements is improper. The principle is especially applicable to a property in transition from one use to another. While the improvements on a parcel ready for a high use may theoretically have a long physical life, their economic life may have already terminated.

PRINCIPLE OF CONTRIBUTION

This principle states that a value of an agent of production (or a property component) depends upon its contribution to the whole. This is another way of saying that cost does not necessarily equal value. Some examples are:

- 1. A garage is erected on an existing home at a cost of \$30,000. Based on comparable sales analysis, it is determined that such a garage adds \$35,000 to the overall market value of the property. In this case \$35,000 is the value contribution of the garage.
- 2. Cost does not always equal value. A stone fireplace cost \$10,000 to construct. Sales analysis in this neighborhood reflects a standard fireplace only adds \$5,000 of value to a home. A stone fireplace may only add \$6,000 of contribution to the value of the home, not the cost of \$10,000.

This principle is the basis for the adjustment process of the comparative sales approach to value and the direct sales comparison method of land valuation, for determining whether physical deterioration and functional obsolescence are curable or incurable, and for justifying remodeling and modernization. Many of the adjustments to value that are detailed herein for various property characteristics are based on their contribution to the whole property, not their actual cost. This principle works in conjunction with the principles of balance, increasing and decreasing returns, and surplus productivity.

PRINCIPLE OF INCREASING AND DECREASING RETURN

This principle states that, when successive increments of one agent of production are added to fixed amounts of other agents, future net benefits (income or amenities) will increase up to a certain point, (the point of decreasing returns), after which successive increments will decrease future net benefits.

PRINCIPLE OF PROGRESSION AND REGRESSION

The principles of progression and regression relate to how surroundings affect the value of an object. Progression indicates that the value of a lessor object is enhanced by association with better objects of the same type. The principle of regression states that, when there are dissimilar properties within the same general classification and in the same area, the better property will be adversely affected.

PRINCIPLE OF SUBSTITUTION

Value is created by the marketplace. 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.

PRINCIPLE OF SUPPLY AND DEMAND

In order for property to have value, there must be desirability, utility, scarcity, and economic purchasing power. Utility is the capacity of goods to create desire and should not be confused with usefulness. While utility is a subjective concept, usefulness is an objective concept inherent in the property.

Scarcity helps to create desire. There are two economic forces which determine scarcity, 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, this 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 that 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 value.

A community may well support two shopping centers, but the addition of a third shopping center may increase the supply to 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.

Utility and scarcity by themselves do not confer value on an object, unless the desire by the purchaser is present, a desire backed by the economic purchasing power of the buyer(s).

PRINCIPLE OF SURPLUS PRODUCTIVITY

This principle states that the net income remaining after the cost of the agents of production-labor, coordination, and capital has been paid is considered surplus productivity.

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/she must do for each property he/she 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, Sales Comparison 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 to 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 SALES COMPARISON APPROACH involves the compiling of sales and offerings of properties that are comparable to the property being appraised. These sales and offerings are then adjusted for any dissimilarity, 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. Some examples of applicable North Carolina Case Law are:

Neither this section nor G S 105-317(a) requires the commission to value property according to its sale price in a recent arm's length transaction when competent evidence of a different value is presented.

In re Greensboro Office Partnership, 72 N.C. App635, 235 S.E. 2n 24, cert. denied, 313 N.C. 602,330 S.E. 2d 610 (1985)

Where sale was not between a willing buyer and a willing seller, as contemplated by this section, sales price was not indicative of property's true value.

In re Phoenix Ltd. Partnership, 134 N.C. App. 474, 517 S.E. 2d 903 (1999)

Essentially, North Carolina law prohibits the presumption that the sale price of any particular property must be the basis for its appraised value for ad valorem tax purposes. Instead, reliance is placed on the greater weight of evidence determined from a larger sampling of comparable properties and, as a result, the appraised value may be less than or greater than the sale price of any particular property.

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:

- Estimated Land Value
- + Estimated Replacement Cost New of Structures
- Estimated Depreciation
- = Indication of Property Value

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. The 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. The 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 the 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 that 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 now and its actual selling price (total property selling price less the estimated value of the land).

APPLYING THE MARKET DATA APPROACH

An indication of the value of a property can be derived through analysis of 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.

INTRODUCTION TO THE SALES COMPARISON APPROACH

For assessment purposes, market values are defined by constitutions, statutes and case law. When sales data is available, the sales comparison approach is generally considered the most reliable of the approaches to value. However, in North Carolina assessment litigation, under the "rules of evidence", a bona fide sale of the subject property may not be considered the best evidence of market value "when competent evidence of different value is presented". In re Greensboro Office Partnership, 72 N.C. App 635, 235 S.E. 2n 24, cert. denied, 313 N.C. 602,330 S.E. 2d 610 (1985).

Emphasizing uniformity and the equitable distribution of the tax burden relative to the premise that similar properties should share similarly in that burden, North Carolina statutory language and the interpretation of relating actual sales to market value by the North Carolina Courts both provide this guidance.

The sales comparison approach models the behavior of the market by comparing the properties being appraised (subject property) with similar properties that have recently sold (comparable properties). Comparable properties are selected for their similarity to the subject property. Their sales prices are then adjusted for their differences from the subject. Finally, a market value for the subject is determined from the adjusted sales prices of the comparable properties.

To understand the sales comparison approach, an appraiser must understand the principles of supply and demand. The interaction of supply and demand factors impacts property prices. Supply depends on current inventories and, in a larger sense, the availability of human skills, materials, and capital, while demand is influenced by population levels, mortgage rates, income levels, local services, housing trends, and the cost of substitutes. The principal of substitution is one demand factor that implies that the market will recognize differences in utility between the subject and its best alternatives by a difference in price.

The sales comparison approach requires the following steps:

- 1. Definition of the appraisal problem.
- 2. Data collection
- 3. Analysis of market data to develop units of comparison and select attributes for adjustment (model specifications)
- 4. Development of reasonable adjustments (model calibration).
- 5. Application of the model to adjust the sales price of comparable properties to the subject property.
- 6. Analysis of the adjusted sales price to indicate the value of the subject property.

The entire valuation process depends on accurately defining the subject property because the nature of the property determines the sources of information, methods of comparable selection, and adjustment techniques.

Defining the subject property includes:

- 1. Identifying the property (parcel number or pin for ad valorem tax purposes)
- 2. The rights to be appraised (generally Fee Simple for ad valorem tax purposes)
- 3. The date of appraisal (January 1 of the appraisal year for NC ad valorem tax purposes)
- 4. The use (highest and best use)
- 5. The type of value to estimate (market value, for NC ad valorem tax purposes)

This approach has a wide application as a method of estimating value; however, there are factors that can or do limit the usefulness of the sales comparison approach. Despite these limitations, this approach has a broad application in all appraisal work. The value estimates found by the use of this approach are considered particularly significant because they are expressions of value as established by transactions in the market place.

Even though the sales comparison approach is mostly used for estimating market value for residential property, it may also be used for some commercial and industrial properties if sufficient data is available. Additionally, some valuation parameters of the other valuation approaches (cost and income) are influenced by the application of and observations learned from the sales comparison approach.

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 "arm's 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 that do not normally reflect valid market conditions are as follows:

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

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 that are truly comparable to the property under appraisement. 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 comparable sales 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 comparable sales 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 that influence the prospective buyers of particular types of properties.

The typical homebuyer 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, and 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 that 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 that 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 that 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 that is most applicable to the subject property.

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 that should be returned from competitive properties. The appraiser must make a distinction between Economic Rent, the rent which property is normally expected to produce on the open market, as opposed to Control Rent, the rent which property is actually realizing at the time of the appraisal due to lease terms established sometime in the past.

The first step then is to obtain specific income and expense data on properties that 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 that 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 income and expense (I & E) data in order to arrive at an accurate and realistic estimate of net income.

Vance County did not send surveys soliciting income and expense data from property owners and lessees of commercial (income-producing) property. Typically, the return results for these surveys are limited at best. A significant amount of information is made available as part of the appeal process. This data (income and expense) is generally provided in support of a claim seeking a decrease in appraisal value. The quality/worth of the data is dependent on the documentation provided. Lease information (lease rates, terms, and other stated considerations) is best, with undocumented statements the least useful.

The county may utilize other outside sources of information. Even though this may be done on a limited basis it could be useful during the appeal process.

QUESTIONS RELATING TO INCOME DATA

- A. Was the reported income produced entirely by the subject property? Very often the rent 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 verification.
- 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 that are applicable to the cost of ownership; that is, those expenses that 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; an 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 that he/she 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 fore 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, are not necessarily 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/hers own guidelines for insurance. He/She 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 coverage 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 that 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/she 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 leased 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:

Value = Net Income divided by 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 no improvement value. There are three fallacies in this thinking. First, the potential buyer (investor) has no intention of holding 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 reinvest 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 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.

In *Direct Capitalization*, the appraiser determines a single "overall" capitalization rate. This is done through analysis of 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 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 (Value = Net Income divided by 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 an 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 (principle interest)	70%	.1492	=	.1044
Equity (down payment)	30%	.18	=	.0540
Weighted Average	100%		_	100%

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 twenty- 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:

.199108 70% .0425 =
$$\underline{.0059}$$
 (%of loan paid in 10 yrs.) x (loan rate) X (sinking fund 18% for 10 yrs.) Resulting Net Rate = .1525

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 sales 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 contributes 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-term 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 comparable sales 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 comparison, 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:

- Selling Price of Property
- Estimated Depreciated Value of Buildings
- = Indication of Land Value

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 lot, site or home site, 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, un-platted 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 tend 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 comparable and the subject property. Since such an adjustment is generally necessary for each lot, it is beneficial that the appraiser adopts and/or develops 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. Site value tables provide for uniform pricing of standard sized lots within homogenous neighborhoods or subdivisions. 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. Incremental and decremented adjustments can be applied to account for size differences.

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 that 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 that 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 that represents the portion of the total improved value that is land value, or as a formula:

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 the value could 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 may 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 equiv	alent)			\$15,000
Improved Lot Sales (range)			\$65,	,000 to \$75,000
Indicated Ratio	\$15,000 To	15,000	- X 100%	20% to 23%
indicated Katio	75,000	65,000	- A 10070	20% 10 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% x \$85,000 to 23% x \$105,000)	\$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.

MASS APPRAISING

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 reappraisal 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 affect 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 farmland 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 value is some measure of its present 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 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 that the property is capable of yielding can be determined, and the amount of investment required to affect that net return at a rate commensurate with that normally expected by investors could 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 that 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 affected.

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 that 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 database necessary to generate the desired output.

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, and 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, suppliers, 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 qualification 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 Register of Deeds Office, MLS, Sales Letters, Fee Appraisers 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, fee appraisers 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 delineation 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. The existing property record card can serve in this capacity as it contains the current data on file.

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 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, summarization, 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 that 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 that 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, may be used, 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 affect the valuation of agricultural, residential, forestry, 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 attempt personal contact with the occupant. In the course of the inspection, the following procedures must be adhered to.

Identification of the property.

Recording the property address.

Interviewing the occupant of the building and recording all pertinent data.

Inspection, when possible, 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 of the proper 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 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.

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 approximates 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 produce the highest degree of accuracy and equity possible.

ESTIMATING REPLACEMENT COST NEW

The informed buyer is not justified in paying anything more for a property than what it would cost him/her 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 principal Quality Grade classifications are as follows:

Grade XX	Superior Quality
Grade X	Excellent Quality
Grade A	Very Good Quality
Grade B	Good Quality
Grade C	Average Quality
Grade D	Fair Quality
Grade E	Poor Quality

The seven grades listed above will cover the entire range of construction quality, from the poorest quality to the finest quality.

Schedule of Values

The general quality specifications for each grade are as follows:

XX Grade

Buildings generally having an exceptional architectural style and design, constructed with the finest quality materials and custom workmanship. Superior quality interior finish, built-in features, deluxe heating system, plumbing and lighting fixtures.

X Grade

Buildings generally having an outstanding architectural style and design, constructed with the finest quality materials and workmanship. Superior quality interior finish, built-in features, deluxe heating system, 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 to 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", "seconds" and poor- quality workmanship; resulting from unskilled, inexperienced, "do-it-yourself" type labor. Low grade heating, plumbing, and lighting fixtures.

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 rarely a 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, examples of theses factors are listed below.

XX	325%	B+	135%	C-	95%	E	55%
	250%	_		D+	90%	E-	45%
	165%		120%	D	85%	_	
A	155%	C+	110%	D-	75%		
A-	145%	C	100%	E+	65%		

Note: the quality factor ultimately selected should represent a composite judgement of the overall Quality Grade. Generally, the quality of materials and workmanship is 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 rectangular 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 judgement 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. 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 that 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 OR CLASS

The quality grade 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 the same facilities and with the same specific features, but with widely different cost 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 prevailing.

The following schedule has been developed to distinguish between variations in cost. This schedule represents the full range of conventional dwelling construction. The basic specifications for each grade, as to type of facilities furnished is relatively constant; that is, each has a specific type of heating system, two bathrooms, kitchen unit, and other typical living facilities, but with variable quality of materials and workmanship prevailing.

The basic grade represents the cost of construction using average quality materials, with average workmanship. The majority of dwellings erected fall within one class above and one class below the base grade of C. The layman or professional appraiser can readily distinguish between these classes. The three classes of grade of quality for this group of dwelling have been established as follows:

Grade B	Good	Quality 125%
Grade C	Average	Quality 100%
Grade D	Fair	Quality 85%

To justify variation in cost, maintain uniformity and retain complete control throughout the cost range, we have established these base grades. The pricing spread between each grade is based upon the use of better grade materials and higher quality workmanship from C Grade to B Grade. B Grade dwellings are found to have better individual features and interior finish, which reflects higher costs than a C Grade. Likewise, the D Grade dwelling would be constructed of lesser quality than C Grade, due to the type of materials used and workmanship. Consequently, better quality of construction or construction of cheaper quality can be comparatively observed.

Schedule of Values

To cover the entire range of dwelling construction, three additional classes of dwellings above the three base grade dwellings must be considered along with one grade dwelling below the base three grades.

The three base grades above are:

"A"	Excellent Quality	155%
"X"	Superior Quality	250%
"XX"	'Ultimate Quality	325%

The A, X and XX Grade dwelling incorporates the best quality of materials and workmanship. Construction costs of XX Grade dwellings usually run substantially higher than the cost of C Grade dwellings. The prestige type and the mansion, or country estate-type homes are usually in this class. The X Grade dwellings having exceptional architectural style and design are generally custom-built homes and are better in overall construction than the C Grade dwellings. The A Grade dwellings having outstanding architectural style and design are generally custom-built homes and are 55% better in overall construction than the C Grade dwellings.

The dwelling of the cheapest quality construction built of low-grade materials and is the E Grade quality.

These seven (7) established base graded or classes of quality will cover the entire range of dwelling construction, from the cheapest to the finest in quality.

USE OF GRADE FACTORS

The grading method is based on C Grade as standards of quality and design. Quality adjustments are established by means of grade factor multipliers. Since not all dwellings are constructed to fall into one of the precise grade levels with no adjustments, it becomes necessary to further refine our grading system. It is not unusual for conventional houses to be built incorporating qualities that fall above or below these established grades. If the house that is being appraised does not fall exactly on a specific grade, but should be classified within that grade, the use of Grade Factor Symbols (+ or -) will accomplish this adjustment in the Grade A, B, C, D and E Classes. XX and X grades do not have an option of (+ or -)

For a grading increase in the A Grade category, a plus factor can be used, which will result in each factor being higher than the last.

A Sample Would Be –

A dwelling with outstanding architectural style and design, constructed with the finest quality materials and workmanship throughout, Superior quality interior, finish with extensive built-in features, Deluxe heating system and high-grade lighting and plumbing fixtures may be graded A+. The A+ Grade places this house in the Superior Quality range. The + part of the A+ Grade places this house one level above the A Grade category. Grade A+ has a multiplier of 165%. Thus, once

Schedule of Values

you have priced this house to the base level of C, a multiplier of 165% would be applied to adjust the C Grade base level up to the A+ Grade level you desired.

The same approach would apply should you have a house 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. Minimal code, low-grade mechanical features and fixtures may be graded E. The E Grade places this house in the Cheap Quality range. Grade E has a multiplier of 55%; once you have priced this house to the base level of "C", a multiplier of 55% would be applied to adjust the C Grade base level down to the E Grade level you desired.

NOTE:

The quality factor ultimately selected is to 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 weigh 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.

The appraiser must use extreme caution not to confuse Quality and Condition when establishing grades for older houses in which a deteriorated condition may have a noticeable effect on their appearance. Grades should be established on original built-in quality as new dwellings, and not be influenced by physical condition. Proper grading must reflect replacement cost of new buildings. Bear in mind a house will always retain its initial grade of construction, regardless of its present deteriorated condition.

XX Quality Dwellings

These dwellings are constructed of the finest quality materials and workmanship, exhibiting unique and elaborate architecturally styling and treatment, and having all the features typically characteristic of mansion-type homes.

BASE SPECIFICATIONS

FOUNDATION: Brick or reinforced concrete foundation walls on concrete footings with interior piers.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, or frame siding. All exterior walls will be of high quality and constructed with much detail and workmanship. Ample insulation and numerous openings for windows and doors are typical.

ROOF: Slate, tile, cedar shake, or architectural asphalt shingles on quality sheathing with well braced rafters having various slopes and ridges.

INTERIOR FINISH: The interior of these homes is of the highest custom design and construction with much attention given to fine detail and master craftsmanship.

FLOORS: Heavy construction utilizing wood or steel joists and sub floor with the best quality combination of hardwoods, ceramic tile, terrazzo, marble or granite tile, vinyl, or luxurious carpeting.

PLUMBING: A combination of high quality fixtures, good quality materials, and skilled workmanship. Considered typically and adequate for the type of construction, generally exceeding a total of twelve fixtures.

CLIMATE CONTROL: A heating system equal to forced air with ample capacity and insulated ductwork throughout. Air conditioning is included as a part of the specifications; however, this item is considered an add-on item and is excluded from base pricing.

ELECTICAL: Good quality wiring, maximum electrical outlets and expensive light fixtures.



Grade XX

X Quality Dwellings

These homes are architecturally designed; and custom built by contractors who specialize in good quality construction. Extensive detail is given to ornamentation with the use of good grade materials and skilled craftsmanship. Homes of this quality are in affluent areas that will enhance and benefit the home the most.

BASE SPECIFICATIONS

FOUNDATION: Brick or reinforced concrete foundation walls on concrete footings with interior piers.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, or frame siding. All exterior walls will be of high quality and constructed with much detail and workmanship. Ample insulation and numerous openings for windows and doors are typical.

ROOF: Slate, tile, cedar shake, or architectural asphalt shingles on quality sheathing with well braced rafters having various slopes and ridges.

INTERIOR FINISH: The interior of these homes is of the highest custom design and construction with much attention given to fine detail and master craftsmanship.

FLOORS: Heavy construction utilizing wood or steel joists and sub floor with the best quality combination of hardwoods, ceramic tile, terrazzo, marble or granite tile, vinyl, or luxurious carpeting.

PLUMBING: A combination of high-quality fixtures, good quality materials, and skilled workmanship. Considered typically and adequate for the type of construction, generally exceeding a total of twelve fixtures.

CLIMATE CONTROL: A heating system equal to forced air with ample capacity and insulated ductwork throughout. Air conditioning is included as a part of the specifications; however, this item is considered an add-on item and is excluded from base pricing.

ELECTICAL: Good quality wiring, maximum electrical outlets, and expensive light fixtures.



Grade X







Grade X

A Quality Dwellings

These homes are architecturally designed; and custom built by contractors who specialize in good quality construction. Extensive detail is given to ornamentation with the use of good grade materials and skilled craftsmanship. Homes of this type are in areas that are specifically developed for this level of quality.

BASE SPECIFICATIONS

FOUNDATION: Brick or reinforced concrete foundation walls on concrete footings with interior piers.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, or frame siding. All exterior walls will be of good quality and constructed with detail and workmanship. Ample insulation and adequate openings for windows and doors is typical.

ROOF: Slate, tile, cedar shake, or architecture asphalt shingles on quality sheathing with well braced rafters having various slopes and ridges.

INTERIOR FINISH: The interior of these homes is of good design and good construction with much attention given to detail and good quality craftsmanship.

FLOORS: Heavy construction utilizing wood or steel joists and sub floor with a good quality combination of hardwoods, ceramic tile, marble or granite tile, vinyl, or good quality carpeting.

PLUMBING: A combination of good quality fixtures, good quality materials, and skilled workmanship. Considered typically and adequate for the type of construction, generally exceeding a total of twelve fixtures.

CLIMATE CONTROL: A heating system equal to forced air with ample capacity and insulated ductwork throughout. Air conditioning is included as a part of the specifications; however, this item is considered an add-on item and is excluded from base pricing.

ELECTICAL: Good quality wiring, maximum electrical outlets, and expensive light fixtures.



Grade A







Grade A

B Quality Dwellings

These homes are architecturally designed and built by contractors who specialize in good quality construction. Much detail is given to ornamentation with the use of good grade materials and skilled workmanship. Custom-built homes normally fall into this classification.

BASE SPECIFICATIONS

FOUNDATION: Brick or reinforced concrete foundation walls on concrete footings with interior piers.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, or frame siding. All exterior walls will be of good quality and constructed with detail and workmanship. Ample insulation and adequate openings for windows and doors is typical.

ROOF: Slate, tile, cedar shake, or architecture asphalt shingles on quality sheathing with well braced rafters having various slopes and ridges.

INTERIOR FINISH: The interior of these homes is of good design and good construction and good quality workmanship.

FLOORS: Moderate construction utilizing wood or steel joists and sub floor with a good combination of hardwoods, ceramic tile, vinyl, or good quality carpeting.

PLUMBING: A combination of quality fixtures, quality materials, and skilled workmanship. Considered typically and adequate for this type of construction, generally having at least eight fixtures.

CLIMATE CONTROL: A heating system equal to forced air with ample capacity and insulated ductwork throughout. Air conditioning is included as a part of the specifications; however, this item is considered an add-on item and is excluded from base pricing.

ELECTICAL: Good quality wiring, maximum electrical outlets and good light fixtures.



Grade B







Grade B

C Quality Dwellings

These homes are designed and built by contractors who specialize in average quality construction. Adequate detail is given to ornamentation with the use of average grade materials and typical workmanship. Homes of this type are located in areas that are specifically developed for this level of quality. These homes represent the prevalent quality.

BASE SPECIFICATIONS

FOUNDATION: Brick or reinforced concrete foundation walls on concrete footings with interior piers.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, or frame siding. All exterior walls will be average quality and constructed with detail and workmanship. Ample insulation and adequate openings for windows and doors is typical.

ROOF: Tile, cedar shake, or asphalt shingles on average quality sheathing with frame trusses and having typical slopes.

INTERIOR FINISH: The interior of these homes is of average design and average construction with attention given to detail and average quality workmanship.

FLOORS: Moderate construction utilizing wood or steel joists and sub floor with an average combination of hardwoods, ceramic tile, vinyl, or average quality carpeting.

PLUMBING: A combination of average quality fixtures, average quality materials, and workmanship. Considered typically and adequate for the type of construction, generally not exceeding a total of twelve fixtures.

CLIMATE CONTROL: A heating system equal to forced air with ample capacity and insulated ductwork throughout. Air conditioning is included as a part of the specifications; however, this item is considered an add-on item and is excluded

ELECTICAL: Average quality wiring, adequate electrical outlets and average light fixtures from base pricing.



Grade C







Grade C

D Quality Dwellings

These homes are usually built of fair quality materials with expense-saving construction. Economy-built homes would normally fall into this classification.

BASE SPECIFICATIONS

FOUNDATION: Brick or concrete block walls on concrete footings.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, or frame siding. All exterior walls are average quality or less and constructed with minimal detail and workmanship. Insulation is minimal and openings for windows and doors are typical.

ROOF: Light weight asphalt shingles on adequate sheathing and frame trusses with minimal slope.

INTERIOR FINISH: The interior of these homes is below average design and construction with limited attention given to detail and quality workmanship.

FLOORS: Low-cost construction utilizing wood or steel joists and sub floor with some hardwoods, vinyl, and/or low- quality carpeting.

PLUMBING: A combination of fair quality fixtures and typical quality materials and workmanship. Considered typical and adequate for this type of construction, normally has eight fixtures or less.

CLIMATE CONTROL: A heating system equal to forced air with minimal capacity and ductwork throughout. Air conditioning is not a part of the specifications. This item is excluded from base pricing and should be added if applicable.

ELECTICAL: Adequate quality wiring, minimal electrical outlets and low- cost light fixtures.



Grade D





E Quality Dwellings

These homes are constructed of low-quality materials and usually designed not to exceed minimal building code. Little detail is given to interior or exterior finish. They are usually built for functional use only. Homes of this type are not specifically located within housing developments but may be built as in-fill housing.

BASE SPECIFICATIONS

FOUNDATION: Brick or concrete block foundation walls on concrete footings, piers, or concrete slab.

EXTERIOR WALLS: Stone, brick veneer, stucco, log, frame siding, or concrete block. All walls are cheaply constructed with minimal detail and workmanship. Little or no insulation and minimal windows and doors are typical.

ROOF: Light weight asphalt shingles, roll roofing, or metal on plywood sheathing and frame trusses with minimal slope.

INTERIOR FINISH: The interior of these homes is of fair design and construction with low-cost materials. Little attention is given to detail and quality workmanship.

FLOORS: Low-cost construction utilizing wood or steel joists and sub floor with some hardwoods, vinyl, and/or low -quality carpeting.

PLUMBING: A combination of fair quality fixtures, typical quality materials, and workmanship. Considered adequate for the type of construction. Generally, not have more than a total of five fixtures.

CLIMATE CONTROL: A heating system equal to forced air with minimal capacity and ductwork throughout. Air conditioning is not a part of the specifications. This item is excluded from base pricing and should be added if applicable.

ELECTICAL: Minimal quality wiring, limited electrical outlets and inexpensive lighting.



Grade E







Grade E

MANUFACTURED HOUSING

General

Manufactured housing can be single-wide mobile homes, double-wide mobile homes, multisectional homes, or modular homes. Non-modular structures are designed with a steel undercarriage and wheel assemblies for transporting to the site.

Note: most modular homes have wood joist rather than a steel undercarriage. For mass appraisal purposes, both wood joist and steel undercarriage homes that are classified as modular are considered to be like stick-built homes.

As of June 15, 1976, all manufactured homes built, after that time, must meet or exceed Federal Standards outlined in Title VI, Housing and Community Development Act of 1974. These standards (building codes) are administered by United States Department of Housing and Urban Development (HUD). The HUD code, unlike conventional building codes, requires manufactured homes to be constructed on permanent chassis. Manufactured homes that are not consider modular homes must have a red/silver certification (HUD certification) on the exterior of each transportable section when transported from the factory.

Modular homes are constructed on the same state, local and regional building codes (conventional building codes) as site- built homes which exceed the HUD code and have a "State of North Carolina Modular Construction Validating Stamp" on the interior of the home. For mass appraisal purposes all factory constructed homes are to be classified as either manufactured (single-wide, double-wide, etc.) or modular.

MODULAR HOME CLASSIFICATION STANDARDS

All homes constructed in a factory may be considered manufactured homes, but only those that meet or exceed the North Carolina State Residential Building Code may be considered modular homes. North Carolina General Statute 105-164.3(21b) defines modular home as "a factory-built structure that is designed to be used as a dwelling, is manufactured in accordance with the specifications for modular homes under the North Carolina State Residential Building Code (NCSRBC), and bears a seal or label issued by the Department of Insurance pursuant to G.S. 143-139.1". Also, in addition to NCSRBC, modular homes may be required to be constructed to local and/or regional building codes. North Carolina addresses the construction and definition of modular homes under the North Carolina State Building Code Volume VIII – Modular Construction Regulations. The quality of modular homes is the same as site-built homes per memorandum from the North Carolina Department of Insurance (see memorandum, page 383). For mass appraisal purposes structures that are considered modular must meet current general statute requirements. Note: All homes classified as modular will be considered as real property, even if on someone else's land.

We have classified all Modular homes as Single Family Residential Homes

MANUFACTURED HOME CLASSIFICATION STANDARDS

All manufactured homes not meeting the requirements of a modular home are to be considered using the term "manufactured home" for mass appraisal purposes. N.C.G.S. 105-273(13), in defining real property, provides for the inclusion of manufactured homes. Also, N.C.G.S. 105-316.7 defines mobile home and manufactured home.

Any manufactured home will be considered *real property* and will be valued in accordance with the schedule of values if the owner of the land and the owner of the home placed upon the land are the same, having the towing hitch and axle assembly removed and placed upon a permanent foundation as required by the Vance County Building Department.

If the owner of the manufactured home does not own the land it occupies, the home will be considered a *personal property* item. If the manufactured home is considered a *personal* item, it will be noted within the miscellaneous items section of the property record card.



MA70W
Single wide
Manufactured
Home

MA30W
Double wide
Manufactured
Home



RESIDENTIAL COST SCHEDULES

The Cost Approach to value lends itself best to property valuation for tax purposes for two principle reasons.

- 1) Appraisals for Ad Valorem purposes require separate land value estimates.
- 2) The Cost Approach can be applied to all classes of property.

The use of one approach to the exclusion of others is contrary to the appraisal process. The approach outlined in this manual includes cost schedules which have been developed and are supported through analysis and incorporation of economic factors indicated by all three approaches to value; Cost, Income and Market.

The following cost schedules are based on a model residence constructed using typical components, average quality workmanship and materials, consisting of one thousand five hundred (1500) square feet, unit heating system and slab foundation.

The general pricing procedure is as follows:

- 1. Determine the Main Area (MA) Code by exterior wall type and type of residential building. (Ex. Wood Siding ranch style homes is a MA 37W)
- 2. Multiply the base square footage of the first floor by the main area price and by the size factor for the MA code. (Ex. 1500 sq. ft. X \$112.00 X .84 = \$141,120)
- 3. For buildings with an upper floor, multiply the square footage of the upper floor by the main area price, then by the size factor for the MA code of the first-floor square footage and by the multiple story adjustment (ST1) of 97% which is only applied to upper floor square footage. (Ex. 500 sq. ft. (upper floor area) X \$112.00 X .84 X .97 = \$45,629)
- 4. Apply Cost & Design % factor to the total main area price.
- 5. Adjustments to the main area are calculated from the norm of the base structure.
 - A. Heat type- the standard is unit heat. Determine the heat type (Ex: Packaged Heat/Cool HC07) and multiply the square footage by the heat type code rate by the size adjustment for the main area of the first-floor square footage. (Ex. 1500 sq. ft. $X $4.50 \times 3.84 = $5,670$)
 - B. Plumbing type- Determine the number of fixtures. (Ex. $2\frac{1}{2}$ baths have two full baths and one-half bath) Multiply the number of full (PL03) and half bath (PL 04) fixtures times the rates. (Ex. $2 \times 3,000 = 6,000 + \frac{1}{2} \times 2,000 = 1,000$
 - C. Fireplace type- the standard is no fireplace. Determine the type of fireplace. (Ex. Prefab FP 03) Multiply the fireplace rate times the number of fireplaces. (Ex. $1 \times 1.850 = 1.850$)
 - D. Basement Type- the standard is no basement. Determine the type of basement. (Ex. Basement is finished BA FIN) Multiply the square footage by the basement type code by the size adjustment for the main area of the first-floor square footage (Ex. 1500 sq. ft. X \$62.20 X .84 = \$78,372)

- 6. Determine the addition code type (Ex. Covered Porch AC 06) attached to the main structure. Multiply the base rate of the AC code by the size adjustment for that code. (Ex. 80sq. ft. X \$28.70 X 1.02 = \$2,342)
- 7. Sub-total all areas of the structure's components.
- 8. Apply the proper Quality Grade Factor to arrive at the Replacement Cost New. The standard pricing schedule is at a C grade building.
- 9. Apply the proper depreciation from the C.D.U. Chart. (Ex. A home built in 1975 that physically is in average condition with normal functional use, but is in a desirable neighborhood and the C.D.U. is Good, the depreciation is 80% of the value remaining)
- 10. If a market adjustment is to be applied, it is applied at this stage.
- 11. The final value for the building is finished.

All adjustments from base specifications are included in the following schedules:

BASE PRICE FOR RESIDENTIAL SCHEDULE MA 37W SINGLE FAMILY RESIDENCE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 112.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING

EXTERIOR WALLS:

VINYL SIDING OR EQUAL

PARTITIONS:

ADEQUATE FOR SEPARATION OF ROOMS/STORAGE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FEATURES: FLOOR COVER/FINISH:

VINYL/CARPET

ADD FOR FIREPLACES

GARAGES/PORCHES/BASEMENT AREAS

ADDITIONAL PLUMBING ADD FOR COOLING SYSTEM

INTERIOR FINISH: DRYWALL/PANEL

HEATING/COOLING:

FORCED HOT AIR OR EQUAL

PLUMBING:

BASE PRICE FOR RESIDENTIAL SCHEDULE MA 18W DUPLEX/TRIPLEX

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 101.50 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING

EXTERIOR WALLS:

VINYL SIDING OR EQUAL

PARTITIONS:

ADEQUATE FOR SEPARATION OF ROOMS/STORAGE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FEATURES: FLOOR COVER/FINISH:

VINYL/CARPET

ADD FOR ATTACHMENTS ADD FOR EXTRA PLUMBING ADD FOR COOLING SYSTEM

INTERIOR FINISH: DRYWALL/PANEL

HEATING/COOLING: FORCED HOT AIR

PLUMBING:

BASE PRICE FOR RESIDENTIAL SCHEDULE MA 12W CONDOMINUM

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 112.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING

EXTERIOR WALLS:

VINYL SIDING OR EQUAL

PARTITIONS:

ADEQUATE FOR SEPARATION OF ROOMS/STORAGE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FEATURES: FLOOR COVER/FINISH:

VINYL/CARPET

ADD FOR ATTACHMENTS ADD FOR EXTRA PLUMBING ADD FOR COOLING SYSTEM

INTERIOR FINISH: DRYWALL/PANEL

HEATING/COOLING: FORCED HOT AIR

PLUMBING:

BASE PRICE FOR RESIDENTIAL SCHEDULE MA 30W DOUBLE WIDE MANUFACTURED HOME

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 100.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING

EXTERIOR WALLS:

VINYL SIDING OR EQUAL

PARTITIONS:

ADEQUATE FOR SEPARATION OF ROOMS/STORAGE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FEATURES: FLOOR COVER/FINISH:

VINYL/CARPET

ADD FOR ATTACHMENTS

ADD FOR EXTRA PLUMBING

ADD FOR COOLING SYSTEM INTERIOR FINISH: DRYWALL/PANEL

HEATING/COOLING: FORCED HOT AIR

PLUMBING:

BASE PRICE FOR RESIDENTIAL SCHEDULE MA 70W SINGLE WIDE MANUFACTURED HOME

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 80.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING

EXTERIOR WALLS:

VINYL SIDING OR EQUAL

PARTITIONS:

ADEQUATE FOR SEPARATION OF ROOMS/STORAGE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FEATURES: FLOOR COVER/FINISH:

VINYL/CARPET

ADD FOR ATTACHMENTS

ADD FOR EXTRA PLUMBING

ADD FOR COOLING SYSTEM INTERIOR FINISH:

DRYWALL/PANEL

HEATING/COOLING: FORCED HOT AIR

PLUMBING:

MAIN AREA BASE RATES

MA	Description	Rate	Size Adj.
Code			Default
MA 02W	Townhouse	\$83.00	A03
MA02M	Townhouse Masonry Frame	\$86.00	A03
MA 12W	Condo	\$112.00	A01
MA12M	Condo Masonry Frame	\$115.00	A01
MA 18W	Duplex/Triplex	\$101.50	A01
MA18M	Duplex/Triplex Masonry	\$104.50	A01
MA 30W	Doublewide Manufactured Home	\$100.00	A01
MA 30M	Doublewide Masonry	\$103.00	A01
MA 37W	Single Family Res	\$112.00	A01
MA 37M	Single Family Res Masonry	\$115.00	A01
MA 70W	Singlewide Manufactured Home	\$80.00	A02
MA70M	Singlewide Masonry	\$83.00	A02
MA 82W	Finished Fr 2 nd floor over Garage or any AC	\$100.00	A02
MA 82M	Finished Mas 2 nd floor over Garage or any AC	\$105.00	A02

MAIN AREA BASE RATES

HC	Heat	SQ. FT.
Code	A/C	ADJ.
01	NONE	(-) \$4.60
02	FLR/WALL FURNACE	\$1.00
03	RADIANT/ELEC/BB	BASE
04	RADIANT/WATER	\$1.20
05	FORCED HOT AIR	\$3.80
06	UNIT HEATERS	BASE
07	PACKAGED HEAT/COOL	\$4.50
08	REVERSE CYCLE PUMP	\$4.50
09	COOLING W/DUCTS	\$3.80
	HEATING VENTILATION &	\$4.50
10	AIR	

FP Code	Fireplace	Rate
01	NONE	BASE
02	FLUE	\$925
03	PREFAB	\$1,850
04	ONE STORY SINGLE	\$3,700
05	ONE STORY DOUBLE	\$4,700
06	TWO STORY SINGLE	\$4,700
07	TWO STORY DOUBLE	\$6,150

BG Code	Basement Garage	SQ. FT Rate
BG	BASEMENT GARAGE DOOR	\$2,500

PL	Plumbing	Rate
Code		
01	NONE	BASE
02	NUMBER OF	\$750.00
	FIXTURES (Commercial)	
03	FULL BATH	\$3,000
04	HALF BATH	\$2,000

AT	Attic	Rate
Code		
UNFIN	UNFINISHED	\$25.00
FIN	FINISHED	\$53.00

BA	Basement	SQ.FT.
Code		Rate
CELL	CELLAR ONLY	\$10.00
FIN	FINISHED	\$62.20
SEMI	SEMI FINISHED	\$46.65
UNFIN	UNFINISHED	\$27.20

ST1	Story Height Adjust	97%

DISCRIPTIVE CODES ONLY (NO MONETARY VALUE)

Roof Design (RD)		
Code	Desc.	
01	FLAT	
02	SHED	
03	GABLE	
04	HIP	
05	GAMBREL	
06	MANSARD	
07	MONITOR	
08	IRREGULAR	

Roof Cover (RC)		
Code	Code Desc.	
01	COMPOSITION	
02	BUILT-UP/TAR & GRAVEL	
03	WOOD SHINGLE	
04	ASB./SLATE	
05	CLAY TILE	
06	CORG. METAL	
07	METAL SHINGLE	

	Floor Cover (FC)	
Code	Desc.	
01	SOFTWOOD	
02	HARDWOOD	
03	ASPHALT	
04	VINYL	
05	CARPET	
06	CONCRETE	
07	TERRAZZO	
08	TILE/INLAY	
09	OTHER	

Foundation (FD)		
Code	Desc.	
00	NONE	
01	CB-CONT WALL	
02	PIER/POST	
03	CONTINUOUS SLAB	
04	BR-CONT WALL	
05	SUPERIOR WALLS	
03	POURED CONCRETE	
07	STONE	

Floor Systems (FS)			
Code Desc.			
01	EARTH		
02	CONCRETE SLAB		
03	WOOD FRAME		

Exterior Wall (EW)			
Code	Desc.		
00	NONE/UNKNOWN		
01	BRICK		
02	STONE		
03	CONCRETE BLOCK		
04	STUCCO		
05	WOOD PANEL/LOG		
06	WOOD SIDING		
07	ASBESTOS		
08	ALUM/VINYL		
09	CORG. METAL		
10	PRECAST PANEL		
11	CEMENT BOARD		
12	CEDAR/CYPRESS		

Structural Frame (SF)			
Code Desc.			
01	WOOD FRAME		
02	MASONRY		
03	CONCRETE		
04	STEEL/FP		
05	RIGID STEEL FRAME		

MAJOR IMPROVEMENT SIZE ADJUSTMENTS

Code	Size	Adj. %	Code	Size	Adj. %	Code	Desc.	Adj. %
A01	0001-0299	175.00	A02	0001-0524	110.00	A03	0-8999	100.00
A01	0300-0309	167.00	A02	0525-0549	110.00	A03	9000-9049	99.90
A01	0310-0319	165.00	A02	0550-0574	109.00	A03	9050-9099	99.80
A01	0320-0329	163.00	A02	0575-0599	109.00	A03	9100-9149	99.70
A01	0330-0339	161.00	A02	0600-0624	108.00	A03	9150-9199	99.60
A01	0340-0349	160.00	A02	0625-0649	108.00	A03	9200-9249	99.50
A01	0350-0359	158.00	A02	0650-0674	107.00	A03	9250-9299	99.40
A01	0360-0369	156.00	A02	0675-0699	107.00	A03	9300-9349	99.30
A01	0370-0379	154.00	A02	0700-0724	106.00	A03	9350-9399	99.20
A01	0380-0389	153.00	A02	0725-0749	106.00	A03	9400-9449	99.10
A01	0390-0399	151.00	A02	0750-0774	105.00	A03	9450-9499	99.00
A01	0400-0409	149.00	A02	0775-0799	105.00	A03	9500-9549	98.90
A01	0410-0419	148.00	A02	0800-0824	104.00	A03	9550-9599	98.80
A01	0420-0429	147.00	A02	0825-0849	104.00	A03	9600-9649	98.70
A01	0430-0439	145.00	A02	0850-0874	103.00	A03	9650-9699	98.60
A01	0440-0449	144.00	A02	0875-0899	103.00	A03	9700-9749	98.50
A01	0450-0459	143.00	A02	0900-0924	102.00	A03	9750-9799	98.40
A01	0460-0469	142.00	A02	0925-0949	102.00	A03	9800-9849	98.30
A01	0470-0479	140.00	A02	0950-0974	101.00	A03	9850-9899	98.20
A01	0480-0489	139.00	A02	0975-0999	101.00	A03	9900-9949	98.10
A01	0490-0499	138.00	A02	1000-1049	100.00	A03	9950-9999	98.00
A01	0500-0509	137.00	A02	1050-1074	100.00	A03	10000-10049	97.90
A01	0510-0519	135.00	A02	1075-1099	99.00	A03	10050-10099	97.80
A01	0520-0529	134.00	A02	1100-1124	99.00	A03	10100-10149	97.70
A01	0530-0539	133.00	A02	1125-1149	98.00	A03	10150-10199	97.60
A01	0540-0549	132.00	A02	1150-1174	98.00	A03	10200-10249	97.50
A01	0550-0559	130.00	A02	1175-1199	97.00	A03	10250-10299	97.40
A01	0560-0569	129.00	A02	1200-1224	97.00	A03	10300-10349	97.30
A01	0570-0579	128.00	A02	1225-1249	96.00	A03	10350-10399	97.20
A01	0580-0589	127.00	A02	1250-1274	96.00	A03	10400-10449	97.10
A01	0590-0599	125.00	A02	1275-1299	95.00	A03	10450-10499	97.00
A01	0600-0609	124.00	A02	1300-1324	95.00	A03	10500-10549	96.90
A01	0610-0619	123.00	A02	1325-1349	94.00	A03	10550-10599	96.80
A01	0620-0629	122.00	A02	1350-1374	94.00	A03	10600-10649	96.70
A01	0630-0639	121.00	A02	1375-1399	93.00	A03	10650-10699	96.60
A01	0640-0649	120.00	A02	1400-1424	93.00	A03	10700-10749	96.50
A01	0650-0659	119.00	A02	1425-1449	92.00	A03	10750-10799	96.40
A01	0660-0669	118.00	A02	1450-1474	92.00	A03	10800-10849	96.30
A01	0670-0679	117.00	A02	1475-1499	91.00	A03	10850-10899	96.20
A01	0680-0689	116.00	A02	1500-1524	91.00	A03	10900-10949	96.10
A01	0690-0699	115.00	A02	1525-UP	90.00	A03	10950-10999	96.00
A01	0700-0719	114.00				A03	11000-11049	95.90
A01	0720-0739	113.00				A03	11050-11099	95.80

Vance County 2024

A01	0740-0759	112.00
A01	0760-0779	111.00
A01	0780-0799	110.00
A01	0800-0819	109.00
A01	0820-0839	108.00
A01	0840-0859	106.00
A01	0860-0879	105.00
A01	0880-0899	104.00
A01	0900-0924	103.00
A01	0925-0949	102.00
A01	0950-0974	102.00
A01	0975-0999	100.00
A01	1000-1019	100.00
A01	1020-1039	99.00
A01	1040-1059	98.00
A01	1060-1079	97.00
A01	1080-1099	96.00
A01	1100-1124	95.00
A01	1125-1149	94.00
A01	1150-1174	93.00
A01	1175-1199	92.00
A01	1200-1224	91.00
A01	1225-1249	90.00
A01	1250-1274	90.00
A01	1275-1299	89.00
A01	1300-1349	88.00
A01	1350-1399	87.00
A01	1400-1449	86.00
A01	1450-1499	85.00
A01	1500-1574	84.00
A01	1575-1649	84.00
A01	1650-1724	83.00
A01	1725-1799	82.00
A01	1800-1899	81.00
A01	1900-1999	80.00
A01	2000-2099	79.00
A01	2100-2249	78.00
A01	2250-2399	77.00
A01	2400-2599	77.00
A01	2600-2799	76.00
A01	2800-2999	75.00
A01	3000-3249	74.00
A01	3250-3499	73.00
A01	3500-3999	72.00
A01	4000-4499	72.00
A01	4500-4999	71.00
A01	5000-UP	70.00

A03	11100-11149	95.70
A03	11150-11199	95.60
A03	11200-11249	95.50
A03	11250-11299	95.40
A03	11300-11349	95.30
A03	11350-11399	95.20
A03	11400-11449	95.10
A03	11450-11499	95.00
A03	11500-11549	94.90
A03	11550-11599	94.80
A03	11600-11649	94.70
A03	11650-11699	94.60
A03	11700-11749	94.50
A03	11750-11799	94.40
A03	11800-11849	94.30
A03	11850-11899	94.20
A03	11900-11949	94.10
A03	11950-11999	94.00
A03	12000-12049	93.90
A03	12050-12099	93.80
A03	12100-12149	93.70
A03	12150-12199	93.60
A03	12200-12249	93.50
A03	12250-12299	93.40
A03	12300-12349	93.20
A03	12350-12399	93.10
A03	12400-12449	93.00
A03	12450-12499	92.90
A03	12500-12549	92.80
A03	12550-12599	92.70
A03	12600-12649	92.60
A03	12650-12699	92.50
A03	12700-12749	92.40
A03	12750-12799	92.30
A03	12800-12849	92.20
A03	12850-12899	92.10
A03	12900-12949	92.00
A03	12950-12999	92.00
A03	13000-UP	92.00

MAIN BUILDING ATTACHMENT CODES

Code	Description	Rate	Size Adj
01	BRICK ADDITION	\$69.15	A2
02	BRICK GARAGE FINISHED	\$30.75	A1
03	BRICK GARAGE UNFINISHED	\$25.25	A1
04	CANOPY – INEXPENSIVE	\$11.60	A5
05	CARPORT	\$18.90	A3
06	COVERED PORCH	\$28.70	A5
08	ENCLOSED FRAME PORCH	\$47.15	A5
09	SUNPORCH	\$56.40	A5
10	ENCLOSED MASNORY PORCH	\$49.10	A5
11	FRAME ADDITION	\$66.50	A2
12	FRAME DECK	\$16.70	A5
13	FRAME GARAGE FINISHED	\$28.80	A1
14	FRAME GARAGE UNFINISHED	\$27.80	A1
15	FRAME STORAGE	\$26.80	A5
16	FREIGHT ELEVATOR	\$40,000	-
16X	FREIGHT ELEVATOR XTRA STOPS	\$7,500	-
17	SCREEN PORCH	\$33.00	A6
20	MASONRY STOOP/TERRACE	\$12.00	A12
21	MASONRY STORAGE	\$28.40	A6
25	PASSENGER ELEVATOR	\$75,000	-
25X	PASSENGER ELEVATOR XTRA STOPS	\$7,500	-
26	SLAB	\$5.10	A4
29	MEZZANINE UNFINISHED	\$25.00	A11
33	MISC STROAGE	\$23.00	A1
34	SHED	\$15.00	A11
35	COMMERCIAL CANOPY	\$24.15	A5
36	MEZZANINE DISPLAY	\$35.00	A6
37	PATIO	\$11.35	A4
46	DOCK W/ ROOF	\$21.75	A4
47	LOADING WELL	\$15.00	A11
48	BRICK PATIO	\$11.35	A12
51	LEAN – TO	\$8.00	A11
52	SERVICE GAR ATTACHED MAS	\$45.00	A13
53	SERVICE GAR ATTACHED RSF	\$38.00	A13
55	COLD STORAGE WALK IN	\$125.00	A11
56	RAMP	\$12.00	A12
59	LOADING DOCK COVERED	\$25.00	A4

ATTACHMENT CODE SIZE ADJUSTMENT

A1		
AREA	ADJ	
001-150	110	
151-200	108	
201-250	106	
251-300	104	
301-350	102	
351-600	100	
601-650	98	
651-700	96	
701-750	94	
751-800	92	
801-UP	90	

A2	2
AREA	ADJ
001-050	110
051-100	105
101-150	102
151-400	100
401-550	98
551-700	96
701-850	94
851-1000	92
1001-UP	90

A3				
AREA	ADJ			
001-150	110			
151-200	105			
201-250	102			
251-400	100			
401-600	98			
601-700	96			
701-800	94			
801-900	92			
901-UP	90			

A4			
AREA	ADJ		
001-040	100		
041-080	98		
081-150	96		
151-300	94		
301-UP	90		

A5		
AREA	ADJ	
001-020	110	
021-040	106	
041-060	104	
061-080	102	
081-200	100	
201-300	98	
301-400	96	
401-500	94	
501-UP	90	

A6)
AREA	ADJ
001-020	110
021-040	106
041-060	104
061-080	102
081-200	100
201-300	98
301-400	96
401-500	94
501-UP	90

A11						
AREA	ADJ					
0-199	103.00					
200-224	102.80					
225-249	102.60					
250-274	102.40					
275-299	102.20					
300-324	102.00					
325-349	101.80					
350-374	101.60					
375-399	101.40					
400-424	101.20					
425-449	101.00					
450-474	100.80					
475-499	100.60					
500-524	100.40					
525-549	100.20					
550-574	100.00					
575-599	99.80					
600-624	99.50					
625-649	99.30					
650-674	99.00					
675-699	98.80					
700-724	98.50					
725-749	98.30					
750-774	98.00					
775-799	97.80					
800-824	97.50					
825-849	97.30					
850-874	97.00					
875-899	96.80					
900- 924	96.50					
925-949	96.30					
950-974	96.00					
975-999	95.80					
1000 - UP	95.50					

AREA ADJ 0-09 103.80 10-19 103.50 20-29 103.30 30-39 103.00 40-49 102.80 50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 <t< th=""><th colspan="7">A12</th></t<>	A12						
0-09 103.80 10-19 103.50 20-29 103.30 30-39 103.00 40-49 102.80 50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599							
10-19 103.50 20-29 103.30 30-39 103.00 40-49 102.80 50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624							
20-29 103.30 30-39 103.00 40-49 102.80 50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649							
30-39 103.00 40-49 102.80 50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80							
40-49 102.80 50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80							
50-59 102.50 60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	-	103.00					
60-69 102.30 70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	40-49						
70-79 102.00 80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80		102.50					
80-89 101.80 90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80		102.30					
90-99 101.50 100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	70-79	102.00					
100-119 101.30 120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	80-89	101.80					
120-139 101.00 140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	90-99	101.50					
140-159 100.80 160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	100-119	101.30					
160-179 100.50 180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	120-139	101.00					
180-199 100.30 200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	140-159	100.80					
200-224 100.00 225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	160-179	100.50					
225-249 99.80 250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	180-199	100.30					
250-274 99.50 275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	200-224	100.00					
275-299 99.30 300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	225-249	99.80					
300-324 99.00 325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	250-274	99.50					
325-349 98.80 350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	275-299	99.30					
350-374 98.50 375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	300-324	99.00					
375-399 98.30 400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	325-349	98.80					
400-424 98.00 425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	350-374	98.50					
425-449 97.80 450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	375-399	98.30					
450-474 97.50 475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	400-424	98.00					
475-499 97.30 500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	425-449	97.80					
500-524 97.00 525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	450-474	97.50					
525-549 96.80 550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	475-499	97.30					
550-574 96.50 575-599 96.30 600-624 96.00 625-649 95.80	500-524	97.00					
575-599 96.30 600-624 96.00 625-649 95.80	525-549	96.80					
575-599 96.30 600-624 96.00 625-649 95.80	550-574	96.50					
625-649 95.80							
625-649 95.80	600-624	96.00					
1 1	625-649						
030-074 93.30	650-674	95.50					
675-699 95.30	675-699	95.30					
700-UP 95.00	700-UP						

A13	
AREA	ADJ
0-1999	104.00
2000-2024	104.00
2025-2049	103.80
2050-2074	103.60
2075-2099	103.40
2100-2124	103.20
2125-2149	103.00
2150-2174	102.80
2175-2199	102.60
2200-2224	102.40
2225-2249	102.20
2250-2274	102.00
2275-2299	101.80
2300-2324	101.60
2325-2349	101.40
2350-2374	101.20
2375-2399	101.00
2400-2424	100.80
2425-2449	100.60
2450-2474	100.40
2475-2499	100.20
2500-2524	100.00
2525-2549	99.80
2550-2574	99.60
2575-2599	99.40
2600-2624	99.20
2625-2649	99.00
2650-2674	98.80
2675-2699	98.60
2700-2724	98.40
2725-2749	98.20
2750-2774	98.00
2775-2799	97.80
2800-2824	97.60
2825-2849	97.40
2850-2874	97.20
2875-2899	97.00
2900-2924	96.80
2925-2949	96.50
2950-2974	96.30
2975-UP	96.00

A14						
AREA	ADJ					
0-6999	100.00					
7000-7049	99.80					
7050-7099	99.50					
7100-7149	99.30					
7150-7199	99.00					
7200-7249	98.80					
7250-7299	98.50					
7300-7349	98.30					
7350-7399	98.00					
7400-7449	97.80					
7450-7499	97.50					
7500-7549	97.30					
7550-7599	97.00					
7600-7649	96.80					
7650-7699	96.50					
7700-7749	96.30					
7750-7799	96.00					
7800-7849	95.80					
7850-7899	95.50					
7900-7949	95.30					
7950-7999	95.00					
8000-8049	94.80					
8050-8099	94.50					
8100-8149	94.30					
8150-8199	94.00					
8200-8249	93.80					
8250-8299	93.50					
8300-8349	93.30					
8350-8399	93.00					
8400-8449	92.80					
8450-8499	92.50					
8500-8549	92.30					
8550-8599	92.00					
8600-8649	91.80					
8650-8699	91.50					
8700-8749	91.30					
8750-8799	91.00					
8800-8849	90.80					
8850-8899	90.50					
8900-8949	90.30					
8950-UP	90.00					

QUALITY GRADE

	T				
QUALITY GRADE	PERCENT				
XX	325%				
X	250%				
A+	165%				
A	155%				
A-	145%				
B+	135%				
В	125%				
B-	120%				
C+	110%				
С	100%				
C-	95%				
D+	90%				
D	85%				
D-	75%				
E+	65%				
Е	55%				
E-	45%				

C.D.U. TABLE

AGE	EX	VG	GD	AV	FR	PR	VP	UN
1	0	0	0	0	5	10	15	25
2	0	0	0	0	6	12	18	30
3	0	0	0	1	7	14	21	35
4	0	0	0	1	8	16	24	40
5	0	0	1	2	9	18	27	45
6	0	0	1	3	10	20	30	50
7	0	1	1	3	12	22	32	62
8	0	1	1	4	14	24	34	70
9	0	1	1	4	16	26	36	80
10	0	1	2	5	18	28	38	90
11	0	1	2	6	20	30	40	90
12	0	1	2	7	22	32	42	90
13	0	1	2	8	23	33	43	90
14	0	1	2	9	24	34	44	90
15	0	1	3	10	25	35	45	90
16	1	2	3	11	26	36	46	90
17	1	2	3	12	27	37	47	90
18	1	2	4	13	28	38	48	90
19	1	2	4	14	29	39	49	90
20	1	2	5	15	30	40	50	90
21	1	2	5	15	30	40	50	90
22	1	2	6	16	31	41	51	90
23	1	2	6	16	31	41	51	90
24	1	2	7	17	32	42	52	90
25	1	2	8	18	33	43	53	90
26	2	2	8	18	33	43	53	90
27	2	2	9	19	34	44	54	90
28	2	2	9	19	34	44	54	90
29	2	2	10	20	35	45	55	90
30	2	3	10	20	35	45	55	90
31	2	3	11	21	36	46	56	90
32	2	3	11	21	36	46	56	90
33	2	3	12	22	37	47	57	90
34	2	3	12	22	37	47	57	90
35	3	3	13	23	38	48	58	90
36	3	3	14	24	39	49	59	90
37	3	3	14	24	39	49	59	90
38	3	3	15	25	40	50	60	90
39	3	3	15	25	40	50	60	90
40	3	4	16	26	41	51	61	90
41	3	4	16	26	41	51	61	90

AGE	EX	VG	GD	AV	FR	PR	VP	UN
42	3	4	17	27	42	52	62	90
43	3	4	17	27	42	52	62	90
44	3	4	18	28	43	53	63	90
45	3	5	18	28	43	53	63	90
46	3	5	19	29	44	54	64	90
47	3	5	19	29	44	54	64	90
48	3	5	20	30	45	55	65	90
49	3	5	20	30	45	55	65	90
50	3	5	21	31	46	56	66	90
51	4	6	21	31	46	56	66	90
52	4	6	22	32	47	57	67	90
53	4	6	22	32	47	57	67	90
54	4	6	23	33	48	58	68	90
55	4	6	23	33	48	58	68	90
56	5	7	24	34	49	59	69	90
57	5	7	24	34	49	59	69	90
58	5	7	25	35	50	60	70	90
59	5	7	25	35	50	60	71	90
60	5	7	25	36	51	61	71	90
61	5	8	26	36	51	61	71	90
62	5	8	26	37	52	62	72	90
63	5	8	26	37	52	62	72	90
64	5	8	26	38	53	63	73	90
65	6	8	27	38	53	63	73	90
66	6	9	27	39	54	64	74	90
67	6	9	27	39	54	64	74	90
68	6	9	27	39	54	64	74	90
69	6	9	28	40	55	65	75	90
70	7	9	28	40	55	65	75	90
71	7	10	28	40	55	65	75	90
72	7	10	28	41	56	66	76	90
73	7	10	29	41	56	66	76	90
74	7	10	29	41	56	66	76	90
75	7	10	29	42	57	67	77	90
76	7	11	29	42	57	67	77	90
77	7	11	30	42	57	67	77	90
78	7	11	30	43	58	68	78	90
79	7	11	30	43	58	68	78	90
80	8	11	30	43	58	68	78	90
81	8	11	31	44	59	69	79	90
82	8	12	31	44	59	69	79	90
83	8	12	31	44	59	69	79	90
84	8	12	31	45	60	70	80	90

Vance County 2024

AGE	EX	VG	GD	AV	FR	PR	VP	UN
85	8	12	32	45	60	70	80	90
86	8	12	32	45	60	70	80	90
87	8	12	32	46	61	71	81	91
88	8	13	32	46	61	71	81	91
89	8	13	33	46	61	71	81	91
90	9	13	33	47	62	72	82	92
91	9	13	33	47	62	72	82	92
92	9	13	33	47	62	72	82	92
93	9	14	34	48	63	73	83	93
94	9	14	34	48	63	73	83	93
95	9	14	34	48	63	73	83	93
96	9	14	34	49	64	74	84	94
97	9	15	34	49	64	74	84	94
98	9	15	34	49	64	74	84	94
99	10	15	35	50	65	75	85	95
100- UP	10	15	35	50	65	75	85	95

MANUFACTURED HOME SECTION C.D.U. TABLE

AGE	MEX	MVG	MGD	MAV	MFR	MPR	MVP	MUN
1	1	2	2	4	10	20	50	95
2	1	3	4	5	13	22	50	95
3	1	4	5	6	15	24	51	95
4	1	5	6	8	18	26	52	95
5	2	8	8	9	21	28	53	95
6	3	9	10	11	23	30	54	95
7	4	10	11	13	25	32	55	95
8	5	10	13	15	27	34	56	95
9	6	11	15	17	31	36	57	95
10	7	11	17	18	35	38	58	95
11	8	12	19	20	37	40	59	95
12	8	12	21	22	43	44	60	95
13	8	13	22	24	45	48	61	95
14	9	14	22	26	47	50	62	95
15	9	14	23	28	49	52	63	95
16	9	15	23	29	53	54	64	95
17	10	15	24	31	55	58	65	95
18	10	16	24	33	56	60	66	95
19	10	17	25	35	57	60	67	95
20	11	17	25	36	58	62	68	95
21	11	18	26	38	59	63	69	95
22	11	19	27	40	59	63	70	95
23	12	20	27	42	60	64	71	95
24	12	20	28	43	61	65	71	95
25	12	21	28	45	61	65	72	95
26	13	21	29	46	62	66	72	95
27	13	22	29	46	63	70	73	95
28	13	23	30	47	63	70	73	95
29	14	23	31	47	64	71	74	95
30	14	24	31	48	65	72	74	95
31	14	25	32	48	65	72	75	95
32	15	25	32	49	66	73	75	95
33	15	26	33	49	67	74	76	95
34	15	26	34	50	67	74	76	95
35	16	27	34	50	68	75	77	95
36	16	28	35	51	69	76	77	95
37	16	28	35	51	69	76	78	95
38	17	29	35	52	70	77	78	95
39	17	29	36	52	70	78	80	95
40	17	29	36	53	71	78	81	95
41	18	30	36	53	72	79	82	95

Vance County 2024

AGE	MEX	MVG	MGD	MAV	MFR	MPR	MVP	MUN
42	18	30	37	54	73	80	83	95
43	18	31	37	54	74	80	84	95
44	19	32	37	55	75	81	85	95
45	19	32	38	56	76	82	86	95
46	19	33	39	58	77	82	87	95
47	20	33	39	58	78	83	88	95
48	20	34	40	59	79	84	89	95
49	20	35	41	60	80	85	90	95
50	20	35	41	60	80	85	90	95
51	20	35	41	60	80	85	90	95
52	20	35	41	60	80	85	90	95
53	20	35	41	60	80	85	90	95
54	20	35	41	60	80	85	90	95
55	20	35	41	60	80	85	90	95
56-UP	20	35	41	60	80	85	90	95

OTHER BUILDING AND YARD ITEMS PRICING SCHEDULES

The Other Building and Yard Item pricing schedules are provided to calculate the replacement cost new of a variety of types of structures typically associated with residential property.

Base prices and adjustments are provided for swimming pools, detached garages, greenhouses, carports, canopies, utility buildings, tennis courts, boat houses, and boat docks. Each structure has been assigned a unique Structure Type Code to be utilized on Computer-Assisted Mass Appraisal (CAMA) programs.

Depreciation allowances, where applicable, are included in the appropriate schedule. Additional tables can be found in the Depreciation Schedules and Tables section of the Manual.

The general pricing procedure is as follows:

- 1. Determine the Miscellaneous Structure code that best describes the structure. (Ex. Detached frame garage is a MS 10)
- 2. Multiply the square footage of the building by the square foot rate times the size factor for that structure code. (Ex. 900 Sq. Ft X \$25.00 X .965 = \$21,713)
- 3. Apply the proper Quality Grade Factor to arrive at the Replacement Cost New. The standard pricing schedule is at a C grade building.
- 4. Apply the proper depreciation from the correct table. (Ex. A garage built in 2007 in normal condition is reduced by 30% to its final value) X.70 (Percent Good)
- 5. The final value for the building is finished.



MS 04 CANOPY

MS 05
CARPORT





MS 10
UNFINISHED
FRAME
GARAGE



MS 29 STORAGE BUILDING

MS 53
UNFINISHE
D
BRICK
GARAGE





MS 30 SWIMMIN G POOL



MS 03 BULK BARN

MS 17
IMPLEMENT
SHED





MS 21
POULTR
Y
HOUSE



MS 25 SILO



MS 26 STABLE

MS 41 BOAT SHELTER





MS 47
POLE
SHELTER

MS 66 GAZEBO





MS 89
PREFAB
METAL
CARPORT

MS 100 DOCK LEVELER





MS 101 COVERED DOCK

OUTBUILDING AND YARD ITEMS

Code	Description	Rate	Size Adj	Deprec.
01	ASPHALT PAVING	\$2.00	A1	C10
02	BATH HOUSE	\$50.00	A2	S2
03	BULK BARN	\$18.00	A4	S2
04	CANOPY	\$11.00	A5	S3
05	CARPORT	\$6.00	A5	S3
06	CONCRETE PAVING	\$3.50	A1	C15
07	DOCK	\$25.00	A1	S1
09	FENCE	\$9.00	A1	C10
10	UNFINISHED FRAME GARAGE	\$25.00	A11	S3
100	DOCK LEVELER	\$2,500.00	-	S1
101	COVERED DOCK	\$29.25	_	S1
11	GATE	\$800.00	-	-
12	GRAIN BIN	\$1.75	A4	S2
15	GREENHOUSE COMMERCIAL	\$10.00	A14	C20
16	HOG PARLOR	\$9.75	A4	S1
17	IMPLEMENT SHED	\$5.00	A2	S2
18	HANGER	\$20.50	A1	S3
19	LIGHTING	\$1,800.00	-	C20
21	POULTRY HOUSE	\$10.00	A1	S2
23	SHED	\$15.00	A4	S2
24	SHOP	\$24.00	A4	S2
25	SILO	\$8.50	A1	S1
26	STABLE	\$23.50	A4	S2
28	BARN	\$18.00	A4	S2
29	STORAGE BUILDING FRAME	\$10.00	A4	S2
30	SWIMMING POOL CONCRETE	\$35.00	A1	S1
31	TENNIS COURT	\$6.00	A1	C25
32	MOBILE HOME R.E.	\$55.00	A14	-
34	UNATTACHED DECK	\$12.50	A11	S3
35	MOBILE HOME ADDITION	\$40.00	A2	S1
36	TOBACCO BARN	\$18.00	A4	S2

OUTBUILDING AND YARD ITEMS (continued)

Code	Description	Rate	Size Adj	Deprec.
39	TANK	\$1.75	A1	S2
40	PIER	\$30.00	A3	S1
41	BOAT SHELTER	\$30.00	A1	S1
43	MOBILE HOME HOOKUP	\$4,000.00	A14	-
47	POLE SHELTER	\$8.00	A4	S2
48	LEAN-TO	\$5.00	A4	S2
50	SWIMMING POOL VINYL	\$29.55	A1	S1
52	FINISHED FRAME GARAGE	\$28.75	A1	S3
53	UNFINISHED BRICK GARAGE	\$28.75	A1	S3
54	FINISHED BRICK GARAGE	\$36.00	A4	S3
57	SHIPPING DOCK W/ROOF	\$25.00	A11	C20
58	GREENHOUSE RES	\$7.50	A4	S2
60	GOLF COURSE	\$100,000.00	-	-
61	FIN FR GARAGE W/FIN UPPER	\$51.25	A11	S3
62	FIN BR GARAGE W/FIN UPPER	\$51.25	A1	S3
63	DWHM-PERSONAL PROPERTY	-	-	-
64	SWMH-PERSONAL PROPERTY	-	-	-
66	GAZEBO	\$18.00	A12	S1
67	METAL STORAGE SHED	\$12.85	A12	S2
69	PICNIC SHELTER	\$18.00	A11	S1
72	CANOPY-COMMERCIAL	\$25.00	A14	C30
74	PATIO	\$5.00	A1	S3

OUTBUILDING AND YARD ITEMS (continued)

Code	Description	Rate	Size Adj	Deprec
76	RIP RAP	\$35.00	-	S2
77	CONCRETE/SLAB	\$3.50	A1	C15
78	PORCH ATTACHED	\$18.00	A5	S3
79	DECK ATTACHED	\$12.50	A5	S3
80	CABIN	\$50.00	A11	S1
82	COLD STORAGE	\$63.30	A11	C20
86	QUONSET BLDG	\$20.00	A1	S3
89	PREFAB METAL CARPORT	\$4.25	A5	S3
90	PREFAB METAL GARAGE	\$21.00	A1	S3
97	CELL TOWER (STATE ACCESSED)	N/A	-	-
98	OVERHEAD DOOR	\$2,500.00	A2	C20

OTHER BUILDING AND YARD ITEMS CODE SIZE ADJUSTMENT

A1		
AREA	ADJ	
001-150	110	
151-200	108	
201-250	106	
251-300	104	
301-350	102	
351-600	100	
601-650	98	
651-700	96	
701-750	94	
751-800	92	
801-UP	90	

A2		
AREA	ADJ	
001-050	110	
051-100	105	
101-150	102	
151-400	100	
401-550	98	
551-700	96	
701-850	94	
851-1000	92	
1001-UP	90	

A3		
AREA	ADJ	
001-150	110	
151-200	105	
201-250	102	
251-400	100	
401-600	98	
601-700	96	
701-800	94	
801-900	92	
901-UP	90	

A4		
AREA	ADJ	
001-040	100	
041-080	98	
081-150	96	
151-300	94	
301-UP	90	

A5		
AREA	ADJ	
001-020	110	
021-040	106	
041-060	104	
061-080	102	
081-200	100	
201-300	98	
301-400	96	
401-500	94	
501-UP	90	

A6		
AREA	ADJ	
001-020	110	
021-040	106	
041-060	104	
061-080	102	
081-200	100	
201-300	98	
301-400	96	
401-500	94	
501-UP	90	

A11		
AREA	ADJ	
0-199	103.00	
200-224	102.80	
225-249	102.60	
250-274	102.40	
275-299	102.20	
300-324	102.00	
325-349	101.80	
350-374	101.60	
375-399	101.40	
400-424	101.20	
425-449	101.00	
450-474	100.80	
475-499	100.60	
500-524	100.40	
525-549	100.20	
550-574	100.00	
575-599	99.80	
600-624	99.50	
625-649	99.30	
650-674	99.00	
675-699	98.80	
700-724	98.50	
725-749	98.30	
750-774	98.00	
775-799	97.80	
800-824	97.50	
825-849	97.30	
850-874	97.00	
875-899	96.80	
900- 924	96.50	
925-949	96.30	
950-974	96.00	
975-999	95.80	
1000 - UP	95.50	

A12	
AREA	ADJ
0-09	103.80
10-19	103.50
20-29	103.30
30-39	103.00
40-49	102.80
50-59	102.50
60-69	102.30
70-79	102.00
80-89	101.80
90-99	101.50
100-119	101.30
120-139	101.00
140-159	100.80
160-179	100.50
180-199	100.30
200-224	100.00
225-249	99.80
250-274	99.50
275-299	99.30
300-324	99.00
325-349	98.80
350-374	98.50
375-399	98.30
400-424	98.00
425-449	97.80
450-474	97.50
475-499	97.30
500-524	97.00
525-549	96.80
550-574	96.50
575-599	96.30
600-624	96.00
625-649	95.80
650-674	95.50
675-699	95.30
700-UP	95.00

A13		
AREA	ADJ	
0-1999	104.00	
2000-2024	104.00	
2025-2049	103.80	
2050-2074	103.60	
2075-2099	103.40	
2100-2124	103.20	
2125-2149	103.00	
2150-2174	102.80	
2175-2199	102.60	
2200-2224	102.40	
2225-2249	102.20	
2250-2274	102.00	
2275-2299	101.80	
2300-2324	101.60	
2325-2349	101.40	
2350-2374	101.20	
2375-2399	101.00	
2400-2424	100.80	
2425-2449	100.60	
2450-2474	100.40	
2475-2499	100.20	
2500-2524	100.00	
2525-2549	99.80	
2550-2574	99.60	
2575-2599	99.40	
2600-2624	99.20	
2625-2649	99.00	
2650-2674	98.80	
2675-2699	98.60	
2700-2724	98.40	
2725-2749	98.20	
2750-2774	98.00	
2775-2799	97.80	
2800-2824	97.60	
2825-2849	97.40	
2850-2874	97.20	
2875-2899	97.00	
2900-2924	96.80	
2925-2949	96.50	
2950-2974	96.30	

Vance County 2024

2975-UP	96.00

OTHER BUILDING AND YARD ITEMS CODE SIZE ADJUSTMENT

A14	
AREA	ADJ
0-6999	100.00
7000-7049	99.80
7050-7099	99.50
7100-7149	99.30
7150-7199	99.00
7200-7249	98.80
7250-7299	98.50
7300-7349	98.30
7350-7399	98.00
7400-7449	97.80
7450-7499	97.50
7500-7549	97.30
7550-7599	97.00
7600-7649	96.80
7650-7699	96.50
7700-7749	96.30
7750-7799	96.00
7800-7849	95.80
7850-7899	95.50
7900-7949	95.30
7950-7999	95.00
8000-8049	94.80
8050-8099	94.50
8100-8149	94.30
8150-8199	94.00
8200-8249	93.80
8250-8299	93.50
8300-8349	93.30
8350-8399	93.00
8400-8449	92.80
8450-8499	92.50
8500-8549	92.30
8550-8599	92.00
8600-8649	91.80
8650-8699	91.50
8700-8749	91.30
8750-8799	91.00
8800-8849	90.80
8850-8899	90.50
8900-8949	90.30

8950-UP	90.00

OTHER BUILDING AND YARD ITEMS DEPRECIATION

S1		
AGE	DEPR.	
01	10%	
02	20%	
03	25%	
04	30%	
05	35%	
06	40%	
07	45%	
08-UP	50%	

S2	
AGE	DEPR.
01	5%
02	10%
03	15%
04	20%
05	25%
06	30%
07	35%
08	40%
09	45%
10	50%
11	55%
12	60%
13	65%
14	70%
15-UP	75%

S3		
AGE	DEPR.	
0003	5%	
0406	10%	
0709	15%	
1012	20%	
1315	25%	
1618	30%	
1921	35%	
2224	40%	
2527	45%	
2830	50%	
3135	55%	
3640	60%	
4145	65%	
4650	70%	
51UP	75%	

S4	
AGE	DEPR.
0004	5%
0508	10%
0912	15%
1316	20%
1720	25%
2124	30%
2528	35%
2932	40%
3336	45%
3740	50%
4144	55%
4548	60%
4952	65%
5356	70%
57UP	75%

S5	
AGE	DEPR.
0005	5%
0610	10%
1115	15%
1620	20%
2125	25%
2630	30%
3135	35%
3640	40%
4145	45%
4650	50%
5155	55%
5660	60%
6165	65%
6670	70%
71UP	75%

OTHER BUILDING AND YARD ITEMS DEPRECIATION (Continued)

C10		
AGE	DEPR.	
01	9%	
02	17%	
03	24%	
04	30%	
05	36%	
06	40%	
07	45%	
08	49%	
09	52%	
10	55%	
11-17	60%	
18-20	65%	
21-UP	75%	

C15	
AGE	DEPR.
01	9%
02	17%
03	24%
04	30%
05	36%
06	40%
07	45%
08	49%
09	52%
10	55%
11-17	60%
18-20	65%
21-UP	75%

C20		
AGE	DEPR.	
01	5%	
02	9%	
03	13%	
04	17%	
05	21%	
06	24%	
07	27%	
08	30%	
09	33%	
10	36%	
11	38%	
12	40%	
13	43%	
14	45%	
15	47%	
16	49%	
17	50%	
18	52%	
19	54%	
20-UP	55%	

C25	
AGE	DEPR.
01	4%
02	8%
03	11%
04	14%
05	17%
06	20%
07	23%
08	26%
09	28%
10	30%
11	33%
12	35%
13	37%
14	39%
15	40%
16	42%
17	44%
18	46%
19	47%
20	49%
21	50%
22	51%
23	53%
24	54%
25-UP	55%

C30						
AGE	DEPR.					
01	3					
02	6					
03	9					
04	12					
05	15					
06	17					
07	20					
08	22					
09	24					
10	26 28					
11	28					
12	30					
13	32					
14 15	34					
15	36					
16	37					
17	39					
18	40					
19	42					
20	43					
21	45					
22	46					
23	47					
24	49					
25	50					
26	51					
27	52					
28	53					
29	54					
30-UP	55					

OTHER BUILDING AND YARD ITEMS DEPRECIATION (Continued)

C35					
AGE	DEPR.				
01	3%				
02	6%				
03	9%				
04	12%				
05	14%				
06	17%				
07	19%				
08	21%				
09	23%				
10	25%				
11	27%				
12	29%				
13	30%				
14	32%				
15	33%				
16	35%				
17	36%				
18	37%				
19	39%				
20	40%				
21	41%				
22	42%				
23	43%				
24	44%				
25	45%				
26	46%				
27	47%				
28	48%				
29	49%				
30-UP	50%				

AGE DEPR. 01 2% 02 5% 03 7% 04 9% 05 11% 06 13% 07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 19 30% 20 31% 21 32% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50%	C40				
02 5% 03 7% 04 9% 05 11% 06 13% 07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 17 28% 18 29% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55	AGE	DEPR.			
03 7% 04 9% 05 11% 06 13% 07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 <t< td=""><td>01</td><td>2%</td></t<>	01	2%			
04 9% 05 11% 06 13% 07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89	02	5%			
05 11% 06 13% 07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	03	7%			
06 13% 07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	04	9%			
07 14% 08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	05	11%			
08 16% 09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 18 29% 19 30% 20 31% 21 32% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	06	13%			
09 18% 10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 18 29% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	07	14%			
10 19% 11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 18 29% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	08	16%			
11 21% 12 22% 13 23% 14 25% 15 26% 16 27% 17 28% 18 29% 19 30% 20 31% 21 32% 22 33% 23 34% 24 35% 25-26 36% 27 37% 28 38% 29-30 39% 31 40% 32-33 41% 34-35 42% 36-37 43% 38 44% 39-49 45% 50-59 50% 60-69 55% 70-79 60% 80-89 65%	09	18%			
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50-59 50% 60-69 55% 70-79 60% 80-89 65%	38	44%			
60-69 55% 70-79 60% 80-89 65%		45%			
70-79 60% 80-89 65%	50-59				
80-89 65%	60-69	55%			
	70-79	60%			
90-UP 75%		65%			
	90-UP	75%			

C50					
AGE	DEPR.				
01	2%				
02	4%				
03	6%				
04	8%				
05	9%				
06	11%				
07	13%				
08	14%				
09	16%				
10	17%				
11	19%				
12	20%				
13	22%				
14	23%				
15	24%				
16	26%				
17	27%				
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26	37%				
27	38%				
28	39%				
29-30	40%				
31	41%				
32	42%				
33	43%				
34	44%				
35	45%				
36-37	46%				
38	47%				
39	48%				
40-41	49%				
42	50%				
43-44	51%				
45	52%				
46-47	53%				
48-49	54%				
50-89	55%				
90-UP	65%				
J J U U I	0070				

EXEMPT/INSTITUTIONAL BUILDINGS

This section of the Manual includes basic procedures and applications to be utilized to determine the Replacement Cost New for a variety of institutional type structures. Prices are provided based on the structure type and exterior wall material.

BASE SPECIFICATIONS

Base prices assume normal construction, mechanical, and other features such as plumbing, heating, air conditioning, interior finish, framing, elevators, etc., according to the designed building structure type.

SCHEDULE APPLICATION

Select the structure type which is most representative of the subject building. Establish the Quality Grade of the building, which is contingent upon the exterior wall material of the structure type. Determine the total square feet of floor area and multiply the cost per square foot by the total area to establish the replacement cost.

PERCENT (%) GOOD GUIDELINES

Physical deterioration of institutional buildings should be based on the effective age and condition. Structures of this type normally have an expected life which is longer than other types of similar structures. Actual age and life expectancy can be extended through continued maintenance and renovation. When establishing the percent (%) good, the adjustment should be based on anticipated additional life as compared to normal life guidelines.



MA 03 ARMOR Y

MA 10 CHURC H





MA 11 CLASSROO M



MA 19 GYMNASIUM







MA 23 HOSPITAL



MA 47 GOVERNMENT BUILDING





COMMERCIAL/INDUSTRIAL SCHEDULES

Commercial and Industrial pricing schedules are provided for a variety of buildings based on the use of the property. The General Commercial Schedule is to be used as a guide for computing the replacement cost of mercantile type buildings, offices, and similar type structures, commercial living accommodations and associated support structures and manufacturing and warehouse storage type structures.

The general application of all the schedules is essentially the same; selecting the base price (per square foot) which is most representative of the subject building and adjusting the base price to account for any significant variation.

SCHEDULE FORMAT - BASE PRICES

The schedules designate base prices by use type for a series of perimeter-area ratios and wall types. "C" Grade base prices are provided for various finish types at different floor levels with specified floor-to-floor heights, for fire resistant construction with brick (or equal), frame (or equal), and metal superstructure walls and reinforced concrete basement walls.

Wood Frame (W) – buildings that are constructed of combustible materials with wood framed exterior walls covered by shingles, wood siding, stucco, asbestos, aluminum, or vinyl. Roof structure is usually wood frame or pre-constructed trusses with wood sheathing and composition shingles, built-up or corrugated metal cover. Floor structure may be perimeter footing with reinforced concrete slab or wood joists and sheathing.

Masonry (M) – buildings that are constructed of double brick, brick on concrete block, stone or ornamental concrete block exterior walls which are usually load bearing. Roof structure is usually wood frame or pre-constructed trusses with wood sheathing and composition shingles, built-up or corrugated metal cover. Floor structure may be perimeter footing with reinforced concrete slab or wood joist and sheathing.

Concrete (C) – buildings that are constructed with poured reinforced concrete super structure, or reinforced concrete or pre-cast concrete panel load bearing exterior walls. Super structure may have a variety of exterior walls covers including pre-cast panels and masonry veneers, or steel frame and stationary glass. Roof structure may be steel joists with metal decking and poured concrete or concrete planks or other non-combustible construction. Floors are usually reinforced concrete slab on grade.

Rigid Steel or Pre-Engineered (R) – buildings that are constructed with pre-fabricated structural members with exterior wall cover of pre-constructed panels or sheet siding. Roof structure is steel joists or beams usually with corrugated metal cover. Floors are usually reinforced concrete slab on grade.

The base price is determined by selecting the appropriate square foot price based on exterior wall type, construction and use. The base price is driven by construction type and is adjusted for variations in wall height, and area perimeter ratio adjustments.

Base prices also include: normal footings and foundation construction for a building at grade level, normal parapets and coping, ground floor slab including base and cement finish, normal roof construction consisting of insulation, decking, framing, and utility service.

Basements include excavation and backfill and structural floor (for first floor) construction consisting of sub floor and framing.

Note: The cost of the basement exterior wall construction and spread footings exclude an allowance for the normal foundation construction included with the first floor.

Stairways (with enclosures in the finished use types) are included in the basement and upper floor prices.

Normal partitions, plumbing, and lighting are included for each floor level based on use type. Adjustments may be made for the various base price components if the component is greater or less than what is considered normal for the use type.

Example: For general retail, normal is considered a cross partition (separating the sales area from the stock area) and partitions for two toilet rooms. If the store were divided into several sales areas, an addition for excessive partitions would be applicable.

CONSTRUCTION TYPES

Wood Frame/Joist/Beam to indicate construction, which incorporates wood, stud balloon or platform framing or wood post and beam framing (mill construction). This category also includes masonry structures, which incorporate wood joist or plank floor systems, or wood joist, truss, or rafter roof systems.

Fire Resistant to indicate buildings with exposed structural steel or reinforced concrete columns and beams. Multi-story structures will have steel floor joists with concrete plank or a reinforced concrete floor system. Exterior walls will typically be masonry or metal and glass panels.

Fireproof to indicate typically high- rise buildings with fabricated, heavy, structural steel column and beam framing which has been enveloped in a fire-proof material such as concrete or gypsum. Floors will be reinforced concrete or pre-cast concrete plank on steel joists protected by a gypsum-vermiculite plaster on metal lath ceiling. Exterior walls will be masonry or metal and glass panels.

QUALITY GRADE SPECIFICATIONS

The base prices are for normal "C" Grade buildings erected with average quality materials and workmanship. A Table of Quality Factors is provided to adjust the "C" Grade prices in order to account for variations in construction quality.

XX Grade Buildings generally having an outstanding architectural style and design,

constructed with the finest quality materials and workmanship. Superior quality interior finish, built-in features, heating system, and very good grade

plumbing and lighting fixtures.

X Grade Architecturally attractive buildings constructed with excellent quality

materials and workmanship. High quality interior finish, built-in features,

heating system, and very good grade plumbing and lighting fixtures.

B Grade Buildings constructed with good quality' materials and above average

workmanship, moderate architectural treatment. Good quality interior

finish, built-in features, heating, plumbing, and lighting fixtures.

C Grade Buildings constructed with average quality materials and workmanship

conforming with the base specifications used to develop the pricing schedule. Minimal architectural treatment. Average quality interior finish and built-in features. Standard quality heating system, plumbing, and

lighting fixtures.

D Grade Buildings constructed with economy quality materials and fair

workmanship. 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

"seconds" and very poor- quality workmanship resulting from unskilled, inexperienced, "do-it-yourself" type labor. Low grade heating, plumbing,

and lighting fixtures.

Note: The quality factor selected is to represent a composite judgment of the overall grade. Generally, the quality of materials and workmanship is consistent throughout the construction of a specific building. However, since this is not always the case, it is necessary to weigh the quality of each major component to arrive at the proper "overall" quality grade. Particular consideration must be given to "special features" such as elevators and banking features, since variations in quality are already considered in the respective pricing tables. Equal consideration must also be given to those "additions" which are constructed of materials and workmanship inconsistent with the quality of the main building.

QUALITY GRADE FACTORS

Schedule of Values

Vance County 2024

XX	325%	B+	135%	C-	95%	E	55%
X	250%	В	125%	D+	90%	E-	45%
A+	165%	В-	120%	D	85%		
A	155%	C+	110%	D-	75%		
A-	145%	\mathbf{C}	100%	E+	65%		

GENERAL APPLICATION

The general pricing procedure is as follows:

- 1. Determine the Main Area (MA) Code by construction type.
- 2. Apply base rate for MA Code
- 3. Apply story height adjustment (SC1) to upper floor.
- 4. Apply Cost & Design % factor to the total main area price.
- 5. Adjust for wall height, Table **H1** or **H2**.
- 6. Make necessary square foot adjustments for variations in the base price (heating and cooling, sprinkler system, etc.).
- 7. Determine the area size adjustment and apply it to each main area section.
- 8. Add lump sum valued features (elevators, etc.).
- 9. Sub-total the replacement cost of all main area components.
- 10. Add the cost of attachments or additions to arrive at the total "C" Grade Replacement Cost.
- 11. Apply the proper Quality Grade Factor to arrive at the Replacement Cost New.
- 12. Deduct for physical depreciation and functional or economic obsolescence.

SPECIAL APPLICATION

Although the General Commercial and Industrial schedules have been designed to be used primarily for computing the replacement cost of mercantile type buildings, offices, commercial apartments, warehouses, and manufacturing facilities, the schedules can also be effectively adapted to the pricing of other special purpose buildings. To maintain uniformity of the approach in pricing special purpose buildings, specific instructions and procedures have been developed and included in the schedules.



MA 05 AUTO SHOWROOM/ DEALERSHI P

MA 06 BANK





MA 07
BEAUTY/
BARBER
SHOP



MA 09 CAR WASH

MA 13
CONVERSION





MA 14
COUNTRY
CLUB



MA 15
DEPART. STORE

MA 16 DISCOUNT STORE





MA 25
INDUSTRIAL
LIGHT







MA 42 REST HOME

MA 31 MOTEL



MA 32 OFFICE





MA 33
RESTAURANT



MA 34 RETAIL



MA 35 SERVICE GARAGE

MA 36 SERVICE STATION



MA 38 SUPER-MARKET





MA 39 THEATRE

MA 40
WAREHOUS
E



MA 41 CONVEN . STORE





MA 49 VET. CLINIC



MA 43
BOWLIN
G
ALLEY

MA 44
FUNERAL
HOME





MA 45
RADIO/TV
STATION



MA 46
MEDICAL
OFFICE



MA 55 MINI-LUBE MA 58
NEIGHBORHOOD
SHOPS





MA 61 SKATING RINK



MA 64 DRIVE-THRU BANK MA 67 CARWASH SELF-SERV





MA 69 DAY CARE

BASE PRICE FOR COMMERCIAL SCHEDULE MA 05 AUTO DEALERSHIP

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 65.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF SHOWROOM/OFFICE/STORAGE

FRAMING:

WOOD JOIST/STEEL TRUSS

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/CARPET

FINISHED CONCRETE SLAB

ABUNDANT FLUORESCENT

LIGHTING

ADD FOR HEATING/COOLING

ADD FOR SHOWROOM

INTERIOR FINISH:

PAINTED BLOCK/DRYWALL/PANEL

PLUMBING:

10-12 PLUMBING FIXTURES

OTHER FEATURES:

GARAGE DOORS/HOSE BIBS/

FLOOR DRAINS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 06 BANK

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$125.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

OFFICE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/CARPET

ABUNDANT FLUORESCENT INTERIOR FINISH:

LIGHTING DRYWALL/PANEL

ADD FOR HEATING/COOLING INTERIOR FINISH:

PAINTED BLOCK/DRYWALL/PANEL

PLUMBING: 08-12 FIXTURES

OTHER FEATURES:

DRIVE UP WINDOWS, RECORD VAULT,

MONEY VALULT

BASE PRICE FOR COMMERCIAL SCHEDULE MA 07 BEAUTY/BARBER SHOP

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$ 67.55 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE/JUMBO BRICK

PARTITIONS/COMMON WALLS:

ADEQUATE

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL

FEATURES:

FLOOR COVER/FINISH: WOOD/VINYL/CARPET

ADD FOR HEATING/COOLING

INTERIOR FINISH: DRYWALL/PANEL

PLUMBING:

5-10 PLUMBING FIXTURES

OTHER FEATURES:

BASE PRICE FOR COMMERCIAL SCHEDULE MA 43 BOWLING ALLEY

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 65.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SERVICE/STORAGE AREA

FRAMING:

RIGID STEEL JOIST/TRUSS

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/HEAVY LINOLEUM

FINISHED CONCRETE SLAB

ABUNDANT FLUORESCENT

LIGHTING

ADD FOR HEATING/COOLING INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR SPRINKLER SYSTEM PAINTED BLOCK

PLUMBING:

10-15 FIXTURES

OTHER FEATURES:

ALUM/GLASS ENTRANCE

BASE PRICE FOR COMMERCIAL SCHEDULE MA 67 DRIVE - THRU CAR WASH

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$ 89.20 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: JUMBO BRICK

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

BAYS

FRAMING:

RIGID STEEL JOIST/TRUSS

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CONCRETE SLAB

FLOURESCENT LIGHTING INTERIOR FINISH:

EXPOSED BRICK/BLOCK

PLUMBING:

FLOOR DRAINS

OTHER FEATURES:

BASE PRICE FOR COMMERCIAL SCHEDULE MA 09 CAR WASH-WAND

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 84.80 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: JUMBO BRICK

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

BAYS/SALES AREA

FRAMING:

RIGID STEEL JOIST/TRUSS

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES: VINYL/CONCRETE SLAB

EATURES: VINYL/CONCRETE SLAF

FLUORESCENT LIGHTING INTERIOR FINISH:

EXPOSED BRICK

ADD FOR HEATING/COOLING

PLUMBING:

05-08 PLUMBING FIXTURES

OTHER FEATURES: FLOOR DRAINS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 79 COLD STORAGE WAREHOUSE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 56.60 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS:

FACE BRICK/PRE-FAB PANELS

LOAD BEARING WALLS

PARTITIONS/COMMON WALLS:

SMALL OFFICE AREAS

FRAMING:

STEEL BAR JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CONCRETE SLAB

ADD FOR HEATING/COOLING INTERIOR FINISH:

(CREATURE COMFORT ONLY) EXPOSED BRICK/PANELS

PLUMBING:

5-10 FIXTURES

OTHER FEATURES:

OVERHEAD/ROLLING DOORS

METAL/STEEL

BASE PRICE FOR COMMERCIAL SCHEDULE MA 41 CONVENIENCE STORE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$187.70 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS:

MINIMAL

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL

FEATURES:

ABUNDANT FLUORESCENT

LIGHTING

ADD FOR HEATING/COOLING

INTERIOR FINISH: DRYWALL/PANEL

FLOOR COVER/FINISH:

VINYL/HEAVY LINOLEUM

ADD FOR SPRINKLER SYSTEM

EXPOSED BRICK

PLUMBING: 5 FIXTURES

OTHER FEATURES:

ALUM/PLATE GLASS STORE FRONT

AVERAGE DISPLAY AREA

GLASS DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 13 CONVERSION

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 92.25 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING

EXTERIOR WALLS:

FACE BRICK OR EQUAL

PARTITIONS:

ADEQUATE FOR SEPARATION OF ROOMS/STORAGE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FEATURES: FLOOR COVER/FINISH:

VINYL/LINOLEUM/CARPET

ADD FOR FIREPLACES

GARAGES/PORCHES/BASEMENT AREAS

ADDITIONAL PLUMBING

ADD FOR HEATING/COOLING SYSTEM

INTERIOR FINISH: DRYWALL/PANEL

HEATING/COOLING:

FORCED HOT AIR OR EQUAL

PLUMBING:

8 PLUMBING FIXTURES

BASE PRICE FOR COMMERCIAL SCHEDULE MA 14 COUNTRY CLUB

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 84.95 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

RETAIL/DINING AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/LINOLEUM/CARPET

ADD FOR SPRINKLER SYSTEM INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR HEATING/COOLING

PLUMBING:

15-20 PLUMBING FIXTURES

OTHER FEATURES:

KITCHEN AREA/QUARRY TILE

FLOOR DRAINS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 69 DAY CARE CENTER

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$80.60 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS:

FACE BRICK

PARTITIONS/COMMON WALLS: ADEQUATE TO SEPARATE OFFICE/ CLASSROOMS/KITCHEN AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CONCRETE SLAB/VINYL/CARPET

ADD FOR HEATING/COOLING INTERIOR FINISH:

PAINTED BLOCK/DRYWALL

ADD FOR SPRINKLER SYSTEM

PLUMBING:

10-15 FIXTURES

OTHER FEATURES:

BASE PRICE FOR COMMERCIAL SCHEDULE MA 15 DEPARTMENT STORE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$80.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

RETAIL/STORAGE AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:
FEATURES VINYL/HEAVY LINOLEUM

ABUNDANT FLUORESCENT INTERIOR FINISH:

LIGHTING DRYWALL/PANEL/PLASTER

EXPOSED BRICK

ADD FOR HEATING/COOLING ADD FOR SPRINKLER SYSTEM

PLUMBING: 10-15 FIXTURES

OTHER FEATURES:

METAL/VITREOUS/GLASS STORE FRONT/DISPLAY

BASE PRICE FOR COMMERCIAL SCHEDULE MA 16 DISCOUNT STORE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 105.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

RETAIL/STORAGE AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES VINYL/HEAVY LINOLEUM

ABUNDANT FLUORESCENT INTERIOR FINISH:

LIGHTING DRYWALL/PANEL/PLASTER

PAINTED BLOCK

ADD FOR HEATING/COOLING ADD FOR SPRINKLER SYSTEM

PLUMBING: 8-10 FIXTURES

OTHER FEATURES:

ALUM/GLASS STORE FRONT

AUTOMATIC DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 62 DISTRIBUTION WAREHOUSE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 41.75 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL LOAD BEARING WALLS

PARTITIONS/COMMON WALLS:

SMALL OFFICE AREAS

FRAMING:

REINFORCED CONCRETE

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CONCRETE SLAB

ADEQUATE LIGHTING INTERIOR FINISH:

EXPOSED CONCRETE/BLOCK

ADD FOR HEATING/COOLING

PLUMBING:

ADD FOR SPINKLER SYSTEM 05-10 FIXTURES

OTHER FEATURES:

OVERHEAD/ROLLING DOORS

METAL/STEEL

BASE PRICE FOR COMMERCIAL SCHEDULE MA 64 DRIVE THRU BANK (NO VAULT)

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$108.20 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

OFFICE AREAS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/CARPET

ABUNDANT FLUORESCENT INTERIOR FINISH: LIGHTING DRYWALL/PANEL

ADD FOR HEATING/COOLING PLUMBING: 08-12 FIXTURES

OTHER FEATURES:

DRIVE UP WINDOWS, RECORD VAULT

BASE PRICE FOR COMMERCIAL SCHEDULE MA 44 FUNERAL HOME

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$85.80 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SALES/VIEWING CHAPEL

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CARPET/VINYL OR RUBBER TILE

ADD FOR HEATING/COOLING INTERIOR FINISH:

DRYWALL/PANEL

PLUMBING:

10-15 FIXTURES

OTHER FEATURES:

FLOOR DRAINING/QUARRY TILE/PREPARATION AREA

BASE PRICE FOR COMMERCIAL SCHEDULE MA 22 HANGER

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 41.60 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: POURED CONCRETE SLAB

EXTERIOR WALLS: RIGID STEEL FRAME

PARTITIONS/COMMON WALLS:

MINIMAL

FRAMING:

RIGID STEEL FRAME

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES CONCRETE SLAB

ABUNDANT FLUORESCENT INTERIOR FINISH:

LIGHTING NONE

ADD FOR HEATING/COOLING

ADD FOR SPRINKLER SYSTEM PLUMBING:

1-3 FIXTURES

OTHER FEATURES: OVERHEAD DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 53 HEALTH CLUB

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$72.60 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SERVICE/STORAGE AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/HEAVY LINOLEUM/CARPET

GOOD FLUORESCENT LIGHTING INTERIOR FINISH:

PAINTED BLOCK/EXPOSED BRICK

ADD FOR HEATING/COOLING

PLUMBING: 03-10 FIXTURES

OTHER FEATURES:

OVERHEAD DOORS (ABUNDANT)

DOCK BUMPERS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 24 HOTEL

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$ 96.62 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS:

ADEQUATE FOR SEPARATION OF SERVICE

AREA/GUEST ROOMS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES VINYL/HEAVY LINOLEUM

CARPET

ABUNDANT FLUORESCENT

LIGHTING

INTERIOR FINISH:

DRYWALL/PANEL/PLASTER

PAINTED BLOCK

ADD FOR HEATING/COOLING ADD FOR SPRINKLER SYSTEM

PLUMBING:

3-5 FIXTURES PER ROOM

OTHER FEATURES:

QUARRY TILE/KITCHEN AREA

BASE PRICE FOR COMMERCIAL SCHEDULE MA 25 INDUSTRIAL LIGHT

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 34.15 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE/JUMBO BRICK

PARTITIONS/COMMON WALLS:

SMALL OFFICE AREAS

FRAMING: STEEL FRAME

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES VINYL/HEAVY LINOLEUM

CARPET

ADD FOR ENCLOSURES

AND MEZZANINES INTERIOR FINISH:

PAINTED BLOCK

ADD FOR HEATING/COOLING

ADD FOR SPRINKLER SYSTEM PLUMBING:

10-15 FIXTURES

OTHER FEATURES:

OVERHEAD DOORS/DOCK BUMPERS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 26 LABORATORY

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$115.50 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL LOAD BEARING WALLS

PARTITIONS/COMMON WALLS:

SMALL OFFICE AREAS

FRAMING:

REINFORCED CONCRETE

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES CONCRETE SLAB

ADD FOR ENCLOSURES

AND MEZZANINES INTERIOR FINISH:

PAINTED BLOCK OR

ADD FOR HEATING/COOLING EQUAL

ADD FOR SPRINKLER SYSTEM PLUMBING:

10-15 FIXTURES

ABUNDANT FLORESCENT

LIGHTING OTHER FEATURES:

OVERHEAD DOORS/DOCK BUMPERS

ADD FOR CLEAN ROOMS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 27 LAUNDRY/CLEANERS

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$ 69.65 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINUOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE/JUMBO BRICK

PARTITIONS/COMMON WALLS:

ADEQUATE

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL

FEATURES:

FLOOR COVER/FINISH: WOOD/VINYL/CARPET

ADD FOR HEATING/COOLING INTERIOR FINISH:

DRYWALL/PANEL/UNFINISHED

PLUMBING:

5-10 PLUMBING FIXTURES

OTHER FEATURES:

BASE PRICE FOR COMMERCIAL SCHEDULE MA 46 MEDICAL OFFICE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$140.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ABUNDANT FOR SEPARATION OF TREATMENT/EXAM ROOMS

FRAMING: WOOD FRAME

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/CARPET

ADD FOR HEATING/COOLING INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR SPRINKLER SYSTEM

PLUMBING:

15-25 FIXTURES

OTHER FEATURES:

Schedule of Values

BASE PRICE FOR COMMERCIAL SCHEDULE MA 68 MINI WAREHOUSE/STORAGE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$ 36.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

STORAGE UNITS

FRAMING:

RIGID STEEL FRAME

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CONCRETE SLAB

ADD FOR ENCLOSURES/PLUMBING INTERIOR FINISH:

UNFINISHED

ADD FOR HEATING/COOLING

PLUMBING:

ADD FOR SPINKLER SYSTEM NONE

OTHER FEATURES:

OVERHEAD/PEDESTRIAN DOORS

METAL/WOOD

BASE PRICE FOR COMMERCIAL SCHEDULE MA 31 MOTEL

WALL HEIGHT **BASE PRICE BASE SPECIFICATIONS**

10 \$ 85.82 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS:

ADEQUATE FOR SEPARATION OF SERVICE

AREA/GUEST ROOMS

FRAMING: **WOOD JOIST**

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES:

VINYL/HEAVY LINOLEUM

CARPET

ADD FOR HEATING/COOLING ADD FOR SPRINKLER SYSTEM

INTERIOR FINISH: DRYWALL/PANEL PAINTED BLOCK

PLUMBING:

3-5 FIXTURES PER ROOM

OTHER FEATURES:

ALUMINIUM/GLASS WINDOW WALLS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 58 NEIGHBORHOOD SHOPS

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 79.85 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS:

FACE BRICK/PAINTED BLOCK

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

RETAIL STORES

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/HEAVY LINOLEUM

ABUNDANT FLOURESCENT INTERIOR FINISH: LIGHTING DRYWALL/PANEL

DRYWALL/PANEL PAINTED BLOCK

ADD FOR HEATING/COOLING

PLUMBING:

ADD FOR SPRINKLER SYSTEM 10-15 FIXTURES

OTHER FEATURES:

ALUM/GLASS STORE FRONT

AUTOMATIC DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 42 REST HOME

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 98.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF HOUSING/TREATMENT/KITCHEN

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES: VINYL/HEAVY LINOLEUM

GOOD FLUORESCENT LIGHTING

INTERIOR FINISH: DRYWALL/PANEL PAINTED BLOCK

ADD FOR HEATING/COOLING ADD FOR SPRINKLER SYSTEM

PLUMBING:

3-5 FIXTURES PER ROOM

OTHER FEATURES:

QUARRY TILE/KITCHEN AREA

FLOOR DRAINS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 32 OFFICE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

10 \$78.85 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS:

ADEQUATE FOR SEPARATION OF SERVICE

AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/CARPET

ADD FOR HEATING/COOLING INTERIOR FINISH:

DRYWALL/PANEL

PLUMBING: 8-10 FIXTURES

OTHER FEATURES:

ALUMINIUM/GLASS WINDOW WALLS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 45 RADIO/TV STATION

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$93.95 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE/JUMBO BRICK

PARTITIONS/COMMON WALLS: ADEQUATE TO SEPARATE BROADCAST/OFFICE AREAS

FRAMING:

STEEL BAR JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH: CONCRETE SLAB/VINYL

ADD FOR HEATING/COOLING INTERIOR FINISH:

PAINTED BLOCK/DRYWALL

ADD FOR SPRINKLER SYSTEM

PLUMBING: 5-10 FIXTURES

OTHER FEATURES:

SOUNDPROOF INSULATION

BASE PRICE FOR COMMERCIAL SCHEDULE MA 59 SHOPPING MALL

WALL HEIGHT **BASE PRICE BASE SPECIFICATIONS**

14 \$ 88.70 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS:

FACE BRICK/PAINTED BLOCK

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

RETAIL STORES

FRAMING: **WOOD JOIST**

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES:

VINYL/HEAVY LINOLEUM

CARPET

ABUNDANT FLOURESCENT

LIGHTING INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR HEATING/COOLING PAINTED BLOCK

ADD FOR SPRINKLER SYSTEM PLUMBING:

15-20 FIXTURES

OTHER FEATURES:

ALUM/GLASS STORE FRONT

AUTOMATIC DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 48 RESEARCH AND DEVELOPMENT

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 110.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE/JUMBO BRICK

PARTITIONS/COMMON WALLS:

SMALL OFFICE AREAS

FRAMING:

STEEL BAR JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH: CONCRETE SLAB/VINYL

ABUNDANT FLUORESCENT

LIGHTING INTERIOR FINISH:

PAINTED BLOCK WALLS OR EQUAL

ADD FOR SPRINKLER SYSTEM

PLUMBING:

10-15 FIXTURES

ADD FOR HEATING/COOLING

OTHER FEATURES:

ADD FOR MAJOR LAB/OFFICE OVERHEAD DOORS/DOCK

ENCLOSURES BUMPERS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 33 RESTAURANT

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$105.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

KITCHEN/DINING AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH: FEATURES: VINYL/HEAVY LINOLEUM

ABUNDANT FLUORESCENT INTERIOR FINISH: LIGHTING DRYWALL/PANEL

ADD FOR HEATING/COOLING ADD FOR SPRINKLER SYSTEM

PLUMBING: 10-15 FIXTURES

OTHER FEATURES:

QUARRY TILE/KITCHEN AREA

FLOOR DRAINS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 34 RETAIL

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$ 78.90 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS:

MINIMAL

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: CARPET/VINYL

ADD FOR HEATING/COOLING INTERIOR FINISH:

DRYWALL/PANEL

PLUMBING: 5 FIXTURES

OTHER FEATURES:

ALUM/PLATE GLASS FRONT AVERAGE DISPLAY AREA

GLASS DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 35 SERVICE GARAGE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 65.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SERVICE/STORAGE AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: FINISHED CONCRETE SLAB

GOOD FLUORESCENT LIGHTING INTERIOR FINISH:
ADD FOR HEATING/COOLING PAINTED BLOCK

PLUMBING: 2-5 FIXTURES

OTHER FEATURES:

GARAGE DOORS/HOSE BIBS/

FLOOR DRAINS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 36 SERVICE STATION

WALL HEIGHT **BASE PRICE BASE SPECIFICATIONS**

12 \$83.75 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: STEEL OR EQUAL

PAINTED

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

OFFICE/SERVICE AREA

FRAMING: **WOOD JOIST**

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: FINISHED CONCRETE SLAB

QUARRY TILE OR EQUAL

GOOD FLUORESCENT LIGHTING

INTERIOR FINISH:

ADD FOR HEATING/COOLING PAINTED BLOCK

> PLUMBING: 5-8 FIXTURES

OTHER FEATURES:

OVERHEAD DOORS/HOSE BIBS/ DRAINS/SALES/OFFICE AREA/ PLATE GLASS WINDOWS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 38 SUPERMARKET

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 71.70 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SERVICE/STORAGE AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: FINISHED CONCRETE SLAB

ABUNDANT FLUORESCENT

ADD FOR HEATING/COOLING

LIGHTING INTERIOR FINISH:

DRYWALL/PANEL PAINTED BLOCK

ADD FOR SPRINKLER SYSTEM PLUMBING:

8-10 FIXTURES

OTHER FEATURES:

ALUM/GLASS STORE FRONT

AUTOMATIC DOORS

BASE PRICE FOR COMMERCIAL SCHEDULE MA 61 SKATING RINK

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 71.10 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SALES/RINK AREA

FRAMING:

RIGID STEEL JOIST/TRUSS

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/HEAVY LINOLEUM

CARPET

ABUNDANT LIGHTING

ADD FOR HEATING/COOLING INTERIOR FINISH: DRYWALL/PANEL

PAINTED BLOCK

PLUMBING:

12-15 FIXTURES

OTHER FEATURES:

ALUM/GLASS ENTRANCE

BASE PRICE FOR COMMERCIAL SCHEDULE MA 39 THEATER

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 95.93 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION OF

SERVICE/STORAGE AREA

FRAMING:

RIGID STEEL JOIST/TRUSS

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: VINYL/HEAVY LINOLEUM

FINISHED CONCRETE SLAB

ADD FOR HEATING/COOLING

INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR SPRINKLER SYSTEM PAINTED BLOCK

PLUMBING:

10-12 FIXTURES

OTHER FEATURES:

ELEVATED PROJECTION BOOTHS/PLATE GLASS FRONT TICKET BOOTH

BASE PRICE FOR COMMERCIAL SCHEDULE MA 40 WAREHOUSE STORAGE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

14 \$ 29.50 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS: FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS:

SMALL OFFICE AREAS

FRAMING: STEEL FRAME

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES: FINISHED CONCRETE SLAB

ADD FOR HEATING/COOLING INTERIOR FINISH:

PAINTED BLOCK

ADD FOR SPRINKLER SYSTEM

ADD FOR MAJOR ENCLOSURES PLUMBING:

AND MEZZANINES 0-5 FIXTURES

OTHER FEATURES:

OVERHEAD/ROLLING DOORS

WOOD OR STEEL

MAIN AREA RATES PER SQUARE FOOT

MA	OCCUPANCY	CONC	MASON.	R.S.F.	WOOD	HEIGHT	SIZE
CODE		(C)	(M)	(R)	(W)	ADJ	ADJ
01	Apartment	\$114.70	\$106.58	\$104.55	\$101.50	H1	A03
03	Armory	\$75.87	\$70.50	\$69.15	\$67.14	H2	A03
04	Auditorium	\$84.07	\$78.12	\$76.63	\$74.40	H2	A03
05	Auto Showroom/Dealership	\$73.45	\$68.25	\$66.95	\$65.00	H2	A03
06	Bank	\$141.25	\$131.25	\$128.75	\$125.00	H2	A02
07	Beauty/Barber Shop	-	\$70.93	\$69.58	\$67.55	H2	A02
08	Cafeteria	\$100.40	\$93.29	\$91.52	\$88.85	H2	A02
09	Car Wash	\$95.82	\$89.04	\$87.34	\$84.80	H1	A02
10	Church	\$120.06	\$111.56	\$109.44	\$106.25	H2	A03
11	Classroom/School	\$87.35	\$81.17	\$79.62	\$77.30	H2	A03
13	Dwelling Conversion	-	\$96.86	_	\$92.25	H2	A01
14	Country Club	\$95.99	\$89.20	\$87.50	\$84.95	H2	A02
15	Department Store	\$90.40	\$84.00	\$82.40	\$80.00	H2	A03
16	Discount Store	\$118.65	\$110.25	\$108.15	\$105.00	H2	A03
17	Dormitory	\$85.09	\$79.07	\$77.56	\$75.30	H2	A03
19	Gymnasium	\$81.93	\$76.13	\$74.68	\$72.50	H2	A03
20	Fire Station	\$83.90	\$77.97	\$76.48	\$74.25	H2	A02
21	Frat/Clubhouse	\$95.99	\$89.20	\$87.50	\$84.95	H2	A02
22	Hanger	-	\$43.68	\$42.85	\$41.60	H2	A02
23	Hospital	\$139.84	\$129.94	\$127.46	\$123.75	H2	A03
24	Hotel	\$109.18	\$101.45	\$99.52	\$96.62	H1	A03
25	Industrial Light	\$38.59	\$35.86	\$35.17	\$34.15	H2	A03
26	Laboratory	\$130.52	\$121.28	\$118.97	\$115.50	H2	A02
27	Laundromat	-	\$73.13	\$71.74	\$69.65	H2	A02
28	Library	\$92.26	\$85.73	\$84.10	\$81.64	H2	A02
31	Motel	\$96.98	\$90.11	\$88.39	\$85.82	H1	A03
32	Office	\$89.10	\$82.79	\$81.22	\$78.85	H2	A02
33	Restaurant	\$118.65	\$110.25	\$108.15	\$105.00	H2	A02
34	Retail Store	\$89.16	\$82.85	\$81.27	\$78.90	H2	A02
35	Service Garage	\$73.45	\$68.25	\$66.95	\$65.00	H2	A02
36	Service Station	-	\$87.94	\$86.26	\$83.75	H2	A02
38	Supermarket	\$80.91	\$75.29	\$73.85	\$71.70	H2	A03
39	Theatre	\$108.40	\$100.73	\$98.81	\$95.93	H2	A02
40	Warehouse Storage	\$33.34	\$30.98	\$30.39	\$29.50	H2	A03
41	Convenience Store	\$212.10	\$197.09	\$193.33	\$187.70	H2	A02
42	Rest Home	\$110.74	\$102.90	\$100.94	\$98.00	H2	A03
43	Bowling Alley	\$73.45	\$68.25	\$66.95	\$65.00	H2	A03
44	Funeral Home	\$96.95	\$90.09	\$88.37	\$85.80	H2	A02
45	Radio/TV Station	\$106.16	\$98.65	\$96.77	\$93.95	H2	A02
46	Medical Office	\$158.20	\$147.00	\$144.20	\$140.00	H2	A03
47	Government Building	\$100.46	\$93.35	\$90.64	\$88.90	H2	A03

MAIN AREA RATES PER SQUARE FOOT (Continued)

MA	OCCUPANCY	CONC.	MASON.	R.S.F.	WOOD	HEIGHT	SIZE
CODE		(C)	(M)	(R)	(W)	ADJ	ADJ.
48	Research/Development	\$124.30	\$115.50	\$113.30	\$110.00	H2	A03
49	Veterinary Clinic	\$95.32	\$88.57	\$86.88	\$84.35	H2	A02
50	Fast Food Restaurant	\$282.50	\$262.50	\$257.50	\$250.00	H1	A02
51	Transit Warehouse	\$65.65	\$61.00	\$59.84	\$58.10	H2	A03
52	Community Bldg	\$61.13	\$56.81	\$55.72	\$54.10	H2	A02
53	Health Club	\$82.04	\$76.23	\$74.78	\$72.60	H2	A02
54	Automotive Service Center	\$53.11	\$49.35	\$48.41	\$47.00	H2	A03
55	Mini-Lube	\$195.77	\$181.91	\$178.45	\$173.25	H2	A02
56	Dairy Sales	\$77.63	\$72.14	\$70.76	\$68.70	H2	A02
57	Repair Shop	-	\$41.11	\$40.32	\$39.15	H2	A02
58	Neighborhood Shops	\$90.23	\$83.84	\$82.25	\$79.85	H2	A03
59	Shopping Malls	\$100.23	\$93.14	\$91.36	\$88.70	H2	A03
60	Community Shops	\$90.23	\$83.84	\$82.25	\$79.85	H2	A03
61	Skating Rink	-	\$74.66	\$73.23	\$71.10	H2	A03
62	Distribution Warehouse	\$47.18	\$43.84	\$43.00	\$41.75	H2	A03
63	Dispensary	\$103.90	\$96.55	\$94.71	\$91.95	H2	A03
64	Bank Drive Thru	\$122.27	\$113.61	\$111.45	\$108.20	H2	A02
65	Multiple Dwelling	\$114.70	\$106.58	\$104.55	\$101.50	H2	A01
66	Post Office	\$95.32	\$88.57	\$86.88	\$84.35	H2	A02
67	Car Wash (Drive - Thru)	\$100.80	\$93.60	\$91.88	\$89.20	H1	A02
68	Mini-Warehouse/Storage	ı	\$37.80	\$37.08	\$36.00	H1	A02
69	Day Care	\$91.08	\$84.63	\$83.02	\$80.60	H2	A02
71	Medium Industrial	\$99.50	\$92.50	\$90.75	\$88.10	H2	A03
72	Heavy Industrial	\$104.81	\$97.39	\$95.53	\$92.75	H2	A03
74	Jail- Police Station	\$100.51	\$93.40	\$91.62	\$88.95	H2	A02
75	Arcade	\$73.45	\$68.25	\$66.95	\$65.00	H2	A02
76	Convenience Store – Rural	-	\$82.85	\$81.27	\$78.90	H2	A02
77	Big Box	-	\$75.00	\$75.00	\$70.00	H2	A03
78	Conditioned Stg Warehouse	\$38.00	\$35.00	\$33.00	\$31.00	H2	A03
79	Cold Storage Warehouse	\$63.96	\$59.43	\$58.30	\$56.60	H2	A03
80	Fellowship Hall	-	\$111.56	\$109.44	\$106.25	Н2	A03

STORY ADJUSTMENT FOR COMMERCIAL BUILDINGS

SC1	Upper Floor	97% of First Floor Price

WALL HEIGHT ADJUSTMENTS

Code	Height	Adjust.
H1	ALL	100%
H2	8	94%
H2	9	96%
H2	10	100%
H2	11	100%
H2	12	100%
H2	13	100%
H2	14	100%
H2	15	102%
H2	16	104%
H2	17	106%
H2	18	108%
H2	19	110%
H2	20	112%
H2	21	114%
H2	22	116%
H2	23	118%
H2	24	120%
H2	25	122%
H2	26	124%

Code	Height	Adjust.
H2	27	126%
H2	28	128%
H2	29	130%
H2	30	132%
H2	31	134%
H2	32	136%
H2	33	138%
H2	34	140%
H2	35	142%
H2	36	144%
H2	37	146%
H2	38	148%
H2	39	150%
H2	40	164%
H2	41	164%
H2	42	164%
H2	43	164%
H2	44	164%
H2	45	164%
H2	46-49	164%
H2	50-OVER	164%

	HC- Heating/Air Conditioning				
Code	Type	Rate			
50	HEATING VENT. & AIR	\$4.50			
51	NONE	N/A			
52	FLR/WALL FURNACE	\$1.00			
53	RADIANT/ELEC/BB	\$3.00			
54	RADIANT/WATER	\$3.00			
55	FORCED HOT AIR	\$3.80			
56	UNIT HEATERS	\$1.00			
57	PACKAGED HEAT/COOL	\$6.00			
58	REVERSE CYCLE PUMP	\$6.00			
59	COOLING W/ DUCTS	\$3.80			

BC – Basement				
Code	Type	Rate		
FIN	FINISHED	\$22.25		
UNFIN	UNFINISHED	\$12.50		

SS - Sprinklers			
Code	Type	Rate	
51	Comm Wet	\$1.25	
52	Comm Dry	\$1.50	

MAIN BUILDING ATTACHMENT CODES

Code	Description	Rate	Size Adj
01	BRICK ADDITION	\$69.15	A2
02	BRICK GARAGE FINISHED	\$30.75	A1
03	BRICK GARAGE UNFINISHED	\$25.25	A1
04	CANOPY – INEXPENSIVE	\$11.60	A5
05	CARPORT	\$18.90	A3
06	COVERED PORCH	\$28.70	A5
08	ENCLOSED FRAME PORCH	\$47.15	A5
09	SUNPORCH	\$56.40	A5
10	ENCLOSED MASNORY PORCH	\$49.10	A5
11	FRAME ADDITION	\$66.50	A2
12	FRAME DECK	\$16.70	A5
13	FRAME GARAGE FINISHED	\$28.80	A1
14	FRAME GARAGE UNFINISHED	\$27.80	A1
15	FRAME STORAGE	\$26.80	A5
16	FREIGHT ELEVATOR	\$40,000	1
16X	FREIGHT ELEVATOR XTRA STOPS	\$7,500	-
17	SCREEN PORCH	\$33.00	A6
20	MASONRY STOOP/TERRACE	\$12.00	A12
21	MASONRY STORAGE	\$28.40	A6
25	PASSENGER ELEVATOR	\$75,000	-
25X	PASSENGER ELEVATOR XTRA STOPS	\$7,500	1
26	SLAB	\$5.10	A4
29	MEZZANINE UNFINISHED	\$25.00	A11
33	MISC STROAGE	\$23.00	A1
34	SHED	\$15.00	A11
35	COMMERCIAL CANOPY	\$24.15	A5
36	MEZZANINE DISPLAY	\$35.00	A6
37	PATIO	\$11.35	A4
46	DOCK W/ ROOF	\$21.75	A4
47	LOADING WELL	\$15.00	A11
48	BRICK PATIO	\$11.35	A12
51	LEAN – TO	\$8.00	A11
52	SERVICE GAR ATTACHED MAS	\$45.00	A13
53	SERVICE GAR ATTACHED RSF	\$38.00	A13
55	COLD STORAGE WALK IN	\$125.00	A11
56	RAMP	\$12.00	A12
59	LOADING DOCK COVERED	\$25.00	A4

ATTACHMENT CODE SIZE ADJUSTMENT

A1			
AREA	ADJ		
001-150	110		
151-200	108		
201-250	106		
251-300	104		
301-350	102		
351-600	100		
601-650	98		
651-700	96		
701-750	94		
751-800	92		
801-UP	90		

A2			
AREA	ADJ		
001-050	110		
051-100	105		
101-150	102		
151-400	100		
401-550	98		
551-700	96		
701-850	94		
851-1000	92		
1001-UP	90		

A3			
AREA		ADJ	
001-150		110	
151-200		105	
201-250		102	
251-400		100	
401-600		98	
601-700		96	
701-800		94	
801-900		92	
901-UP		90	

A4			
AREA	ADJ		
001-040	100		
041-080	98		
081-150	96		
151-300	94		
301-UP	90		

A5	
AREA	ADJ
001-020	110
021-040	106
041-060	104
061-080	102
081-200	100
201-300	98
301-400	96
401-500	94
501-UP	90

A6	
AREA	ADJ
001-020	110
021-040	106
041-060	104
061-080	102
081-200	100
201-300	98
301-400	96
401-500	94
501-UP	90

Schedule of Values

A11	1
AREA	ADJ
0-199	103.00
200-224	102.80
225-249	102.60
250-274	102.40
275-299	102.20
300-324	102.00
325-349	101.80
350-374	101.60
375-399	101.40
400-424	101.20
425-449	101.00
450-474	100.80
475-499	100.60
500-524	100.40
525-549	100.20
550-574	100.00
575-599	99.80
600-624	99.50
625-649	99.30
650-674	99.00
675-699	98.80
700-724	98.50
725-749	98.30
750-774	98.00
775-799	97.80
800-824	97.50
825-849	97.30
850-874	97.00
875-899	96.80
900- 924	96.50
925-949	96.30
950-974	96.00
975-999	95.80
1000 - UP	95.50

A12)
AREA	ADJ
0-09	103.80
10-19	103.50
20-29	103.30
30-39	103.00
40-49	102.80
50-59	102.50
60-69	102.30
70-79	102.00
80-89	101.80
90-99	101.50
100-119	101.30
120-139	101.00
140-159	100.80
160-179	100.50
180-199	100.30
200-224	100.00
225-249	99.80
250-274	99.50
275-299	99.30
300-324	99.00
325-349	98.80
350-374	98.50
375-399	98.30
400-424	98.00
425-449	97.80
450-474	97.50
475-499	97.30
500-524	97.00
525-549	96.80
550-574	96.50
575-599	96.30
600-624	96.00
625-649	95.80
650-674	95.50
675-699	95.30
700-UP	95.00

A13					
AREA	ADJ				
0-1999	104.00				
2000-2024	104.00				
2025-2049	103.80				
2050-2074	103.60				
2075-2099	103.40				
2100-2124	103.20				
2125-2149	103.00				
2150-2174	102.80				
2175-2199	102.60				
2200-2224	102.40				
2225-2249	102.20				
2250-2274	102.00				
2275-2299	101.80				
2300-2324	101.60				
2325-2349	101.40				
2350-2374	101.20				
2375-2399	101.00				
2400-2424	100.80				
2425-2449	100.60				
2450-2474	100.40				
2475-2499	100.20				
2500-2524	100.00				
2525-2549	99.80				
2550-2574	99.60				
2575-2599	99.40				
2600-2624	99.20				
2625-2649	99.00				
2650-2674	98.80				
2675-2699	98.60				
2700-2724	98.40				
2725-2749	98.20				
2750-2774	98.00				
2775-2799	97.80				
2800-2824	97.60				
2825-2849	97.40				
2850-2874	97.20				
2875-2899	97.00				
2900-2924	96.80				
2925-2949	96.50				
2950-2974	96.30				
2975-UP	96.00				

A14	4
AREA	ADJ
0-6999	100.00
7000-7049	99.80
7050-7099	99.50
7100-7149	99.30
7150-7199	99.00
7200-7249	98.80
7250-7299	98.50
7300-7349	98.30
7350-7399	98.00
7400-7449	97.80
7450-7499	97.50
7500-7549	97.30
7550-7599	97.00
7600-7649	96.80
7650-7699	96.50
7700-7749	96.30
7750-7799	96.00
7800-7849	95.80
7850-7899	95.50
7900-7949	95.30
7950-7999	95.00
8000-8049	94.80
8050-8099	94.50
8100-8149	94.30
8150-8199	94.00
8200-8249	93.80
8250-8299	93.50
8300-8349	93.30
8350-8399	93.00
8400-8449	92.80
8450-8499	92.50
8500-8549	92.30
8550-8599	92.00
8600-8649	91.80
8650-8699	91.50
8700-8749	91.30
8750-8799	91.00
8800-8849	90.80
8850-8899	90.50
8900-8949	90.30
8950-UP	90.00

MULTI-FAMILY APARTMENTS

An apartment is a residential living unit with the same living accommodations normally found in a single- family residence. An apartment house is a multifamily residence containing four or more residential living units, and generally providing each unit with several common facilities, services and amenities. Two or more apartment buildings operating as a single unit are generally referred to as an apartment complex.

The increased development of multi-family residential housing units since the 1950's has brought the development of both apartment complexes and "high-rise" apartment buildings. Each of these offer complete living accommodations with all the modern conveniences and amenities. In addition, they generally provide a variety of recreational facilities and services for their occupants.

VALUATION

As with other types of property the replacement cost method of valuation is a starting point for the appraiser. There are two types of apartment buildings that must be considered: 1) the walk-up apartment normally found in apartment complexes; and 2) the high-rise or elevator building.

Apartment units found in each apartment building or complex of buildings vary in size and arrangement. They may be one room efficiency units consisting of a bedroom and kitchenette; two room studio units consisting of a bedroom and living room/den and kitchenette combination; and conventional units consisting of a kitchen, dining area, living room and one or more bedrooms. Each apartment unit has one or more bathrooms, and conventional units often have a separate dining room, den, or family room.

One of the most significant variables in determining the replacement cost of an apartment building is the average size of the individual units. The pricing schedule provided in this section is designed to account for this variation.

BASE PRICES - APARTMENTS

Base square foot prices have been developed for typical average "C" Grade quality apartment units, based on average unit sizes at various floor levels for Wood Joist construction. Adjustments are provided for Fire Resistant and Reinforced Concrete, together with Brick (or equal) and Frame/Concrete Block exterior walls.

The foundation, roof, and normal built-ins are included with the first -floor prices, thus making the schedule applicable to both one story and multi-story buildings.

APPLICATION

Application of the pricing schedule involves the selection of the appropriate base price per floor based on the average unit sizes. Adjustments to the base price for air conditioning, central heating, and type of construction should be made to account for any variations between the subject building and the model building.

SPECIAL APPLICATION

The Apartment Pricing Schedule is designed for garden/walk-up apartment buildings of four or more units. Two and three family residences should be priced by using the Residential Dwelling Schedule (included in the Residential section of the manual).

QUALITY FACTOR

The schedule prices are for average "C" Grade construction quality, erected with average materials and workmanship. A table of Quality Factors is provided to adjust the "C" Grade prices in order to account for variations in construction quality.

INCOME APPROACH

Apartment buildings, regardless of the type, are built, bought, and sold as investment or income producing property. The appraisal of apartments utilizing the Capitalization or Income Approach to value follows the same procedures discussed in the Property Valuation section of the manual.

The basic procedure is:

- 1. Collection of the income generated including monthly rents for the units, parking, and other receipts, such as laundry facilities.
- 2. The collection of the expenses associated with the management and maintenance of the property.
- 3. The capitalization of the net income into an indication of value.

A special section is provided on the use of the economic data form to record all necessary income and expense data.

PERCENT (%) GOOD GUIDELINES

Physical deterioration of the structure should be based on age and condition of the property. Functional and Economic Depreciation allowances must be derived from the income and expense of each apartment project as it relates to other properties of similar utility and condition; and should be expressed as percent (%) good.

Schedule of Values

BASE PRICE FOR COMMERCIAL SCHEDULE MA 01W APARTMENT

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

9 \$101.50 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT:

CONTINOUS FOOTING OR POURED

CONCRETE SLAB

EXTERIOR WALLS:

WOOD FRAME OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION

OF LIVING UNITS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES. VINYL/CARPET

ADD FOR ATTACHMENTS INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR ADDITIONAL

PLUMBING: PLUMBING:

5 FIXTURES PER UNIT

ADD FOR HEATING/COOLING

OTHER FEATURES:

BASE PRICE FOR COMMERCIAL SCHEDULE MA 02W TOWNHOUSE

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

9 \$83.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT:

CONTINOUS FOOTING OR POURED

CONCRETE SLAB

EXTERIOR WALLS:

WOOD FRAME OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE FOR SEPARATION

OF LIVING UNITS

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL FLOOR COVER/FINISH:

FEATURES. VINYL/CARPET

ADD FOR ATTACHMENTS INTERIOR FINISH:

DRYWALL/PANEL

ADD FOR ADDITIONAL

PLUMBING: PLUMBING:

5 FIXTURES PER UNIT

ADD FOR HEATING/COOLING

OTHER FEATURES:



MA 02 TOWNHOUS E

MA 01 APARTMENT



FRANCHISE FOOD RESTAURANTS

Franchise Food restaurants have become a common place beginning in the 1950's. The buildings, though they offer similar accommodations, are highly distinctive in architectural style and design. Each operation is readily identifiable with a particular design and motif; and relies heavily on the appearance or "eye appeal" of its buildings to attract, maintain and promote business. The wide range of styles and designs have a direct influence on the replacement costs of the buildings. The size and quality of materials and workmanship alone are not the prime determining factors. Two restaurants showing no marked difference in size and construction quality may still show a considerable difference in cost due to the difference in design and décor. The replacement cost schedule provided is based upon specifications of size, quality, and design. The schedule is to be used as a guide for estimating replacement costs of franchise food restaurants. The proper use of the schedule, along with experience and sound judgment, should enable the appraiser to establish a reasonable estimate of replacement cost.

BASE SPECIFICATIONS

The Cost Schedule assumes a basic layout which includes a serving area, food preparation area, a small office area, an employee dressing area, two toilet rooms, and depending upon size, a dining area. General construction features include masonry foundation walls on spread footings; 4" reinforced concrete floor slab on a granular base; roof and exterior wall construction, interior finish, and building equipment and fixtures commensurate with the grade; stud and masonry partitioning; unfinished floor and painted masonry or dry wall interior finish in storage areas and mechanical rooms; utility service, heating, fluorescent lighting fixtures in the preparation and office areas, plumbing fixtures and drains.

QUALITY GRADE SPECIFICATIONS

A Grade

A unique design featuring elaborate architecture especially in the roof and exterior walls; built of high-quality materials and workmanship. A-Frame, Mansard, Gambrel, or Multi-Pitch type roofs with extensive overhangs, and copper, porcelain enamel shingles, wood shakes, slate, or comparable high- quality roofing on insulated wood or steel decking and framing, with laminated wood frame or steel frame supporting beams and columns often exposed to project architectural effects. Walls consist of a combination of face brick or ceramic glazed brick, decorative stone or wood and plate glass. High quality interior finish of ceramic or quarry tile flooring, exposed stone and brick or high- grade wood or porcelain enamel paneling and ceramic tile wall finish. porcelain enamel or acoustical tile ceilings, often open to the roof slope: combined heating and air conditioning system, high grade ornamental lighting fixtures in the dining and service areas; good quality plumbing fixtures for typical toilet room facilities.

B Grade

Conventional design featuring custom architectural styling, built of good quality materials and workmanship. Mansard, Gambrel or Double-Pitch roofs with liberal overhangs, composition tar and gravel, stone chip, or asphalt shingle roofing on insulated wood or steel decking and framing; face brick, ceramic tile and plate glass exterior walls with moderate architectural treatment; good quality interior finish of ceramic or quarry tile flooring, exposed brick or wood paneling and ceramic wall finish; acoustical tile or drywall ceiling; combined heating and air conditioning system, ornamental lighting fixtures in the dining and serving areas, and good quality plumbing fixtures for typical toilet room facilities.

C Grade

Conventional design featuring moderate architectural styling, built of good quality workmanship and materials. Double-Pitch type roofs with normal overhangs, composition tar and gravel or asphalt shingle roofing on insulated wood or steel decking and framing; face brick, wood, or painted concrete block and plate glass exterior walls; good quality interior finish of quarry or vinyl asbestos tile flooring, wood paneling or drywall and part ceramic tile wall finish; drywall or acoustical tile ceiling; combined heating and air conditioning system; fluorescent lighting fixtures in the dining area, and good quality plumbing fixtures for typical toilet room facilities.

D Grade

Simple conventional design void of architectural styling; built of average quality materials and workmanship. Flat or Single Pitch roof with normal overhangs, composition roofing on insulated wood decking and framing; painted concrete block or wood exterior walls with a minimal amount of plate glass; average quality interior finish consisting of asphalt or vinyl asbestos tile flooring; painted concrete block, drywall or paneled wall finish and drywall ceiling; forced-air heating, wall unit air conditioning, fluorescent lighting fixtures, fair quality plumbing fixtures for typical toilet room facilities.

E Grade

Simple design void of architectural styling; built of fair quality materials and workmanship. Single-Pitch roof with normal overhangs, and composition roofing on wood decking and framing;

painted concrete block or wood exterior walls with a minimal amount of plate glass; low quality interior finish consisting of asphalt tile flooring and painted concrete block and drywall; unit heaters, no air conditioning, fluorescent lighting fixtures, and fair quality plumbing fixtures for typical toilet room facilities,

SCHEDULE APPLICATION

Base prices are included for Average "C" Grade construction for four typical exterior wall types. Select the base price based upon the structure size and exterior wall construction, and make adjustments for attached improvements, air conditioning and sprinkler systems as required. Apply the proper quality Grade factor to establish the replacement cost new.

PERCENT (%) GOOD GUIDELINES

Franchise Food restaurants are special purpose buildings which are not readily adaptable to other uses. They go out of style both functionally and economically at a much faster rate than they deteriorate physically. The business is highly competitive and relies heavily on location and the physical appearance of its buildings. In order to keep abreast of competition, owners must frequently renovate the structures. Changing consumer habits, traffic patterns, and competition are but a few of the factors that influence the life span of the buildings and must therefore be considered in the evaluation process.



MA 50W FAST FOOD

MA 50W FAST FOOD





MA 50W FAST FOOD

BASE PRICE FOR COMMERCIAL SCHEDULE MA 50W FAST FOOD RESTAURANT

WALL HEIGHT BASE PRICE BASE SPECIFICATIONS

12 \$250.00 STORY HEIGHT:

FIRST FLOOR AREA

FOUNDATION/BASEMENT: CONTINOUS FOOTING OR POURED CONCRETE SLAB

EXTERIOR WALLS:

FACE BRICK OR EQUAL

PARTITIONS/COMMON WALLS: ADEQUATE

FOR SEPARATION OF KITCHEN/DINING

AREA

FRAMING: WOOD JOIST

REMARKS/ADDITIONAL

FEATURES:

FLOOR COVER/FINISH: VINY/HEAVY LINOLEUM TERRAZZO/QUARRY TILE

ABUNDANT LIGHTING

INTERIOR FINISH:

DRYWALL/PANEL/EXPOSED BRICK

ADD FOR HEATING/COOLING

PLUMBING: 10-15 FIXTURES

OTHER FEATURES:

KITCHEN AREA/ SPRINKLER SYSTEM/ QUARRY TILE FINISH/ FLOOR DRAINS

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 swimming 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 or 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 component to determine the contribution of each component to the overall cost per site. 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 10 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.

MOBILE HOME PARKS

The average quality mobile home park is designed to provide the user with adequate utility services and facilities. Recreational amenities are limited or nonexistent with streets and landscaping of minimal planning and construction.

Normal site improvements include low-cost concrete or asphalt pads and walks, and enough grading to allow adequate site preparation, drainage, and leveling, minimal on-site electrical service, on site well and septic service, on site public or private water and sewer systems.

The value attributed to land, and the cost of any supportive structures, are not included in the base cost site.

Any variation in overall quality from average should be reflected by the appropriate quality grade adjustment.

REPLACEMENT COST PER SITE

"43" Mobile Home Site \$4,000

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:

XX/X 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 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 tees 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	the course has greens, bunkers, tees, fairways, and very Putt Course 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 and 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.				

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 \$125,000 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 and 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. Multiply the average replacement cost per hole, as derived in Step #3, by the total number of holes to arrive at the total replacement cost of the course.
- 5. 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 #4, to arrive at the depreciated value of the course.
- 6. 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.

GOLF COURSE PRICING EXAMPLE

Smith Golf Course - an 18 hole; regulation size course, 6500 yards long, par 72, located on 150 acres of rolling terrain. The course is 10 years old and has 10000 square foot greens, (3) 2500 square foot tee locations for each hole, and (3) bunkers per hole. Fairways and greens have automatic sprinkler systems.

This course is judged to be a Average Quality Course with very good greens and tees, good overall condition, desirability and utility. Land value is estimated at \$5000 per acre

Base Cost Per Hole Average Quality	\$	100,000
Quality Factor + 0%	+	0
Replacement Cost Per Hole	\$	100,000
Number of Holes	X	18
Total Replacement Cost	\$1	,800,000
Less Depreciation -10%	-	180,000
Total Value of Course Improvements	\$1	,620,000
Land Value (150 acres @ \$5000)	+	750,000
Total Value	\$2	,370,000
Value Per Hole (Rounded)	\$	131,667

GOLF COURSE PRICING

MS 60 - REPLACEMENT COST \$100,000 PER HOLE.

SOLAR FARMS

G.S. 105-275 – Property classified and excluded from tax base.

80% of the appraised value of solar electric systems is excluded as exempt use. *Solar Energy Electric System means* "all equipment used directly and indirectly for the conversion of solar energy to electricity."

Solar Panels and other equipment shall be valued as business personal property at a rate of 20% of value. The land associated with this equipment will be valued at a range of market value based on the principal of **Highest and Best Use.**

CELL TOWERS

For listing purposes 1.00 acre will be designated to support the cell tower and associated components required to run cellular operations. In certain cases more than one acre shall be designated based on the size and footprint of the tower.

The cellular components are listed as personal property. They usually consist of the cell tower, individual company's cellular antenna, operating equipment, equipment shelters and security fencing. Give any information attained about the cellular components to business personal property.

The land supporting the cell tower will be valued using the prevailing commercial and industrial land rates in the immediate area.

SECTION 42 LOW-INCOME HOUSING

North Carolina General Statute # 105-277.16

In North Carolina low-income housing which has been allocated a federal tax credit under Section 42 of the Code is designated a special class of property under Article V, Section 2 (2) of the North Carolina Constitution and must be appraised, assessed and taxed in accordance with this section. The assessor must use the income approach as the method of valuation for property classified under this section and must take rent restrictions that apply to the property into consideration in determining the income attributable to the property. The assessor may not consider income tax credits received under Section 42 of the Code or under G.S. 105-129.42 in determining the income attributable to the property. (2008-146, s. 3.1:2008-187, s. 47.6).

General Application

Identify the low-income housing property being appraised and request copies of the audited financial statements for current year (revaluation year) and three prior years.

Analyze the actual income stream; apply expense ratios, and capitalization rates developed for use in the 2024 Vance County Revaluation Project.

Standardized Operating Expenses & Vacancy Rates

Operating Expenses

Based on analysis an expense ratio of 55% has been adopted for use by Vance County.

Vacancy Rates

Analysis of vacancy rates provided by IREM indicates average vacancy rates of 0% to 5%, a rate of 3% has been adopted for use by Vance County.

Reserve for Replacements

Analysis of typical reserve for replacements for traditional apartment properties in Vance County indicates a range of 3% to 5%. A rate of 5% has been selected for use in Section 42 low-income housing appraisal example.

Capitalization Rate

A range of capitalization rates from 6%-7.5% have been adopted for Section 42 housing.

SAMPLE INCOME APPROACH APPRAISAL

SECTION 42 LOW INCOME HOUSING

(G.S. 105-277.16)

100 UNIT APARTMENT COMPLEX @ \$450 PER MONTH BASE RENT

POTENTIAL GROSS INCOME	\$540,000
(100 x \$450 x 12 MONTHS)	
VACANCY (3%)	(-\$16,200)
OTHER INCOME	
EFFECTIVE GROSS INCOME	\$523,800
OPERATING EXPENSES (55%)	(-\$288,090)
RESERVE FOR REPLACEMENTS	(-\$26,190)
(5%)	
NET OPERATING INCOME	\$209,520
CAPITALIZATION RATE (6%)	{.06}
APPRAISED VALUE	\$3,492,000
VALUE PER UNIT	
(ROUNDED)	\$34,920

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 DEFINITION OF DWELLING

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 considered. 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 97% 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 97% 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. The building has been extremely well maintained and completely modernized with central heating, electric lighting, and plumbing added. The structure is in good physical condition despite its age. The 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 90% 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. The 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 48% 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.

COMMERCIAL/INDUSTRIAL PERCENT GOOD COMMON CAUSES OF OBSOLESCENCE

In the final analysis, an estimate of depreciation or value loss 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. The accuracy of the estimate will be a product of the appraiser's experience in recognizing the symptoms of deterioration and obsolescence and his ability to exercise sound judgment in equating his observations to the proper monetary allowance to be deducted from the replacement cost new. The following tables have been provided as guidelines to assist the appraiser in arriving at the resultant estimate of the diminishing value of improvements after subtracting all forms of depreciation. Following is a listing of some of the most common sources of functional and economic obsolescence which should further assist him in arriving at a reasonable estimate of obsolescence.

Common Causes of Functional Obsolescence

Poor ratio of land to building area.

Inadequate parking, and/or truck and railroad loading and unloading facilities.

An appearance unattractive and inconsistent with present use and surrounding properties.

Poor proportion of office, rental, or manufacturing, and warehouse space.

Inadequate or unsuited utility space.

Limited use and excessive material and product handling costs caused by irregular and inefficient floor plans, varying floor elevations, inadequate clearance, and cut up interiors with small bays and excessive number of walls, posts and columns.

Multi-story design when single story would be more efficient and economical. Effects of corrosion created by manufacturing, processing, or storing of chemicals.

Foundational and structural failures due to poor soil conditions, poor design, excessive loading, poor maintenance, excessive vibration of building and process equipment.

Inadequate power distribution, heating, ventilation, air condition, or lighting systems.

Common Causes of Economic Obsolescence

Zoning laws and other governmental regulations which affect the usage and operation of the property.

Building code requirements which set current acceptable construction standards.

Market acceptability of the product or services for which the property was constructed or is currently used.

Schedule of Values

Excessive or deficient floor load capacity.

Insufficient and inadequate elevator service.

High maintenance costs resulting from mixed building constructions and/or obsolete building materials.

Profitability of the operation of the property and the justifiable investment which the business would support.

Termination of the need for the property due to actual or probable changes the use of in economic or social conditions.

COMMERCIAL DEPRECIATION TABLES

Commercial Depreciation Codes are defined by three characters. All commercial depreciation codes start with character C. The second position character denotes <u>Condition</u>. The last character position identifies <u>Construction Type</u>. Codes are defined as:

Condition		Construction Type				
E	Excellent	W	Wood Frame			
G	Good	R	Fire Resistant			
A	Average	P	Fire Proof			
F	Fair					
P	Poor					
U	Unsound					
F	Fair Poor	P	Fire Proof			

Fire Resistant Construction

C	ER	C	GR	C	AR		C	CFR		CPR		
Age	Deprec.	Age	Deprec.	Age	Deprec.		Age	Deprec.		Age	Deprec.	
01	0%	01	1%	01	2%		01	3%		01	4%	
02-03	1%	02	2%	02	3%		02	5%		02	6%	
04	2%	03	3%	03	5%		03	6%		03	8%	
05-06	3%	04	5%	04	7%		04	8%		04	10%	
07	4%	05	6%	05	9%		05	10%		05	12%	
08-09	5%	06	7%	06	10%		06	12%		06	14%	
10	6%	07	8%	07	12%		07	14%		07	16%	
11-12	7%	08	10%	08	14%		08	16%		08	18%	
13	8%	09	11%	09	16%		09	18%		09	20%	
14-15	9%	10	12%	10	17%		10	19%		10	22%	
16	10%	11	13%	11	19%		11	21%		11	24%	
17-18	11%	12	14%	12	21%		12	23%		12	26%	
19	12%	13	15%	13	22%		13	24%		13	27%	
20-21	13%	14	16%	14	23%		14	25%		14	29%	
22	14%	15	17%	15	24%		15	26%		15	30%	
23-24	15%	16	18%	16	25%		16	27%		16	32%	
25	16%	17	19%	17	27%		17	28%		17	34%	
26-27	17%	18	20%	18	28%		18	30%		18	35%	
28	18%	19	21%	19	29%		19	31%		19	37%	
29-30	19%	20-21	22%	20	30%		20	32%		20	38%	
31-32	20%	22	23%	21	31%		21	34%		21	40%	
33	21%	23	24%	22	32%		22	35%		22	42%	
34-35	22%	24	25%	23	33%		23	36%		23	43%	
36-37	23%	25	26%	24	34%		24	37%		24	44%	
38-39	24%	26-27	27%	25	35%		25	38%		25	45%	
40-41	25%	28	28%	26	36%		26	39%		26	46%	
42-44	26%	29	29%	27	37%		27	40%		27	48%	
45-46	27%	30	30%	28	38%		28	42%		28	49%	
47	28%	31-32	31%	29	39%		29	43%		29	51%	
48-49	29%	33	32%	30	40%		30	44%		30	52%	
50 Up	30%	34	33%	31	41%		31	45%		31	53%	
		35	34%	32	42%		32	46%		32	54%	
		36-37	35%	33	43%		33	47%		33	55%	
		38	36%	34	44%		34	48%		34	57%	
		39-40	37%	35	45%		35	49%		35	58%	
		41-42	38%	36	46%		36	50%		36	59%	
		43-44	39%	37	47%		37	51%		37	60%	
		45-46	40%	38	48%	3	38-39	52%		38	61%	
		47	41%	39-40	49%		40	53%		39	62%	
		48-49	42%	41-42	50%		41	54%		40	63%	
		50 Up	43%	43	51%		42	55%		41	64%	
				44-45	52%		43-44	56%		42-43	65%	
				46-47	53%		45	57%		44-45	66%	
				48-49	54%		46-47	58%		46-47	67%	
CU	JR			50 Up	55%		48-49	59%		48	68%	
Age	Deprec.						50 Up	60%		49	69%	
01 Up	90%									50 Up	70%	

Wood Frame Construction

Cl	EW	CC	GW	CA	4W	CI	FW	CF	PW .
Age	Deprec.	Age	Deprec.	Age	Deprec.	Age	Deprec.	Age	Deprec.
01	0%	01	2%	01	3%	01	4%	01	4%
02-03	1%	02	3%	02	5%	02	6%	02	7%
04	2%	03	4%	03	7%	03	8%	03	9%
05-06	3%	04	6%	04	9%	04	10%	04	11%
07	4%	05	7%	05	11%	05	12%	05	14%
08-09	5%	06	8%	06	13%	06	14%	06	16%
10	6%	07	10%	07	15%	07	16%	07	18%
11-12	7%	08	11%	08	17%	08	18%	08	20%
13	8%	09	12%	09	19%	09	20%	09	23%
14-15	9%	10	14%	10	21%	10	22%	10	25%
16	10%	11	15%	11	22%	11	24%	11	27%
17-18	11%	12	16%	12	24%	12	26%	12	30%
19	12%	13	17%	13	26%	13	28%	13	32%
20-21	13%	14-15	19%	14	28%	14	30%	14	34%
22	14%	16	21%	15	29%	15	31%	15	36%
23-24	15%	17	22%	16	31%	16	32%	16	38%
25	16%	18	23%	17	33%	17	35%	17	40%
26-27	17%	19	24%	18	34%	18	36%	18	42%
28	18%	20-21	25%	19	35%	19	37%	19	44%
29-30	19%	22	26%	20	36%	20	38%	20	45%
31-32	20%	23	27%	21	37%	21	39%	21	47%
33	21%	24	28%	22	38%	22	40%	22	49%
34-35	22%	25	29%	23	39%	23	42%	23	51%
36-37	23%	26	30%	24	40%	24	44%	24	52%
38-39	24%	27	31%	25	42%	25	45%	25	53%
40-41	25%	28	32%	26	43%	26	46%	26	55%
42-44	26%	29-30	33%	27	44%	27	47%	27	56%
45-46	27%	31	34%	28	45%	28	48%	28	57%
47	28%	32	35%	29	46%	29	49%	29	59%
48-49	29%	33	36%	30	47%	30	51%	30	60%
50 Up	30%	34-35	37%	31	48%	31	52%	31	61%
		36-37	38%	32	49%	32	53%	32	62%
		38-39	39%	33	50%	33	54%	33	63%
		40-41	40%	34-35	51%	34	55%	34	64%
		42-46	41%	36	52%	35	56%	35	65%
		47-49	42%	37	53%	36	57%	36	66%
		50 Up	43%	38-39	54%	37	58%	37	67%
CU	JW	•		40 Up	55%	38-39	59%	38	68%
Age	Deprec.			•		40 Up	60%	39	69%
01 Up	90%							40 Up.	70%

Fire Proof Construction

C	EP	CC	GP	CA	AΡ		Cl	FP.	C	PP
Age	Deprec.	Age	Deprec.	Age	Deprec.		Age	Deprec.	Age	Deprec.
01-03	0%	01	0%	01	0%		01	1%	01-02	2%
04-05	1%	02	1%	02	2%		02	2%	03	5%
06-07	2%	03	2%	03	3%		03	4%	04	8%
08-09	3%	04	3%	04	5%		04	7%	05	10%
10-11	4%	05	4%	05	6%		05	8%	06	12%
12-13	5%	06	5%	06	8%		06	10%	07	14%
14-15	6%	07	6%	07	10%		07	12%	08	16%
16-17	7%	08	8%	08	12%		08	14%	09	18%
18-19	8%	09	9%	09	14%		09	16%	10	20%
20-21	9%	10-11	10%	10	15%		10	18%	11	22%
22-23	10%	12	11%	11	16%		11	19%	12	23%
24	11%	13	12%	12	17%		12	20%	13	24%
25-26	12%	14	13%	13	18%		13	21%	14	25%
27-28	13%	15	14%	14	20%		14	23%	15	26%
29-30	14%	16-17	15%	15	21%		15	24%	16	27%
31-32	15%	18	16%	16	22%		16	25%	17	28%
33-34	16%	19	17%	17	23%		17	26%	18	29%
35-36	17%	20-21	18%	18	24%		18	27%	19	30%
37-38	18%	22	19%	19	25%		19	28%	20	32%
39-40	19%	23	20%	20	26%		20	29%	21	33%
41-42	20%	24	21%	21	27%		21	30%	22	34%
43-44	21%	25-26	22%	22	28%		22	31%	23	36%
45-46	22%	27	23%	23	29%		23	33%	24	37%
47-48	23%	28	24%	24	30%		24	34%	25	39%
49-50	24%	29-30	25%	25	31%		25	35%	26	40%
51-52	25%	31	26%	26	32%		26	36%	27	41%
53-54	26%	32	27%	27	33%		27	37%	28	42%
55-56	27%	33-34	28%	28	34%		28	38%	29	43%
57-58	28%	35-36	29%	29	35%		29	39%	30	45%
59	29%	37-38	30%	30	36%		30	41%	31	46%
60 Up	30%	39-40	31%	31	37%		31	42%	32	47%
оо ор	3070	41	32%	32	38%		32	43%	33	49%
		42	33%	33	39%		33	44%	34	50%
		43-44	34%	34-35	40%		34	45%	35	51%
		45-46	35%	36-37	41%		35	46%	36	52%
		47-48	36%	38-39	42%		36-37	47%	37	53%
		49-50	37%	40	43%		38-40	48%	38	54%
		51-52 53-54	38%	41	44% 45%		41-42	49% 50%	39 40	55% 56%
			40%		46%		45-46			
		55-56 57-58	41%	43-44 45-46	46%		45-46	51% 52%	41 42	57% 58%
		59		45-46	48%				42	
			42%	47-48	48%		49-50 51-52	53% 54%	44-45	59% 60%
		60 Up	45%					55%		
				50-51 52-53	50%		53		46	61%
					51%		54-55	56%	47	62%
				54-55	52%		56	57%	48	63%
				56-57	53%		57-58	58%	49-50	64%
				58-59	54%		59	59%	51-52	65%
				60 Up	55%		60 Up	60%	53	66%
									54-55	67%
	JP								56-57	68%
Age	Deprec.								58-59	69%
01 Up	90%					Ш			60 Up	70%

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.

Five 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 five tables.

Miscellaneous Structures Depreciation

S1				
AGE	DEPR.			
01	10%			
02	20%			
03	25%			
04	30%			
05	35%			
06	40%			
07	45%			
08-UP	50%			

S2				
AGE	DEPR.			
01	5%			
02	10%			
03	15%			
04	20%			
05	25%			
06	30%			
07	35%			
08	40%			
09	45%			
10	50%			
11	55%			
12	60%			
13	65%			
14	70%			
15-UP	75%			

S3				
AGE	DEPR.			
0003	5%			
0406	10%			
0709	15%			
1012	20%			
1315	25%			
1618	30%			
1921	35%			
2224	40%			
2527	45%			
2830	50%			
3135	55%			
3640	60%			
4145	65%			
4650	70%			
51UP	75%			

S	4
AGE	DEPR.
0004	5%
0508	10%
0912	15%
1316	20%
1720	25%
2124	30%
2528	35%
2932	40%
3336	45%
3740	50%
4144	55%
4548	60%
4952	65%
5356	70%
57UP	75%

S	55
AGE	DEPR.
0005	5%
0610	10%
1115	15%
1620	20%
2125	25%
2630	30%
3135	35%
3640	40%
4145	45%
4650	50%
5155	55%
5660	60%
6165	65%
6670	70%
71UP	75%

LAND TYPES AND DESCRIPTIONS

Land Type	LAND DESCRIPTIONS
BS & B) Building Site	Build Site – site for possible construction of building.
SBS & S) Secondary	Secondary Build Site – restricted site for possible construction of building. Example: the site of a second house located behind the main house on a particular parcel.
UBS & U) Undeveloped	Land that is either being actively developed, being prepared for development, or the highest and best use is suitable for and likely to be developed in the near future. Typically located in suburban areas with many active subdivisions and concentrated population centers; but can also be found in rural areas with extra road frontage or pocket areas of construction. Public water and sewer is preferred but is not a requirement.
UL) Undeveloped Land	Land that is undeveloped and owned by either a development company or homeowners association. This land has not been surveyed to create additional parcels.
OPEN & R) Residual	Land with nominal value, typically land (that is not wooded) which only has value relative to its contribution to the overall parcel value. Example: an improved parcel which consists of 1.25 acres, one acre will be classified as a Primary Site with the remaining .25 acres priced as residual land.
OPSP) Open Space	Additional land that was not used once subdivision lots were surveyed and parceled out of undeveloped land.
LU) Land Use	Land segment used for descriptive purposes to identify quantities of land for reference. Example can be used to identify the number of Agricultural Land Use acres in a given land segment.
CVE) Conservation Easement	Conservation Easement

Schedule of Values

Vance County 2024

CA) Common Area Allocation of value to individual properties located in townhouse or condominium developments. Value includes interest in all common areas, e.g. parking areas, pools, tennis courts, etc. CT) Cell Tower Land that has a cell tower placed on it. ZV) Zero Value Land segment used for descriptive purposes to identify quantities of land for reference. Examplecan be used to identify the number of Agricultural Land Use acres in a given land segment. WASTE) Wasteland Land which is unsuitable for any practical use. Example: land located under the waters of a river. WOOD) Residual Land with nominal value, typically land (that is not open) which only has value relative to its contribution to the overall parcel value. Example: an improved parcel which consists of 1.25 acres, one acre will be classified as a Primary Site with the remaining .25 acres priced as residual land. WBS) Waterfront Land which has lake access – refers to Residential, **Build Site** Commercial and Industrial Improved Building Sites as well as Undeveloped Lots and Acreage tracts.. Apartment Building Site - includes cost typical site AP) Apartment preparation, landscaping and water and sewer **Improved** access. CB) Commercial Commercial Building Site - includes cost of Improved minimal site preparation, landscaping, and water and sewer service. CS) Commercial Secondary Secondary Build Site – restricted site for possible construction of building. Example: the site of a second building located behind the main building on a particular parcel. CR) Commercial Commercial land which has nominal value, Residual typically land which only has value relative to its contribution to the overall parcel value.

Schedule of Values

Vance County 2024

CU) Commercial Undeveloped	Vacant Commercial Land which is suitable in size, zoning and location for commercial development.
IB) Industrial Improved	Industrial Building Site - includes cost of typical site preparation, landscaping and water and sewer system access.
IS) Industrial Secondary	Industrial Secondary Site - includes cost of minimal site preparation, landscaping, and water and sewer service.
IU) Industrial Undeveloped	Vacant Industrial Land which is suitable in size, zoning and location for industrial development.
IR) Industrial Residual	Industrial land which has nominal value, typically land which only has value relative to its contribution to the overall parcel value.
ER) Exempt Residual	Exempt land which has nominal value, typically land which only has value relative to its contribution to the overall parcel value.
EB) Exempt Improved	Exempt Building Site - includes cost of typical site preparation, landscaping and water and sewer system access.
ES) Exempt Secondary	Exempt Secondary Site - includes cost of minimal site preparation, landscaping, and water and sewer service.
EU) Exempt Undeveloped	Vacant Exempt Land which is suitable in size, zoning and location for industrial development.

VALUATION GUIDELINES

- 1) Rural Remote or sparsely developed areas of the county where much of the land is being actively farmed or lying idle. Turnover is infrequent; and development is generally limited to major highway intersections and rural hamlet communities. Public water may or may not be available. The majority of homes and businesses in rural areas are served by individual wells and septic systems.
- 2) Suburban Areas in the county in which development is occurring or has reached equilibrium stage. Includes concentrated communities, surrounding cities, and towns. Pockets of commercial and industrial properties are prevalent. Public water is normally available; and in some cases, sanitary sewer services exist but are not required.
- 3) Urban Areas within or immediately surrounding cities or towns with a high density of housing, commercial and industrial properties. Land is almost always bought and sold with the intent to develop. Turnover is frequent; and development is rapid. Public water and sewer are readily available.
- 4) Subdivisions Areas which have been divided into plots with roadways for the purpose of development for residential, commercial or industrial. Subdivisions may have extra restrictions besides governmental restrictions. Public water may or may not be available and in some cases sanitary sewer services exist.

DEEDED VS. CALCULATED ACREAGE DISCREPANCIES

Vance County is a "Deeded Acreage" county indicating the County Assessor will list all parcels at the acreage as stated on their respective deeds. In accordance with the best practices as recommended by the North Carolina Secretary of State, Land Records Division, the County Assessor may resolve discrepancies between Deeded and Calculated acreages.

LAND INFLUENCE FACTORS

GENERAL:

The technique of land pricing, as described in other sections of this manual, 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:

Square Foot Acreage Base Value Land Use

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 "Land Influences Factors" 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 primary goal of a Reappraisal 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

Topography

This category allows the 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 has been corrected. Therefore, an improved lot normally should have no allowance for topography. However, a topography influence may need 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, potential erosion, and flood plain areas.

The following is presented as topography factor guide:

TOPOGRAPHY INFLUENCE FACTOR GUIDE

	CONDITION	FACTOR
Normal	Problem corrected or not significant.	NONE
Slight	Problem is a moderate handicap to 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.	10% - 25%
Moderate	Problem is significant but correctable in that it prevents the development of the lot until the topography problem is corrected.	25% - 75%
Severe	The topography problem is so severe it is not economically feasible to develop the lot.	75% - 90%

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.

The following is presented as a shape/size factor guide:

	Condition	Factor
Normal	Shape or size is no significant detriment to the presumed utilization of the parcel.	NONE
Minor	The lot is buildable and/or economically usable for the presumed utilization but irregular shape or insufficient size preludes the full utilization of the parcel.	10% - 25%
Moderate	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.	25% - 75%
Un-Buildable	The shape or size problem is so severe that it renders the land category unusable and/or unbuildable for the presumed utilization. A typical example would be an undersized lot subject to minimum zoning restrictions which effectively prevents any economical utilization.	75% - 90%

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, 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 as bridges, highway medians, fences or abutments.

The following is presented as a land influence factor guide for restrictions:

	CONDITION	FACTOR
Normal	No significant restriction to the property exists.	NONE
Minor	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.	10% - 25%
Moderate	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. An example would be power lines bisecting the lot which prevent the building of a dwelling but would be suitable for a garage or secondary structure.	25% - 75%
Un- Buildable	A restriction of very severe impact, legal or physical, exists which causes the property to be rendered virtually un-buildable or unusable for any significant utilization compared to similar lots in the area which are not subject to this restriction. An example would be a lot rendered non-	75% - 90%

accessible by a highway right-of-way.

Economic Mis-Improvement

This category is reserved as a reviewer's judgment of the comparative loss of value 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 bases 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, or gross under-improvement, as an old warehouse located in an area where market evidence indicates modern office complex development.

Following is an Economic Mis-Imrovement Factor Guide:

	CONDITION	FACTOR
Normal	The property is unimproved (No major structures present) or the existing structure is consistent with the economical utilization of the land.	NONE
Minor	The land is encumbered with a structure that represents an economic mis-improvement and the structure has an assigned value of 25% to 50% of the land value at highest and best use.	25% - 50%
Major	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 the highest and best use.	50% - 75%

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 to only those cases of commercial or industrial property where the corner is an actual enhancement to the land.

Following is presented as a guide for Corner Influence Factors:

	CONDITION	FACTOR
Normal	The presence of a corner or alley has no significant enhancement effect to the property. Example: The side street has restricted access as a dead-end street.	NONE
Minor	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% - +25%
Major	The lot value is significantly enhanced by the presence of corner or alley exposure. Example: The intersection of two major arterial streets.	+25% - +100%

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. This factor also applies to golf course lots.

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 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.

The following is a View Influence Factor Guide:

	CONDITION	FACTOR
Normal	The view is considered common to the area, and market evidence indicates no actual value enhancement exists.	NONE
Minor	The subject property has a moderate enhancement due to an appealing view, and market evidence: Indicates value enhancement exists.	+10% - +25%
Major	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.	+25% -+100%
Negative	For properties with less than normal or typical views, the appraiser should apply negative factors to the affected properties as indicated by market analysis and evidence.	-10%75%

ACCESS ADJUSTMENT TABLE					
%	DESCRIPTION	CODE			
BASE	Paved Access	LC04			
90	Gravel Public	LC03			
75	Private Access	LC02			
50	No Access/Land Locked	LC01			

BASE RATE LAND VALUATION TECHNIQUE

The Base Rate Land Valuation Technique allows the appraiser to establish land rates using either a price per acre, price per square foot or price per lot for each parcel located within an individual neighborhood unit. This method also allows the appraiser to develop base land sizes for each land segment type within the neighborhood.

Incremental/Decremental Rates are developed as a percentage of the Base Land Rates to allow for size adjustments for those parcels which are either smaller or larger than the indicated base sizes established for the neighborhood.

EXAMPLE 1:

Neighborhood 0902 North Hickory Mountain

Land Type	Base Size (Acreage)	Base Rate (Per Acre)	Decrement Rate	Increment Rate
AC BS	1.00	35000	17500	35000
AC OPEN	20.00	175000	8750	4375

Subject parcel consists of 50 acres, including: an improved one (1) acre building site, and forty (49) acres of residual land. The base rate valuation technique will value the parcel in the following manner:

1 acre Building Site @ \$35,000 per acre	\$ 35,000
49 acres Rural Land @ \$6160 per acre (average) (20 acres @ \$175,000 - 29 acres @ \$4375 per acre)	\$301,840
TOTAL APPRAISED VALUE OF LAND	\$336,840

EXAMPLE 2:

Neighborhood SC002 Pine Forest South

Land Type	Base Size (Acreage)	Base Rate (Per Acre)	Decrement Rate	Increment Rate
AC BS	1.00	90000	45000	90000
AC OPEN	1.00	22500	22500	11250

Subject parcel consists of an improved lot containing .65 acres located within a prominent neighborhood. The base rate valuation technique will value the parcel in the following manner:

Residual Size x Decrement = Residual Value
$$(.35 \text{ acres})$$
 x $(\$45000/\text{acre})$ = $(\$15750)$

Subject Site x Effective Rate/Acre = Appraised Value (.65 acres) x
$$(\$114231)$$
 = $(\$74250)$

TOTAL APPRAISED VALUE OF LAND

\$74,250

LAND USE SCHEDULES

2024 REAPPRAISAL

VANCE COUNTY NORTH CAROLINA

In order to comply with the procedures of North Carolina General Statutes 105-317 (c) "1" and "2" and 105-277.6 (c), Vance County is required to develop and adopt a land use schedule of values for agriculture, horticulture and forest lands. The purpose of this schedule is to provide a uniform method of valuation based on the present value in use for qualifying lands.

After careful consideration of the available pertinent production statistics for Vance County, North Carolina and the Use Value Manual for Agricultural, Horticultural and Forest Land prepared by the North Carolina Use Advisory Board. The following schedule of values is recommended as the standard for present use taxation for the 2024 Vance County, North Carolina Reappraisal.

LAND USE VALUATION SCHEDULE

AGRICULTURAL SCHEDULE (Rate Per Acre)

MLRA	CLASS I	CLASS II	CLASS III
136	\$950	\$645	\$420

HORTICULTURAL SCHEDULE (Rate Per Acre)

MLRA	CLASS I	CLASS II	CLASS III
136	\$1,370	\$890	\$615

FORESTRY SCHEDULE (Rate Per Acre)

MLRA	CLASS I	CLASS II	CLASS III	CLASS IV	CLASS V
136	\$415	\$280	\$260	\$100	\$135

Rates shown are price per acre.

Floodplain

Vance county has a number of parcels in the 3 different labels of Floodplain's – This section of the SOV is to explain how we distributed the adjustments to each parcel affected.

Floodplain Calculations

$$FPL = \frac{Acreage - 0.5 \times FWA - 0.25 \times 100 YrA - 0.1 \times 500 YrA}{Acreage} \times 100\%$$

Adjustments for each floodplain type: Floodway (FWA) is 50% 100-Year Floodplain is 75% 500-Year Floodplain is 90%

Above is the equation that is used to calculate out the proper percent adjustment for each parcel in either Floodway, 100-Year Floodway or 500-year Floodway.

On the Next page, we show two separate examples:

FPL is the floodplain adjustment percentage rounded to the nearest whole number.

Acreage is the Total Acreage of the Parcel.

FWA is the size of the land in a floodway in acres.

100YrA is the size of the land in a 100-Year floodplain in acres.

500YrA is the size of the land in a 500-year floodplain in acres.

Example 1.



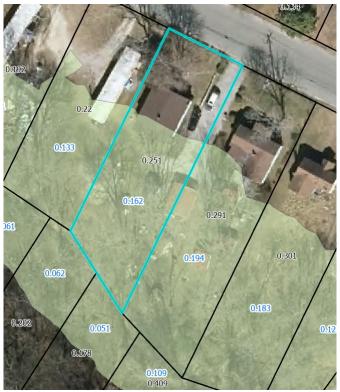
Floodplain Acreage highlighted in Blue Parcel Acreage highlighted in Black

Acreage = 6.748 acres FWA (Pink) = 1.722 acres100YrA (Purple) = 1.805 acres 500YrA (Yellow) = 0.529 acres

$$\frac{6.748 - (0.5 \times 1.722) - (0.25 \times 1.805) - (0.1 \times 0.529)}{6.748} \times 100\%$$

Our total Floodplain Adjustment for this example is 80%.

Example 2.



Floodplain Acreage in Blue Parcel Acreage in Black

Acreage = 0.251 acres FWA (Pink) = 0 acres 100YrA (Purple) = 0 acres 500YrA (Yellow) = 0.162 acres

$$\frac{0.251 - (0.5\,\times 0) - (0.25\,\times 0) - (0.1\,\times 0.162)}{0.251}\,\times 100\%$$

Our total Floodplain Adjustment for this parcel is 94%.

INCOME APPROACH TO VALUE

The Income Approach includes models for the following property groups:

Apartments

Hotels

Retail Shops/Grocery Stores

Discount Stores

Office

Convenience Stores

Restaurants

Manufacturing/Warehouse

NNN Models

Mobile Home Parks

Mini Storage

Service Shop/Service Garage

Franchise Drug Store

Franchise Restaurant

Franchise Retail

Medical Office

Motels

Nursing Home

Office/Warehouse

Shopping Center/Mall

Income and Expense Models are developed for each property group to cover the range of properties located within Vance County. Income and expense models are based on typical net lease situations. For triple net and other type leases, expense ratios should be adjusted to reflect actual or typical expenses of the landlord in this type of arrangement. Triple net leases have no expenses.

Economic Income is developed on a gross square foot or unit basis. Potential Gross Income is adjusted for occupancy loss to produce an Effective Gross Income. Income and Occupancy factors may be adjusted for exceptional properties on an individual basis.

Expenses for management and marketing, maintenance, utilities, reserve for replacement, property taxes and other operating expenses are specified as a percentage of Effective Gross Income. Expenses are deducted from Effective Gross Income to generate a Net Income, which is then capitalized using direct capitalization.

Income Models include associated capitalization parameters:

- a) Typical financing percentage rates and terms.
- b) Cash on cash requirements.

These capitalization parameters may be adjusted for lower or higher risk properties through an override of the indicated model rates. Capitalization Rates are computed excluding an effective tax rate and applied to the Net Income to generate an indicated value

APARTMENTS

	MONTHLY RENTAL RATE			EXF	PENSE F	RATIOS C	APITALIZ	ATION		
MODEL	EFF	1BR	2BR	3BR	4BR	VACANCY	MGMT	EXPENSES	CAP RATE	MISC
AP1	1000	1100	1600	2100	2600	5 - 10%	3 - 10%	25 - 40%	.0507	\$100.00
AP2	850	1000	1200	1500	1800	5 - 10%	3 - 10%	25 - 40%	.0508	\$100.00
AP3	700	750	950	1100	1300	5 - 10%	3 - 10%	25 - 40%	.0509	\$100.00
AP4	600	650	750	900	1000	10 - 15%	3 - 10%	30 - 50%	.0610	\$100.00
AP5	500	550	625	800	900	10 - 15%	3 - 10%	30 - 50%	.0711	\$50.00
AP6	350-Less	400-LESS	500-LESS	600-LESS	700-LESS	15 - 20%	3 - 10%	30 - 50%	.1012	\$50.00

HOTELS

EFFE	CTIVE DAILY ROOM RATES	EXPENSE RATIOS			CAPITALIZATION
MODEL	DAILY ROOM RATES	VACANCY	MGMT	EXPENSES	CAP RATE
H01	\$200 - UP PER NIGHT	35 - 50%	5 - 10%	40 - 60%	.0710
H02	\$150 PER NIGHT	35 - 50%	5 - 10%	40 - 65%	.0710
H03	\$100 PER NIGHT	35 - 50%	5 - 10%	50 - 65%	.0711
H04	\$75 PER NIGHT	35 - 50%	5 - 10%	50 - 65%	.0811

RETAIL SHOPS/GROCERY STORES

ANNUAL SQUARE FOOT RENT		EXP	ENSE RA	CAPITALIZATION	
		l I			
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
RE1	\$10 - \$30 PER SQ/FT	5 - 10%	5 - 10%	20 - 40%	.0510
RE2	\$10 - \$25 PER SQ/FT	5 - 10%	5 - 10%	20 - 40%	.0510
RE3	\$8.50 - \$20 PER SQ/FT	5 - 10%	5 - 10%	20 - 40%	.0510
RE4	\$7.50 - \$12.50 PER SQ/FT	5 - 10%	5 - 10%	25 - 50%	.0511
RE5	\$6 - \$10 PER SQ/FT	10 - 15%	5 - 10%	25 - 50%	.0511
RE6	\$5 - \$7.50 PER SQ/FT	10 - 15%	5 - 10%	25 - 50%	.0511

DEPARTMENT/DISCOUNT STORES

ANIAH	ANNUAL SQUARE FOOT RENT EXPENSE RATIOS CAPITALIZATION						
ANNUAL SQUARE FOOT RENT		EXPE	NSE KA	CAPITALIZATION			
·							
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE		
DS1	\$6 - \$10 PER SQ/FT	3 - 5%	5 - 10%	25 - 40%	.0609		
DS2	\$4 - \$6 PER SQ/FT	3 - 5%	5 - 10%	25 - 40%	.0710		
DS3	\$2.50 - \$4 PER SQ/FT	3 - 5%	5 - 10%	25 - 40%	.0811		

OFFICE

ANN	UAL SQUARE FOOT RENT	EXP	ENSE RA	CAPITALIZATION	
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
OF1	\$20 - UP PER SQ/FT	3 - 5%	3 - 5%	20 - 35%	.0608
OF2	\$15 - \$20 PER SQ/FT	3 - 10%	3 - 5%	20 - 35%	.0609
OF3	\$10 - \$15 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.07095
OF4	\$5 - \$10 PER SQ/FT	10 - 15%	5 - 10%	25 - 45%	.0811
OF5	\$7 - LESS PER SQ/FT	10 - 15%	5 - 10%	25 - 45%	.0911

CONVENIENCE STORES

ANN	UAL SQUARE FOOT RENT	EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
CS1	\$35- UP PER SQ/FT	0 - 5%	5 - 10%	08 - 10%	.0610
CS2	\$20- \$30 PER SQ/FT	0 - 5%	5 - 10%	10 - 15%	.0711
CS3	\$12.50- \$20 PER SQ/FT	3 - 5%	5 - 10%	15 - 30%	.0811
CS4	\$8-\$12.50 PER SQ/FT	5 - 10%	5 - 10%	20 - 30%	.0911
CS5	\$5 - \$8 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.1012

RESTAURANTS

ANN	UAL SQUARE FOOT RENT	EXP	ENSE RA	CAPITALIZATION	
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
RS1	\$25 - UP PER SQ/FT	0 - 5%	5 - 10%	20 - 35%	.0609
RS2	\$15 - \$25 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.0710
RS3	\$10 - \$15 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.0810
RS4	\$6 - \$10 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.0911
RS5	\$4 - \$6 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.1012

MANUFACTURING/WAREHOUSE

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
MW1	\$7.50 - UP PER SQ/FT	5 – 10%	5 - 10%	25 - 40%	.0609
MW2	\$4 - \$7.50 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.0710
MW3	\$2.50 - \$4 PER SQ/FT	10 - 15%	5 - 10%	25 - 40%	.0710
MW4	\$1 - \$2.50 PER SQ/FT	10 - 15%	5 - 10%	40 - 55%	.0811

NNN MODELS

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
NN1	\$20 - \$40 PER SQ FT	0 - 3%	5 - 10%	10 - 15%	.0508
NN2	\$25 - \$40 PER SQ/FT	0 - 3%	5 - 10%	10 - 15%	.0508
NN3	\$7.50 - UP PER SQ/FT	0 - 5%	5 - 10%	05 - 10%	.0509

MOBILE HOME PARKS

	ECONOMIC RENT	EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT PER SITE	VACANCY	MGMT	EXPENSES	CAP RATE
MH1	\$125 - \$200/MONTH	5 - 10%	5 - 10%	25 - 35%	.0810

MINI-STORAGE

	ECONOMIC RENT	EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT PER UNIT	VACANCY	MGMT	EXPENSES	CAP RATE
MS1	\$75 - UP PER MONTH	10 - 25%	5 - 10%	20 - 35%	.0509
MS2	\$50- \$125 PER MONTH	10 - 25%	5 - 10%	20 - 35%	.0509
MS3	\$25 - \$75 PER MONTH	10 - 25%	5 - 10%	20 - 35%	.0510

SERVICE SHOP/SERVICE GARAGE

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION			
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE			
SS1	\$15 - UP PER SQ/FT	5 – 10%	5 - 10%	10 - 15%	.0608			
SS2	\$5 - \$10 PER SQ/FT	5 - 10%	5 - 10%	20 - 35%	.0810			
SS3	\$2.50 - \$4 PER SQ/FT	5 - 10%	5 - 10%	25 - 40%	.1011			

FRANCHISE DRUG STORES

ANNUAL SQUARE FOOT RENT		EXPE	NSE RA	CAPITALIZATION	
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
FD1	\$18 - \$20 PER SQ/FT	3 - 5%	5 - 10%	0 - 10%	.0508
FD2	\$15 - \$20 PER SQ/FT	3 - 5%	5 - 10%	05 - 10%	.05085

FRANCHISE RESTURANTS

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL ECONOMIC RENT VACANCY MGMT EXPENSES					CAP RATE
FR1	\$25 - \$40 PER SQ/FT	0 - 3%	5 - 10%	5 - 15%	.0508
FR2	\$15 - \$25 PER SQ/FT	0 - 3%	5 - 10%	5 - 15%	.0509

FRANCHISE RETAIL

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
RF1	\$12.50 PER SQ/FT	5 – 10%	5 - 10%	05 - 15%	.0508
RF2	\$7- \$12 PER SQ/FT	5 - 10%	5 - 10%	05 - 15%	.0609
RF3	\$7.50 –LESS PER SQ/FT	5 - 10%	5 - 10%	05 - 15%	.0709

MEDICAL OFFICES

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
MD1	\$30 - \$40 PER SQ/FT	5 - 10%	5 - 10%	20 - 30%	.0509
MD2	\$20 - \$30 PER SQ/FT	5 - 10%	5 - 10%	25 - 35%	.0509
MD3	\$10 - \$20 – PER SQ/FT	5 - 10%	5 - 10%	25 - 35%	.0510

MOTELS

EFFECTIVE DAILY ROOM RATES		EXPENSE RATIOS			CAPITALIZATION
MODEL	DAILY ROOM RATES	VACANCY	MGMT	EXPENSES	CAP RATE
MO1	\$125 - UP PER NIGHT	40 - 50%	5 - 10%	30 - 60%	.0710
MO2	\$100 PER NIGHT	40 - 50%	5 - 10%	30 - 60%	.0710
MO3	\$85 PER NIGHT	40 - 50%	5 - 10%	50 - 65%	.0811
MO4	\$65 PER NIGHT	40 - 50%	5 - 10%	50 - 65%	.0911
MO5	\$50 PER NIGHT	40 - 50%	5 – 10%	50 – 70%	.1012
MO6	\$40 PER NIGHT	40 - 50%	5 – 10%	50 – 70%	.1012

NURSING HOMES

ECONOMIC RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
NH1	\$1100 - \$1500/MONTH	5 - 10%	5 - 10%	40 - 60%	.0710

OFFICE/WAREHOUSE

ECONOMIC RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
OW1	\$10 + PER SQ FT	05 - 10%	5 - 10%	20 - 40%	.0509
OW2	\$7.50- \$12.50 PER SQ FT	05 - 10%	5 - 10%	20 - 40%	.0510
OW3	\$4.50 - \$7.50 PER SQ FT	05 - 10%	5 - 10%	20 - 40%	.0510

SHOPPING CENTERS/MALL

ANNUAL SQUARE FOOT RENT		EXPENSE RATIOS			CAPITALIZATION
MODEL	ECONOMIC RENT	VACANCY	MGMT	EXPENSES	CAP RATE
SC1	\$15 + PER SQ/FT	5 - 10%	5 - 10%	25 - 50%	.07509
SC2	\$12.50 - \$15 PER SQ/FT	5 - 10%	5 - 10%	25 - 45%	.0810
SC3	\$7.50 - \$12.50 PER SQ/FT	5 - 10%	5 - 10%	25 - 45%	.0810

Neighborhood Delineation

Purpose

Neighborhood Delineation is a study of forces from outside which could be considered to influence property value; and 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 properties where the significant economic forces of those properties are generally uniform.

The Neighborhood Data Form serves three (3) main functions:

- 1. To provide an opinion of the typical structure, economic factors and conditions within an area considered a neighborhood. Appraisers use this information to provide a benchmark to compare each property within the neighborhood with each other.
- 2. To provide a generally similar geographic area to use as a statistical base for sales comparison, both during the 2024 Reappraisal and years later to measure change and update values accordingly.
- 3. Provide a basis to allow development of computer assisted land price tables (CALP).

Significant Characteristics Considered:

- 1. Physical Boundaries
 - a. Natural like rivers, mountains, woods, streams, etc.
 - b. Manmade as roads, highways, railroads, streets, corporation boundaries, etc.
- 2. Housing Characteristics such as type, quality, age and condition.
- 3. Occupancy as % of homes owner-occupied or tenant-occupied, and % of vacant structures.
- 4. Predominant land use and anticipated changes.
- 5. Typical land size and land valuation.
- 6. Neighborhood life cycle.
- 7. Estimates of market value ranges.

INSTRUCTIONS FOR NEIGHBORHOOD DELINEATION FIELD ANALYSIS

Step 1 - Produce large scale maps for the county, which ideally show all streets, roads and significant physical features as rivers, lakes, railroads, etc.

Step 2 - Establish preliminary neighborhood boundaries on base maps using known physical and governmental features as boundaries. A general rule would be to consider all physical separation points such as rivers, arterial streets, corporation lines, lakes, commercial-industrial areas, highways, etc., as a definite neighborhood boundary.

Step 3 - Assemble and analyze supplementary material for the community as available and useful.

Examples would include:

Listing of established subdivisions

Zoning maps and zoning restrictions

Planning department maps - (master development plans)

Census Tract Statistics

School district maps

Redevelopment planning maps and studies

Current and planned utility maps (sewer, public water)

Soil maps, topographic maps, etc.

Real estate sales data from multiple listing service and internal sales verification letters.

Industrial plant listing, employment base summaries.

Step 4 - Begin the field inspection process by conducting a thorough, street by street visual inspection throughout the county. Based on physical observation and data collected and analyzed to date, establish individual neighborhood boundaries, recognizing the specific delineation points where the properties begin to represent significant physical and economic changes from adjacent areas.

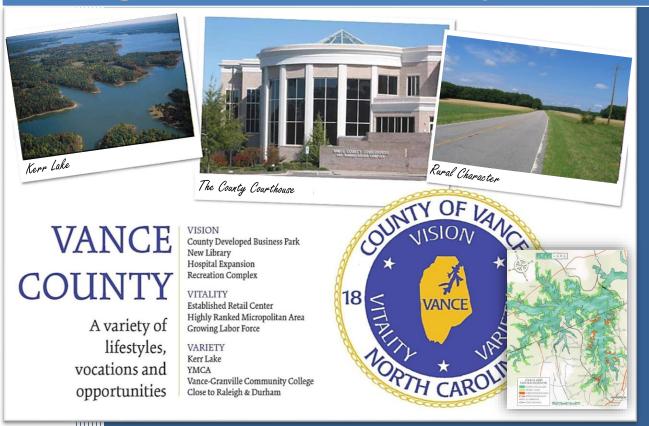
- Step 5 After establishing boundaries of each neighborhood:
 - A Fill out the neighborhood data form and assign an identification number.
 - B Post the established neighborhood boundaries and identification numbers to a master map.

Step 6 - Establish final boundaries and permanent neighborhood numbers and post both to the Project Master Map and Individual Field Maps used for field appraisal.

Step 7 - Determine through manual or computerized analysis the comparability of all neighborhoods. The theory here is, 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.

SUMMARY - Keep in mind during the neighborhood analysis process, our primary purpose is to use the neighborhoods established to develop a statistical measuring base for pooling and analyzing sales data, and subsequently using this data to determine market value for individual properties via the comparable market data approach.

Zoning Ordinance – Vance County, North Carolina



Revised January 9, 2023



vision • vitality • variety

The Vance County Planning and Development Department acknowledges and appreciates the support of the County Board of Commissioners in developing a countywide zoning ordinance to promote managed growth while preserving the rural and agricultural character of Vance County. This would not have been possible without the cooperation of Vance County's Board of Commissioners, Planning Board, Citizens Advisory Committee, County Manager, County officials, interested and concerned residents of Vance County, local and state cooperating agencies, and the staff of the County Planning and Development Department:

Vance County Board of Commissioners: Dan Brummitt (Chairman), Leo Kelly (Vice Chairman), Carolyn Faines, Yolanda J. Feimster, Tommy S. Hester, Jr., Archie B. Taylor, Jr., Gordon Wilder

Vance County Planning Board: J. Thomas Shaw (Chairwoman), Ruth Jones (Vice Chairman), Mitch Wyatt, Ruxton Bobbitt (Alternate), Alvin Johnson, Jr., Logan Darensburg, Phyllis Stainback, Benny Finch (Alternate)

Vance County Staff: Jordan McMillen (County Manager), Keith Callahan (Planning & Development Director)

Recommended by formal action and vote of the Vance County Planning Board on April 8, 2021, to be submitted as a **completed draft document** to the Vance County Board of Commissioners for their consideration and review.

Adopted by the Vance County Board of Commissioners on May 3, 2021. This document will be effective as of May 3, 2021. For amendments see Appendix A.



Preface: An Overview of Planning Principles and Zoning

To determine how a county will grow, good planning needs to be implemented. The severity of the issues and available resources that face a community, town, city, or county determine the best approach to meet the needs of that particular area. In planning for growth each community, town, city, or county is different, but the process is the same:

- Identify issues, problems, and opportunities.
- Gather information on these issues, problems, and opportunities.
- Compare alternatives.
- Choose a plan and implement the plan.
- Monitor the plan progress.

These five elements form the basic planning process. Whether used to develop a Comprehensive Development Plan (Land Use Plan), establish an Extraterritorial Jurisdiction, or developing countywide zoning, this basic process follows the five principles stated above. The goal is to establish a pattern for development and beneficial land use, it includes the following:

- Identify current conditions (man-made and natural features).
- Identify the future image of the study area and a path to reach that image.
- Provide a basis to insure residents will have adequate resources in the future.
- Identify current issues, needs, and how to address them.
- Solicit the interest and support of residents.
- Field research, meetings with officials, field experts, and public meetings.

Additionally, planning how a community will grow addresses several other factors including encouraging quality growth, protection of the community's character, preserving resources, enhancing aesthetics and quality of life, preparation for infrastructure needs, and funding to support new development. Planning can be defined as "a method through which well-informed decisions are achieved." It provides a community the opportunity to define its future image, to predict what may occur, to benefit from new opportunities, and determine actions to prevent future problems. Planning provides methods to determine actions that will deter future negative impacts, rather than reacting to them once they have occurred. Planning "tools" that could be developed (or current ones revised) include, but are not limited to:

- Countywide zoning which defines areas (zones) for a specific uses.
- Updating subdivision regulations to insure minimum standards for development.
- Developing a minimum housing code and/or property maintenance code to meet minimum standards structure used for homes and businesses.

In addition, two other elements are needed: citizen participation and monitoring. Citizen participation includes informing residents and gathering their input, as well as required public hearings when necessary. This information is used in determining methods to address County needs. Monitoring is the process of reviewing the program or document, once adopted, periodically to determine if the community's goals are being met. For zoning, state legislation allows cities, villages, counties, and townships to establish zoning, with their own distinct procedures and methods. The content is the discretion of the governing body and residents involved in the planning process. Zoning regulations can be divided into two categories: unincorporated (rural) and municipal. Rural zoning concentrates on areas outside of municipalities, municipal zoning is the responsibility of the unit of government for that municipality (county zoning is under the jurisdiction of the county commissioners). Discussions of zoning constantly provoke differences of opinion about what it is, what it can do, and what it cannot do. *In general*, the following applies:



Rural Zoning Can...

- Assist community economic growth by identifying areas for appropriate land uses as residential, commercial, industrial, agricultural, and open space for natural resource preservation/protection.
- Protect the public's property from inconsistent or harmful uses
- Help keep rural areas from becoming dumping grounds for businesses, which are trying to avoid municipal regulations
- Protect property owners from harmful/undesirable uses of adjacent property
- Provide orderly and systematic transition in land use that benefits all land uses through public hearings and local decisions
- Prevent objections to normal and necessary farming operations (can occur when residential developments move into agricultural areas in an unplanned fashion).
- Make a community more attractive by assisting the preservation of open space, unique natural resources, and natural terrain features
- Protect present/future industry from harassment by residential neighbors by informing residents where industry is allowed to develop in an orderly fashion
- Serve as a tool to put into effect plans for future development
- Allow for important community decisions to be made within the community.
- Protect local natural and environmental resources from inconsistent or harmful uses that can have negative impacts on community health and welfare.

Rural Zoning (and zoning in general) Cannot...

- Correct past land uses, the only exception is if a use is made non-conforming (such a use can be eliminated if it is voluntarily discontinued for a period of time or a defined percentage of the structure is destroyed by fire or natural disaster).
- Prohibit farm buildings or farming decisions, such as crop or livestock selection
- Set higher development standards than the community desires (guarantee that its adoption will be followed by industrial and commercial development).
- Assure that land uses will be permanently retained as assigned under the zoning resolution (rezoning is possible in response to changing conditions).
- Guarantee the structural soundness of buildings constructed in zoned zones.

Rural zoning can provide guidelines for acceptable use practices. While it cannot change or correct past land use actions, it can serve as a guideline for future development. Zoning is a development tool available to rural residents who want to be involved in the growth and development of their area (there are limits as to what zoning can and cannot accomplish). The following is a brief list of "general" terms related to zoning (several are located in Section 12):

- Zoning (Zone): an area or areas of the town/city where certain land uses are permitted and other uses prohibited, through a zoning ordinance.
- Zoning ordinance: land use regulations enacted by the local unit of government that creates zones, where certain uses are permitted and other uses prohibited (type, density, height, coverage of land by structures regulate land uses in zones).
- Spot Zoning: occurs when the zoning of a particular lot for a certain use is different from the permitted uses in the surrounding zone. Potentially creates a negative impact on the surrounding neighborhoods and possible invalidation by the courts.
- Special Use (addresses the use of property): in unusual circumstances, an applicant may apply for a use not normally allowed in a particular zone. It may be granted, but only if the use is allowed as a Special Use listed in the local zoning ordinance. These may involve the decisions of the unit of governments Planning Board, Board of Adjustment, and/or the governing body.
- Nonconforming Use: land use that does not comply with the zoning ordinance or zone classification where it is located, or does not comply with other land use regulations. Generally,



- this type of use existed prior to the zoning regulations and would be allowed to continue its operation (often called a "grandfather" clause).
- Variance (addresses the physical layout of property): an action granted by either the County Zoning Board of Adjustments <u>or</u> County Board of Commissioners where due to certain situations (established hardship), a property owner is given the right to make use of his/her property even though it does not conform to the literal provisions of the zoning ordinance (property owner must prove an unnecessary hardship exists). Economic/financial hardship alone is not exceptional (inconvenience, aesthetics, physical handicaps, personal preferences, or the disapproval of neighbors don't qualify). The hardship the applicant must prove is measured against the community's need for strictly enforced regulations that protect its citizens from danger and the long-term risk to owners/occupants of the building.

In addition to the information listed above, a couple of points should be highlighted when considering issues related to zoning and development. Zoning should be consistent with surrounding land uses and maintain the character of the neighborhood. A proposed use/zone not specifically listed under permitted uses, or Special Uses (in the local adopted zoning code) is an issue called spot zoning:

- Spot zoning should only be permitted when there is a demonstrated public need for the proposed use (and that use cannot be reasonably placed elsewhere).
- If one or a few landowners appear to gain favoritism through spot zoning, which cannot be justified by a plan (land use plan/zoning map) of the unit of government, the spot zoning could be found to be illegal by the courts.

TABLE OF CONTENTS

SECTION 1 – LEGAL PROVISIONS	10
1.1 PURPOSE	10
1.2 AUTHORITY AND ENACTMENT	10
1.3 TITLE	10
1.4 JURISDICTION	10
1.5 BONA FIDE FARMS EXEMPT	10
1.6 MINIMUM REQUIREMENTS	11
1.7 SEVARABILITY	11
1.8 VESTED RIGHTS	11
1.9 EFFECTIVE DATE	12
SECTION 2 - APPLICATION AND ENFORCEMENT	13
2.1 APPLICATION	13
2.2 ENFORCEMENT	13
A. ZONING ADMINISTRATOR	13
B. CERTIFICATE OF ZONING COMPLIANCE/BUILDING PERMIT REQUIRED	13
C. SITE PLAN REQUIREMENTS	13
- Example Site Plan	
D. TEMPORARY CERTIFICATE	16
E. RIGHT OF APPEAL	16
F. COMPLAINTS REGARDING VIOLATIONS	16
G. PERSONS LIABLE	16
H. PROCEDURES UPON DISCOVERY OF VIOLATIONS	16
I. PENALTIES AND REMEDIES FOR VIOLATIONS	16
J. CANCELLATION OF PERMITS	17
SECTION 3 - ZONING MAP AND ZONING CATEGORIES	18
3.1 INTERPRETATION OF ZONE BOUNDARIES	18
3.2 ZONES, DESCRIPTIONS, AND DIMENSIONS	19
3.2.1 A-R Agricultural Residential	20
3.2.2 W-O-Z Watershed Overlay Zone	20
3.2.3 R-30 Residential, Low Density	22
3.2.4 R-20 Residential, Medium Density	22

3.2.5 R-10 Residential, High Density	22
3.2.6 O-S Open Space	22-23
3.2.7 R-M-H-C Residential Manufactured Housing Community	23
3.2.8 E-I-A Employment and Institutional Area	23
3.2.9 H-C Highway Commercial	23
3.2.10 G-C-1 General Commercial	23
3.2.11 L-I Light Industrial	
3.2.12 I-M Industrial-Mining/Quarry.	24
3.2.13 O-I Office Institutional.	24-25
3.2.14 Middleburg Overlay Zone	25
3.3 CONDITIONAL ZONING DISTRICTS	25
TABLE OF PERMITTED USES	27-32
SECTION 4 - GENERAL PROVISIONS	33
4.1 STREET ACCESS	33
4.2 REQUIRED YARDS NOT TO BE USED BY ANOTHER BUILDING	33
4.3 RELATIONSHIP OF BUILDING TO LOT	33
4.4 REDUCTION OF LOT AND YARD AREAS PROHIBITED	33
4.5 SUBSTANDARD LOT OF RECORD	33
4.6 ADJOINING AND VACANT LOTS OF RECORD	33-34
4.7 ADDITIONAL ENVIRONMENTAL PROVISIONS	34
4.8 CURB CUTS GIVING ACCESS TO PUBLIC RIGHTS-OF-WAY	34
4.9 PROJECTION INTO PUBLIC RIGHT-OF-WAYS	34
4.10 HEIGHT LIMIT EXCEPTIONS	
4.11 CORNER VISIBILITY	34
4.12 ACCESSORY STRUCTURES/BUILDINGS	34-35
4.13 ACCESSORY USES	35
A. POOLS	35
B. SATELLITE DISHES	35
C. SOLAR COLLECTOR	35
4.14 OUTDOOR DISPLAY	36
4.15 OUTDOOR STORAGE	36
4.16 SCREENING AND BUFFERING	36-38
4.17 LIGHTING	38
4.18 MANUFACTURED HOME FOR HARDSHIP	38

4.19 CLUSTER DEVELOPMENT	39-40
4.20 ONLY ONE MAIN BUILDING/USE ON LOT AND BUILDING ORIENTATION	41
4.21 MINIMUM YARDS	41
4.22 LOT SUBDIVISION	41
4.23 IMPROVEMENTS BOND.	41
4.24 GENERAL DEVELOPMENT REGULATIONS	41-42
CECTION 5 NONCONFORMING LIGES	42
SECTION 5 - NONCONFORMING USES	
5.1 CONTINUANCE OF NONCONFORMING BUILDINGS	
5.2 CONTINUANCE OF NONCONFORMING USE OF LAND	
5.3 CHANGE OF USE	
5.4 RECONSTRUCTION OF NONCONFORMING BUILDINGS	
5.5 MAINTENANCE / REPAIR OF BUILDING CONTAINING NONCONFORMING USE	
SECTION 6 - SPECIAL USE PERMITS	
6.1 OBJECTIVES AND PURPOSE	44
6.2 PROCEDURES	44
6.3 BOARD OF ADJUSTMENT ACTION	44-45
6.4 DENIALS AND APPEAL	45
6.5 COMPLIANCE WITH ZONE REGULATIONS	45
6.6 FAILURE TO COMPLY WITH PLANS/NOTIFY ADJACENT PROPERTY OWNERS	45
6.7 EXPIRATION	45
6.8 MODIFICATION OF PLANS	
6.9 SUPPLEMENTAL REQUIREMENTS FOR SPECIAL USES	45-46
6.10 SPECIAL USE MINIMUM DEVELOPMENT REQUIREMENTS	
A. Adult Entertainment Establishment	
B. Airports	
C. Automobile and Other Storage, Parking, Junk, Salvage, or Wrecking Yards including Manufactured Home Storage and/or Junk Yard D. Commercial and/or Non-Residential Uses in Residential Zoned Areas	48-49
E. Electronic Gaming Operations	
F. Industrial Uses in Non-Industrial Zones	
G. Landfill, Demolition, Sanitary, Land Clearing Inert Debris	
H. Mining and Quarrying or other Extraction Operations	
I Non-Single-Family Residential	52-55

J. Public and Semi Public Uses, Facilities & Buildings including schools, colleges, hospitals, parks, community centers, hospitals and other similar uses	
L. Recreation, Outdoor (including, but not limited to, ball fields, swimming pools, horseback riding trails, saddle clubs and community rodeos)	56
M. Shooting Ranges	56-58
N. Solar Energy Systems, Large Scale (Solar Farms)	58-59
O. Wireless Communications Towers	59-62
SECTION 7 - Off Street Parking and Loading	63
7.1 OFF-STREET PARKING REQUIRED	63
7.2 CERTIFICATION OF MINIMUM PARKING REQUIREMENTS	63
7.3 COMBINATION OF REQUIRED PARKING SPACE	63
7.4 REMOTE PARKING SPACE	63
7.5 REQUIREMENTS FOR PARKING LOTS	63-64
7.6 MOBILE HOME AND TRAILER PARKING AND STORING	64
7.7 VEHICLE STORAGE	64
A. Residential Zones	64
B. Commercial and Industrial Zones	64
7.8 MINIMUM PARKING REQUIREMENTS	64
7.9 DESIGN STANDARDS FOR OFF-STREET PARKING	65-66
7.10 OFF-STREET LOADING PURPOSE AND GENERAL REQUIREMENTS	66
7.11 DESIGN STANDARDS FOR OFF-STREET LOADING SPACE	66-67
7.12 MINIMUM OFF-STREET LOADING REQUIREMENTS	67
SECTION 8 – VARIANCES	68-72
SECTION 9 – SIGNS	73-77
SECTION 10 - BOARD OF ADJUSTMENTS	78-81
SECTION 11- CHANGES AND AMENDMENTS	82
11.1 Initiation of Amendments	82
11.2 Action by the Applicant	82
11.3 Action by the Planning Board	82-83

11.4 Action by the Board of County Commissioners	83
11.5 Withdrawal of the Application	83
11.6 Conditional Zoning.	83-85
SECTION 12- DEFINITIONS AND WORD INTERPRETATIONS	86-109
APPENDIX A – AMENDMENTS	110

SECTION 1 – LEGAL PROVISIONS

1.1 PURPOSE

In order to lessen congestion in the streets; to secure safety from fire, panic, and other dangers; to promote health and the general welfare; to provide adequate light and air; to prevent the overcrowding of land; to avoid undue concentration of population; to facilitate the adequate provisions of transportation, sewerage, schools, parks, and other public requirements; to conserve the value of buildings; to protect the public water supply, and encourage the most appropriate use of land throughout the planning and zoning jurisdiction in accordance with the following goals set forth by the Comprehensive Development Plan of Vance County, NC (adopted October 1996; amended August 2010):

- To encourage development at a rate and in a pattern which can be efficiently and effectively served by existing and planned services and facilities.
- To provide and maintain adequate county services and facilities that will accommodate economic development and growth and will protect the environment, public health and general welfare.
- To promote, encourage, and stimulate the conservation of existing housing stock, rehabilitation/replacement of substandard housing, construction of new housing.
- To promote, expand, and diversify the economic base in Vance County to maximize the use of local resources while protecting important natural features and community values.
- To conserve, protect, and encourage the wise and prudent use of Vance County's natural and cultural resources in order to maintain the rural and agricultural nature of specific areas of the County.

1.2 AUTHORITY AND ENACTMENT

This Zoning Ordinance is hereby enacted pursuant to the authority vested in Vance County by Chapter 160D, Article 7. Zoning Regulation of the General Statutes of North Carolina.

1.3 TITLE

This Ordinance shall be known as the "Zoning Ordinance, Vance County, North Carolina."

1.4 JURISDICTION

The provisions of this Ordinance shall apply within the areas designated as zones on the official zoning map(s) by the Board of Commissioners of Vance County. The official zoning map(s) will be on file in the Vance County Planning and Development Department.

1.5 BONA FIDE FARMS EXEMPT

The provisions of this Ordinance shall not apply to bona fide farms. For purposes of this ordinance, the terms "agriculture", "agricultural", and "farming" refer to all of the following:

- 1. The cultivation of soil for production and harvesting of crops, including but not limited to fruits, vegetables, sod, flowers and ornamental plants.
- 2. The planting and production of trees and timber.
- 3. Dairying and the raising, management, care, and training of livestock, including horses, bees, poultry, and other animals for individual and public use, consumption, and marketing.
- 4. Aquaculture as defined in N.C.G.S. 106-758.
- 5. The operation, management, conservation, improvement, and maintenance of a farm and the structures and buildings on the farm, including building and structure repair, replacement, expansion, and construction incident to the farming operation.
- 6. When performed on the farm, "agriculture", "agricultural", and "farming" also include the marketing and selling of agricultural products, agritourism, the storage and use of materials for agricultural purposes, packing, treating, processing, sorting, storage, and other activities



- performed to add value to crops, livestock, and agricultural items produced on the farm, and similar activities incident to the operation of a farm.
- 7. A public or private grain warehouse or warehouse operation where grain is held 10 days or longer and includes, but is not limited to, all buildings, elevators, equipment, and warehouses consisting of one or more warehouse sections and considered a single delivery point with the capability to receive, load out, weigh, dry, and store grain.

For purposes of determining whether a property is being used for bona fide farm purposes, N.C.G.S. 160D-903, as amended, recodified or replaced, shall control.

NOTE: For ease of reference for our citizens, the following constitute sufficient evidence that the property is being used for bona fide farm purposes. *Please verify these prior to proceeding with activity*.

- 1. A farm sales tax exemption certificate issued by the Department of Revenue.
- 2. A copy of the property tax listing showing that the property is eligible for participation in the present use value program pursuant to G.S. 105-277.3.
- 3. A copy of the farm owner's or operator's Schedule F from the owner's or operator's most recent federal income tax return.
- 4. A forest management plan.

This Ordinance does not impose nor exercise any controls over croplands, timberlands, pasturelands, orchards, idle (land currently not cultivated or that is fallow-currently unplanted for crops) or other farmlands. Nor does it exercise control over any farmhouse, barn, poultry house, or other farm buildings, including tenant or other houses for persons working on said farms, as long as such houses shall be in the same ownership as the farm and located on the farm. Residences for non-farm use or occupancy and other non-farm uses shall be subject to the provisions of this Ordinance.

1.6 MINIMUM REQUIREMENTS

In interpreting and applying the provisions of this Ordinance, they shall be held to be the minimum requirements for the promotion of the public safety, health, convenience, prosperity, and general welfare. It is not intended by this Ordinance to interfere with, abrogate, or annul any easements, covenants, or other agreements between parties. However, where this Ordinance imposes a greater restriction upon the use of buildings or premises or upon the height of buildings, or requires larger open space than is imposed or required by other ordinance, rules, regulations, or by easements, covenants, or agreements, the provisions of this Ordinance shall govern.

1.7 SEVARABILITY

If any Article, Section, sentence, clause, or phrase of this Ordinance is for any reason held to be invalid by the courts, such decision shall not affect the validity of the remaining portion of this Ordinance. The Board of County Commissioners hereby declares that it has passed this Ordinance and each Article, Section, clause, and phrase thereof, irrespective of the fact that any one (1) or more Articles, Sections, sentences, or phrases be declared invalid by the courts.

1.8 VESTED RIGHTS

A vested right shall be deemed established with respect to any property upon the valid approval, or conditional approval, of a site-specific development plan or a phased development plan. Such vested right shall confer upon the landowner the right to undertake and complete the development and use of said property under the terms and conditions of the site-specific development plan or the phased development plan including any amendments thereto. A right, which has been vested, shall remain vested for a period of two years, or for the period of time to complete the project as specified in the phased development plan.



A vested right, once established, precludes any zoning action which would change, alter, impair, prevent, diminish, or otherwise delay the development or use of the property as set forth in an approved site specific development plan or an approved phased development plan except:

- With written consent of the affected landowner.
- Upon findings, by ordinance after notice and an evidentiary hearing, that natural or man-made hazards on or in the immediate vicinity of the property, if not corrected, would pose a serious threat to the public health, safety, and welfare if the project were to proceed as contemplated in the site specific development plan or the phased development plan.
- To the extent that the affected landowner receives compensation (appraised at fair market value) for all costs, expenses, and losses incurred.
- Upon findings, by ordinance after notice and an evidentiary hearing, that the landowner or his representative intentionally supplied inaccurate information or made material misrepresentations, which made a difference in the approval by the County of the site specific development plan or the phased development plan; or
- Upon the enactment of a State or Federal law or regulation which precludes development as contemplated in the site specific development plan or the phased development plan.

1.9 EFFECTIVE DATE

This Ordinance and its provisions governing the use of land, buildings, and other matters as hereinafter set forth are hereby established and declared to be in full force and effect from the passage date and the determined effective date. Approved and adopted by the Vance County Board of Commissioners this 3rd day of May 3, 2021 and shall become effective on and from May 3, 2021.

Chairperson, Bo	pard of Commissioners
ATTEST:	
 Clerk	

SECTION 2 – APPLICATION AND ENFORCEMENT

2.1 APPLICATION

No land use shall hereafter be altered except in conformity with the regulations herein specified for the zone in which it is located, except as hereinafter provided in this Ordinance.

2.2 ENFORCEMENT

A. ZONING ADMINISTRATOR:

The Zoning Administrator or his/her designee is to enforce the provisions of this Ordinance and shall keep records of all variances and amendments to this ordinance. As directed and provided for by the County Commissioners and/or County Manager, Deputy Zoning Administrators may be employed and/or appointed to assist the Zoning Administrator in the prescribed duties.

If the Zoning Administrator finds that any of the provisions of this Ordinance are being violated, and when appropriate with consultation of the County attorney, he shall notify in writing by first class mail the person responsible for such alleged violations, indicating the nature of such alleged violation and ordering the action necessary to correct it. He shall order discontinuance of illegal use of land, buildings, or structures or of additions, alterations or structural changes thereto; discontinuance of any illegal work being done; or shall take any other action authorized by this Ordinance or the Board of Commissioners to insure compliance with or to prevent violations of its provisions.

B. ZONING PERMIT AND BUILDING PERMIT REQUIRED:

No land shall be used or occupied and no building hereafter erected, structurally altered, moved, or its use changed until a Zoning Permit has been issued (approved) by the Zoning Administrator or his/her designee, except in conformity with the provisions of this Ordinance or except after written order from the Board of Adjustment.

- 1. A Zoning permit is issued by the Zoning Administrator for permitted uses.
- 2. A Special Use permit is issued by the Board of Adjustment.

NOTE: The County cannot issue a Certificate of Occupancy unless zoning compliance is certified through an approved zoning permit.

A record of all certificates shall be kept on file in the office of the Zoning Administrator and copies shall be furnished upon request to any person having a proprietary or tenancy interest in the building or land involved.

C. SITE PLAN REQUIREMENTS:

NOTE: This section applies to site plans for individual lots. Submittal of site plans for development of a Minor or Major Subdivision is a separate application process and subject to the Vance County Subdivision Ordinance. All applications for a Zoning Permit shall include two (2) copies of a site plan, drawn to scale, which shall be of an appropriate size for review of the proposed project. One (1) copy of the site plan shall be returned to the applicant upon approval, the submitted site plan shall contain the following (see example on next page):

Submitted Site Plan Requirements:

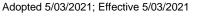
- 1. Lot lines with dimensions;
- 2. The location of said lot with respect to adjacent rights-of-way;
- 3. The shape, dimensions, and location of all buildings, existing and proposed, driveways, and required setbacks;
- 4. The current zoning category of the property for which the application is submitted, the current zoning of the adjacent properties, and the tax map number identification of the subject property.



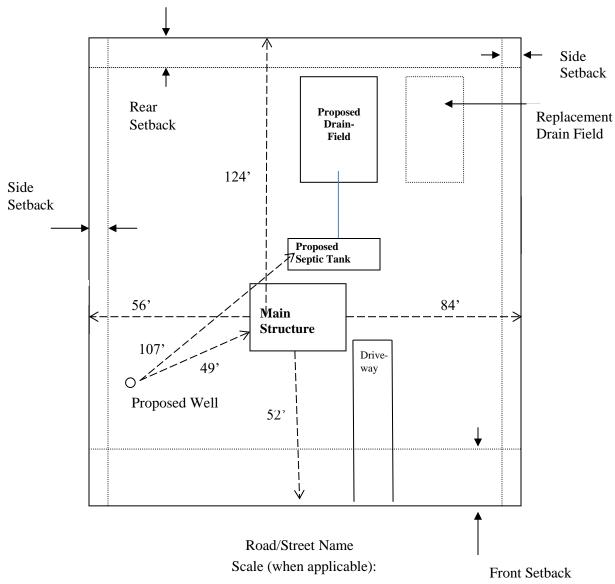
- 5. Distance from structures to lot lines and distance between structures;
- 6. The nature of the proposed use of the building or land, including the extent and location of the use;
- 7. Location of existing or proposed well;
- 8. Location of existing or proposed septic tank, drainage field and replacement drainage field (Note: structures may not be located over septic tanks, drainage fields, or replacement drainage fields);
- 9. The location and dimensions of off-street parking and loading space and means of ingress and egress;
- 10. The square feet/percentage of lot as built upon area;
- 11. The location of all required buffers;
- 12. Required Driveway Permits from the Department of Transportation;
- 13. Any Additional information that may be necessary to meet state and local requirements for development; and
- 14. Any other information, which the Zoning Administrator may deem necessary for consideration in enforcing all provisions of this Ordinance.

NOTE:

- Prior to approval of the Site Plan, the Zoning Administrator may consult with other qualified personnel for assistance to determine if the application meets the requirements of this Ordinance.
- Review/approval of submitted site plans and zoning permit applications by the Planning and Development Department shall be two (2) weeks (as feasible) upon submittal of the completed application and appropriate documentation by the applicant.
- ♦ Zoning permits shall have the same period of being valid as prescribed in G.S. (General Statutes) 160D-403 and 160D-1110 as applicable to County building permits: A permit issued pursuant to G.S. 160D-1111 expires six (6) months, or any lesser time fixed by ordinance of the county, after the date of issuance if the work authorized by the permit has not commenced. If after commencement the work is discontinued for a period of twelve (12) months, the permit therefore immediately expires. No work authorized by a permit that has expired may thereafter be performed until a new permit has been secured.



EXAMPLE OF SUBMITTED SITE PLAN FOR A ZONING PERMIT



Owner Name

Property Address

Tax parcel Number

D. TEMPORARY ZONING PERMIT:

The Zoning Administrator may issue a Temporary Zoning Permit for rallies, carnivals, religious revivals, and similar temporary uses. Such certificates shall be issued for a fixed period of time, but not to exceed fifteen (15) days, shall be subject to such limitations as the Zoning Administrator may impose to protect the character of the zone affected, and may be considered for reapplication. A fee set by the Board of Commissioners shall be charged for processing such an application. The adopted fee schedule shall be posted in the Planning and Development Department and the office of the Zoning Administrator and his/her designee.

NOTE: No permanent electrical power will be authorized and no Certificate of Occupancy will be issued until all the above items are provided, the Zoning Administrator deems the Site Plan complete, and an "as built plan" is submitted.

E. RIGHT OF APPEAL:

If the Zoning Permit is denied, the applicant may appeal the action of the Zoning Administrator to the Board of Adjustment; and from the decision of the Board of Adjustment, recourse shall be by the Vance County Superior Court as provided by law. It is further the intention of this Ordinance that the duties of the Board of Commissioners, in connection with the Ordinance shall not include the hearing and passing upon disputed questions that may arise in connection with the enforcement thereof, but that the procedure for determining such questions shall be as herein set out in the Ordinance. The duties of the Board of Commissioners, in connection with this Ordinance, shall be only the duty of considering and passing upon any proposed amendment, or repeal of the Ordinance as provided by law.

F. COMPLAINTS REGARDING VIOLATIONS:

Whenever the Administrator receives a written, signed complaint from County residents, County property owners, or their agents or an absentee landowner or their agent that includes at least two parties (making the complaint) having been identified and signing the written complaint, he/she shall investigate the complaint, take whatever action is warranted, and inform the complainant in writing by mail using a first class mail letter, as to what action has been or will be taken. The Administrator may investigate a violation that he suspects or has knowledge of existing.

G. PERSONS LIABLE:

The owner and, if different, the tenant, or occupant of any building or land or part thereof and any architect, builder, contractor, agent, or other person who participates in, assists, directs, creates, or maintains any situation that is contrary to the requirements of this Ordinance may be held responsible for the violation, suffer penalties and be subject to remedies herein provided.

H. PROCEDURES UPON DISCOVERY OF VIOLATIONS:

- 1. If the Administrator finds that any provisions of this Ordinance are being violated, he shall send a written notice by personal delivery, electronic delivery or first class mail, to the person responsible for such violation, indicating the nature of the violation and ordering the action necessary to correct it. Additional written notices may be sent at the Administrator's discretion. The person providing the notice shall certify to the local government that the notice was provided.
- 2. In cases when delay would seriously threaten the effective enforcement of this Ordinance or pose a danger to the public health, safety, or welfare, the Administrator may seek enforcement without prior written notice by invoking any of the penalties or remedies authorized by this Article.

I. PENALTIES AND REMEDIES FOR VIOLATIONS:

1. Violations of the provisions of this Ordinance or failure to comply with any of its requirements, including violations of any conditions and safeguards established in connection with grants of variances or special-use permits, shall constitute a misdemeanor, punishable by the maximum



fine and/or the maximum imprisonment as authorized by N.C. General Statute 14-4 or any amendments thereto.

- 2. Any act constituting a violation of the provisions of this Ordinance or a failure to comply with any of its requirements, including violations of any conditions and safeguards established in connection with the grants of variances or conditional-use permits, shall also subject the offender to a civil penalty of \$100.00 per day. If the offender fails to pay this penalty within ten (10) working days after being duly cited for a violation, the County, in a civil action in the nature of debt, may recover the penalty.
- 3. This Ordinance may also be enforced by an appropriate equitable action.

J. CANCELLATION OF PERMITS:

The Zoning Administrator, in consultation with the County Attorney and through the Vance County Planning and Development Department shall cancel a building or occupancy permit when the method of construction or use violates any provisions contained in these regulations. Similar cancellation shall be carried out if a violation has not been remedied or if a written plan of action to remedy has not been submitted to the Zoning Administrator within forty five (45) days of the postmarked date of the violation letter.



Adopted 5/03/2021; Effective 5/03/2021

SECTION 3 – ZONING MAP

For the purposes of this Ordinance, Vance County is hereby divided into zones whose locations and boundaries are shown on the Official Zoning Map for Vance County, which is hereby adopted by reference and declared to be a part of this Ordinance. This Zoning Map and all the notations, references, and all amendments thereto, and other information shown thereon are hereby made a part of this Ordinance, the same as if such information set forth on the map were all fully described and set out herein. The Zoning Map properly attested is on file in the Vance County Planning and Development Department and is available for inspection by the public.

The Planning and Development Director or his/her designee shall be responsible for the maintenance and revision of the Official Zoning Map. Upon notification by the Board of Commissioners that a zoning change has been made, the Planning and Development Director or his/her designee shall make the necessary changes on the Official Zoning Map.

3.1 INTERPRETATION OF ZONE BOUNDARIES

Where uncertainty exists with respect to the boundaries of zoning zones as shown on the Official Zoning Map, the following rules shall apply:

- A. Unless otherwise specifically indicated, where zone boundaries are shown on the Zoning Map as approximately parallel or following the center lines of streets, highways, utility easements, or stream beds, or such lines extended, such lines shall be construed as such zone boundaries.
- B. Where zone boundaries are so indicated that they approximately follow lot lines, such lot lines shall be construed to be said boundaries.
- C. Where a zoning boundary line divides a parcel (also referred to as a lot-see definitions section for "lot") in single ownership, the requirements for the zone in which the greater portion of the lot lies shall be extended to the balance of the lot, provided such extension shall not include any part of such lot which lies more than fifty (50) feet beyond the zoning boundary, and further provided that the remaining parcel shall not be less than the minimum required for the zone where it is located.
- D. Where any public street is hereafter officially vacated or abandoned, the regulations applicable to parcels of abutting property shall apply to that portion of such street/alley thereto by virtue of the vacation/abandonment.
- E. The Board of Adjustment shall be empowered to interpret the intent of the Zoning Map as to the location of zone boundaries in case any further uncertainty exists.
- F. The zoning category for the individual property shall be noted on the property owners County Tax bill:
 - 1. Said identification and notation of zoning for individual properties shall be conducted within twelve (12) months after the date of adoption of this Ordinance.
 - 2. Upon the adoption of this Ordinance and completion of notation for zoning for all individual properties, future re-zonings that are approved through the process outlined in this Ordinance, shall be noted in the Vance County Tax Office within ninety (90) days of the approved re-zoning.
 - 3. It shall be the responsibility of the County residents or their agents or an absentee landowner or their agent and all persons or parties with interest in property within Vance County, to research potential re-zonings with the Vance County Planning and Development Department and the Vance County Tax Office.



3.2 ZONES, DESCRIPTIONS, AND DIMENSIONS

In order that the purpose of this Ordinance may be accomplished, the planning and zoning limits of Vance County, as set forth on the accompanying zoning map, is hereby divided into the following zones:

- A. Residential: A-R (Agricultural Residential), W-O-Z (Watershed Overlay Zone), R-30 (Residential Low Density), R-20 (Residential Medium Density), R-10 (Residential High Density), O-S (Open Space Preservation), R-M-H-C (Residential Manufactured Housing Community)
- B. Non Residential: E-I-A (Employment and Institutional Area), H-C (Highway Commercial), G-C-1 (General Commercial) L-I (Light Industrial), I-M (Industrial Mining/Quarry), O-I (Office-Institutional).
- C. Roanoke River Basin: The State of North Carolina has adopted a river basin management plan to protect water quality for the Roanoke River Basin (and for all 17 river basins in North Carolina). Development in Vance County occurring in the Roanoke River Basin shall comply with these regulations; the Raleigh office of the North Carolina Division of Water Quality (NCDWQ) enforces water quality protection. The current revision of the Roanoke River Basinwide Water Quality plan was adopted in September 2006. The next revision will be due in 2012.
- D. NOTE Riparian Buffer Rules and Additional Criteria Related To Zoning: The State of North Carolina has adopted riparian buffer rules that affect the Tar-Pamlico River Basin. These rules apply to 50-foot wide riparian buffers (on each side-total of 100 feet) directly adjacent to surface waters in the Tar-Pamlico Basin (intermittent streams, perennial streams, lakes, ponds, estuaries), excluding wetlands. Development in Vance County occurring in the Tar-Pamlico River Basin shall comply with these regulations, the Raleigh office of the North Carolina Division of Water Quality (NCDWQ) enforces the riparian buffer protection rules (information below per North Carolina Department of Environmental and Natural Resources- NCDENR):
 - On August 1, 2000 mandatory buffer rules (15A NCAC 2B .0233) became
 effective for most streams and water bodies in the Tar-Pamlico River Basin. A
 50-foot wide buffer is required on each side of those water bodies that qualify
 for protection. This buffer must be implemented, coordinated with establishing
 a Streamside Management Zone (SMZ)-per NC Forest Practices Guidelines
 (FPG) Related to Water Quality
 - 2. A "Forestry Leaflet" was published in April 2004 by the NC Division of Forest Resources (NCDFR), briefly summarizing the requirements of these buffer rules as related to timber harvesting and forestry operations in the Tar-Pamlico River Basin. These riparian buffer rules place limitations on timber harvesting and other forestry activities (due to these restrictions, it is important to determine if a stream or waterbody is located on a job site is in Tar-Pamlico River Basin).
 - 3. The NCDFR can help loggers, landowners, and land managers determine if a stream or waterbody requires the implementation of these riparian buffer rules (contact the NCDFR District Office, NCDENR Regional Office, or visit the NCDWQ Web site for assistance on activities related to riparian buffer rules).
 - 4. Per the Vance County Subdivision Ordinance the following applies to Zoning:
 - a. All sewage facilities shall be located one hundred (100) feet from any existing well or proposed new well. Requirement may be reduced to fifty (50) feet with written documentation from the Vance County Health Department.
 - b. Lots located adjacent to Kerr Lake shall be allowed a zero (0) lot line setback from the US Army Corps of Engineers property line.



- E. NOTE Cul de sacs and Flag Lots. The following shall apply for Cul de Sacs and Flag Lots (see Definitions Section 12). The minimum road frontage can be reduced to no less than thirty-five (35) feet and the minimum lot width requirement per individual zoning category shall be measured from the minimum setback line per the individual zoning category. The maximum building setback line shall be no more than four (4) times the minimum setback requirement. In general (with coordination between the applicant and Vance County Planning and Development staff) the minimum lot width/street frontage identified in each zoning category below is encouraged. When developing a subdivision (per the Vance County Subdivision Ordinance), up to twenty five (25) percent of the lots in that subdivision may be allowed a reduced Minimum Lot Width/Street Frontage as identified in this section.
- F. NOTE Minimum Requirements for Water and Sewer Service. For purposes of providing water and sewer service to individual lots, for both public water and sewer or private well and septic, the following shall apply:
 - 1. In the A-R, R-30, H-C, G-C-1, L-I, E-I-A, and O-I zones: lot size minimum requirements are the same for public water/sewer or private well/septic and must meet all applicable regulations per the Vance County Health Department if a private well/septic system is used.
 - 2. In the R-20 and R-10 zones: lot size minimum requirement is with access to public water/sewer only, this zone is not intended for use with private well/septic systems.
 - 3. Wells and/or water supplies, septic tanks and/or temp/power poles shall not be installed for camper use unless installed in accordance with other regulations herein.
 - 4. If a combination of a well (other water supplies included), septic tank or temp/power pole is located on the lot, without a primary dwelling:
 - a. A camper may not be present on the lot for more than 14 consecutive calendar days; and
 - b. If a camper is present for more than 3 consecutive calendar days (or more than 4 consecutive calendar days for the Labor Day and/or Memorial Day holidays), it shall not return to the lot within 30 calendar days from the day of removal.
- **3.2.1** A-R Agricultural Residential: Established for primarily rural, agricultural, and sparsely spaced residential development. Standards are designed to preserve the rural character of Vance County by prohibiting uses incompatible with rural and low-density residential development. Certain non-residential uses are allowed, either as a matter of right or on a conditional basis. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 1 Acre (43,560 Square Feet)
 - 2. Minimum Lot Width: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Maximum Building Height: 35 Feet
 - 5. Maximum Dwelling Units (density per acre): 1.00
 - 6. Maximum Lot Coverage-Net Area (Built-Upon Area): 24%
 - 7. Minimum Setbacks: Front 50 feet, Side 25 Feet, Rear 35 Feet
- 3.2.2 W-O-Z Watershed Overlay Zone: Established primarily for the protection of the County's residential growth areas from incompatible land uses and to protect Vance County's Watersheds (Anderson Creek and Tar-Pamlico) as determined by the North Carolina Department of Environmental and Natural Resources (NCDENR). Certain non-residential uses are allowed, either as a matter of right or on a conditional basis with approval by the Vance County Watershed Review Board (See Watershed Protection Ordinance). The lot size minimum requirements outlined below are to provide protection for the land and natural resources, and to protect water quality. These overlay zones are superimposed over



other zoning categories in these areas and may modify provisions for those underlying zones in relation to allowed uses and standards for development. All development of property located in the Watershed Overlay Zones shall be in accordance with NCDENR (State requirements shall prevail where they are more stringent than existing requirements for development). All development in the Watershed Overlay Zones shall also be subject to review and approval by the Watershed Review Board and when necessary by the Zoning Board of Adjustments and/or the Planning Board. The following applies in the Anderson Creek and Tar Pamlico watersheds (and shall comply with the Vance County Water Supply Watershed Protection Ordinance):

- 1. Lots shall not be reduced below 43,560 square feet in Watershed Areas with a WS-III-CA (Critical Area) designation.
- 2. Lots shall not be reduced below 35,000 square feet in Watershed Protection Areas with a WS-III-BW (Balance of Watershed or WS-IV-PA (Protected Area) designation, under any circumstances.
- 3. In regards to impervious surface coverage (Built Upon Area) the following shall apply:
 - a. **WS-III-CA** (*Critical Area*): In order to maintain a low to moderate land use intensity pattern, single family residential uses are allowed at a maximum of one (1) dwelling unit per acre (43,560 square feet). All residential, other than single family residential and non-residential development shall be allowed to a maximum of twelve percent (12%) built-upon area.
 - b. WS-III-BW (Balance of Watershed): In order to maintain a low to moderate land use intensity pattern, single family detached uses shall be developed with a minimum lot size of 35,000 square feet, where a larger size may be required by the Vance County Health Department, in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems", North Carolina Department of Environment, Health, and Natural Resources, Division of Environmental Health, On-Site Wastewater Section". All residential, other than single family residential and non-residential development shall be allowed a maximum of twenty-four percent (24%) built-upon area.
 - c. WS-IV-BW (Balance of Watershed): In order to address a moderate to high land use intensity pattern, single family residential uses shall develop with a minimum lot size of 35,000 square feet, where a larger size may be required by the Vance County Health Department, in accordance with "Laws and Rules for Sewage Treatment and Disposal Systems", North Carolina Department of Environment, Health and Natural Resources, Division of Environmental Health, On-Site Wastewater Section" or within an approved cluster development. All residential, other than single family residential, and non-residential development shall be allowed at a maximum of twenty-four percent (24%) built-upon area or thirty-six (36%) percent built-upon area is allowed for projects without a curb and gutter street system.
- 4. No request for a reduction of lot size will be considered unless submitted with appropriate evidence.
- 5. Minimum Setbacks (and Lot Width Minimum) are identified below:
 - a. Anderson Creek-Critical Area WS-III-CA (Lot width minimum 150 feet): Front: 50 Feet, Side: 25 Feet, Rear: 35 Feet
 - b. Anderson Creek-Balance of Watershed WS-III-BW (lot width minimum 100 feet): Front 40 Feet, Side 25 Feet, Rear 30 Feet
 - c. Tar Pamlico-Balance of Watershed WS-IV-BW (lot width minimum 100 feet): Front 30 Feet, Side 20 Feet, Rear 25 Feet.



- d. For Cul de Sacs and Flag Lots see Note E above.
- **3.2.3** *R-30 Residential Low Density:* Established primarily for the protection of the County's residential growth areas from incompatible land uses. This zone is characterized by lot sizes compatible with State of North Carolina minimum requirements for adequate space to incorporate a private septic system and repair area. This zone is further characterized as being within the public water (and/or sewer) service area or proposed service area. The primary use in this area is residential, with some areas of the County suitable for agricultural uses. Certain non-residential uses are allowed, either as a matter of right or on a conditional basis. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 30,000 Square Feet
 - 2. Minimum Lot Width: 100 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage: 100 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Maximum Building Height: Thirty-Five (35) Feet
 - 5. Maximum Dwelling Units (density per acre): 1.45
 - 6. Maximum Lot Coverage-Net Area (Built Upon Area): 20%
 - 7. Minimum Setbacks: Front 30 Feet, Side 20 Feet, Rear 25 Feet
- **3.2.4 R-20 Residential Medium Density:** Established primarily for the protection of the County's residential growth areas from incompatible land uses. This zone characterized as being within the public water (and/or sewer) service area or proposed service area. The primary use in this area is residential. Certain non-residential uses are allowed, either as a matter of right or on a conditional basis. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 20,000 Square Feet
 - 2. Minimum Lot Width: 80 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage: 80 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Maximum Building Height: Thirty-Five (35) Feet
 - 5. Maximum Dwelling Units (density per acre): 2.17
 - 6. Maximum Lot Coverage-Net Area (Built Upon Area): 25%
 - 7. Minimum Setbacks: Front 25 Feet, Side 15 Feet, Rear 20 Feet
- **3.2.5** *R-10 Residential High Density:* Established primarily for the protection of the County's residential growth areas from incompatible land uses. This zone characterized as being within the public water (and/or sewer) service area or proposed service area. The primary use in this area is residential. Certain non-residential uses are allowed, either by right or a conditional basis. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 10,000 Square Feet
 - 2. Minimum Lot Width: 75 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage: 75 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Maximum Building Height: Thirty-Five (35) Feet
 - 5. Maximum Dwelling Units (density per acre): 4.5
 - 6. Maximum Lot Coverage-Net Area (Built Upon Area): 30%
 - 7. Minimum Setbacks: Front 20 Feet, Side 10 Feet, Rear 15 Feet
- **3.2.6** O-S Open Space (Open Space Preservation): Established for areas focus on preservation of natural resources with limited residential development allowed. This development is to promote the economic use and conservation of land for natural resources use, managed residential development, non-intensive recreational use, and limited (low intensity) commercial development that will serve the recreational use of the natural resources. Although not exclusive, this zone is characterized as not having access to public utilities such as water or sewer. Certain non-residential uses are allowed, either as a matter of right or on a conditional basis. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 1 Acre (43,560 Square Feet)
 - 2. Minimum Lot Width: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)

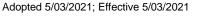


- 4. Maximum Building Height: 35 Feet
- 5. Maximum Dwelling Units (density per acre): 1.00
- 6. Maximum Lot Coverage-Net Area (Built Upon Area): 20%
- 7. Minimum Setbacks: Front 50 Feet, Side 25 Feet, Rear 35 Feet
- **3.2.7 R-M-H-C** (*Planned Manufactured Housing Community*): This zone will include residences and related recreational, commercial, and service facilities, subject to the Vance County Manufactured Housing Park Ordinance (Ordinance #3) and detailed site plan approval (refer to Ordinance #3 for dimensional requirements, lot sizes, and infrastructure requirements: water, sewer, roads). Where applicable to develop a manufactured home community (also called a mobile home park) in other zoning categories as identified in this Ordinance, the more restrictive regulations of that particular zoning category shall apply in addition to the development standards as outlined in Ordinance #3.
- **3.2.8** *E-I-A Employment and Institutional Area:* Established to provide suitable sites for a concentration of non-retail employment and institutional uses and services such as medical, manufacturing, office, religious, educational, recreational, and governmental. Dimensional requirements are as follows:
 - 1. Minimum Lot Area: Two (2) contiguous acres, one (1) acre with public water and sewer.
 - 2. Minimum Lot Width: 150 Feet (125 Feet with public water and sewer) (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage: 150 Feet (125 Feet with public water and sewer) (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Minimum Setbacks**: Front 75 (50) Feet, Side 25 (20) Feet, Rear 75 (50) Feet
 - 5. Maximum Building Height: N/A (NOT APPLICABLE)
 - 6. Landscaping/buffering required: See Section 4.16 on Buffering and Screening Requirements.
 - 7. Maximum Lot Coverage-Net Area (Built Upon Area): 60%
- **3.2.9** *H-C Highway Commercial:* Established primarily for business catering to the auto traveling public requiring large lots, easy access, ample parking and loading space, and little pedestrian movement. Retail trade and services for the convenience of nearby residential areas is also a function of this zone. Generally this zone is located along established or proposed highway corridors mainly at intersections and interchanges. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 43,560 Square Feet
 - 2. Minimum Lot Width: 125 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum /Street Frontage: 125 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Minimum Setbacks**: Front 50 Feet, Side 10 Feet, Rear 25 Feet
 - 5. Maximum Building Height: N/A (NOT APPLICABLE)
 - 6. Landscaping/buffering required: See Section 4.16 on Buffering and Screening Requirements.
 - 7. Maximum Lot Coverage-Net Area (Built Upon Area): 60%
- **3.2.10** G-C-1 General Commercial: Established to provide an area of retail and service commercial activities, size will vary according to the trade area. This area will include retail commercial uses that are related to the supply needs and frequent demand/daily requirements of a particular area. Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 43,560 Square Feet
 - 2. Minimum Lot Width: 125 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 3. Minimum Street Frontage in Feet: 125 Feet (see Note E above-Cul de Sacs/Flag Lots)
 - 4. Minimum Setbacks**: Front 75 Feet, Side 25 Feet, Rear 50 Feet
 - 5. Maximum Building Height: N/A (NOT APPLICABLE)
 - 6. Landscaping/buffering required: See Section 4.16 on Buffering and Screening Requirements.
 - 7. Maximum Lot Coverage-Net Area (Built Upon Area): 60%



3.2.11 L-I Light Industrial: Established where the principal land use is for wholesale activities, industrial, research, warehousing, light manufacturing operations, and some institutional uses. The standards established are designed to promote sound, permanent, light industrial development and to protect abutting or surrounding residential areas from any undesirable aspect of such uses. The zone is to be located in an area that has good access to transportation facilities, affords reasonably level sites, and permits expansion of existing industrial areas wherever possible and appropriate to the character of land development. When possible, the zone shall be separated from residential areas by natural/structural boundaries such as drainage channels, sharp breaks into topography, strips of vegetation, traffic arteries and/or similar features. Residential, retail commercial, and service land uses are either prohibited or discouraged in the zone as they may be incompatible with the primary permitted uses. Dimensional requirements are as follows:

- 1. Minimum Lot Area in Square Feet: 80,000 Square Feet
- 2. Minimum Lot Width: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)
- 3. Minimum Street Frontage: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)
- 4. Minimum Setbacks**: Front 75 Feet, Side 25 Feet, Rear 75 Feet
- 5. Maximum Building Height: N/A (NOT APPLICABLE)
- 6. Landscaping/buffering required: See Section 4.16 on Buffering and Screening Requirements.
- 7. Maximum Lot Coverage-Net Area (Built Upon Area): 75%
- 3.2.12 I-M Industrial-Mining/Quarry: Established where the principal land use is for industrial mining and quarry activities. The standards established are designed to promote safe and managed operations of mining and quarry industry and to protect abutting-surrounding residential areas from any undesirable aspect of such uses. The zone is to be located in an area that has good access to transportation facilities, affords reasonably level sites, and permits expansion of existing industrial areas wherever possible and appropriate to the character of land development. When possible, the zone shall be separated from residential areas by natural/structural boundaries such as drainage channels, sharp breaks into topography, strips of vegetation, traffic arteries and/or similar features. Residential, retail commercial, and service land uses are prohibited in the zone as they may be incompatible with the permitted uses. The following elements shall be required for mining operations in Vance County:
 - A. Blasting Time: 8:00 AM to 5:00 PM, Monday through Friday, and conforming to State Vibration Policy.
 - B. Monitoring wells: Case by case basis where needed; required on rock quarries.
 - C. Fencing: Six (6) foot fence required for all mining, including sand and clay mining when the excavation depth poses a hazard.
 - D. Setback for excavation: Minimum fifty (50) feet for all mining, except rock quarries where two hundred (200) feet is required from property lines and zoning lines.
 - E. Buffer zone (undisturbed area): Minimum of twenty five (25) feet on sand and clay mining, minimum of fifty (50) feet for all other mining. This use shall also comply with Section 4.16 Screening and Buffering of this Ordinance.
 - F. Roads: Shall be paved or treated otherwise to conform to standards set forth in the Clean Air Act.
 - G. Minimum Setbacks**: Front 75 Feet, Side 25 Feet, Rear 75 Feet
- **3.2.13** *O-I Office-Institutional:* Established to provide an area of predominantly non-retail commercial nature such as professional businesses, medical offices, or related administrative services (area may include uses related to the supply needs and demand/daily requirements of an area with a minimum of customer travel). Dimensional requirements are as follows:
 - 1. Minimum Lot Area in Square Feet: 40,000 Square Feet
 - 2. Minimum Lot Width: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)



- 3. Minimum Street Frontage: 150 Feet (see Note E above-Cul de Sacs/Flag Lots)
- 4. Minimum Setbacks**: Front 50 Feet, Side 25 Feet, Rear 25 Feet
- 5. Maximum Building Height: N/A (NOT APPLICABLE)
- 6. Landscaping/buffering required: See Section 4.16 on Buffering and Screening Requirements.
- 7. Maximum Lot Coverage-Net Area (Built Upon Area): 65%

NOTE**: Any building height above fifty (50) feet shall require the front, side, and rear setbacks to be increased one (1) foot for every two (2) feet increase in building height.

- **3.2.14 Middleburg Overlay Zone:** Established to include the Town of Middleburg within the county's zoning jurisdiction as requested by the Middleburg Town Council and approved by the Vance County Board of Commissioners. All current regulations and requirements within the existing Vance County Zoning Ordinance shall apply except as follow:
 - 1. New manufactured homes shall not be allowed within the Middleburg Overlay Zone. Existing manufactured homes may be continued, provided they conform to the provision of section 5.
 - 2. Nonconforming lots, structures or uses within the Town of Middleburg as of the date of this amendment may be continued, provided they conform to the provisions of section 5.
 - 3. Existing junk yards, outdoor storage and signs that do not meet current zoning regulations, will be given an amortization period of 180 days from the date of the adoption of this ordinance amendment to become compliant.

 (Section 3.2.14 Amended 1/6/2020)

3.3 CONDITIONAL ZONING DISTRICTS

- A. In addition to the general use zoning districts established in Section 3.2, a corresponding conditional zoning district, bearing the designation 'CZ', may be established in accordance with the provisions of Section 11.6. Accordingly, the following conditional zoning districts may be designated upon approval by the Board of County Commissioners of a petition by the property owners to establish a conditional zoning district:
 - 1. CZ-AR, Agricultural Residential Conditional Zoning District
 - 2. CZ-WOZ, Watershed Overlay Zone Conditional Zoning District
 - 3. CZ-R30, Residential Low Density Conditional Zoning District
 - 4. CZ-R20, Residential Medium Density Conditional Zoning District
 - 5. CZ-R10, Residential High Density Conditional Zoning District
 - 6. CZ-OS, Open Space Conditional Zoning District
 - 7. CZ-RMHC Planned Manufactured Housing Community Conditional Zoning District
 - 8. CZ-EIA, Employment and Institutional Area Conditional Zoning District
 - 9. CZ-HC, Highway Commercial Conditional Zoning District
 - 10. CZ-GC1, General Commercial Conditional Zoning District
 - 11. CZ-LI, Light Industrial Conditional Zoning District
 - 12. CZ-IM, Industrial Mining/Quarry Conditional Zoning District
 - 13. CZ-OI, Office Institutional Conditional Zoning District
- B. The development and use of property within a conditional zoning district is subject to predetermined ordinance standards and the rules, regulations, and conditions imposed as part of the legislative decision creating the district. All regulations which apply to a general use zoning district also apply to the corresponding conditional zoning district. All other rules, regulations, and conditions which may be offered by the property owner and approved by the Board of County Commissioners as part of the rezoning process shall also apply. Property may be placed in a conditional zoning district only in



response to a petition by the owners of all of the property proposed to be included in the conditional zoning district. Requirements for conditional zoning districts are delineated in Section 11.6. (Section 3.3 Amended 1/9/2023)



TABLE OF PERMITTED USES

With the various zones as indicated on the Official Zoning Map of Vance County, North Carolina, no land, building, or structure shall be used, and no building or structure shall be erected or altered, except in conformance with the provisions of this Ordinance. Any use not specifically permitted is prohibited. Where more than one use occupies a building or premises, the zoning requirements for each use shall be adhered to as set forth in this Ordinance:

- "P" indicates uses permitted by right.
- ***** "X" indicates a prohibited use.
- ❖ "SUP" indicates uses permitted as a Special Use upon approval by the Board of Adjustment. Standard conditions are set forth in Section 6 of this Ordinance. Additional conditions may be placed on specific uses by the Board of Adjustment to insure the intent of this Ordinance is met. Should any interpretation conflict arise between Special Use allowed under this table an appeal may be filed with the Board of Adjustment and Appeals as provide and in accordance with Section 10 of this Ordinance.

NOTE: The purpose of this section is to identify uses permitted within Vance County not inclusive of the incorporated limits City of Henderson or its Extraterritorial Jurisdiction (ETJ). The chart below applies to new uses/construction after the effective date of this Ordinance so as to avoid undue hardship by permitting the continued use of any building, structure, or property that was lawful at the time of the enactment of this Ordinance or any applicable amendment thereof, even though such use, structure or property does not conform with the provisions of this Ordinance. There may exist circumstances which require continuance of a non-conforming use in the event of a natural or man-made disaster, which is addressed in Section 5 of this Ordinance. This table of permitted uses is not intended to limit or prevent certain operations that are a normal secondary extension (part) of existing development and uses.

Table of Permitted Uses – Updated 3/2020 and 5/3/2021

$\underline{ extbf{U}}$ se Type	Reference Sections	AR	R30	R20	R10	RMHC	НC	GC1	LI	IM	EIA	OI	OS	WOZ	Parking-Loading
AGRICULTURAL			•								•	•			•
Bona Fide Farms (includes raising poultry, or livestock for commercial use)	Section 1.5 Appendix A-Amend (12/1/14 - #1) Appendix A-Amend (7/2/2018 - #1)	Р	Р	SUP	Х	х	Х	Х	SUP	SUP	SUP	Х	Р	Р	N/A
Commercial Stables		Р	Р	SUP	х	Х	Х	Х	х	х	SUP	х	Р	Р	Parking:1/300 SF + 1 per 3 stalls Loading: 1 per 40 stalls
Farming (greenhouses- nurseries, not Bona Fide Farms)		Р	Р	Р	SUP	CU	Р	Р	Р	SUP	SUP	Х	Р	Р	Parking: 1/ 250 SF Loading: 1 per 5 bays
RESIDENTIAL USES			J.	I	I		ı	1	ı	I				1	
Single Family, Detached/Subdivisions (stick built, modular- Definitions)	Section 3.2.2 (3a,3b,3c) Sections 4.18b and 4.19.1a Section 7.8 Section 12 – Definitions: Dwelling, Single Family	Р	Р	Р	Р	Х	Х	Х	х	Х	х	Х	Р	Р	Parking: 3 per dwelling unit Loading: N/A
Multi-Family Dwellings (duplex, triplexes)	Section 6.10.l.1a,1c Section 7.8 Section 12 – Definitions: Dwelling, Duplex	SUP	Р	Р	Р	Х	Х	Х	х	х	х	х	Р	Р	Parking: 2 per dwelling un Loading: N/A
Multi-Family Dwellings (townhouses, apartments, condominiums)	Section 4.19.1.a, (p.36) & 4.19.5.A2 Section 6.10.I.1a,1c Section 7.8 Section 12 – Definitions: Apartment Condominium, p.90, Dwelling, Multi-Family, Zero Lot Line	Х	SUP	Р	Р	х	х	х	х	х	х	х	SUP	SUP	Parking: 2 per dwelling uni Loading: N/A
Manufactured Home (single wide/double wide-Definitions) per County Ord. #3	Section 3.2.7 Section 4.18 Section 12 – Definitions: Manufactured home	Р	Р	Р	Р	Р	х	х	х	х	х	х	Р	Р	Parking: 2 per dwelling un Loading: N/A
Manufactured Home Park single wide/double wide) per County Ord. #3	Section 4.23 Section 12 – Definitions	SUP	SUP	Р	Р	Р	Х	х	х	Х	х	х	х	х	Parking: 2 per dwelling ur Loading: N/A
Planned Unit Development (PUD)	Section 12 – Definitions: Cluster Development, Planned Unit Development, PUD, Zero Lot Line	SUP	SUP	SUP	SUP	SUP	Х	Х	Х	Х	Х	Х	SUP	SUP	Parking: 2 per dwelling uni Loading: N/A
HOME USES			•			•	•	•	•		•	•	•	•	
Home Occupation/Business (Definitions)	Section 12 – Definitions	Р	SUP	SUP	SUP	SUP	Х	Х	Х	Х	х	х	SUP	SUP	Parking: 2 per employee Loading: N/A
Home Care Unit (Definitions)	Section 12 – Definitions	Р	Р	Х	Х	х	Х	Х	Х	Х	Х	Х	Р	Р	Parking: 3 per dwelling unit Loading: N/A
Family Care Home (Group Home-Definitions)	Section 12 – Definitions	Р	Р	Р	Р	Р	Х	Х	Х	Х	Х	х	Р	Р	Parking: 3 per dwelling unit Loading: N/A
Day Care Home (Children, Adult-Definitions)	Section 12 – Definitions	Р	Р	Р	Р	Р	х	х	х	х	х	х	Р	Р	Parking: 1 per 7 child-adult + 1 per employee Loading: N/A

$\underline{ extbf{U}}$ se Type	Reference Sections	AR	R30	R20	R10	RMHC	НC	GC1	LI	IM	EIA	OI	OS	WOZ	Parking-Loading
Day Care Facility (Children, Adults)	Section 12 – Definitions	SUP 1-acre min.	Р	Р	Р	Р	SUP	SUP	CU	Х	Р	Р	SUP	Р	Parking: 1 per 7 child-adult + 1 per employee Loading: N/A
Home for the Aged or Rest Home (Definitions)	Section 12 – Definitions, Life Care Center	SUP	Р	Р	Р	Р	SUP	SUP	Х	х	Р	Р	SUP	Р	Parking: .33 spaces per room Loading: N/A
Assembly and Worship (Churches, Synagogues, Mosques. etc.)	Section 7.3	Р	Р	Р	Р	Р	Р	Р	Х	х	Р	Р	Р	Р	Parking: 1/3 seats Loading: 1 per 40,000 SF
Retirement Community (planned community)	Section 12 – Definitions: Life Care Center	SUP	Р	Р	Р	Р	SUP	SUP	х	х	Р	Р	SUP	Р	Parking: .33 spaces per room Loading: N/A
Schools (kindergarten, nursery, elementary, middle-high schools)	Section 6.10.J	Р	Р	Р	Р	Р	SUP	SUP	х	х	Р	Р	Р	Р	Parking: 2 per classroom Loading: 1/ 40,000 SF
College (Community and University)	Section 6.10.J	SUP	Х	Х	Х	Х	Р	Р	Х	Х	Р	Р	SUP	SUP	Parking: 1 per 2 students Loading: 1/40,000 SF
Hospitals	Section 6.10.J Section 7.12	SUP	SUP	Х	Х	Х	Р	Р	Х	Х	Р	Р	Х	SUP	Parking: 1 per bed Loading: 1/33,000 SF
Fire Stations, Police stations, EMS Stations (Public Safety Facilities)		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Parking: 1 per employee + stored vehicle Loading: 1/ loading bay
Medical and Dental Clinics	Section 6.10.J Section 7.12	SUP	SUP	SUP	SUP	SUP	Р	Р	Х	Х	Р	Р	Р	SUP	Parking: 4.5/1,000 SF Loading: 1/30,000 SF
Public Utilities (substations, water-sewer pump stations, water tanks)		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Parking: 1/1,000 SF Loading: 1/ 2,000 SF
COMMERCIAL USES															
Agricultural Support and Services (see Definitions)	Section 12 – Definitions Section 6.10.D	Р	SUP	Х	Х	Х	Р	Р	Р	Х	Х	Х	SUP	SUP	Parking: 1/25 SF Loading: 1.5/ bay
Bed and Breakfast/Country Inn	Section 6.10.D Section 12 – Definitions Section 12 – Definitions: (Inn/Country Inn)	Р	Р	SUP	SUP	Х	Р	Р	х	х	х	х	Р	Р	Parking: 1 per room + 2 extra spaces for facility Loading: N/A
Animal Hospitals-Veterinary Clinics	Proposed reference - Section 6.10.J Proposed reference - Section 7.12	Р	Р	SUP	Х	Х	Р	Р	Р	Х	SUP	SUP	Р	Р	Parking: 3/1,000 SF Loading: 1/ 30,000 SF
Kennels	Section 12 – Definitions	Р	Х	х	х	Х	Р	Р	Р	х	х	х	Р	Р	Parking: 1 per 300 SF + 1 per 3 stalls Loading: 1 40 stalls
Commercial Lodging (Motels, Hotels)	Section 6.10.I.4 Section 7.12.B Section 12 – Definitions: Hotel Section 12 – Definitions: Motel	SUP	SUP	х	х	Х	Р	Р	х	х	SUP	SUP	SUP	SUP	Parking: 1/room + 2 extra spaces for facility Loading: 2 per 40,000 SF
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Parking: 4/1,000 SF Loading: 1/ 30,000 SF

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Section 6.10.D

Section 12 – Definitions

Appendix A – Amendment, 3/6/2017, #1 and #2

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General Store

$\underline{\mathbf{U}}$ se Type	Reference Sections	AR	R30	R20	R10	RMHC	HC	GC1	LI	IM	EIA	OI	OS	WOZ	Parking-Loading
Retail	Section 6.10.J Section 7.12.B	Х	Х	Х	Х	Х	Р	Р	SUP	Х	Х	Х	SUP	SUP	Parking: 4/1,000 SF Loading: 1/ 30,000 SF
Shopping Center	Section 7.3 Section 7.9.F Section 12 – Definitions	Х	Х	х	х	Х	Р	Р	х	х	х	Х	Х	SUP	Parking: 1/ 200 SF Loading: 1 per 25,000 SF
Gas Stations	Section 6.10.J Section 12 – Definitions: Automobile Service Station (Gas Station)	Х	Х	х	х	х	Р	Р	Р	х	SUP	SUP	Х	SUP	Parking: 1 per 1,000 SF + 1 per pump station Loading: 1/ 20,000 SF
Alcohol Sales (ABC Store)	Section 6.10.J	Х	Х	Х	Х	Х	Р	Р	Р	Х	Х	Х	SUP	Х	Parking: 4/1,000 SF Loading: N/A
Office	Section 7.12.B Section 6.10.J	х	Х	х	х	Х	Р	Р	Р	Р	Р	Р	Х	SUP	Parking: 4/1,000 SF Loading:1/33,000 SF
Lumber Yards and Building Supplies Sales	Section 6.10.D Section 7.12.A	SUP	Х	Х	Х	Х	Р	Р	Р	Х	Х	Х	SUP	SUP	Parking: 4 per 1,000 SF Loading: 2 per 30,000 SF
Vehicle/Boat Sales	Section 6.10.D Section 7.12.A Appendix A – Amendment 3/6/2017, #4	SUP	Х	х	х	Х	Р	Р	Р	х	Х	Х	SUP	SUP	Parking: 1/15 vehicles on lo Loading: 2/ 30,000 SF
Vehicle/Boat Repair/Service Garage	Section 6.10.D Section 12 – Definitions: Automobile Repair Services	SUP	х	х	х	Х	Р	Р	Р	х	х	Х	SUP	SUP	Parking: 1/15 vehicles on lo Loading: 2/ 30,000 SF
Auto-Boat-RV Storage	Section 6.10.C Section 6.10 D Section 7.7 Section 7.12.A	SUP	х	х	х	х	Р	Р	Р	х	Х	Х	SUP	SUP	Parking: 1/15 vehicles on lo Loading: 2/30,000 SF
Restaurants	Section 6.10.J Section 7.12.B	х	Х	х	х	Х	Р	Р	SUP	х	SUP	SUP	SUP	SUP	Parking: 12 per 1,000 SF gross floor area Loading: N/A
Junkyard (also called a salvage yard)	Section 6.10.C Section 7.7 Section 12 – Definition	SUP	Х	х	х	х	Р	Р	х	х	х	Х	Х	х	Parking: 1 per 2,000 SF storage + 1 per vehicle Loading: N/A
Electronic Gaming Operations	Section 6.10.E Section 12 – Definitions	Х	Х	х	Х	Х	SUP	SUP	SUP	Х	Х	Х	Х	SUP	Parking: 1/100 SF OR 1 per 2 terminals (which Greater)

Campgrounds, Recreational Vehicle Parks (see Definitions)	Section 6.10.l.2 Section 12 – Definitions: Campground Section 12 – Definitions: Camp or Care Center Appendix A – Amendment, 1/7/2013, #5	SUP	SUP	х	х	Х	Х	х	Х	Х	Х	х	Р	SUP	Parking: 1 travel trailer + 1 per 350 SF office space Loading: 1
Commercial Amusement (indoor)		×	Х	Х	Х	Х	Р	Р	SUP	Х	Х	Х	Х	SUP	Parking: 6 per 1,000 SF Loading: 1
Commercial Amusement (outdoor)		х	х	х	Х	Х	SUP	SUP	Х	Х	Х	х	Х	SUP	-Parking: 1 per 3 seats or 1.25 per play area Loading: N/A
Theaters		х	Х	Х	Х	х	Р	Р	SUP	Х	SUP	SUP	Х	SUP	Parking: 1 per 3 seats Loading: 1 per 40,000 SF

$\underline{\mathbf{U}}$ se Type	Reference Sections	AR	R30	R20	R10	RMHC	HC	GC1	LI	IM	EIA	OI	os	WOZ	Parking-Loading
Public Recreation (centers, parks, fields, playgrounds, pools, facilities)	Section 6.10.D Section 6.10.J.,L	SUP	SUP	SUP	SUP	SUP	Р	Р	х	х	Р	Р	Р	SUP	Parking: 1 per 4,000 SF of area Loading: N/A
INDUSTRIAL USES															
Disposal (waste and sewerage)	Section 7.8	х	Х	Х	Х	Х	Х	Х	SUP	SUP	Х	Х	Х	Х	Parking: 1 per vehicle Loading: 1 per vehicle
Convenience Center	Section 6.10.F Section 7.8 Section 12 – Definitions	SUP	SUP	х	Х	х	х	SUP	Р	Р	х	х	х	Р	Parking: 1 per employee
Extraction (mining)	Section 6.10. H Section 7.8 Section 12 – Definitions: Mining	х	х	х	х	х	х	х	SUP	Р	х	х	х	х	Parking: 1 per vehicle Loading: 1 per vehicle
Recycling and/or Storage	Section 4.15 Section 6.9 Section 6.10 C-D Section 6.10.F Section 7.8 Section 12 – Definitions: Outdoor Storage Section 12 – Definitions: Storage	SUP	х	x	х	х	х	SUP	Р	Р	х	х	x	х	Parking: 2 per 1,000 SF Loading:1.25/ bay
Manufacturing	Section 6.10 Section 12 – Definitions: Fabrication	х	Х	Х	х	Х	SUP	SUP	Р	Р	SUP	х	х	х	Parking: 1/500 SF + 1/vehicle Loading: 1/ 20,000 SF
Machine and Welding Shops (see Definitions-Home Occupation-Industrial or Commercial Nature)	Section 6.10.F Section 7.8	SUP	SUP	Х	х	х	SUP	SUP	Р	Р	х	х	Х	х	Parking: 1 per 500 SF + 1 per vehicle Loading: 1/20,000 SF
Petroleum/HazMat, Bulk Storage (all fire/safety regulations are met)		х	х	Х	х	х	SUP	SUP	Р	Р	х	х	х	х	Parking: 1 per 2,000 SF Loading: 1.5/ bay
Warehousing (includes ministorage), Distribution and Logistics		х	х	Х	х	х	Р	Р	Р	Р	SUP	х	х	SUP	Parking: 1 per 2,000 SF Loading: 1.5/ bay
Land Clearing Inert Debris Landfill, Minor (Less than 2 acres)		SUP	Х	х	х	х	Х	х	SUP	SUP	х	х	х	SUP	
Land Clearing Inert Debris Landfill, Major (Greater than 2 acres)		SUP	Х	х	х	Х	Х	Х	SUP	SUP	Х	Х	х	SUP	
SPECIAL USES															
Adult Establishments		х	Х	Х	х	Х	SUP	SUP	SUP	х	х	х	Х	Х	Parking: 4 per 1,000 SF Loading: N/A
Airports		SUP	Х	Х	Х	Х	Х	SUP	SUP	SUP	SUP	SUP	Х	Х	Special Study Required***
Commercial Communications Towers (Cell Towers)		SUP	Х	Х	Х	Х	SUP	Parking: 2 per tower Loading: 1							

$\underline{ extbf{U}}$ se Type	Reference Sections	AR	R30	R20	R10	RMHC	HC	GC1	LI	IM	EIA	OI	os	WOZ	Parking-Loading
Cemetery (Church, Family)		Р	Р	Р	Х	Х	Х	Х	Х	Х	Х	Р	Р	SUP	N/A
Cemetery (Commercial)		Р	SUP	х	Х	Х	Х	х	х	х	Х	х	SUP	SUP	Parking: 6 per 1,000 SF of office-building Loading: 1
Shooting Ranges		SUP	х	Х	Х	Х	Х	х	х	Х	Х	х	SUP	SUP	Parking: 1.5 per shooting station Loading: 1
Solar Collector (Accessory)		Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	N/A
Solar Energy Systems, Large Scale (Solar Farms)		SUP	Х	х	Х	Х	Х	х	SUP	CU	SUP	SUP	Х	х	Parking: 1/every 2 employees on shift of greatest employment
TEMPORARY USES															
Commercial (temporary-see Definitions) Outdoor Sales		Р	Р	Х	Х	Х	Р	Р	Р	Р	Р	Р	Р	Р	Parking: staff review Loading: N/A
Concrete/Asphalt Operations		Х	Х	Х	Х	Х	Х	Х	SUP	Р	Х	Х	Х	Х	Parking: staff review Loading: 1 per vehicle
Contractor's Office (located at project site for duration of project)		SUP	SUP	х	Х	Х	SUP	SUP	SUP	Р	SUP	SUP	Х	SUP	Parking: 1 per 200 SF Loading: N/A
Farmstand		Р	Р	Х	Х	Х	Р	Р	Р	Х	Х	Х	Р	Р	Parking: 8 spaces Loading: N/A
Manufactured Housing Unit for Office and/or Exhibition		SUP	SUP	SUP	SUP	Р	Р	Р	Р	Х	Х	SUP	SUP	SUP	Parking: 1 per vehicle Loading: N/A
Manufactured Home for Hardship		SUP	SUP	SUP	SUP	Р	Х	Х	Х	Х	Х	Х	Х	SUP	Parking: 2 per dwelling unit Loading: N/A
Public Interest Event and/or Special Event		SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	Parking: 1/patron Loading: 1 per vehicle
Temporary Miscellaneous Sales (see Definitions)		SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	SUP	Parking: 1 per vehicle Loading: N/A
***See Section 6.10.L															

SECTION 4 – GENERAL PROVISIONS

4.1 STREET ACCESS

No building shall be erected on a lot which does not abut a street or have access to a street. Except in a business zone or in a planned project in a residential zone, a building may be erected adjoining a parking area or other dedicated open space with access to a street used in common with other lots.

4.2 REQUIRED YARDS NOT TO BE USED BY ANOTHER BUILDING

The minimum yards or other open spaces required by this Ordinance for each and every building shall not be encroached upon or considered as meeting the yard and open space requirements of any other building.

4.3 RELATIONSHIP OF BUILDING TO LOT

Every building hereafter erected, moved or structurally (structural, not cosmetic) altered shall be located on a lot. In no case shall there be more than one (1) principal building and its customary accessory buildings on a lot, except in the case of a specifically designed complex of institutional, residential, commercial, or industrial buildings in an appropriate zone, in this circumstance the accessory structure (s) may be allowed and shall comply with Section 4.12 of this Ordinance.

4.4 REDUCTION OF LOT AND YARD AREAS PROHIBITED

No yard or lot existing at the time of passage of this Ordinance shall be reduced in size or area below the minimum requirements set forth herein, except for street widening. Yards or lots created after the effective date of this Ordinance shall meet at least the minimum requirements established by this Ordinance.

4.5 SUBSTANDARD LOT OF RECORD

When a substandard lot can be used in conformity with all of the regulations applicable to its intended use, except that the lot is smaller than the required minimum size for its zoning category, then the lot may be used as proposed as if it were conforming. However, no use requiring a greater lot size than the established minimum lot size for a particular zone is permissible on a substandard lot.

When the use proposed for a substandard lot is one that conforms in all other respects, but the applicable setback requirements cannot reasonably be complied with, then the authorizing agent or board by this Ordinance may issue a permit for the proposed use (zoning administrator, board of adjustments). The permit may allow deviations from the applicable setback requirements if it is found that:

- A. The property cannot reasonably be developed for the use proposed without such deviations.
- B. These deviations are necessitated by the size or shape of the nonconforming lot, and
- C. The property can be developed as proposed without any obvious adverse impact on surrounding properties or the public health or safety, based the determination of County planning staff and the property owner.

For this section, compliance with applicable building setback requirements is not reasonably possible if a building that serves the minimal needs of the use proposed for the substandard lot cannot practicably be constructed and located on the lot in conformity with the particular zoning category setback requirements. Financial hardship does not constitute grounds for finding that compliance is not reasonably possible.

This section is applicable only to substandard lots of record (lots recorded in the Vance County Tax Office and Register of Deeds, prior to the effective date of this Ordinance, with no development. A lot is undeveloped if it has no substantial structures upon it.

4.6 ADJOINING AND VACANT LOTS OF RECORD

If two (2) or more adjoining and vacant lots of record are in a single ownership at any time after the adoption of this Ordinance and such lots individually have less frontage or area than the minimum requirements of the zone in which such a single lot or several lots are located, the lands involved shall be considered to be an undivided parcel for the purposes of this Ordinance, and no portion of said parcel



shall be used which does not meet lot width and area requirements established by this Ordinance, nor shall any division of the parcel be made which leaves remaining any lot with width or area below the requirements stated in this Ordinance. For circumstances where such a lot that meets the provision and would be established as a non-buildable lot, such lot could be applicable for use for signage, septic system repair area, or open space upon review/approval by the Zoning Administrator.

4.7 ADDITIONAL ENVIRONMENTAL PROVISIONS

In addition to the requirements of this Ordinance, all effluents and emissions into the air or surface or groundwater from new development permitted by this Ordinance including any land disturbing activity must be in conformity with all applicable Federal, State, and County Health and Environmental Quality regulations. Land development must also comply with all other applicable regulations, which also include floodplain, and watershed regulations. All applicable Health Department regulations shall apply.

4.8 CURB CUTS GIVING ACCESS TO PUBLIC RIGHTS-OF-WAY

Construction of curb cuts for purposes of ingress or egress to property abutting a public right-of way shall be approved by the North Carolina Department of Transportation where said curbs affect access to State Highways. Provision for all access work done on highway right-of-way is subject to approval by the Department of Transportation.

4.9 PROJECTION INTO PUBLIC RIGHT-OF-WAYS

No private sign, structure, or other items shall project beyond an imaginary line drawn ten (10) feet from and parallel to the outer edge of the public right-of-way. Any projection into a public right-of-way, new or existing, shall be removed, with the exception of mailboxes (per compliance with US Postal Service regulations as applicable and North Carolina Department of Transportation regulations as applicable).

4.10 HEIGHT LIMIT EXCEPTIONS

The height limitations contained in this Ordinance do not apply to spire, belfries, cupolas, antennas, water tanks, ventilators, chimneys, mechanical equipment penthouses, or other appurtenances required to be placed above the roof level and not intended for human occupancy.

4.11 CORNER VISIBILITY

There shall be no planting, structure, fence, or other obstruction to visibility on any corner lot between two (2) feet and ten (10) feet above the level of the center line of the street in a triangular area bounded by the street right-of-way line on such corner lots and a base line joining points along right-of-way lines twenty-five (25) feet from the intersection right -of-way corner. Per the Vance County Subdivision Ordinance, the following applies for Vehicular Sight Distance Easements: Triangular sight distance easements shall remain free of all structures, trees, shrubbery, driveways, and signs, except traffic control signs and shall be shown in dashed lines at all street intersections and so noted on the subdivision plat. Final determination of the location and extent of sight distance easements will be made by the jurisdiction in cooperation with the NCDOT District Engineer.

4.12 ACCESSORY STRUCTURES/BUILDINGS

Accessory structures/buildings shall not be placed any closer to the front right of way than any portion of the dwelling. For all lots facing on more than one road, all accessory structures shall meet the front setback requirements for each road right of way. The following exceptions apply to this rule:

- A. Accessory Structures located on properties containing 5 or more acres may be placed closer to the front setback than the dwelling, but may not be within the front setback stated for that zoning district.
- B. Accessory structures located on properties that border land owned by the U.S. Government under the control of the U.S. Army Corps of Engineers for the John H. Kerr Dam and Reservoir may be placed closer to the front setback than the dwelling, but may not be within the front setback stated for that zoning district.



A survey showing all improvements and proposed improvements shall be presumptive evidence of compliance with this section.

- Minimum side setback: 10ft
- Minimum rear setback: 10ft
- Minimum setback from principal structure: 10ft
- Maximum building height shall not exceed 20ft from mean roof height
- In each zoning category, the <u>Maximum Lot Coverage-Net Area (Built Upon Area)</u> shall be adhered to, inclusive of the principle structure, paving/driveways, and accessory structure/buildings.
- No residential accessory structure shall be rented or occupied for financial purposes and shall not be used for human habitation.

Accessory buildings not exceeding 50 sq. ft. and used exclusively to house well and pump equipment may be permitted in front, side or rear yards, provided such accessory buildings are at least five (5) feet from any property lines and do not encroach into any required easements or other site angles. An accessory building may be located on another contiguous or non-contiguous lot from the principal use with which it is associated, to the extent that the principal use itself would also be permitted on such lot.

4.13 ACCESSORY USES

- A. POOLS: All pools, whether above-ground or in-ground, shall be built only in rear or side yards. The definition of a pool shall include all structures, and walks or patio areas of cement, stone, or wood at or above grade, built for, and used in conjunction with the pool. A pool as defined above shall be included in the calculations of the total allowed lot coverage for the zoning category in which the lot is located. Pools, as defined above, shall be setback a minimum of 10 ft. from all side and rear property lines. Patio area at grade has no setback requirements from rear and side lot lines. Pool shall be enclosed by a privacy fence, with a childproof gate, a minimum height of four (4) feet and a maximum height of eight (8) feet. Pools located in rear yards on corner lots which are greater than 22,000 sq. ft. shall be located in the rear yard opposite the abutting street, unless the rear yard is screened by a wall or privacy fence.
- B. SATELLITE DISHES: Satellite dishes less than 20 inches in diameter may be located anywhere on a lot. All other satellite dishes shall adhere to the following:
 - 1. Satellite dishes shall be no larger than eight (8) feet in diameter.
 - 2. The maximum height shall be fifteen (15) feet unless the applicant can prove: a) a less intrusive location is not possible and, b) a higher location will improve reception.
 - 3. The dish must be installed and grounded properly.
 - 4. Satellite dishes shall meet all appropriate setbacks applicable to accessory structures and if located in a front yard shall meet the minimum setback requirements for that zoning category.
 - 5. Satellite dishes shall be screened from view with dense landscaping materials, fences, or other solid materials, to the extent that it does not impair reception.
 - 6. Satellite dishes shall not be located on a roof.
- C. SOLAR COLLECTOR: Solar Collectors as an accessory use may be roof-mounted or freestanding ground/pole mounted.
 - 1. Setbacks: All solar energy collectors, whether ground mounted or mounted on an existing structure, shall meet all appropriate setbacks applicable to accessory structures and if located in a front yard shall meet the minimum setback requirements for that zoning category.
 - 2. Height: The height of the structure shall not be taller than the allowed height of a structure in the zoning district in which it is located. Ground or pole mounted solar energy systems shall not exceed 25 feet in height when oriented at maximum tilt. Solar collection devices shall not be included in computing lot coverage.



4.14 OUTDOOR DISPLAY

Outdoor display of merchandise for sale, which is normally required in conducting the commercial or industrial operation, is permitted in the appropriate zones. All non-conforming outdoor display existing on the effective date of this Ordinance, which does not conform to the requirements of this article, shall be removed and/or brought into compliance within twelve (12) months from the effective date of this Ordinance.

4.15 OUTDOOR STORAGE

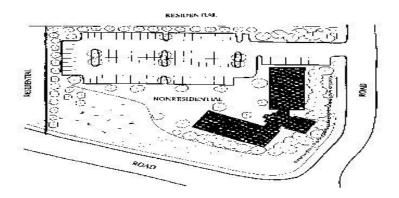
Outdoor storage of goods, equipment and material, including, but not limited to junk vehicles, junk appliances, trash collection areas or dumpsters, open air docks, outdoor storage of bulk materials and/or parts, or areas regularly used for outdoor repair areas or service stations, motor vehicle dealers, or inspection stations, but excluding temporary construction and related activities and closed bay docks, and other such items as trash, and other debris shall be regulated by this Ordinance. In the interest of safety to children and adjacent property owners, any approved outdoor storage shall maintain a buffer that conceals the stored materials from public view. The buffer shall be compact evergreen hedge or other type of evergreen foliage screening which shall reach the height of at least eight (8) feet at maturity, or shall be a combined fence and shrubbery screen. The buffer shall be maintained at a minimum of eight (8) feet in height and to be determined wide enough to adequately screen the use. Earth-berms, other topographical features and existing wooded areas may be accepted in lieu of the above requirements, if they conceal the use from public view. Fences shall be at least eight (8') feet, but no greater than twelve (12') feet, must be opaque, and made of materials that are normally accepted in the fencing industry. Nothing in this section will preclude the County from enforcement against junk and abandoned vehicles as prescribed in the Vance County Abandoned Vehicle Ordinance (Ordinance #2). All non-conforming outdoor storage existing on the effective date of this Ordinance, which does not conform to the requirements of this article, shall be removed and/or brought into compliance within twelve (12) months from the effective date of this Ordinance.

4.16 SCREENING AND BUFFERING

- A. A minimum of a one hundred foot (100') vegetative buffer (fifty feet on each side) is required for development activities along all perennial waters indicated on the most recent versions of U.S. Geologic Survey (USGS) 1:24,000 (7.5 minute) scale topographic maps or as determined by local government resources. Desirable artificial stream bank or shoreline stabilization is permitted.
- B. No new development is allowed in the buffer except for water dependent structures and public projects such as road crossings and greenways where no practical alternative exists. These activities should minimize built-upon surface area, direct runoff away from the surface waters and maximize the use of stormwater Best Management Practices (BMP's).
- C. New or expanding uses and other uses subject to this provision must provide a vegetative buffer along the property boundary that separates the proposed or expanding non-residential use and the existing residential use as a means to lessen the impact of non-residential use on the residential use. The buffer shall be a compact evergreen hedge or other type of evergreen foliage to be determined as adequate in width to screen the use, which shall reach the height of at least eight (8) feet within three years, or shall be a combined fence and shrubbery screen, with the shrubbery facing the residential use. It shall be maintained at a minimum of eight (8) feet in height thereafter. The fence shall be at least eight (8) feet, must be opaque, and made of materials normally accepted in the fencing industry. Earth-berms, other topographical features and existing wooded areas may be accepted in lieu of the above requirements, if they conceal the use from public view.
- D. Buffer Strips:



- 1. Whenever a buffer strip is required by this Ordinance, such strip shall meet the specifications of this section, unless other specifications are given in the section where the buffer strip is required.
- 2. Buffer strips shall be required whenever an industrial, commercial, or any other nonresidential use is established adjacent to a different zone. Buffer strips shall be required on three (3) sides (rear and side lot lines) of lot, unless a corner lot, then buffer is not required on any side lot line adjacent to a street right-of-way lot line. The front of the lot, except for ingress/egress, shall have ten (10) feet of landscaping, vegetative or natural that would not pose a hazard for vehicular traffic, but creates a natural looking front (if opaque or semi-opaque screening is used then this can be used in place of the ten (10) feet of landscaping). Refer to the example:



- 3. Buffer strips shall become part of the lot(s) on which they are located, or in the case of commonly-owned land, shall belong to the homeowners or property owners association.
- 4. Buffer strips shall be maintained for the life of the development. Maintenance shall be the responsibility of the property owner, or, if rented, the lessee.
- 5. If a natural screen is already in place which will adequately fulfill the purpose of the buffer strip, the Zoning Administrator may, in writing, allow a substitution of all or part of this screen for the buffer strip. Written permission of the Zoning Administrator shall be obtained before removing an existing natural buffer in the location of the required buffer strip. If the natural screen is removed, then the buffer screen must comply with the buffer strip requirement.
- 6. Where a planting screen cannot be expected to thrive because of intense shade or soil conditions, or where lot size will not allow a planted buffer, the Zoning Administrator may, in writing, allow the substitution of a well-maintained wood, masonry wall, or chain link fence with slats at least eight (8) feet in height in place of the planted screen.
- 7. When such permission is granted in (6) above, the buffer strip may be used for driveway and parking so long as such use does not interfere with the eight (8) foot wall or fence, and no permanent building or structure is allowed to encroach on the buffer.
- E. Note for residential development adjacent to commercial/industrial development:
 - Residential development shall, when feasible, incorporate a natural area as an
 undisturbed buffer (to be maintained in a natural vegetative condition, i.e. undisturbed
 trees, hedges, etc.) in order to provide a separation between residential development and
 commercial/industrial development.
 - a. This buffer shall be a minimum of fifteen (15) feet surrounding the perimeter of any new development adjacent to other properties that are not within the new development (not inclusive of easements).



- b. This buffer shall be located within the established minimum setbacks as outlined in this Ordinance for the appropriate zoning category (not as an addition).
- c. If no open area exists prior to development, the developer shall not be required to plant a buffer as outlined in this Subsection E.
- d. Buffers and natural greenspace that may be included within to meet the requirements of this sub-section shall be included with the established Homeowners Association (HOA) for a subdivision and shall be maintained shall be maintained by the HOA.

4.17 LIGHTING:

All lighting must be directed away from adjacent property and roadways. Lighting shall be directed onto the individual owners' site only. Height regulations shall be determined as necessary by the Vance County Plan Review staff in complying with all appropriate State and National Building Codes.

4.18 MANUFACTURED HOME FOR HARDSHIP ("Hardship Mobile Homes"):

For the purpose of this section, a manufactured home for hardship refers to dwelling units called "mobile homes" and are the same as defined in this ordinance (<u>inclusive of single –wide and double wide units only</u>) – a transportable, factory-built home designed to be used as a year-round residential dwelling and built prior to enactment of the National Manufactured Home Construction and Safety Standards Act, which became effective June 15, 1976. A mobile home does not meet the criteria for a manufactured home. A recreational vehicle or travel trailer is not a mobile home.

- A. The owner of the lot of record shall be the applicant.
- B. The lot which contains the hardship mobile home shall contain existing single family dwelling and shall be an approved lot or an existing lot of record prior to the date of this adopted ordinance.
- C. The owner of the property shall submit proof that no private deed restrictions and/or covenants prohibit the placement of a mobile home on a lot.
- D. The proposed mobile home shall only be occupied by a relative of blood, by lineal family which shall include direct lineal descendants (children, grandchildren, great-grandchildren), direct lineal ascendants (father, mother, grandfather, grandmother), spouses, step child, step parents or adopted child of the owner of the property.
- E. The proposed hardship mobile home shall meet the minimum setbacks of the zone.
- F. A hardship mobile home shall only be permitted if a genuine hardship exists based on medical reasons. Written documentation such as a letter on professional stationary signed by the attending physician shall be submitted by the applicant. Should the services of health care professional for the stated hardship, said health care provider may reside in the mobile home for hardship.
- G. Only one (1) hardship mobile home is permitted at a time, and each home must meet the minimum lot area in the zoning zone as a separate and individual use.
- H. The mobile home shall be removed from the property when the specified hardship ceases to exist (the mobile home shall not be rented or otherwise occupied by any other person once the hardship ceases to exist) within six (6) months.
- I. Upon approval, the application for the hardship mobile home shall be reviewed twelve (12) months from the date of approval and on annual basis thereafter to determine if the conditions under which the approval was granted remain in existence to warrant a continuation of approval for the hardship mobile home NOTE: This application is a renewable permit that is separate from a zoning permit.



4.19 CLUSTER DEVELOPMENT:

Clustering of residential lots is a development alternative (for design, not as a use) intended to encourage more efficient subdivision design better suited to the natural features of the land than a conventional subdivision, by regulating lots based on lot density standards rather than minimum lot size standards and by requiring that part of the subdivision not devoted to lots and roads be set aside as open space. This allows a concentration of smaller lots on those parts of the subdivision best suited to accommodate development with the least negative impact. This type of development also allows smaller and less costly networks of roads and utilities, reducing the amount of impervious surface and stormwater runoff. In addition, the open space provided by clustering can offer recreational opportunities for the subdivision's residents, to conserve and protect natural areas and environmentally sensitive areas, and to preserve historic resources. See Notes under Section 3.2.2 (1 & 2) of this Ordinance in reference to Cluster development in the Anderson Creek (WS-III) and Tar Pamlico (WS-IV) regarding lot sizes in these watersheds.

4.19.1 Cluster Development Design Standards:

Should Cluster Development be a selected design alternative, the following standards shall apply:

- A. Clustering of lots shall not be allowed on any tract of land less than ten (10) acres in size for single family residential (inclusive of stick built and modular homes) or for a combination of single family residential and townhouses). If the development is only townhouses then a small tract of five acres may be allowed for clustering.
- B. Should clustering be selected as a design alternative, the density requirements (for residential) and built upon area (open space) requirements for the zone in which the development is located shall apply. Clustering shall not increase the density of development. In watersheds, all development must comply with the built-upon restrictions.
- C. Should clustering be selected as a design alternative, the developer and County planning staff shall coordinate in a pre-development meeting to determine applicable incentives for utilizing the clustering provision.
- D. The maximum number of lots allowed within a cluster subdivision shall be equal to the site's total land area (acreage), less the street rights-of-way, divided by the minimum lot size of the non-clustered subdivision.
- E. Each lot shall be regularly shaped and have at least forty (40) feet of frontage on a private or public road meeting the standards of this Ordinance. Side lot lines extending from a road shall be approximately perpendicular or radial to the road or street.
- F. Open Space requirements shall include that land within the subdivision site not contained in lots, streets, or utility easements, and shall be in one or more parcels dedicated or reserved as permanent open space.

4.19.2 Open Space Requirements:

The total area of parcels dedicated or reserved as permanent open space shall make up at least twenty percent (20%) of the subdivision. Open space shall be dedicated or reserved for one or more of the following uses:

- A. Conservation of any identifiable natural hazard areas, such as floodways or wetlands,
- B. Conservation and protection of identified significant natural areas, such as rare plant communities, important wildlife habitat, or other environmentally sensitive areas where development might threaten water quality of ecosystems,
- C. Conservation and protection of any identifiable important historic resources,
- D. Provision of active and/or passive outdoor recreation opportunities, either for the general public or for the subdivision residents.



- E. Retention of productive farmland or forestland for continued agricultural and/or forestry use, or
- F. Establishment of a conservation reservation on the remainder of the tract, for the life of the development.

Highest priority for the location, design, and use of open space shall be given to conserving, and avoiding development in any natural hazard areas on the site. Open space shall contain such buildings, structures, access ways, and parking facilities as are necessary to its principal uses. The location, size, character, and shape of the required open space shall be appropriate to its intended use; active recreation shall be located and designed so its users can easily access it.

4.19.3 Open Space Dedication or Reservation:

Land within the subdivision site not contained in lots, streets, or utility easements, shall be in one or more contiguous parcels dedicated or reserved as permanent open space for the life of the development. The title to the open space shall be conveyed to a property owners' association, homeowners' association, or other legal entity (public agency or nonprofit organization) that is capable of and willing to accept responsibility for managing the open space for its intended purpose.

Each dedicated or reserved open space parcel shall be shown on all subdivision plans and on record plat recorded with the Vance County Register of Deeds, with a notation of its area and its intended open space use.

4.19.4 Maintenance of Open Space:

The owner of the open space shall be responsible for maintaining the open space so that it continues to effectively function for its intended use and any dedication or conveyance of an open space parcel shall provide for such responsibility.

4.19.5 General Design Provisions for Cluster Development:

Subdivisions located in watersheds shall be designed so that lots and development sites are concentrated in the upland areas and away from surface waters and drainage ways, and the undeveloped areas (open space) shall remain in a vegetated or natural state. Built-upon areas shall be sited and designed to minimize stormwater runoff impact to the watershed's receiving waters.

- A. Zero (0) Side and/or Rear Yard Setbacks (for townhouse and/or condominium development): A zero (0) side and/or rear yard setback as permitted herein within the Cluster Development only and does not refer to the setbacks that abut adjoining properties (and as relates to the sides of dwelling units that face open paces areas), may be permitted, subject to the following provisions:
 - 1. Any wall, constructed on the side or rear lot shall be solid, with no doors or windows. Such wall shall contain no electrical, mechanical, heating, air conditioning, or other fixtures that project beyond such wall.
 - 2. When applicable per North Carolina and National Building Codes a fire wall between units for townhouses and/or condominiums shall be incorporated.
 - 3. If there is an offset of the wall from the lot line, such offset shall comply with the side yard setback requirements specified in Section 3.2. Roof eaves may encroach two (2) feet into the adjoining lot.
 - 4. A five (5) foot maintenance and access easement with a maximum eave encroachment easement of two (2) feet within the maintenance easement shall be established on the adjoining lot and shall assure ready access to the lot line wall at reasonable periods of the day for normal maintenance.
 - 5. Where zero (0) side or rear yard setbacks are proposed, the buildable area for each lot shall be indicated on the preliminary and final subdivision plat.
 - 6. No structure may be located on more than one (1) side lot line.



4.20 Only One Main Building/Use on Lot, and Building Orientation

In all zones, every main building hereafter erected or altered shall be located on a separate lot, as defined in this Ordinance, and in no case shall there be more than one main building and permitted accessory building on the lot nor more than one main use (e.g., commercial, industrial, or residential) per building and lot; provided that this requirement shall not apply to uses permitted in the Table of Permitted Uses (Section 3.2) within the same zone and located in the same building, nor to motels or manufactured home parks, nor to planned building groups approved by the Planning Board, nor to a bona fide farm use.

4.21 Minimum Yards

The minimum yards or other open spaces required by this Ordinance, including those provisions regulating intensity of use for each and every building hereafter erected or structurally altered, shall not be encroached upon or considered as meeting the yard or open space requirements or the intensity of use provisions for any other building.

4.22 Lot Subdivision

Subdivision of property into individual lots shall comply with the provisions of the Vance County Subdivision Ordinance and Zoning Ordinance. No lot shall hereafter be so reduced in area as to cause any open space required by this Zoning Ordinance to be less in any dimension than is herein required by the minimum yard requirements of the zone in which the lot in question is located.

4.23 Improvements Bond

No final certificate of occupancy/compliance for a commercial, residential, or Manufactured Home Park or planned development will be issued until all required site improvements have been completed. In lieu of completion of required site improvements, the developer of the planned development may enter into a contract with Vance County providing for the installation of required improvements within a designated period of time. Performance of said contract shall be secured by a cash or surety bond which will cover the total estimated cost of the improvements as determined by Vance County.

4.24 General Development Regulations (not addressed in previous section/subsections):

- A. Where a minimum lot width is specified in these regulations, it shall be measured at the building line (also called the building setback line, or setbacks).
- B. As attached to buildings, uncovered stairs, landings, terraces, porches, balconies, loading docks, and fire escapes may project into any yard, but such projection may not exceed six (6) feet and may not be closer than ten (10) feet to any lot line, except where lots located adjacent to Kerr Lake are allowed a zero (0) lot line setback from the US Army Corps of Engineers property line.
- C. Architectural projections, such as chimneys, flues, sills, eaves, belt courses, and ornaments may project into any required yard, but such projection shall be at least ten (10) feet from any lot line, except where lots located adjacent to Kerr Lake are allowed a zero (0) lot line setback from the US Army Corps of Engineers property line.
- D. Required Open Space Cannot be Used by Another Building or Use. No part of a lot, yard, off-street parking area, or other required open space shall be reduced below the minimum required by this Ordinance. No part of a lot, yard, off-street parking area, or other open space required for a building or use shall be used to satisfy the requirements of another building or use. These prohibitions shall not be interpreted to prevent the granting of a variance (Section 8) by the Zoning Board of Adjustment (Section 11).
- E. Existing Lots of Insufficient Size. Any lot of record existing when this Ordinance is adopted, which has an area or width which is less than required by this Ordinance, shall be subject to the following exceptions and modifications:
 - 1. Adjoining Lots. When two (2) or more adjoining lots with continuous frontage are in one (1) ownership at any time after the adoption of this Ordinance, and such lots individually are less than the minimum square footage and/or have less than the minimum width required in the zone in which they are located, then such group of lots shall be considered as a single lot or several lots of minimum permitted width and area for the zone in which



- located. This does not apply to lots of record or to any lot in a subdivision which has received preliminary or final approval from the Vance County Planning Board. However, such lots must meet all Vance County Health Department minimum requirements.
- 2. Lot Not Meeting Minimum Lot Size Requirements. Except as set forth in #1 above, in any zone in which single-family dwellings are permitted, any lot of record existing at the time of the adoption of these regulations which has an area or a width which is less than required by these regulations may be used as a building site for a single-family dwelling.
- 3. Side Yard Requirements. Except as set forth in A, above, where a lot has a width less than the width required in the zone in which it is located, then the Administrator shall be authorized to reduce the side yard requirements for such lot, however no side yard shall be less than ten (10) feet wide.

SECTION 5 - NONCONFORMING USES ("Grandfather Clause")

After the effective date of this Ordinance, pre-existing lots or structures, or uses of lots or structures, which are prohibited under the regulations for the zone in which they are located, shall be considered as nonconforming. Nonconforming lots, structures or uses may be continued, provided they conform to the provisions of this section.

5.1 CONTINUANCE OF NONCONFORMING BUILDINGS

The lawful use of a building existing at the time of the passage of this Ordinance shall not be affected by this Ordinance, and such use may be extended throughout the building, provided no structural alterations except those required by law, ordinance or ordered by the Zoning Administrator to secure the safety of the building are made therein. If such nonconforming building is removed or the nonconforming use of such building is discontinued for a continuous period of more than one (1) year, every future use of such premises shall be in conformity with the provisions of this Ordinance.

5.2 CONTINUANCE OF NONCONFORMING USE OF LAND

The lawful use of "land" existing as of January 1, 2021 although such use does not conform to the provisions of this Ordinance, shall not be affected by this Ordinance provided, however, that no such nonconforming use shall be extended to occupy a greater area of land than occupied by such use in existence on January 1, 2021. If such nonconforming use is discontinued for a continuous period of not less than 24 months, every future use of said land shall be in conformity with the provision of this Ordinance. Uses deemed unlawful by this Ordinance, or any other public law shall not be covered by this provision.

5.3 CHANGE OF USE

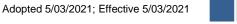
A nonconforming use shall only be changed to a use listed as permitted or permitted with conditions for the zone in which such a nonconforming use is located. Uses not designated as permitted or conditional special shall be prohibited by this Ordinance in the areas delineated by the Official Zoning Map of Vance County.

5.4 RECONSTRUCTION OF NONCONFORMING BUILDINGS

Nothing in this Ordinance shall be construed to prevent the restoration of a business or building destroyed by fire, explosion, or other casualty, if such construction is begun one (1) year of the date of such damage. Owner occupied residences, which are nonconforming uses may be rebuilt regardless of the extent of the destruction.

5.5 NORMAL MAINTENANCE AND REPAIR OF A BUILDING CONTAINING A NONCONFORMING USE

Normal maintenance and repair in a building occupied by a nonconforming use is permitted provided it does not expand the structure nor extend the nonconforming use.



SECTION 6 - SPECIAL USE PERMITS

6.1 OBJECTIVES AND PURPOSE

It is recognized that there are some land uses, which are basically in keeping with the intent, and purpose of the various zones created by this Ordinance, yet these uses may have a significant impact on those zones. These impacts are best determined following careful review of the specific proposal. In order to add flexibility to this Ordinance, certain uses are allowed by means of controls exercised through the Special Use Permit process.

6.2 PROCEDURES

Special Uses Permits shall be granted by the Board of Adjustment as permitted by G.S. 160D-406 for all Special Uses enumerated in the Table of Permitted Uses. Special Uses may only be established by Board of Adjustment approval. The owner or owners of all the property included in the petition for a Special Use Permit shall submit required application information to the Planning and Development Department at least three (3) weeks prior to the Board of Adjustment meeting at which it is to be heard. Such application shall include all of the requirements pertaining to it in this Ordinance. Applications shall include a Site Plan as outlined in Section 2.2C of this Ordinance and be accompanied by a fee set according to the Planning and Development Department Fee Schedule. The Board of Adjustment shall review all requests for Special Use Permits within thirty (30) days from submittal.

6.3 BOARD OF ADJUSTMENT ACTION

The Planning and Development Director or his/her designee shall submit all applications for Special Use Permits to the Board of Adjustment. The Board of Adjustment shall set and advertise a date and time for a quasi-judicial hearing on the Special Use permit application. The applicant shall provide to the Planning and Development Department a list of the names and addresses of all adjacent property owners. A notice of the hearing shall be mailed by the Planning and Development Director or his/her designee, to each person on this list and the applicant and the owner of the subject property (if not the applicant) at least ten (10) days but not more than 25 days prior to the hearing. The person mailing such notice shall certify that such notices have been mailed. Additionally notice of the hearing must be posted on the affected property at least ten (10) days but not more than 25 days prior to the hearing. At the hearing all interested persons shall be permitted to testify in sworn testimony. A person who is interested in the matter but who does not have a personal stake in the outcome (such as a likely effect on his or her property value) may attend and observe the hearing, but they have no legal right to offer evidence, ask questions, or otherwise directly participate in the matter. The Board of Adjustment shall consider the application and comments at the hearing and may grant or deny the Special Use Permit. If the Special Use Permit is granted, the Board of Adjustment shall use as a guide, the specific conditions outlined in this Article for each use proposed. In addition, the Board of Adjustment shall find:

- A. That the use will not materially endanger the public health or safety if located according to the plan submitted and approved.
- B. That the use meets all required conditions and specifications.
- C. That the use will not substantially injure the value of adjoining or abutting property, or that the use is a public necessity.
- D. That the location and character of the use, if developed according to the plan as submitted and approved, will be in harmony with the area in which it is to be located and in general conformity with the Vance County Land Use Plan. In granting the Special Use Permit the Board of Adjustment may designate only those conditions, in addition to those stated herein, which, in its opinion, assure that the use in its proposed location will be harmonious with the area and with the spirit of this Ordinance and clearly in keeping with the public welfare. All such additional conditions shall be entered in the minutes of the meeting, at which the Special Use Permit is granted, on the Special Use Permit itself, and on the approved plans submitted therewith. All



specific conditions shall run with the land and shall be binding on the original applicants for the Special Use Permit, their heirs, successors and assigns. The Special Use Permit shall be signed and dated by the applicant and recorded in the Vance County Register of Deeds.

6.4 DENIALS AND APPEAL

If the Board denies the Special Use Permit, it shall enter the reason for its action in the minutes of the meeting at which the action is taken. No appeal may be taken from the action of the Board of Adjustment in granting or denying a Special Use Permit except through the Vance County Superior Court. Said appeal must be made within thirty (30) days.

6.5 COMPLIANCE WITH ZONE REGULATIONS

In addition to the conditions specifically imposed in this paragraph and such further conditions as the Board of Adjustment may deem reasonable and appropriate, Special Uses shall comply with all other regulations for the zoning zone in which they are located unless the provisions for the Special Use provide to the contrary.

6.6 FAILURE TO COMPLY WITH PLANS/NOTIFICATION OF ADJACENT PROPERTY OWNERS

In the event of failure to comply with the plans approved by the Board of Adjustment, or with any other conditions imposed upon the Special Use Permit, within sixty (60) days, the permit shall thereupon immediately become void and of no effect. No building permits for further construction or certificates of occupancy under this Special Use Permit shall be issued, and all completed structures shall be regarded as nonconforming uses subject to the provisions of this Ordinance. In such cases, owners of adjoining property shall be notified that the Special Use Permit is no longer in effect.

6.7 EXPIRATION

In any case where a Special Use Permit has not been exercised within the time limit set by the Board of Adjustment, or within two years if no specific time limit has been set, then without further action, the permit shall be null and void. "Exercised" as set forth in this section shall mean that binding contracts for the construction of the main building have been let; or in absence of contracts that the main building is under construction to a substantial degree; or that prerequisite conditions involving substantial investment are contracted for, in substantial development; or completed (sewerage, drainage, etc.). When construction is not a part of the use, "exercised" shall mean that the use is in operation in compliance with the conditions set forth in the permit.

6.8 MODIFICATION OF PLANS

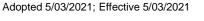
Where plans are required to be submitted and approved as part of the application for a Special Use Permit, the Board of Adjustments may authorize modifications of the original plans.

6.9 SUPPLEMENTAL REQUIREMENTS FOR SPECIAL USES

Specific Requirements: Site plans, in accordance with Section 2.2C of this Ordinance shall be submitted with the application. Also, site plans submitted for the purpose of obtaining a Special Use permit shall indicate the following (when applicable):

- A. Location and dimensions of outdoor activity areas including outdoor storage.
- B. Location and type of outdoor lighting.
- C. Areas of environmental concern (inclusive of floodplains, surface waters, and drainage ways. This shall also include documentation for soils suitability, air quality, and all appropriate local, state, federal agency documentation/approval).

Prior to approval of the site plan, County Planning Staff may consult with other qualified personnel for assistance to determine if the application meets the requirements of this Ordinance. Individual Special Uses may require more information, as given in this Section or elsewhere in this Ordinance (if applicable), or as outlined in Section 6.10.



The Board of Adjustment may require other information, as it deems necessary in order to determine if the proposal meets all requirements and will not endanger persons or property. The Board of Adjustment may impose reasonable conditions (i.e. hours of operation, parking requirements, and additional site safety and security measures) in addition to those given in this Section and elsewhere in this Ordinance. In order to do this, the Board must determine that additional conditions are necessary to protect the welfare and safety of the public and of property, or to meet the tests given elsewhere in this Section.

6.10 SPECIAL USE MINIMUM DEVELOPMENT REQUIREMENTS

In addition to the conditions listed above for Special Uses, some uses, which, because of their very nature, are recognized as having serious objectionable operational characteristics, particularly when several such uses are concentrated under certain circumstances, which can thereby cause a detrimental effect upon adjacent areas. Conditional regulation of these uses is necessary to insure that these negative effects will not contribute to the blighting or downgrading of the surrounding neighborhood. These conditional regulations are itemized in this section. The primary control or regulation is for the purpose of preventing a concentration of these uses in any one area (i.e. not more than one (1) such use within one thousand (1,000) feet of each other which would create such adverse effects). The requirements for each use that follows are additional requirements to the requirements listed in Section 6.3 and Sections 3 and 4:

A. ADULT ENTERTAINMENT ESTABLISHMENTS

- 1. Dimensional Requirements: No adult entertainment establishments may be located within one-thousand (1,000) feet of another adult entertainment establishment. That distance shall be measured from the exterior walls of the building(s) containing such regulated use.
 - a. No adult entertainment establishment may be located within one-thousand (1,000) feet of any residential use or from the property line of the adult establishment to the property line of the residential unit (s), churches, synagogues, temples, nursery schools, child care centers and public or private schools in all zoning zones, which will be measured from the property line (s) containing such regulated use. Areas zoned for residential use shall be classified as A-R, R-30, R-20, R-10, R-M-H-C, and shall include residential uses in the O-S and W-O-Z Zones.
- 2. Screening and Buffering: Shall comply as necessary with Section 4.16 of this Ordinance.
- 3. A required plan shall be submitted that shows the location of existing structures on property within one thousand (1,000) feet of exterior wall (s) of the regulated use, and the zoning properties within one thousand (1,000) feet of each property line of the regulated use from the property line of the adjacent use.
- 4. Hours of operation shall be between 11:00 AM and 10:00 PM, Monday through Thursday and until 12:00 AM on Friday and Saturday.
- 5. All viewing booths shall be open and visible to the manager (s) of the establishment.
- 6. If applicable, no viewing booth shall be occupied by more than one (1) person at a time.
- 7. If applicable there shall be a minimum separation of 6 feet between patrons and performers.
- 8. Servers of food and beverage shall at all times wear a shirt and pants.
- 9. No nude or semi-nude service/entertainment of any kind shall be allowed outside the building of a regulated use.
- 10. The adult establishment shall be limited to one (1) wall sign per premise; the sign shall be internally lighted, and shall be allowed maximum size of twenty (20) square feet.



- 11. No adult establishment shall allow, permit or condone patronage of any person under the age of eighteen (18) years of age upon the premises of the business.
- B. AIRPORTS (Include heliports, private landing strips and general aviation)
 - 1. An airport under this section and as defined in Section 12 of this Ordinance shall demonstrate compliance with the following requirements:
 - a. Heliports (see Definitions Section 12, refers to the entire site):
 Dimensional requirements for this use shall be a minimum site of five (5) acres.
 - 1. Setbacks from helicopter pads shall be at least one hundred (100) feet for each helicopter operating from the facility, up to a maximum setback of four hundred (400) feet.
 - b. Private Landing Strips: Dimensional requirements for this use shall be a minimum of ten (10) acres.
 - 1. An area equal to fifteen (15) percent of the runway length shall be within the site at both ends of the runway.
 - 2. The setback from the runway shall be a minimum of one hundred (100) feet for each aircraft operating from the facility, up to a maximum of four hundred (400) feet.
 - 3. No dwelling unit shall be within five hundred (500) feet of either end of the runway.
 - c. General Aviation Airport: Dimensional requirements for this use shall be one hundred (100) acres. Development plans for this classification shall be submitted with a noise impact assessment. Said assessment shall identify the initial twenty (20) year projected Day-Night Level (DNL-see Section 12 Definitions) noise contour lines beginning with fifty (50) DNL and proceeding to seventy-five (75) DNL.
 - 1. The twenty (20) year, seventy (70) DNL line shall be completely contained within the airport property, or adjacent land that has been granted a noise easement.
 - 2. If the fifty-five (55) DNL area expands, land use plan for all land within the fifty-five (55) DNL noise contour shall be submitted.
 - 3. This plan shall indicate the feasibility of restricting such land to non-residential uses.
 - Airport approval shall be based on the ability to minimize noise intrusion (pollution) to existing residential areas and to prohibit residential development that would limit future airport expansion.
 - 5. Once established, Vance County shall require all re-zonings that would permit residential use within the twenty (20) year, fifty-five (55) DNL noise contour to record the noise contours on the property.
 - 6. All developments and all individual lot surveys would be required to identify (illustrate) the noise contours, to be indicated



on the preliminary and final plats as reviewed by the Vance County Planning and Development Department and Vance County Planning Board. In addition, to be included on the final recorded plat for the development, a warning would accompany all such lots to indicate that Vance County will not limit future airport expansion due to residential development within the fifty-five (55) DNL noise contour.

- 7. This use (General Aviation Airport) shall be separated from all residential districts and schools by a minimum of one thousand five hundred (1,500) feet.
- C. Automobile and Other Storage, Parking, Junk, Salvage, or Wrecking Yards including Manufactured Home Storage and/or Junk Yard
 - 1. For the purpose of protecting the residents of Vance County from possible injury at junkyards (also called salvage yards), preserving the aesthetic quality of the local natural resources, preserving the integrity of land in close proximity to residential areas, and protecting and enhancing the economic viability and interest of the County residents, the following minimum standards for salvage/junkyards apply:
 - a. Dimensional Requirements:
 - 1. Minimum parcel size shall be at least four (4) acres excluding right-of-ways; and
 - 2. Minimum setback from any property line to any buildings (except existing buildings), equipment, operations (except roads) or junk shall be at least fifty (50 feet) excluding right-of-ways, unless an opaque or semi-opaque fence is utilized then the setbacks from property lines shall be at least twenty-five (25) feet.
 - b. Screening and Buffering: Outdoor storage shall meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.
 - c. Any gates allowing for access must meet the same height requirement and must be kept closed and locked after dark and at any time when not open for business.
 - d. Existing Non-conforming Junkyards and/or Salvage Yards:
 - 1. All existing junkyards and/or salvage yards have previously been given an amortization period of 30 days from June 2, 2008 (adoption of original Junkyard Ordinance #37). As such, Junkyards and/or salvage yards not registered during that time are considered new and shall adhere to the regulations for such new establishments. Existing junkyards and/or salvage yards are exempt from the following within Section 6.10:
 - a. Section C.1.a.1
 - b. Section C.1.e.2
 - c. Section C.1.e.3
 - d. Section C.1.e.4
 - 2. Owners and operators of junkyards and/or salvage yards shall be registered with the NC Department of Revenue.



- 3. Shall comply with State and Federal requirements for commercial uses and all applicable environmental requirements.
- e. New Junkyards and/or Salvage Yard Approved as a Special Use:
 - 1. Shall have a site plan approved.
 - 2. No junk, salvage, or wrecking yard shall be located closer than one-thousand (1000) feet to a pre-existing church, school, day care center, nursing home, skilled health care facility, hospital, public buildings, public recreation facilities, historical buildings, lakes, watershed areas, floodplain areas, residences, or residential areas (excluding residence of the owner or his agent).
 - 3. No Junk, salvage, or wrecking yard shall be located less than one-thousand (1000) feet from any property used or zoned for residential purposes. Areas zoned for residential use shall be classified as R-30, R-20, R-10, R-M-H-C, and shall include residential uses in the O-S and W-O-Z Zones.
 - 4. Shall not have a driveway or entrance roadway located closer than sixty (60) feet from any side property line; and
 - 5. Shall be fenced and screened completely, at minimum, with a protective fence, and screened from public view with vegetation.
 - 6. Shall be registered with the NC Department of Revenue.
 - 7. Shall comply with State and Federal requirements for commercial uses and all applicable environmental requirements.
- f. Annual Inspections of Junkyards/Salvage Yard:
 - The Vance Granville Health Department or NC DENR shall inspect each junkyard annually to determine that no vectors are present. Should vectors be identified, the owner, operator or maintainer shall immediately take steps to eliminate such vectors and shall submit satisfactory evidence to the Health Department and the Planning and Development Department that such vectors have been eliminated.
 - 2. Annual fire and safety inspections shall be made by the Vance County fire inspector or designee and a certificate of compliance issued. Failure to comply with inspection requirements may result in revocation of permits or other penalties and remedies as provided for in Section 2 of this ordinance.

Adopted 5/03/2021; Effective 5/03/2021

- D. Commercial and/or Non-Residential Uses in Residential Zoned Areas
 - 1. Dimensional Requirements: The Zone dimensional requirements shall apply.
 - 2. Screening and Buffering: Outdoor storage must meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.
 - 3. Lighting: Lighting must be directed away from adjacent property and roadways. Lighting shall be directed onto the applicant's site only.
 - 4. Access: Adequate space must be provided on the site that allows vehicles to exit onto the street without backing into the road, highway, or street (See Section 7).

E. ELECTRONIC GAMING OPERATIONS

1. Days/Hours of operation: Businesses engaging in electronic gaming operations activities may operate from 8:00 AM to 10:00 PM Sunday through Thursday and 8:00 AM to 12:00 midnight Friday and Saturday nights.



- 2. The maximum number of machines/terminals/computers for any electronic gaming operations business is twenty (20).
- 3. Minimum paved parking spaces:
 - a. One (1) space per every two (2) terminals or one (1) space per every one hundred (100) square feet of total floor area, whichever is greater;
 - b. One (1) handicapped space per every twenty five (25) or fewer spaces;
 - c. One (1) in every eight (8) accessible spaces, but not less than one, shall be served by an access aisle ninety six (96) inches wide minimum and shall be designated "van accessible";
 - d. One (1) additional space per each (1) employee.
- 4. If food or beverage is served, the establishment must meet the requirements of the Vance County Health Department, including any and all necessary permits and/or licenses.
- 5. The establishment must be a minimum of three hundred (300) feet from any building being used as a dwelling.
- 6. The establishment must be a minimum of two thousand (2,000) feet from any other organization engaged in an electronic gaming operations business or any adult or sexually oriented business.
- 7. The establishment must be a minimum of two thousand (2,000) feet from any established religious institution/synagogue, school, daycare center/home; library, public park, recreation area or motion picture establishment where "G" or "PG" rated movies are shown to the general public on a regular basis.
- 8. A straight-line drawing shall be prepared by a registered land surveyor depicting the property lines and the structures containing any existing electronic gaming businesses within two thousand (2,000) feet of the property; the property lines of any established religious institution/synagogue, school, daycare center/home; library, public park, recreation area or motion picture establishment where "G" or "PG" rated movies are shown to the general public on a regular basis that is within two thousand (2,000) feet of the property. For purposes of this Section, a use shall be considered existing or established if it is in existence at the time an application is submitted.
- 9. Measurement of distance separation shall be in a straight line from the closest point of the buildings at which the internet café/sweepstakes business is located.
- F. Industrial Uses in Non-Industrial Zones
 - 1. Dimensional Requirements: The zone dimensional requirements shall apply.
 - 2. Screening and Buffering: Outdoor storage must meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.
- G. Landfill (Demolition, Sanitary, Land Clearing Inert Debris) (Amended 10/7/2019)
 - 1. Distance Requirements (Only applies to Demolition or Sanitary Landfills): The landfill or any structure must be a minimum of one thousand (1,000) feet from any residential structure on surrounding properties. An owner occupied residence on the property of the tract is allowed. All buildings, including accessory garages or storage buildings, shall be set back a minimum of one hundred (100) feet from all property lines and street rights-ofway.
 - 2. Screening, Buffering, and Fencing: Outdoor storage must meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.
 - a. Any gates allowing for access must meet the same height requirement and must be kept closed and locked after dark and at any time when not open for business.



b. Screening is required which completely screens from view the stored items. Such screening shall be a durable wall or fence at least eight (8) feet high *in addition* to a minimum fifteen (15) foot wide vegetated strip around the entire perimeter of any outdoor storage area. This vegetated strip shall consist of a naturally wooded area or planted with a mixture of evergreen and deciduous trees and shrubs to simulate a naturally wooded area.

3. Licensing Requirements (Amended 10/7/2019)

- a. LCID (Land Clearing Inert Debris) Landfills minor, under two acres, require a copy of the Facility Plan approved by NCDEQ to be filed with the county planning department. Landfills major, greater than two acres, require a copy of the licensing issued by the North Carolina Division of Waste Management to be filed with the county planning department.
- b. LCID (Land Clearing Inert Debris) landfill facilities may not operate prior to 7:00 a.m. or after 7:00 p.m. unless allowed by the county manager in responding to excess debris resulting from a natural disaster.

H. Mining and Quarrying or other Extraction Operations

- 1. Additional Site Plan Requirements:
 - a. The names and addresses of property owner(s) or developers(s) and the designer or Registered Surveyor or Professional Engineer, if the plans are drawn other than by the property owner, operator or developer.
 - b. Date, scale and approximate North arrow.
 - Boundaries of the tract, parcel, plot or lot shown with bearing and distances.
 - d. Buffers, ingress and egress, surrounding land usage and any other specific information pertinent to the parcel, plot or lot
 - e. A vicinity map showing the location of the parcel, plot or lot.
 - f. The names for each adjoining property owner, shown on the parcel, plot or lot they own.
 - g. Land contours with vertical intervals of not less than ten (10) feet. U.S.G.S. 7.5 Minute Topographical Quadrangle Maps are acceptable.
 - h. When an expansion is being requested, the size and location of any existing area that is being operated as a mine or mining operation.
 - i. A letter or other certification of approval must be submitted from the North Carolina Department of Transportation, as to the safety and design of the access or entrance on to a State maintained street or road from the mine. In place of this requirement, the applicant may submit a completed application as required by the State of North Carolina for a Mining Permit.
- 2. Access: Access to a mine or mining operation must be from a road or street that is a State maintained road or a private road with a right-of-way width of not less than thirty (30) feet and a cleared or drivable area of not less than twenty (20) feet. Any ingress or



- egress that does not abut one of the above roads, entrance etc. must also have a right-of-way width of not less than thirty (30) feet and a cleared and drivable area that is adequately maintained at all times for vehicular travel and that is at least twenty (20) feet in width.
- 3. Screening and Buffering: An area of land, which shall not be less than one hundred fifty (150) feet in width, (unless the Board of Adjustment approves a lesser width) shall be provided along all boundaries of the affected land with the exception of permitted ingress and egress to public roadways. This buffer area may be left in a natural vegetative state if sufficient visual buffering is provided otherwise the buffer, where practicable, must be planted with trees, shrubs or plants that create a visual screen. Trees, plants, and ground covers to be planted must be native to the area and trees shall not be less than eight (8) feet in height when mature. Alternatively, an earthen berm (or berms) may be placed within the buffer for visual screening. Any berm must have a vegetative groundcover and side slopes sufficient to minimize erosion. If the berm(s) is (are) less than ten feet in height, trees not less than six (6) feet in height at the crown shall be planted on the berm(s) to supplement visual screening.
- 4. Additional Considerations: In the case of denial because all the requirements of this section were not met, the Application may be resubmitted when all requirements have been met, with no additional fee required, provided the plan is resubmitted within one hundred eighty (180) days of the notice of rejection or denial. Following approval by the Vance County Board of Adjustment, the Zoning Administrator is authorized to issue a Special Use Permit. No site disturbing activities are allowed until all required permits have been issued by the State of North Carolina, including but not limited to a Mining Permit, an Air Quality Permit and a Water Quality Permit.
- 5. If compliance with all terms of approval by the Vance County Board of Adjustment has not been completed within one year (365 days) from the date of approval of the application by the Board of Adjustment, the approval of the application and Special Use Permit shall be null and void and a new application must be submitted, unless the Board of Adjustment authorizes an extension beyond the one year time limit.
- I. Non-Single-Family Residential: Multi-Family Residential, Group Homes, Camp or Care Centers and Campground, Public and Private (including Recreational Vehicle Park), Manufactured Home Parks (see the Vance County Ordinances for requirements to establish Manufactured Home Parks), Motels, Hotels, and other Temporary Residential Use
 - 1. Non-Single-Family Residential (Multi-Family Residential)
 - a. Dimensional Requirements: Large scale multi-family dwelling developments shall comply with the lot, yard, and height requirements of the district in which the development is located, unless otherwise provided herein or by the Board of Adjustment. The dimensional requirements shall apply to the entire development proposal rather than to only individual structures.
 - b. Landscaping, Buffers, and Screening: Outdoor storage must meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.
 - c. Other Requirements: Individual structures shall be separated by at least forty (40) feet end-to-end, and fifty (50) feet in all other configurations. No multi-family structure shall be more than two hundred (200) feet in length. There shall be provided a minimum of three hundred (300) square feet of usable open space for each multi-family unit. Such open space



- shall be improved active and passive recreation areas for the use of residents thereof.
- d. Roads: Private, hard surface, drives are required. Individual structures or land uses need not front on a public street. Private drives shall allow for public safety vehicles to efficiently maneuver. The developer shall provide an assurance bond as outlined in Section 4.23 of this Ordinance, acceptable to the Board of Adjustment, that the owner, homeowners association, or agent thereof, will assume maintenance responsibilities for all private drives.
- e. Utilities: Utilities, including storm sewers, sanitary sewers, refuse collection; water system shall be submitted by the project engineer for review by the Vance County Plan Review staff. As-built drawings of the facilities will be required where the utilities are to be dedicated to, and accepted by, the County, City or State, or any other public entity. The developer shall provide assurances, acceptable to the Board of Adjustment, that the owner, homeowners association, or agent thereof, will assume maintenance responsibilities for all private utility systems.
- f. Parking: Requirements for parking shall meet the calculations outlined in the Table of Permitted Uses under Section 3 of this Ordinance and those identified in Section 7 of this Ordinance (if applicable)
- 2. Camp or Care Centers and Campground, Public and Private (including Recreational Vehicle Park)
 - a. Dimensional Requirements: In areas with developed campsites, separate sanitary facilities for both sexes (including showers) shall be available within four hundred (400) feet of each campsite and drinking water shall be available within one hundred (100) feet of each campsite.
 - b. In areas with developed campsites (those with paved/gravel camp sites and accessory structures for use by patrons), a camp store may be provided, which may sell camping supplies, e.g. food, ice, personal supplies, etc.
 - c. In primitive camping areas (those without paved/gravel camp sites and no accessory structures), drinking water and sanitary facilities shall be available within twelve hundred (1200) feet of the campground.
 - d. In areas with developed campsites, each campsite shall have a minimum of parking for two (2) vehicles.
 - e. Adequate lighting shall be provided for all common areas, including interior lighting in any building open at night. All sanitary facilities and dumping areas, water faucets, parking areas (other than at each campsite), recreation areas, and other service buildings and general use sites shall be lit at night, either with a light mounted on the building or as a pole light. In developed camping areas, lights will be installed along walkways to water and sanitary facilities and at roadway or driveway intersections.
 - f. All outdoor lighting shall have a total cutoff at ninety (90) degrees.
 - g. Screening and Buffering: Outdoor storage must meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.

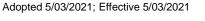


- h. Additional Plan Requirements:
 - 1. Topography of the site, at contour interval no greater than five (5) feet.
 - 2. Natural features such as streams, lakes or ponds, rocky outcrops, wooded areas, marshes, meadow land, or any other site in interest.
 - 3. Historic sites and cemeteries.
 - 4. Location and approximate size of all buildings and structures within five hundred (500) feet.
 - 5. Proposed layout of campground, natural and developed camping areas (includes individual sites, cabins, recreation areas, drinking water outlets, sanitary disposal facilities, comfort stations, other service buildings.
 - 6. In submitting a preliminary plan with the Special Use permit application, upon completion of review by the Board of Adjustments, if there are no changes to be made to the preliminary plan and the Special Use permit is approved, then no final plan review is required.
- i. Additional Site Operational Requirements:
 - 1. In developed camping areas, an attendant will be on the site twenty-four (24) hours a day while the campground is open for business.
 - 2. A public phone in working order shall be available.
 - 3. A fire extinguisher shall be available at each service building and at the office.
 - 4. Individual campsites and general use areas shall be kept clean and free from garbage, refuse, litter, and other conditions, which can lead to the transmission of disease, breeding of rodents and insects, and which may present a fire hazard or contribute to the spread of fire.
 - 5. All sanitary, laundry, and drinking water facilities shall be maintained in a clean, sanitary condition and kept in good repair at all times.
- 3. Manufactured Housing Parks: (Refer to the Vance County Manufactured Housing Park Ordinances-Ordinance #3 for requirements to establish Manufactured Housing Parks). Where applicable to develop a manufactured home community (also called a mobile home park) in other zoning categories as identified in this Ordinance, the more restrictive regulations of that particular zoning category shall apply in addition to the development standards as outlined in Ordinance #3.
- 4. Motels, Hotels, and other Temporary Residential Use.
 - a. Dimensional Requirements: The zone dimensional requirements shall apply.
 - b. Screening and Buffering: Outdoor storage must meet the requirements of Section 4.15. Screening and buffering must be provided in accordance with Section 4.16.
 - c. Lighting: Lighting must be directed away from adjacent property and roadways and shall be directed onto the applicant's site only.



- d. Access: Adequate space must be provided on the site that allows vehicles to exit onto the street without backing into the road, highway, or street (Also see section 7).
- e. Parking: Requirements for parking shall meet the calculations outlined in the Table of Permitted Uses under Section 3 of this Ordinance and those identified in Section 7 of this Ordinance (if applicable)
- f. Other Requirements:
 - 1. Roads: Private, hard surface, drives are required. Individual structures or land uses need not front on a public street. Private drives shall allow for public safety vehicles to efficiently maneuver. The developer shall provide, an assurance bond as outlined in Section 4.23 of this Ordinance, acceptable to the Board of Adjustment, that the owner, homeowners association, or agent thereof, will assume maintenance responsibilities for all private drives.
 - 2. Utilities: Utilities, including storm sewers, sanitary sewers, refuse collection, and water system shall be submitted by the project engineer for review by the Vance County Plan Review staff. As-built drawings of the facilities will be required where the utilities are to be dedicated to, and accepted by, the County, City or State, or any other public entity. The developer shall provide assurances, acceptable to the Board of Adjustment, that the owner, homeowners association, or agent thereof, will assume maintenance responsibilities for all private utility systems.
- J. Public and Semi Public Uses: Facilities & Buildings including schools, colleges, hospitals, parks, community centers and other similar uses.
 - 1. Dimensional Requirements: The Zone dimensional requirements shall apply.
 - 2. Screening and Buffering: Outdoor storage shall meet the requirements of Section 4.15. If the development is located within 30' to 100' of the adjacent property line of an existing residential occupied property, screening and buffering shall be provided in accordance with Section 4.16.
 - 3. Lighting: Lighting must be directed away from adjacent property and roadways. Lighting shall be directed onto the applicant's site only.
 - 4. Access: Adequate space must be provided on the site that allows vehicles to exit onto the street without backing into the road, highway, or street (Also see section 7).
 - 5. Parking: Requirements for parking shall meet the calculations outlined in the Table of Permitted Uses under Section 3 of this Ordinance and those identified in Section 7 of this Ordinance (if applicable).
- K. Radio and Television Studios.
 - 1. Dimensional Requirements: The Zone dimensional requirements shall apply.

 Transmission towers shall be setback a minimum distance that equals half the towers height subject to engineering plans and requirements.



- 2. Screening and Buffering: Outdoor storage must meet the requirements of Section 4.15. If the development is located within 30' to 100' of the adjacent property line of an existing residential occupied property, he/she must provide a screening and buffering in accordance with Section 4.16.
- 3. Lighting: Lighting must be directed away from adjacent property and roadways. Lighting shall be directed onto the applicant's site only.
- 4. Access: Adequate space must be provided on the site that allows vehicles to exit onto the street without backing into the road, highway, or street (Also see section 7).
- 5. Parking: Requirements for parking shall meet the calculations outlined in the Table of Permitted Uses under Section 3 of this Ordinance and those identified in Section 7 of this Ordinance (if applicable).
- L. Recreation, Outdoor (including, but not limited to, ball fields, swimming pools, horseback riding trails, saddle clubs and community rodeos).
 - 1. Dimensional Requirements: The Zone dimensional requirements shall apply.
 - 2. Screening and Buffering: Outdoor storage shall meet the requirements of Section 4.15. Screening and buffering shall be in accordance with Section 4.16.
 - 3. Lighting: Lighting must be directed away from adjacent property and roadways. Lighting shall be directed onto the applicant's site only.
 - 4. Access: Adequate space must be provided on the site that allows vehicles to exit onto the street without backing into the road, highway, or street.
 - 5. Parking: Requirements for parking shall meet the calculations outlined in the Table of Permitted Uses under Section 3 of this Ordinance and those identified in Section 7 of this Ordinance (if applicable).
 - 6. Hours of Operation: Hours of operation are limited to 7:00 am 10:00 pm with the exception of any use that may require overnight stay, such as a bed and breakfast or campground.

M. SHOOTING RANGES

- 1. The purpose of the following requirements is to promote and to protect the public health, welfare, and safety by regulating existing and proposed shooting ranges. The requirements are intended to minimize the adverse effects on adjoining properties relating to shot containment and noise mitigation. Each shooting range facility shall be designed to contain the bullets, shot, arrows and ricochets discharged on or within the range facility. Each shooting range shall also be designed to minimize off-site noise impacts generated by the activities conducted on the range facility. This section does not otherwise apply to the general discharge of firearms or the use of bows and arrows in accordance with other applicable laws and regulations.
- 2. Existing Shooting Ranges: Existing shooting ranges shall be considered non-conforming and will be subject to the "grandfather clause" in accordance with Section 5 of this ordinance.
- 3. Performance Standards: The following performance standards shall apply to all shooting range facilities:
 - a. *Shot containment*. Shooting range facilities shall be designed to contain all of the bullets, shot, arrows or other projectiles or any other debris on the range facility.
 - b. Noise mitigation. Noise levels measured at the property line shall not exceed sixty-five (65) dBA when located adjacent to residential or commercial property or seventy-five (75) dBA when adjacent to industrial property.



4. Development Requirements:

- a. Minimum design requirements. Where not otherwise specified within this ordinance, shooting range facilities shall apply for and have a Range Technical Team Advisor from the National Rifle Association (NRA) or an equivalent organization inspect and evaluate the range according to the guidelines specified by the NRA's Range Source Book: A Guide to Planning and Construction, current edition, and follow the suggestions made by the advisor.
- b. *Setbacks*. Notwithstanding the performance standards above the following setbacks shall apply.
 - 1. All shooting stations and targets on a range facility shall be located a minimum of three (300) feet from any property line; and
 - 2. The surface danger zone shall be contained within the leased boundary line of the range facility on leased land or the property boundary line for non-leased land.
- c. Warning signs. Warning signs meeting National Rifle Association (NRA) guidelines for shooting ranges shall be posted at one hundred-foot intervals along the entire perimeter of the shooting range facility and along the entire perimeter of the property lines in the same intervals.
- d. *Distance from occupied dwelling*. All shooting stations, targets, and firing lines shall be located at least one-half (1/2) mile from any existing, occupied dwelling.
- e. *Access to facility*. Access to the facility and shooting range shall be secured and controlled, with ingress and egress permitted only during operating hours as established below. Prior to issuance of a permit, a valid driveway permit must be obtained from North Carolina Department of Transportation.
- f. Written variance. The distance requirements of this section may be varied with written permission in the form of an affidavit from all adjoining property owners and all rightful leaseholders of dwellings located within the ½ mile surrounding area affected thereby, except that written approval is not needed for any adjoining land owned by the State of North Carolina.

5. Operational Requirements:

- a. Maintenance. Where not otherwise specified within this ordinance, shooting range facilities shall be operated and maintained in a manner that shall meet or exceed the guidelines as specified by the Range Technical Team Advisor upon inspection going by the guidelines in the NRA's Range Source Book: A Guide to Planning and Construction, current edition.
- b. Best Management Practices. Outdoor Shooting Ranges shall provide a plan outlining its Best Management Practices (BMPs) relating to lead management. Said plan shall meet or exceed the guidelines as specified by the Environmental Protection Agency's (EPA) Best Management Practices for Lead at Outdoor Shooting Ranges, current edition.
- c. *Hours of operation*. Shooting Ranges shall be allowed to operate between sunrise and sunset Monday through Saturday, except that the hours may be extended after sunset for purposes of subdued-lighting certification of law enforcement officers, or may be extended for other



- purposes only when a permit allowing such activity is issued in advance by the Sherriff's Office.
- d. Liability insurance. The permittee shall be required to carry a minimum of three million dollars (\$3,000,000.00) per occurrence of liability insurance. Such insurance shall name Vance County as an additional insured party and shall save and hold Vance County, its elected and appointed officials, and employees acting within the scope of their duties harmless from and against all claims, demands, and causes of action of any kind or character, including the cost of defense thereof, arising in favor of a person or group's members or employees or third parties on account of any property damage arising out of the acts or omissions of the permittee, his/her group, club, or its agents or representatives. The County shall be notified of any policy changes or lapses in coverage.

N. Solar Energy Systems, Large Scale (Solar Farms)

- 1. Height: Systems, equipment and structures shall not exceed twenty-five (25) feet in height when ground mounted. Excluded from this height requirement, however, are electric transmission lines and utility poles. Roof mounted systems shall not exceed the maximum height for the applicable zoning district.
- 2. Setback: Ground mounted solar energy systems as part of a solar farm shall have a setback for all equipment including fences a minimum of 100 feet from street right-of-ways and 50 feet from other property lines. The Board of Adjustment may reduce such setback requirement if the proposed or existing buffer is sufficient to screen the project from view from adjoining properties or public right-of-ways.
- 3. Screening and Fencing: Systems, equipment and structures shall be fully enclosed and secured by a fence with a minimum height of 8 feet. A thirty (30) foot vegetative buffer consisting of a compact evergreen hedge or other type of evergreen foliage shall be required along the entire perimeter of the facility. The buffer shall be planted at a minimum of three (3) feet tall and reach the height of at least eight (8) feet within three years and shall be maintained in good condition. Failure to maintain the buffer shall constitute a violation of this ordinance. Earth-berms, other topographical features and existing wooded areas may be accepted in lieu of the above requirements, if they conceal the use from public view and are maintained.
- 4. Lighting: If lighting is provided at the site, lighting shall be shielded and downcast such that the light does not spill onto the adjacent parcel or the night sky. Motion sensor control is preferred.
- 5. Noise: Noise levels measured at the property line shall not exceed fifty (50) decibels when located adjacent to an existing residence or residential district.
- 6. Power Transmission Lines: To the extent practical, all new power transmissions lines to any building, structure or utility connection shall be located underground. Existing above ground utility lines shall be allowed to remain in their current location.
- 7. Installation and Design: Electric solar system components must have a UL listing and must be designed with anti-reflective coating(s). Individual arrays/solar panels shall be designed and located in order to prevent glare toward any inhabited buildings on adjacent properties as well as adjacent street rights-of-way.
- 8. Compliance with Building and Electrical Codes: All solar farms shall be in conformance with the requirements of the State Building and Electrical Codes (current addition), the State of North Carolina and Vance County. All active solar systems shall be inspected by a Vance County building inspector.
- 9. Inspections: Each solar farm shall be required to have the facility inspected annually for 3 years following the issuance of the zoning permit to verify continued compliance with



- the Zoning Ordinance. Additional inspections necessitated by complaints or otherwise shall not replace the annual inspection requirement.
- 10. Utility Notification: No grid tied photovoltaic system shall be installed until evidence has been given to the Planning and Development Department that the owner has been approved by the utility company to install an interconnected customer-owned generator. Off-grid systems shall be exempt from this requirement.
- 11. Abandonment and Decommissioning: It is the responsibility of the solar system owner and landowner to notify the County and to remove all obsolete or unused systems within twelve (12) months of cessation of operations. Reusable components are to be recycled whenever possible.

A decommissioning plan signed by the party responsible for decommissioning and the landowner (if different) addressing the following shall be submitted with the permit application.

- a. Defined conditions upon which decommissioning will be initiated (i.e. end of land lease, no power production for 12 months, etc.)
- b. Removal of all non-utility owned equipment, conduit, structures, fencing, roads, and foundations
- Restoration of property to condition prior to development of the solar farm.
- d. The timeframe for completion of decommissioning activities.
- e. Description of any agreement (e.g. lease) with landowner regarding decommissioning.
- f. The party currently responsible for decommissioning.
- g. Plans for updating this decommissioning plan.

O. WIRELESS COMMUNICATIONS TOWERS ("CELL TOWERS")

- The purpose of the following requirements is to promote and to protect the public health, welfare, and safety by regulating existing and proposed communication towers. The requirements are intended to protect property values, create a more attractive economic and business climate, and enhance and protect the scenic and natural beauty of designated areas.
- 2. *General Requirements*. When allowed, such towers and associated equipment shall be subject to the following additional requirements:
 - a. Towers shall not interfere with normal radio and television reception in the vicinity. Commercial messages shall not be displayed on any tower. Violations shall be considered zoning violations and shall be corrected under the enforcement provisions.
 - b. Lighting shall not exceed the Federal Aviation Administration (FAA) minimum if lighting is required by the FAA. The lights shall be oriented so as not to project directly onto surrounding residential property, consistent with FAA requirements. Prior to issuance of a building permit, the applicant shall be required to submit documentation from the FAA that the lighting is the minimum lighting required by the FAA.
 - c. Towers shall be constructed and maintained in conformance with all applicable building code requirements.
 - d. In order to protect the public from unnecessary exposure to electromagnetic radiation, the tower owner shall provide appropriate Federal Communications Commissioner (FCC) documentation indicating that the power output levels do not exceed federally approved levels.



- e. In allowed districts, towers of 75 feet or more require that a Special Use Permit be granted by the Board of Adjustment. The Board of Adjustment may consider variances up to 10 % of the setback requirements for such towers as a part of the Special Use Permit approval.
- f. To encourage shared use of towers, the applicant for new wireless facilities shall be required to evaluate the reasonable feasibility of collocating new antennas and equipment on an existing wireless support structure or structures within the applicant's search ring. The Board of Adjustment may allow a new wireless facility to be placed within their search ring which includes existing wireless facilities upon being presented with written documentation that (1) appropriate space on the tower is not available, (2) the petitioner has made good faith efforts to negotiate an agreement with the owner of the existing wireless facility, or (3) equipment currently on the tower is not compatible with the proposed equipment. If the petitioner cannot locate on an existing tower and a new tower has to be constructed, the height of the tower cannot exceed two hundred feet (200'). The new tower cannot be located closer than one mile from an existing tower.
- g. All new towers shall be constructed to be able to accommodate at least two or more users so that future co-location will be available. In addition, reasonable accommodation for public service uses is also suggested.
- 3. When permitted, towers shall conform to the following dimensional requirements:
 - a. On top of structures: Towers (with the exception of concealed towers) may not be located on top of structures in any residential district. Towers which are located on top of structures in nonresidential districts (which are not tower accessory structures) shall not be more than 75 feet above the top of the structure. The structure shall meet the normal setbacks of the zone.
 - b. *Setbacks*: Towers located on the ground or top of a tower accessory structure:
 - a. If the tower is more than 75 feet high and adjacent to, inside, or separated by a public right of way from property that is residentially zoned or used, the setback shall be one foot (1') for every foot in height, or the setback of the zoning district, whichever is greater. If the tower is more than 75 feet in height and adjacent to, inside, or separated by a public right of way from nonresidential property, the setbacks shall be one foot (1') for every two feet in height or the setback in the zoning district, whichever is greater, and in no case less than fifty feet (50').
 - b. To encourage shared use of towers, applications for towers which will operate with more than one user immediately upon completion may reduce setbacks from adjacent nonresidential property. The setback from adjacent nonresidential property may be reduced by 25% when two users commit to occupy the tower immediately upon its completion, or reduced by 50% when three or more users commit to occupy the tower immediately upon its completion. However, the required setback distance may not be reduced to less than fifty feet (50'). The reductions do not apply if the tower adjoins a residential zone on any side.

- c. No setbacks shall be required if the tower is to be located on an existing structure.
- 4. *Residential District*. Towers (with the exception of concealed towers) where allowed in residential districts shall conform to the following setbacks:
 - a. Where allowed, towers 75 feet or more in height may be permitted subject to the issuance of a Special Use Permit. A tower shall have a setback from all property lines that is in compliance with this section.
 - b. To prevent a clear view of the base of the tower, the setback shall contain an established forested area with a depth of at least 100 feet. When the 100 foot forested area requirement cannot be met, a natural buffer shall be provided as required in Section 6.10.K.5 below. The Board of Adjustment, when deciding the Special Use Permit, may reduce the setback adjacent to nonresidential property upon consideration of circumstances which reduce the offsite effects of the tower such as topography, berms, the proximity of other existing or potential uses, and existing vegetation and improvements made to the site to obscure or reduce the visibility of the tower. The Board of Adjustment shall not reduce the required setback from adjacent property which has residential use.
 - c. No outdoor storage yards shall be allowed on tower sites, storage buildings that are secondary and/or incidental to the primary use of the site are allowed within the provisions of the designated zoning category.
- 5. Buffers.
- a. The base of the tower, any guy wires, and any associated structures, walls, or fences shall be surrounded by a landscaped buffer. The site developer may have the option of: (a) providing a buffer around the tower base and associated items individually or (b) providing a buffer around the perimeter of the entire site.
- b. A 10 foot buffer shall be provided between the tower and the property boundaries in all zones other than residential. In all residential zones, the buffer shall be a minimum of 25 feet in width.
- exercises every ev
- 6. *Site Plan Requirements*. The following information must be supplied with the site plan or building permit application for towers that are 75 feet in height or more prior to any approval:
 - a. Identification of the intended user(s) of the tower.
 - b. Documentation provided by registered engineer that the tower has sufficient structural integrity to accommodate more than one user.
 - c. Documentation by the applicant that no suitable existing facilities within the coverage area are available to the applicant.



- d. A statement indicating the owner's intent to allow shared use of the tower and how many other users can be accommodated.
- 7. *Co-Location*. To further encourage co-location, additional users and associated equipment that do not add to the tower's height may be added without additional approval. However, additional building code regulations may apply. Site plans must show the locations for at least two equipment buildings, even if the tower is proposed for a single user.
- 8. Collocation of small wireless facilities.
 - A. Small wireless facilities that meet the height requirements of G.S. 160D-936(b)(2) shall only be subject to administrative review and approval under subsection (d) of this section if they are collocated outside of city rights-of-way on property other than single-family residential property.
 - B. In no instance in an area zoned single-family residential where the existing utilities are installed underground may a utility pole, public utility pole, or wireless support structure exceed 40 feet above ground level, unless the Board of Adjustment grants a waiver or variance approving a taller utility pole, public utility pole, or wireless support structure.
- 9. Removal of Towers. Towers that are not used for a period of six (6) months or more shall be removed by the owner within one hundred eighty (180) days after receiving notice from the County to remove the tower. To assure the removal of towers that do not meet requirements for use or maintenance, this section serves as notice that the County may remove said tower and may file a lien collectable as taxes against the property.
- 10. Additional Requirements for Special Use Permits for Telecommunication Towers and Equipment:
 - a. When considering a Special Use Permit request, the Board of Adjustment shall be required to make a determination of the electromagnetic field (EMF) effects of the tower on the health of the public.
 - b. All property owners within a 1,500 foot radius and/or adjoining the property where the tower is proposed shall be notified, in writing, of the hearings at which the application will be considered.
 - c. Special Use Permits for all towers shall expire unless documentation, including but not limited to an FCC license, is submitted each January to the Board of Adjustment indicating that the tower is being utilized.
 - d. The tower shall meet all other applicable supplementary requirements.



SECTION 7 – PARKING, OFF STREET PARKING, AND LOADING

7.1 OFF-STREET PARKING REQUIRED

At the time of the erection of any building, or at the time any principal building is enlarged or increased in capacity by adding dwelling units, guestrooms, seats, or floor area, or before conversion from one type of use or occupancy to another, permanent off-street parking space shall be provided in the amount specified by this Section. Such parking space may be provided in a parking garage or properly controlled open space.

7.2 CERTIFICATION OF MINIMUM PARKING REQUIREMENTS

Each application for a Zoning Permit (except for dwellings) shall include information as to the location and dimensions of off-street parking and the means of ingress and egress to such space. This information shall be in sufficient detail to enable the Zoning Administrator to determine whether the requirements of this Article are met.

7.3 COMBINATION OF REQUIRED PARKING SPACE

The required parking space for any number of separate uses may be combined in one (1) lot, but the required space assigned to the one (1) use may not be assigned to another use, with one exception. One-half (1/2) of the parking space required for churches whose peak attendance will be at night or on Sundays may be assigned to a use which will be closed at night and on Sundays or in shopping centers where uses may have different peak hours.

7.4 REMOTE PARKING SPACE

If the off-street parking space required by this Ordinance cannot be reasonably provided on the same lot on which the principal use is located, such space may be provided on any land within reasonable distance of the main entrance to such principal use, provided such land is in the same ownership as the principal use and in the same zoning zone. Said land shall be used for no other purposes so long as no other adequate provisions of parking space meeting the requirements of this Ordinance have been made for the principal use. In such cases, the applicant for a permit for the principal use shall submit with their application for a Zoning Permit or a Certificate of Occupancy an instrument duly executed and acknowledged, which subjects said land to parking use in connection with the principal use for which it is made available. Such instrument shall become a permanent record and be attached to the Zoning Permit or Certificate of Occupancy application. In the event such land is ever used for other than off-street parking space for the principal use to which it is encumbered and no other off-street parking space meeting the terms of this Ordinance is provided for the principal use, the Certificate of Occupancy or Zoning Permit for such principal use shall become void.

7.5 REQUIREMENTS FOR PARKING LOTS

Where parking lots for more than five (5) cars are permitted or required, the following provisions shall be complied with in addition to the requirements below:

- A. The lot may be used only for parking and not for any type of commercial use, but shall not preclude convention exhibits or parking of rental vehicles.
- B. All entrances, exits, barricades at sidewalks, and drainage plans shall be approved and constructed before occupancy.
- C. A strip of land ten (10) feet wide adjoining any street line or any lot zoned for residential uses shall be reserved as open space, guarded with wheel bumpers and planted in grass and/or shrubs or trees.
- D. Any parking lot of more than five (5) cars which is adjacent, along the side or rear property lines, to property used or zoned for residential uses, shall be provided with screening as described in Section 4.17.



- E. Only one (1) entrance and one (1) exit sign no larger than two (2) square feet prescribing parking regulations may be erected at each entrance or exit.
- F. It shall be the duty of the property owner to keep the parking area free of damaging potholes, obstructions, and maintain the overall appearance and functionality of the parking area in good repair.

7.6 MOBILE, MANUFACTURED AND MODULAR HOME AND TRAILER PARKING AND STORING

It shall be unlawful to park or otherwise store for any purpose whatsoever any manufactured or modular home (see Definitions Section 12) or trailer within any-zone except as follows:

- A. At a safe, lawful, and non-obstructive location on a street, alley highway, or other public place, providing that the trailer or mobile home shall not be parked overnight;
- B. Within a mobile home park, provided, however, the mobile home shall either have a North Carolina or HUD Label of Compliance permanently attached thereto; and,
- C. On any other lot or plot outside of the City of Henderson and its Extraterritorial Jurisdiction (ETJ) provided that trailers, as defined in Section 12, shall be stored in a garage or carport or in the rear or side yard.
- D. Junk or Dilapidated Mobile Home/Manufactured Home Storage or repair yards must obtain a Special Use permit.
- E. Trailers shall include those pulled behind a tractor trailer (18-wheeler) and for use in transporting vehicles, boats, or freight shall be parked in a suitable commercial parking area outside of residential areas.
- F. In circumstances where a dwelling unit (modular or manufactured) is either new for installation or being replaced, the replacement unit may be temporarily stored on the development site for up to five (5) days with permission of the property owner.

7.7 VEHICLE STORAGE

A. Residential, Open Space, and Watershed Overlay Zones: Only vehicles intended for personal use (not part of a commercial operation) shall be parked or stored on any property zoned for Residential use (includes residential uses in the O-S and W-O-Z categories, this provision is not inclusive of the Agricultural Residential zone). No storage of commercial inventory whatsoever shall be permitted and no inoperative and/or unlicensed vehicles shall be permitted to be parked or stored longer than (14) fourteen days, unless said vehicles are being stored while undergoing repairs and are not part of a commercial operation prohibited in the residential zone. This Section shall further not be applicable to restoration of antique vehicles. (NOTE: Four or more junk, inoperable, or unlicensed vehicles constitute a junk yard). Commercial trucks or vans customarily driven home by employees or owners shall not be affected by the regulations of this Section, this shall include the cab portion (also called a "semi") of an eighteen (18) wheeled truck and trailer combination, customarily used to transport a large, multi-wheeled trailer (trailers of this type shall be stored in an appropriate commercial or industrial location). Storage of Junk, inoperable or unlicensed vehicles shall comply with the Vance County Abandoned Vehicle Ordinance-Ordinance #2. This section shall apply to the following zoning categories as either a residential zone or where a residential use is permitted (not inclusive of the A-R zone): R-30, R-20, R-10, R-M-H-C, O-S, and W-O-Z.

B. Commercial and Industrial Zones: Customer and employee parking is permitted along with the parking and storing of governmental or commercial vehicles, in any public, commercial, or industrial zone. Inoperative vehicles shall only be permitted to be parked or stored while undergoing repairs at a commercial garage or automobile service station or if stored in an approved junk or wrecking yard (NOTE: Four or more junk, inoperable, or unlicensed vehicles constitute a junk yard).



7.8 MINIMUM PARKING REQUIREMENTS

The number of off-street spaces required by this Article shall be provided on the same lot with the principal use except as provided in Part 4 of this Section and the required number of off-street parking spaces specified for each use shall be considered as the absolute minimum. In addition, a developer shall evaluate their own needs to determine if they are greater than the minimum specified by this Ordinance. For purposes of this Ordinance, an off-street parking space shall be no less than one hundred sixty (160) square feet in area, plus adequate ingress and egress provided for each off-street parking space.

- Single Family Residential Uses shall provide parking area for at least 2 vehicles off the public right of way.
- Multi-family Uses shall provide parking spaces for at least 2 vehicles per unit off the public right of way in designated park lots.
- © Commercial Uses shall provide 1 parking space for each 200 sq. feet of gross floor area off the public right-of-way.
- Industrial Uses shall provide 1 parking space for each 500 sq. feet of gross floor area off the public right-of-way.

The Zoning Administrator is allowed to adjust these parking ratios when it is deemed necessary and place such reason on the face of the permit and/or site plan.

7.9 DESIGN STANDARDS FOR OFF-STREET PARKING

All off-street areas required by this Section shall conform to the following design standards:

A. All parking spaces shall have minimum dimensions of nine (9) feet in width and eighteen (18) feet in length. All access or backup aisles shall conform to the following minimum dimensions:

Parking Angle	Aisle Dimension
90 degrees	24 feet
60 degrees	18 feet
45 degrees	14 feet
30 degrees	12 feet
0 degrees	12 feet

- B. The use of streets, sidewalks, alleys or other public rights-of-way for parking or maneuvering to and from off-street parking spaces is prohibited, except where such maneuvering is necessary in the use of driveways for access to and from single-family and two family dwellings. All off-street parking areas shall be so arranged that ingress and egress is by forward motion of the vehicle.
- C. Parking area edges shall be protected by suitable curbing, wheel guards, or other means to prevent vehicular encroachment on a public right-of-way or on adjacent property, and to protect the public right-of-way and adjoining properties from the damaging effects from surface drainage from parking lots. It shall be the duty of the property owner to keep the parking area free of damaging potholes, obstructions, and maintain the overall appearance and functionality of the parking area in good repair.
- D. Where parking or loading areas are provided adjacent to the public street, ingress and egress thereto shall be made only through driveways not exceeding twenty-five (25) feet in width at the curb line of said street, except where the Zoning Administrator finds that a greater width is necessary to accommodate the vehicles customarily using the driveway.
- E. Where two (2) or more driveways are located on the same lot, other than a mobile home park, the minimum distance between such drives shall be thirty (30) feet or one third (1/3) of the lot frontage, whichever is greater; however, this provision shall not apply to any commercial or industrial planned development. Driveway locations in such developments shall be approved by the North Carolina Department of Transportation.



- F. Businesses adjacent to, or integrated in, a shopping center or cluster of commercial facilities shall use the common access with other business establishments in the center.
- G. No driveway shall be located closer than twenty-five (25) feet to any street intersection.
- H. Any lighting of parking areas shall be shielded so as to cast no light upon adjacent properties and streets.
- I. All applicable ADA (American Disabilities Act) standards shall apply.

7.10 OFF-STREET LOADING PURPOSE AND GENERAL REQUIREMENTS

Off-street loading requirements are established in order to ensure the proper and uniform development of loading areas throughout the County, to relieve traffic congestion in the streets and to minimize any detrimental effects of off-street loading areas on adjacent properties. Each application for a Zoning Permit or Certificate of Occupancy shall include plans and other information of sufficient detail to enable the Zoning Administrator to determine whether or not the requirements of this Article have been met. Plans for off-street loading areas shall include information as to:

- A. The location and dimensions of driveway entrances, access aisles and loading spaces.
- B. The provisions for vehicular and pedestrian circulation.
- C. The location of sidewalks and curbs.

The Zoning Permit or Certificate of Occupancy for the construction or use of any building, structure or land where off-street loading space is required shall be withheld by the Zoning Administrator until the provisions of this Section have been met. If at any time such compliance ceases, any Certificate of Occupancy which shall have been issued for the use of the property shall immediately become void and of no effect.

7.11 DESIGN STANDARDS FOR OFF-STREET LOADING SPACE

The off-street loading space required by this Section shall be provided for standing, loading, and unloading operations either inside or outside a building, on the same lot with the use served, and shall conform to the following standards:

- A. For uses containing a gross floor area of less than 20,000 square feet, each off-street loading space shall have minimum dimensions of fifteen (15) feet in width and thirty (30) feet in length.
- B. For uses containing a gross floor area of 20,000 square feet or more, each off-street loading space shall be fifteen (15) feet in width and forty-five (45) feet in length as a minimum.
- C. All off-street loading spaces shall have a minimum vertical clearance of fifteen (15) feet.
- D. Access aisles or apron spaces shall be of sufficient width to allow for proper backing and/or turning movements.
- E. Required off-street loading areas including drives and access aisles shall be paved with an all-weather hard surface material.
- F. Loading spaces and access ways shall be located in such a way that no truck or service vehicle using such areas shall block or interfere with the free, normal movement of other vehicles on a service drive or on any off-street parking area, public street, aisle or pedestrian way used for general circulation. In addition, the off-street loading facilities shall be designed and constructed so that all maneuvering of vehicles for loading and unloading purposes shall take place entirely within the property lines of the premises.
- G. Loading area edges shall be protected by suitable curbing to prevent encroachment on a public right-of-way or on adjacent property, and to protect the public right-of-way and adjoining properties from the damaging effects of surface drainage from off-street loading areas.



- H. Any lighting of loading areas shall be shielded so as to cast no light upon adjacent properties and streets.
- I. Any off-street loading areas and access ways adjacent, along the side or rear property lines, to property used or zoned for residential purposes, shall be provided with screening meeting the standards described in Section 4.16 (Screening and Buffering).

7.12 MINIMUM OFF-STREET LOADING REQUIREMENTS

Off-street loading shall be provided and maintained as specified in the following:

A. Uses which normally handle large quantities of goods, including but not limited to industrial plants, wholesale establishments, storage warehouses, freight terminals, hospitals or sanitariums, and retail sales establishments shall provide off-street loading facilities in the following amounts:

Gross Floor Area (Min. Square Feet) Nu	iniber of Spaces
5,000 - 20,000	1
20,001 - 50,000	2
50,001 - 80,000	3
80,001 - 125,000	4
125,001 - 170,000	5
170,001 - 215,000	6
215,001 - 260,000	7
For each additional 45,000	1 – Additional

B. Uses which do not handle large quantities of goods, including but not limited to office buildings, restaurants, funeral homes, hotels, motels, apartment buildings, and places of public assembly, shall provide off-street loading facilities in the following amounts:

Gross Floor Area (Min. Square Feet	Number of Spaces
5,000 - 80,000	1
80,001 - 200,000	2
200,001 - 320,000	3
320,001 - 500,000	4
For each additional 180 000	1- Additional

SECTION 8 – VARIANCES

Where applicable in this section, the State Environmental Management Commission is under the North Carolina Department of Natural Resources-Division of Water Quality. For purposes of development that requires a variance for under the minimum watershed management requirements for the low density option (see 15A NCAC 2B), this text is appropriate for this Ordinance.

8.1 Purpose

When unnecessary hardships would result from carrying out the strict letter of this zoning ordinance, the Board of Adjustment shall vary any of the provisions of this ordinance upon a showing of all of the following:

- A. The unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
- B. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance. A variance may be granted when necessary and appropriate to make a reasonable accommodation under the Federal Fair Housing Act for a person with a disability.
- C. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
- D. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.

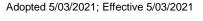
8.2 Authorized Variances

The Board of Adjustment is authorized to grant variances to the provisions of this ordinance in accordance therewith. No change in permitted uses may be authorized by variance. Appropriate conditions may be imposed on any variance, provided that the conditions are reasonably related to the variance.

8.3 Applications

A person requesting a zoning variance must submit a variance application to the Planning and Development Director or his/her designee. Applications shall include the following:

- A. Site plan drawn to an appropriate scale and illustrating property lines, existing or proposed structures, parking areas and other built upon areas, surface water drainage (if applicable), and indicates north point.
- B. Lists name and address of person who prepared the plan.
- C. Lists the date of the plan and date of revisions (if applicable).
- D. A complete and detailed description of the proposed variance.
- E. Any other pertinent information which the applicant feels would be helpful.
- F. For purposes of notification to abutting property owners, the following is required for a variance application:
 - 1. Location of property.
 - 2. General description of the request
 - 3. Time and date of meeting
 - 4. Location of meeting



5. Notification to be sent to: adjoining property owners if applicable and to all other local governments having jurisdiction abutting the property, this notice shall be sent by the Zoning Administrator by first class mail.

8.3.1 VARIANCES:

The applicant has the burden of proving unnecessary hardship. The proof must be compelling and reasons for granting the variance must be substantial. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, personal preferences, or the disapproval of one's neighbors also do not qualify. The hardship that the applicant must prove must be measured against the community's need for strictly enforced regulations that protect its citizens from dangers and damages from development and the long-term risk to owners and occupants of the building.

Variances may be issued for the repair or rehabilitation of historic structures upon the determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

A written report addressing each of the above factors shall be submitted with the application for a variance. Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance. Conditions for Variances include:

- 1. Variances may not be issued when the variance will make the structure in violation of other Federal, State, or local laws, regulations, or ordinances.
- 2. Variances shall only be issued upon a determination that the variance is the minimum necessary to afford relief.
- 3. Variances shall only be issued upon (i) a showing of good and sufficient cause; (ii) a determination that failure to grant the variance would result in exceptional hardship; and, (iii) a determination that the granting of a variance will not result in additional threats to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- 4. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the requirement and what the variance specifies. Such notification shall be maintained with a record of all variance actions.
- 5. The Zoning Administrator shall maintain the records of all appeal actions.

8.4 Quasi-Judicial Proceedings

Although the Board of Adjustment acts in a quasi-judicial capacity, it is not intended that proceedings before it be conducted as formally as those before courts. Nevertheless, it is necessary that the rules of procedure and evidence set forth in this ordinance be followed to protect the interests of the parties and of the public. To this end, the presiding officer or the clerk of the Board may administer oaths to any witnesses and may make any rulings as are necessary to preserve fairness, order, or proper decorum in any matter before the Board of Adjustment. In addition, any member of the Board of Adjustment or any interested party may object to, and the presiding officer may exclude, any evidence or testimony or statement which is so incompetent, irrelevant, immaterial, or unduly repetitious as to fail to reasonably address the issues before the Board of Adjustment.

8.5 Evidence and Testimony

Any interested party (defined as person (s) affected by the variance application) may be given the opportunity to present evidence or testimony, to cross-examine witnesses, to inspect documents, and to offer evidence or testimony in explanation or rebuttal. A person who is interested in the matter but who does not have a personal stake in the outcome (such as a likely effect on his or her property value) may



attend and observe the hearing, but they have no legal right to offer evidence, ask questions, or otherwise directly participate in the matter. The presiding officer (Board of Adjustment Chair or County staff) may determine whether testimony, oral argument, or cross-examination must be limited in duration. Any member of the Board of Adjustment may question any interested party. Persons other than interested parties may make comments. Such comments must be competent, relevant, and material.

8.6 Hearings

- A. The Board of Adjustment must hold a quasi-judicial hearing before taking action on a zoning variance application.
- B. At least 10 working but not more than 25 days before a hearing on a variance, the Planning and Development Director or his/her designee must post notice of the hearing on the affected property and send written notice of the hearing to the applicant, the owner of the affected property, and the owners of all real property adjoining the affected property (as shown on County tax listings current when the application is filed).
- C. If a requested variance would result in the relaxation of any of the North Carolina Department of Natural Resources-Division of Water Quality minimum watershed management requirements (or the Vance County Watershed Protection Ordinance), the Planning and Development Director or his/her designee must, at the same time, send written notice of the hearing to all other local governments having jurisdiction within the same water supply watershed.
- D. On determining that the application would impact non-adjoining properties in the neighborhood of the affected site, the Planning and Development Director or his/her designee may also send written notices to the owners of those properties, and may require the applicant to submit the additional materials necessary to provide such notices.
- E. Notices to the applicant and the owner of the affected site must be sent via mail,. All other mailed notices must be sent via first-class mail to those interested parties as applicable.
- F. If the Planning and Development Director or his/her designee determines that an application for a variance would have significant impacts on properties beyond the neighborhood of the affected site, the Planning and Development Director or his/her designee must cause notice of the hearing to be published in a newspaper of general circulation in the county or the area of the affected site. The notice must be published in each of 2 successive calendar weeks, with the first notice being published between 10 and 25 days before the hearing date.
- G. The Planning and Development Director or his/her designee must make every reasonable effort to comply with these notice requirements. However, where the Planning and Development Director or his/her designee has made a reasonable and good-faith attempt to comply with the requirements for notice to owners of adjoining properties, no failure to comply with those requirements must render any decision on the application invalid.

8.7 Review and Decision

The decision of the Board of Adjustment must include findings of fact and conclusions of law and must be based upon substantial evidence or testimony that is competent, relevant, and material. Findings concerning the existence or nonexistence of crucial facts must be based upon sworn evidence or testimony unless the party or parties before the Board of Adjustment stipulate the facts or waive this requirement. Every decision of the Board of Adjustment must also include the vote, abstention from voting, or absence of each member.

A. Appeals for variances shall be filed with the Zoning Administrator, who shall transmit all such records to the Board of Adjustment.



- B. The Board of Adjustment shall fix a reasonable time, not to exceed thirty (30) days, for the hearing of the variance.
- C. The Zoning Administrator shall post a sign on any property for which a Variance has been requested. The sign shall state the date, time, and a phone number to call for information on the Variance, and shall be posted at least 10 days, but not more than 25 days prior to the hearing date.
- D. The concurring vote of four-fifths of the board shall be necessary to grant a variance.
- E. Each decision of the Board of Adjustment is subject to review by the Vance County Superior Court. Any appeal to the Superior Court shall be taken within thirty (30) days after the decision of the Board of Adjustment is filed in the Office of the Zoning Administrator, or after a written copy of the decision is delivered to the appellant by mail, or personal service, whichever is later.

Additional Evidence: Notwithstanding any other provision of this ordinance, the Board of Adjustment may require additional evidence, as part of the initial application and hearing process, or memoranda of authority to be submitted, and may reserve its decision until such evidence or memoranda have been submitted and considered.

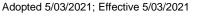
8.8 Required Findings of Fact

A variance may not be granted unless the Board of Adjustment makes findings of fact supporting its conclusions, and concludes, at a minimum, that:

- A. There are special circumstances or conditions applying to the land, building, or use referred to in the application which exists through no fault of the property owner;
- B. The granting of the application is necessary for the preservation and enjoyment of property rights;
- C. The granting of the application will not materially affect adversely the health or safety of persons residing or working in the neighborhood of the proposed use, and will not be materially detrimental to the public welfare or injurious to property or improvement in such neighborhood;
- D. A denial of the application would cause unnecessary hardships to the landowner;
- E. In areas of special flood hazard the Board of Adjustment must additionally conclude that:
 - 1. No increase in flood levels will result within any designated floodway during the base flood discharge as a result of granting the variance;
 - 2. A more limited or narrower variance would not provide relief;
 - 3. Failure to grant the variance would result in exceptional hardship (see Definition Section 8.1) to the property-owner;

<u>NOTE:</u> The Board of Adjustment must make specific findings of fact, based on evidence introduced, on the following issues, and these findings of fact must not be inconsistent with the conclusions concerning variances in areas of special flood hazard:

- A. The danger that materials may be swept onto other lands to the injury of others;
- B. The danger to life and property due to flooding damage;
- C. The susceptibility of the proposed use and its contents to flood damage and the effect of such damage on the individual owner;
- D. The importance of the services provided by the proposed use to the community;
- E. The necessity for the use of a waterfront location, where applicable;
- F. The availability of alternative locations on the same parcel, not subject to flooding damage, for the proposed use;
- G. The compatibility of the proposed use with existing and anticipated development;
- H. The safety of access to the property in times of flood for ordinary and emergency vehicles;
- I. The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters, and the effects of wave action, if applicable, expected at the site; and



J. The cost of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as wastewater, gas, electrical, and water systems, and streets and bridges.

8.9 Conditions of Approval

In granting zoning variances, the Board of Adjustment is authorized to impose conditions that secure substantially the objectives of the regulations of the Zoning Ordinance or provisions being varied or modified.

8.10 Variations from State Watershed Management Requirements

If the Board of Adjustment grants a variance that would result in the relaxation, by a factor greater than ten (10%), of any of the North Carolina Department of Natural Resources-Division of Water Quality minimum watershed management requirements (or the Vance County Watershed Protection Ordinance), the Board of Adjustment's decision is subject to review and approval by the State Environmental Management Commission before it becomes final. In such cases, the Planning and Development Director or his/her designee must prepare a preliminary record of the variance application, the evidence submitted to the Board of Adjustment, and the Board of Adjustment's findings and decision, and submit it to the State Environmental Management Commission approves the variance as granted by the Board of Adjustment, the Board of Adjustment's decision must then be considered final and the variance granted. If the State Environmental Management Commission approves the variance with conditions varying from, or in addition to, those imposed by the Board of Adjustment, the Board of Adjustment must revise its decision to include the varied or added conditions. If the State Environmental Management Commission denies the variance, the Board of Adjustment must reverse its decision and deny the variance.

8.11 Appeals to Superior Court

Any interested party (defined as person (s) affected by the variance application) may seek review of the decision of the Board of Adjustment in Superior Court by proceedings in the nature of certiorari. Any notice of appeal to the Superior Court must be taken within thirty (30) days after decision of the Board of Adjustment is filed in the office of the zoning administrator, or after a written copy thereof is delivered to the person taking the appeal by personal service or first class mail, whichever is later. The person required to provide notice shall certify to the local government that proper notice has been made, and the certificate shall be deemed conclusive in the absence of fraud.

SECTION 9 – SIGNS

For the purposes of this Ordinance, the intent of this Section is to recognize that signs serve a legitimate public service, complementing and supporting trade, tourism and investment within Vance County. The regulations of this section are intended to establish standards which maximize the effectiveness of permitted signs while limiting visual distraction to motorists, preserving property value, and preserving the natural aesthetics of the County.

All signs except those specifically listed in Section 9.3 (Exempt Signs) shall be erected, installed, or modified only in accordance with a valid sign permit issued by the Zoning Administrator. Sign permits shall be issued in accordance with the zoning permit requirements and procedures of this Ordinance. If plans submitted for a zoning, special use, or Special Use permit include sign plans in sufficient detail that the Zoning Administrator can determine whether the proposed sign(s) comply with the provisions of this Section, then issuance of the requested zoning, special use, or Special Use permit shall constitute approval of the proposed sign(s).

NOTE: In all circumstances, signs must meet all applicable North Carolina Department of Transportation (NC-DOT) standards and provisions (per all NC-DOT guidelines) for clear lines of site and placement of signs in NC-DOT rights of way. Applicants shall comply with all applicable building and zoning regulations, as necessary, in relation to sign permits.

9.2 Sign Standards

- 9.2.1. All signs, except for those attached flat against the wall of a building, shall be constructed to withstand minimum wind loads as specified by the NC State Building Code. Sufficient documentation shall be submitted to the Zoning Administrator for review to assure that wind and stress requirements have been met prior to any permit being issued.
- 9.2.2. All signs shall be installed and maintained in compliance with the North Carolina State Building Code and the National Electrical Code and shall have appropriate permits and inspections. Electrical signs and fixtures shall bear labels of a nationally accepted testing laboratory.
- 9.2.3. All signs shall be maintained in a state of good repair and shall present a neat, well-kept appearance. The Zoning Administrator or his authorized representative shall have the authority to order the painting, repair, alteration or removal of a sign, at the expense of the owner of such sign, which shall constitute a hazard to safety, health or public welfare by reasons of inadequate maintenance, dilapidation or obsolescence. The existence of a sign or its support structure with no message display for a period of one hundred-eighty (180) days shall be justification to declare the sign abandoned and require its removal.
- 9.2.4. All lights used for the illumination of a sign shall be shielded so that the light will not shine directly on surrounding areas (inclusive of residential areas within three hundred (300) feet) or create a traffic hazard or distraction to operators of motor vehicles on the public thoroughfares. The Zoning Administrator shall have the power to order a change in the illumination of any sign that becomes a hazard or a nuisance.
- 9.2.5. No illuminated sign, other than professional or occupational signs or nameplates, on-premises signs, incidental signs, or identification signs shall be permitted within 100 feet of any residential zoning district. Illuminated signs other than those listed above which are located within 300 feet of a residence or residentially zoned district shall not be illuminated between the hours of 12 midnight and 6 a.m., unless said lighting is designed in such as a manner as to shield the neighboring residence or residentially zoned district from the illumination.



- 9.2.6. Any sign erected without proper permits or in violation of this Section shall be brought into compliance within 30 days of notification by the Planning and Development Director or his/her designee or said sign shall be removed immediately.
- 9.2.7. Any sign that meets the provisions of this Ordinance, upon its adoption, and requires a remedy to any deficiency (such as a sign that is damaged and requires repair), in this instance the owner shall be given written notice by certified letter return receipt requested by the Zoning Administrator to remedy the situation. The owner shall have ninety (90) days to remedy or be in violation of this Ordinance.

9.3 Exempt Signs

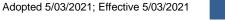
The following listed signs are subject to all placement and dimensional requirements of this Section and shall comply with the North Carolina Department of Transportation sight distance and road rights-of-way clearances. The following listed signs shall, however, be exempt from permit and fee requirements. Exempt signs shall be maintained in good condition and shall not constitute a hazard to safety, health or public welfare. Exempt signs that are found to be in violation shall be ordered corrected or removed.

- 1. Any sign 32 square feet or less in area.
- 2. Any sign that is required by law or erected at the direction of a governmental agency.
- 3. Signs erected to regulate traffic.
- 4. Any warning signs; utility signs; signs for public use; and no trespassing, no hunting, or neighborhood watch signs shall contain no commercial message.
- 5. Mailboxes, house numbers, nameplates, and building markers not exceeding 32 square feet in area
- 6. Religious symbols at a place of worship or at a church-owned or operated facility. Such symbols must meet all setbacks and lighting requirements for signs.
- 7. Construction signs having a maximum area of 32 square feet and a maximum height of 8 feet and limited to one sign per construction site per road frontage. Exempt construction signs must be removed within 15 days following the completion of the project.
- 8. Real estate signs having a maximum area of 32 square feet and a maximum height of 8 feet. Real estate signs are limited to one per site or one per 300 feet of road frontage. Temporary real estate signs associated with the marketing of a subdivision shall be limited to one sign per subdivision entrance and 32 square feet in area and 8 feet in height. This type of sign must be set back a minimum of 2 feet from all exterior property lines of the subdivision and shall remain clear of the roadway sight distance easement. An additional directory-type sign of the same dimension, height and setback requirements may be located within the interior of a subdivision. Real estate signs must be removed within 30 days following completion of the project or transaction.
- 9. Temporary signs shall not be placed more than 30 days prior to the event, election or grand opening and must be removed within 10 days following the event, election or grand opening. Such signs are limited to 32 square feet in area and 8 feet maximum height.

9.4 Prohibited Signs

The following signs shall not be permitted, erected or maintained within Vance County's planning and zoning jurisdiction inclusive of the Towns of Kittrell and Middleburg (not inclusive of the City of Henderson or its Extraterritorial Jurisdiction-ETJ).

- Signs with moving, revolving or rotating parts, optical illusions or movement or mechanical
 movements by any description or other apparent movement achieved by electrical, electronic or
 mechanical means, except for time, temperature, date signs; traditional barber poles; and
 electronically controlled message signs.
- 2. Signs with lights or illuminations which flash, move, rotate, scintillate, blink, flicker, vary in intensity, vary in color or use intermittent electrical pulsations, except for: time, temperature, date signs; traditional barber poles; and electronically controlled message signs.



- 3. Strings of light bulbs used in connection with commercial premises for commercial purposes other than traditional holiday decorations.
- 4. Portable signs, including signs painted on or displayed on vehicles or trailers used to serve primarily as a sign, shall be prohibited except that portable signs used as temporary signs as defined in Section 9.1.25 and in compliance with Section 9.3.9 are permitted.
- 5. Signs erected, maintained, painted or drawn on any tree, rock or other natural feature.
- 6. Signs that are attached to a structure and extend vertically above the highest portion of the roof of any structure.
- 7. This section shall not apply to signs that are of an artistic nature and painted on natural features.

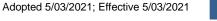
9.5 Sign Placement, Size, Height, Setback, Separation, Clearances/Construction By Sign Type

- A. Advertising Signs (Billboards): All advertising signs (billboards) located within 660 feet of interstate or federally assisted primary highways are subject to the standards and permitting requirements of the Outdoor Advertising Control Act administered by the North Carolina Department of Transportation.
 - 1. For Advertising Signs (billboards) that are off-premise, the maximum permitted sign area, location, characteristics, and number of off-premise outdoor advertising signs shall be in accordance with the standards in this section, the following regulations for such signs shall apply:
 - a. Permitted only with the issuance of a Special Use Permit.
 - b. Limited to a maximum size of:
 - 1. 400 square feet along any U.S. or North Carolina designated highway.
 - 2. 200 square feet along all other streets/roads.
 - c. Be setback a minimum of fifty (50) feet from the public right-of-way, or any legal private access road.
 - d. Not exceed thirty (30) feet in height.
 - e. Have only one (1) face per side of the sign. "Double-decker" signs with signs erected one over or above the other and side-by-side signs with signs erected one next to the other are prohibited.
 - f. Be a minimum of one-thousand (1,000) feet from any residential zoning district or residentially developed property, whether within the jurisdictional limits of the county or not. The distance shall be measured radially from the proposed sign location to the nearest point of the residential district or property.
 - g. Shall be a minimum of one-thousand (1,000) feet from any other offpremise outdoor advertising sign, located on the same or on the opposite side of the street. The distance shall be measured radially from the proposed sign location to the existing sign location.
 - h. Shall be a minimum of one-hundred (100) feet from any existing or proposed building, off-street parking area, or other building or structure.



The distance shall be measured radially from the proposed sign location to the nearest point of the building, off-street parking area, or other building or structure.

- i. No vegetation in the public right-of-way shall be cut for the purpose of increasing or permitting visibility to such off-premises outdoor advertising sign unless approved by the chief engineer of the governmental authority having jurisdiction over such right-of-way.
- j. No outdoor advertising sign (billboard) shall be located in a required front yard setback.
- k. Outdoor advertising signs (billboards) shall meet North Carolina Building Code requirements for wind load and all supports shall be of steel, aluminum, concrete, or other non-combustible material.
- 1. No outdoor advertising signs (billboards) shall be erected closer than ten (10) feet from any conductor of electricity, and all such signs shall comply with all requirements of the National Electrical Code with respect to clearance from overhead electrical conductors.
- B. On-Premise Signs-Businesses (freestanding pole/ground mounted on-premise signs):
 - 1. Maximum height: 35 feet.
 - 2. Maximum Sign Size: 200 square feet of sign area per adjoining public road frontage. Maximum sign size is a cumulative total and shall not exceed 300 square feet in area when multiple displays are used on a single support.
 - 3. Maximum number of freestanding or ground mounted on-premises signs per parcel: 1 sign per adjoining public road frontage.
 - 4. Minimum separation from rights-of-way, property lines and structures: 10 feet.
 - 5. Minimum separation from utility lines shall be in compliance with the requirements of the utility having jurisdiction.
 - 6. No unfinished surfaces or structures shall be exposed on on-premises signs.
 - 7. Multiple signs (ground mounted and on the same property) for businesses: Businesses advertising special sales, special events, and promotions may display one temporary sign or banner per establishment in addition to the permitted signs, provided that such sign is not illuminated and if mounted on a building shall be flush against the building wall. Maximum size is 18 square feet and such sign may not be is not located within a street right-of-way or required sight triangle. NOTE: SIGNS OF THIS NATURE ARE EXEMPT FROM FEES/PERMITTING PER SECTION 9.3 ABOVE (less than 32 square feet in size).
- C. Wall Signs (including canopy, awning and building facade signs):
 - 1. Maximum area: 1 square foot of sign area per linear foot of building, canopy or awning per building side. Sign footage permitted per building side may not be used on any side other than that building side.
 - 2. Minimum guaranteed wall signage area at any individual premises is 32 square feet.
 - 3. The maximum projection of a wall sign shall not exceed 12 inches.
 - 4. The height of a wall sign shall not exceed the height of the building or canopy facade.
- D. Professional or Occupational Name Plates and Incidental Signs:
 - 1. Maximum sign area: 32 square feet.
 - 2. Maximum height: 30 inches if ground mounted, signs in this category may also be mounted against the structure.



- 3. Minimum setback from all property lines: 2 feet.
- 4. Maximum number of signs per business establishment: 1.

E. Identification Signs:

- 1. Maximum sign area: 32 square feet.
- 2. Maximum height: 8 feet.
- 3. Minimum setback: 10 feet from all property lines.
- 4. Maximum number of signs per entrance: 1.

F. Menu Signs

- 1. Maximum sign area: 45 square feet.
- 2. Maximum height if ground mounted: 8 feet.
- 3. Minimum setback from all property lines: 10 feet.
- 4. Maximum number of signs per business establishment: 1.

9.6 Nonconforming Signs

It is the intent of this Section to permit signs that were lawful before the effective date of this Article to remain in service. All non-conforming signs existing on the effective date of this Ordinance, which do not conform to the requirements of this section, shall be removed and/or brought into compliance within twelve (12) months from the effective date of this Ordinance.

SECTION 10 - BOARD OF ADJUSTMENTS

The Board of Adjustments is charged with hearing and deciding on Special Use Permits, Variances, and Appeals from orders and Interpretation of the Planning and Development Director or his/her designee.

10.1 AUTHORITY

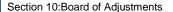
A Board of Adjustment (Board) is hereby established pursuant to North Carolina General Statutes 160D-109. (NOTE: CONFLICT OF INTEREST RULES ARE STATED IN NORTH CAROLINA GENERAL STATUTES UNDER G.S 160D-109 (d-e): A member of the board or any other body exercising the functions of the board shall not participate in or vote on any quasi-judicial matter in a manner that would violate affected persons' constitutional rights to an impartial decision maker. Impermissible conflicts include, but are not limited to, a member having a fixed opinion prior to hearing the matter that is not susceptible to change, undisclosed ex parte communications, a close familial, business, or other associational relationship with an affected person, or a financial interest in the outcome of the matter. If an objection is raised to a member's participation and that member does not recuse himself or herself, the remaining members shall by majority vote rule on the objection.

10.2 MEMBERSHIP

The Board of Adjustment shall consist of seven (7) members, and initially be those current members of the Planning Board. As seats become available thereafter, each Board of Adjustment seat shall be assigned a separate Board of Commissioners District until all seven seats shall be so assigned. The Board of Commission member then currently serving from the designated district shall have the right to nominate an individual to fill the seat, with the Board of Commissioners to make the final decision of appointment. In addition to the seven full time members of the Board of Adjustment, up to two (2) atlarge alternates may be appointed and available to serve in a member's absence. Terms of office shall be for a three year period, with the initial Board Member's term being consistent with their current term on the planning board.

Additionally should any of the municipalities within the county elect to allow Vance County to administer this ordinance within their jurisdictions, each of the municipalities shall have the option of nominating 1 additional alternate member from that jurisdiction that shall be considered a full voting member for issues within that jurisdiction's boundaries only. These alternate members are encouraged to voice opinions and recommendations concerning matters outside of their jurisdiction but shall have no vote on these matters. The nomination from the municipalities shall not be official without Board of Commissioner approval.

- A. Powers and Duties: The Board of Adjustment shall have the following powers and duties:
 - 1. To hear and decide appeals from and review any order, requirement, decision, determination, or interpretation made by an administrative official charged with enforcing this Ordinance.
 - 2. To hear and decide any exceptions which are specifically delegated to it by this Ordinance.
 - 3. To determine and vary application of zoning regulations in harmony with their general purpose and intent and in accordance with general and specific rules contained herein.
 - 4. To hear and decide appeals for variances from the zoning provisions of this Ordinance in cases where special conditions would make strict and literal interpretation and enforcement of the zoning provisions of this Ordinance result in a loss of privileges shared by other properties within the same zoning zone.



- 5. To interpret zoning maps and pass upon disputed questions of zone boundary lines and similar questions that may occur in the administration of this Ordinance.
- 6. To hear and decide all matters referred to it or upon which it is required to pass under this Ordinance.

10.3 VOTING

- A. Required Vote for Approval: A four-fifths (4/5) vote of its members shall be required to grant a variance. A majority of the members shall be required to decide any other quasi-judicial matter or to determine an appeal made in the nature of certiorari.
- B. Vote of the Chairperson: The Board Chairperson shall vote as any other Board member.
- C. Delay of Decision: The Board may, direct that its decision be delayed to a date and time specific subsequent to the Board's vote on an appeal, not to exceed thirty (30) days.
- D. NOTE: VOTING REQUIREMENTS OF THE BOARD OF ADJUSTMENTS ARE ESTABLISHED BY NORTH CAROLINA GENERAL STATUTES UNDER G.S 160D-406 as referenced): The concurring vote of four-fifths of the board shall be necessary to grant a variance. A majority of the members shall be required to decide any other quasi-judicial matter or to determine an appeal made in the nature of certiorari. For the purposes of this subsection, vacant positions on the board and members who are disqualified from voting on a quasi-judicial matter shall not be considered members of the board for calculation of the requisite majority if there are no qualified alternates available to take the place of such members.

10.4 COURT REVIEW

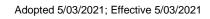
- A. Appeal to Superior Court: Each decision of the Board shall be subject to Superior Court review by proceedings in the nature of certiorari.
- B. Timing of Appeal:
 - Any petition for review by the Superior Court shall be filed with the Clerk of Superior Court within thirty days after the decision by the Board is filed in the Planning and Development Department; or
 - 2. After a written copy thereof is delivered by first class mail, to every aggrieved party who has filed a written request for such copy with the Secretary or Chairperson of the Board at the time of its hearing of the case, whichever is later.

10.5 NOTICE OF HEARINGS/DECISIONS

Hearing Notice: Notice of quasi-judicial hearings shall be mailed to the person or entity whose appeal, application, or request is subject to the hearing, to the owner of the property that is subject of the hearing if the owner did not initiate the hearing, to the owners of all parcels of land abutting the parcel of land that is the subject of the hearing, and to any other persons entitled to receive notice as provided by this ordinance. For the purpose of this section, properties are "abutting" even if separated by a street, railroad, or other transportation corridor. In the absence of evidence to the contrary, the County may rely on the tax listing to determine owners of property entitled to mailed notice. The notice must be deposited in the mail at least 10 days, but not more than 25 days, prior to the date of the hearing. Within that same time period, the County shall also prominently post a notice of the hearing on the site that is the subject of the hearing or on an adjacent street or highway right-of-way.

Decision Notice: The decision of the Board may be delivered by personal service or first class mail to the aggrieved party. The board is authorized to impose reasonable and appropriate conditions upon decisions/permits that are issued.

10.6 OATHS



The Chair of the Board or any member acting as Chair and the clerk to the board are authorized to administer oaths to witnesses in any matter coming before the Board.

10.7 APPEALS TO THE BOARD OF ADJUSTMENTS

The board shall hear and decide appeals decisions of administrative officials charged with enforcement of the zoning ordinance and may hear appeals arising out of any other ordinance that regulates land use or development, pursuant to the following:

- A. Appeal Eligibility: Any person who has standing under G.S. 160D-1402(c) may appeal a decision of the board. An appeal is taken by filing a notice of appeal with the county clerk. The notice of appeal shall state the grounds for the appeal.
 - 1. The official who made the decision shall give written notice to the owner of the property that is the subject of the decision and to the party who sought the decision, if different from the owner. The written notice shall be delivered by personal delivery, electronic mail, or by first-class mail.
 - 2. The owner or other party shall have 30 days from receipt of the written notice within which to file an appeal. Any other person with standing to appeal shall have 30 days from receipt from any source of actual or constructive notice of the decision within which to file an appeal.
 - 3. The official who made the decision shall transmit to the Board all documents and exhibits constituting the record upon which such action appealed from was taken. The official shall also provide a copy of the record to the appellant and to the owner of the property that is subject of the appeal if the appellant is not the owner.
- B. Effect of Appeal: An appeal of a notice of violation or other enforcement order stays enforcement of the action appealed from unless the officer who made the decision certifies to the Board after notice of appeal has been filed that because of facts stated in an affidavit, a stay would cause imminent peril to life or property or that because the violation is transitory in nature, a stay would seriously interfere with enforcement of this Ordinance. In that case, enforcement proceedings shall not be stayed except by a restraining order, which may be granted by a court. If enforcement proceedings are not stayed, the appellant may file with the official a request for an expedited hearing of the appeal, and the board shall meet to hear the appeal within 15 days after such request is filed.
- C. The Board shall fix a reasonable time for hearing the appeal, not to exceed thirty (30) days, give due notice of the appeal to the parties, and decide the appeal within a reasonable time. The Board may reverse or affirm, in whole or in part, or may modify the order, requirement, decision, or determination or interpretation appealed from, and shall make any order, requirement, decision, determination or interpretation that in the Board's opinion ought to be made under the circumstances.

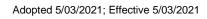
10.8 VARIANCES

- A. Application: An application for a variance shall be submitted in writing to the Board by filing a copy of the completed application with the Zoning Administrator or Planning Director.
- B. Procedure: The Board shall:
 - 1. Fix a reasonable time for holding a quasi-judicial hearing on the variance request;
 - 2. Give notice of the variance request as prescribed in Section 8; and
 - 3. Decide the variance request within a reasonable time.



NOTE: The Board shall make findings of fact that the requirements of Section 8.8, Granting of a Variance, have been met by the applicant. The Variance requested is the minimum variance that will make possible the reasonable use of the land, building or structure. Board shall not, under any circumstances, grant a variance to permit a use or density not otherwise permitted by this Ordinance in the zone involved. Neither the nonconforming use of lands, buildings or structures in the same zone, nor the permitted use of lands, buildings or structures in other zoning zones shall be considered as grounds for the issuance of a variance.

- C. Granting of Variance: A variance may be granted by the Board if evidence that is presented by the applicant persuades the Board to reach the following conclusions:
 - 1. There are unnecessary hardships (as defined under Section 8.1 of this Ordinance) that would result from the strict enforcement of this Ordinance. The Board may reach this conclusion if it finds that:
 - a. The unnecessary hardship would result from the strict application of the ordinance. It shall not be necessary to demonstrate that, in the absence of the variance, no reasonable use can be made of the property.
 - b. The hardship results from conditions that are peculiar to the property, such as location, size, or topography. Hardships resulting from personal circumstances, as well as hardships resulting from conditions that are common to the neighborhood or the general public, may not be the basis for granting a variance.
 - c. The hardship did not result from actions taken by the applicant or the property owner. The act of purchasing property with knowledge that circumstances exist that may justify the granting of a variance shall not be regarded as a self-created hardship.
 - d. The requested variance is consistent with the spirit, purpose, and intent of the ordinance, such that public safety is secured, and substantial justice is achieved.
- D. Conditions: In granting a variance, the Board may prescribe such reasonable and appropriate conditions and safeguards as will assure the use of the property to which the variance applies will be compatible with surrounding properties and will not alter the essential character of the neighborhood.
 - 1. Violations of such conditions and safeguards, when a part of the terms under which the variance is granted, shall be deemed a violation of this Ordinance.
 - 2. A variance granted subject to a condition shall be permitted only so long as there is compliance with the condition.
 - 3. If a violation of a variance occurs, the applicant shall have thirty (30) days to correct the violation, otherwise the Enforcement Officer may revoke the Certificate of Occupancy.
 - 4. In the event that any such condition is held invalid, for any reason, such holding shall have the effect of invalidating the variance granted and shall render the variance null and void.
- E. Duration: The variance may be issued for an indefinite duration or for a specified duration only. Unless otherwise specified, construction or operation shall be commenced within twelve months of the date of issue.



SECTION 11 - CHANGES AND AMENDMENTS

11.1 Initiation of Amendments:

The Board of County Commissioners may, on its own motion, upon recommendation of the Planning Board, Planning Staff, or upon petition by an interested person, amend, supplement, change, modify or repeal the regulations or zone boundaries established by this Ordinance. A petition by an interested person shall be submitted to the Board of County Commissioners through, and reviewed by, the Planning Board, which shall consider its merit and make a recommendation to the Board of County Commissioners. In no case shall final action by the Board of County Commissioners be taken on amending, changing, supplementing, modifying or repealing the regulations or zone boundaries hereby established until the Board of County Commissioners has held a public hearing.

11.2 Action By the Applicant:

- A. Initiation of Amendments: Proposed changes or amendments to the Vance County Zoning Map may be initiated by the Board of County Commissioners, Planning Board, County Administration, Board of Adjustment, or by the owner(s), or his agent, of property within the area proposed to be changed. Any interested party may initiate proposed amendments to the text of the Ordinance.
- B. Application: An application for any change or amendment shall contain a description and/or statement of the present and proposed zoning regulation or zone boundary, and the names and addresses of the owner or owners of the property involved. Such application shall be filed not later than three weeks prior to the meeting at which the application is to be considered. There must be a separate application prepared for each parcel of land that has different ownership.
- C. Fees: A nonrefundable fee, according to the schedule posted in the Planning Department, shall be paid to Vance County for each application for an amendment, to cover costs of advertising and other administrative expenses involved.
- D. Public Hearing Notices for Changes:
 - 1. Notification procedure for text amendments or changes: A public hearing shall be set and published no less than ten (10) days nor more than twenty-five (25) business days before the date fixed for the public hearing by the Board of Commissioners in a newspaper of general circulation in Vance County.
 - 2. Notification procedure for Rezonings and Map Amendments: In addition to the required newspaper notification of zoning changes and amendments above in D. 1, rezonings and map amendments require that adjacent property owners be notified by first class mail. The Planning and Zoning Department shall cause such mailing to occur. Notice to all adjacent property owners and newspaper advertisement shall take place no less than ten (10) days nor more than twenty five (25) business days prior to the public hearing. Additionally notice of the public hearing must be posted on the affected property at least ten (10) days prior to the hearing.
- E. Reapplication for Amendment: An application for any rezoning of the same property or any application for the same amendment to the Zoning Ordinance text shall be permitted only once within any one year period, unless the application made is for a different use.

11.3 Action By the Planning Board

Every proposed amendment, supplement, change, modification or repeal of this Ordinance shall be referred to the Planning Board for its recommendation and report. The Planning Board shall consider and make recommendations to the Board of Commissioners concerning each proposed zoning amendment. The Planning Board shall follow policy guidelines for all zoning amendments. A proposed zoning amendment will not receive favorable recommendation unless:



- A. The proposal will place all property similarly situated in the area in the same category, or in appropriate complementary categories.
- B. There is convincing demonstration that all uses permitted under the proposed zone classification would be in the general public interest and not merely in the interest of an individual or small group.
- C. There is convincing demonstration that all uses permitted under the proposed zone classification would be appropriate in the area included in the proposed change. (When a new zone designation is assigned, any use permitted in the zone is allowable, so long as it meets zone requirements, and not merely uses which applicants state that they intend to make of the property involved.)
- D. There is convincing demonstration that the character of the neighborhood will not be materially or adversely affected by any use permitted in the proposed change.
- E. The proposed change is in accord with the County Land Use Plan and sound planning principles.

The Planning Board shall render its decision on any properly filed petition within 30 days after the introduction of such petition and shall transmit its recommendation and report, including the reasons for its determinations, to the Board of County Commissioners and the applicant.

11.4 Action By the Board of County Commissioners

Before taking such lawful action, as it may deem advisable to approve or deny an applicant's request, the Board of County Commissioners shall consider the Planning Board's recommendations on each proposed zoning amendment. If no recommendation is received from the Planning Board within thirty (30) days after the Planning Board receives the application, the proposed amendment shall be deemed to have been a positive recommendation by the Planning Board.

11.5 Withdrawal of the Application

Any application submitted in accordance with the provisions of this Article for the purpose of amending the regulations or zone boundaries established by this Ordinance may be withdrawn at any time, but fees are nonrefundable.

11.6 Conditional Zoning (Section 11.6 Added 1/9/2023)

- A. There are circumstances in which a general zoning district designation allowing a use by right would not be appropriate for a particular property even though the use itself could, if properly planned, be appropriate for the property consistent with the objectives of this Ordinance and adopted land development plan, comprehensive plan, corridor plans, small area plans, and other land use policy documents. The rezoning process established in this Section provides for the accommodation of such uses by a reclassification of property into a conditional district, subject to additional conditions which ensure compatibility of the proposed use with the use and enjoyment of neighboring properties. A conditional district allows a particular use or uses to be established only in accordance with specified standards and conditions tailored to each individual development project. This is a voluntary rezoning procedure that is intended for firm development proposals. It is not intended or suited for securing early zoning for tentative proposals that may not be undertaken for some time.
- B. The review and approval process for conditional district petitions involves a legislative hearing and legislative decision by the Board of County Commissioners. The review of conditional district petitions shall be undertaken in accordance with the provisions of Sections 11.
- C. Property may be placed in a conditional district only in response to a petition by the owners of all the property to be included. A petition for a conditional district shall include:
 - 1. A master site plan prepared in accordance with Sections 2.2, 6.9 and as required by this ordinance;
 - 2. Written supporting documentation that specifies the actual use or uses proposed for the property, and



- 3. Proposed rules, regulations, and conditions that, in addition to all predetermined requirements of this Ordinance, will govern the development and use of the property.
- 4. A statement analyzing the reasonableness of the proposed rezoning.
- D. Conditional districts, as established in Section 3.3, parallel general use zoning districts. Only those land uses (including uses by right, special uses, and conditional uses) permitted in a general use zoning district to which a conditional zoning district corresponds shall be allowed. All requirements of any corresponding general use district and all other requirements of this Ordinance apply to a conditional district except to the extent that the approved rules, regulations, and conditions included in the petition for rezoning are more restrictive than the general use district requirements.
- E. Review and Approval Process: The review and approval of a petition for a conditional district shall follow the same process as outlined in Section 11 for a general use rezoning.
 - 1. In the course of evaluating the proposed use, the Planning Board and/or the Board of County Commissioners may request additional information deemed appropriate to provide a complete analysis of the proposal.
 - 2. Conditional district decisions are a legislative process subject to judicial review using the same procedures and standard of review applicable to general use district zoning decisions.
 - 3. Conditional district decisions shall be made in consideration of identified relevant adopted land use plans for the area, including, but not limited to, land development plans, comprehensive plans, strategic plans, district plans, small area plans, corridor plans, and other land development policy documents.
- F. Conditions to Approval: Specific conditions applicable to the conditional districts may be proposed by the petitioner or the County or its agencies, but only those conditions mutually approved by the County and the petitioner may be incorporated into the zoning regulations or permit requirements.
 - Conditions and site-specific standards imposed in a conditional district shall be limited to
 those that address the conformance of the development and use of the site to County
 ordinances and an officially adopted comprehensive or other plan and those that address
 the impacts reasonably expected to be generated by the development or use of the site.
 - 2. Any such conditions should relate to the relationship of the proposed use to surrounding property, proposed support facilities such as parking areas and driveways, pedestrian and vehicular circulation systems, screening and buffer areas, the timing of development, street and right-of-way improvements, water and sewer improvements, storm water drainage, the provision of open space, and other matters that the Board of County Commissioners may find appropriate or the petitioner may propose. Such conditions to approval of the petition may include dedication to the county or state, as appropriate, of any rights-of-way or easements for streets, water, sewer, or other public utilities necessary to serve the proposed development.
 - 3. The petitioner shall have a reasonable opportunity to consider and respond to any such conditions prior to final action by the Board of County Commissioners.
 - 4. If for any reason any condition for approval is found to be illegal or invalid or if the petitioner should fail to accept any condition following approval, the approval of the site plan for the district shall be null and void and of no effect and proceedings shall be instituted by the County to rezone the property to its previous zoning classification or to another zoning district.
- G. Effect of Approval: If a petition for a conditional district is approved, the development and use of the property shall be governed by the predetermined ordinance requirements applicable to the district's classification, the approved site plan or master plan for the district, and any additional approved rules, regulations, and conditions, all of which shall constitute the zoning regulations



for the approved district and are binding on the property as an amendment to this Ordinance and to the zoning map.

- 1. If a petition is approved, only those uses and structures indicated in the approved petition and site plan shall be allowed on the subject property. A change of location of the structures may be authorized pursuant to subsection I below provided that such change in building layout does not result in an increase in the number of structures.
- 2. Following the approval of the petition for a conditional district, the subject property shall be identified on the zoning map by the appropriate district designation. A conditional district shall be identified by the same designation as the underlying general district preceded by the letters 'CZ' [for example 'CZ-R10'].
- 3. No permit shall be issued for any development activity within a conditional district except in accordance with the approved petition and site plan for the district.
- 4. Any violation of the approved site plan or any rules, regulations and conditions for the district shall be treated the same as any other violation of this Ordinance and shall be subject to the same remedies and penalties as any such violation.
- H. Alterations to Approval: Except as provided in subsection 1 below, changes to an approved petition or to the conditions attached to the approved petition shall be treated the same as amendments to this Ordinance or to the zoning map and shall be processed in accordance with the procedures in this Ordinance.
 - 1. The Planning Director shall have the delegated authority to approve an administrative amendment to an approved site plan. The Planning Director shall have no authority to amend the conditions of approval of a petition. The standard for approving or denying such a requested change shall be that the change does not significantly alter the site plan and that the change does not have a significant impact upon abutting properties. Any decision by the Planning Director must be in writing stating the grounds for approval or denial
 - 2. The Planning Director, however, shall always have the discretion to decline to exercise the delegated authority either because he is uncertain about approval of the change pursuant to the standard or because a rezoning petition for a public hearing and Board of County Commissioners consideration is deemed appropriate under the circumstances. If the Planning Director declines to exercise this authority, the applicant may file a rezoning petition for a public hearing and Board of County Commissioners decision in accordance with the provisions delineated in Sections 11.
 - 3. Any request for an administrative amendment shall be pursuant to a written letter, signed by all of the owners of the property, detailing the requested change. Upon request, the applicant shall provide any additional information as deemed necessary by the Planning Director. Upon an approval of an administrative amendment, the applicant shall file a sufficient number of copies of the revised site plan as deemed necessary by the Planning Director.
 - 4. If the Planning Director denies approval of the requested administrative amendment, the applicant may file a rezoning petition for a public hearing and Board of County Commissioner decision in accordance with the provisions delineated in Sections 11.
- I. Review of Approved Conditional Districts: It is intended that property shall be reclassified to a conditional district only in the event of firm plans to develop the property. Therefore, no sooner than one year (or two years if a vested right has been established in accordance with the provisions of Section 1.8) after the date of approval of the petition, the Planning Board may examine the progress made toward developing the property in accordance with the approved petition and any conditions attached to the approval. If the Planning Board determines that progress has not been made in accordance with the approved petition and conditions, the Planning Board shall forward to the Board of County Commissioners a report which may recommend that the property be rezoned to its previous zoning classification or to another zoning district.



SECTION 12 - DEFINITIONS AND WORD INTERPRETATIONS

In the construction of this Ordinance, the word interpretations and definitions contained in this section shall be observed and applied, except when the context clearly indicates otherwise. In further amplification and for clarity of interpretation of the context, the following definitions of word usage shall apply:

- A. Words used in the present tense shall include the future; and words used in the singular number shall include the plural number, and the plural the singular.
- B. The word "shall" is mandatory and not discretionary.
- C. The word "may" is permissive.
- D. The word "person" includes a firm, association, organization, partnership, corporation, trust and company as well as an individual.
- E. The word "lot" shall include the words "piece", "parcel", "tract", and "plot".
- F. The word "building" includes all structures of every kind, except fences and walls, regardless of similarity to buildings.
- G. The phrase "used for" shall include the phrases "arranged for", "designed for", "intended for", and "occupied for".
- H. The word "map" or "zoning map" shall mean the official Zoning Map(s) of Vance County, North Carolina.
- I. The term "Board of Adjustment" shall mean the Zoning Board of Adjustment of Vance County, North Carolina.

<u>Abutting:</u> Having property or zone lines in common; i.e., two lots are abutting if they have property lines in common. Lots are also considered to be abutting if directly opposite each other and separated by a street, alley, railroad right-of-way, or stream.

<u>Active Solar System</u>: A solar energy system that transforms solar energy into another form of energy or transfers heat from a collector to another medium using mechanical, electrical, or chemical means.

<u>Abandonment:</u> That the use, structure, building, or sign is not used occupied or otherwise operating for the intended non-conforming activity for the period specified in Section 5 of this Ordinance. Periods of active re-modeling during which the use is closed for repairs should not be considered in determining abandonment, provided the remodeling is completed within a reasonable time period as indicated on the zoning permit issued for re-modeling the nonconforming use. Abandonment of signs shall mean having electricity disconnected for lighted signs, no message, or the failure to repair damaged signs.

Access: A way of approaching or entering a property. Access also includes ingress, the right to enter, and egress, and the right to leave.

Accessory Building, Structure, or Use: A building, structure, or use, not including signs, which is:

- A. Conducted or located on the same zoning lot as the principal building, structure, or use, except as may be specifically provided elsewhere in the Ordinance;
- B. Clearly incidental to, subordinate in area and purpose to, and serves the principal use; and,
- C. Either in the same ownership as the principal uses or is clearly operated and maintained solely for the comfort, convenience, necessity, or benefit of the occupants, employees, customers, or visitors of or to the principal use.

Adult Entertainment Establishment: Includes clubs and eating and drinking establishments with nude or seminude entertainment or dancing; physical culture establishments, such as but not limited to massage parlors, etc.; and establishments that include adult bookstores, adult motion picture theaters, adult motels and hotels, and similar establishments depicting/emphasizing sexual activities and/or nudity.



<u>Advertising Signs (Billboards or Outdoor Advertising Signs):</u> A sign which publicizes and directs attention to a business, profession, commodity, activity, product, service or entertainment not conducted, sold or offered upon the premises where such sign is located.

Affected land (relating to mining): The surface area of land that is mined, the surface area of land associated with a mining activity so that soil is exposed to accelerated erosion, the surface area of land on which overburden and waste is deposited, and the surface area of land used for processing or treatment plant, stockpiles, nonpublic roads, and selling ponds.

<u>Agriculture:</u> The practice of cultivating the soil, producing crops, and raising livestock; such as but not limited to dairying, pasturage, viticulture, horticulture, hydroponics, floriculture, aquaculture, truck farming, orchards, forestry, and animal and poultry husbandry. However, the operation of any accessory uses shall be secondary to that of the normal agricultural activities. See definition of Bona Fide Farm for complete listing of activities included within the definition of Agriculture.

<u>Agriculture Support and Services (Agri-business):</u> Any support or service (agri-business) store or any such use where the primary activity is supplying farm hardware, seed, fertilizer, and/or that provides tractor or other agricultural equipment sales/service.

Agri-tourism: A type of tourism, as a commercial practice, in which farmers provide their farms as a venue for tours of the farming operations and/or making the operation available to overnight guests. This type of commercial venture allows visitors and guests the opportunity to experience "what it's like to live on a farm, to see how food is produced and gain an appreciation for natural ecosystems." This practice also provides farmers with additional operating income to assist in preserving their respective farms operations as well as preserving such farmlands and their native ecosystems.

<u>Airport:</u> A use that includes facilities for the flying of aircraft and their maintenance for the private use of an individual and those used by ultra-light aircraft. This definition includes flight schools.

<u>Alley:</u> A public or private right-of-way primarily designed to serve as secondary access to the side or rear of those properties whose principal frontage is on a street and is not intended for general traffic.

<u>Alter:</u> To make any structural changes in the supporting or load-bearing members of a building, such as bearing walls, columns, beams, girders, or floor joists.

Animated Sign: Any sign which flashes, revolves, rotates or swings by mechanical means, or which uses a change of lighting to depict action, or to create a special effect or scene.

<u>Antenna:</u> Any exterior transmitting or receiving device that radiates or captures electromagnetic waves (excluding radar signals).

<u>Apartment:</u> A room or suite of rooms intended for use as a residence by a single household or family. Such a dwelling unit may be located in an apartment house, duplex, or as an accessory use in a single family home or a commercial building.

<u>Apartment House:</u> A building containing three (3) or more dwelling units, except where permitted as an accessory use.

<u>Apartment Hotel:</u> A hotel in which at least ninety (90) percent of the hotel accommodations are occupied by permanent guests.

Assembly: A joining together of completely fabricated parts creating a finished product.

<u>Automobile Service Station (Gas Station):</u> Any building or land used for the dispensing, sale, or offering for sale at retail any automobile fuels along with accessories such as lubricants or tires, except that car washing, mechanical and electrical repairs, and tire repairs shall only be performed incidental to the conduct of the service station and are performed indoors. There shall be no fuel pumps within fifteen (15) feet of any property line or street right-of-way and incidental activities shall not include tire re-treading, major bodywork, major mechanical work, or upholstery work.



<u>Automobile Repair Services.</u> An establishment primarily engaged in one or more of the following activities: (1) general automotive repair or service, (2) automotive engine repair, (3) installation or repair of automotive transmissions, (4) installation or repair of automotive glass, (5) installation or repair of automotive exhaust systems, (6) repair of automotive tops, bodies and interiors, and (7) automotive painting and refinishing.

<u>Banner</u>: A sign or outside advertising display having the character, letters, illustrations, ornamentations, symbol, color, or visual representation applied to cloth, paper, vinyl, fabric, plastic, or like kind of malleable material with or without frame. Banners may be of permanent or temporary nature, if permanent it shall be rigidly mounted to a pole or a building by rigid frame at two or more edges. National flags, state or municipal flags, or the official flag of any institution or business shall not be considered banners.

<u>Bed and Breakfast:</u> A form of temporary housing for travelers with breakfast included, but no other meals available (no restaurant, but a dining room may be used by overnight guests only, which is open only during breakfast hours).

<u>Berm:</u> Any elongated earthen mound designed or constructed to separate, screen, or buffer adjacent land uses.

Best Management Practices (BMP's): BMP's are structural, managerial, or vegetative practices that are used to protect and improve surface water, groundwater, and overall water quality. These practices can utilize rock rip-rap to stabilize stream banks, could include establishing grasses and plants on raw soils, could incorporate gravel-lined livestock stream crossings, silt fencing, and seeding/mulching. There are three categories of BMP's, which include:

- A. Structural: include physical structures/materials that are used to protect water quality and slow water velocities to prevent soil erosion (rock rip-rap, silt fence, check dams, water diversions, retention-detention basins, grade stabilizations).
- B. Managerial: cover how projects are implemented, primarily the order and fashion of carrying out a project (organic material disposal, maintenance of other BMP's, sweeping to collect sediment, construction practices to limit/prevent soil erosion).
- C. Vegetative: used to prevent soil erosion/establish ground cove, stabilize eroding soils (seeding, mulching, sod, tree planting, soil management, grass waterways).

<u>Board of Adjustment:</u> As created by Ordinance, the convening body of members appointed by the Vance County Board of Commissioners charged with hearing and deciding on Special Use Permits, Variances of Ordinance Regulations, and Appeals from orders and Interpretation of the Zoning Administrator.

Board of County Commissioners: The governing body of Vance County.

<u>Boarding House:</u> A building other than a hotel, inn, or motel, where, for compensation, meals are served and lodging is provided.

Bona Fide Farm: For purposes of this ordinance, the terms "agriculture", "agricultural", and "farming" refer to all of the following:

- 1. The cultivation of soil for production and harvesting of crops, including but not limited to fruits, vegetables, sod, flowers and ornamental plants.
- 2. The planting and production of trees and timber.
- 3. Dairying and the raising, management, care, and training of livestock, including horses, bees, poultry, and other animals for individual and public use, consumption, and marketing.
- 4. Aquaculture as defined in N.C.G.S. 106-758.
- 5. The operation, management, conservation, improvement, and maintenance of a farm and the structures and buildings on the farm, including building and structure repair, replacement, expansion, and construction incident to the farming operation.



- 6. When performed on the farm, "agriculture", "agricultural", and "farming" also include the marketing and selling of agricultural products, agritourism, the storage and use of materials for agricultural purposes, packing, treating, processing, sorting, storage, and other activities performed to add value to crops, livestock, and agricultural items produced on the farm, and similar activities incident to the operation of a farm.
- 7. A public or private grain warehouse or warehouse operation where grain is held 10 days or longer and includes, but is not limited to, all buildings, elevators, equipment, and warehouses consisting of one or more warehouse sections and considered a single delivery point with the capability to receive, load out, weigh, dry, and store grain.

For purposes of determining whether a property is being used for bona fide farm purposes, any of the following shall constitute sufficient evidence that the property is being used for bona fide farm purposes:

- 1. A farm sales tax exemption certificate issued by the Department of Revenue.
- 2. A copy of the property tax listing showing that the property is eligible for participation in the present use value program pursuant to G.S. 105-277.3.
- 3. A copy of the farm owner's or operator's Schedule F from the owner's or operator's most recent federal income tax return.
- 4. A forest management plan.
- 5. A Farm Identification Number issued by the United States Department of Agriculture Farm Service Agency.

This Ordinance does not impose nor exercise any controls over croplands, timberlands, pasturelands, orchards, idle (land that is currently not cultivated or that is fallow-currently unplanted for crops) or other farmlands. Nor does it exercise control over any farmhouse, barn, poultry house, or other farm buildings, including tenant or other houses for persons working on said farms, as long as such houses shall be in the same ownership as the farm and located on the farm. Residences for non-farm use or occupancy and other non-farm uses shall be subject to the provisions of this Ordinance.

<u>Buffer:</u> A fence, wall, hedge, or other planted area or device used to enclose, screen, or separate one use or lot from another.

<u>Buildable Area (Building Envelope):</u> The space remaining on a lot after the minimum open-space requirements (yards, setbacks) have been met.

<u>Building:</u> Any structure enclosed and isolated by exterior walls constructed or used for residence, business, industry, or other public or private purposes, or accessory thereto, and including tents, lunch wagons, dining cars, trailers, mobile homes, and attached or unattached carports consisting of roof and supporting members, and similar structures whether stationary or movable.

<u>Building-integrated Solar Systems.</u> An active solar system that is an integral part of a principal or accessory building, rather than a separate mechanical device, replacing or substituting for an architectural or structural component of the building. Building-integrated systems include but are not limited to photovoltaic or hot water solar systems that are contained within roofing materials, windows, skylights, and awnings.

<u>Building Footprint:</u> The portion of a lot's area that is enclosed by the foundation of buildings, plus any cantilevered upper floor.

<u>Building Height:</u> The vertical distance measured from the average elevation of the finished grade at the front of the building to the highest point of the building. Spires, cupolas, chimneys, antennae attached to a building, and/or projections from buildings, radios, TV, communications, telecommunication, and water towers are not to be included in the calculations of building height.

<u>Building Lot Coverage:</u> The amount of net lot area or land surface area, expressed in terms of a percentage that is covered by all principal buildings.



<u>Building Marker:</u> A sign indicating the name of a building and date and incidental information about its construction, which sign is cut into a masonry surface, or made of bronze or other permanent material.

<u>Building</u>, <u>Principal</u> (<u>Main</u>): A building in which is conducted the principal use of the plot on which it is situated.

<u>Building Setbacks:</u> The minimum distance from the property line, right-of-ways, and / or easements to closest projection of the exterior face of buildings, walls, or other form of construction (i.e. decks, landings, terraces, porches, and patios on grade).

<u>Building Setback Line:</u> The line on the front, rear, and sides of a lot, set according to the zone regulations, which delineates the areas upon which a structure may be built or maintained. At the time of application, all yard setbacks are determined from the most recent Vance County Official Tax Map.

- A. Front yard setback shall be measured from the roadway right-of-way as shown on tax maps.
- B. Side and Rear yard setbacks shall be measured from the property lines as shown on tax maps.
- C. Corner lot setbacks shall be measured from the roadway right-of-ways it is adjacent to as on a flag lot, the "building setback line" runs parallel to the street and is measured from the point in the main portion of the lot (i.e. the "flag" part of the lot, not the "pole" part), which is closest to the street (minimum lot width must be met in this area, as well; if the point closest to the street is a corner rather than a line, the setback will have to extend as far as necessary to meet the required minimum lot width)

<u>Built-Upon Area:</u> Built-upon areas shall include that portion of a development project that is covered by impervious or partially impervious surfaces, including buildings, pavement, gravel roads, recreation facilities (e.g. tennis courts), etc. (Note: Wooded slatted decks, golf courses, and the water area of a swimming pool are not considered built-upon area).

<u>Camp or Care Center:</u> A facility licensed by the State of North Carolina, which consists of one or more buildings, located on at least twenty (20) acres of land, which provides accommodations for more than nine (9) individuals and where the activities of those individuals predominantly occur in supervised groups.

<u>Camper</u>: A structure manufactured of metal, wood, canvas, plastic, or other materials, or any combination thereof, mounted on wheels, which includes a living area and is designed for travel, recreation or vacation use. A camper is not designed or intended to be used as a permanent dwelling and is synonymous with recreational vehicles. (See also recreational vehicle definition)

<u>Campground:</u> Land upon which shelters (such as tents, travel trailers, campers and recreational vehicles) are erected or located for occupation by transients and/or vacationers. They may include such permanent structures and facilities as are normally associated with the operation of a campground.

<u>Canopy, Marquee, or Awning:</u> A roof-like cover extending over a sidewalk, walkway, driveway, or other outdoor improvement for the purpose of sheltering individuals or equipment from the weather. An awning is made of fabric or some flexible fabric-like substance. Canopies and marquees are rigid structures of a permanent nature.

<u>Canopy Sign</u>: Any sign which is a part of or attached to an awning, canopy or other fabric-like or plastic protective structure which is extended over a door, window, or entranceway. A marquee is not a canopy.

<u>Car Wash:</u> A building, or portion thereof, containing facilities for washing automobiles or other vehicles, using production line methods with a chain conveyor, blower, or other mechanical devices; or providing space, water, equipment, or soap for the complete or partial hand washing of automobiles, whether washing is performed by the operator or by the customer.

<u>Cemetery, Church:</u> All graves and crypts shall be set back at least thirty (30) feet from all exterior property lines, and provided that no burial lots are sold on a commercial basis.



<u>Cemetery, Commercial:</u> All graves and crypts shall be set back at least thirty (30) feet from all exterior property lines, and provided that no burial lots are sold on a commercial basis.

<u>Cemetery, Family:</u> All graves and crypts shall be set back at least thirty (30) feet from all exterior property lines, and provided that no burial lots are sold on a commercial basis.

<u>Certificate of Occupancy.</u> An official certification that a premise conforms to provisions of the State Building Code and may be used or occupied. Such a certificate is granted for new construction or for alterations or additions to existing structures or a change in use. Unless such a certificate is issued, a structure cannot be occupied, but a certificate may be issued for a portion of a structure ready for occupancy, such as separate dwelling or commercial units in a structure with multiple units.

Club or Lodge (Private, Nonprofit, Civic, or Fraternal). A nonprofit association of persons, who are bona fide members paying dues, which owns, hires, or leases a building, or portion thereof, the use of such premises being restricted to members and their guests. A Board of Directors, executive committee, or similar body chosen by the members conducts the affairs and management of such "private club or lodge". It shall be permissible to serve food and meals on such premises, providing adequate dining room space and kitchen facilities are available. The sale of alcoholic beverages to members and their guests shall be allowed, provided it is secondary and incidental to the promotion of some other common objective of the organization, and further provided that such sale of alcoholic beverages is in compliance with the applicable federal, state, and local laws.

<u>Cluster Development.</u> A development process that keeps land in agriculture or open space, and protects natural resources, by requiring buildings to be concentrated on a specified, proportional area of a total acreage. For this definition (and as relates to Planned Unit Development - PUD) for zero (0) side and/or rear yard setbacks (townhouse and/or condominium development), a zero (0) side and/or rear yard setback is within the development only and does not refer to the setbacks that abut adjoining properties (relates to the sides of dwelling units that face open paces areas).

<u>Commercial Message:</u> Any sign wording, logo, or other representation that directly or indirectly, names, advertises, or calls attention to a business, product, service, or other commercial activity. This definition does not include company nameplates or logos on instructional signs.

<u>Common Open Space</u>. A parcel or parcels of land, or an area of water, or a combination of both land and water, within the site designated for development and designed and intended for the use and enjoyment of residents of the development or for the general public, not including streets or off-street parking areas. Common Open Space shall be substantially free of structures, but may contain such improvements as are in the plan as finally approved and are appropriate for the benefit of residents of the development.

<u>Condominium.</u> A dwelling unit in which the ownership of the occupancy rights to the dwelling unit is individually owned or for sale to an individual, and such ownership is not inclusive of any land.

<u>Construction Sign:</u> A sign on a construction site during the period of construction on which is printed or written the name of the owner, developer, contractor, architect, planner, engineer, or development title.

<u>Contractor.</u> One who accomplishes work or provides facilities under contract to another. The major portion of a contractor's work normally occurs outside and away from his business location. As used in this Ordinance, the term "contractor" does not include general assembly, fabrication, or manufacture at his business location.

<u>Controlled-Access Highway</u>. A roadway which, in accordance with State and Federal guidelines, is designed to give preference to through traffic by providing access connections at interchanges or selected public roads only, with no direct access from private roads or driveways and with no crossing at grade, including any interstate, State, or U.S. Route.

<u>Convalescent Home (Nursing Home)</u>. An institution, which is advertised, announced, or maintained for the express or implied purpose of providing nursing or convalescent care for persons unrelated to the licensee. A convalescent home is a home for chronic or nursing patients who, on admission, are not as a



rule acutely ill and who do not usually require special facilities such as an operating room, X-ray facilities, laboratory facilities, and obstetrical facilities. A convalescent home provides care for persons who have remedial ailments or other ailments for which continuing medical and skilled nursing care is indicated; who, however, are not sick enough to require general hospital care. Nursing care is their primary need, but they will require continuing medical supervision. A major factor that distinguishes convalescent homes is that the residents will require the individualization of medical care.

<u>Convenience Store</u>. A commercial building where a variety of items are sold, which may include food, magazines, automobile accessories and maintenance supplies, and other such items. In addition to the commercial building, other services on the premises may include gasoline sales, and a coin operated (automated) car wash.

<u>Convenience Center</u>. A county owned, operated and maintained or privately owned, but county operated and maintained site for the collection of residential waste and recycling. (*Amended 3/11/2019*)

Conversion. Changing the original purpose of the building to the different use.

<u>Covenant</u>. A private legal restriction on the use of land, which is contained in the deed to the property or otherwise formally recorded. There may be certain legal requirements for formal establishment of a covenant such as a written document, a mutual interest in the property, that the covenant be concerned with the use of the land rather than individual characteristics of ownership, etc.

Day Care Facility (Adults and Children). A place other than an occupied dwelling, which provides for the care of children or adults. Those receiving care are not all related to each other by blood or marriage and are not legal wards or foster children of the attendant adults, and for which care a payment, fee, or grant is made. All State registration requirements and inspections shall be met. If children are the primary clients of the day care home the following shall apply: Any child care arrangement where three (3) or more children under thirteen (13) years of age receive care away from their own home by persons other than relatives, guardians, or full-time custodians, or in the child's own home where other unrelated children are in care. Child day care does not include seasonal recreational programs operated for less than four (4) consecutive months. Child day care also does not include arrangements that provide only drop-in or short-term child care for parents participating in activities that are not employment related and where the parents are on the premises or otherwise easily accessible.

<u>Day Care Home (Adults and Children)</u>. A dwelling in which a permanent occupant of the dwelling provides for the care of children or adults. Those receiving care are not all related to the occupant or to each other by blood or marriage and are not the legal wards or foster children of the attendant adults. Those receiving care and are not dependents of the occupant, do not reside on the site. For the purpose of this ordinance, such activities shall meet all requirements for home occupations. All State registration requirements and inspections shall be met. If children are the primary clients of the day care home the following shall apply:

- A. Includes child care centers, family child care homes, and any other child care arrangement not excluded by G.S. 110-86(2), which provides day care on a regular basis at least once a week for more than four (4) hours, but less than twenty-four (24) hours, per day for more than five (5) children under the age of thirteen (13) years, not including the operator's own school-aged children. It does not matter where it is located, whether the same or different children attend, and whether or not operated for profit.
- B. The following are not included: public schools; nonpublic schools, as described in G.S. 110-86(2); summer camps having children in full-time residence; summer day camps; specialized activities or instruction such as athletics, clubs, the arts, etc.; and Bible schools normally conducted during vacation periods.

<u>Day-Night Level (DNL):</u> A measure of noise that is an outdoor, day-night average (a weighted sound level).



<u>dBA</u>. The sound pressure level, in decibels, as measured using the impulse mode and "A" weighting network on a precision sound level meter.

<u>Dedication</u>. The transfer of property from private to public ownership with no compensation involved.

<u>Density</u>. The average number of families, persons, housing units, or buildings per unit of land.

<u>Drip Line</u>. A vertical line extending from the outermost edge of the tree canopy or shrub branch to the ground.

Driveway. A private roadway located on a parcel or lot used for vehicle access.

<u>Dwelling.</u> Any building, structure, manufactured home or mobile home, or portion thereof designed, arranged, or used or intended to be used for human habitation. The term "dwelling" shall not be deemed to include a travel trailer, motel, hotel, tourist home, or other structures designed for transient or seasonal vacation residence.

<u>Dwelling</u>, <u>Attached</u>. A dwelling that is joined to another dwelling at one or more sides by a party wall or walls.

<u>Dwelling</u>, <u>Detached</u>. A dwelling that is entirely surrounded by open space on the same lot.

<u>Dwelling</u>, <u>Duplex</u>. A building containing two (2) dwelling units, other than where a second dwelling unit is permitted as an accessory use.

<u>Dwelling</u>, <u>Multifamily</u>. A building containing three (3) or more dwelling units, except where permitted as an accessory use.

<u>Dwelling, Single Family:</u> A building containing one dwelling unit only, but may include one (1) separate unit as an accessory use to be occupied only by employees or relatives of the household. This definition does not include Manufactured Home, see definition of Manufactured Home)

<u>Dwelling Unit.</u> One or more rooms, which are arranged, designed, or used as living quarters for one family only. Individual bathrooms and complete kitchen facilities, permanently installed, shall always be included for each "dwelling unit".

<u>Easement.</u> A right given by the owner of land to another party for specific limited use of that land. For example, a property owner may give an easement on his property to allow utility facilities like power lines or pipelines, to allow light to reach a neighbor's windows, or to allow access to another property.

<u>Electronic Gaming Operations.</u> Any business enterprise, whether as a principal or an accessory use, where persons utilize electronic machines, including but not limited to computers and gaming terminals, to conduct games of chance, including sweepstakes, and where cash, merchandise or other items of value are redeemed or otherwise distributed, whether or not the value of such distribution is determined by electronic games played or by predetermined odds. This term includes, but is not limited to internet cafes, internet sweepstakes, beach sweepstakes or cybercafés. This does not include any lottery approved by the State of North Carolina.

Electronically Controlled Message Sign: A sign on which the copy changes automatically on a lampbank, such that the message or display does not run continuously in the travel mode, and any message or display remains stationary for a minimum of two seconds. Any sign on which the message or display runs continuously in the travel mode and/or on which any message or display does not remain stationary for a minimum two seconds shall be considered a flashing sign.

<u>Erect.</u> Build, construct, erect, rebuild, reconstruct, or re-erect any building or other structure.

<u>Fabrication.</u> Manufacturing, excluding the refining or other initial processing of basic raw materials, such as metal, ores, lumber, or rubber. Fabrication relates to stamping, cutting, or otherwise shaping the processed materials into useful objects.



<u>Fall Zone Buffer</u> A land buffer around a tower base to provide for containment of the tower to the site in the event that it falls.

<u>Family.</u> One or more persons related by blood, marriage, or adoption living together as a single housekeeping unit. For the purpose of this Ordinance, such persons may include gratuitous guests, also persons living together voluntarily as a family in a dwelling as a single housekeeping group.

<u>Family Care Home.</u> A facility that provides health, counseling, or related services, including room, board, and care, to six (6) or fewer handicapped persons in a family-type environment. These handicapped persons include those with physical, emotional, or mental disabilities, but not those who have been deemed dangerous to themselves or to others.

<u>Fence</u>, <u>Security</u>. A fence designed to keep out unauthorized persons and kept locked when the area or facility is not in use or under observation. Security fences are often equipped with a self-closing and positive self-latching mechanism.

<u>Firearm</u>. A weapon, including but not limited to pistols, rifles, and shotguns, capable of firing a projectile using an explosive charge as a propellant.

<u>Firing line.</u> A line parallel to a target from which firearms or arrows are discharged.

<u>Flag Lot.</u> An irregularly shaped lot where the buildable area of the lot is connected to its street frontage by an arm of the lot.

<u>Flashing Sign:</u> A type of animated sign which contains an intermittent, blinking, scintillating, or flashing light source, or which includes the illusion of intermittent or flashing light, or an externally mounted intermittent light source. An electronically controlled message sign is not a flashing sign.

Floor Area (for determining off-street parking and loading requirements). The gross total horizontal area of all floors below the roof, including usable basements, cellars, and accessory storage areas such as counters, racks, or closets, but excluding, in the case of nonresidential facilities, arcades, porticos, and similar areas open to the outside air which are accessible to the general public and which are not designed or used as areas for sales, display, storage, service, or production. However, "floor area", for the purpose of measurement for off-street parking spaces shall not include: floor area devoted to primarily storage purposes (except as otherwise noted above); floor area devoted to off-street parking or loading facilities, including aisles, ramps, and maneuvering space; or basement floor other than area devoted to retailing activities, to the production or processing of goods, or business or professional offices.

<u>Floor:</u> The top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

Floor Area, Gross. The total floor area enclosed within a building.

<u>Freestanding Sign:</u> Any sign which is supported by structures or supports which are placed on, or anchored in the ground, and which structures or supports are independent from any building or other structure.

<u>Freestanding Tower.</u> All towers which are placed on an independent base, and erected without support from other structures (examples include: monopole towers, and lattice/cage towers). NOTE: Guy-wires are not used in freestanding towers.

<u>Frontage</u>. All of the real property abutting a street line measured along the street right-of-way.

<u>Functionally Dependent Facility.</u> A facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading/unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities (term does not include long-term storage, manufacture, sales, service facilities).



<u>Garage</u>, <u>Commercial</u>. Any building or premises, except those described as a private or parking garage, used for the storage or care of motor vehicles, or where any such vehicles are equipped for operation, repaired, or kept for remuneration, hire, or sale. If the garage is listed as a business in the Tax Assessor's Office by January 31 or each year and consists of two acres, six (6) additional motor vehicles may be allowed.

<u>Garage</u>, <u>Parking</u>. Any building or premises, other than a private or commercial garage, used exclusively for the parking or storage of motor vehicles.

<u>Garage</u>, <u>Private</u>. A building or space used as an accessory to, or a part of, the main building permitted in any residential zone, providing for the storage of motor vehicles, and in which no business, occupation, or service for profit is conducted, except in an approved home occupation.

Gas Station. See Automobile Service Station.

General Store: A retail establishment (up to 5000 square feet) that contains limited amounts of a wide variety of goods for retail sale, including, but not limited to, milk, eggs, gloves, gardening supplies; fishing tackle; ice cream and food snacks, refrigerated beverages, etc. It may contain a small grill for food preparation but no indoor seating area. Does not have fuel pumps.

<u>Governmental Sign:</u> Any sign erected by or on behalf of a governmental body to post a legal notice, identify public property, convey public information, and direct or regulate pedestrian or vehicular traffic.

<u>Greenhouses and Nurseries (commercial):</u> An establishment primarily engaged in the retail sale of trees, shrubs, other plants, seeds, bulbs, mulches, soil conditioners, fertilizers, pesticides, garden tools, and other garden supplies to the general public. These establishments primarily sell products purchased from others, but may sell some plants which are grown at the establishment.

<u>Greenhouses (private-to include gardening):</u> A small facility where plants are grown for personal use, not for retail or commercial sale.

<u>Greenway.</u> A corridor of open space that connects different parts of a community (county) and offers opportunities for walking, bicycling, other forms of passive recreation, and non-motorized transportation. Greenways help to promote a pollutant-free environment in reducing the need for modes of travel dependent on fuel.

<u>Grid Tied Solar System.</u> A photovoltaic solar system that is connected to an electric circuit served by an electric utility company.

<u>Groundcover.</u> Any natural vegetative growth or other material that renders the soil surface stable against accelerated erosion.

<u>Height</u>. For the purpose of determining the height limits in all zones set forth in this Section, the datum shall be mean sea level elevation unless otherwise specified.

<u>Heliport:</u> A use that includes facilities for the flying of helicopters and associated rotary-wing aircraft and their maintenance for the private use of an individual and those used by flight schools.

<u>Historic Structure</u>. Any structure that is: (a) listed individually in the National Register of Historic Places (a listing maintained by the US Department of Interior) or preliminarily determined by the Secretary of Interior as meeting the requirements for individual listing on the National Register; (b) certified or preliminarily determined by the Secretary of Interior as contributing to the historical significance of a registered historic zone or a zone preliminarily determined by the Secretary to qualify as a registered historic zone; (c) individually listed on a State inventory of historic places; (d) individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified (1) by an approved state program as determined by the Secretary of Interior, or (2) directly by the Secretary of Interior in states without approved programs.



<u>Home Care Unit.</u> A facility meeting all the requirements of the State of North Carolina for boarding and care of not more than five (5) persons who are not critically ill and do not need professional medical attention, and is located on a lot of at least one (1) acre in size.

Home for the Aged, or Rest Home. A place for the care of aged and infirmed persons whose principal need is a home with such sheltered and custodial care as their age and infirmities require. In such homes, medical care is only occasional or incidental, such as may be required in the home of any individual or family for persons who are aged and infirm. The residents of such homes will not, as a rule, have remedial ailments or other ailments for which continuing skilled planned medical and nursing care is indicated. A major factor distinguishing those homes is that the residents may be given congregate services (distinguished from individualization of medical care required in "patient" care). A person may be accepted for sheltered or custodial care because of a disability, which does not require continuing, planned medical care, but which does make him unable to maintain himself in individual living arrangements. For the purposes of this Ordinance, a "home for the aged" shall also be considered a "rest home".

<u>Home Occupation</u>. Any occupation or profession carried on entirely within a dwelling or accessory building on the same lot by one or more occupants thereof, providing the following (No Retail Sales Permitted):

- A. That such use is clearly incidental and secondary to the use of the dwelling for dwelling purposes;
- B. That no more than twenty-five percent (25%) of the total floor area of the dwelling is used for such purposes;
- C. That there is no outside or window display;
- D. There shall be no change in the outside appearance of the building or premises, or other visible evidence of the home occupation other than one non-illuminated sign, not exceeding three (3) square feet in area.
- E. That no mechanical or electrical equipment is installed or used other than is normally used for domestic, professional, or hobby purposes, or for infrequent consultation or emergency treatment; and,
- F. That not more than one person not a resident of the dwelling is employed in connection with the home occupation. A doctor or dentist may have one nurse or receptionist employed in his office.
- G. No traffic shall be generated by such home occupation in greater volumes than would normally be expected in a residential neighborhood, and required parking shall be met off the street and other than in a required front yard.
- H. No equipment or process shall be used in such home occupation which creates noise, vibration, glare, fumes, odors, or electrical interference detectable to the normal senses off the lot. In the case of electrical interference no equipment or process shall be used which creates visual or audible interference in any radio or television receivers off the premises.

<u>Home Occupation of an Industrial or Commercial Nature</u>. A home occupation in a rural area that may be of a heavier commercial or industrial nature than a typical home occupation. The business owner resides on the premises, but the amount of floor area used and the type of equipment used may be different than the standard home occupation and more than one person not a resident of the dwelling may be employed. Such home occupations may include commercial or industrial uses listed in the Table of Uses.

<u>Horse Farm.</u> A bona fide farm that, as a primary activity, conducts business by engaging in any one or more of the activities of breeding, training, buying, selling, showing, racing, and boarding of horses, including associated accessory activities.

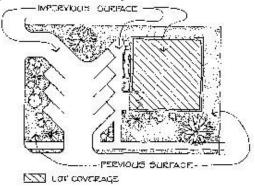
<u>Hotel.</u> A building or other structure kept, maintained, advertised as, or held out to the public to be a place where sleeping accommodations are supplied for pay to transient or permanent guests or tenants. Rooms are furnished for the accommodation of such guests, and the hotel may or may not have one or more dining rooms, restaurants, or cafes where meals are served. Such sleeping accommodations and dining



rooms, restaurants, or cafes, if existing, are located in the same building. Entry to sleeping rooms shall be from the interior of the building.

<u>Identification Sign:</u> A permanent sign announcing the name of a subdivision, manufactured home park, campground/RV park, multifamily or townhouse development, planned unit development, church, school, park or quasi-public structure or facility.

<u>Impervious Surface Area</u>. That portion of the land area that allows little or no infiltration of precipitation into the soil. Impervious areas include, but are not limited to, that portion of a development project covered by buildings, areas paved with concrete, asphalt, or brick, gravel roads, patios, driveways, streets, and recreation facilities such as tennis courts (wooden slatted decks and the water area of a swimming pool are considered pervious). See example illustration:



<u>Impervious Surface Ratio:</u> The algebraic ratio calculated to determine the percentage of open land versus built-upon area on any tract(s) of land used for the purpose of actual or anticipated residential or nonresidential development.

<u>Incidental Sign:</u> A sign that provides only information for the convenience and necessity of the public. Company logos may be displayed on such signs but must not occupy more than 25% of the sign area. Incidental signs include directories, entrance, exit and other necessary directional signs.

<u>Incompatible Use</u>. A use or service that is unsuitable for direct association and/or contiguity with certain other uses because it is contradictory, incongruous, or discordant.

<u>Industrial Park.</u> A special or exclusive type of planned industrial area designed and equipped to accommodate a community of industries, providing them with all necessary facilities and services in attractive surroundings among compatible neighbors. Industrial parks may be promoted or sponsored by private developers, community organizations, or government organizations.

Inn (shall also refer to what is termed a Country Inn). An establishment meeting the definition of "hotel" except that it is designed for a more leisurely paced lifestyle with no more than twenty-five (25) guestrooms, and with a maximum of ten (10) percent of the total floor area (excluding guestrooms and hallways) in use as accessory commercial uses, such as gift shops, newsstands, or restaurants.

<u>Inoperative Vehicle.</u> Any vehicle, designed to be self-propelled, which by virtue of broken or missing component parts, is no longer capable of self-propulsion. For the purpose of this Ordinance, any vehicle that is registered with the North Carolina Division of Motor Vehicles with a current North Carolina motor vehicle registration license affixed to it shall not be considered inoperative.

<u>Interested Persons and/or Parties.</u> In reference to filing for a variance, rezoning, and/or Special Use permit (definition shall also apply to the quasi - judicial process of hearings held by the Board of Adjustments-G.S.160D-406), unless otherwise specified in this Ordinance, applications for review and approval may be initiated by an interested person/party who is:

- A. The owner of the property that is the subject of the application;
- B. The owner's authorized agents; or



C. Any review or decision-making body (inclusive of the Board of Commissioners, Board of Adjustments, and Planning Board) as specified in this Ordinance.

When an authorized agent files an application under this section on behalf of a property owner, the agent shall provide the County with written documentation that the owner of the property has authorized the filing of the application. When review or a decision-making body initiates action under this Ordinance, it does so without prejudice toward the outcome.

<u>Junk Yard.</u> Any area, in whole or in part, where waste or scrap materials are bought, sold, exchanged, stored, baled, packed, disassembled, or handled, including but not limited to scrap iron and other metals, paper, rags, vehicles, rubber tires, and bottles. A "junk yard" includes an auto-wrecking yard, but does not include uses established entirely within enclosed buildings. A "junk yard" for vehicles is defined as four or more junk, inoperable or unlicensed vehicles stored on the property. See definition of commercial garage for exception.

Kennel: Any facility used for the purpose of boarding animals, not including horses, cattle, swine, sheep, goats, geese or peafowl. Kennels may conduct other such incidental activities, such as the sale of animals, treatment of the animals, grooming or cleaning, and the sale of pet supplies. This definition shall include any establishment wherein any person engages in business or practice, for fee, of boarding, breeding, grooming, letting for hire, or training of more than three domesticated animals at any one time; or an establishment wherein any person engages in the business or practice, for a fee, of selling more than one litter of domesticated animals at any one time or the selling of any three individual domesticated animals (not defined as litter herein) at any one time. Domesticated animals, for the purpose of this ordinance, shall be defined as dogs, cats, and other generally accepted household pets. Litter, for the purpose of this Ordinance, shall be defined as the offspring resulting from the breeding of two domesticated animals. The following shall not constitute the operation of a kennel as defined above and in no way shall this provision regulate the following (for personal use):

- (a) The ownership of domesticated animals as household pets;
- (b) The ownership of domesticated animals for hunting or tracking purposes;
- (c) The ownership of domesticated animals for the purpose of exhibiting at shows, obedience or field trials: and
- (d) The ownership of domesticated animals for the purpose of protection or guarding of residences or commercial establishments.

<u>Landfill</u>, <u>Demolition</u>. A landfill facility for stumps, limbs, leaves, concrete, brick, wood, uncontaminated earth and other solid wastes resulting from construction, demolition or land clearing.

<u>Landfill, Land Clearing Inert Debris, (LCID), major.</u> A landfill facility, greater than two acres, for the land disposal of land clearing waste, concrete, brick, concrete block, uncontaminated soil, gravel and rock, untreated and unpainted wood, and yard trash, as defined in 15A NCAC 13B.0101. (Amended 10/7/2019)

<u>Landfill, Land Clearing Inert Debris, (LCID), minor</u>. A landfill facility, less than two acres, for the land disposal of land clearing waste, concrete, brick, concrete block, uncontaminated soil, gravel and rock, untreated and unpainted wood, and yard trash as defined in 15A NCAC 13B.0101. (*Amended* 10/7/2019)

<u>Landfill</u>, <u>Sanitary</u>. A facility where waste material and refuse is placed in the ground in layers and covered with earth or some other suitable material each work day. Sanitary landfills shall also conform to requirements of 15A NCAC 13B regarding solid waste management.

<u>Landscaped Area.</u> A portion of the site or property containing vegetation to exist after construction is completed. Landscaped areas can include, but are not limited to, natural areas, buffers, lawns, and plantings.

<u>Lattice/Cage Tower.</u> A structure consisting of connected sections of metal supports. Towers of this type typically are 250-300 feet in height and require no supporting guy-wires.



<u>Life Care Center:</u> A facility which combines the functions of any combination of a retirement community, rest home, nursing home, and convalescent home, providing residential facilities for independent living, assisted care, and, possibly, nursing care.

<u>Loading Area or Space, Off-Street:</u> An area logically and conveniently located for bulk pickups and deliveries, scaled to delivery vehicles expected to be used, and accessible to such vehicles. Required off-street loading space is not to be included as off-street parking space in computing required off-street parking space.

<u>Lot.</u> A parcel of land in undivided ownership occupied, or intended for occupancy, by a main building or group of main buildings together with any accessory buildings, including such yards, open spaces, width, and area as are required by this Ordinance, either shown on a plat of record or described by metes and bounds and recorded with the Register of Deeds. For the purpose of this Ordinance, the word "lot" shall be taken to mean any number of contiguous lots or portions thereof, upon which one or more main structures for a single use are erected or are to be erected and their accessory buildings.

<u>Lot, Corner.</u> A lot abutting the intersection of two (2) or more streets or a lot abutting on a curved street or streets shall be considered a corner lot if straight lines drawn from the foremost points of the side lot lines to the foremost point of the lot at the apex meet at any angle of less than one hundred thirty-five (135) degrees. In such a case the apex of the curve forming the corner lot shall be considered as the intersection of street lines for the purpose of this Ordinance, such as in corner visibility requirements.

<u>Lot</u>, <u>Depth</u>. The depth of a lot is the average distance between the front and back lot lines measured at right angles to its frontage and from corner to corner.

Lot, Interior. A lot other than a corner lot.

<u>Lot Lines</u>. The lines bounding a lot. Where a lot of record includes a right-of-way, the lot lines are presumed not to extend into the right-of-way.

Lot, Through. An interior lot having frontage on two streets.

<u>Lot</u>, <u>Width</u>. The straight line distance between the points where the building setback line intersects the two side lot lines.

<u>Lot of Record.</u> A lot which is a part of a subdivision, a plat of which has been recorded in the office of the Vance County Register of Deeds, or a lot described by metes and bounds, the description of which has been recorded in the office of the Register of Deeds by the owner or predecessor in title thereto.

Machine and Welding Shop: This industry comprises establishments known as machine shops primarily engaged in machining metal parts on a job or order basis. Generally machine shop jobs are low volume using machine tools such as lathes (including computer numerically controlled); automatic screw machines; and machines for boring, grinding, and milling. This industry also comprises establishments primarily engaged in the repair and maintenance of commercial and industrial machinery and equipment. Establishments in this industry either sharpen/install commercial and industrial machinery blades and saws; or provide welding (e.g., automotive, general) repair services; or repair agricultural and other heavy and industrial machinery and equipment (e.g., forklifts and other materials handling equipment, machine tools, commercial refrigeration equipment, construction equipment, and mining machinery).

<u>Manufactured Home Space:</u> A designated area of land within a manufactured home park designed for the accommodation of a single manufactured dwelling home in accordance with the requirements of the Vance County Manufactured Housing Ordinance (Ordinance #3).

Manufactured Home: A factory-built structure composed of one or more components, each of which is manufactured or constructed under the authority of 42 United States Code Section 5401, the National Manufactured Home Construction and Safety Standards Act, and is to be used as a place for human habitation, but which is not constructed or equipped with a permanent hitch or other device allowing it to



be moved other than for the purpose of moving to a permanent site, and which does not have permanently attached to its body or frame any wheel or axles. A mobile home, a recreational vehicle or travel trailer are not a manufactured homes.

<u>Manufactured Home Development:</u> A general category of development that includes manufactured home subdivisions and manufactured home parks.

<u>Manufactured Home Park:</u> A parcel of land under single ownership on which three or more manufactured homes are located where spaces are offered for use, lease or rent for the purpose of locating manufactured homes. Also referred to as land-lease or rental communities. A group development site with required improvements and utilities for the long-term location of manufactured homes which may include services and facilities for the residents.

<u>Manufactured Home Subdivision:</u> A subdivision designed and/or intended for the sale of lots for siting manufactured homes. Manufactured Home Subdivisions shall conform to the same land development and site improvement standards that apply to conventional subdivisions.

Menu Sign: A permanent on-premises sign located at businesses that provide drive-up or drive-through services such as fast food restaurants, banks, laundries, etc. Menu signs shall be located so as not to create vehicle stacking problems which will interfere with the flow of traffic.

Mining. The breaking of the surface soil in order to facilitate or accomplish the extraction or removal of minerals, ores or other solid matter. Any activity or process constituting all or part of a process for the extraction or removal of minerals, ores, soils, and other solid matter from their original location. The preparation, washing, cleaning, or other treatment of minerals, ores, or other solid matter so as to make them suitable for commercial, industrial or construction use. Mining does not include:

- ☐ Those aspects of deep mining not having significant effect on the surface, where the affected land does not exceed one acre in area.
- Excavation or grading when conducted solely in aid of on-site farming or of on-site construction for purposes other than mining, such as constructing a residence, garage, commercial or industrial building.
- Mining operations where the affected land does not exceed one (1) acre in area.
- Plants engaged in processing minerals produced elsewhere and whose refuse does not affect more than one (1) acre of land.
- Removal of overburden and mining of limited amounts of any ores or mineral solids when done only for the purpose and to the extent necessary to determine the location, quantity, or quality of any natural deposit, provided that no ores or mineral solids removed during exploratory excavation or mining are sold, processed for sale, or consumed in the regular operation of a business, and provided further that the affected land resulting from any exploratory excavation does not exceed one (1) acre in area.

<u>Mini-Warehouse / Storage Facilities:</u> A building, or group of buildings, in a controlled access and/or fenced compound that contains varying sizes of individual, compartmentalized and controlled access stalls or lockers for the dead storage of a customer's goods or wares. No sales, service, or repair activities other than the rental of storage (see definition in this section) units are permitted on the premises.

Mobile Home: A transportable, factory-built home designed to be used as a year-round residential dwelling and built prior to enactment of the National Manufactured Home Construction and Safety Standards Act, which became effective June 15, 1976. A mobile home does not meet the criteria for a manufactured home. A recreational vehicle or travel trailer is not a mobile home.

<u>Mobile Office.</u> A structure identical to a mobile home (as defined in this section) or a modular home (as defined in this section), that has been converted to, or originally designed and constructed for, commercial or office use.



Adopted 5/03/2021; Effective 5/03/2021

<u>Modular Home:</u> A factory-built home certified as meeting the North Carolina Building Codes and associated codes as applicable to modular housing. Once certified by the State, modular homes shall be subject to the same standards as a site-built home.

<u>Monopole Tower</u>. A single pole structure that supports telecommunication equipment. These towers are typically less than 200 feet in height. Said towers have been shown to be resistant to wind and ice conditions that could cause tower collapse.

<u>Motel</u>. A building or other structure kept, maintained, advertised as, or held out to the public to be, a place where sleeping accommodations are supplied for pay to transient or permanent guests or tenants and where rooms are furnished for the accommodation of such guests. Entry to sleeping rooms may be from the interior or exterior of the building. Food may be served in dining rooms, restaurants, or cafes, which may be located in the same building as the sleeping rooms or may be in one or more separate buildings.

<u>Nonconforming Lot.</u> A lot existing at the effective date of this Ordinance or any amendment to it (and not created for the purpose of evading the restrictions of this Ordinance) that cannot meet the minimum area or lot width or depth requirements of the zone in which the lot is located.

<u>Nonconforming Sign:</u> Any sign that does not conform to size, height, location, design, construction, or other requirements of this Section. The nonconformity may result from adoption of this Article or any subsequent amendment.

<u>Nonconforming Use</u>. The use of a building, mobile home, or land which does not conform to the use regulation of this Ordinance for the zone in which it is located, either at the effective date of this Ordinance or as a result of subsequent amendments which may be incorporated.

<u>Nonconformity</u>, <u>Dimensional</u>. A nonconforming situation that occurs when the height, size, or minimum floor space of a structure, or the relationship between an existing building or buildings and other buildings or lot lines (i.e. setbacks), does not conform to the regulations applicable to the zone in which the property is located.

<u>Nuisance.</u> Anything that interferes with the use or enjoyment of property, endangers personal health or safety, or is offensive to the senses (sight, smell, touch, hearing, and taste).

<u>Ordinance</u>. This, the Zoning Ordinance, including any amendments. Whenever the effective date of the Ordinance is referred to, the reference includes the effective date of any amendment to it.

<u>Off-grid Solar System.</u> A photovoltaic solar system in which the circuits energized by the solar system are not electrically connected in any way to electric circuits that are served by an electric utility company.

Off-Premise Outdoor Advertising. any outdoor sign, display, light, device, figure, painting, drawing, message, plaque, poster, billboard, or any other thing which is designed, intended or used to advertise or inform, any part of the advertising or information contents of which is visible from any place on the maintraveled way of the interstate or primary system or other public right of way, whether the same be permanent or portable installation.

<u>On-Premises Sign:</u> A sign that publicizes and directs attention to a profession, commodity, activity, product, service or entertainment conducted, sold or offered upon the premises where such sign is located. On-premises signs include pole and ground mounted signs.

<u>Opaque.</u> In reference to screening, buffering, and fencing, this term shall mean "not able to be seen through form one side to the other.

<u>Outdoor Display.</u> The placement of merchandise normally associated with the commercial or industrial use outside for public display.

Outdoor Storage. The placement /storage of goods, equipment, or material, such as junk vehicles, junk appliances and other such items, trash, and other debris outside of an enclosed building for a period of



more than forty-eight (48) consecutive hours shall be considered outdoor storage. Outdoor storage does not refer to licensed vehicles in use by the person occupying the property, or other minor/incidental storage, such as items specifically designed for outdoor use including; lawn furniture, outdoor grill, swing set, lawn care equipment, which would not have a negative impact on the health, safety and general welfare of adjacent property owners and land uses.

<u>Parking Lot or Area</u>: An area or plot of land used for, or designated for, the parking or storage of vehicles, either as a principal use or as an accessory use.

<u>Parking Space:</u> A storage space of not less than one hundred sixty (160) square feet for one automobile, plus the necessary access space.

Parking Space, Off-Street. A parking space located outside of a dedicated street right-of-way.

<u>Person:</u> An individual, firm, partnership, corporation, company, association, joint stock association or government entity; includes a trustee, a receiver, an assignee, or a similar representative of any of them.

<u>Photovoltaic System</u>: An active solar energy system that converts solar energy directly into electricity.

<u>Planned Unit Development (PUD)</u>. A form of development usually characterized by a unified site design for a number of housing units, clustering buildings, providing common open space, density increases, and mix of building types/land uses. It permits the planning of a project and the calculation of densities over the entire development, rather than on an individual lot-by-lot basis. For this definition (and as relates to Cluster Development) for zero (0) side and/or rear yard setbacks (townhouse and/or condominium development), a zero (0) side and/or rear yard setback is within the development only and does not refer to the setbacks that abut adjoining properties (relates to the sides of dwelling units that face open paces areas).

<u>Political Sign.</u> A sign advertising a candidate or issue to be voted upon on a specific election day, which is attached to the ground by a stake or stakes, but which excludes any other sign defined as a portable sign. See TEMPORARY SIGN definition below, this type of sign shall not be placed more than 30 days prior to the event/election and must be removed within 10 days following the event/election.

Portable Sign: A sign not permanently attached to any surface.

<u>Pre-Existing Tower.</u> Any tower erected or for which a permit has been issued prior to the effective date of this ordinance.

<u>Property</u>. All real property, or a lot or a number of adjacent lots on which is situated a land use, a building, or group of buildings designed as a unit or on which a building or a group of buildings are to be constructed which is subject to the land-use regulations of the county.

<u>Private Road or Street</u>: Any road or street which is not publicly owned and maintained and is used for access by the occupants of the development, their guests, and the general public.

<u>Professional or Occupational Sign or Name Plate:</u> A sign that publicizes and directs attention to a home occupation, rural family occupation, or to a profession.

<u>Projecting Sign:</u> Any sign that is end mounted or otherwise attached to an exterior wall of a building that forms an angle with said wall.

Real Estate Sign: A sign that advertises the sale, rent, or lease of property.

Recreational Vehicle: A vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a truck; and, (d) designed primarily not for use as a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use. Recreational vehicles and camping trailers shall not be used as temporary living quarters for more than ninety (90) days in any twelve (12) month period except if these are placed in an approved RV/Camper park or in the event of an emergency or disaster when a



governmental grant/program provides a temporary recreational vehicle while the damaged/destroyed home is being replaced. Recreational vehicles must be ready, willing, and able to move off-site within 48 hours.

<u>Right-of-Way.</u> An area owned and maintained by a municipality, the State of North Carolina, a public utility, a railroad, or a private entity for the placement of such utilities and/or facilities for the passage of vehicles/pedestrians, including roads, pedestrian walkways, utilities, or railroads.

<u>Satellite Dish Antenna (Earth Station)</u>: A dish antenna, or earth station, is defined as an accessory structure and shall mean a combination of:

- Antenna or dish antenna whose purpose is to receive communication or other signals from orbiting satellites and other extraterrestrial sources;
- A low-noise amplifier which is situated at the focal point of the receiving component and whose purpose is to magnify and transfer signals; and
- A coaxial cable whose purpose is to carry the signals into the interior of the building.

<u>Self-Service Gasoline Pump</u>. A gasoline or diesel fuel dispensing pump, which is, operated by the customer who pays the charge to an attendant or cashier.

<u>Self-Supporting Tower.</u> See definition of Freestanding Tower.

<u>Setback</u>. The required minimum distance between every structure and the lot lines of the lot on which it is located (measured from the road right of way in the front and property lines on the remaining portions of the property).

<u>Shopping Center</u>: A commercial area with one or more buildings or lots and designed as a unit to house two (2) or more businesses offering products and/or services to the public.

<u>Shooting range facility</u>. A public or private facility, including individual shooting ranges, safety fans or shotfall zones, structures, parking areas, and other associated improvements, designed for the purpose of providing a place for the discharge of various types of firearms or the practice of archery. Does not include incidental target practice areas on private property.

Shooting station. A fixed point from which firearms or arrows are discharged.

<u>Sign:</u> Any words, lettering, numerals, parts of letters or numerals, figures, phrases, sentences, emblems, devices, designs, or trade names or trademarks by which anything is known (including any surface, fabric or other material or structure designed to carry such devices such as are used to designate or attract attention to an individual, firm, an association, a corporation, a profession, a business, or a commodity or product) which are exposed to public view and used to attract attention.

Sign Area: The area of a sign shall be measured in conformance with the following:

- a. The area of the face of a sign shall be calculated to include the outermost part that forms the shape or display. Necessary supports and trim moldings shall not be included when calculating the area of the sign. Aprons below advertising signs shall not exceed 3 feet in height. Aprons serve an aesthetic function and shall not be used for any purposes other than to identify, by name, the sign company responsible for the sign.
- b. In computing the area of a sign, standard mathematical formulas for common regular geometric shapes (triangle, parallelogram, circle and ellipse, or combinations thereof) shall be used.
- c. In the case of an irregularly shaped sign or a sign with letters and/or symbols affixed to or painted, displayed or incorporated into or upon a wall, canopy, awning or decorative facade of a building, the area of the sign shall be the area within the singular continuous perimeter, outlining the limits of the writing, representation, emblem, or any figure of similar character.



d. Back-to-back and V-type signs mounted so as to be connected and not spread more than 15 feet will be considered as one sign location when calculating horizontal separation between signs. Advertising signs (billboards) shall not be stacked, horizontally or vertically.

<u>Sign Height:</u> The vertical distance measured from the ground elevation where the sign is located, to the highest point of the sign except as follows: When the ground elevation is different from the elevation of an adjacent road, the height of a sign shall be measured from the road elevation of the adjacent road at the edge of the pavement.

<u>Site Plan.</u> A plan, to scale, with supporting text showing uses and structures proposed for a parcel of land as required by the regulations involved. It includes such things as lot lines, streets, building sites, reserved open space, buildings, major landscape features – both natural and manmade and depending on requirements, the locations of proposed utility lines.

<u>Solar Collector (Accessory)</u>: A device, structure or a part of a device or structure for which the primary purpose is to transform solar radiant energy into another source for direct power consumption and interconnection with the power grid to offset energy consumption of a principal use. The device may be roof-mounted or ground-mounted as an accessory use.

<u>Solar Collector Surface</u>: Any part of a solar collector that absorbs solar energy for use in the collector's energy transformation process. Collector surface does not include frames, supports and mounting hardware.

<u>Solar Energy</u>: Radiant energy received from the sun that can be collected in the form of heat or light by a solar collector.

<u>Solar Energy System</u>: A device or structural design feature, a substantial purpose of which is to provide daylight for interior lighting or provide for the collection, storage and distribution of solar energy for space heating or cooling, electricity generating, or water heating. Solar Energy Systems may include, but not be limited to, solar farms and any of several devices that absorb and collect solar radiation for use as a source of energy.

<u>Solar Farm</u>: A facility used to convert solar energy into electrical power for interconnection with the power grid for primarily off-site energy consumption. Also referred to as a Solar Energy Generation Facility, Solar Power Plant or Solar Photovoltaic Farm.

<u>Solar Mounting Devices</u>: Devices that allow the mounting of a solar collector onto a roof surface or the ground.

Sound Management Program for Agricultural Land and Horticultural Land (per North Carolina G.S. 105-277.3). If the property owner demonstrates any one of the following factors with respect to agricultural land or horticultural land, then the land is operated under a sound management program:

- 1. Enrollment in and compliance with an agency-administered and approved farm management plan.
- 2. Compliance with a set of best management practices.
- 3. Compliance with a minimum gross income per acre test.
- 4. Evidence of net income from the farm operation.
- 5. Evidence that farming is the farm operator's principal source of income.
- 6. Certification by a recognized agricultural or horticultural agency within the county that the land is operated under a sound management program.

Operation under a sound management program may also be demonstrated by evidence of other similar factors. As long as a farm operator meets the sound management requirements, it is irrelevant whether the property owner received income or rent from the farm operator.

Sound Management Program for Forestland (per North Carolina G.S. 105-277.3). If the owner of forestland demonstrates that the forestland complies with a written sound forest management plan for the production and sale of forest products, then the forestland is operated under a sound management program.



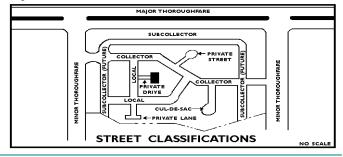
Special Use: A use that, given special characteristics related to its operation or installation, is permitted in a zone subject to approval by the Board of County Commissioners, and subject to special requirements, different from those requirements for the zone in which the Special Use may be located. When required, a Special Use Permit:

- A. Shall have, as its purpose, to create a set of conditions under which a certain use could become compatible or acceptable, which current regulations do not allow.
- B. Shall have the process is to allow review of all pertinent information by the public, technical staff members, appointed officials and elected officials and to allow each entity the opportunity to suggest, or require, conditions which will mitigate the adverse impact of the use.
- C. Shall not be construed to be a variance to any existing regulation.
- D. Does not waive or alter any portion of the existing regulations.
- E. Additional requirements shall be specific to the use or structure under consideration.
- F. As a request, shall specify the nature of the proposed development and shall propose conditions to assure compatibility between the development and the surrounding neighborhood. General requirements would include:
 - 1. A request for a Special Use Permit shall be considered only upon request by the property owner(s).
 - 2. All standards and requirements shall be met, except to the extent that the conditions imposed are more restrictive than that standard or requirement.
 - The use shall not endanger the public health or safety if located where proposed and developed according to the plan submitted.
 - 4. Additional requirements shall be specific to the use or structure under consideration.
 - 5. No alterations to the use or structure shall be permitted, except as specifically reviewed and approved.
 - 6. Changes shall require a new request and shall be treated as a new and separate request.
 - 7. The use shall not injure the value of adjoining or abutting property or the use is a public necessity.
 - 8. The location and character of the use, if developed according to the plans submitted, will be in harmony with the area in which it is to be located and generally in conformity with the County's Land Use Plan.

Storage. The deposition of commodities/items for the purpose of future use or safekeeping.

Story. That portion of a building included between the surface of any floor and the surface of the next floor above it, or if there is no floor above it, then the space between such floor and the ceiling above it.

Street. A thoroughfare, which affords the principal, means of access to abutting property, including avenue, place, way, drive, lane, boulevard, highway, road, and any other thoroughfare, except an alley. Examples of street classifications are as follows:





- A. Subcollector Street: street whose principal function is to provide access to abutting properties, but which is also designed to be used or is used to connect local streets with collector or higher classification streets.
- B. Public Street: dedicated public right-of-way for vehicular traffic which 1) has been accepted by NCDOT for maintenance; or 2) is not yet accepted, but in which the roadway design and construction have been approved under public standards for vehicular traffic. Alleys are specifically excluded.
- C. Private Street: vehicular travelway not dedicated or offered for dedication as a public street, but resembling a cul-de-sac or a local street by carrying traffic from a series of driveways to the public street system.
- D. Cul-de-Sac Street: short local street having one end open to traffic and the other end permanently terminated by a vehicular turnaround.
- E. Local Street: street with primary function to provide access to abutting properties.
- F. Private Lane: private cul-de-sac for vehicular traffic serving four (4) or fewer residential lots in a minor subdivision, maintained pursuant to NCGS 136-102.6.
- G. Private Drive: vehicular travelway not dedicated or offered for dedication as a public street, providing access to parking lot(s) for two (2) or more principal buildings in a group housing or group nonresidential development.
- H. Collector Street: street whose principal function is to carry traffic between cul-de-sac, local, and subcollector streets, and streets of higher classification, but which may also provide direct access to abutting properties.
- I. Major Thoroughfare Street: Major thoroughfares consist of interstate, other freeway, expressway, or parkway links, and major streets that provide for the expeditious movement of high volumes of traffic within and through urban areas.
- J. Minor Thoroughfare Street: Minor thoroughfares collect traffic from collector, subcollector, and local streets and carrying it to the major thoroughfare system. Minor thoroughfares may be used to supplement the major thoroughfare system by facilitating movement of moderate volumes of traffic within and through urban areas and may also serve abutting property.

<u>Structure.</u> Anything constructed or erected, including a building; a manufactured (modular) or mobile home; storage tank for gases or liquids; or any other permanent or temporary, man-made facilities, including swimming pools, walls, signs, and storage buildings.

<u>Structural Alterations.</u> Any change in the supporting members of a building, such as bearing walls, columns, beams, or girders, except for repair or replacement.

Start of Construction: Includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home (as defined in this section-modular) or a mobile home (as defined in this section) on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of the building, whether or not that alteration affects the external dimensions of the building.

<u>Stealth Tower.</u> A hidden tower, where the telecommunication equipment is placed in such a way as to not be obvious (typically incorporated into the supporting structure and assumes the color, texture, and



appearance of the supporting structure as in placement in/on a church steeple, a water tower, or on a tall building).

Street: A dedicated and accepted public right-of-way for vehicular traffic. The word "street" shall include the word "road". This definition shall include reference to a "private road (a vehicular right-of-way and street or road not intended for dedication to or maintenance by NCDOT or other appropriate public agency) and "public road" (a dedicated public right-of-way for vehicular traffic which 1) has been accepted by NCDOT for maintenance; or 2) is not yet accepted, but in which the roadway design and construction have been approved under public standards for vehicular traffic). Alleys are specifically excluded.

<u>Subdivision</u>. Means all divisions of a tract or parcel of land into two or more lots, building sites, or other divisions for the purpose of sale or building development whether immediate or future and includes all division of land involving the dedication of a new street or change in existing streets; however, the following is not included within this definition and are not subject to any regulations enacted pursuant to the Vance County Subdivision Ordinance (Exemptions):

- A. The combination or recombination of portions of previously subdivided and recorded lots if the total number of lots is not increased and resultant lots are equal to or exceed the standards of the county as shown in its subdivision regulations;
- B. The division of land into parcels greater than ten (10) acres if no street right-of-way dedication is involved:
- C. The public acquisition by purchase of strips of land for widening or opening streets; and
- D. The division of a tract into single ownership where the entire area is no greater than two (2) acres, into not more than three (3) lots, if no street right-of-way dedication is involved and if the resultant lots are equal to or exceed the standards of the county as shown by the Vance County Subdivision Ordinance.
- E. The division of a tract into parcels in accordance with the terms of a probated will or in accordance with intestate succession under Chapter 29 of the General Statutes

<u>Substantial damage</u>: means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. See definition of "substantial improvement".

<u>Substantial improvement:</u> means any repair, reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures, which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either: (1) any project of improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or, (2) any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

<u>Surface Danger Zone</u>. Any area that may reasonably expect projectile impact resulting from direct fire, including misdirected and accidental discharges, and ricochets from any firearm or bow, which takes into consideration all mitigation efforts as submitted by the applicant and determined by a certified engineer.

<u>Target</u>. Any object or area which is used as the intended recipient of the projectiles fired from a firearm or bow.

<u>Telecommunication Tower.</u> Any structure designed and built to support one or more antennae, including self-supporting and guyed lattice/cage towers, or monopole towers used for the support of PCS and cellular mobile services. This definition does not address commercial radio and television towers and does not include personal satellite dishes or amateur radio antennas.

Temporary. Anything temporary is to exist less than six (6) months.



- A. Commercial (temporary Outdoor Sales include uses such as flea markets, auctions, and fireworks sales tents.
- B. Temporary Miscellaneous Sales include such uses other than flea markets, auctions, fireworks sales tents, but does not include what are termed yard/garage sales (no restrictions imposed on small scale/individual home yard/garage sales).

<u>Temporary Signs:</u> Temporary signs are those signs (inclusive of banners as defined in this section) that relate to such events as elections, farm auctions, yard sales, agricultural production sales, annual charitable, civic or fraternal events, horse shows; festivals, bona fide grand openings and model home show openings.

<u>Tourist Home.</u> Any dwelling occupied by the owner or operator in which rooms are rented to guests, for lodging of transients and travelers for compensation, and where food may be served, other than a bed and breakfast.

Tower Setback. A buffer between the tower structure and adjoining property owners.

<u>Townhouse</u>: A dwelling unit as part of a structural arrangement of four (4) or more single family attached dwellings joined by common walls on not more than two (2) opposite sides with the uppermost story being a portion of the same dwelling located directly beneath at the grade or first floor level and having exclusive individual ownership and occupant rights of each dwelling unit including, but not limited to, the land area directly beneath the dwelling. Said units shall have separate entrances to the outside and are entirely separated from each other by walls that meet North Carolina Building Standards.

<u>Tower Height</u>. The vertical distance measured from the ground to the uppermost point of the tower, including the antennas and lightning rod.

<u>Trailer.</u> Any vehicle or structure originally designed to transport something or intended for human occupancy for short periods of time. Trailers shall include the following:

- House Trailer. A vehicular, portable structure built on a wheeled chassis, designed to be towed by a self-propelled vehicle for use for travel, recreation, or vacation purposes, having a body width ten (10) feet or less or a body length thirty-two (32) feet or less when equipped for road travel.
- © Camping Trailer. A folding structure manufactured of metal, wood, canvas, plastic, or other materials, or any combination thereof, mounted on wheels and designed for travel, recreation, or vacation use.
- ☐ Trailer. A vehicle hauled by another vehicle and designed to transport vehicles, boats, or freight.

<u>Transmission Line, High Voltage Electric Power.</u> A line transmitting, or designed to transmit, electricity of 66,000 or more volts, including poles, guys, wires, towers, and appliances, but not including transformer stations or substations.

<u>Under story.</u> The small trees, shrubs, and other vegetation growing beneath the canopy of forest trees.

<u>Use</u>. Any continuing or repetitive occupation or activity taking place upon a parcel of land or within a building including, but not limited to; residential, manufacturing, retailing, offices, public services, recreational, and educational.

<u>Variance</u>. A variance is a relaxation of the terms of the Zoning Ordinance where such variance will not be contrary to the public interest and where, owing to conditions peculiar to the property and not the result of the action of the applicant, a literal enforcement of the Ordinance would result in unnecessary and undue hardship. As used in this Ordinance, a variance is authorized only for height, area, and size of a structure or size of yards and open space.

Wall Sign: A sign which is attached to a wall or facade of a building or canopy.

<u>Warning Sign:</u> Any sign with no commercial message that displays information pertinent to the safety or legal responsibilities of the public such as signs warning of 'high voltage', 'no trespassing', and similar directives.



Wetlands. Those areas that are defined as wetlands by the United States Army Corps of Engineers from time to time

Woodlands. Undeveloped land except for roads and utilities and contains stands of native trees.

<u>Yard.</u> An open space on the same lot with a building, unoccupied and unobstructed from the ground upward, except by trees or shrubbery or as otherwise provided herein.

<u>Yard</u>, <u>Front (Highway Yard)</u>. A yard across the full width of the lot extending from the front line of the building.

<u>Yard</u>, Side. An open space on the same lot with a building, between the building and the side line of the lot, extending through, from the front building line, to the rear of the lot.

<u>Yard</u>, <u>Rear</u>. A yard extending across the full width of the lot and measured between the rear line of the lot and the rear line of the main building.

Zero Lot Line. A concept commonly used in Planned Unit Developments where individual commercial buildings or dwellings, such as townhouses (row houses) and patio homes, are to be sold, along with the ground underneath and perhaps a small yard or patio area. Such commercial or residential units are located in buildings with two (2) or more units per building, usually including common walls. With zero lot line, the minimum requirements for lot area and yards need not be met and construction can take place up to the lot line.

Zoning. A police power measure, enacted primarily by general-purpose units of local government, in which the community is divided into zones or zones within which permitted and Special Uses are established, as are regulations governing lot size, building bulk, placement, and other development standards. Requirements vary from zone to zone, but they must be uniform within zones. The Zoning Ordinance consists of two parts – a text and a map.

Zoning Administrator: The official person charged with the administration of the Zoning Ordinance. This definition may include other Zoning Enforcement Officers; both the positions of the Administrator and the Enforcement Officer are sworn positions.

Zoning District: An area established by this Ordinance where the individual properties are designed to serve compatible functions and to be developed at compatible scales.

Zoning Permit. An official certification that a premise, site plan, building or land conforms to provisions of this Zoning Ordinance and may be used or occupied. Such a certificate is granted for new construction or for alterations or additions to existing structures or a change in use. Unless such a permit is issued a building permit cannot be issued by the County Planning and Development Department.



APPENDIX A - AMENDMENTS

January 7, 2013

- 1. Amended section 3.2F to include prohibitions on new utilities for campers and limiting campers if utilities are present.
- 2. Amended the Table of Permitted Uses by adding "Solar Collector (Accessory) as a permitted use within all current zoning districts.
- 3. Amended section 4.13 to include Solar Collectors as an accessory use.
- 4. Amended section 12, Definitions, adding Active Solar System, Building-integrated Solar System, Grid Tied Solar System, Off-grid Solar System, Photovoltaic System, Solar Collector (Accessory), Solar Collector Surface, Solar Energy, Solar Energy System, Solar Farm, Solar Mounting Device.
- 5. Amended section 12, Definitions amending definition of campgrounds.

February 4, 2013

- 1. Amended the Table of Permitted Uses by adding "Solar Energy Systems, Large Scale (Solar Farms) as a Special Use within the AR, LI, IM, EIA, and OI zoning districts.
- 2. Amended section 6, Special Use Permits, adding conditions for the issuance of a Special Use permit for solar energy systems and solar farms.

December 1, 2014

- 1. Amended sections 1.5 and 12 to update the definition of agriculture and bona fide farms as per session law 2013-347.
- 2. Amended sections 1.8, 6.3, 6.10 O9, 8.1, 8.2, 8.5, 8.6A, 8.7, 8.8D, 8.11, 10.3A, 10.3D, 10.5, 10.6, 10.7, 10.8 B, and 10.8C to update and modernize language regarding quasi-judicial hearings and board of adjustment procedures as per session law 2013-126.

July 6, 2015

- 1. Amended the Table of Permitted Uses by permitting Cemetery (Church, Family) as a Permitted Use within the OI zoning district and prohibiting Cemetery (Church, Family) within the R-10 zoning district.
- 2. Amended the Table of Permitted Uses by permitting Manufacturing as a Special Use within the (HC) Highway Commercial zoning designation.

September 8, 2015

1. Amended section 6.10N to update the solar farm regulations providing additional protections for setbacks, screening and fencing, lighting, installation and design, inspections, and decommissioning.

March 6, 2017

- 1. Amended the Table of Permitted Uses by adding General Store as a Permitted Use in HC and GC zoning districts and as a Special Use Permit in AR, R30, and OS zoning districts.
- 2. Amended section 12, Definitions adding a definition of General Store.
- 3. Amended section 3.2.D.4.a to allow the separation between well and septic to be reduced to fifty (50) feet with written approval by the Vance County Health Department.
- 4. Amend the Table of Permitted Uses by dividing the Vehicle/Boat Sales, Rental, and Service into three separate uses.

July 2, 2018

- 1. Amend Section 1, 1.5 BONA FIDE FARMS, dropping "e" "A Farm Identification Number issued by the USDA Farm Service Agency from the evidence accepted as proof of BONA FIDE FARM.
- 2. Amended Section 4, 4.12, Accessory Structures/Buildings, to allow larger than 1,200 sq. ft., even with or behind dwelling.

March 11, 2019

- 1. Amended the Table of Permitted Uses by adding convenience center as a permitted use in the LI, IM, and WOZ zoning districts, and as a Special Use Permit in AR, R30, and GC1 zoning districts.
- 2. Amend Section 12, Definition, adding a definition of convenience center.

October 7, 2019

- 1. Amended Section 3, Table of Permitted Uses (Industrial Uses), by adding Land Clearing Inert Debris Landfill, Minor and Major as a Special Use in the AR, LI, IM, and WOZ zoning districts.
- 2. Amended Section 6.10 (G), adding Special Use minimum development requirements.
- 3. Amend Section 12, Definitions, adding definitions for "Landfill, Land Clearing Inert Debris, (LCID), minor" and "Landfill, Land Clearing Inert Debris, (LCID), major".

January 6, 2020

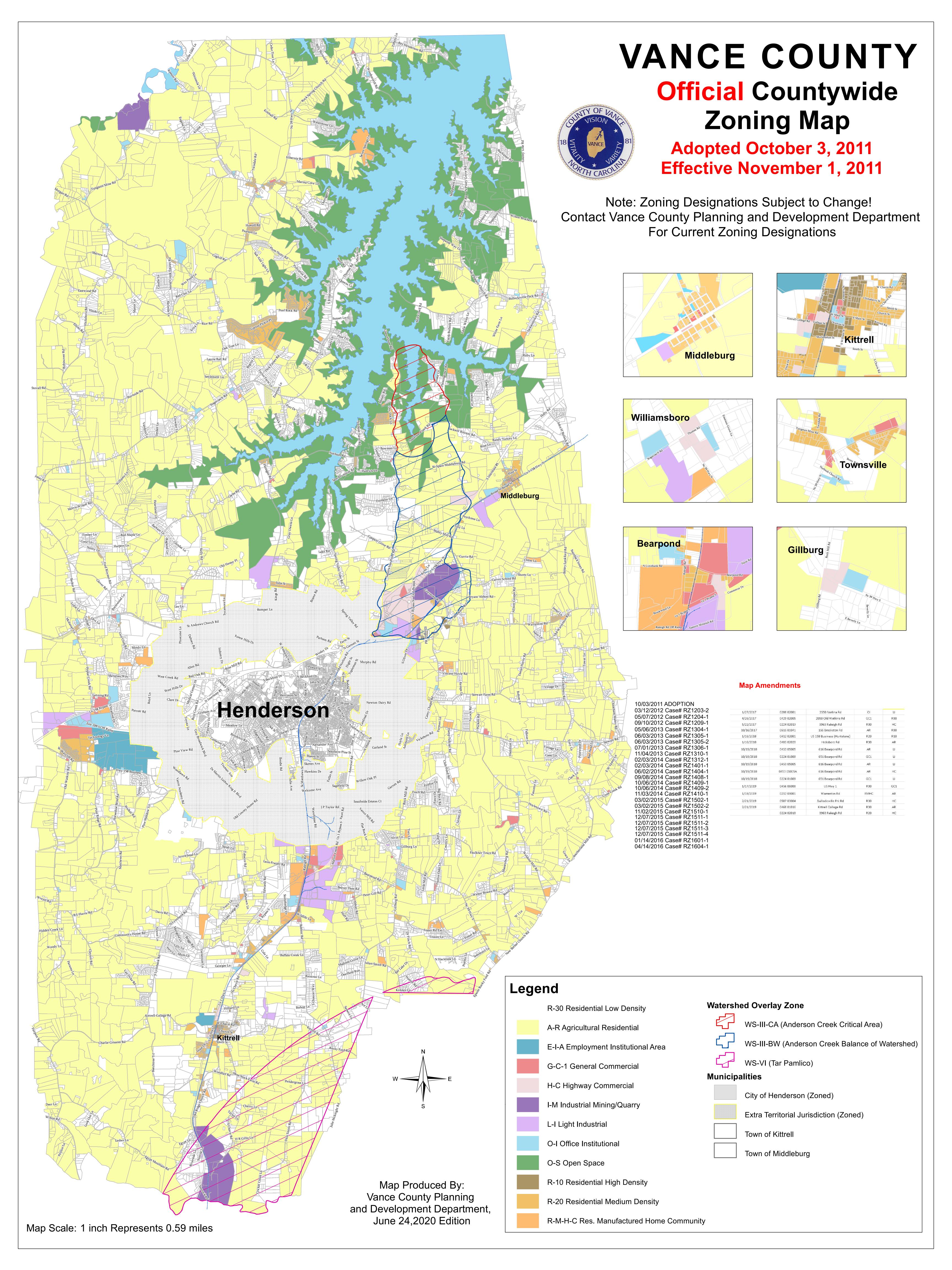
1. Amend Section 3.2.14 to establish the Middleburg Overlay Zone to include the Town of Middleburg within the County Zoning Ordinance.

May 3, 2021

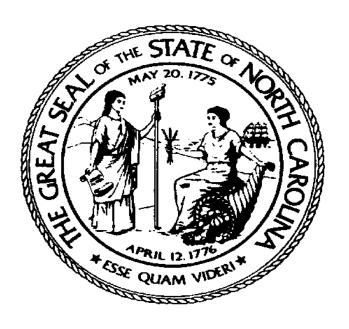
1. Amend various sections to comply with 160D.

January 9, 2023

1. Amendment to add section 3.3 and 11.6 authorizing and setting process for conditional zoning.



2024 USE-VALUE MANUAL FOR AGRICULTURAL, HORTICULTURAL AND FOREST LAND



April 2023

North Carolina Use-Value Advisory Board North Carolina Department of Revenue Raleigh, North Carolina

Table of Contents

Foreword	1
Use-Value Advisory Board Members	3
Use-Value Advisory Board Subcommittee Members	4
Use-Value Advisory Board Manual	5
North Carolina Major Land Resource Areas (MLRA Map)	9
Agricultural Schedule	10
Horticultural Schedule	11
Forestry Schedule	12
Cash Rents Survey	13
Christmas Tree Guidelines	20
Procedure for Forestry Schedules	23
Forestry Net Present Values Table	28
MLRA 130 Soil Survey	30
MLRA 133A Soil Survey	40
MLRA 136 Soil Survey	45
MLRA 137 Soil Survey	64
MLRA 153A Soil Survey	66
MLRA 153B Soil Survey	70

Foreword

When originally enacted in 1973, the objective of the present-use value program was to keep "the family farm in the hands of the farming family." By the early 1970's, North Carolina had become a prime site for industrial and commercial companies to relocate because of its plentiful and reliable work force. With this growth came other improvements to the State's infrastructure to accommodate this growth, such as new and larger road systems, more residential subdivisions, and new industrial and commercial developments. The land on which to build these improvements came primarily from one source: farmland. As the demand for this land skyrocketed, so did its price as well as its assessed value, as counties changed from a fractional assessment to a market value system. Farmers who owned land near these sites soon could not afford the increase in property values and sought relief from the General Assembly.

In response, the General Assembly passed legislation known as the Present-Use Value program. As originally enacted, the basic tenets of this program were that only individuals who lived on the land for which they were applying could immediately qualify and that the land had to have a highest and best use as agriculture, horticulture or forest land. Land might also have qualified if the farmer owned it for seven years. Passage of this law eased the financial burden of most farmers and eliminated to some degree the "sticker shock" of the new property tax values. From that time until the mid-1980's, the present-use value schedules were based on farmer-to-farmer sales, and quite often the market value schedules were very similar to the present use schedules, especially in the more rural areas.

Virtually every session of the General Assembly has seen new changes to the law, causing a constant rethinking as to how the law is to be administered. The mid-1980's saw several court cases that aided in this transformation. Among the legislative changes that resulted from these cases were the use of soil productivity to determine value, the use of a 9% capitalization rate, and the utilization of the "unit concept" to bring smaller tracts under the present use value guidelines.

Through the years the General Assembly has expanded the present-use value program to include new types of ownership such as business entities, tenants in common, trusts, and testamentary trusts. Legislation also expanded the definition of a relative. More recent legislation has established cash rents as the basis for determining present-use value for agricultural and horticultural land, while retaining the net income basis for determining present-use value for forestland.

This Use-Value Advisory Board Manual is published yearly to communicate the UVAB recommended present-use value rates and to explain the methodology used in establishing the recommended rates.

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USE-VALUE ADVISORY BOARD MANUAL

Following are explanations of the major components of this manual.

I. Cash Rents

Beginning in 1985, the basis for determining present-use value for agricultural land was based on the soil productivity for growing corn and soybeans. At that time, corn and soybeans were considered the predominant crops in the state. Over time, fewer and fewer acres went into the production of corn and soybeans and the land used for these crops tended to be lower quality. As a result, both the productivity and value of these crops plummeted, thus resulting in lower present-use values. A viable alternative was sought to replace corn and soybeans as the basis for present-use value. Following a 1998 study by North Carolina State University, cash rents for agricultural and horticultural land were determined to be the preferred alternative. Cash rents are a very good indicator of net income, which can be converted into a value using an appropriate capitalization rate.

The General Assembly passed legislation that established cash rents as the required method for determining the recommended present-use values for agricultural and horticultural land. The cash rents data from the NCSU study served as the basis for determining present-use value for the 2004-2007 UVAB manuals. However, starting in 2006, funding became available for the North Carolina Department of Agriculture to perform an extensive statewide cash rents survey on a yearly basis. The 2006 survey became the basis for the 2008 UVAB recommended values, and this process will

continue forward until changes dictate otherwise (i.e. the 2007 survey is used to establish the 2009 UVAB values, etc.).

Forestland does not lend itself well to cash rents analysis and continues to be valued using the net income from actual production.

II. Soil Types and Soil Classification

The 1985 legislation divided the state using the six Major Land Resource Areas (MLRAs). Five different classes of productive soils and one non-productive soil class for each MLRA were determined. Each class was identified by its net income according to type: agriculture, horticulture and forestry. The net income was then divided by a 9% capitalization rate to determine the present-use value. For 2004 and forward, the following change has taken place. For agricultural and horticultural classifications, the five different soil classes have been reduced to three soil classes and one non-productive soil class. Forestland present-use value has kept the five soil classes and one non-productive soil class. The use of the six MLRAs has been retained.

The six MLRAs are as follows:

MLRA 130 Mountains
MLRA 133A Upper Coastal Plain
MLRA 136 Piedmont
MLRA 137 Sandhills
MLRA 153A Lower Coastal Plains
MLRA 153B Tidewater

The soils are listed in this manual according to the MLRA in which they occur. They are then further broken down into their productivity for each of the three types of use: agriculture, horticulture and forestry. Every soil listed in each of the MLRAs is ranked by its productivity into four classes (with the exception of forestry which retained its previous six classes). The classes for agricultural and horticultural land are as follows:

CLASS I Best Soils
CLASS II Average Soils
CLASS III Fair Soils
CLASS IV Non-Productive Soils

CLASS IV Non-Productive Soils

It should be noted that, in some soil types, all the various slopes of that soil have the same productivity class for each of the usages, and therefore for the sake of brevity, the word "ALL" is listed to combine these soils. Each of the classes set up by the UVAB soils subcommittee corresponds to a cash rent income established by the most recent cash rents survey conducted by the North Carolina Department of Agriculture. This rent income is then capitalized by a rate established each year by the UVAB (see below). The criteria for establishing present-use value for forestry have remained basically unchanged from previous years due to the quantity and quality of information already available.

III. Capitalization Rate

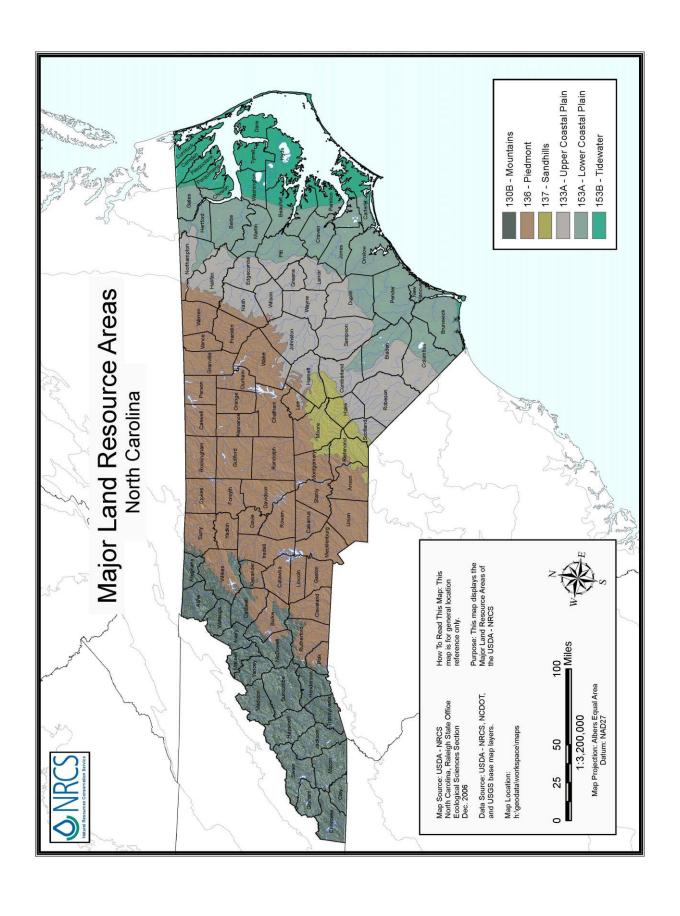
The capitalization rate mandated by the 1985 legislation for all types of present-use value land was 9%. The 1998 study by NCSU strongly indicated that a lower capitalization rate for agricultural and horticultural land was more in line with current sales and rental information. The 2002 legislation mandated a rate between 6%-7% for agricultural and horticultural land.

For the year 2004 and the subsequent years, the UVAB has set the capitalization rate at 6.5% for agricultural and horticultural land.

The capitalization rate for forestland continues to be fixed at 9% as mandated by the statutes.

IV. Other Issues

The value for the best agricultural land can be no higher than \$1,200 an acre for any MLRA.



PRESENT-USE VALUE SCHEDULES

AGRICULTURAL RENTS

MLRA	BEST	AVERAGE	FAIR
130	90.30	54.30	35.50
133A	82.15	58.30	43.65
136	61.80	42.10	27.35
137	67.50	47.30	32.20
153A	77.10	56.10	42.20
153B	103.95	70.70	53.00

AGRICULTURAL SCHEDULE

MLRA	CLASS I	CLASS II	CLASS III
130	\$1,200*	\$835	\$545
133A	\$1,200*	\$895	\$670
136	\$950	\$645	\$420
137	\$1,035	\$725	\$495
153A	\$1,185	\$860	\$645
153B	\$1,200*	\$1,085	\$815

⁻⁻NOTE: All Class 4 or Non-Productive Land will be appraised at \$40.00 per acre.

⁻⁻ Cash rents were capitalized at a rate of 6.5% to produce the Agricultural Schedule.

^{*} As required by statute, agricultural values cannot exceed \$1,200.

HORTICULTURAL SCHEDULE

All horticultural crops requiring more than one growing season between planting or setting out and harvest, such as Christmas trees, ornamental shrubs and nursery stock, apple and peach orchards, grapes, blueberries, strawberries, sod and other similar horticultural crops should be classified as horticulture regardless of location in the state.

HORTICULTURAL RENTS

MLRA	BEST	AVERAGE	FAIR
130	161.70	111.10	72.90
133A	99.10	68.40	52.25
136	89.20	58.05	40.15
137	84.35	56.85	37.70
153A	93.80	58.15	44.40
153B	122.40	92.80	84.35

HORTICULTURAL SCHEDULE

MLRA	CLASS I	CLASS II	CLASS III
130	\$2,485	\$1,705	\$1,120
133A	\$1,520	\$1,050	\$800
136	\$1,370	\$890	\$615
137	\$1,295	\$870	\$580
153A	\$1,440	\$890	\$680
153B	\$1,880	\$1,425	\$1,295

⁻⁻NOTE: All Class 4 or Non-Productive Land will be appraised at \$40.00 per acre.

⁻⁻ Cash rents were capitalized at a rate of 6.5% to produce the Horticultural Schedule.

FORESTLAND NET PRESENT VALUES

MLRA	Class I	Class II	Class III	Class IV	Class V
130	\$35.68	\$22.66	\$8.92	\$4.61	\$4.45
133A	\$34.04	\$22.39	\$22.01	\$8.50	\$5.75
136	\$37.70	\$25.36	\$23.21	\$16.14	\$11.97
137	\$41.05	\$26.86	\$23.21	\$8.93	\$3.55
153A	\$34.04	\$22.39	\$22.01	\$8.50	\$5.75
153B	\$28.86	\$22.01	\$17.61	\$8.50	\$5.75

FORESTLAND SCHEDULE

MLRA	Class I	Class II	Class III	Class IV	Class V
130	\$395	\$250	\$100	\$50	\$50
133A	\$375	\$250	\$245	\$95	\$65
136	\$415	\$280	\$260	\$180	\$135
137	\$455	\$300	\$260	\$100	\$40
153A	\$375	\$250	\$245	\$95	\$65
153B	\$320	\$245	\$195	\$95	\$65

⁻⁻NOTE: All Class VI or Non-Productive Land will be appraised at 40.00/Acre. Exception: For MLRA 130 use 80 % of the lowest valued productive land.

⁻⁻Net Present Values were divided by a capitalization rate of 9.00% to produce the Forestland Schedule.

2009 Cash Rent Study

INTRODUCTION

The National Agricultural Statistics Service in cooperation with the North Carolina Department of Agricultural and Consumer Services collected cash rents data on the 2009 County Estimates Survey. North Carolina farmers were surveyed to obtain cash rent values per acre for three land types: Agricultural, horticultural, and Christmas tree land. Supporting funds for this project were provided by the North Carolina Legislature. Appreciation is expressed to all survey participants who provided the data on which this report is based.

THE SURVEY

The survey was conducted by mail with telephone follow-up during September through February. Values relate to the data collection time period when the respondent completed the survey.

THE DATA

This report includes the most current number of responses and average rental rate per acre. Producers were asked to provide their best estimate of cash rent values in their county by land quality. The data published here are simple averages of the best estimate of the cash rent value per acre. These averages are not official estimates of actual sales.

Reported data that did not represent agricultural usage were removed in order to give a more accurate reflection of agricultural rents and values. To ensure respondent confidentiality and provide more statistical reliability, counties and districts with fewer than 10 reports are not published individually, but are included in aggregate totals. Published values in this report should never be used as the only factor to establish rental arrangements.

Data were collected for three land types: Agricultural, horticultural, and Christmas tree land. Agricultural land includes land used to produce row crops such as soybeans, corn, peanuts, and small grains, pasture land, and hay. Agricultural land also includes any land on which livestock are grown. Horticultural land includes commercial production or growing of fruits or vegetables or nursery or floral products such as apple orchards, blueberries, cucumbers, tomatoes, potted plants, flowers, shrubs, sod, and turf grass. Christmas tree land includes any land to produce Christmas trees, including cut and balled Christmas trees.

2009 Average Cash Rents for Resource Area = 130 Mountains

	Agric	Agricultural	Agrice	Agricultural	Agricultural	ıltural	Horticultural	ultural	Horticultural	ıltural	Hortic	Horticultural	Christmas Trees		Christma	Christmas Trees Christmas Trees	Christm	as Trees
	Ι	High	Me	Medium	Ľ	Low	Ξ	High	Medium	inm	Low	W	High	gh	M edium	lium	Ľ	Low
	Prod	Productivity	Produ	P roductivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Productivity	ctivity	P ro du	Productivity	Produ	Productivity
					No. of												No. of	
	No. of		No. of		report		No.of		No. of		No. of		No. of		No.of		report	
County	reports	Average	reports	Average		Average reports	reports	Average	reports	Average	reports	Average	reports	Average reports		Average		Average
ALLEGHANY	22	08'68	21	25.50	21	33.30												
ASHE	4	09'92	15	43.50	9,	28.30							42	162.50				
AVERY																		
BUNCOMBE	37	100.70	31	23.90	22	33.80												
BURKE	25	55.20	22	33.20	61	26.60												
CALDWELL	13	35.40	П	23.20	QL	16.70												
CHEROKEE	16	88.10	П	48.60	QL	29.50												
CLAY	15	68.70	41	39.10	8	25.20												
GRAHAM																		
HAYWOOD	41	17.90	28	73.80	58	43.50												
HENDERSON	24	83.50	18	92.29	81	36.90												
JACKSON																		
MACDOWELL																		
MACON	11	73.20	12	43.30														
MADISON	26	116.50	22	63.20	23	40.50												
MITCHELL																		
POLK																		
SWAIN																		
TRANSYLVANIA	14	93.60											11	181.36				
WATAUGA	27	79.10	18	49.70	14	32.50												
WILKES	79	57.30	71	39.30	29	27.00												
YANCEY	17	17.90	13	72.30	8	48.85												
AREA TOTAL	422	82.10	349	49.40	317	32.30	78	147.00	47	101.10	41	66.30	69	153.60	47	93.60	38	61.30

2009 Average Cash Rents for Resource Area = 133A Upper Coastal Plain

	Agric	Agricultural	Agric	Agricultural	Agricultural	ıltural	Horticultural	ultural	Horticultural	ultural	Horticultural	ultural	Christma	s Trees	Christma	Christmas Trees Christmas Trees Christmas Trees	Christma	s Trees
	I	High	Me	Medium	<u>د</u>	Low	Ξ	High	M edium	lium	L _o	Low	High	gh	M edium	inm	Low	*
	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	P roductivity	ctivity	P roductivity	stivity
					No.of												No. of	
	No.of		No.of		report		No.of		No.of		No.of		No. of		No.of		report	
County	reports	Average	reports	Average	S	Average	reports	Average	reports	Average	reports	Average	reports	Average	reports	Average	s /	Average
BLADEN	36	63.10	32	49.20	52	33.80												
COLUMBUS	77	08.09	89	45.80	12	34.60												
CUMBERLAND	36	66.40	58	44.70	52	30.40												
DUPLIN	142	08.69	113	50.80	06	39.70												
EDGECOMBE	36	77.10	29	57.20	22	43.60												
GREENE	61	79.70	40	55.00	98	41.30												
HALIFAX	28	83.30	81	64.20	1/1	42.10												
HARNETT	58	74.50	25	5170	68	36.40												
JOHNSTON	103	71.90	84	49.90	63	33.40	13	93.90	10	53.00								
LENOIR	90	8160	45	58.70	33	42.10												
NASH	51	77.80	68	52.70	31	43.10												
NORTHAMPTON	23	102.60	4	73.80	8	57.30												
ROBESON	53	49.60	25	38.90	28	32.40												
SAMPSON	128	8160	601	56.40	87	41.80	10	95.00										
SCOTLAND	10	44.50																
WAYNE	96	89.70	64	62.30	9	47.00												
WILSON	40	82.80	30	61.50	27	48.20												
AREA TOTAL	1038	74.70	8 19	53.00	929	39.70	61	90.10	46	62.20	35	47.50						

2009 Average Cash Rents for Resource Area = 136 Piedmont

	Agric	Agricultural	Agric	Agricultural	Agricu	gricultural	Horticultural	ultural	Horticultural	ultural	Hortic	Horticultural	Christm	Christmas Trees	Christmas Trees		Christmas Trees	s Trees
	Ι	High	Me	M edium	Ļ	Low	Î	High	Medium	lium	Ľ	Low	Ī	High	Medium	ium	Low	>
	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Productivity	ctivity	Productivity	ctivity
	No. of		No. of		of ort		No. of				No. of		No. of				of	
County	reports	A verage	report	A verage		A verage	reports	Average	reports	Average	reports	Average	reports	Average	reports	Average	s	Average
ALEXANDER	35		28		29	20:00												
ANSON	35				25	28.40												
BURKE	25				19	26.60												
CABARRUS	20				13	23.90												
CALDWELL	13				10	16.70												
CASWELL	54	49.90		30.90	44	19.20												
CATAWBA	32		29		31	19.20												
CHATHAM	47				37	23.10												
CLEVELAND	44				8 5	2120												
DAVIDSON	90	45.60		32.90	40	2140				1								
DAVIE	38				24	2130												
DURHAM	15				3	2150												
FORSYTH	76				20	23.30					_ _ _						Ī	
FRANKLIN	41	59.20		37.10	32	21.90												
GASTON	/L				වී	18.80												
GRANVILLE	82				43	17.80				1				\int				
GUILFORD	46		39		δ, 45	17.60				1				\int				
HALIFAX	28	83.30			4 6	42.10												
IREDELL	52		49		43	27.90	ç			0								
NOISNHOR	50L				63	33.40	57	93.90	Ω	53.00								
LEE	C7				ē ć	33.10												
LINCOLN	OI &		4	71.80	7.	09:01												
MONTGOMERY	T.	61.40 41.60	16	39.10	4	20.00												
MOORE	37	56.50			25	23.90												
NASH	51			52.70	31	43.10												
ORANGE	31				25	19.40												
PERSON	38	60.70		40.60	22	23.30												
POLK	00				Î	0												
RANDOLPH	98	48.20	χ,		5 5	2130												
RICHMOND	17			23.30	Σ ζ	19.30												
ROWAN	47		36		33	23.50												
RUTHERFORD	21				4	19.30												
STANLY	34	52.50			29	27.90												
STOKES	54		39		34	28.10												
SURRY	73				53	35.30												
UNION	22				40	40.30												
VANCE	32				23	17.20												
WAKE	55				39	26.20												
WARREN	24				20	17.80												
WILKES	79	57.30			29	27.00												
YADKIN	79			47.80	28	31.50												
AREA TOTAL	1798	56.20	1468	38.30	1324	24.90	125	81.10	101	52.80	88	36.50	46	77.90	43	52.90	41	35.00

2009 Average Cash Rents for Resource Area = 137 Sandhills

	Agric	Agricultural	Agrice	Agricultural	Agricultural	ıltural	Hortic	Horticultural	Horticultural	ultural	Hortic	Horticultural	Christma	1s Trees	Christma	Christmas Trees Christmas Trees Christmas Trees	Christma	Is Trees
		High	Mec	Medium	Ľ	Low	Ĩ	High	Med	Medium	Lc	Low	Ξ	High	Medium	ium	Low	*
	Prod	Productivity	Produ	Productivity	Produ	P roductivity	Produ	Productivity	Produ	Productivity	Produ	P roductivity	Produ	Productivity	Productivity	ctivity	Productivity	stivity
					No. of												No. of	
	No. of		No. of		report		No. of		No. of		No. of		No. of		No. of		report	
County	reports	reports Average	reports	Average	v	Average	reports	Average	reports	Average reports Average reports Average reports Average reports Average reports Average	reports	Average	reports	Average	reports ,	Average	s	Average
HARNETT	28	74.50	52	5170	39	36.40												
HOKE	4	56.50	#	45.00	1	29.10												
337	25	72.40	20	45.40	9	33.10												
MOORE	37	56.50	33	37.30	22	23.90												
RICHMOND	21	32.60	\$	23.30	81	08.90												
SCOTLAND	10	44.50																
AREA TOTAL	168	61.40	139	43.00	115	29.30	*	04'94	*	51.70	*	34.30						

An * indicates the data is published even though there are less than 10 reports.

2009 Average Cash Rents for Resource Area = 153A Lower Coastal Plain

	Agricultural	ıltural	Agric	Agricultural	Agricultural	Itural	Horticultural	ltural	Horticultural	ıltural	Hortic	Horticultural	Christmas Trees		hristma	Christmas Trees Christmas Trees	Christma	s Trees
	Ī	High	Me	Medium	Ļ	Low	High	ų.	M edium	lium	Ļ	Low	High		M edium	E n	Low	>
	Produ	Productivity	Produ	Productivity	Produ	Productivity	Productivity	tivity	P ro du	Productivity	Produ	Productivity	Productivity	vity	P roductivity	tivity	Productivity	tivity
					No. of												No. of	
County	No. of	Average	No. of	000000	report	Average	No. of	Average	No. of	020207	No. of	Average	No. of	A vorson	No. of	976797	report	Average
BEAUFORT	_	83.70	23		21		+	_		_			_			5		5
BERTIE	41	75.00		60.10	21	44.50												
BLADEN	36	63.10	32	49.20	25	33.80												
BRUNSWICK	23	44.40	72	38.00	t3	30.00												
CARTERET																		
CHOWAN	20	87.00	13	58.90	7	51.70												
COLUMBUS	77	60.80	28	45.80	51	34.60												
CRAVEN	32	09.09	29	47.80	21	35.20												
DUPLIN	142	69.30	113	50.80	90	39.70												
EDGECOMBE	36	77.10	29	57.20	22	43.60												
GATES	13	8120	11	62.30														
HERTFORD	12	73.00	11	49.60														
JONES	25	64.40	22	49.80	20	41.30												
MARTIN	46	80.70	33	53.20	29	40.50												
NEW HANOVER																		
ONSLOW	34	55.40	24	42.80	23	34.80												
PAMLICO	13	70.40	13	5120	t3	36.50												
PENDER	24	67.10	21	45.50	10	33.70												
PITT	45	73.70	39	56.20	33	40.50												
WASHINGTON	15	128.80	10	6100														
AREA TOTAL	672	70.10	525	51.00	442	38.40	30	85.30	19	52.90	13	40.40						

2009 Average Cash Rents for Resource Area = 153B Tidewater

	Agric	Agricultural	Agric	Agricultural	Agricultural	ultural	Horticultural	ultural	Horticultural	ultural	Hortic	Horticultural	Christma	3S Trees	Christma	Christmas Trees Christmas Trees Christmas Trees	Christma	s Trees
	<u>_</u>	High	Me	Medium	Ľ	Low	Ĩ	High	Mec	M edium	L _o	Low	Ĩ	High	M edium	lium	Low	*
	Prod	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	Produ	Productivity	P ro du	Productivity	P roductivity	stivity
					No. of												No. of	
	No. of		No. of		report		No. of		No. of		No. of		No. of		No.of		report	
County	reports	reports Average	reports	reports Average	S	Average reports	reports	Average	reports	Average reports Average	reports	Average reports Average reports Average	reports	Average	reports	Average	s	Average
BEAUFORT	30	83.70	23	52.00	21	37.10												
CAMDEN																		
CARTERET																		
CHOWAN	20	87.00	13	58.40	4	51.70												
CURRITUCK	01	88.00																
DARE																		
HYDE																		
PAMLICO	13	70.40	13	5120	13	36.50												
PASQUOTANK	19	105.30	11	73.20	10	00:09												
PERQUIMANS	24	10190	21	78.10	18	58.90												
TYRRELL	00	109.50																
WASHINGTON	12	128.80	10	6100														
AREA TOTAL	163	94.50	117	64.30	111	48.20	12	111.30	*	84.40	*	76.70						

An * indicates the data is published even though there are less than 10 reports.

2009 Average Cash Rents - State Total

07 67	80	2414 3150 254 10320 184 6770 155 4690 114 12150 93 7530 80 4940	93	12150	114	46 90	155	02 29	18.4	103 20	756	3150	_	3431 66 90 2743 45 60	2743	06 99	3431	STATE TOTAL
Average	S	Average reports Average reports Average reports Average reports Average s Average	reports	Average	reports	Average	reports	Average	reports	Average	reports	Average	S	reports Average reports Average	reports	Average	reports	County
	report		No.of		No. of		No.of		No.of		No.of		report		No. of		No. of	
	No. of												No.of					
P roductivity	Prod	P roductivity	Produ	Productivity	Prod	Productivity	Prod	P roductivity	Prod	Productivity	Prod	Productivity	Produ	P roductivity	Prod	Productivity	Prod	
Low	_	M edium	M	High	I	Low		M edium	M	High	Ι	Low	7	Medium	M	High	_	
as Trees	Christm	Horticultural Christmas Trees Christmas Trees	Christm	as Trees	Christm	ultural	Hortic	Horticultural	Hortic	Horticultural	Hortic	Agricultural	Agrice	Agricultural	Agric	Agricultural	Agric	

Christmas Tree Guidelines

This information replaces a previous memorandum issued by our office dated December 12, 1989. The 1989 General Assembly enacted an "<u>in-lieu of income</u>" provision allowing land previously qualified as horticulture to continue to receive benefits of the present-use value program when the crop being produced changed from any horticultural product to Christmas trees. It also directed the Department of Revenue to establish a separate <u>gross income</u> requirement different from the \$1,000 gross income requirement for horticultural land, when the crop being grown was evergreens intended for use as Christmas trees. N.C.G.S. 105-289(a)(6) directs the Department of Revenue:

"To establish requirements for horticultural land, used to produce evergreens intended for use as Christmas trees, in lieu of a gross income requirement until evergreens are harvested from the land, and to establish a gross income requirement for this type of horticultural land, that differs from the income requirement for other horticultural land, when evergreens are harvested from the land."

It should be noted that horticultural land used to produce evergreens intended for use as Christmas trees is the only use allowed benefit of the present-use value program without first having met a gross income requirement. The trade-off for this exception is a different gross income requirement in recognition of the potential for greater income than would normally be associated with other horticultural or agricultural commodities.

While the majority of Christmas tree production occurs in the western mountain counties (MLRA 130), surveys as far back as 1996 indicate that there are approximately 135 Christmas tree operations in non-mountain counties (MLRAs 136, 137, 133A, 153A & 153B). They include such counties in the piedmont and coastal plain as Craven, Halifax, Robeson, Wake, and Warren. For this reason we have prepared separate <u>in-lieu of income requirements</u> and <u>gross income requirements</u> for these two areas of the State. The different requirements recognize the difference in species, growing practices, markets, and resulting gross income potential.

After consulting with cooperative extension agents, the regional Christmas tree/horticultural specialist at the Western North Carolina Experimental Research Station, and various landowners/growers, we have determined the standards in the following attachments to be reasonable guidelines for compliance with G.S. 105-289(a)(6). Please note these requirements are subject to the whims of weather and other conditions that can have a significant impact. The combined effect of recent hurricanes, spring freezes, and ice storms across some parts of the State should be taken into consideration when appropriate within each county. As with other aspects of the present-use value program, owners of Christmas tree land should not be held accountable for conditions such as adverse weather or disease outbreak beyond their control.

We encourage every county to contact their local Cooperative Extension Service Office to obtain the appropriate local data and expertise to support particular situations in each county.

I. Gross Income Requirement for Christmas Trees

For MLRA 130, the gross income requirement for horticultural land used to grow evergreens intended for use as Christmas trees is \$2,000 per acre.

For all other MLRAs, the gross income requirement for horticultural land used to grow evergreens intended for use as Christmas trees is \$1,500 per acre.

II. In-Lieu of Income Requirement

MLRA 130 – Mountains

The <u>in-lieu of income requirement</u> is for acreage in production but not yet undergoing harvest, and will be determined by sound management practices, best evidenced by the following:

- 1. Sites prepared by controlling problem weeds and saplings, taking soil samples, and applying fertilizer and/or lime as appropriate.
- 2. Generally, a 5' x 5' spacing producing approximately 1,750 potential trees per acre. Spacing must allow for adequate air movement around the trees. (There is very little 4' x 4' or 4.5' x 4.5' spacing. Some experimentation has occurred with 5' x 6' spacing, primarily aimed at producing a 6' tree in 5 years. All of the preceding examples should be acceptable.)
- 3. A program for insect and weed control.
- 4. Generally, an eight-to-ten year setting to harvest cycle. (Most leases are for 10 years, which allows for a replanting of non-established or dying seedlings up through the second year.)

The gross income requirement for acres undergoing Christmas tree harvest in the mountain region of North Carolina (MLRA 130) is \$2,000 per acre. Once Christmas trees are harvested from specific acreage, the requirement for those harvested acres will revert to the in-lieu of income requirement.

As an example, if the total amount of acres devoted to Christmas tree production is six acres, three of which are undergoing harvest and three of which have yet to reach maturity, the gross income requirement would be \$6,000.

MLRA 136 – Piedmont, MLRA 137 – Sandhills, MLRA 133A – Upper Coastal Plain, MLRA 153A – Lower Coastal Plain, and MLRA 153B – Tidewater.

The <u>in-lieu of income requirement</u> is for acreage in production but not yet undergoing harvest, and will be determined by sound management practices, best evidenced by the following:

- 1. Sites prepared by controlling problem weeds and saplings, taking soil samples, and applying fertilizer and/or lime as appropriate.
- 2. Generally, a 7' x 7' spacing producing approximately 900 potential trees per acre. Spacing must allow for adequate air movement around the trees. (There may be variations in the spacing dependent on the species being grown, most likely Virginia Pine, White Pine, Eastern Red Cedar, and Leyland Cypress. All reasonable spacing practices should be acceptable.)
- 3. A program for insect and weed control.
- 4. Generally a five-to-six year setting to harvest cycle. (Due to the species being grown, soil conditions and growing practices, most operations are capable of producing trees for market in the five-to-six year range. However, the combined effect of adverse weather and disease outbreak may force greater replanting of damaged trees thereby lengthening the current cycle beyond that considered typical.)

The gross income requirement for acres undergoing Christmas tree harvest in the non-mountain regions of North Carolina (MLRAs 136, 137, 133A, 153A, and 153B) is \$1,500 per acre. Once Christmas trees are harvested from specific acreage, the requirement for those harvested acres will revert to the in-lieu of income requirement.

As an example, if the total amount of acres devoted to Christmas tree production is six acres, three of which are undergoing harvest and three of which have yet to reach maturity, the gross income requirement would be \$4,500.

Procedure for Forestry Schedules

The charge to the Forestry Group is to develop five net income per-acre ranges for each MLRA based on the ability of the soils to produce timber income. The task is confounded by variable species and stand type; management level, costs and opportunities; markets and stumpage prices; topographies; and landowner objectives across North Carolina.

In an attempt to develop realistic net income per acre in each MLRA, the Forestry Group considered the following items by area:

- 1. Soil productivity and indicator tree species (or stand type);
- 2. Average stand establishment and annual management costs;
- 3. Average rotation length and timber yield; and
- 4. Average timber stumpage prices.

Having selected the appropriate combinations above, the harvest value (gross income) from a managed rotation on a given soil productivity level can be calculated, netted of costs and amortized to arrive at the net income per acre per year soil expectation value. The ensuing discussion introduces users of this manual to the procedure, literature and software citations and decisions leading to the five forest land classes for each MLRA. Column numbers beside sub-headings refer to columns in the Forestry Net Present Values Table.

<u>Soil Productivity/Indicator Species Selection (Col. 1).</u> Soil productivity in forestry is measured by site index (SI). Site index is the height to which trees of a given species will grow on a given soil/site over a designed period of time (usually 50 or 25 years, depending on species, site or age

of site table). The Forestry Group identified key indicator species (or stand types) for each MLRA and then assigned site index ranges for the indicator species that captured the management opportunities for that region. The site index ranges became the productivity class basis for further calculations of timber yield and generally can be correlated to Natural Resource Conservation Service (NRCS) cubic foot per acre productivity classes for most stand types. By MLRA, the following site index ranges and species/stand types cover the overwhelming majority of soils/sites and management opportunities.

MLRA 153A, 153B, 137, 136, 133A:

Species/Stand Type	SI Range (50 yr. basis)

Loblolly pine 86-104 Loblolly pine 66-85 Loblolly pine 60-65

Mixed hardwoods Mixed species and site indices on coves, river

bottoms, bottomlands

Pond and/or longleaf pine 50-55

Upland hardwoods (MLRA 136) 40-68 (Upland oak)

MLRA 130:

Species/Stand Type	SI Range (50 yr. basis)

White pine 70-89 White pine 55-69

Shortleaf/mixed hardwoods Mixed species/sites (SI 42-58 shortleaf)

Bottomland/cove hardwoods Mixed species/site indices on coves and bottoms

Upland oak ridges 40-68

The site index ranges above, in most cases, can be correlated to individual soil series (and series' phases) according to NRCS cubic foot per acre productivity classes. An exception will be the cove, bottomland, river bottom, and other hardwood sites where topographic position must also be

considered. The Soils Group is responsible for assigning soil series to the appropriate class for agriculture, horticulture and forestry.

Stand Establishment and Annual Management Costs (Columns 2 and 3). Stand establishment costs include site preparation and tree planting costs. Costs vary from \$0 to over \$200 per acre depending on soils, species, and management objectives. No cost would be incurred for natural regeneration (as practiced for hardwoods) with costs increasing as pine plantations are intensively managed on highly productive sites. The second column in the Forestry Net Present Values Table contains average establishment costs for the past five years as reported by the N.C. Forest Service for site classes in each MLRA.

Annual management may include costs of pine release, timber stand improvement activities, prescribed burning, boundary line maintenance, consultant fees and other contractual services. Cost may vary from \$0 on typical floodplain or bottomland stands to as high as \$6 per acre per year on intensively managed pine plantations. Annual management costs in Forestry Net Present Values Table are the best estimates under average stand management regimes by site class.

Rotation Length and Timber Yields (Columns 4, 5, 6). Saw timber rotations are recommended on all sites in North Carolina. This decision is based on the market situation throughout the state, particularly the scarce markets for low quality and small-diameter pine and hardwood, which normally would be used for pulpwood. Timber thinnings are not available to most woodlot managers and, therefore, rotations are assumed to proceed unthinned until the optimum economic product mix is achieved.

Timber yields are based on the most current yield models developed at the N.C. State University College of Natural Resources for loblolly pine. (Hafley, Smith, and Buford, 1982) and natural hardwood stands (Gardner et al. 1982). White pine yields, mountain mixed stand yields, and upland oak yields are derived from U.S. Forest Service yield models developed by Vimmerstedt (1962) and McClure and Knight. Longleaf and pond pine yields are from Schumacher and Coile (1960).

<u>Timber Stumpage Prices (Columns 7 and 8)</u>. Cost of forestry operations are derived from the past five-year regional data (provided by the NC Forest Service). For timber, stumpage prices (prices paid for standing timber to landowners) are derived over the same 5-year period from regional timber price data obtained from Timber Mart-South, Inc, or similar timber price reporting system.

<u>Harvest Values (Column 9</u>). Multiplication of timber yields (columns 5 and 6) times the respective timber stumpage prices (columns 7 and 8) gives the gross harvest value of one rotation.

Annualized Net Present Value (NPV) (Column 10). Harvest values (column 9) are discounted to present value at a 4 percent discount rate, which is consistent with rates used and documented by the U.S. Forest Service, forestry industry and forestry economists. This rate approximates the long-term measures of the opportunity cost of capital in the private sector of the U. S. economy (Row et al. 1981; Gunter and Haney, 1984). The respective establishment costs and the present value of annual management costs are subtracted from the present value of the income to obtain the net

present value of the timber stand. This is then amortized over the life of the rotation to arrive at the annualized net present value (or annual net income) figure.

Forestry Net Present Values

Indicator Species or Stand Types, Lengths of Rotation, Costs, Yields, Price and Annualized Net Present Value per Acre of Land by Site Index Ranges in Each Major Land Resource Area, North Carolina.

(1) Species/Stand Type	(2) Est. Cost	(3) Mgmt. Cost	(4) Rot. Lgth.	(5) Yield	(6) Yield	(7) Price /mbf	(8) Price /cd	(9) Harvest Value	(10) Annualized NPV
MLRAs 153A and 133A	(\$)	(\$)	(yrs)	(MBF)	(spo)	(\$)	(\$)	(\$)	(\$)
(Lower and Upper CP) Mixed hardwoods	0.00	0.00	50	11.5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	237.55	15.59	3,417.59	22.39
Lobiolly pine (66-85)	258.00	2.00	8 8	<u> </u>	16.8	232.70	33.00	2,183.24	22.01
Loblolly pine (60-65)	132.00	1.00	40	4.8	12.7	232.70	33.00	1,536.01	8.50
Pond pine (50-55)	47.00	0.50	20	2.7	20	232.70	33.00	1,288.22	5.75
Longleaf pine (50-55)	47.00	0.50	20	3.2	∞	232.70	33.00	1,008.61	4.83
MLRA 153B (Tidewater)									
Mixed hardwoods	0.00	0.00	20	8.43	44	237.55	15.59	2,688.30	17.61
Loblolly pine (86-104)	456.50	3.00	30	12	14.4	232.70	33.00	3,267.55	28.86
Loblolly pine (66-85)	258.00	2.00	30	7	16.8	232.70	33.00	2,183.24	22.01
Loblolly pine (60-65)	132.00	1.00	40	4.8	12.7	232.70	33.00	1,536.01	8.50
Pond pine (low site)	47.00	0.50	20	2.7	20	232.70	33.00	1,288.22	5.75
MLRA 137 (Sandhills)									
Mixed hardwoods	0.00	0.00	20	11.9	46	237.55	15.59	3,543.78	23.21
Loblolly pine (86-104)	258.00	3.00	30	12	15.6	232.70	33.00	3,307.14	41.05
Loblolly pine (66-85)	132.00	2.00	30	6.4	16.9	232.70	33.00	2,046.92	26.86
Loblolly pine (60-65)	55.00	1.00	20	7.2	7	232.70	33.00	1,906.41	8.93
Longleaf pine (50-55)	22.00	0.50	20	3.2	∞	232.70	33.00	1,008.61	3.55

Forestry Net Present Values

Indicator Species or Stand Types, Lengths of Rotation, Costs, Yields, Price and Annualized Net Present Value per Acre of Land by Site Index Ranges in Each Major Land Resource Area, North Carolina.

(1) Species/Stand Type	(2) Est. Cost	(3) Mgmt. Cost	(4) Rot. Lgth.	(5) Yield	(6) Yield	(7) Price /mbf	(8) Price /cd	(9) Harvest Value	(10) Annualized NPV
	(\$)	(\$)	(yrs)	(MBF)	(cds)	(\$)	(\$)	(\$)	(\$)
MLRA 136 (Pied)									
Mixed hardwoods	0.00	0.00	20	11.9	46	237.55	15.59	3,543.78	23.21
Loblolly pine (86-104)	280.00	3.00	30	11.5	15.6	232.70	33.00	3,190.79	37.70
Loblolly pine (66-85)	158.00	2.00	30	6.4	16.9	232.70	33.00	2,046.92	25.36
Loblolly pine (60-65)	22.00	0.50	4	4.1	15	232.70	33.00	1,449.02	11.97
Upland hardwoods	0.00	0.00	20	6.05	32	232.70	33.00	2,463.72	16.14
MLRA 130 (MTN)									
Mixed hardwoods*	0.00	0.00	20	10.95	0	315.91	17.13	3,459.17	22.66
White pine (70-89)	284.00	2.00	30	17.8	0	170.48	20.94	3,034.57	35.68
White pine (55-69)	182.00	1.00	35	8.5	0	170.48	20.94	1,449.09	8.92
Shortleaf/mixed hwd.	0.00	0.00	09	9	0	176.59	20.94	1,059.54	4.45
Upland oak ridge (40-68)	0.00	0.00	2	5.32		315.91	17.13	1,680.62	4.61

^{*} Coves, riverbottoms, bottomland yields

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Braddock gravelly loam, 8 to 15 percent slopesIIIIBraddock loam, 2 to 8 percent slopesIIIBraddock loam, 8 to 15 percent slopesIIIIBraddock-Urban land complex, ALLIVIVIVBradson gravelly loam, ALLIIIIBrandywine stony soils, ALLIVIVIVBrasstown-Junaluska complex, 8 to 15 percent slopesIIIIVIVBrasstown-Junaluska complex, 15 to 30 percent slopesIVIVIIIBrevard fine sandy loam, 1 to 6 percent slopes, rarely floodedIIIBrevard loam, 2 to 6 percent slopesIIIBrevard loam, 6 to 10 percent slopesIIIIBrevard loam, 7 to 15 percent slopesIIIIBrevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVII		I	I	I
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Braddock-Urban land complex, ALL Bradson gravelly loam, ALL Brandywine stony soils, ALL Brandywine stony soils, ALL Brasstown-Junaluska complex, 8 to 15 percent slopes Brasstown-Junaluska complex, 15 to 30 percent slopes Brasstown-Junaluska complex, ALL OTHER Brevard fine sandy loam, 1 to 6 percent slopes, rarely flooded Brevard loam, 2 to 6 percent slopes Brevard loam, 6 to 10 percent slopes Brevard loam, 7 to 15 percent slopes Brevard loam, 10 to 25 percent slopes Brevard loam, 15 to 25 percent slopes Brevard loam, 25 to 45 percent slopes IV III IV IV IV IV IV IV IV	Braddock loam, 2 to 8 percent slopes	I	I	I
Bradson gravelly loam, ALL Brandywine stony soils, ALL Brandywine stony soils, ALL Brasstown-Junaluska complex, 8 to 15 percent slopes III Brasstown-Junaluska complex, 15 to 30 percent slopes IV IV III Brasstown-Junaluska complex, 15 to 30 percent slopes IV IV IV IV IV IV IV IV IV I	Braddock loam, 8 to 15 percent slopes	II	I	I
Brandywine stony soils, ALL Brasstown-Junaluska complex, 8 to 15 percent slopes III Brasstown-Junaluska complex, 15 to 30 percent slopes IV IV III Brasstown-Junaluska complex, 15 to 30 percent slopes IV IV IV IV IV IV IV IV IV I	Braddock-Urban land complex, ALL	IV	I	IV
Brasstown-Junaluska complex, 8 to 15 percent slopesIIIIVIIIBrasstown-Junaluska complex, 15 to 30 percent slopesIVIVIIIBrasstown-Junaluska complex, ALL OTHERIVIVIVBrevard fine sandy loam, 1 to 6 percent slopes, rarely floodedIIIBrevard loam, 2 to 6 percent slopesIIIBrevard loam, 6 to 10 percent slopesIIIIBrevard loam, 7 to 15 percent slopesIIIIBrevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVIII	Bradson gravelly loam, ALL	II	I	I
Brasstown-Junaluska complex, 8 to 15 percent slopesIIIIVIIIBrasstown-Junaluska complex, 15 to 30 percent slopesIVIVIIIBrasstown-Junaluska complex, ALL OTHERIVIVIVBrevard fine sandy loam, 1 to 6 percent slopes, rarely floodedIIIBrevard loam, 2 to 6 percent slopesIIIBrevard loam, 6 to 10 percent slopesIIIIBrevard loam, 7 to 15 percent slopesIIIIBrevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVII	Brandywine stony soils, ALL	IV	IV	IV
Brasstown-Junaluska complex, 15 to 30 percent slopesIVIVIIIBrasstown-Junaluska complex, ALL OTHERIVIVIVBrevard fine sandy loam, 1 to 6 percent slopes, rarely floodedIIIBrevard loam, 2 to 6 percent slopesIIIBrevard loam, 6 to 10 percent slopesIIIIBrevard loam, 7 to 15 percent slopesIIIIBrevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVIII		III	IV	III
Brevard fine sandy loam, 1 to 6 percent slopes, rarely flooded I I I Brevard loam, 2 to 6 percent slopes I I I Brevard loam, 6 to 10 percent slopes II I I Brevard loam, 7 to 15 percent slopes II I I Brevard loam, 10 to 25 percent slopes IV I I Brevard loam, 15 to 25 percent slopes Brevard loam, 25 to 45 percent slopes IV I II		IV	IV	III
Brevard loam, 2 to 6 percent slopesIIIBrevard loam, 6 to 10 percent slopesIIIIBrevard loam, 7 to 15 percent slopesIIIIBrevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVIII	Brasstown-Junaluska complex, ALL OTHER	IV	IV	IV
Brevard loam, 6 to 10 percent slopes Brevard loam, 7 to 15 percent slopes Brevard loam, 10 to 25 percent slopes Brevard loam, 15 to 25 percent slopes Brevard loam, 25 to 45 percent slopes II I I I I Brevard loam, 10 to 25 percent slopes IV I I Brevard loam, 25 to 45 percent slopes IV I II	Brevard fine sandy loam, 1 to 6 percent slopes, rarely flooded	I	I	I
Brevard loam, 7 to 15 percent slopesIIIIBrevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVIII	Brevard loam, 2 to 6 percent slopes	I	I	I
Brevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVIII	* *	II	I	I
Brevard loam, 10 to 25 percent slopesIVIIBrevard loam, 15 to 25 percent slopesIVIIBrevard loam, 25 to 45 percent slopesIVIII	Brevard loam, 7 to 15 percent slopes	II	I	I
Brevard loam, 15 to 25 percent slopes IV I I Brevard loam, 25 to 45 percent slopes IV I II	• •	IV	I	I
Brevard loam, 25 to 45 percent slopes IV I II	• •	IV	I	I
		IV	I	II
		II	I	I

Map Unit Name	Agri	For	Hort
Brevard-Greenlee complex, extremely bouldery, ALL	IV	I	IV
Buladean-Chestnut complex, 15 to 30 percent slopes, stony	IV	I	III
Buladean-Chestnut complex, stony, ALL OTHER	IV	I	IV
Burton stony loam, ALL	IV	V	IV
Burton-Craggey complex, windswept, ALL	IV	VI	IV
Burton-Craggey-Rock outcrop complex, windswept, ALL	IV	VI	IV
Burton-Wayah complex, windswept, ALL	IV	VI	IV
Cashiers fine sandy loam, 2 to 8 percent slopes	II	I	I
Cashiers fine sandy loam, 8 to 15 percent slopes	II	I	II
Cashiers fine sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Cashiers fine sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Cashiers fine sandy loam, 50 to 95 percent slopes, stony	IV	I	IV
Cashiers gravelly fine sandy loam, 8 to 15 percent slopes	II	I	II
Cashiers gravelly fine sandy loam, 15 to 30 percent slopes	IV	I	II
Cashiers gravelly fine sandy loam, 30 to 50 percent slopes	IV	I	III
Cashiers gravelly fine sandy loam, 50 to 95 percent slopes	IV	I	IV
Cashiers sandy loam, 8 to 15 percent slopes, stony	II	I	II
Cashiers sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Cashiers sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Cashiers sandy loam, 50 to 95 percent slopes, stony	IV	I	IV
Cataska-Rock outcrop complex, 30 to 95 percent slopes	IV	VI	IV
Cataska-Sylco complex, 50 to 95 percent slopes	IV	VI	IV
Chandler and Fannin soils, 25 to 45 percent slopes	IV	I	IV
Chandler gravelly fine sandy loam, 8 to 15 percent slopes	IV	III	II
Chandler gravelly fine sandy loam, 15 to 30 percent slopes	IV	III	II
Chandler gravelly fine sandy loam, 15 to 50 percent slopes Chandler gravelly fine sandy loam, 30 to 50 percent slopes	IV	III	III
Chandler graverly fine sandy loam, 30 to 30 percent stopes Chandler gravelly fine sandy loam, ALL OTHER	IV	III	IV
Chandler gravelly fine sandy loam, windswept, ALL	IV	VI	IV
Chandler loam, 2 to 8 percent slopes	III	III	II
Chandler loam, 8 to 15 percent slopes	IV	III	II
Chandler loam, 15 to 25 percent slopes	IV	III	III
Chandler loam, 25 to 65 percent slopes	IV	III	IV
Chandler silt loam, 10 to 25 percent slopes	IV	III	II
Chandler silt loam, 25 to 45 percent slopes	IV	III	III
Chandler story loam, 45 to 70 percent slopes	IV	III	IV
Chandler stony silt loam, ALL	IV	III	IV
Chandler-Micaville complex, 8 to 15 percent slopes	IV	III	II
Chandler-Micaville complex, 15 to 30 percent slopes, stony	IV	III	II
Chandler-Micaville complex, 30 to 50 percent slopes, stony	IV	III	III
Chandler-Micaville complex, 50 to 95 percent slopes, stony	IV	III	IV
Cheoah channery loam, ALL	IV	I	IV
Cheoah channery loam, stony, ALL	IV	I	IV
Cheoah channery loam, windswept, stony	IV	VI	IV
Chester clay loam, 15 to 45 percent slopes, eroded (Evard)	IV	I	III
Chester fine sandy loam, 6 to 15 percent slopes (Evard)	II	I	I
Chester fine sandy loam, 15 to 25 percent slopes (Evard)	II	I	III
Chester fine sandy loam, 25 to 45 percent slopes (Evard)	IV	I	III
Chester loam, 2 to 6 percent slopes	II	I	I
Chester loam, 6 to 10 percent slopes	III	I	I
Chester loam, 10 to 25 percent slopes	IV	I	II
Chester loam, 25 to 45 percent slopes	IV	I	III
Chester stony loam, 10 to 15 percent slopes (Evard)	III	I	III
total, round, ro	***		111

Map Unit Name	Agri	For	Hort
Chester stony loam, (Evard), ALL OTHER	IV	I	IV
Chestnut and Edneyville soils, 15 to 25 percent slopes	IV	I	II
Chestnut and Edneyville soils, 25 to 50 percent slopes	IV	I	III
Chestnut gravelly loam, 50 to 80 percent slopes	IV	III	IV
Chestnut-Ashe complex, ALL	IV	III	IV
Chestnut-Buladean complex, 8 to 15 percent slopes, rocky	III	III	III
Chestnut-Buladean complex, stony, ALL	IV	III	IV
Chestnut-Cleveland-Rock outcrop complex, windswept, ALL	IV	VI	IV
Chestnut-Edneyville complex, 8 to 25 percent slopes, stony	IV	III	III
Chestnut-Edneyville complex, 25 to 60 percent slopes, stony	IV	III	IV
Chestnut-Edneyville complex, windswept, stony, ALL	IV	VI	IV
Chestoa-Ditney-Rock outcrop complex, 30 to 95 percent slopes, very	IV	VI	IV
bouldery			
Cleveland-Chestnut-Rock outcrop complex, windswept, ALL	IV	VI	IV
Cleveland-Rock outcrop complex, 8 to 90 percent slopes	IV	VI	IV
Cliffield-Cowee complex, 15 to 30 percent slopes, very stony	IV	V	IV
Cliffield-Fairview complex, 15 to 25 percent slopes	IV	V	IV
Cliffield-Pigeonroost complex, very stony, ALL	IV	V	IV
Cliffield-Rhodhiss complex, 25 to 60 percent slopes, very stony	IV	V	IV
Cliffield-Rock outcrop complex, 50 to 95 percent slopes	IV	VI	IV
Cliffield-Woolwine complex, 8 to 15 percent slopes	IV	V	IV
Clifton (Evard) stony loam, ALL	IV	I	IV
Clifton clay loam, 8 to 15 percent slopes, eroded	III	I	III
Clifton clay loam, 15 to 30 percent slopes, eroded	IV	I	III
Clifton clay loam, 30 to 50 percent slopes, eroded	IV	I	IIII
Clifton loam, 2 to 8 percent slopes	II	I	I
Clifton loam, 6 to 10 percent slopes	II	I	I
Clifton loam, 8 to 15 percent slopes	II	I	II
Clifton loam, 10 to 25 percent slopes	IV	I	II
Clifton loam, 15 to 25 percent slopes	IV	I	II
Clifton loam, 25 to 45 percent slopes	IV	I	III
Clifton stony loam, 15 to 45 percent slopes	IV	I	IV
Clingman-Craggey-Rock outcrop complex, windswept, 15 to 95 percent	IV	VI	IV
slopes, extremely bouldery	1,	, ,	1,
Codorus, ALL	II	II	III
Colvard, ALL	I	II	III
Comus, ALL	I	II	III
Cowee gravelly loam, stony, ALL	IV	V	IV
Cowee-Evard-Urban land complex, 15 to 30 percent slopes	IV	III	IV
Cowee-Saluda complex, stony, ALL	IV	V	IV
Craggey-Rock outcrop complex, 40 to 90 percent slopes	IV	VI	IV
Craggey-Rock outcrop-Clingman complex, windswept, rubbly, ALL	IV	VI	IV
Crossnore-Jeffrey complex, very stony, ALL	IV	I	IV
Cullasaja cobbly fine sandy loam, 8 to 30 percent slopes, very bouldery	IV	II	IV
Cullasaja cobbly loam, extremely bouldery, ALL	IV	II	IV
Cullasaja very cobbly fine sandy loam, extremely bouldery, ALL	IV	II	IV
Cullasaja very cobbly loam, extremely bouldery, ALL	IV	II	IV
Cullasaja very cobbly sandy loam, extremely bouldery, ALL	IV	II	IV
Cullasaja-Tuckasegee complex, 8 to 15 percent slopes, stony	IV	II	II
Cullasaja-Tuckasegee complex, 8 to 13 percent slopes, stony Cullasaja-Tuckasegee complex, 15 to 30 percent slopes, stony	IV	II	II
Cullasaja-Tuckasegee complex, 30 to 50 percent slopes, stony	IV	II	III
Cullasaja-Tuckasegee complex, 50 to 90 percent slopes, stony	IV	II	IV
Cullasaja-Tuckasegee complex, 50 to 95 percent slopes, stony Cullasaja-Tuckasegee complex, 50 to 95 percent slopes, stony	IV	II	IV
Curiasaja-1 uckasegee complex, 30 to 93 percent slopes, stony	1 V	11	1 V

Map Unit Name	Agri	For	Hort
Cullasaja-Tusquitee complex, 10 to 45 percent slopes	IV	II	III
Cullowhee fine sandy loam, 0 to 2 percent slopes, occasionally flooded	II	II	II
Cullowhee, frequently flooded, ALL	IV	II	IV
Cullowhee-Nikwasi complex, 0 to 2 percent slopes, frequently flooded	IV	II	IV
Delanco (Dillard) loam, ALL	I	I	I
Delanco fine sandy loam, 2 to 6 percent slopes	II	I	I
Dellwood gravelly fine sandy loam, 0 to 5 percent slopes, frequently flooded	IV	II	IV
Dellwood, occasionally flooded, ALL	III	II	III
Dellwood-Reddies complex, 0 to 3 percent slopes, occasionally flooded	III	II	III
Dellwood-Urban land complex, 0 to 3 percent slopes, occasionally flooded	IV	II	IV
Dillard, ALL	I	I	I
Dillsboro clay loam, 2 to 8 percent slopes	I	I	I
Dillsboro clay loam, 8 to 15 percent slopes, rarely flooded	II	I	II
Dillsboro clay loam, 8 to 15 percent slopes, stony	III	I	II
Dillsboro clay loam, 15 to 30 percent slopes, stony	IV	I	II
Dillsboro loam, 2 to 8 percent slopes	I	I	I
Dillsboro loam, 8 to 15 percent slopes	II	I	II
Dillsboro-Urban land complex, 2 to 15 percent slopes	IV	I	IV
Ditney-Unicoi complex, very stony, ALL	IV	VI	IV
Ditney-Unicoi complex, 50 to 95 percent slopes, very rocky	IV	VI	IV
Ditney-Unicoi-Rock outcrop complex, ALL	IV	VI	IV
Edneytown gravelly sandy loam, 8 to 25 percent slopes	IV	I	III
Edneytown-Chestnut complex, 30 to 50 percent slopes, stony	IV	I	III
Edneytown-Chestnut complex, 50 to 80 percent slopes, stony	IV	I	IV
Edneytown-Pigeonroost complex, 8 to 15 percent slopes, stony	III	I	III
Edneytown-Pigeonroost complex, 15 to 30 percent slopes, stony	IV	I	III
Edneytown-Pigeonroost complex, 30 to 50 percent slopes, stony	IV	I	IV
Edneyville (Edneytown) fine sandy loam, 7 to 15 percent slopes	III	I	III
Edneyville (Edneytown) fine sandy loam, 15 to 25 percent slopes	IV	I	IV
Edneyville (Edneytown) fine sandy loam, 25 to 45 percent slopes	IV	I	IV
Edneyville loam, 15 to 25 percent slopes	IV	I	II
Edneyville loam, 25 to 45 percent slopes	IV	I	III
Edneyville stony loam, 45 to 70 percent slopes	IV	I	IV
Edneyville-Chestnut complex, 2 to 8 percent slopes, stony	III	I	III
Edneyville-Chestnut complex, 8 to 15 percent slopes, stony	IV	I	III
Edneyville-Chestnut complex, 10 to 25 percent slopes, stony	IV	I	III
Edneyville-Chestnut complex, 15 to 30 percent slopes, stony	IV	I	III
Edneyville-Chestnut complex, ALL OTHER	IV	I	IV
Edneyville-Chestnut-Urban land complex, ALL	IV	I	IV
Ellijay silty clay loam, 2 to 8 percent slopes, eroded	III	I	I
Ellijay silty clay loam, 8 to 15 percent slopes, eroded	IV	I	I
Ellijay silty clay loam, eroded, ALL OTHER	IV	I	II
Elsinboro loam, ALL	I	I	I
Eutrochrepts, mined, 30 to 50 percent slopes, very stony	IV	VI	IV
Evard and Saluda fine sandy loams, 25 to 60 percent slopes	IV	I	IV
Evard fine sandy loam, 7 to 15 percent slopes	III	I	II
Evard fine sandy loam, 15 to 25 percent slopes	IV	I	II
Evard fine sandy loam, 25 to 50 percent slopes	IV	I	III
Evard gravelly sandy loam, 6 to 15 percent slopes	III	I	II
Evard gravelly sandy loam, 15 to 25 percent slopes	IV	I	III
Evard loam, ALL	IV	I	IV
Evard soils, 15 to 25 percent slopes	IV	I	III

Map Unit Name	Agri	For	Hort
Evard soils, ALL OTHER	IV	I	IV
Evard stony loam, 25 to 60 percent slopes	IV	I	IV
Evard-Cowee complex, 2 to 8 percent slopes	III	I	II
Evard-Cowee complex, 8 to 15 percent slopes	III	I	II
Evard-Cowee complex, 8 to 15 percent slopes, eroded	III	I	II
Evard-Cowee complex, 8 to 25 percent slopes, stony	IV	I	III
Evard-Cowee complex, ALL OTHER	IV	I	IV
Evard-Cowee-Urban land complex, ALL	IV	I	IV
Fannin fine sandy loam, 8 to 15 percent slopes	III	I	I
Fannin fine sandy loam, 15 to 30 percent slopes	IV	I	II
Fannin fine sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Fannin fine sandy loam, 30 to 50 percent slopes	IV	I	II
Fannin fine sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Fannin fine sandy loam, 50 to 95 percent slopes	IV	I	III
Fannin loam, 8 to 15 percent slopes	III	I	II
Fannin loam, 15 to 25 percent slopes	IV	I	III
Fannin loam, 25 to 45 percent slopes	IV	I	III
Fannin loam, 30 to 50 percent slopes, eroded	IV	I	III
Fannin loam, 45 to 70 percent slopes	IV	I	IV
Fannin sandy clay loam, 8 to 15 percent slopes, eroded	III	I	II
Fannin sandy clay loam, 8 to 15 percent slopes, eroded Fannin sandy clay loam, eroded, ALL OTHER	IV	I	III
	III	I	II
Fannin silt loam, 6 to 10 percent slopes, eroded		I	II
Fannin silt loam, 7 to 15 percent slopes	III IV	I	III
Fannin silt loam, 10 to 25 percent slopes, eroded			
Fannin silt loam, 15 to 25 percent slopes	IV	I	III
Fannin silt loam, 25 to 45 percent slopes	IV	I	III
Fannin silty clay loam, 15 to 45 percent slopes, eroded	IV	I	IV
Fannin-Chestnut complex, 50 to 85 percent slopes, rocky	IV	I	IV
Fannin-Cowee complex, 15 to 30 percent slopes, stony	IV	I	III
Fannin-Cowee complex, stony, ALL OTHER	IV	I	IV
Fannin-Urban land complex, 2 to 15 percent slopes	IV	I	IV
Fletcher and Fannin soils, 6 to 15 percent slopes	III	I	II
Fletcher and Fannin soils, 15 to 25 percent slopes	IV	I	II
Fluvaquents-Udifluvents complex, occasionally flooded, ALL	III	II	IV
Fontaflora-Ostin complex	IV	II	IV
French fine sandy loam, 0 to 3 percent slopes, frequently flooded	IV	II	IV
Greenlee ALL	IV	I	IV
Greenlee-Ostin complex, 3 to 40 percent slopes, very stony	IV	I	IV
Greenlee-Tate complex, ALL	IV	I	IV
Greenlee-Tate-Ostin complex, 1 to 15 percent slopes, extremely stony	IV	I	IV
Gullied land	IV	VI	IV
Harmiller-Shinbone complex, 15 to 30 percent slopes, stony	IV	III	III
Harmiller-Shinbone complex, 30 to 50 percent slopes, stony	IV	III	III
Hatboro loam	IV	II	IV
Hayesville channery fine sandy loam, 8 to 15 percent slopes, very stony	IV	I	II
Hayesville channery fine sandy loam, 15 to 25 percent slopes, very stony	IV	I	III
Hayesville channery fine sandy loam, 25 to 60 percent slopes, very stony	IV	I	IV
Hayesville clay loam, 2 to 8 percent slopes, eroded	III	I	II
Hayesville clay loam, 6 to 15 percent slopes, eroded	IV	I	II
Hayesville clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Hayesville clay loam, 10 to 25 percent slopes, severely eroded	IV	I	III
Hayesville clay loam, 15 to 30 percent slopes, eroded	IV	I	III

Hayesville fine sandy loam, 6 to 15 percent slopes III I I I Hayesville fine sandy loam, 15 to 25 percent slopes III I I I I I Hayesville fine sandy loam, 15 to 25 percent slopes III I I I III Hayesville fine sandy loam, 15 to 25 percent slopes III I I III Hayesville fine sandy loam, 25 to 50 percent slopes III I I III Hayesville loam, 2 to 7 percent slopes III I I I III Hayesville loam, 2 to 8 percent slopes III I I I I Hayesville loam, 2 to 8 percent slopes III I I I I I Hayesville loam, 6 to 10 percent slopes III I I I I I Hayesville loam, 6 to 10 percent slopes III I I I I I I Hayesville loam, 6 to 10 percent slopes III I I I I I Hayesville loam, 6 to 10 percent slopes III I I I I I I Hayesville loam, 7 to 15 percent slopes III I I I I I Hayesville loam, 7 to 15 percent slopes III I I I I I Hayesville loam, 7 to 15 percent slopes III I I I I I Hayesville loam, 8 to 15 percent slopes III I I I I I Hayesville loam, 10 to 25 percent slopes III I I I I I Hayesville loam, 15 to 30 percent slopes III I I I I I Hayesville loam, 15 to 30 percent slopes III I I I I I Hayesville loam, 15 to 30 percent slopes III I I II Hayesville sandy clay loam, eroded, ALL O'HER III I I II Hayesville sandy clay loam, eroded, ALL O'HER III I II I Hayesville-Evard complex, 15 to 25 percent slopes III I I II I II I II I II I II Hayesville-Evard complex, 15 to 25 percent slopes III I II I II I II I II I II I I I I	Map Unit Name	Agri	For	Hort
Hayesville fine sandy loam, 18 to 15 percent slopes	*			
Hayesville fine sandy loam, 15 to 25 percent slopes III				
Hayesville fine sandy loam, 15 to 30 percent slopes		+		
Hayesville loam, 2 to 7 percent slopes		+		1
Hayesville loam, 2 to 8 percent slopes				1
Hayesville loam, 2 to 8 percent slopes II I I I I Hayesville loam, 6 to 15 percent slopes III I I I I Hayesville loam, 6 to 15 percent slopes III I I I I Hayesville loam, 6 to 15 percent slopes III I I I I Hayesville loam, 7 to 15 percent slopes III I I I I I Hayesville loam, 10 to 25 percent slopes III I I I I I Hayesville loam, 10 to 25 percent slopes III I I I I I I I I I Hayesville loam, 10 to 25 percent slopes III I I I I I I I I I I I I I I Hayesville loam, 15 to 25 percent slopes III I I I I I I I I I I I I I I I I I		+		1
Hayesville loam, 6 to 10 percent slopes Hayesville loam, 6 to 15 percent slopes III		+		
Hayesville loam, 6 to 15 percent slopes III I I I Hayesville loam, 7 to 15 percent slopes III I I I I Hayesville loam, 7 to 15 percent slopes III I I I I Hayesville loam, 10 to 25 percent slopes III I I I I I Hayesville loam, 10 to 25 percent slopes III I I II I II II II II II II II II I				
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Lonon loam, 2 to 8 percent slopesIIILonon loam, 8 to 15 percent slopesIIIILonon loam, 15 to 30 percent slopesIVIIILonon-Northcove complex, 6 to 15 percent slopesIVIIIIMaymead fine sandy loam, ALLIVIIIMaymead-Greenlee-Potomac complex, 3 to 25 percent slopesIVIIVNikwasi, ALLIVIIIVNorthcove very cobbly loam, ALLIVIIVNorthcove-Maymead complex, extremely stony, ALLIVIIV	Keener-Lostcove complex, 30 to 50 percent slopes, very stony	IV	I	IV
Lonon loam, 8 to 15 percent slopes II I I Lonon loam, 15 to 30 percent slopes IV I III Lonon-Northcove complex, 6 to 15 percent slopes IV I III Maymead fine sandy loam, ALL Maymead-Greenlee-Potomac complex, 3 to 25 percent slopes IV I IV Nikwasi, ALL Northcove very cobbly loam, ALL Northcove-Maymead complex, extremely stony, ALL IV I IV IV I IV	Kinkora loam	IV	I	III
Lonon loam, 15 to 30 percent slopes Lonon-Northcove complex, 6 to 15 percent slopes IV III Maymead fine sandy loam, ALL Maymead-Greenlee-Potomac complex, 3 to 25 percent slopes IV II IV II IV II IV Northcove very cobbly loam, ALL IV II IV IV II IV IV IV IV	Lonon loam, 2 to 8 percent slopes	I	I	I
Lonon-Northcove complex, 6 to 15 percent slopesIVIIIIMaymead fine sandy loam, ALLIVIIIMaymead-Greenlee-Potomac complex, 3 to 25 percent slopesIVIIVNikwasi, ALLIVIIIVNorthcove very cobbly loam, ALLIVIIVNorthcove-Maymead complex, extremely stony, ALLIVIIV	· 1 1		I	
Maymead fine sandy loam, ALLIVIIIMaymead-Greenlee-Potomac complex, 3 to 25 percent slopesIVIIVNikwasi, ALLIVIIIVNorthcove very cobbly loam, ALLIVIIVNorthcove-Maymead complex, extremely stony, ALLIVIIV	Lonon loam, 15 to 30 percent slopes	IV	I	II
Maymead-Greenlee-Potomac complex, 3 to 25 percent slopesIVIIVNikwasi, ALLIVIIIVNorthcove very cobbly loam, ALLIVIIVNorthcove-Maymead complex, extremely stony, ALLIVIIV	Lonon-Northcove complex, 6 to 15 percent slopes	IV	I	III
Nikwasi, ALLIVIIIVNorthcove very cobbly loam, ALLIVIIVNorthcove-Maymead complex, extremely stony, ALLIVIIV	Maymead fine sandy loam, ALL	IV	I	II
Northcove very cobbly loam, ALL IV I IV Northcove-Maymead complex, extremely stony, ALL IV I IV	Maymead-Greenlee-Potomac complex, 3 to 25 percent slopes	IV	I	IV
Northcove-Maymead complex, extremely stony, ALL IV I IV	Nikwasi, ALL	IV	II	IV
	Northcove very cobbly loam, ALL	IV	I	IV
	Northcove-Maymead complex, extremely stony, ALL	IV	I	IV
		IV	VI	IV

Map Unit Name	Agri	For	Hort
Oconaluftee channery loam, windswept, ALL	ΙV	VI	IV
Ostin, occasionally flooded, ALL	IV	II	IV
Pigeonroost-Edneytown complex, stony, ALL	IV	I	III
Pineola gravelly loam, 2 to 8 percent slopes	IV	I	II
Pineola gravelly loam, 8 to 15 percent slopes, stony	IV	I	II
Pineola gravelly loam, 15 to 30 percent slopes, stony	IV	I	III
Pits, ALL	IV	VI	IV
Plott fine sandy loam, 8 to 15 percent slopes, stony	III	I	II
Plott fine sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Plott fine sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Plott fine sandy loam, 50 to 95 percent slopes, stony	IV	I	IV
Plott loam, 15 to 30 percent slopes, stony	IV	I	II
Plott loam, 30 to 50 percent slopes, stony	IV	I	III
Plott loam, 50 to 95 percent slopes, stony	IV	I	IV
Ponzer muck, cool variant	IV	VI	IV
Porters gravelly loam, 8 to 15 percent slopes, stony	III	I	II
Porters gravelly loam, 15 to 30 percent slopes, stony	IV	I	II
Porters gravelly loam, 30 to 50 percent slopes, stony	IV	I	III
Porters gravelly loam, 50 to 80 percent slopes, stony	IV	I	IV
Porters loam, 25 to 45 percent slopes	IV	I	III
Porters loam, 25 to 80 percent slopes, stony	IV	I	IV
Porters loam, 30 to 50 percent slopes, stony	IV	I	IV
Porters loam, ALL OTHER	IV	I	II
Porters stony loam, 10 to 25 percent slopes	IV	I	II
Porters stony loam, 15 to 25 percent slopes	IV	I	II
Porters stony loam, 15 to 45 percent slopes	IV	I	II
Porters stony loam, 25 to 45 percent slopes	IV	I	III
Porters stony loam, ALL OTHER	IV	Ι	IV
Porters-Unaka complex, 8 to 15 percent slopes, stony	IV	I	II
Porters-Unaka complex, 15 to 30 percent slopes, stony	IV	I	II
Porters-Unaka complex, 30 to 50 percent slopes, stony	IV	I	III
Porters-Unaka complex, 50 to 95 percent slopes, rocky	IV	I	IV
Potomac, frequently flooded, ALL	IV	II	IV
Potomac-Iotla complex, 0 to 3 percent slopes, mounded, frequently flooded	IV	II	IV
Rabun loam, 6 to 25 percent slopes	IV	I	II
Rabun loam, 25 to 50 percent slopes	IV	I	III
Reddies, occasionally flooded	II	II	II
Reddies, frequently flooded, ALL	IV	II	IV
Rock outcrop	IV	VI	IV
Rock outcrop-Ashe complex, ALL	IV	VI	IV
Rock outcrop-Ashe-Cleveland complex, ALL	IV	VI	IV
Rock outcrop-Cataska complex, ALL	IV	VI	IV
Rock outcrop-Cleveland complex, ALL	IV	VI	IV
Rock outcrop-Cleveland complex, windswept, ALL	IV	VI	IV
Rock outcrop-Craggey complex, windswept, ALL	IV	VI	IV
Rosman, frequently flooded, ALL	IV	II	IV
Rosman, ALL OTHER	I	II	I
Rosman-Reddies complex, 0 to 3 percent slopes, occasionally flooded	I	II	I
Saunook gravelly loam, 2 to 8 percent slopes	I	I	I
Saunook gravelly loam, 8 to 15 percent slopes	I	I	I
Saunook gravelly loam, 8 to 15 percent slopes, stony	II	I	II
Saunook gravelly loam, 15 to 30 percent slopes	IV	I	II

Map Unit Name	Agri	For	Hort
Saunook gravelly loam, 15 to 30 percent slopes, stony	IV	I	II
Saunook gravelly loam, 30 to 50 percent slopes, stony	IV	I	III
Saunook loam, 2 to 8 percent slopes	I	I	I
Saunook loam, 8 to 15 percent slopes	I	I	I
Saunook loam, 8 to 15 percent slopes, stony	II	I	II
Saunook loam, 15 to 30 percent slopes, stony	IV	I	II
Saunook loam, 15 to 30 percent slopes, very stony	IV	I	III
Saunook loam, 30 to 50 percent slopes, very stony	IV	I	IV
Saunook sandy loam, 2 to 8 percent slopes	I	I	I
Saunook sandy loam, 8 to 15 percent slopes, stony	II	I	II
Saunook salty loam, 8 to 15 percent slopes, story Saunook silt loam, 2 to 8 percent slopes	I	I	I
Saunook silt loam, 8 to 15 percent slopes, stony	II	I	II
Saunook-Nikwasi complex, 2 to 15 percent slopes	IV	I	III
	IV	I	III
Saunook-Thunder complex, ALL			
Saunook-Urban land complex, 2 to 15 percent slopes	IV	I	IV
Sauratown channery fine sandy loam, 8 to 15 percent slopes	IV	V	III
Sauratown channery fine sandy loam, 8 to 15 percent slopes, very stony	IV	V	III
Sauratown channery fine sandy loam, ALL OTHER	IV	V	IV
Soco-Cataska-Rock outcrop complex, 50 to 95 percent slopes	IV	VI	IV
Soco-Ditney complex, 6 to 25 percent slopes, stony	IV	III	III
Soco-Ditney complex, 8 to 15 percent slopes, very stony	IV	III	III
Soco-Ditney complex, 15 to 30 percent slopes, very stony	IV	III	III
Soco-Ditney complex, ALL OTHER	IV	III	IV
Soco-Stecoah complex, 8 to 15 percent slopes, stony	IV	III	II
Soco-Stecoah complex, 15 to 30 percent slopes	IV	III	III
Soco-Stecoah complex, 15 to 30 percent slopes, stony	IV	III	III
Soco-Stecoah complex, ALL OTHER	IV	III	IV
Soco-Stecoah complex, windswept, 30 to 50 percent slopes	IV	VI	IV
Spivey cobbly loam, extremely bouldery, ALL	IV	I	IV
Spivey stony loam, 10 to 40 percent slopes	IV	I	IV
Spivey-Santeetlah complex, 8 to 15 percent slopes, stony	IV	I	III
Spivey-Santeetlah complex, 15 to 30 percent slopes, stony	IV	I	III
Spivey-Santeetlah complex, stony, ALL OTHER	IV	I	IV
Spivey-Whiteoak complex, ALL	IV	I	IV
Statler, rarely flooded, ALL	I	I	I
Stecoah-Soco complex, 15 to 30 percent slopes, stony	IV	I	III
Stecoah-Soco complex, 30 to 50 percent slopes, stony	IV	I	III
Stecoah-Soco complex, 50 to 80 percent slopes, stony	IV	I	IV
Stony colluvial land	IV	II	IV
Stony land	IV	VI	IV
Stony steep land	IV	VI	IV
Suncook loamy sand, ALL	IV	II	II
Sylco-Cataska complex, ALL	IV	IV	IV
Sylco-Rock outcrop complex, 50 to 95 percent slopes	IV	IV	IV
Sylco-Soco complex, 10 to 30 percent slopes, stony	IV	IV	IV
Sylva-Whiteside complex, ALL	IV	I	II
Talladega, ALL	IV	IV	IV
Tanasee-Balsam complex, ALL	IV	VI	IV
Tate fine sandy loam, 2 to 6 percent slopes	I	I	I
Tate fine sandy loam, 2 to 7 percent slopes	I	I	I
Tate fine sandy loam, 2 to 8 percent slopes	I	I	I
Tate fine sandy loam, 2 to 8 percent slopes, very stony	IV	I	II

Map Unit Name	Agri	For	Hort
Tate fine sandy loam, 6 to 15 percent slopes	II	I	I
Tate fine sandy loam, 7 to 15 percent slopes	II	I	I
Tate fine sandy loam, 8 to 15 percent slopes	II	I	I
Tate fine sandy loam, 8 to 25 percent slopes	IV	I	II
Tate fine sandy loam, 15 to 25 percent slopes	IV	I	II
Tate gravelly loam, 8 to 15 percent slopes	II	I	I
Tate gravelly loam, 8 to 15 percent slopes, stony	II	I	II
Tate gravelly loam, 15 to 30 percent slopes, stony	IV	I	II
Tate loam, 2 to 6 percent slopes	I	I	I
Tate loam, 2 to 8 percent slopes	I	I	I
Tate loam, 6 to 10 percent slopes	II	I	I
Tate loam, 6 to 15 percent slopes	II	I	I
Tate loam, 8 to 15 percent slopes	II	I	I
Tate loam, 10 to 15 percent slopes	II	I	I
Tate loam, 15 to 25 percent slopes	IV	I	II
Tate loam, 15 to 30 percent slopes	IV	I	II
Tate-Cullowhee complex, 0 to 25 percent slopes	IV	I	II
Tate-French complex, 2 to 10 percent slopes	II	I	II
Tate-Greenlee complex, ALL	IV	I	IV
Thunder-Saunook complex, ALL	IV	II	IV
Toecane-Tusquitee complex, ALL	IV	II	III
Toxaway, ALL	IV	II	IV
Transylvania silt loam	I	II	II
Trimont gravelly loam, ALL	IV	I	IV
Tuckasegee-Cullasaja complex, 8 to 15 percent slopes, stony	IV	II	III
Tuckasegee-Cullasaja complex, 5 to 30 percent slopes, very stony	IV	II	IV
Tuckasegee-Cullasaja complex, 30 to 50 percent slopes, extremely stony	IV	II	IV
Tuckasegee-Whiteside complex, 2 to 8 percent slopes	I	II	I
Tuckasegee-Whiteside complex, 8 to 15 percent slopes	II	II	I
Tusquitee and Spivey stony soils, ALL	IV	I	IV
Tusquitee loam, 6 to 10 percent slopes	I	I	I
Tusquitee loam, 6 to 15 percent slopes	II	I	I
Tusquitee loam, 7 to 15 percent slopes	II	I	I
Tusquitee loam, 8 to 15 percent slopes	II	I	I
Tusquitee loam, 10 to 15 percent slopes	II	I	I
Tusquitee loam, 15 to 25 percent slopes	IV	I	II
Tusquitee stony loam, 25 to 45 percent slopes	IV	I	IV
Tusquitee stony loam, ALL OTHER	IV	I	III
Udifluvents, frequently flooded, ALL	IV	II	IV
Udorthents, loamy, ALL	IV	V	IV
Udorthents-Pits complex, mounded, 0 to 2 percent slopes, occasionally	IV	V	IV
flooded	1 V	•	1 V
Udorthents-Urban land complex, ALL	IV	V	IV
Unaka-Porters complex, very rocky, ALL	IV	V	IV
Unaka-Rock outcrop complex, 50 to 95 percent slopes, very bouldery	IV	VI	IV
Unicoi-Rock outcrop complex, 30 to 95 percent slopes, very bouldery	IV	V	IV
Unison fine sandy loam, 2 to 8 percent slopes	I	I	I
Unison fine sandy loam, 8 to 15 percent slopes	II	I	I
Unison fine sandy loam, 15 to 25 percent slopes Unison fine sandy loam, 15 to 25 percent slopes	IV	I	II
Unison loam, 2 to 8 percent slopes	I	I	I
Unison loam, 8 to 15 percent slopes	II	I	I
Unison loam, 15 to 30 percent slopes Unison loam, 15 to 30 percent slopes	IV	I	II
	IV	VI	II
Urban land	1 V	V I	11

Map Unit Name	Agri	For	Hort
Watauga loam, 6 to 10 percent slopes	III	I	II
Watauga loam, 6 to 15 percent slopes	III	I	II
Watauga loam, 8 to 15 percent slopes	III	I	II
Watauga loam, ALL OTHER	IV	I	III
Watauga sandy loam, 8 to 15 percent slopes, stony	III	I	II
Watauga sandy loam, 15 to 30 percent slopes, stony	IV	I	II
Watauga sandy loam, 30 to 50 percent slopes, stony	IV	I	III
Watauga stony loam, 15 to 45 percent slopes	IV	I	IV
Wayah loam, windswept, eroded, stony, ALL	IV	VI	IV
Wayah sandy loam, stony, ALL	IV	V	IV
Wayah sandy loam, windswept, stony, ALL	IV	VI	IV
Wayah-Burton complex, 15 to 30 percent slopes, bouldery	IV	V	IV
Wayah-Burton complex, 30 to 50 percent slopes, bouldery	IV	V	IV
Wayah-Burton complex, 50 to 95 percent slopes, very rocky	IV	V	IV
Wayah-Burton complex, windswept, ALL	IV	V	IV
Whiteoak cobbly loam, 8 to 15 percent slopes, stony	II	I	II
Whiteoak cobbly loam, 15 to 30 percent slopes, stony	IV	I	III
Whiteoak fine sandy loam, 2 to 8 percent slopes	I	I	I
Whiteoak fine sandy loam, 8 to 15 percent slopes, stony	II	I	II
Whiteoak fine sandy loam, 15 to 30 percent slopes, very stony	IV	I	III
Whiteside-Tuckasegee complex, 2 to 8 percent slopes	I	I	I

Alluvial land, wet	Map Unit Name	Agri	For	Hort
Alpin, ALL			III	
Altavista. ALL Altavista-Urban land complex, 0 to 3 percent slopes, rarely flooded IV I IV Augusta, ALL I I I I Autryville Joamy sand, ALL IIII Autryville Joamy sand, ALL IIII III IIII IIII IIII IIII IIII IIII IIII IIII IIII Autryville-Urban land complex, 0 to 6 percent slopes IV III IV Aycock very fine sandy loam, 2 to 6 percent slopes, eroded III III III Aycock, ALL O'THER I I III III Ballahack fine sandy loam I I I III Ballahack fine sandy loam I I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				
Altavista-Urban land complex, 0 to 3 percent slopes, rarely flooded IV I I IV Augusta, ALL I I I I I Autryville loamy sand, ALL IIII III III III III III III III II				
Augusta, ALL Autryville loamy sand, ALL Autryville, ALL OTHER IV III III Autryville, ALL OTHER IV III IV Autryville-Urban land complex, 0 to 6 percent slopes IV III IV Accock very fine sandy loam, 2 to 6 percent slopes, eroded III III Ballahack fine sandy loam I I I II Ballahack fine sandy loam I I I II Bethera loam, 0 to 1 percent slopes III II IV Bibb, ALL IV III IV Bibb, ALL IV III IV Bibb, ALL IV III IV Bianey, ALL Blanton, ALL Bonneau loamy fine sand, 0 to 4 percent slopes III III Bonneau loamy sand, 0 to 4 percent slopes III III Bonneau loamy sand, 0 to 5 percent slopes III III Bonneau loamy sand, 0 to 5 percent slopes III III Bonneau sand, 0 to 7 percent slopes III III Bonneau sand, 0 to 8 percent slopes III III Bonneau sand, 0 to 9 percent slopes III II				
Autryville loamy sand, ALL Autryville, ALL OTHER Autryville, ALL OTHER Autryville-Urban land complex, 0 to 6 percent slopes IV II IV Autryville-Urban land complex, 0 to 6 percent slopes IV II IV Aycock very fine sandy loam, 2 to 6 percent slopes, eroded II II II II Ballahack fine sandy loam I I I I I Ballahack fine sandy loam I I I I II Bethera loam, 0 to 1 percent slopes II I II II Bibb and Johnston soils, frequently flooded IV III IV Bibb, ALL IV III IV Blaney, ALL IV III IV Blaney, ALL IV III IV Blaney, ALL IV III IV Bojac loamy fine sand, 0 to 3 percent slopes III II III III Bonneau loamy fine sand, 0 to 4 percent slopes III II III III Bonneau loamy sand, 0 to 6 percent slopes III II III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 12 percent slopes III III III Bonneau loamy sand, 0 to 2 percent slopes III III III Bonneau loamy sand, 0 to 2 percent slopes III III III Bonneau loamy sand, 0 to 2 percent slopes III III III Candor sand, 0 to 2 percent slopes III III III Candor sand, 0 to 2 percent slopes III III III Candor sand, 1 to 8 percent slopes III III III Candor sand, 1 to 8 percent slopes III III III Candor sand, 1 to 8 percent slopes III III III Candor sandy loam, 0 to 2 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy loam, 0 to 1 percent slopes III III III Candor sandy l				
Autryville, ALL OTHER Autryville-Urban land complex, 0 to 6 percent slopes IV II IV Autryville-Urban land complex, 0 to 6 percent slopes IV III IV Aycock very fine sandy loam, 2 to 6 percent slopes, eroded II II II Aycock, ALL OTHER I II II Ballahack fine sandy loam I I II Barclay very fine sandy loam I I II Bothera loam, 0 to 1 percent slopes III III Bothera loam, 0 to 1 percent slopes III III Bonneau loamy fine sand, 0 to 3 percent slopes III III Bonneau loamy fine sand, 0 to 4 percent slopes III III Bonneau loamy sand, 0 to 4 percent slopes III III Bonneau loamy sand, 0 to 6 percent slopes III III Bonneau loamy sand, 0 to 6 percent slopes III III Bonneau loamy sand, 0 to 7 percent slopes III III Bonneau loamy sand, 0 to 2 percent slopes III III Bonneau loamy sand, 0 to 2 percent slopes III III Bonneau loamy sand, 0 to 2 percent slopes III III Bonneau sand, 0 to 2 percent slopes III III Bonneau loamy sand, 0 to 2 percent slopes III III Bonneau loamy sand, 0 to 2 percent slopes III III Bonneau loamy sand, 0 to 2 percent slopes III III Butters loamy sand, 0 to 2 percent slopes III III Candor sand, 1 to 8 percent slopes III III Candor sand, 1 to 8 percent slopes III III Candor sand, 8 to 15 percent slopes III III Candor sand, 8 to 15 percent slopes III III Caroline sandy loam, 0 to 2 percent slopes III III Caroline sandy loam, 0 to 2 percent slopes III III Caroline sandy loam, 0 to 2 percent slopes III III Caroline sandy loam, 6 to 1 percent slopes III III Caroline sandy loam, 6 to 1 percent slopes III III Caroline sandy loam, 6 to 1 percent slopes III III Caroline sandy loam, 6 to 1 percent slopes III III Caroline sandy loam, 7 to 6 percent slopes III III Caroline sandy loam, 6 to 9 percent slopes III III Caroline sandy loam, 6	\mathcal{C}			
Autryville-Urban land complex, 0 to 6 percent slopes				
Aycock very fine sandy loam, 2 to 6 percent slopes, eroded II				
Aycock, ALL OTHER Ballahack fine sandy loam I I I I I Ballahack fine sandy loam Berthera loam, 0 to 1 percent slopes II I I I I I I I Berthera loam, 0 to 1 percent slopes III I I I I I I I I I I I I I I I I I				
Ballahack fine sandy loam Barclay very fine sandy loam I I I I I Barclay very fine sandy loam I I I I I Bethera loam, 0 to 1 percent slopes III I I II Bibb and Johnston soils, frequently flooded IV IIII IV Bibb, ALL Bibb, ALL IV III IV Blaney, ALL Bojac loamy fine sand, 0 to 3 percent slopes III II III Bonneau loamy fine sand, 0 to 4 percent slopes III III III Bonneau loamy sand, 0 to 4 percent slopes III III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 2 percent slopes III III III Bonneau sand, 0 to 3 percent slopes III III III Bonneau sand, 0 to 2 percent slopes III III III Bonneau sand, 0 to 2 percent slopes III III III Bonneau sand, 0 to 2 percent slopes III III III Bonters fine sand, 0 to 2 percent slopes III III III Byars loam III IIII Byars loam III IIII Candor sand, 1 to 8 percent slopes IV V IV Cape Fear loam II I III Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 0 to 1 percent slopes III III III Caroline sandy loam, 0 to 1 percent slopes III III III Chastain silt loam, frequently flooded IV III IV Chastain silt loam, frequently flooded IV IIII IV Chewacla and Chastain soils, frequently flooded IV IIII IV Chewacla and Chastain soils, frequently flooded IV IIII IV Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV IIII IV Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV IIII IV Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV IIII IIII Chewacla loam				
Barclay very fine sandy loam Bethera loam, 0 to 1 percent slopes II I I II Bibb and Johnston soils, frequently flooded IV IIII IV Bibb, ALL Blaney, ALL IV III IV Blanton, ALL Blaney, ALL IV III IV Blanton, ALL Bonneau loamy fine sand, 0 to 3 percent slopes III II III Bonneau loamy sand, 0 to 4 percent slopes III II III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 12 percent slopes III III III Bonneau sand, 0 to 2 percent slopes III III III Butters fine sand, 0 to 2 percent slopes III III III Butters loamy sand, 0 to 2 percent slopes III III III Butters loamy sand, 0 to 2 percent slopes III III III Butters loamy sand, 0 to 2 percent slopes III III III Candor sand, 1 to 8 percent slopes IV V V IV Cape Fear loam Caroline sandy loam, 0 to 2 percent slopes III III III Candor sand, 8 to 15 percent slopes III III III Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 2 to 6 percent slopes III III III Chastain and Bibb soils, 0 to 1 percent slopes, frequently flooded IV III IV Chewacla and Chastain soils, frequently flooded IV III IV Chewacla and Chastain soils, frequently flooded IV III IV Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV III III Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV III IV Chewacla loam				
Bethera loam, 0 to 1 percent slopes Bibb and Johnston soils, frequently flooded IV III IV Bibb, ALL IV III IV Bibb, ALL IV III IV Blanton, ALL IV III IV Bojac loamy fine sand, 0 to 3 percent slopes Bill II II III Bonneau loamy fine sand, 0 to 4 percent slopes III II III Bonneau loamy sand, 0 to 4 percent slopes III II III Bonneau loamy sand, 0 to 6 percent slopes III II III Bonneau loamy sand, 0 to 6 percent slopes III III III Bonneau loamy sand, 0 to 12 percent slopes III III III Bonneau sand, 0 to 3 percent slopes III III III Bonneau sand, 0 to 2 percent slopes III III III Bonneau sand, 0 to 2 percent slopes III III III Butters fine sand, 0 to 2 percent slopes III III III Butters loamy sand, 0 to 2 percent slopes III III III Butters loamy sand, 0 to 2 percent slopes III III III Candor sand, 1 to 8 percent slopes IV V IV Cape Fear loam Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 0 to 2 percent slopes III III III Caroline sandy loam, 2 to 6 percent slopes III III III Caroline sandy loam, 2 to 6 percent slopes IV III IV Chastain and Bibb soils, 0 to 1 percent slopes, frequently flooded IV III IV Chastain silt loam, frequently flooded IV III IV Chewacla and Chastain soils, frequently flooded IV III IV Chewacla and Chastain soils, frequently flooded IV III IV Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV III IV Chewacla and Wehadkee soils, 0 to 1 percent slopes, frequently flooded IV III IV Chewacla loam				
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Craven sandy Joam, 2 to 6 percent slopes, eroded (Gritney)		II		
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Craven-Urban land complex, 0 to 4 percent slopes	• • • • • • • • • • • • • • • • • • • •			
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Decloss loam		1		
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Gilead loamy sand, 2 to 6 percent slopes Gilead loamy sand, 2 to 6 percent slopes, eroded Gilead loamy sand, 6 to 10 percent slopes Gilead loamy sand, 6 to 10 percent slopes Gilead loamy sand, 6 to 10 percent slopes Gilead sandy loam, 2 to 8 percent slopes Gilead sandy loam, 8 to 15 percent slopes Goldsboro, ALL Goldsboro-Urban land complex, ALL Grantham, ALL Grantham, ALL Grantham-Urban land complex Grifton-Meggett complex, occasionally flooded Gritney fine sandy loam, 2 to 6 percent slopes III Gritney fine sandy loam, 4 to 8 percent slopes, eroded Gritney fine sandy loam, 5 to 12 percent slopes, eroded Gritney fine sandy loam, 6 to 10 percent slopes III III III III III III III		IV	II	IV
Gilead loamy sand, 6 to 10 percent slopes Gilead loamy sand, 6 to 10 percent slopes, eroded IV II IV Gilead sandy loam, 2 to 8 percent slopes Gilead sandy loam, 8 to 15 percent slopes Goldsboro, ALL Goldsboro-Urban land complex, ALL Grantham, ALL Grantham-Urban land complex Grifton-Meggett complex, occasionally flooded Gritney fine sandy loam, 2 to 6 percent slopes Gritney fine sandy loam, 4 to 8 percent slopes Gritney fine sandy loam, 5 to 12 percent slopes IV III IV IV III IV IV IV IV		IV	II	IV
Gilead loamy sand, 6 to 10 percent slopes Gilead loamy sand, 6 to 10 percent slopes, eroded Gilead sandy loam, 2 to 8 percent slopes Gilead sandy loam, 8 to 15 percent slopes Gilead sandy loam, 8 to 15 percent slopes Goldsboro, ALL Goldsboro-Urban land complex, ALL Grantham, ALL Grantham-Urban land complex Grifton-Meggett complex, occasionally flooded Gritney fine sandy loam, 2 to 6 percent slopes Gritney fine sandy loam, 4 to 8 percent slopes Gritney fine sandy loam, 5 to 12 percent slopes, eroded Gritney fine sandy loam, 6 to 10 percent slopes III III IV IV III IV IV IV IV	Gilead loamy sand, 2 to 6 percent slopes, eroded	III	II	III
Gilead sandy loam, 2 to 8 percent slopes Gilead sandy loam, 8 to 15 percent slopes III III III Gilead sandy loam, 8 to 15 percent slopes IV II IV Goldsboro, ALL Goldsboro-Urban land complex, ALL Grantham, ALL Grantham-Urban land complex IV I IV Grifton-Meggett complex, occasionally flooded IV I IV Gritney fine sandy loam, 2 to 6 percent slopes III III Gritney fine sandy loam, 2 to 7 percent slopes III III Gritney fine sandy loam, 4 to 8 percent slopes III III Gritney fine sandy loam, 5 to 12 percent slopes, eroded IV II IV Gritney fine sandy loam, 6 to 10 percent slopes		IV	II	IV
Gilead sandy loam, 2 to 8 percent slopes Gilead sandy loam, 8 to 15 percent slopes III III III Gilead sandy loam, 8 to 15 percent slopes IV II IV Goldsboro, ALL Goldsboro-Urban land complex, ALL Grantham, ALL Grantham-Urban land complex IV I IV Grifton-Meggett complex, occasionally flooded IV I IV Gritney fine sandy loam, 2 to 6 percent slopes III III Gritney fine sandy loam, 2 to 7 percent slopes III III Gritney fine sandy loam, 4 to 8 percent slopes III III Gritney fine sandy loam, 5 to 12 percent slopes, eroded IV II IV Gritney fine sandy loam, 6 to 10 percent slopes	Gilead loamy sand, 6 to 10 percent slopes, eroded	IV	II	IV
Goldsboro, ALL Goldsboro-Urban land complex, ALL Grantham, ALL Grantham-Urban land complex Grifton-Meggett complex, occasionally flooded Gritney fine sandy loam, 2 to 6 percent slopes Gritney fine sandy loam, 2 to 7 percent slopes Gritney fine sandy loam, 4 to 8 percent slopes Gritney fine sandy loam, 5 to 12 percent slopes, eroded Gritney fine sandy loam, 6 to 10 percent slopes III III III III III III III		III	II	III
Goldsboro-Urban land complex, ALL Grantham, ALL Grantham-Urban land complex Grifton-Meggett complex, occasionally flooded Gritney fine sandy loam, 2 to 6 percent slopes Gritney fine sandy loam, 2 to 7 percent slopes Gritney fine sandy loam, 4 to 8 percent slopes Gritney fine sandy loam, 5 to 12 percent slopes, eroded Gritney fine sandy loam, 6 to 10 percent slopes III III III III III III III	Gilead sandy loam, 8 to 15 percent slopes	IV	II	IV
Grantham, ALL Grantham-Urban land complex IV II IV Grifton-Meggett complex, occasionally flooded IV IV IV Gritney fine sandy loam, 2 to 6 percent slopes III III III III III III III III III I	Goldsboro, ALL	I	I	I
Grantham-Urban land complexIVIIVGrifton-Meggett complex, occasionally floodedIVIIVGritney fine sandy loam, 2 to 6 percent slopesIIIIIIGritney fine sandy loam, 2 to 7 percent slopesIIIIIIGritney fine sandy loam, 4 to 8 percent slopesIIIIIIIIGritney fine sandy loam, 5 to 12 percent slopes, erodedIVIIIVGritney fine sandy loam, 6 to 10 percent slopesIIIIIIIII	Goldsboro-Urban land complex, ALL	IV	I	IV
Grifton-Meggett complex, occasionally floodedIVIIVGritney fine sandy loam, 2 to 6 percent slopesIIIIIIGritney fine sandy loam, 2 to 7 percent slopesIIIIIIGritney fine sandy loam, 4 to 8 percent slopesIIIIIIIIIGritney fine sandy loam, 5 to 12 percent slopes, erodedIVIIIVGritney fine sandy loam, 6 to 10 percent slopesIIIIIIIII	Grantham, ALL	I	I	I
Gritney fine sandy loam, 2 to 6 percent slopes II II II Gritney fine sandy loam, 2 to 7 percent slopes II II II Gritney fine sandy loam, 2 to 8 percent slopes III III III Gritney fine sandy loam, 4 to 8 percent slopes III III Gritney fine sandy loam, 5 to 12 percent slopes, eroded IV II IV Gritney fine sandy loam, 6 to 10 percent slopes III III III III III III III II	Grantham-Urban land complex	IV	I	IV
Gritney fine sandy loam, 2 to 6 percent slopes II II II Gritney fine sandy loam, 2 to 7 percent slopes II II II Gritney fine sandy loam, 2 to 8 percent slopes III III III Gritney fine sandy loam, 4 to 8 percent slopes III III Gritney fine sandy loam, 5 to 12 percent slopes, eroded IV II IV Gritney fine sandy loam, 6 to 10 percent slopes III III III III III III III II	Grifton-Meggett complex, occasionally flooded	IV	I	IV
Gritney fine sandy loam, 2 to 7 percent slopes II II II Gritney fine sandy loam, 4 to 8 percent slopes III II II III III Gritney fine sandy loam, 5 to 12 percent slopes, eroded IV II IV Gritney fine sandy loam, 6 to 10 percent slopes III III III III III III III II		II	II	II
Gritney fine sandy loam, 4 to 8 percent slopes Gritney fine sandy loam, 5 to 12 percent slopes, eroded Gritney fine sandy loam, 6 to 10 percent slopes III III III IV III III III II	·	II	II	II
Gritney fine sandy loam, 5 to 12 percent slopes, eroded IV II IV Gritney fine sandy loam, 6 to 10 percent slopes III III	• • • • • • • • • • • • • • • • • • • •	III	II	III
Gritney fine sandy loam, 6 to 10 percent slopes III III III	• • • • • • • • • • • • • • • • • • • •	IV	II	IV
	• • •	III	II	III
	·	IV	II	IV

Map Unit Name	Agri	For	Hort
Gritney fine sandy loam, 10 to 15 percent slopes	IV	II	IV
Gritney loamy fine sand, 2 to 7 percent slopes	II	II	II
Gritney sandy clay loam, ALL	III	II	III
Gritney sandy loam, 2 to 5 percent slopes, eroded	III	II	III
Gritney sandy loam, 2 to 6 percent slopes	II	II	II
Gritney sandy loam, 5 to 12 percent slopes, eroded	IV	II	IV
Gritney sandy loam, 6 to 10 percent slopes	III	II	III
Gritney-Urban land complex, 2 to 12 percent slopes	IV	II	IV
Hoffman loamy sand, 6 to 10 percent slopes, eroded (Gilead)	IV	II	IV
Hoffman loamy sand, 10 to 20 percent slopes (Gilead)	III	II	III
Johns, ALL	II	I	II
Johnston, ALL	IV	III	IV
Kalmia loamy sand, 0 to 2 percent slopes	II	II	II
Kalmia loamy sand, 0 to 3 percent slopes Kalmia loamy sand, 0 to 3 percent slopes	II	II	II
Kalmia loamy sand, 2 to 6 percent slopes	II	II	II
Kalmia loamy sand, 2 to 6 percent slopes Kalmia loamy sand, 10 to 15 percent slopes	III	II	III
Kalmia loamy sand, 15 to 25 percent slopes	IV	II	IV
Kenansville, ALL	III	II	III
Kinston, ALL	IV	III	IV
Kureb sand, 1 to 8 percent slopes	IV	V	IV
Lakeland, ALL	IV	V	IV
Leaf loam	III	I	III
Lenoir loam	III	I	III
Leon sand, ALL	IV	V	IV
Liddell very fine sandy loam	I	I	I
Lillington-Turbeville complex, 8 to 15 percent slopes	III	II	III
Lucy loamy sand	II	II	II
Lumbee, ALL	II	I	II
Lynchburg, ALL	I	I	I
Lynchburg-Urban land complex	IV	I	IV
Lynn Haven and Torhunta soils	II	II	II
Mantachie soils, local alluvium	II	III	II
Marlboro, ALL	II	II	II
Marlboro-Cecil complex, 2 to 8 percent slopes	II	II	II
Marvyn and Gritney soils. 6 to 15 percent slopes	IV	I	IV
Marvyn loamy sand, 6 to 12 percent slopes	IV	I	IV
Maxton loamy sand, 0 to 2 percent slopes	II	II	II
McColl loam	III	II	III
McQueen loam, 1 to 6 percent slopes	II	II	II
Meggett, ALL	IV	I	IV
Muckalee, ALL	IV	III	IV
Myatt very fine sandy loam	II	I	II
Nahunta, ALL	I	I	I
Nankin ,ALL	II	II	II
Nixonton very fine sandy loam	I	I	I
Norfolk and Faceville soils, 6 to 10 percent slopes	II	II	II
Norfolk loamy fine sand, ALL	I	II	I
Norfolk loamy sand, 0 to 2 percent slopes	I	II	I
Norfolk loamy sand, 2 to 6 percent slopes	I	II	I
Norfolk loamy sand, 2 to 6 percent slopes Norfolk loamy sand, 2 to 6 percent slopes, eroded	II	II	II
Norfolk loamy sand, 6 to 10 percent slopes	II	II	II
Norfolk loamy sand, 6 to 10 percent slopes, eroded	III	II	III
THOTTOIR TOUTHY SUITE, O TO TO POLOCIIL STOPES, CLOUCU	1111	111	111

Norfolk sandy loam, 0 to 2 percent slopes	Map Unit Name	Agri	For	Hort
Norfolk sandy Joam, 2 to 6 percent slopes				
Norfolk sandy loam, 2 to 6 percent slopes II				
Norfolk sandy Joam, 6 to 10 percent slopes	• • •			
Norfolk, Georgeville, and Faceville soils, 2 to 8 percent slopes II II Norfolk-Urban land complex, 0 to 3 percent slopes IV II IV Norfolk-Urban land complex, 2 to 6 percent slopes II II II II II II II				
Norfolk-Urban land complex, 0 to 3 percent slopes				
Norfolk-Wedowee complex, 2 to 6 percent slopes				
Ocilla, ALL	1 1			
Discription				
Orangeburg loamy sand, eroded, ALL	· · · · · · · · · · · · · · · · · · ·			
Drangeburg loamy sand, ALL OTHER				
Pactolus, ALL				
Pamilico muck				
Pantego, ALL				
Paxville line sandy loam		1		
Paxville loam				
Peawick, ALL	·			
Pits-Tarboro complex IV				
Plummer and Osier soils				
Plummer, ALL	*			
Pocalla loamy sand, 0 to 3 percent slopes				
Polawana loamy sand, frequently flooded IV III IV Ponzer muck, siliceous subsoil variant I V I I Portsmouth, ALL I I I I I Rains, ALL I I I I I Rains-Toisnot complex, 0 to 2 percent slopes IV I IV Rains-Urban land complex, ALL IV I IV Rimin sand IV V IV Rimin sand IV V IV Riverview loam, 0 to 1 percent slopes, occasionally flooded I IIII II Roanoke, ALL III III III Roanoke, ALL III III III Roanoke-Urban land complex IV III IV Ruston land ysand, ALL III III III Roanoke-Urban land complex IIV III IV Ruston loamy sand, ALL III III III Ruston sandy loam, 2 to 6 percent slopes, eroded IIV III IV Seabrook loamy sand IV V IV Seabrook loamy sand, rarely flooded IV II IV St. Lucie sand (Kureb) IV V IV St. Lucie sand (Kureb) IV V IV Stallings, ALL III III III State, ALL II II III Torbont, ALL IV III IV Torboot, ALL III III III Torbout, ALL II III III Torboot, ALL II III III Torboot, ALL III III III Torboot, ALL II III III Torboot, ALL III III Torboot, ALL III III III Torboot, ALL III III III Torboot, ALL III III Torboot, ALL III III III Torboot, ALL III III Torboot, ALL III IIII Torboot, ALL III IIII Torboot, ALL III IIIIII Torboot, ALL III IIII Torboot, ALL III IIIIIIIIIIIIIIIIIIIIIIIIIIIIII	· · · · · · · · · · · · · · · · · · ·			
Ponzer muck, siliceous subsoil variant				
Portsmouth, ALL	1 1	1		
Rains, ALL				
Rains-Toisnot complex, 0 to 2 percent slopes Rains-Urban land complex, ALL Rimini sand IV Riverview loam, 0 to 1 percent slopes, occasionally flooded IIIIII Roanoke and Wahee loams III IIII III Roanoke, ALL Rimini sand Roanoke-Urban land complex IV Ruston loamy sand, ALL Ruston sandy loam, 2 to 6 percent slopes, eroded IV Rutlege loamy sand IV Rutlege loamy sand IV Seabrook loamy sand, rarely flooded IV Rutlege loamy sand IV Sebrook loamy sand, rarely flooded IV Rutlege loamy sand IV Sebrook loamy sand IV Sebrook loamy sand IV Sebrook loamy sand IV Rutlege loamy sand IV III III III III III III III III III				
Rains-Urban land complex, ALL Rimini sand Riv V Rimini sand Roanoke and Wahee loams Roanoke, ALL Roanoke-Urban land complex Ruston loamy sand, ALL Ruston sandy loam, 2 to 6 percent slopes, eroded Rutlege loamy sand Seabrook loamy sand, rarely flooded Rutlege loamy sand Roanoke Sandy land Roanoke Wirban land complex Rutloge loamy sand Rutlege loamy sand, rarely flooded Rutlege loam		_		
Rimini sand IV V IV Riverview loam, 0 to 1 percent slopes, occasionally flooded I IIII II Roanoke and Wahee loams III IIII II Roanoke, ALL III III III Roanoke-Urban land complex IV III IV Ruston loamy sand, ALL IIII III III Ruston sandy loam, 2 to 6 percent slopes, eroded IV III IV Rutlege loamy sand IV V III IV Seabrook loamy sand, rarely flooded IV III IV Smoothed sandy land IV VI II IV St. Lucie sand (Kureb) IV V IV Stallings, ALL III III III State, ALL III III III State, ALL III III III Torhonta, ALL IV III IV Tormahawk sand III IV Tomahawk sand IIII III Tornotley, ALL I I I III Torhunta and Lynn Haven soils III III Torhunta, ALL I I III Trebloc loam IV III IV Turbeville fine sandy loam, 2 to 6 percent slopes II III III Turbeville gravelly sandy loam, 2 to 8 percent slopes	• • •			
Riverview loam, 0 to 1 percent slopes, occasionally flooded Roanoke and Wahee loams II III III III Roanoke, ALL Roanoke-Urban land complex Ruston loamy sand, ALL Ruston sandy loam, 2 to 6 percent slopes, eroded IV III IV Ruston sandy loam, 2 to 6 percent slopes, eroded IV II IV Rutlege loamy sand IV V IV Seabrook loamy sand, rarely flooded IV II IV Smoothed sandy land IV VI IV Stallings, ALL III III III State, ALL I I I II State, ALL I I I I IV Tarboro, ALL Torinunta, ALL Torhunta and Lynn Haven soils III III Torhunta, ALL I I I III Torup sand IV III IV Turbeville fine sandy loam, 2 to 6 percent slopes II II II III III III III III I	*			
Roanoke and Wahee loams Roanoke, ALL Roanoke, ALL Roanoke-Urban land complex IV III III Ruston loamy sand, ALL Ruston sandy loam, 2 to 6 percent slopes, eroded Rutlege loamy sand Rutlege loamy sand, rarely flooded IV III Ruston sandy loam, 2 to 6 percent slopes, eroded IV IV Seabrook loamy sand, rarely flooded IV II Smoothed sandy land IV VI St. Lucie sand (Kureb) IV VI Stallings, ALL III III State, ALL III III III State, ALL III III IV Torboro, ALL IV III Torinnta, ALL IV III Torhunta and Lynn Haven soils III Trebloc loam IV III IV Turbeville fine sandy loam, 2 to 6 percent slopes II III III III III III III I			•	
Roanoke, ALL				
Roanoke-Urban land complex IV III IV Ruston loamy sand, ALL III III III III III Ruston sandy loam, 2 to 6 percent slopes, eroded IV II IV IV IV IV IV I				
Ruston loamy sand, ALL Ruston sandy loam, 2 to 6 percent slopes, eroded Rutlege loamy sand Rutlege loamy sand, rarely flooded Rutlege loamy sand loam, 2 to 6 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand loam, 2 to 8 percent slopes Rutlege loamy sand lill lill lill lill lill lill lill li				
Ruston sandy loam, 2 to 6 percent slopes, eroded Rutlege loamy sand IV Rutlege loamy sand IV V IV Seabrook loamy sand, rarely flooded IV II IV Smoothed sandy land IV VI St. Lucie sand (Kureb) IV V IV Stallings, ALL II II II State, ALL II Swamp IV III IV Tarboro, ALL Toisnot, ALL Tomahawk sand III Tomotley, ALL Torhunta and Lynn Haven soils II Torhunta, ALL Trebloc loam IV III IV III III III III III	*			
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Seabrook loamy sand, rarely floodedIVIIIVSmoothed sandy landIVVIIVSt. Lucie sand (Kureb)IVVIVStallings, ALLIIIIIIIIState, ALLIIIISwampIVIIIIVIIIVTarboro, ALLIVIIIVIIIVToisnot, ALLIVIIIVIIIVTomahawk sandIIIIIIIIIIIIIITomotley, ALLIIIIITorhunta and Lynn Haven soilsIIIIITorhunta, ALLIIIIITrebloc loamIIIIITroup sandIVIIIVIIIVTurbeville fine sandy loam, 2 to 6 percent slopesIIIIITurbeville gravelly sandy loam, 2 to 8 percent slopesIIIIIIII				
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Stallings, ALL II II II II State, ALL I I I I I I I I I I I I I I I II IV III IV III IV III IV III IV III IV III IV III	·			IV
State, ALL I I I I I I I I I I I I I I I IV III IV III IV III IV III IV III IV III IV III IV III		IV	•	IV
Swamp IV III IV Tarboro, ALL IV II IV Toisnot, ALL IV II IV Tomahawk sand III II III Tomotley, ALL I I I I Torhunta and Lynn Haven soils II I II II II Torhunta, ALL I		II	II	II
Tarboro, ALL IV II IV Toisnot, ALL IV II IV Tomahawk sand III II III Tomotley, ALL I I I Torhunta and Lynn Haven soils II I II Torhunta, ALL I I I Trebloc loam I I I Troup sand IV II IV Turbeville fine sandy loam, 2 to 6 percent slopes I II I Turbeville gravelly sandy loam, 2 to 8 percent slopes II II II	State, ALL	_	I	I
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Tomahawk sandIIIIIIIITomotley, ALLIIITorhunta and Lynn Haven soilsIIIIITorhunta, ALLIIIIIIITrebloc loamIIITroup sandIVIIIVTurbeville fine sandy loam, 2 to 6 percent slopesIIIITurbeville gravelly sandy loam, 2 to 8 percent slopesIIIIII	Tarboro, ALL	IV	II	IV
Tomotley, ALLIIITorhunta and Lynn Haven soilsIIIIITorhunta, ALLIIITrebloc loamIIITroup sandIVIIIVTurbeville fine sandy loam, 2 to 6 percent slopesIIIITurbeville gravelly sandy loam, 2 to 8 percent slopesIIIIII	Toisnot, ALL	IV	II	IV
Torhunta and Lynn Haven soils II II Torhunta, ALL I II II Trebloc loam I I I I I I I I I I I I I I I I I I I	Tomahawk sand	III	II	III
Torhunta, ALL I I I I Trebloc loam I I I I Troup sand IV II IV Turbeville fine sandy loam, 2 to 6 percent slopes I II II Turbeville gravelly sandy loam, 2 to 8 percent slopes II II II	Tomotley, ALL	I	I	I
Trebloc loamIIITroup sandIVIIIVTurbeville fine sandy loam, 2 to 6 percent slopesIIIITurbeville gravelly sandy loam, 2 to 8 percent slopesIIIIII	Torhunta and Lynn Haven soils	II	I	II
Troup sandIVIIIVTurbeville fine sandy loam, 2 to 6 percent slopesIIIITurbeville gravelly sandy loam, 2 to 8 percent slopesIIIIII	Torhunta, ALL	I	I	I
Turbeville fine sandy loam, 2 to 6 percent slopes I II II Turbeville gravelly sandy loam, 2 to 8 percent slopes II II II	Trebloc loam	I	I	I
Turbeville gravelly sandy loam, 2 to 8 percent slopes II II II	Troup sand	IV	II	IV
Turbeville gravelly sandy loam, 2 to 8 percent slopes II II II	Turbeville fine sandy loam, 2 to 6 percent slopes	I	II	I
	Turbeville gravelly sandy loam, 2 to 8 percent slopes	II	II	II
		I	II	I

Map Unit Name	Agri	For	Hort
Turbeville loamy sand, 2 to 6 percent slopes	Ĭ	II	I
Turbeville sandy clay loam, 2 to 6 percent slopes, eroded	II	II	II
Turbeville sandy loam, 0 to 2 percent slopes	I	II	I
Turbeville sandy loam, 2 to 6 percent slopes	I	II	I
Turbeville sandy loam, 2 to 8 percent slopes	I	II	I
Turbeville sandy loam, 6 to 12 percent slopes	II	II	II
Turbeville-Urban land complex, 0 to 8 percent slopes	IV	II	IV
Uchee, ALL	III	V	III
Udorthents, loamy	IV	VI	IV
Urban land	IV	VI	IV
Varina, ALL	II	II	II
Vaucluse loamy sand, 10 to 15 percent slopes	IV	II	IV
Vaucluse loamy sand, 10 to 15 percent slopes, eroded	IV	II	IV
Vaucluse loamy sand, 2 to 6 percent slopes	III	II	III
Vaucluse loamy sand, 2 to 6 percent slopes, eroded	III	II	III
Vaucluse loamy sand, 6 to 10 percent slopes	III	II	III
Vaucluse loamy sand, 6 to 10 percent slopes, eroded	III	II	III
Wagram fine sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 0 to 2 percent slopes	II	II	II
Wagram loamy sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 2 to 6 percent slopes	II	II	II
Wagram loamy sand, 6 to 10 percent slopes	III	II	III
Wagram loamy sand, 10 to 15 percent slopes	III	II	III
Wagram sand, thick surface, 0 to 6 percent slopes	II	II	II
Wagram sand, thick surface, 6 to 10 percent slopes	III	II	III
Wagram sand, thick surface, 10 to 15 percent slopes	III	II	III
Wagram-Troup sands, 0 to 4 percent slopes	IV	II	IV
Wagram-Urban land complex, ALL	IV	II	IV
Wahee, ALL	I	I	I
Wakulla, ALL	IV	V	IV
Wehadkee and Chewacla loams	IV	III	IV
Wehadkee, ALL	IV	III	IV
Wehadkee-Chastain association, frequently flooded	IV	III	IV
Weston loamy sand	III	I	III
Wickham fine sandy loam, 6 to 15 percent slopes, rarely flooded	II	I	II
Wickham fine sandy loam, ALL OTHER	I	I	I
Wickham loamy sandy, ALL	I	I	I
Wickham sandy loam, 0 to 4 percent slopes	I	I	I
Wickham sandy loam, 2 to 6 percent slopes, eroded	II	I	II
Wickham-Urban land complex, 1 to 6 percent slopes	IV	I	IV
Wilbanks loam, frequently flooded	IV	III	IV
Wilbanks silt loam	IV	III	IV
Winton fine sandy loam, ALL	IV	I	IV
Woodington loamy sand	II	II	II

Map Unit Name	Agri	For	Hort
Ailey-Appling complex, 2 to 8 percent slopes	II	II	II
Ailey-Appling complex, 8 to 15 percent slopes, bouldery	IV	II	III
Alamance silt loam, gently sloping phase	II	II	II
Alamance variant gravelly loam, ALL	IV	II	II
Altavista fine sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Altavista fine sandy loam, 7 to 10 percent slopes	II	I	I
Altavista fine sandy loam, 0 to 2 percent slopes occasionally flooded	I	I	II
Altavista fine sandy loam, ALL OTHER	I	I	I
Altavista fine sandy loam, clayey variant	I	I	I
Altavista loam, 0 to 3 percent slopes, rarely flooded	I	I	I
Altavista sandy loam, ALL	I	I	I
Altavista silt loam, ALL	I	I	I
Appling coarse sandy loam, eroded gently sloping phase	II	II	II
Appling coarse sandy loam, eroded sloping phase	II	II	II
Appling coarse sandy loam, ALL OTHER	II	II	I
Appling fine sandy loam, 2 to 6 percent slopes	II	II	I
Appling fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Appling fine sandy loam, 2 to 7 percent slopes	II	II	I
Appling fine sandy loam, 2 to 7 percent slopes, eroded	II	II	II
Appling fine sandy loam, 6 to 10 percent slopes	II	II	I
Appling fine sandy loam, 6 to 10 percent slopes, eroded	II	II	II
Appling fine sandy loam, 7 to 10 percent slopes(Wedowee)	II	II	I
Appling fine sandy loam, 7 to 10 percent slopes, eroded (Wedowee)	II	II	II
Appling fine sandy loam, 10 to 14 percent slopes (Wedowee)	III	II	II
Appling fine sandy loam, 10 to 14 percent slopes, eroded (Wedowee)	III	II	II
Appling fine sandy loam, (Wedowee), ALL OTHER	IV	II	II
Appling gravelly sandy loam, 2 to 6 percent slopes	II	II	I
Appling gravelly sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Appling gravelly sandy loam, 6 to 10 percent slopes	II	II	I
Appling gravelly sandy loam, 6 to 10 percent slopes, eroded	II	II	II
Appling loamy sand, 2 to 6 percent slopes	II	II	I
Appling sandy clay loam, 6 to 10 percent slopes, severely eroded	III	II	II
Appling sandy clay loam, 10 to 15 percent slopes, severely eroded	IV	II	II
Appling sandy clay loam, severely eroded sloping phase	III	II	III
Appling sandy loam, 1 to 6 percent slopes	II	II	I
Appling sandy loam, 2 to 6 percent slopes	II	II	I
Appling sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Appling sandy loam, 2 to 8 percent slopes	II	II	I
Appling sandy loam, 6 to 10 percent slopes	II	II	I
Appling sandy loam, 6 to 10 percent slopes, eroded	II	II	II
Appling sandy loam, 6 to 12 percent slopes	II	II	II
Appling sandy loam, 8 to 15 percent slopes	II	II	II
Appling sandy loam, 10 to 15 percent slopes	III	II	II
Appling sandy loam, 10 to 15 percent slopes, eroded	III	II	II
Appling sandy loam, 10 to 25 percent slopes, eroded (Wedowee)	IV	II	II
Appling sandy loam, 15 to 25 percent slopes (Wedowee)	IV	II	П
Appling sandy loam, 15 to 25 percent slopes, eroded (Wedowee)	IV	II	П
Appling sandy loam, eroded gently sloping phase	II	II	П
Appling sandy loam, eroded sloping phase	II	II	II
Appling sandy loam, eroded strongly sloping phase	III	II	II
Appling sandy loam, gently sloping phase	II	II	I
Appling sandy loam, moderately steep phase (Wedowee)	III	II	II

Map Unit Name	Agri	For	Hort
Appling sandy loam, sloping phase	II	II	II
Appling sandy loam, strongly sloping phase	II	II	II
Appling-Marlboro complex, 1 to 6 percent slopes	II	II	II
Appling-Urban land complex, ALL	IV	II	IV
Armenia, ALL	IV	III	III
Ashlar-Rock outcrop complex, ALL	IV	V	IV
Augusta, ALL	III	I	II
Ayersville gravelly loam, ALL	IV	V	II
Badin channery loam, 8 to 15 percent slopes	III	II	II
Badin channery silt loam, 2 to 8 percent slopes	III	II	II
Badin channery silt loam, 8 to 15 percent slopes	III	II	II
Badin channery silt loam, ALL OTHER	IV	II	II
Badin channery silty clay loam, eroded, ALL	III	II	II
Badin silty clay loam, 2 to 8 percent slopes, moderately eroded	III	II	II
Badin silty clay loam, 8 to 15 percent slopes, moderately eroded	IV	II	II
Badin-Goldston complex, 2 to 8 percent slopes	III	II	II
Badin-Goldston complex, 8 to 15 percent slopes	IV	II	III
Badin-Goldston complex, 15 to 25 percent slopes	IV	II	IV
Badin-Nanford complex, 15 to 30 percent slopes	IV	II	IV
Badin-Tarrus complex, 2 to 8 percent slopes	II	II	I
Badin-Tarrus complex, 2 to 8 percent slopes, moderately eroded	III	II	I
Badin-Tarrus complex, 8 to 15 percent slopes	III	II	II
Badin-Tarrus complex, 8 to 15 percent slopes, moderately eroded	IV	II	II
Badin-Tarrus complex, 15 to 25 percent slopes	IV	II	II
Badin-Tarrus complex, 25 to 45 percent slopes	IV	II	IV
Badin-Urban land complex, ALL	IV	II	IV
Banister loam, 1 to 6 percent slopes, rarely flooded	II	I	I
Bethlehem gravelly sandy loam, 2 to 8 percent slopes	III	II	II
Bethlehem gravelly sandy loam, 8 to 15 percent slopes	IV	II	II
Bethlehem-Hibriten complex, 6 to 15 percent slopes	IV	II	III
Bethlehem-Urban land complex, 2 to 15 percent slopes	IV	II	IV
Buncombe, ALL	IV	III	IV
Callison-Lignum complex, 2 to 6 percent slopes	III	II	II
Callison-Misenheimer complex, 6 to 10 percent slopes	III	II	II
Carbonton-Brickhaven complex, ALL	IV	II	IV
Cartecay and Chewacla soils	II	III	III
Cecil clay loam, 2 to 6 percent slopes, eroded	III	II	II
Cecil clay loam, 2 to 6 percent slopes, severely eroded	III	II	II
Cecil clay loam, 2 to 7 percent slopes, severely eroded	III	II	II
Cecil clay loam, 2 to 8 percent slopes, eroded	III	II	II
Cecil clay loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil clay loam, 6 to 10 percent slopes, severely eroded	IV	II	II
Cecil clay loam, ALL OTHER	IV	II	II
Cecil fine sandy loam, 2 to 6 percent slopes	II	II	I
Cecil fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Cecil fine sandy loam, 2 to 7 percent slopes	II	II	I
Cecil fine sandy loam, 2 to 7 percent slopes, eroded	II	II	II
Cecil fine sandy loam, 2 to 8 percent slopes	II	II	I
Cecil fine sandy loam, 6 to 10 percent slopes	III	II	II
Cecil fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil fine sandy loam, 7 to 10 percent slopes (Pacolet)	III	II	II
Cecil fine sandy loam, 7 to 10 percent slopes, eroded (Pacolet)	III	II	II

Map Unit Name	Agri	For	Hort
Cecil fine sandy loam, 8 to 15 percent slopes	III	II	II
Cecil fine sandy loam, 10 to 14 percent slopes (Pacolet)	III	II	II
Cecil fine sandy loam, 10 to 14 percent slopes, eroded (Pacolet)	III	II	II
Cecil fine sandy loam, 10 to 15 percent slopes	III	II	II
Cecil fine sandy loam, 10 to 15 percent slopes (Pacolet)	III	II	II
Cecil fine sandy loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	II
Cecil fine sandy loam, 14 to 25 percent slopes (Pacolet)	IV	II	II
Cecil fine sandy loam, 14 to 25 percent slopes, eroded (Pacolet)	IV	II	II
Cecil fine sandy loam, 25 to 40 percent slopes (Pacolet)	IV	II	III
Cecil fine sandy loam, 25 to 40 percent slopes, eroded (Pacolet)	IV	II	III
Cecil fine sandy loam, eroded gently sloping phase	II	II	II
Cecil fine sandy loam, eroded sloping phase	II	II	II
Cecil fine sandy loam, eroded strongly sloping phase	III	II	II
Cecil fine sandy loam, gently sloping phase	II	II	I
Cecil fine sandy loam, moderately steep phase	III	II	II
Cecil fine sandy loam, sloping phase	III	II	II
Cecil fine sandy loam, strongly sloping phase	III	II	II
Cecil gravelly fine sandy loam, 2 to 6 percent slopes	II	II	I
Cecil gravelly fine sandy loam, 2 to 6 percent slopes, eroded	II	II	II
Cecil gravelly fine sandy loam, 2 to 7 percent slopes	II	II	I
Cecil gravelly fine sandy loam, 2 to 7 percent slopes, eroded	III	II	II
Cecil gravelly fine sandy loam, 6 to 10 percent slopes	III	II	II
Cecil gravelly fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil gravelly fine sandy loam, 7 to 10 percent slopes	III	II	II
Cecil gravelly fine sandy loam, 7 to 10 percent slopes, eroded (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, 10 to 14 percent slopes (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, 10 to 14 percent slopes, eroded (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, 10 to 15 percent slopes	III	II	II
Cecil gravelly fine sandy loam, 10 to 15 percent, eroded (Pacolet)	III	II	II
Cecil gravelly fine sandy loam, ALL OTHER	IV	II	II
Cecil gravelly sandy clay loam, 2 to 8 percent slopes, eroded	III	II	II
Cecil gravelly sandy clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Cecil gravelly sandy loam, 2 to 6 percent slopes	II	II	I
Cecil gravelly sandy loam, 2 to 6 percent slopes, eroded	II	II	I
Cecil gravelly sandy loam, 6 to 10 percent slopes	III	II	II
Cecil gravelly sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil gravelly sandy loam, 10 to 15 percent slopes	IV	II	IV
Cecil loam, 2 to 6 percent slopes	II	II	I
Cecil loam, ALL OTHER	III	II	II
Cecil sandy clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Cecil sandy clay loam, 8 to 15 percent slopes, moderately eroded	IV	II	II
Cecil sandy clay loam, ALL OTHER	III	II	II
Cecil sandy loam, 2 to 6 percent slopes	II	II	I
Cecil sandy loam, 2 to 6 percent slopes, eroded	III	II	II
Cecil sandy loam, 2 to 8 percent slopes	II	II	I
Cecil sandy loam, 2 to 8 percent slopes, eroded	III	II	II
Cecil sandy loam, 6 to 10 percent slopes	III	II	I
Cecil sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Cecil sandy loam, 8 to 15 percent slopes	III	II	II
Cecil sandy loam, 8 to 15 percent slopes, eroded	IV	II	II
Cecil sandy loam, 10 to 15 percent slopes	III	II	II
Cecil sandy loam, 10 to 15 percent slopes, eroded	III	II	II

Map Unit Name	Agri	For	Hort
Cecil sandy loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	II
Cecil sandy loam, 15 to 45 percent slopes (Pacolet)	IV	II	II
Cecil sandy loam, eroded gently sloping phase	III	II	II
Cecil sandy loam, eroded sloping phase	III	II	II
Cecil sandy loam, gently sloping phase	II	II	I
Cecil sandy loam, sloping phase	III	II	I
Cecil soils, (Pacolet), ALL	IV	II	II
Cecil stony fine sandy loam, (Uwharrie), ALL	IV	II	II
Cecil-Urban land complex, ALL	IV	II	IV
Chastain silty clay loam	IV	III	III
Chenneby silt loam, 0 to 2 percent slopes, frequently flooded	III	III	III
Chewacla and Chastain soils, 0 to 2 percent slopes, frequently flooded	IV	III	III
Chewacla and Wehadkee, ALL	IV	III	III
Chewacla silt loam, frequently flooded	III	III	III
Chewacia, ALL OTHER	II	III	III
Cid, ALL	III	II	II
Cid-Lignum complex, 1 to 6 percent slopes	II	II	II
Cid-Lightin complex, 1 to 6 percent stopes Cid-Misenheimer complex, 0 to 4 percent slopes	III	II	II
			IV
Cid-Urban land complex, 1 to 5 percent slopes	IV	II	
Meadowfield-Fairview complex, 15 to 25 percent slopes	IV	IV	IV
Meadowfield-Rhodhiss complex, 25 to 60 percent slopes, very stony	IV	IV	IV
Meadowfield-Woolwine complex, 8 to 15 percent slopes	IV	IV	IV
Claycreek fine sandy loam, 0 to 2 percent slopes	III	I	II
Colfax sandy loam, ALL	III	II	II
Colvard sandy loam, 0 to 3 percent slopes, occasionally flooded	I	III	III
Colfax silt loam	III	II	II
Congaree, frequently flooded	II	III	III
Congaree, ALL OTHER	I	III	III
Coronaca clay loam, ALL	II	II	I
Coronaca-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Creedmoor coarse sandy loam, ALL	III	I	II
Creedmoor fine sandy loam, 8 to 15 percent slopes	IV	I	II
Creedmoor fine sandy loam, ALL OTHER	III	I	II
Creedmoor loam, 2 to 8 percent slopes	III	I	II
Creedmoor sandy loam, 10 to 15 percent slopes	IV	I	II
Creedmoor sandy loam, 10 to 20 percent slopes	IV	I	II
Creedmoor sandy loam, ALL OTHER	III	I	II
Creedmoor silt loam, ALL	III	I	II
Cullen clay loam, ALL	II	II	II
Cullen-Wynott complex, 15 to 35 percent slopes	IV	II	III
Cut and fill land	IV	VI	IV
Davidson clay, severely eroded strongly sloping phase	III	I	II
Davidson sandy clay loam, 15 to 25 percent slopes	III	I	I
Davidson, ALL OTHER	II	I	I
Dillard fine sandy loam, 2 to 8 percent slopes, rarely flooded	I	III	I
Dogue, ALL	II	I	I
Dogue-Roanoke complex, 0 to 6 percent slopes, rarely flooded	II	I	III
Durham coarse sandy loam, gently sloping phase	II	I	I
Durham coarse sandy loam, sloping phase	III	I	I
Durham loamy sand, 6 to 10 percent slopes, eroded	III	I	I
Durham loamy sand, ALL OTHER	II	I	I
Durham sandy loam, eroded sloping phase	II	I	I
Zaram sanaj roun, erouca sroping piase	11	1	1

Map Unit Name	Agri	For	Hort
Durham sandy loam, ALL OTHER	III	I	I
Efland silt loam, eroded gently sloping phase (Badin)	II	II	II
Efland silt loam, eroded sloping phase (Badin)	III	II	II
Efland silt loam, gently sloping phase (Badin)	II	II	II
Efland silt loam, sloping phase (Badin)	II	II	II
Efland silt loam, strongly sloping phase (Badin)	III	II	II
Efland silty clay loam severely eroded strongly sloping phase (Badin)	III	II	II
Efland silty clay loam, severely eroded sloping phase (Badin)	III	II	II
Enon clay loam, 2 to 6 percent slopes, eroded	III	II	II
Enon clay loam, 6 to 10 percent slopes, eroded	III	II	II
Enon clay loam, 10 to 15 percent slopes, eroded	IV	II	II
Enon clay loam, severely eroded sloping phase	III	II	II
Enon clay loam, severely eroded strongly sloping phase	IV	II	II
Enon cobbly loam, 2 to 8 percent slopes	II	II	II
Enon cobbly loam, 8 to 15 percent slopes	III	II	II
Enon complex, gullied	IV	II	IV
Enon fine sandy loam, 2 to 15 percent slopes, very stony	IV	II	II
Enon fine sandy loam, 2 to 6 percent slopes	II	II	II
Enon fine sandy loam, 2 to 6 percent slopes, eroded	III	II	II
Enon fine sandy loam, 2 to 8 percent slopes	II	II	II
Enon fine sandy loam, 6 to 10 percent slopes	III	II	II
Enon fine sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Enon fine sandy loam, 8 to 15 percent slopes	III	II	II
Enon fine sandy loam, 10 to 15 percent slopes	III	II	II
Enon fine sandy loam, 10 to 15 percent slopes, eroded	III	II	II
Enon fine sandy loam, 10 to 13 percent stopes, croded Enon fine sandy loam, eroded gently sloping phase	II	II	II
Enon fine sandy loam, croded gently stoping phase	III	II	II
Enon fine sandy loam, gently sloping phase	II	II	II
Enon fine sandy loam, sloping phase	III	II	II
Enon gravelly loam, 2 to 8 percent slopes	II	II	II
Enon gravelly loam, 8 to 15 percent slopes	III	II	II
Enon loam, 2 to 6 percent slopes	II	II	II
Enon loam, 6 to 10 percent slopes	II	II	II
Enon loam, 6 to 12 percent slopes	III	II	II
Enon loam, eroded gently sloping phase	II	II	II
Enon loam, eroded sloping phase	III	II	II
Enon loam, eroded strongly sloping phase	III	II	II
Enon loam, gently sloping phase	II	II	II
Enon loam, sloping phase	III	II	II
Enon loam, strongly sloping phase	III	II	II
Enon sandy loam, 2 to 8 percent slopes	II	II	II
Enon sandy loam, 8 to 15 percent slopes	III	II	II
Enon very cobbly loam, very stony, ALL	IV	II	IV
Enon very stony loam, ALL	IV	II	IV
Enon-Mayodan complex, 15 to 35 percent slopes, very stony	IV	II	III
Enon-Urban land complex, ALL	IV	II	IV
Enon-Wynott complex, ALL Enon-Wynott complex, 2 to 8 percent slopes	II	II	II
Enon-Wynott complex, 4 to 15 percent slopes, very bouldery	IV	II	IV
Fairview sandy clay loam, 2 to 8 percent slopes, moderately eroded	II	II	II
Fairview sandy clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Fairview sandy clay loam, 15 to 25 percent slopes, moderately eroded	IV	II	II
Fairview-Urban land complex, ALL	IV		IV
Tan view-Ordan fand complex, ALL	1 V	II	1 V

Map Unit Name	Agri	For	Hort
Fluvaquents-Udifluvents complex, 0 to 3 percent slopes, mounded,	IV	VI	IV
occasionally flooded	- '	, -	1
Gaston clay loam, 2 to 8 percent slopes, eroded	II	II	II
Gaston clay loam, 8 to 15 percent slopes, eroded	III	II	II
Gaston loam, 15 to 25 percent slopes	III	II	II
Gaston sandy clay loam, 2 to 8 percent slopes, eroded	II	II	II
Gaston sandy clay loam, 8 to 15 percent slopes, eroded	III	II	II
Georgeville clay loam, 2 to 6 percent slopes, eroded	II	I	II
Georgeville clay loam, 2 to 8 percent slopes, eroded	II	I	II
Georgeville clay loam, 8 to 15 percent slopes, eroded	III	I	II
Georgeville gravelly loam, 2 to 6 percent slopes	II	I	I
Georgeville gravelly loam, 2 to 8 percent slopes, stony	III	I	II
Georgeville gravelly loam, 6 to 10 percent slopes	II	Ī	I
Georgeville gravelly loam, 10 to 25 percent slopes	IV	I	II
Georgeville gravelly silt loam, 2 to 8 percent slopes	II	I	I
Georgeville gravelly silt loam, 8 to 15 percent slopes	III	I	II
Georgeville loam, 2 to 6 percent slopes	II	I	I
Georgeville loam, 2 to 8 percent slopes	II	I	I
Georgeville loam, 6 to 10 percent slopes	II	I	I
Georgeville loam, 8 to 15 percent slopes	III	I	I
Georgeville loam, ALL OTHER	IV	I	II
Georgeville silt loam, 2 to 6 percent slopes	II	I	I
Georgeville silt loam, 2 to 6 percent slopes, eroded	III	I	II
Georgeville silt loam, 2 to 8 percent slopes	II	I	I
Georgeville silt loam, 2 to 10 percent slopes, eroded	III	I	II
Georgeville silt loam, 4 to 15 percent slopes, eroded	IV	I	IV
Georgeville silt loam, 6 to 10 percent slopes	II	I	I
Georgeville silt loam, 6 to 10 percent slopes	III	I	II
Georgeville silt loam, 8 to 15 percent slopes	III	I	I
	III	I	I
Georgeville silt loam, 10 to 15 percent slopes	III	I	II
Georgeville silt learn, 10 to 15 percent slopes, eroded	IV	I	
Georgeville silt learn, 10 to 25 percent slopes	IV	I	II IV
Georgeville silt loam, 15 to 45 percent slopes, extremely bouldery			
Georgeville silt loam, eroded gently sloping phase	II	I	II
Georgeville silt loam, eroded sloping phase	III	I	II
Georgeville silt loam, eroded strongly sloping phase	III	I	II
Georgeville silt learn, gently sloping phase	III	I I	I
Georgeville silt loam, moderately steep phase			
Georgeville silt learn, sloping phase	III	I I	I
Georgeville silt loam, strongly sloping phase			
Georgeville silty clay loam, 2 to 6 percent slopes, moderately eroded	II	I	II
Georgeville silty clay loam, 2 to 8 percent slopes	II	I	II
Georgeville silty clay loam, 2 to 8 percent slopes, eroded	II	I	II
Georgeville silty clay loam, 2 to 8 percent slopes, moderately eroded	II	I	II
Georgeville silty clay loam, 6 to 10 percent slopes, moderately eroded	III	I	II
Georgeville silty clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Georgeville silty clay loam, 8 to 15 percent slopes, moderately eroded	IV	I	II
Georgeville silty clay loam, severely eroded gently sloping phase	III	I	II
Georgeville silty clay loam, severely eroded moderately steep phase	IV	I	III
Georgeville silty clay loam, severely eroded sloping phase	III	I	III
Georgeville silty clay loam, severely eroded strongly sloping phase	IV	I	III
Georgeville-Badin complex, ALL	IV	I	II
Georgeville-Montonia complex, very stony ALL	IV	I	III

Map Unit Name	Agri	For	Hort
Georgeville-Urban land complex, ALL	ΙV	I	IV
Goldston, ALL	IV	II	III
Goldston-Badin complex, ALL	IV	II	III
Granville gravelly sandy loam, 2 to 8 percent slopes	II	II	I
Granville sandy loam, 2 to 6 percent slopes	II	II	I
Granville sandy loam, 2 to 6 percent slopes, eroded	II	II	I
Granville sandy loam, 2 to 8 percent slopes	II	II	I
Granville sandy loam, 6 to 10 percent slopes	III	II	I
Granville sandy loam, 6 to 10 percent slopes, eroded	III	II	I
Granville sandy loam, 10 to 15 percent slopes	IV	II	I
Grover, ALL	IV	II	III
Gullied land, ALL	IV	VI	IV
Halewood stony sandy loam, (Edneyville), ALL	IV	III	II
Hatboro sandy loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV
Hayesville and Cecil clay loams, 7 to 14 percent slopes, severely eroded	II	II	II
(Cecil and Cecil)			
Hayesville and Cecil clay loams, 7 to 14 percent slopes, severely eroded	III	II	II
(Cecil and Cecil)			
Hayesville and Cecil clay loams, 14 to 25 percent slopes, severely eroded	IV	II	II
(Pacolet and Pacolet)			
Hayesville and Cecil fine sandy loam, eroded, ALL	IV	II	II
Helena clay loam, severely eroded sloping phase	IV	II	II
Helena coarse sandy loam, sloping phase	IV	II	II
Helena coarse sandy loam, ALL OTHER	III	II	II
Helena fine sandy loam, 2 to 8 percent slopes	III	II	II
Helena sandy loam, 10 to 15 percent slopes	IV	II	II
Helena sandy loam, ALL OTHER	III	II	II
Helena-Sedgefield sandy loams, ALL	III	II	II
Helena-Urban land complex, ALL	IV	II	IV
Helena-Worsham complex, 1 to 6 percent slopes	IV	II	III
Herndon loam, 2 to 6 percent slopes	II	II	I
Herndon loam, 6 to 10 percent slopes	II	II	I
Herndon silt loam, 2 to 6 percent slopes	II	II	I
Herndon silt loam, 2 to 6 percent slopes, eroded	II	II	II
Herndon silt loam, 2 to 8 percent slopes	II	II	I
Herndon silt loam, 6 to 10 percent slopes	III	II	I
Herndon silt loam, 6 to 10 percent slopes, eroded	III	II	II
Herndon silt loam, 8 to 15 percent slopes	III	II	I
Herndon silt loam, 10 to 15 percent slopes, eroded	III	II	II
Herndon silt loam, 15 to 25 percent slopes	III	II	I
Herndon silt loam, eroded gently sloping phase	II	II	II
Herndon silt loam, eroded sloping phase	III	II	II
Herndon silt loam, eroded strongly sloping phase	III	II	II
Herndon silt loam, gently sloping phase	II	II	I
Herndon silt loam, moderately steep phase	III	II	I
Herndon silt loam, sloping phase	II	II	I
Herndon silt loam, strongly sloping phase	III	II	I
Herndon silty clay loam, ALL	IV	II	II
Herndon stony silt loam, 2 to 10 percent slopes	III	II	II
Hibriten very cobbly sandy loam, ALL	IV	V	III
Hiwassee clay loam, 8 to 15 percent slopes, eroded	III	II	II
Hiwassee clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Hiwassee clay loam, 10 to 15 percent slopes, moderately cloded	III	II	II
Till above they found, to to 15 percent slopes, croded	111	11	11

Map Unit Name	Agri	For	Hort
Hiwassee clay loam, 15 to 30 percent slopes, moderately eroded	IV	II	II
Hiwassee clay loam, ALL OTHER	II	II	II
Hiwassee gravelly loam, 2 to 8 percent slopes	II	II	I
Hiwassee gravelly loam, 8 to 15 percent slopes	II	II	II
Hiwassee loam, 2 to 6 percent slopes	II	II	I
Hiwassee loam, 2 to 6 percent slopes, eroded	II	II	II
Hiwassee loam, 2 to 7 percent slopes, eroded	II	II	II
Hiwassee loam, 2 to 8 percent slopes	II	II	I
Hiwassee loam, 6 to 10 percent slopes	II	II	I
Hiwassee loam, 6 to 10 percent slopes, eroded	II	II	II
Hiwassee loam, 8 to 15 percent slopes	II	II	I
Hiwassee loam, 10 to 15 percent slopes	II	II	I
Hiwassee loam, 10 to 15 percent slopes, eroded	III	II	II
Hiwassee loam, 15 to 25 percent slopes	IV	II	II
Hornsboro, ALL	I	I	I
Hulett, ALL	IV	II	II
Hulett-Saw complex, 4 to 15 percent slopes, very rocky	IV	II	III
Hulett-Urban Land complex, 2 to 8 percent slopes	IV	II	IV
Iotla sandy loam, 0 to 2 percent slopes, occasionally flooded	II	III	III
Iredell clay loam, 2 to 6 percent slopes	III	II	III
Iredell fine sandy loam, 10 to 14 percent slopes (Wilkes)	IV	II	III
Iredell fine sandy loam, 10 to 14 percent slopes, eroded (Wilkes)	IV	II	III
Iredell fine sandy loam, ALL OTHER	III	II	III
Iredell gravelly loam, 1 to 4 percent slopes	III	II	III
Iredell loam, ALL	III	II	III
Iredell sandy loam, ALL	III	II	III
Iredell very stony loam, gently sloping phase (Enon)	IV	II	IV
Iredell-Urban land complex, ALL	IV	II	IV
Iredell-Urban land-Picture complex, 0 to 10 percent slopes	IV	II	IV
Kirksey silt loam, ALL	II	II	II
Kirksey-Cid complex, 2 to 6 percent slopes	III	II	II
Leaksville silt loam, 0 to 4 percent slopes	III	III	III
Leaksville-Urban land complex, 0 to 4 percent slopes	IV	III	IV
Leveled clayey land	IV	VI	IV
Lignum gravelly silt loam, 2 to 8 percent slopes	II	III	II
Lignum loam, 2 to 6 percent slopes	II	III	II
Lignum silt loam, 7 to 12 percent slopes	III	III	II
Lignum silt loam, ALL OTHER	II	III	II
Lloyd clay loam, 2 to 6 percent slopes, severely eroded (Gaston)	II	II	II
Lloyd clay loam, 2 to 10 percent slopes, severely eroded (Pacolet)	II	II	II
Lloyd clay loam, 6 to 10 percent slopes, severely eroded (Gaston)	II	II	II
Lloyd clay loam, 10 to 14 percent slopes, severely eroded (Pacolet)	III	II	III
Lloyd clay loam, 10 to 15 percent slopes, severely eroded (Gaston)	III	II	III
Lloyd clay loam, 14 to 25 percent slopes, severely eroded (Pacolet)	IV	II	IV
Lloyd clay loam, 15 to 25 percent slopes, severely eroded (Gaston)	IV	II	IV
Lloyd clay loam, severely eroded gently sloping phase (Gaston)	II	II	II
Lloyd clay loam, severely eroded sloping phase (Gaston)	II	II	II
Lloyd clay loam, severely eroded strongly sloping phase (Gaston)	III	II	III
Lloyd clay loam, severely eroded, moderately steep phase (Cecil)	IV	II	III
Lloyd fine sandy loam, 2 to 6 percent slopes (Cecil)	<u>II</u>	II	II
Lloyd fine sandy loam, 2 to 6 percent slopes, eroded (Cecil)	II	II	II
Lloyd fine sandy loam, 6 to 10 percent slopes (Cecil)	III	II	II

Map Unit Name	Agri	For	Hort
Lloyd fine sandy loam, 6 to 10 percent slopes, eroded (Cecil)	III	II	II
Lloyd fine sandy loam, 10 to 15 percent slopes (Pacolet)	II	II	II
Lloyd fine sandy loam, 10 to 15 percent slopes (t acote) Lloyd fine sandy loam, 10 to 15 percent slopes, eroded (Pacolet)	III	II	II
Lloyd fine sandy loam, 15 to 25 percent slopes (Pacolet)	IV	II	II
Lloyd fine sandy loam, 15 to 25 percent slopes (t acote) Lloyd fine sandy loam, 15 to 25 percent slopes, eroded (Pacolet)	IV	II	III
Lloyd loam, 2 to 6 percent slopes (Gaston)	II	II	I
Lloyd loam, 2 to 6 percent slopes (Gaston) Lloyd loam, 2 to 6 percent slopes, eroded (Davidson)	II	II	II
Lloyd loam, 2 to 6 percent slopes, croded (Bavidson) Lloyd loam, 2 to 6 percent slopes, eroded (Gaston)	II	II	I
Lloyd loam, 2 to 7 percent slopes (Pacolet)	II	II	I
Lloyd loam, 2 to 7 percent slopes (1 acolet) Lloyd loam, 2 to 7 percent slopes, eroded (Pacolet)	II	II	II
Lloyd loam, 6 to 10 percent slopes (Cecil)	III	II	II
Lloyd loam, 6 to 10 percent slopes (Cecil) Lloyd loam, 6 to 10 percent slopes, eroded (Cecil)	III	II	II
Lloyd loam, 6 to 10 percent slopes, croded (Cecil) Lloyd loam, 6 to 10 percent slopes, eroded (Davidson)	II	II	II
Lloyd loam, 7 to 10 percent slopes (Pacolet)	III	II	II
Lloyd loam, 7 to 10 percent slopes (racolet) Lloyd loam, 7 to 10 percent slopes, eroded (Pacolet)	III	II	II
Lloyd loam, 10 to 14 percent slopes (Pacolet)	IV	II	II
Lloyd loam, 10 to 14 percent slopes (Facolet) Lloyd loam, 10 to 14 percent slopes, eroded (Pacolet)	IV	II	III
	IV	II	II
Lloyd loam, 10 to 15 percent slopes (Cecil)	II	II	III
Lloyd loam, 10 to 15 percent slopes, eroded (Davidson)	III	II	III
Lloyd loam, 10 to 15 percent slopes, eroded (Pacolet)	IV	II	II
Lloyd loam, 14 to 25 percent slopes (Pacolet)	IV		
Lloyd loam, 14 to 25 percent slopes, eroded (Pacolet)		II	III
Lloyd loam, 15 to 25 percent slopes (Pacolet)	IV	II	II
Lloyd loam, 15 to 25 percent slopes, eroded (Pacolet)	IV	II	III
Lloyd loam, 25 to 40 percent slopes (Pacolet)	IV	II	IV
Lloyd loam, eroded gently sloping phase (Gaston)	III	II	II
Lloyd loam, eroded sloping phase (Cecil)	III	II	II
Lloyd loam, eroded strongly sloping phase (Cecil)	IV	II	II
Lloyd loam, gently sloping phase (Gaston)	II	II	I
Lloyd loam, level phase (Gaston)	II	II	I
Lloyd loam, moderately steep phase (Cecil)	II	II	II
Lloyd loam, sloping phase (Cecil)	II	II	II
Lloyd loam, strongly sloping phase (Cecil)	IV	II	II
Local alluvial land, ALL	IV	III	III
Louisa fine sandy loam, 25 to 45 percent slopes	IV	II	III
Louisa sandy loam, 25 to 45 percent slopes	IV	II	III
Louisburg and Louisa soils, 25 to 55 percent slopes	IV	II	II
Louisburg and Louisa soils, ALL OTHER	IV	II	III
Louisburg coarse sandy loam, ALL	IV	II	II
Louisburg loamy coarse sand, ALL	IV	II	IV
Louisburg loamy sand, 2 to 6 percent slopes	III	II	II
Louisburg loamy sand, 6 to 10 percent slopes	III	II	II
Louisburg loamy sand, 6 to 15 percent slopes	IV	II	II
Louisburg loamy sand, 10 to 15 percent slopes	IV	II	II
Louisburg loamy sand, 15 to 45 percent slopes	IV	II	III
Louisburg sandy loam, ALL	IV	II	II
Louisburg-Wedowee complex, 15 to 25 percent slopes	IV	II	II
Louisburg-Wedowee complex, ALL OTHER	III	II	II
Made land	IV	VI	IV
Madison clay loam, 2 to 6 percent slopes, eroded	III	II	II
Madison clay loam, 6 to 10 percent slopes, eroded	III	II	II
Madison clay loam, eroded, ALL OTHER	IV	II	II

Madison fine sandy loam, 2 to 6 percent slopes II II II II Madison fine sandy loam, 2 to 7 percent slopes II II II II II Madison fine sandy loam, 2 to 7 percent slopes, eroded II II II II II Madison fine sandy loam, 2 to 7 percent slopes III II II II II Madison fine sandy loam, 6 to 10 percent slopes III II II II II Madison fine sandy loam, 7 to 10 percent slopes III II II II II Madison fine sandy loam, 7 to 10 percent slopes III II II II Madison fine sandy loam, 10 to 14 percent slopes III II II II Madison fine sandy loam, 10 to 14 percent slopes III II II II Madison fine sandy loam, 10 to 14 percent slopes III II II II Madison fine sandy loam, 10 to 14 percent slopes III II II II Madison fine sandy loam, 10 to 14 percent slopes III II II II Madison fine sandy loam, 10 to 15 percent slopes IV II II II Madison fine sandy loam, 10 to 15 percent slopes IV II II II Madison fine sandy loam, 10 to 45 percent slopes IV II II Madison gravelly fine sandy loam, 2 to 6 percent slopes IV II II Madison gravelly fine sandy loam, 2 to 6 percent slopes II II II Madison gravelly fine sandy loam, 6 to 10 percent slopes III II II Madison gravelly fine sandy loam, 6 to 10 percent slopes III II II Madison gravelly fine sandy loam, 6 to 10 percent slopes III II II Madison gravelly fine sandy loam, 6 to 10 percent slopes III II II Madison gravelly fine sandy loam, 10 to 15 percent slopes III II II Madison gravelly fine sandy loam, 10 to 15 percent slopes III II II II Madison gravelly fine sandy loam, 10 to 15 percent slopes III II II II Madison gravelly fine sandy loam, 10 to 15 percent slopes III II II II Madison gravelly fine sandy loam, 10 to 15 percent slopes III II II II II Madison gravelly sandy clay loam, 10 to 15 percent slopes II II II II II II II	Map Unit Name	Agri	For	Hort
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Madison fine sandy loam, 6 to 10 percent slopes		II	II	II
Madison fine sandy loam, 7 to 10 percent slopes III II II II Madison fine sandy loam, 7 to 10 percent slopes III II II II II Madison fine sandy loam, 7 to 10 percent slopes, eroded III II II II Madison fine sandy loam, 10 to 14 percent slopes, eroded IV II II II Madison fine sandy loam, 10 to 14 percent slopes III II II II Madison fine sandy loam, 10 to 15 percent slopes III II II II Madison fine sandy loam, 10 to 15 percent slopes IV II II II Madison fine sandy loam, 15 to 45 percent slopes IV II II Madison fine sandy loam, 15 to 45 percent slopes IV II II Madison gravelly fine sandy loam, 2 to 6 percent slopes IV II II Madison gravelly fine sandy loam, 2 to 6 percent slopes III II II Madison gravelly fine sandy loam, 6 to 10 percent slopes III II II Madison gravelly fine sandy loam, 6 to 10 percent slopes III II II II Madison gravelly fine sandy loam, 7 to 10 percent slopes III II II II Madison gravelly fine sandy loam, 7 to 10 percent slopes III II II II Madison gravelly fine sandy loam, 7 to 10 percent slopes III II II Madison gravelly fine sandy loam, 7 to 10 percent slopes III II II II Madison gravelly fine sandy loam, ALL OTHER IV II II Madison gravelly fine sandy loam, ALL OTHER IV II II Madison gravelly fine sandy loam, ALL OTHER IV II II Madison gravelly sandy clay loam, 8 to 15 percent slopes, moderately eroded IIV II II Madison gravelly sandy loam, ALL OTHER III II II Madison gravelly sandy loam, 8 to 15 percent slopes, eroded IV II II Madison sandy clay loam, 8 to 15 percent slopes, eroded IV II II Madison sandy clay loam, 8 to 15 percent slopes, eroded IV II II Madison sandy loam, 8 to 15 percent slopes, eroded IV II II Madison sandy loam, 6 to 10 percent slopes, eroded III II II Madison sandy loam, 6 to 10 percent slopes, eroded III II II Madison sand		II	II	II
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Mayodan silt loam, 15 to 25 percent slopesIVIIIMayodan silt loam, 25 to 45 percent slopesIVIIIIMayodan silt loam, thin, ALLIIIIIIMayodan silty clay loam, 2 to 8 percent slopes, erodedIIIIIIMayodan silty clay loam, 8 to 15 percent slopes, erodedIVIIIMayodan-Brickhaven complex, 15 to 30 percent slopesIVIIIIMayodan-Exway complex, eroded, ALLIIIIIII	Mayodan silt loam, 2 to 8 percent slopes	II	I	I
Mayodan silt loam, 25 to 45 percent slopesIVIIIIMayodan silt loam, thin, ALLIIIIIIIMayodan silty clay loam, 2 to 8 percent slopes, erodedIIIIIIMayodan silty clay loam, 8 to 15 percent slopes, erodedIVIIIMayodan-Brickhaven complex, 15 to 30 percent slopesIVIIIIMayodan-Exway complex, eroded, ALLIIIIII	Mayodan silt loam, 8 to 15 percent slopes	III	I	II
Mayodan silt loam, thin, ALLIIIIIIMayodan silty clay loam, 2 to 8 percent slopes, erodedIIIIIIMayodan silty clay loam, 8 to 15 percent slopes, erodedIVIIIMayodan-Brickhaven complex, 15 to 30 percent slopesIVIIIIMayodan-Exway complex, eroded, ALLIIIIII	Mayodan silt loam, 15 to 25 percent slopes	IV	I	II
Mayodan silty clay loam, 2 to 8 percent slopes, erodedIIIIIIMayodan silty clay loam, 8 to 15 percent slopes, erodedIVIIIMayodan-Brickhaven complex, 15 to 30 percent slopesIVIIIIMayodan-Exway complex, eroded, ALLIIIIII	Mayodan silt loam, 25 to 45 percent slopes	IV	I	III
Mayodan silty clay loam, 8 to 15 percent slopes, erodedIVIIIMayodan-Brickhaven complex, 15 to 30 percent slopesIVIIIIMayodan-Exway complex, eroded, ALLIIIIII	Mayodan silt loam, thin, ALL	III	I	II
Mayodan-Brickhaven complex, 15 to 30 percent slopesIVIIIIMayodan-Exway complex, eroded, ALLIIIIII	Mayodan silty clay loam, 2 to 8 percent slopes, eroded	III	I	II
Mayodan-Exway complex, eroded, ALL III I II	Mayodan silty clay loam, 8 to 15 percent slopes, eroded	IV	I	II
	Mayodan-Brickhaven complex, 15 to 30 percent slopes	IV	I	III
M 1 D 1 4 1 07 47 41 1 277	Mayodan-Exway complex, eroded, ALL	III	I	II
Mayodan-Pinkston complex, 25 to 45 percent slopes IV I III	Mayodan-Pinkston complex, 25 to 45 percent slopes	IV	I	III
Mayodan-Urban land complex, ALL IV I IV	Mayodan-Urban land complex, ALL	IV	I	IV
McQueen loam, 1 to 6 percent slopes II II II	McQueen loam, 1 to 6 percent slopes	II	II	II
Mecklenburg clay loam, 2 to 8 percent slopes, eroded II II II	Mecklenburg clay loam, 2 to 8 percent slopes, eroded	II	II	II
Mecklenburg clay loam, 2 to 8 percent slopes, moderately eroded II II II	Mecklenburg clay loam, 2 to 8 percent slopes, moderately eroded	II	II	II
Mecklenburg clay loam, 6 to 15 percent slopes, severely eroded IV II II	Mecklenburg clay loam, 6 to 15 percent slopes, severely eroded	IV	II	II
Mecklenburg clay loam, 8 to 15 percent slopes, eroded III II II	Mecklenburg clay loam, 8 to 15 percent slopes, eroded	III	II	II
Mecklenburg clay loam, 8 to 15 percent slopes, moderately eroded III II II	Mecklenburg clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Mecklenburg clay loam, severely eroded sloping phase IV II II	Mecklenburg clay loam, severely eroded sloping phase	IV	II	II
Mecklenburg fine sandy loam, 2 to 6 percent slopes II II I	Mecklenburg fine sandy loam, 2 to 6 percent slopes	II	II	I
Mecklenburg fine sandy loam, 2 to 8 percent slopes II II II	Mecklenburg fine sandy loam, 2 to 8 percent slopes	II	II	II
Mecklenburg fine sandy loam, 8 to 15 percent slopes III II II	Mecklenburg fine sandy loam, 8 to 15 percent slopes	III	II	II
Mecklenburg loam, 2 to 6 percent slopes II II I	Mecklenburg loam, 2 to 6 percent slopes	II	II	I
Mecklenburg loam, 2 to 6 percent slopes, eroded II II II	Mecklenburg loam, 2 to 6 percent slopes, eroded	II	II	II

Map Unit Name	Agri	For	Hort
Mecklenburg loam, 2 to 7 percent slopes, eroded	II	II	II
Mecklenburg loam, 2 to 8 percent slopes	II	II	I
Mecklenburg loam, 6 to 10 percent slopes	II	II	II
Mecklenburg loam, 6 to 10 percent slopes, eroded	II	II	II
Mecklenburg loam, 7 to 14 percent slopes, eroded	III	II	II
Mecklenburg loam, 8 to 15 percent slopes	III	II	II
Mecklenburg loam, 10 to 15 percent slopes, eroded	III	II	II
Mecklenburg loam, ALL OTHER	IV	II	II
Mecklenburg loam, dark surface variant, 2 to 6 percent slopes	II	II	I
Mecklenburg loam, dark surface variant, 6 to 10 percent slopes	II	II	II
Mecklenburg loam, dark surface variant, 10 to 15 percent slopes	III	II	II
Mecklenburg loam, eroded gently sloping phase	II	II	II
Mecklenburg loam, eroded sloping phase	II	II	II
Mecklenburg loam, eroded strongly sloping phase	III	II	II
Mecklenburg sandy clay loam, eroded, ALL	III	II	II
Mecklenburg-Urban land complex, ALL	IV	II	IV
Miscellaneous water	IV	VI	IV
Misenheimer channery silt loam, 0 to 4 percent slopes	IV	V	III
Misenheimer-Callison complex, 0 to 3 percent slopes	IV	V	III
Misenheimer-Cid complex, 0 to 3 percent slopes	IV	V	III
Misenheimer-Kirksey complex, 0 to 5 percent slopes	IV	V	III
Mixed alluvial land, ALL	IV	III	III
Mocksville sandy loam, 2 to 8 percent slopes	II	II	II
Mocksville sandy loam, 8 to 15 percent slopes	III	II	II
Mocksville sandy loam, 15 to 45 percent slopes	IV	II	III
Moderately gullied land, ALL	IV	VI	IV
Monacan and Arents soils	I	III	IV
Monacan loam	I	III	III
Montonia very channery silt loam, 25 to 60 percent slopes, very stony	IV	V	IV
Mooshaunee-Hallison complex, 2 to 8 percent slopes	III	II	II
Mooshaunee-Hallison complex, 8 to 15 percent slopes	IV	II	III
Mooshaunee-Hallison complex, 15 to 25 percent slopes	IV	II	IV
Mooshaunee-Hallison complex, ALL OTHER	IV	II	IV
Nanford gravelly fine sandy loam, 8 to 15 percent slopes	III	II	II
Nanford silt loam, 2 to 6 percent slopes	II	II	I
Nanford silt loam, 2 to 8 percent slopes	II	II	I
Nanford silt loam, 8 to 15 percent slopes	III	II	II
Nanford silty clay loam, 2 to 6 percent slopes, moderately eroded	III	II	II
Nanford-Badin complex, 6 to 10 percent slopes	III	II	II
Nanford-Badin complex, 10 to 15 percent slopes	IV	II	II
Nanford-Emporia complex, 2 to 8 percent slopes	II	II	I
Nason gravelly loam, 2 to 6 percent slopes	III	II	I
Nason gravelly loam, 6 to 10 percent slopes	III	II	II
Nason gravelly loam, 10 to 25 percent slopes	IV	II	II
Nason gravelly loam, 25 to 50 percent slopes	IV	II	III
Nason gravelly silt loam, 2 to 8 percent slopes	II	II	I
Nason gravelly silt loam, 8 to 15 percent slopes	III	II	II
Nason loam, 2 to 6 percent slopes	II	II	I
Nason loam, 6 to 10 percent slopes	III	II	I
Nason silt loam, 2 to 6 percent slopes	II	II	I
Nason silt loam, 2 to 8 percent slopes	II	II	I
Nason silt loam, 6 to 12 percent slopes	III	II	I

Map Unit Name	Agri	For	Hort
Nason silt loam, 8 to 15 percent slopes	III	II	I
Nason silt loam, 10 to 15 percent slopes	III	II	I
Nason silt loam, 15 to 25 percent slopes	IV	II	II
Nason stony silt loam, 10 to 15 percent slopes (Uwharrie)	IV	II	IV
Oakboro silt loam, ALL	III	III	III
Orange gravelly loam, 2 to 7 percent slopes	II	II	II
Orange loam, 0 to 2 percent slopes	II	II	II
Orange silt loam, 0 to 3 percent slopes	II	II	II
Orange silt loam, eroded gently sloping moderately well drained variant	III	II	II
Orange silt loam, eroded gently sloping phase	III	II	II
Orange silt loam, eroded sloping moderately well drained variant	III	II	II
Orange silt loam, gently sloping moderately well drained variant	III	II	II
Orange silt loam, gently sloping phase	II	II	II
Orange silt loam, nearly level phase	II	II	II
Orange silt loam, sloping moderately well drained variant	III	II	II
Pacolet clay loam, 2 to 6 percent slopes, eroded	II	II	II
Pacolet clay loam, 2 to 8 percent slopes, moderately eroded	II	II	II
Pacolet clay loam, 6 to 10 percent slopes, eroded	III	II	II
Pacolet clay loam, 6 to 10 percent slopes, severely eroded	III	II	II
Pacolet clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Pacolet clay loam, 10 to 15 percent slopes, eroded	III	II	II
Pacolet clay loam, 15 to 45 percent slopes, eroded	IV	II	II
Pacolet complex, 10 to 25 percent slopes, severely eroded	IV	II	III
Pacolet fine sandy loam, 2 to 6 percent slopes	II	II	I
Pacolet fine sandy loam, 6 to 10 percent slopes	III	II	I
Pacolet fine sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet fine sandy loam, 10 to 15 percent slopes	III	II	II
Pacolet fine sandy loam, ALL OTHER	IV	II	II
Pacolet gravelly fine sandy loam, 2 to 6 percent slopes	II	II	I
Pacolet gravelly fine sandy loam, 6 to 10 percent slopes	III	II	II
Pacolet gravelly fine sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet gravelly fine sandy loam, 15 to 25 percent slopes	IV	II	II
Pacolet gravelly sandy clay loam, 15 to 30 percent slopes, eroded	IV	II	II
Pacolet gravelly sandy loam, 2 to 8 percent slopes	II	II	I
Pacolet gravelly sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet gravelly sandy loam, ALL OTHER	IV	II	II
Pacolet loam, 10 to 15 percent slopes	III	II	II
Pacolet loam, 15 to 25 percent slopes	IV	II	II
Pacolet sandy clay loam, 2 to 6 percent slopes, eroded	II	II	II
Pacolet sandy clay loam, 2 to 6 percent slopes, moderately eroded	II	II	II
Pacolet sandy clay loam, 2 to 8 percent slopes, eroded	II	II	II
Pacolet sandy clay loam, 6 to 10 percent slopes, moderately eroded	III	II	II
Pacolet sandy clay loam, 8 to 15 percent slopes, eroded	III	II	II
Pacolet sandy clay loam, 8 to 15 percent slopes, moderately eroded	III	II	II
Pacolet sandy clay loam, 10 to 15 percent slopes, moderately eroded	III	II	II
Pacolet sandy clay loam, ALL OTHER	IV	II	II
Pacolet sandy loam, 2 to 6 percent slopes	II	II	I
Pacolet sandy loam, 2 to 8 percent slopes	II	II	I
Pacolet sandy loam, 6 to 10 percent slopes	III	II	II
Pacolet sandy loam, 8 to 15 percent slopes	III	II	II
Pacolet sandy loam, 10 to 15 percent slopes	III	II	II
Pacolet sandy loam, ALL OTHER	IV	II	II

Map Unit Name	Agri	For	Hort
Pacolet soils, 10 to 25 percent slopes	IV	II	III
Pacolet-Bethlehem complex, 2 to 8 percent slopes, eroded	III	II	II
Pacolet-Bethlehem complex, 2 to 8 percent slopes, moderately eroded	III	II	II
Pacolet-Bethlehem complex, ALL OTHER	IV	II	II
Pacolet-Bethlehem complex, 15 to 25 percent slopes, stony	IV	II	III
Pacolet-Bethlehem-Urban Land complex, ALL	IV	II	IV
Pacolet-Madison-Urban land complex, ALL	IV	II	IV
Pacolet-Saw complex, 2 to 8 percent slopes, eroded	III	II	II
Pacolet-Saw complex, 2 to 8 percent slopes, moderately eroded	III	II	II
Pacolet-Saw complex, ALL OTHER	IV	II	II
Pacolet-Udorthents complex, gullied, ALL	IV	II	IV
Pacolet-Urban land complex, ALL	IV	II	IV
Pacolet-Wilkes complex, 8 to 15 percent slopes	III	II	II
Pacolet-Wilkes complex, 5 to 25 percent slopes	IV	II	II
Picture loam, 0 to 3 percent slopes	IV	II	III
Pinkston, ALL	IV	II	III
Pinoka, ALL	IV	II	III
Pinoka, ALL Pinoka-Carbonton complex, 2 to 8 percent slopes	IV	II	III
Pits, ALL	IV	VI	IV
Poindexter and Zion sandy loams, 2 to 8 percent slopes	III	II	II
Poindexter and Zion sandy loams, 8 to 15 percent slopes	IV	II	II
Poindexter and Zion sandy loams, ALL OTHER	IV		
, ,		II	III
Poindexter fine sandy loam, 25 to 60 percent slopes	IV	II	III
Poindexter loam, 2 to 8 percent slopes	III	II	II
Poindexter loam, 8 to 15 percent slopes	IV	II	II
Poindexter loam, 15 to 45 percent slopes	IV	II	III
Poindexter-Mocksville complex, 2 to 8 percent slopes	IV	II	II
Poindexter-Mocksville complex, 8 to 15 percent slopes	IV	II	II
Poindexter-Mocksville complex, ALL OTHER	IV	II	III
Poindexter-Zion-Urban land complex, 2 to 15 percent slopes	IV	II	IV
Polkton-White Store complex, 2 to 8 percent slopes, severely eroded	III	II	III
Polkton-White Store complex, ALL OTHER	IV	II	III
Quarry, ALL	IV	VI	IV
Rhodhiss, ALL	IV	II	II
Rhodhiss-Bannertown complex, 25 to 50 percent slopes	IV	II	III
Rion fine sandy loam, 2 to 8 percent slopes	III	II	II
Rion fine sandy loam, 8 to 15 percent slopes	IV	II	II
Rion fine sandy loam, 15 to 25 percent slopes	IV	II	II
Rion fine sandy loam, 25 to 60 percent slopes	IV	II	III
Rion loamy sand, 8 to 15 percent slopes	IV	II	II
Rion loamy sand, 15 to 25 percent slopes	IV	II	III
Rion sandy loam, 2 to 8 percent slopes	III	II	II
Rion sandy loam, 8 to 15 percent slopes	III	II	II
Rion sandy loam, 15 to 25 percent slopes	IV	II	II
Rion sandy loam, 15 to 30 percent slopes	IV	II	II
Rion sandy loam, ALL OTHER	IV	II	III
Rion, Pacolet, and Wateree soils, 25 to 60 percent slopes	IV	II	IV
Rion-Ashlar complex, 15 to 35 percent slopes, stony	IV	II	III
Rion-Ashlar complex, 25 to 60 percent slopes, rocky	IV	II	IV
Rion-Ashlar-Rock outcrop complex, 45 to 70 percent slopes	IV	II	IV
Rion-Cliffside complex, 25 to 60 percent slopes, very stony	IV	II	IV
Rion-Hibriten complex, 25 to 45 percent slopes, very stony	IV	II	IV

Map Unit Name	Agri	For	Hort
Rion-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Rion-Wateree-Wedowee complex, 8 to 15 percent slopes	IV	II	III
Rion-Wedowee complex, ALL	III	II	II
Rion-Wedowee-Ashlar complex, ALL	IV	II	III
Riverview and Buncombe soils, 0 to 3 percent slopes, frequently flooded	II	III	III
Riverview and Toccoa soils, 0 to 4 percent slopes, occasionally flooded	II	III	III
Riverview, frequently flooded, ALL	II	III	III
Riverview, occasionally flooded, ALL	I	III	III
Roanoke, ALL	II	III	III
Roanoke-Wahee complex, 0 to 3 percent slopes, occasionally flooded	II	III	III
Rock outcrop	IV	VI	IV
Rock outcrop-Ashlar complex, 2 to 15 percent slopes	IV	VI	IV
Rock outcrop-Wake complex, ALL	IV	VI	IV
Sauratown channery fine sandy loam, 25 to 60 percent slopes, very stony	IV	IV	IV
Saw-Pacolet complex, ALL	IV	II	II
Saw-Wake Complex, very rocky, ALL	IV	II	IV
Secrest-Cid complex, 0 to 3 percent slopes	III	II	II
Sedgefield fine sandy loam, 1 to 4 percent slopes	II	II	II
Sedgefield fine sandy loam, 1 to 6 percent slopes	III	II	II
Sedgefield sandy loam, 1 to 6 percent slopes	III	II	II
Sedgefield sandy loam, 2 to 8 percent slopes	III	II	II
Severely gullied land, ALL	IV	VI	IV
Shellbluff loam, 0 to 2 percent slopes, occasionally flooded	II	III	III
Shellbluff silt loam, 0 to 2 percent slopes, frequently flooded	IV	III	III
Skyuka clay loam, 2 to 8 percent slopes, eroded	II	I	II
Skyuka loam, 2 to 8 percent slopes	I	I	II
Spray loam, 0 to 5 percent slopes	IV	II	III
Spray-Urban land complex, 0 to 5 percent slopes	IV	II	IV
Starr loam, ALL	II	I	III
State, ALL	I	I	I
Stoneville loam, 2 to 8 percent slopes	II	II	I
Stoneville loam, 8 to 15 percent slopes	III	II	I
Stoneville loam, 15 to 25 percent slopes	IV	II	II
Stoneville-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Stony land	IV	VI	IV
Swamp	IV	III	IV
Tallapoosa fine sandy loam, ALL	IV	II	III
Tarrus gravelly silt loam, 2 to 8 percent slopes	II	II	I
Tarrus-Georgeville complex, 8 to 15 percent slopes	II	II	I
Tatum and Nason channery silt loams, 15 to 25 percent slopes	IV	II	II
Tatum channery silt loam, ALL	III	II	I
Tatum channery silty clay loam, ALL	III	II	II
Tatum gravelly loam, 2 to 8 percent slopes	II	II	I
Tatum gravelly loam, 8 to 15 percent slopes	III	II	I
Tatum gravelly loam, ALL OTHER	IV	II	II
Tatum gravelly silt loam, 2 to 8 percent slopes	II	II	I
Tatum gravelly silt loam, 8 to 15 percent slopes	III	II	I
Tatum gravelly silt loam, ALL OTHER	IV	II	II
Tatum gravelly silty clay loam, eroded, ALL	III	II	II
Tatum loam, 2 to 6 percent slopes	II	II	I
Tatum loam, 10 to 15 percent slopes	III	II	II
Tatum loam, ALL OTHER	IV	II	II

Map Unit Name	Agri	For	Hort
Tatum silt loam, 2 to 8 percent slopes	II	II	I
Tatum silt loam, 8 to 15 percent slopes	III	II	I
Tatum silt loam, ALL OTHER	IV	II	II
Tatum silty clay loam, eroded, ALL	III	II	II
Tatum-Badin complex, 2 to 8 percent slopes	III	II	I
Tatum-Badin complex, 2 to 8 percent slopes, eroded	III	II	II
Tatum-Badin complex, 8 to 15 percent slopes	III	II	II
Tatum-Montonia complex, 15 to 30 percent slopes	IV	II	II
Tatum-Montonia complex, ALL OTHER	III	II	II
Tatum-Urban land complex, 2 to 8 percent slopes	IV	II	IV
Tetotum fine sandy loam, 1 to 4 percent slopes	I	I	I
Tetotum silt loam, 0 to 3 percent slopes	I	I	I
Tirzah silt loam, eroded gently sloping phase (Tatum)	III	II	I
Tirzah silt loam, eroded sloping phase (Tatum)	II	II	I
Tirzah silt loam, eroded strongly sloping phase (Tatum)	III	II	II
Tirzah silt loam, gently sloping phase (Stoneville)	II	II	II
Tirzah silt loam, sloping phase (Stoneville)	III	II	II
Tirzah silt loam, strongly sloping phase (Stoneville)	III	II	II
Tirzah silty clay loam, severely eroded gently sloping phase (Tatum)	III	II	II
Tirzah silty clay loam, severely eroded sloping phase (Tatum)	III	II	II
Tirzah silty clay loam, severely eroded strongly sloping phase (Tatum)	IV	II	II
Toast sandy loam, 2 to 8 percent slopes	II	I	I
Toast sandy loam, 8 to 15 percent slopes	III	I	II
Toccoa, ALL	I	III	III
Turbeville fine sandy loam, 0 to 3 percent slopes	I	II	I
Udorthents, ALL	IV	VI	IV
Udorthents-Pits complex, mounded, 0 to 2 percent slopes, occasionally	IV	VI	IV
flooded			
Udorthents-Urban land complex, ALL	IV	VI	IV
Urban land, ALL	IV	VI	IV
Urban land-Arents complex, occasionally flooded	IV	III	IV
Urban land-Iredell-Creedmoor complex, 2 to 10 percent slopes	IV	II	IV
Urban land-Masada complex, 2 to 15 percent slopes	IV	II	IV
Uwharrie clay loam, 2 to 8 percent slopes, eroded	III	II	III
Uwharrie clay loam, 8 to 15 percent slopes, eroded	IV	II	III
Uwharrie loam, 15 to 25 percent slopes	IV	II	III
Uwharrie loam, very stony, ALL	IV	II	III
Uwharrie silt loam, 2 to 8 percent slopes	II	II	I
Uwharrie silty clay loam, 2 to 8 percent slopes, eroded	III	II	II
Uwharrie silty clay loam, 2 to 8 percent slopes, moderately eroded	III	II	II
Uwharrie silty clay loam, 8 to 15 percent slopes, eroded	IV	II	II
Uwharrie stony loam, ALL	IV	II	III
Uwharrie stony loam, very bouldery, ALL	IV	II	IV
Uwharrie-Badin complex, ALL	IV	II	III
Uwharrie-Tatum complex, 8 to 15 percent slopes	III	II	III
Uwharrie-Tatum complex, 8 to 15 percent slopes, moderately eroded	IV	II	III
Uwharrie-Urban Land, 2 to 8 percent slopes	IV	II	IV
Vance clay loam, severely eroded sloping phase	IV	II	II
Vance coarse sandy loam, 2 to 8 percent slopes	II	II	II
Vance coarse sandy loam, eroded gently sloping phase	III	II	II
Vance coarse sandy loam, eroded sloping phase	III	II	II
Vance coarse sandy loam, gently sloping phase	II	II	II

Map Unit Name	Agri	For	Hort
Vance sandy clay loam, ALL	III	II	II
Vance sandy loam, 2 to 6 percent slopes	II	II	II
Vance sandy loam, 2 to 6 percent slopes, eroded	III	II	II
Vance sandy loam, 2 to 8 percent slopes	II	II	II
Vance sandy loam, 6 to 10 percent slopes	III	II	II
Vance sandy loam, 6 to 10 percent slopes, eroded	III	II	II
Vance sandy loam, 8 to 15 percent slopes	III	II	II
Vance sandy loam, 10 to 15 percent slopes	III	II	II
Vance sandy loam, eroded gently sloping phase	III	II	II
Vance sandy loam, eroded moderately sloping phase	III	II	II
Vance sandy loam, eroded strongly sloping phase	IV	II	II
Vance sandy loam, gently sloping phase	II	II	II
Vance-Urban land complex, 2 to 10 percent slopes	IV	II	IV
Wadesboro clay loam, 2 to 8 percent slopes, moderately eroded	II	I	II
Wadesboro clay loam, 8 to 15 percent slopes, moderately eroded	III	I	II
Wadesboro fine sandy loam, 2 to 7 percent slopes (Mayodan)	II	I	II
Wadesboro fine sandy loam, 2 to 7 percent slopes, eroded (Mayodan)	II	I	II
Wadesboro fine sandy loam, 7 to 10 percent slopes (Mayodan)	III	I	II
Wadesboro fine sandy loam, 7 to 10 percent slopes, eroded (Mayodan)	III	I	II
Wadesboro fine sandy loam, 10 to 14 percent slopes (Mayodan)	III	I	II
Wadesboro fine sandy loam, 10 to 14 percent slopes, eroded (Mayodan)	IV	I	II
Wadesboro fine sandy loam, 14 to 30 percent slopes (Mayodan)	IV	I	II
Wahee, ALL	II	III	I
Wake soils, ALL	IV	II	III
Wake-Saw-Wedowee complex, 2 to 8 percent slopes, rocky	IV	II	III
Wake-Wateree complex, 15 to 30 percent slopes, very rocky	IV	II	III
Wake-Wateree-Wedowee complex, 8 to 15 percent slopes, rocky	IV	II	III
Warne and Roanoke fine sandy loams (Dogue)	IV	III	II
Wateree fine sandy loam, ALL	IV	II	II
Wateree-Rion complex, 40 to 95 percent slopes	IV	II	III
Wateree-Rion-Wedowee complex, 15 to 30 percent slopes	IV	II	III
Wedowee coarse sandy loam, 2 to 6 percent slopes	II	I	I
Wedowee coarse sandy loam, 6 to 10 percent slopes	III	I	II
Wedowee loam, 2 to 8 percent slopes	II	I	I
Wedowee loam, 8 to 15 percent slopes	III	I	II
Wedowee loam, 15 to 25 percent slopes	IV	I	II
Wedowee sandy clay loam, 8 to 15 percent slopes, eroded	IV	I	II
Wedowee sandy loam, 2 to 10 percent slopes, extremely bouldery	IV	I	IV
Wedowee sandy loam, 2 to 15 percent slopes, bouldery	IV	I	III
Wedowee sandy loam, 2 to 6 percent slopes	II	I	I
Wedowee sandy loam, 2 to 6 percent slopes, eroded	II	I	II
Wedowee sandy loam, 2 to 8 percent slopes	II	I	I
Wedowee sandy loam, 6 to 10 percent slopes	III	I	II
Wedowee sandy loam, 6 to 10 percent slopes, eroded	III	I	II
Wedowee sandy loam, 6 to 15 percent slopes	III	I	II
Wedowee sandy loam, 8 to 15 percent slopes	III	I	II
Wedowee sandy loam, 10 to 15 percent slopes	III	I	II
Wedowee sandy loam, 10 to 15 percent slopes, eroded	III	I	II
Wedowee sandy loam, 10 to 25 percent slopes	III	I	II
Wedowee sandy loam, 15 to 25 percent slopes	IV	I	II
Wedowee sandy loam, 15 to 35 percent slopes, bouldery	IV	I	III
Wedowee sandy loam, 15 to 40 percent slopes	IV	I	II

Map Unit Name	Agri	For	Hort
Wedowee-Louisburg complex, 2 to 6 percent slopes	II	I	II
Wedowee-Louisburg complex, ALL OTHER	III	I	III
Wedowee-Urban land-Udorthents complex, 2 to 10 percent slopes	IV	I	IV
Wehadkee and Bibb soils	IV	III	III
Wehadkee, ALL	IV	III	III
White Store clay loam, ALL	IV	II	III
White Store fine sandy loam, moderately eroded, ALL	IV	II	III
White Store loam, 8 to 15 percent slopes	IV	II	III
White Store loam, ALL OTHER	III	II	III
White Store sandy loam, 2 to 6 percent slopes	III	II	III
White Store sandy loam, ALL OTHER	IV	II	III
White Store silt loam, 8 to 15 percent slopes	IV	II	III
White Store silt loam, ALL OTHER	III	II	III
White Store-Polkton complex, ALL	IV	II	III
White Store-Urban land complex, ALL	IV	II	IV
Wickham fine sandy loam, 0 to 3 percent slopes, rarely flooded	I	I	I
Wickham fine sandy loam, 2 to 6 percent slopes	I	I	I
Wickham fine sandy loam, 2 to 6 percent slopes, eroded	II	I	I
Wickham fine sandy loam, 2 to 7 percent slopes, eroded	II	I	I
Wickham fine sandy loam, 2 to 8 percent slopes	II	I	I
Wickham fine sandy loam, 6 to 10 percent slopes	II	I	I
Wickham fine sandy loam, 6 to 10 percent slopes, eroded	III	I	II
Wickham fine sandy loam, 7 to 14 percent slopes, eroded	III	I	II
Wickham fine sandy loam, 10 to 15 percent slopes	III	I	II
Wickham sandy loam, ALL	I	I	I
Wilkes, ALL	IV	II	III
Wilkes-Poindexter-Wynott complex, ALL	IV	II	III
Wilkes-Urban land complex, 8 to 15 percent slopes	IV	II	IV
Winnsboro fine sandy loam, 2 to 8 percent slopes	II	II	I
Winnsboro loam, 2 to 8 percent slopes	III	II	I
Winnsboro loam, 8 to 15 percent slopes	IV	II	II
Winnsboro-Wilkes complex, 2 to 8 percent slopes	III	II	II
Winnsboro-Wilkes complex, ALL OTHER	IV	II	III
Woolwine-Fairview complex, 2 to 8 percent slopes, moderately eroded	III	II	II
Woolwine-Fairview complex, moderately eroded, ALL OTHER	IV	II	II
Woolwine-Fairview-Urban land complex, ALL	IV	II	IV
Worsham, ALL	IV	III	III
Wynott cobbly loam, 2 to 10 percent slopes, extremely stony	IV	II	IV
Wynott loam, 2 to 8 percent slopes	III	II	II
Wynott-Enon complex, 2 to 8 percent slopes	II	II	II
Wynott-Enon complex, 2 to 8 percent slopes, moderately eroded	II	II	II
Wynott-Enon complex, 8 to 15 percent slopes	II	II	II
Wynott-Enon complex, 8 to 15 percent slopes, moderately eroded	III	II	II
Wynott-Enon complex, 15 to 25 percent slopes	IV	II	II
Wynott-Enon complex, extremely bouldery, ALL	IV	II	IV
Wynott-Wilkes-Poindexter complex, 2 to 8 percent slopes	IV	II	II
Wynott-Winnsboro complex, 2 to 8 percent slopes	II	II	II
Wynott-Winnsboro complex, 8 to 15 percent slopes	II	II	II
Wynott-Winnsboro complex, 15 to 25 percent slopes	IV	II	II
Zion gravelly loam, 2 to 8 percent slopes	III	II	II
Zion gravelly loam, 8 to 15 percent slopes	IV	II	II
Zion-Enon complex, 2 to 8 percent slopes	III	II	III

Map Unit Name	Agri	For	Hort
Zion-Enon complex, 8 to 15 percent slopes	IV	II	II
Zion-Mocksville complex, 25 to 45 percent slopes	IV	II	III
Zion-Wilkes complex, 8 to 15 percent slopes	IV	II	II
Zion-Winnsboro-Mocksville complex, ALL	IV	II	II

MLRA137-S and hills

Map Unit Name	Agri	For	Hort
Ailey gravelly loamy sand, 8 to 15 percent slopes	III	V	III
Ailey gravelly loamy sand, 15 to 25 percent slopes	IV	V	IV
Ailey loamy sand, ALL	III	V	III
Ailey sand, moderately wet, 0 to 6 percent slopes	II	V	II
Ailey-Urban land complex, ALL	IV	V	IV
Bibb loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV
Blaney loamy sand, 2 to 8 percent slopes	II	II	II
Blaney loamy sand, 8 to 15 percent slopes	III	II	III
Blaney-Urban land complex, ALL	IV	II	IV
Bragg sandy loam, 1 to 4 percent slopes	IV	V	IV
Candor and Wakulla soils, 8 to 15 percent slopes	IV	V	IV
Candor sand, ALL	IV	V	IV
Candor-Urban land complex, 2 to 12 percent slopes	IV	V	IV
Dothan gravelly loamy sand, 0 to 6 percent slopes	I	II	I
Dothan loamy sand, ALL	I	II	I
Emporia loamy sand, ALL	II	II	II
Faceville sandy clay loam, 2 to 6 percent slopes, eroded	II	II	II
Fuquay, ALL	II	II	II
Fuquay-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Gilead loamy sand, ALL	II	II	II
Johns fine sandy loam, 0 to 2 percent slopes	I	I	I
Johnston, ALL	IV	III	IV
Kalmia sandy loam, wet substratum, 0 to 2 percent slopes	I	II	I
Kenansville loamy sand, 0 to 4 percent slopes	II	I	II
Lakeland, ALL	IV	V	IV
Lakeland-Urban land complex, 1 to 8 percent slopes	IV	V	IV
Lillington gravelly sandy loam, 2 to 8 percent slopes	III	II	III
Lillington gravelly sandy loam, 8 to 15 percent slopes	IV	II	IV
Lillington gravelly sandy loam, 15 to 25 percent slopes	IV	II	IV
Pactolus sand, 0 to 3 percent slopes	IV	II	IV
Paxville fine sandy loam, 0 to 2 percent slopes	I	III	I
Pelion loamy sand, 0 to 2 percent slopes	II	II	II
Pelion loamy sand, 1 to 4 percent slopes	IV	II	IV
Pelion loamy sand, 2 to 8 percent slopes	III	II	III
Pelion loamy sand, 8 to 15 percent slopes	IV	II	IV
Pelion-Urban land complex, ALL	IV	II	IV
Pelion-Urban land complex, 8 to 15 percent slopes	IV	II	IV
Pocalla loamy sand, 0 to 6 percent slopes	II	II	II
Rains fine sandy loam, 0 to 2 percent slopes	III	I	III
Tetotum silt loam, 0 to 3 percent slopes, rarely flooded	I	I	I
Udorthents, ALL	IV	VI	IV
Urban land, ALL	IV	VI	IV
Vaucluse gravelly loamy sand, 2 to 8 percent slopes	III	II	III
Vaucluse gravelly loamy sand, 8 to 15 percent slopes	IV	II	IV
Vaucluse gravelly loamy sand, 15 to 25 percent slopes	IV	II	IV
Vaucluse gravelly sandy loam, ALL	III	II	III
Vaucluse gravelly sandy loam, 8 to 15 percent slopes	III	II	III
Vaucluse gravelly sandy loam, 15 to 25 percent slopes	III	II	III
Vaucluse loamy sand, 2 to 8 percent slopes	II	II	II
Vaucluse loamy sand, 8 to 15 percent slopes	III	II	III
Vaucluse loamy sand, 15 to 25 percent slopes	IV	II	IV
Vaucluse very gravelly loamy sand, ALL	IV	II	IV

MLRA137-S and hills

Map Unit Name	Agri	For	Hort
Vaucluse-Gilead loamy sands, 15 to 25 percent slopes	IV	II	IV
Vaucluse-Urban land complex, ALL	IV	II	IV
Wakulla and Candor soils, 0 to 8 percent slopes	IV	V	IV
Wakulla sand, ALL	IV	V	IV
Wakulla-Candor-Urban land complex, 0 to 10 percent slopes	IV	V	IV
Wehadkee fine sandy loam	IV	III	IV
Wehadkee loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV

Map Unit Name	Agri	For	Hort
Alaga, ALL	IV	II	IV
Alpin, ALL	IV	II	IV
Altavista, ALL	I	I	I
Altavista, ALE Altavista-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Arapahoe fine sandy loam	II	I	II
Augusta, ALL	II	I	II
Autryville fine sand, 1 to 4 percent slopes	IV	II	IV
	III	II	III
Autryville, ALL OTHER			
Aycock, ALL ERODED	II	I	II
Aycock, ALL OTHER	I	I	I
Ballahack loam, 0 to 2 percent slopes, occasionally flooded	I	I	I
Bayboro, ALL	I	I	I
Baymeade and Marvyn soils, 6 to 12 percent slopes	IV	V	IV
Baymeade fine sand, ALL	IV	V	IV
Baymeade-Urban land complex, 0 to 6 percent slopes	IV	V	IV
Bethera, ALL	II	I	II
Bibb and Johnston loams, frequently flooded	IV	III	IV
Bibb, ALL	IV	III	IV
Bladen, ALL	III	I	III
Blanton, ALL	IV	V	IV
Bohicket, ALL	IV	VI	IV
Bonneau loamy fine sand, 0 to 6 percent slopes	II	II	II
Bonneau loamy sand, 0 to 4 percent slopes	II	II	II
Bonneau loamy sand, 0 to 6 percent slopes	II	II	II
Bonneau loamy sand, 6 to 10 percent slopes	III	II	III
Bonneau loamy sand, 6 to 12 percent slopes	III	II	III
Borrow pits	IV	VI	IV
Bragg, ALL	IV	VI	IV
Brookman loam, frequently flooded	IV	III	IV
Butters loamy fine sand, 0 to 3 percent slopes	III	II	III
Byars loam	II	III	II
Cainhoy, ALL	IV	V	IV
Cape Fear loam, ALL	I	I	I
Caroline fine sandy loam, ALL	II	II	II
Carteret, ALL	IV	VI	IV
Centenary fine sand	IV	II	IV
Chastain and Chenneby soils, frequently flooded	IV	III	IV
Chastain silt loam, frequently flooded	IV	III	IV
Chewacla and Chastain soils, frequently flooded	IV	III	IV
Chewacla loam, frequently flooded	IV	III	IV
Chipley sand	IV	II	IV
Chowan silt loam	IV	III	IV
Conetoe, ALL	III	II	III
Congaree silt loam, 0 to 4 percent slopes, occasionally flooded	I	III	I
Corolla fine sand	IV	VI	IV
Coxville, ALL	II	I	II
Craven clay loam, 4 to 12 percent slopes, eroded	IV	I	IV
Craven fine sandy loam, 0 to 1 percent slopes	II	I	II
Craven fine sandy loam, 1 to 4 percent slopes	II	I	II
Craven fine sandy loam, 1 to 4 percent slopes Craven fine sandy loam, 1 to 6 percent slopes, eroded	III	I	III
Craven fine sandy loam, 4 to 8 percent slopes	III	I	III
Craven fine sandy loam, 4 to 8 percent slopes Craven fine sandy loam, 4 to 8 percent slopes, eroded	IV	I	IV
Claren line sundy found, 7 to 0 percent slopes, croucd	Τ. Α	1	1 4

Map Unit Name	Agri	For	Hort
Craven fine sandy loam, 6 to 10 percent slopes	IV	I	IV
Craven fine sandy loam, 8 to 12 percent slopes, eroded	IV	I	IV
Craven loam, 1 to 4 percent slopes	II	I	II
Craven loam, 1 to 4 percent slopes, eroded	III	I	III
Craven silt loam, 1 to 4 percent slopes	II	I	II
Craven very fine sandy loam, 1 to 4 percent slopes	II	I	II
Craven very fine sandy loam, 4 to 8 percent slopes	IV	I	IV
Craven-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Croatan muck, frequently flooded	III	V	III
Croatan muck, ALL OTHER	II	V	II
Dogue sandy loam, 0 to 2 percent slopes	II	I	II
Dogue sandy loam, 0 to 2 percent slopes Dogue sandy loam, 2 to 6 percent slopes	III	I	III
	IV	I	IV
Dogue sandy loam, 6 to 12 percent slopes	IV	V	IV
Dorovan, ALL Duckston fine sand	IV		
	IV	VI V	IV
Echaw, ALL	1		IV
Exum fine sandy loam, 0 to 1 percent slopes	I	II	I
Exum fine sandy loam, 1 to 6 percent slopes	II	II	II
Exum loam, 0 to 2 percent slopes	I	II	I
Exum silt loam, 0 to 2 percent slopes	I	II	I
Exum very fine sandy loam, 0 to 2 percent slopes	I	II	I
Exum very fine sandy loam, 2 to 5 percent slopes	II	II	II
Exum-Urban land complex, 0 to 2 percent slopes	IV	II	IV
Foreston loamy fine sand, ALL	II	II	II
Goldsboro sandy loam, 1 to 6 percent slopes	I	I	I
Goldsboro, ALL OTHER	I	I	I
Goldsboro-Urban land complex, ALL	IV	I	IV
Grantham, ALL	I	I	I
Grifton, ALL	II	I	II
Hobonny muck	IV	VI	IV
Icaria fine sandy loam, ALL	II	I	II
Invershiel-Pender complex, 0 to 2 percent slopes	I	II	I
Johns, ALL	II	I	II
Johnston and Pamlico soils, 0 to 1 percent slopes, frequently flooded	IV	III	IV
Johnston soils	IV	III	IV
Kalmia, ALL	II	II	II
Kenansville, ALL	III	II	III
Kinston loam, frequently flooded	IV	III	IV
Kureb, ALL	IV	V	IV
Lafitte muck	IV	VI	IV
Lakeland sand, 0 to 6 percent slopes	IV	V	IV
Leaf, ALL	III	I	III
Lenoir, ALL	III	I	III
Leon, ALL	IV	V	III
Leon-Urban land complex	IV	V	IV
Liddell silt loam	II	I	II
Lucy loamy sand, 0 to 6 percent slopes	II	II	II
Lumbee, ALL	II	I	II
Lynchburg, ALL	II	I	II
Lynchburg-Urban land complex	IV	I	IV
Lynn Haven sand	IV	II	IV
Mandarin, ALL	IV	V	IV

Map Unit Name	Agri	For	Hort
Mandarin-Urban land complex	IV	V	IV
Marvyn and Craven soils, 6 to 12 percent slopes	IV	I	IV
Marvyn, ALL	IV	I	IV
Masada sandy loam, 0 to 4 percent slopes	I	II	I
Masontown, ALL	IV	III	IV
Masontown mucky fine sandy loam and Muckalee sandy loam, frequently	IV	III	IV
flooded Manager fine and a larger for greatly flooded	137	111	TV
Meggett fine sandy loam, frequently flooded	IV	III	IV
Meggett, ALL OTHER			III
Mine pits Muckalee loam, ALL	IV IV	VI III	IV IV
Murville, ALL	IV	V	IV
· · · · · · · · · · · · · · · · · · ·	+		
Nahunta, ALL	I	I I	I
Nakina fine sandy loam	I		I
Nawney loam, 0 to 2 percent slopes, frequently flooded	IV	III	IV
Newhan, ALL	IV	VI	IV
Newhan-Corolla complex, 0 to 30 percent slopes	IV	VI	IV
Newhan-Corolla-Urban land complex, 0 to 30 percent slopes	IV	VI	IV
Noboco fine sandy loam, 0 to 2 percent slopes	I	I	I
Noboco fine sandy loam, 2 to 6 percent slopes	II	I	II
Norfolk, ALL	II	II	II
Norfolk-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Ocilla loamy fine sand, 0 to 4 percent slopes	IV	II	IV
Olustee loamy sand, sandy subsoil variant (Murville)	IV	II	IV
Onslow, ALL	II	II	II
Osier loamy sand, loamy substratum	IV	I	IV
Pactolus, ALL	IV	II	IV
Pamlico muck, frequently flooded	IV	V	IV
Pamlico muck, ALL OTHER	III	V	III
Pantego, ALL	I	I	I
Paxville sandy loam	II	III	II
Pender fine sandy loam	II IV	I I	II IV
Pender-Urban land complex Pits, ALL	IV	VI	IV
,		II	
Pocalla loamy sand, 0 to 6 percent slopes Rains, ALL	III	I	III
Rains-Urban land complex Rimini sand 1 to 6 percent slopes	IV IV	I V	IV IV
Roanoke, frequently flooded	IV	III	IV
Roanoke, ALL OTHER	II	III	II
Rumford, ALL	III	II	III
Rutlege mucky loamy fine sand	IV	V	IV
Seabrook, ALL	IV	II	IV
Seabrook-Urban land complex	IV	II	IV
Stallings, ALL	II	II	II
State fine sandy loam, 0 to 2 percent slopes	I	I	I
State fine sandy loam, 2 to 6 percent slopes State fine sandy loam, 2 to 6 percent slopes	II	I	II
State loamy sand, 0 to 2 percent slopes	I	I	I
Stockade fine sandy loam	I	I	I
Suffolk loamy sand, 10 to 30 percent slopes	I	II	I
Swamp	IV	III	IV
Tarboro, ALL	IV	II	IV
Tarboro-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Tarboro-Orban fand complex, o to o percent stopes	1 V	_ п	1 V

Map Unit Name	Agri	For	Hort
Tomahawk fine sand, 0 to 3 percent slopes	IV	II	IV
Tomahawk loamy fine sand	IV	II	IV
Tomahawk loamy fine sand	IV	II	IV
Tomahawk loamy sand, 0 to 3 percent slopes	III	II	III
Tomotley, ALL	I	I	I
Torhunta, ALL	II	I	II
Torhunta-Urban land complex	IV	I	IV
Tuckerman fine sandy loam	II	II	II
Udorthents, ALL	IV	VI	IV
Udults, steep	IV	VI	IV
Umbric Ochraqualfs	IV	VI	IV
Urban land	IV	VI	IV
Valhalla fine sand, 0 to 6 percent slopes	III	II	III
Wagram loamy fine sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 6 to 10 percent slopes	III	II	III
Wagram loamy sand, 0 to 6 percent slopes	II	II	II
Wagram loamy sand, 10 to 15 percent slopes	IV	II	IV
Wahee, ALL	II	I	II
Wando fine sand, 0 to 6 percent slopes	IV	II	IV
Wando-Urban land complex, 0 to 6 percent slopes	IV	II	IV
Wakulla sand, ALL	IV	V	IV
Wasda muck	I	I	I
Wehadkee silt loam	IV	III	IV
Wickham fine sandy loam, 0 to 2 percent slopes	I	I	I
Wickham fine sandy loam, 2 to 6 percent slopes	II	I	II
Wickham fine sandy loam, 6 to 10 percent slopes	II	I	II
Wickham loamy sand, 1 to 6 percent slopes	II	I	II
Wickham sandy loam, 0 to 2 percent slopes	I	I	I
Wickham sandy loam, 0 to 6 percent slopes	II	I	II
Wickham sandy loam, 0 to 6 percent slopes, rarely flooded	II	I	II
Wickham sandy loam, 2 to 6 percent slopes	II	I	II
Wickham-Urban land complex, 2 to 10 percent slopes	IV	I	IV
Wilbanks, ALL	IV	III	IV
Winton, ALL	IV	I	IV
Woodington, ALL	II	II	II
Wrightsboro fine sandy loam 0 to 2 percent slopes	I	I	I
Yaupon silty clay loam, 0 to 3 percent slopes	III	VI	III

MLRA153B – Tidewater Area

Map Unit Name	Agri	For	Hort
Acredale silt loam, 0 to 2 percent slopes, rarely flooded	I	I	I
Altavista ,ALL	I	I	I
Altavista-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Arapahoe, ALL	I	I	I
Argent, ALL	II	I	II
Augusta ,ALL	II	I	II
Augusta-Urban land complex	IV	I	IV
Backbay mucky peat, 0 to 1 percent slopes, very frequently flooded	IV	VI	IV
Ballahack fine sandy loam, occasionally flooded	I	I	I
Barclay very fine sandy loam	I	I	I
Bayboro, ALL	I	I	I
Baymeade ,ALL	IV	V	IV
Baymeade-Urban land complex 1 to 6 percent slopes	IV	V	IV
Beaches, ALL	IV	VI	IV
Beaches-Newhan association	IV	VI	IV
Beaches-Newhan complex, ALL	IV	VI	IV
Belhaven muck, 0 to 2 percent slopes, frequently flooded	IV	V	IV
Belhaven muck, ALL OTHER	II	V	II
Bertie ,ALL	II	I	II
Bibb soils	IV	III	IV
Bladen ,ALL	III	I	III
Bohicket silty clay loam		VI	IV
Bojac, ALL	III	II	III
Bolling loamy fine sand, 0 to 3 percent slopes, rarely flooded	II	I	II
Borrow pits	IV	VI	IV
Brookman loam, 0 to 2 percent slopes, rarely flooded	II	I	II
Brookman mucky loam, frequently flooded	IV	III	IV
Brookman mucky silt loam	I	I	I
Cape Fear, ALL	I	I	I
Carteret, ALL	IV	VI	IV
Chapanoke silt loam, ALL	I	I	I
Charleston loamy fine sand	III	II	III
Chowan, ALL	IV	III	IV
Conaby muck, ALL	II	I	II
Conetoe, ALL	III	II	III
Corolla, ALL	IV	VI	IV
Corolla-Duckston complex, ALL	IV	VI	IV
Corolla-Urban land complex	IV	VI	IV
Currituck, ALL	IV	VI	IV
Dare muck	IV	V	IV
Deloss fine sandy loam	I	III	I
Deloss mucky loam, frequently flooded	IV	III	IV
Delway muck, 0 to 1 percent slopes, very frequently flooded	IV	VI	IV
Dogue, ALL	II	I	II
Dorovan, ALL	IV	V	IV
Dragston, ALL	II	I	II
Duckston, ALL	IV	VI	IV
Duckston-Corolla complex, 0 to 6 percent slopes, rarely flooded	IV	VI	IV
Dune land, ALL	IV	VI	IV
Dune land-Newhan complex, 2 to 40 percent slopes	IV	VI	IV
Elkton, ALL	II	I	II
Engelhard loamy very fine sand, 0 to 2 percent slopes, frequently flooded	IV	III	IV

MLRA153B – Tidewater Area

Map Unit Name	Agri	For	Hort
Engelhard loamy very fine sand, 0 to 2 percent slopes, rarely flooded	II	III	II
Fallsington fine sandy loam	IV	I	IV
Fork fine sandy loam, 0 to 2 percent slopes, rarely flooded	I	I	I
Fork loamy fine sand	II	I	II
Fortescue, ALL	I	III	I
Fripp fine sand, 2 to 30 percent slopes	IV	VI	IV
Galestown loamy fine sand	IV	II	IV
Gullrock muck, 0 to 2 percent slopes, rarely flooded	II	I	II
	IV		IV
Hobonny muck, 0 to 1 percent slopes, frequently flooded Hobucken, ALL	IV	VI VI	IV
,			
Hyde, ALL	I	I	I
Hydeland silt loam, 0 to 2 percent slopes, rarely flooded	I	I	I
Icaria loamy fine sand, 0 to 2 percent slopes, rarely flooded	II	I	II
Johns loamy sand, 0 to 2 percent slopes	II	I	II
Klej loamy fine sand	IV	II	IV
Kureb sand 1 to 8 percent slopes	IV	V	IV
Kureb-Urban land complex 1 to 8 percent slopes	IV	V	IV
Lafitte muck, ALL	IV	VI	IV
Lakeland sand 1 to 8 percent slopes	IV	V	IV
Leaf silt loam	III	I	III
Lenoir, ALL	III	I	III
Leon fine sand, 0 to 2 percent slopes, rarely flooded	IV	V	III
Leon sand	IV	V	III
Longshoal mucky peat, 0 to 1 percent slopes, very frequently flooded	IV	VI	IV
Lynn Haven, ALL	IV	II	IV
Made land and dumps	IV	VI	IV
Masontown mucky fine sandy loam	IV	III	IV
Matapeake fine and very fine sandy loams	I	II	I
Mattapex, ALL	II	I	II
Munden, ALL	II	I	II
Newhan, ALL	IV	VI	IV
Newhan-Beaches complex,	IV	VI	IV
Newhan-Corolla complex, ALL	IV	VI	IV
Newhan-Corolla-Urban land complex, 0 to 30 percent slopes	IV	VI	IV
Newhan-Urban land complex, ALL	IV	VI	IV
Newholland mucky loamy sand, 0 to 2 percent slopes, frequently flooded	IV	V	IV
Newholland mucky loamy sand, 0 to 2 percent slopes, rarely flooded	I	V	I
Nimmo, ALL	II	Ī	II
Nixonton very fine sandy loam	I	I	I
Osier fine sand, ALL	IV	I	IV
Othello, ALL	I	II	I
Ousley fine sand, ALL	IV	V	IV
Pactolus fine sand	IV	II	IV
Pasquotank, ALL	I	I	I
Paxville mucky fine sandy loam	II	III	II
Perquimans, ALL	I	I	I
Pettigrew muck, ALL	II	I	II
	IV	VI	IV
Pits, mine	+		1
Pocomoke, ALL	II	I	II
Ponzer, ALL	II	V	II
Portsmouth, ALL	I	I	I
Psamments, 0 to 6 percent slopes	IV	VI	IV

MLRA153B – Tidewater Area

Map Unit Name	Agri	For	Hort
Pungo muck, ALL	III	V	III
Roanoke, ALL	II	I	II
Roper muck, ALL	I	I	I
Sassafras loamy fine sand	II	I	II
Scuppernong muck, ALL	II	V	II
Seabrook, ALL	IV	II	IV
Seabrook-Urban land complex	IV	II	IV
Seagate fine sand	IV	II	IV
Seagate-Urban land complex	IV	II	IV
State fine sandy loam, ALL	I	I	I
State loamy fine sand, ALL	II	I	II
State sandy loam, ALL	I	I	I
State-Urban land complex, 0 to 2 percent slopes	IV	I	IV
Stockade loamy fine sand	I	III	I
Stockade mucky loam, ALL	IV	III	IV
Stono, ALL	I	I	I
Tarboro sand, ALL	IV	II	IV
Tidal marsh	IV	VI	IV
Tomotley fine sandy loam, ALL	I	I	I
Udorthents, ALL	IV	VI	IV
Urban land ALL	IV	VI	IV
Wahee, ALL	II	I	II
Wakulla sand, ALL	IV	V	IV
Wando, ALL	IV	II	IV
Wasda muck ALL	I	I	I
Weeksville loam, 0 to 2 percent slopes, frequently flooded	IV	I	IV
Weeksville, ALL OTHER	I	I	I
Wickham loamy sand, 0 to 4 percent slopes	II	I	II
Woodstown fine sandy loam	I	I	I
Wysocking very fine sandy loam, 0 to 3 percent slopes, rarely flooded	I	III	I
Yaupon fine sandy loam, 0 to 3 percent slopes	III	VI	III
Yeopim loam, 0 to 2 percent slopes	I	I	I
Yeopim loam, 2 to 6 percent slopes	II	I	II
Yeopim silt loam, ALL	I	I	I
Yonges, ALL	I	I	I

Standard on Mass Appraisal of Real Property

Approved July 2017

International Association of Assessing Officers

This standard replaces the January 2012 Standard on Mass Appraisal of Real Property and is a complete revision. The 2012 Standard on Mass Appraisal of Real Property was a partial revision that replaced the 2002 standard. The 2002 standard combined and replaced the 1983 Standard on the Application of the Three Approaches to Value in Mass Appraisal, the 1984 Standard on Mass Appraisal, and the 1988 Standard on Urban Land Valuation. IAAO assessment standards represent a consensus in the assessing profession and have been adopted by the Executive Board of IAAO. The objective of IAAO standards is to provide a systematic means by which concerned assessing officers can improve and standardize the operation of their offices. IAAO standards are advisory in nature and the use of, or compliance with, such standards is purely voluntary. If any portion of these standards is found to be in conflict with the Uniform Standards of Professional Appraisal Practice (USPAP) or state laws, USPAP and state laws shall govern.

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Contents

L. Scope	
2. Introduction	
B. Collecting and Maintaining Property Data	
3.1 Overview	
3.2 Geographic Data	
3.3 Property Characteristics Data	
3.3.1 Selection of Property Characteristics Data	
3.3.2 Data Collection	
3.3.2.1 Initial Data Collection	
3.3.2.2 Data Collection Format	
3.3.2.3 Data Collection Manuals	
3.3.2.4 Data Accuracy Standards	
3.3.2.5 Data Collection Quality Control	
3.3.3 Data Entry	
3.3.4 Maintaining Property Characteristics Data	
3.3.5 Alternative to Periodic On-Site Inspections	
3.4 Sales Data	
3.5 Income and Expense Data	
3.6 Cost and Depreciation Data	
. Valuation	
4.1 Valuation Models	
4.2 The Cost Approach	
4.3 The Sales Comparison Approach	
4.4 The Income Approach	
4.5 Land Valuation	
4.6 Considerations by Property Type	
4.6.1 Single-Family Residential Property	
4.6.2 Manufactured Housing	
4.6.3 Multifamily Residential Property	
4.6.4 Commercial and Industrial Property	
4.6.5 Nonagricultural Land	
4.6.6 Agricultural Property	
4.6.7 Special-Purpose Property	
4.7 Value Reconciliation	
4.8 Frequency of Reappraisals	
Model Testing, Quality Assurance, and Value Defense	
5.1 Model Diagnostics	
5.2 Sales Ratio Analyses	
5.2.1 Assessment Level	
5.2.2 Assessment Uniformity	
,	
5.3 Holdout Samples	
5.4 Documentation	
5.5 Value Defense	
Managerial and Space Considerations	
6.1 Overview	
6.2 Staffing and Space	
6.2.1 Staffing	
6.2.2 Space Considerations	
6.3 Data Processing Support	
6.3.1 Hardware	
6.3.2 Software	
6.3.2.1 Custom Software	
6.3.2.2 Generic Software	
6.4 Contracting for Appraisal Services	
6.5 Benefit-Cost Considerations	
6.5.1 Overview	
6.5.2 Policy Issues	
6.5.3 Administrative Issues	
. Reference Materials	
7.1 Standards of Practice	
7.2 Professional Library	1
References	·
Suggested Reading	1

Standard on Mass Appraisal of Real Property

1. Scope

This standard defines requirements for the mass appraisal of real property. The primary focus is on mass appraisal for ad valorem tax purposes. However, the principles defined here should also be relevant to CAMAs (CAMAs) (or automated valuation models) used for other purposes, such as mortgage portfolio management. The standard primarily addresses the needs of the assessor, assessment oversight agencies, and taxpayers.

This standard addresses mass appraisal procedures by which the fee simple interest in property can be appraised at market value, including mass appraisal application of the three traditional approaches to value (cost, sales comparison, and income). Single-property appraisals, partial interest appraisals, and appraisals made on an other-than-market-value basis are outside the scope of this standard. Nor does this standard provide guidance on determining assessed values that differ from market value because of statutory constraints such as use value, classification, or assessment increase limitations.

Mass appraisal requires complete and accurate data, effective valuation models, and proper management of resources. Section 2 introduces mass appraisal. Section 3 focuses on the collection and maintenance of property data. Section 4 summarizes the primary considerations in valuation methods, including the role of the three approaches to value in the mass appraisal of various types of property. Section 5 addresses model testing and quality assurance. Section 6 discusses certain managerial considerations: staff levels, data processing support, contracting for reappraisals, benefit-cost issues, and space requirements. Section 7 discusses reference materials.

2. Introduction

Market value for assessment purposes is generally determined through the application of mass appraisal techniques. Mass appraisal is the process of valuing a group of properties as of a given date and using common data, standardized methods, and statistical testing. To determine a parcel's value, assessing officers must rely upon valuation equations, tables, and schedules developed through mathematical analysis of market data. Values for individual parcels should not be based solely on the sale price of a property; rather, valuation schedules and models should be consistently applied to property data that are correct, complete, and up-to-date.

Properly administered, the development, construction, and use of a CAMA system results in a valuation system characterized by accuracy, uniformity, equity, reliability, and low per-parcel costs. Except for unique properties, individual analyses and appraisals of properties are not practical for ad valorem tax purposes.

3. Collecting and Maintaining Property Data

The accuracy of values depends first and foremost on the completeness and accuracy of property characteristics and market data. Assessors will want to ensure that their CAMA systems provide for the collection and maintenance of relevant land, improvement, and location features. These data must also be accurately and consistently collected. The CAMA system must also provide for the storage and processing of relevant sales, cost, and income and expense data.

3.1 Overview

Uniform and accurate valuation of property requires correct, complete, and up-to-date property data. Assessing offices must establish effective procedures for collecting and maintaining property data (i.e., property ownership, location, size, use, physical characteristics, sales price, rents, costs, and operating expenses). Such data are also used for performance audits, defense of appeals, public relations, and management information. The following sections recommend procedures for collecting these data.

3.2 Geographic Data

Assessors should maintain accurate, up-to-date cadastral maps (also known as assessment maps, tax maps, parcel boundary maps, and property ownership maps) covering the entire jurisdiction with a unique identification number for each parcel. Such cadastral maps allow assessing officers to identify and locate all parcels, both in the field and in the office. Maps become especially valuable in the mass appraisal process when a geographic information system (GIS) is used. A GIS permits graphic displays of sale prices, assessed values, inspection dates, work assignments, land uses, and much more. In addition, a GIS permits high-level analysis of nearby sales, neighborhoods, and market trends; when linked to a CAMA system, the results can be very useful. For additional information on cadastral maps, parcel identification systems, and GIS, see the Standard on Manual Cadastral Maps and Parcel Identifiers (IAAO 2016b), Standard on Digital Cadastral Maps and Parcel Identifiers (IAAO 2015), Procedures and Standards for a Multipurpose Cadastre (National Research Council 1983), and GIS Guidelines for Assessors (URISA and IAAO 1999).

3.3 Property Characteristics Data

The assessor should collect and maintain property characteristics data sufficient for classification, valuation, and other purposes. Accurate valuation of real property by any method requires descriptions of land and building characteristics.

3.3.1 Selection of Property Characteristics Data

Property characteristics to be collected and maintained should be based on the following:

- Factors that influence the market in the locale in question
- Requirements of the valuation methods that will be employed
- Requirements of classification and property tax policy
- Requirements of other governmental and private users
- Marginal benefits and costs of collecting and maintaining each property characteristic

Determining what data on property characteristics to collect and maintain for a CAMA system is a crucial decision with long-term consequences. A pilot program is one means of evaluating the benefits and costs of collecting and maintaining a particular set of property characteristics (see Gloudemans and Almy 2011, 46–49). In addition, much can be learned from studying the data used in successful CAMAs in other jurisdictions. Data collection and maintenance are usually the costliest aspects of a CAMA. Collecting data that are of little

importance in the assessment process should be avoided unless another governmental or private need is clearly demonstrated.

The quantity and quality of existing data should be reviewed. If the data are sparse and unreliable, a major recanvass will be necessary. Data that have been confirmed to be reliable should be used whenever possible. New valuation programs or enhancements requiring major recanvass activity or conversions to new coding formats should be viewed with suspicion when the existing database already contains most major property characteristics and is of generally good quality.

The following property characteristics are usually important in predicting residential property values:

Improvement Data

- Living area
- Construction quality or key components thereof (foundation, exterior wall type, and the like)
- Effective age or condition
- Building design or style
- Secondary areas including basements, garages, covered porches, and balconies
- Building features such as bathrooms and central airconditioning
- Significant detached structures including guest houses, boat houses, and barns

Land Data

- Lot size
- Available utilities (sewer, water, electricity)

Location Data

- Market area
- · Submarket area or neighborhood
- Site amenities, especially view and golf course or water frontage
- External nuisances, (e.g., heavy traffic, airport noise, or proximity to commercial uses).

For a discussion of property characteristics important for various commercial property types, see *Fundamentals of Mass Appraisal* (Gloudemans and Almy 2011, chapter 9).

3.3.2 Data Collection

Collecting property characteristics data is a critical and expensive phase of reappraisal. A successful data collection program requires clear and standard coding and careful monitoring through a quality control program. The development and use of a data collection manual is essential to achieving accurate and consistent data collection. The data collection program should result in complete and accurate data.

3.3.2.1 Initial Data Collection

A physical inspection is necessary to obtain initial property characteristics data. This inspection can be performed either by appraisers or by specially trained data collectors. In a joint approach, experienced appraisers make key subjective decisions, such as the assignment of construction quality class or grade, and data collectors gather all other details. Depending on the data required, an interior inspection might be necessary. At a minimum, a comprehensive exterior inspection should be conducted. Measurement is an important part of data collection.

3.3.2.2 Data Collection Format

Data should be collected in a prescribed format designed to facilitate both the collecting of data in the field and the entry of the data into the computer system.

A logical arrangement of the collection format makes data collection easier. For example, all items requiring an interior inspection should be grouped together. The coding of data should be as objective as possible, with measurements, counts, and check-off items used in preference to items requiring subjective evaluations (such as "number of plumbing fixtures" versus "adequacy of plumbing: poor, average, good"). With respect to check-off items, the available codes should be exhaustive and mutually exclusive, so that exactly one code logically pertains to each observable variation of a building feature (such as structure or roof type). The data collection format should promote consistency among data collectors, be clear and easy to use, and be adaptable to virtually all types of construction. Specialized data collection formats may be necessary to collect information on agricultural property, timberland, commercial and industrial parcels, and other property types.

3.3.2.3 Data Collection Manuals

A clear, thorough, and precise data collection manual is essential and should be developed, updated, and maintained. The written manual should explain how to collect and record each data item. Pictures, examples, and illustrations are particularly helpful. The manual should be simple yet complete. Data collection staff should be trained in the use of the manual and related updates to maintain consistency. The manual should include guidelines for personal conduct during field inspections, and if interior data are required, the manual should outline procedures to be followed when the property owner has denied access or when entry might be risky.

3.3.2.4 Data Accuracy Standards

The following standards of accuracy for data collection are recommended.

- Continuous or area measurement data, such as living area and exterior wall height, should be accurate within 1 foot (rounded to the nearest foot) of the true dimensions or within 5 percent of the area. (One foot equates to approximately 30 centimeters in the metric system.) If areas, dimensions, or volumes must be estimated, the property record should note the instances in which quantities are estimated.
- For each objective, categorical, or binary data field to be collected or verified, at least 95 percent of the coded entries should be accurate. Objective, categorical, or binary data characteristics include such attributes as exterior wall material, number of full bathrooms, and waterfront view. As an example, if a data collector captures 10 objective, categorical, or binary data items for 100 properties, at least 950 of the 1,000 total entries should be correct.
- For each subjective categorical data field collected or verified, data should be coded correctly at least 90 percent of the time. Subjective categorical data characteristics include data items such as quality grade, physical condition, and architectural style.
- Regardless of specific accuracy requirements, consistent measurement is important. Standards including national, local and regional practices exist to support consistent measurement. The standard of measurement should be documented as part of the process. (American Institute of Architects 1995; Marshall & Swift Valuation Service 2017; International Property Measurement Standards Coalition n.d.; Building Owners and Managers Association International 2017)

3.3.2.5 Data Collection Quality Control

A quality control program is necessary to ensure that data accuracy standards are achieved and maintained. Independent quality control inspections should occur immediately after the data collection phase begins and may be performed by jurisdiction staff, project consultants,

auditing firms, or oversight agencies. The inspections should review random samples of finished work for completeness and accuracy and keep tabulations of items coded correctly or incorrectly, so that statistical tests can be used to determine whether accuracy standards have been achieved. Stratification by geographic area, property type, or individual data collector can help detect patterns of data error. Data that fail to meet quality control standards should be recollected.

The accuracy of subjective data should be judged primarily by conformity with written specifications and examples in the data collection manual. The data reviewer should substantiate subjective data corrections with pictures or field notes.

3.3.3 Data Entry

To avoid duplication of effort, the data collection form should be able to serve as the data entry form. Data entry should be routinely audited to ensure accuracy.

Data entry accuracy should be as close to 100 percent as possible and should be supported by a full set of range and consistency edits. These are error or warning messages generated in response to invalid or unusual data items. Examples of data errors include missing data codes and invalid characters. Warning messages should also be generated when data values exceed normal ranges (e.g., more than eight rooms in a 1,200-square-foot residence). The warnings should appear as the data are entered. When feasible, action on the warnings should take place during data entry. Field data entry devices provide the ability to edit data as it is entered and also eliminate data transcription errors.

3.3.4 Maintaining Property Characteristics Data

Property characteristics data should be continually updated in response to changes brought about by new construction, new parcels, remodeling, demolition, and destruction. There are several ways of updating data. The most efficient method involves building permits. Ideally, strictly enforced local ordinances require building permits for all significant construction activity, and the assessor's office receives copies of the permits. This method allows the assessor to identify properties whose characteristics are likely to change, to inspect such parcels on a timely basis (preferably as close to the assessment date as possible), and to update the files accordingly.

Another method is aerial photography, which also can be helpful in identifying new or previously unrecorded construction and land use. Some jurisdictions use self-reporting, in which property owners review the assessor's records and submit additions or corrections. Information derived from multiple listing sources and other third-party vendors can also be used to validate property records.

Periodic field inspections can help ensure that property characteristics data are complete and accurate. Assuming that most new construction activity is identified through building permits or other ongoing procedures, a physical review including an on-site verification of property characteristics should be conducted at least every 4 to 6 years. Reinspections should include partial remeasurement of the two most complex sides of improvements and a walk around the improvement to identify additions and deletions. Photographs taken at previous physical inspections can help identify changes.

3.3.5 Alternative to Periodic On-site Inspections

Provided that initial physical inspections are timely completed and that an effective system of building permits or other methods of routinely identifying physical changes is in place, jurisdictions may employ a set of digital imaging technology tools to supplement field reinspections with a computer-assisted office review. These imaging tools should include the following:

- Current high-resolution street-view images (at a sub-inch pixel resolution that enables quality grade and physical condition to be verified)
- Orthophoto images (minimum 6-inch pixel resolution in urban/suburban and 12-inch resolution in rural areas, updated every 2 years in rapid-growth areas or 6–10 years in slow-growth areas)
- Low-level oblique images capable of being used for measurement verification (four cardinal directions, minimum 6-inch pixel resolution in urban/suburban and 12-inch pixel resolution in rural areas, updated every 2 years in rapid-growth areas or 6–10 years in slow-growth areas).

These tool sets may incorporate change detection techniques that compare building dimension data (footprints) in the CAMA system to georeferenced imagery or remote sensing data from sources (such as LiDAR [light detection and ranging]) and identify potential CAMA sketch discrepancies for further investigation.

Assessment jurisdictions and oversight agencies must ensure that images meet expected quality standards. Standards required for vendor-supplied images should be spelled out in the Request for Proposal (RFP) and contract for services, and images should be checked for compliance with specified requirements. For general guidance on preparing RFPs and contracting for vendor-supplied services, see the *Standard on Contracting for Assessment Services* [IAAO 2008].

In addition, appraisers should visit assigned areas on an annual basis to observe changes in neighborhood condition, trends, and property characteristics. An on-site physical review is recommended when significant construction changes are detected, a property is sold, or an area is affected by catastrophic damage. Building permits should be regularly monitored and properties that have significant change should be inspected when work is complete.

3.4 Sale Data

States and provinces should seek mandatory disclosure laws to ensure comprehensiveness of sale data files. Regardless of the availability of such statutes, a file of sale data must be maintained, and sales must be properly reviewed and validated. Sale data are required in all applications of the sales comparison approach, in the development of land values and market-based depreciation schedules in the cost approach, and in the derivation of capitalization rates or discount rates in the income approach. Refer to *Mass Appraisal of Real Property* (Gloudemans 1999, chapter 2) or *Fundamentals of Mass Appraisal* (Gloudemans and Almy 2011 chapter 2) for guidelines on the acquisition and processing of sale data.

3.5 Income and Expense Data

Income and expense data must be collected for income-producing property and reviewed by qualified appraisers to ensure their accuracy and usability for valuation analysis (see Section 4.4.). Refer to *Mass Appraisal of Real Property* (Gloudemans 1999, chapter 2) or *Fundamentals of Mass Appraisal* (Gloudemans and Almy 2011, chapter 2) for guidelines addressing the collection and processing of income and expense data.

3.6 Cost and Depreciation Data

Current cost and depreciation data adjusted to the local market are required for the cost approach (see Section 4.2). Cost and depreciation manuals and schedules can be purchased from commercial services or created in-house. See *Mass Appraisal of Real Property* (Gloudemans 1999, chapter 4) or *Fundamentals of Mass Appraisal* (Gloudemans and Almy 2011, 180–193) for guidelines on creating manuals and schedules.

4. Valuation

Mass appraisal analysis begins with assigning properties to use classes or strata based on highest and best use, which normally equates to current use. Some statutes require that property be valued for ad valorem tax purposes at current use regardless of highest and best use. Zoning and other land use controls normally dictate highest and best use of vacant land. In the absence of such restrictions, the assessor must determine the highest and best use of the land by analyzing the four components—legally permissible, physically possible, appropriately supported, and financially feasible—thereby resulting in the highest value. Special attention may be required for properties in transition, interim or nonconforming uses, multiple uses, and excess land.

4.1 Valuation Models

Any appraisal, whether single-property appraisal or mass appraisal, uses a model, that is, a representation in words or an equation of the relationship between value and variables representing factors of supply and demand. Mass appraisal models attempt to represent the market for a specific type of property in a specified area. Mass appraisers must first specify the model, that is, identify the supply and demand factors and property features that influence value, for example, square feet of living area. Then they must calibrate the model, that is, determine the adjustments or coefficients that best represent the value contribution of the variables chosen, for example, the dollar amount the market places on each square foot of living area. Careful and extensive market analysis is required for both specification and calibration of a model that estimates values accurately. Mass appraisal models apply to all three approaches to value: the cost approach, the sales comparison approach, and the income approach.

Valuation models are developed for defined property groups. For residential properties, geographic stratification is appropriate when the value of property attributes varies significantly among areas and each area is large enough to provide adequate sales. It is particularly effective when housing types and styles are relatively uniform within areas. Separate models are developed for each market area (also known as economic or model areas). Subareas or neighborhoods can serve as variables in the models and can also be used in land value tables and selection of comparable sales. (See *Mass Appraisal of Real Property* [Gloudemans 1999, 118–120] or *Fundamentals of Mass Appraisal* [Gloudemans and Almy 2011, 139–143] for guidelines on stratification.) Smaller jurisdictions may find it sufficient to develop a single residential model.

Commercial and income-producing properties should be stratified by property type. In general, separate models should be developed for apartment, warehouse/industrial, office, and retail properties. Large jurisdictions may be able to stratify apartment properties further by type or area or to develop multiple models for other income properties with adequate data.

4.2 The Cost Approach

The cost approach is applicable to virtually all improved parcels and, if used properly, can produce accurate valuations. The cost approach is more reliable for newer structures of standard materials, design, and workmanship. It produces an estimate of the value of the fee simple interest in a property.

Reliable cost data are imperative in any successful application of the cost approach. The data must be complete, typical, and current. Current construction costs should be based on the cost of replacing a structure with one of equal utility, using current materials, design, and building standards. In addition to specific property types, cost models should

include the cost of individual construction components and building items in order to adjust for features that differ from base specifications. These costs should be incorporated into a construction cost manual and related computer software. The software can perform the valuation function, and the manual, in addition to providing documentation, can be used when nonautomated calculations are required.

Construction cost schedules can be developed in-house, based on a systematic study of local construction costs, obtained from firms specializing in such information, or custom-generated by a contractor. Cost schedules should be verified for accuracy by applying them to recently constructed improvements of known cost. Construction costs also should be updated before each assessment cycle.

The most difficult aspects of the cost approach are estimates of land value and accrued depreciation. These estimates must be based on noncost data (primarily sales) and can involve considerable subjectivity. Land values used in the cost approach must be current and consistent. Often, they must be extracted from sales of improved property because sales of vacant land are scarce. Section 4.5 provides standards for land valuation in mass appraisal.

Depreciation schedules can be extracted from sales data in several ways. See *Mass Appraisal of Real Property* (Gloudemans 1999, chapter 4) or *Fundamentals of Mass Appraisal* (Gloudemans and Almy 2011, 189–192).

4.3 The Sales Comparison Approach

The sales comparison approach estimates the value of a subject property by statistically analyzing the sale prices of similar properties. This approach is usually the preferred approach for estimating values for residential and other property types with adequate sales.

Applications of the sales comparison approach include direct market models and comparable sales algorithms (see *Mass Appraisal of Real Property* [Gloudemans 1999, chapters 3 and 4], *Fundamentals of Mass Appraisal* [Gloudemans and Almy 2011, chapters 4 and 6], and the *Standard on Automated Valuation Models (AVMs)* [IAAO 2003]). Comparable sales algorithms are most akin to single-property appraisal applications of the sales comparison approach. They have the advantages of being familiar and easily explained and can compensate for less well-specified or calibrated models, because the models are used only to make adjustments to the selected comparables. They can be problematic if the selected comparables are not well validated or representative of market value. Because they predict market value directly, direct market models depend more heavily on careful model specification and calibration. Their advantages include efficiency and consistency, because the same model is directly applied against all properties in the model area.

Users of comparable sales algorithms should be aware that sales ratio statistics will be biased if sales used in the ratio study are used as comparables for themselves in model development. This problem can be avoided by (1) not using sales as comparables for themselves in modeling or (2) using holdout or later sales in ratio studies.

4.4 The Income Approach

In general, for income-producing properties, the income approach is the preferred valuation approach when reliable income and expense data are available, along with well-supported income multipliers, overall rates, and required rates of return on investment. Successful application of the income approach requires the collection, maintenance, and careful analysis of income and expense data.

Mass appraisal applications of the income approach begin with collecting and processing income and expense data. (These data should be expressed on an appropriate per-unit basis, such as per square foot or per apartment unit.) Appraisers should then compute normal or typical gross incomes, vacancy rates, net incomes, and expense ratios for various homogeneous strata of properties. These figures can be used to judge the reasonableness of reported data for individual parcels and to estimate income and expense figures for parcels with unreported data. Actual or

reported figures can be used as long as they reflect typical figures (or typical figures can be used for all properties).

Alternatively, models for estimating gross or net income and expense ratios can be developed by using actual income and expense data from a sample of properties and calibrated by using multiple regression analysis. For an introduction to income modeling, see Mass Appraisal of Real Property (Gloudemans 1999, chapter 3) or Fundamentals of Mass Appraisal (Gloudemans and Almy 2011, chapter 9). The developed income figures can be capitalized into estimates of value in a number of ways. The most direct method involves the application of gross income multipliers, which express the ratio of market value to gross income. At a more refined level, net income multipliers or their reciprocals, overall capitalization rates, can be developed and applied. Provided there are adequate sales, these multipliers and rates should be extracted from a comparison of actual or estimated incomes with sale prices (older income and sales data should be adjusted to the valuation date as appropriate). Income multipliers and overall rates developed in this manner tend to provide reliable, consistent, and readily supported valuations when good sales and income data are available. When adequate sales are not available, relevant publications and local market participants can be consulted.

4.5 Land Valuation

State or local laws may require the value of an improved parcel to be separated into land and improvement components. When the sales comparison or income approach is used, an independent estimate of land value can be made and subtracted from the total property value to obtain a residual improvement value. Some computerized valuation techniques provide a separation of total value into land and building components.

Land values should be reviewed annually. At least once every 4 to 6 years the properties should be physically inspected and revalued. The sales comparison approach is the primary approach to land valuation and is always preferred when sufficient sales are available. In the absence of adequate sales, other techniques that can be used in land appraisal include allocation, abstraction, anticipated use, capitalization of ground rents, and land residual capitalization. (See *Mass Appraisal of Real Property* [Gloudemans 1999, chapter 3] or *Fundamentals of Mass Appraisal* [Gloudemans and Almy 2011, 178–180].)

4.6 Considerations by Property Type

The appropriateness of each valuation approach varies with the type of property under consideration. Table 1 ranks the relative usefulness of the three approaches in the mass appraisal of major types of properties. The table assumes that there are no major statutory barriers to using all three approaches or to obtaining cost, sales, and income data. Although relying only on the single best approach for a given type of property can have advantages in terms of efficiency and consistency, the use of two or more approaches provides helpful cross-checks and flexibility and can thus produce greater accuracy, particularly for less typical properties.

Table 1. Rank of typical usefulness of the three approaches to value in the mass appraisal of major types of property

Type of Property	Cost Approach	Sales Comparison Approach	Income Approach
Single-family residential	2	1	3
Multifamily residential	3	1, 2	1, 2
Commercial	3	2	1
Industrial	1,2	3	1, 2
Nonagricultural land	_	1	2
Agriculturala	_	2	1
Special-purpose ^b	1	2,3	2,3

^a Includes farm, ranch, and forest properties.

4.6.1 Single-Family Residential Property

The sales comparison approach is the best approach for single-family residential property, including condominiums. Automated versions of this approach are highly efficient and generally accurate for the majority of these properties. The cost approach is a good supplemental approach and should serve as the primary approach when the sales data available are inadequate. The income approach is usually inappropriate for mass appraisal of single-family residential properties, because most of these properties are not rented.

4.6.2 Manufactured Housing

Manufactured or *mobile* homes can be valued in a number of ways depending on the local market and ownership status. Often mobile homes are purchased separately and situated on a rented space in a mobile home park. In this case the best strategy is to model the mobile homes separately from the land. At other times mobile homes are situated on individual lots and bought and sold similar to stick-built homes. Particularly in rural areas they may be intermixed with stick-built homes. In these cases, they can be modeled in a manner similar to that for other residential properties and included in the same models, as long as the model includes variables to distinguish them and recognize any relevant differences from other homes (e.g., mobile homes may appreciate at a rate different from that for stick-built homes).

4.6.3 Multifamily Residential Property

The sales comparison and income approaches are preferred in valuing multifamily residential property when sufficient sales and income data are available. Multiple regression analysis (MRA) and related techniques have been successfully used in valuing this property type. Where adequate sales are available, direct sales models can be used. MRA also can be used to calibrate different portions of the income approach, including the estimation of market rents and development of income multipliers or capitalization rates. As with other residential property, the cost approach is useful in providing supplemental valuations and can serve as the primary approach when good sales and income data are not available.

4.6.4 Commercial and Industrial Property

The income approach is the most appropriate method in valuing commercial and industrial property if sufficient income data are available. Direct sales comparison models can be equally effective in large jurisdictions with sufficient sales. When a sufficient supply of sales data and income data is not available, the cost approach should be

^b Includes institutional, governmental, and recreation properties.

applied. However, values generated should be checked against available sales data. Cost factors, land values, and depreciation schedules must be kept current through periodic review.

4.6.5 Nonagricultural Land

The sales comparison approach is preferred for valuing nonagricultural land. Application of the sales comparison approach to vacant land involves the collection of sales data, the posting of sales data on maps, the calculation of standard unit values (such as value per square foot, per front foot, or per parcel) by area and type of land use, and the development of land valuation maps or computer-generated tables in which the pattern of values is displayed. When vacant land sales are not available or are few, additional benchmarks can be obtained by subtracting the replacement cost new less depreciation of improvements from the sale prices of improved parcels. The success of this technique requires reliable cost data and tends to work best for relatively new improvements, for which depreciation is minimal.

Another approach is a *hybrid* model decomposable into land and building values. Although these models can be calibrated from improved sales alone, separation of value between land and buildings is more reliable when both vacant and improved sales are available.

4.6.6 Agricultural Property

If adequate sales data are available and agricultural property is to be appraised at market value, the sales comparison approach is preferred. However, most states and provinces provide for the valuation of agricultural land at use value, making the sales comparison approach inappropriate for land for which market value exceeds use value. Thus, it is often imperative to obtain good income data and to use the income approach for agricultural land. Land rents are often available, sometimes permitting the development and application of overall capitalization rates. Many states and provinces have soil maps that assign land to different productivity classes for which typical rents can be developed. Cost tables can be used to value agricultural buildings.

4.6.7 Special-Purpose Property

The cost approach tends to be most appropriate in the appraisal of special-purpose properties, because of the distinctive nature of such properties and the general absence of adequate sales or income data.

4.7 Value Reconciliation

When more than one approach or model is used for a given property group, the appraiser must determine which to use or emphasize. Often this can be done by comparing ratio study statistics. Although there are advantages to being consistent, sometimes an alternative approach or method is more reliable for special situations and atypical properties. CAMA systems should allow users to document the approach or method being used for each property.

4.8 Frequency of Reappraisals

Section 4.2.2 of the *Standard on Property Tax Policy* (IAAO 2010) states that current market value implies annual assessment of all property. Annual assessment does not necessarily mean, however, that each property must be re-examined each year. Instead, models can be recalibrated, or market adjustment factors derived from ratio studies or other market analyses applied based on criteria such as property type, location, size, and age.

Analysis of ratio study data can suggest groups or strata of properties in greatest need of physical review. In general, market adjustments can be highly effective in maintaining equity when appraisals are uniform within strata and recalibration can provide even greater accuracy. However, only physical reviews can correct data errors and, as stated in

Sections 3.3.4 and 3.3.5, property characteristics data should be reviewed and updated at least every 4 to 6 years. This can be accomplished in at least three ways:

- Reinspecting all property at periodic intervals (i.e., every 4 to 6 years)
- Reinspecting properties on a cyclical basis (e.g., one-fourth or one-sixth each year)
- Reinspecting properties on a priority basis as indicated by ratio studies or other considerations while still ensuring that all properties are examined at least every sixth year

5. Model Testing, Quality Assurance, and Value Defense

Mass appraisal allows for model testing and quality assurance measures that provide feedback on the reliability of valuation models and the overall accuracy of estimated values. Modelers and assessors must be familiar with these diagnostics so they can evaluate valuation performance properly and make improvements where needed.

5.1 Model Diagnostics

Modeling software contains various statistical measures that provide feedback on model performance and accuracy. MRA software contains multiple sets of diagnostic tools, some of which relate to the overall predictive accuracy of the model and some of which relate to the relative importance and statistical reliability of individual variables in the model. Modelers must understand these measures and ensure that final models not only make appraisal sense but also are statistically sound.

5.2 Sales Ratio Analyses

Regardless of how values were generated, sales ratio studies provide objective, bottom-line indicators of assessment performance. The IAAO literature contains extensive discussions of this important topic, and the *Standard on Ratio Studies* (2013) provides guidance for conducting a proper study. It also presents standards for key ratio statistics relating to the two primary aspects of assessment performance: level and uniformity. The following discussion summarizes these standards and describes how the assessor can use sales ratio metrics to help ensure accurate, uniform values.

5.2.1 Assessment Level

Assessment level relates to the overall or general level of assessment of a jurisdiction and various property classes, strata, and groups within the jurisdiction. Each group must be assessed at market value as required by professional standards and applicable statutes, rules, and related requirements. The three common measures of central tendency in ratio studies are the median, mean, and weighted mean. The *Standard on Ratio Studies* (2013) stipulates that the median ratio should be between 0.90 and 1.10 and provides criteria for determining whether it can be concluded that the standard has not been achieved for a property group. Current, up-to-date valuation models, schedules, and tables help ensure that assessment levels meet required standards, and values can be statistically adjusted between full reappraisals or model recalibrations to ensure compliance.

5.2.2 Assessment Uniformity

Assessment uniformity relates to the consistency and equity of values. Uniformity has several aspects, the first of which relates to consistency in assessment levels between property groups. It is important to ensure, for example, that residential and commercial properties are appraised at similar percentages of market value (regardless of the legal assessment ratios that may then be applied) and that residential assessment levels are consistent among neighborhoods, construction classes, age groups, and size groups. Consistency among property groups can be evaluated by comparing measures of central tendency calculated for each group.

Various graphs can also be used for this purpose. The *Standard on Ratio Studies* (IAAO 2013) stipulates that the level of appraisal for each major group of properties should be within 5 percent of the overall level for the jurisdiction and provides criteria for determining whether it can be concluded from ratio data that the standard has not been met.

Another aspect of uniformity relates to the consistency of assessment levels within property groups. There are several such measures, the preeminent of which is the coefficient of dispersion (COD), which represents the average percentage deviation from the median ratio. The lower the COD, the more uniform the ratios within the property group. In addition, uniformity can be viewed spatially by plotting sales ratios on thematic maps.

The Standard on Ratio Studies (IAAO 2013) provides the following standards for the COD:

- Single-family homes and condominiums: CODs of 5 to 10 for newer or fairly similar residences and 5 to 15 for older or more heterogeneous areas
- Income-producing properties: CODs of 5 to 15 in larger, urban areas and 5 to 20 in other areas
- Vacant land: CODs of 5 to 20 in urban areas and 5 to 25 in rural or seasonal recreation areas
- Rural residential, seasonal, and manufactured homes: CODs of 5 to 20.

The entire appraisal staff must be aware of and monitor compliance with these standards and take corrective action where necessary. Poor uniformity within a property group is usually indicative of data problems or deficient valuation procedures or tables and cannot be corrected by application of market adjustment factors.

A final aspect of assessment uniformity relates to equity between lowand high-value properties. Although there are statistical subtleties that can bias evaluation of price-related uniformity, the IAAO literature (see particularly *Fundamentals of Mass Appraisal* [Gloudemans and Almy 2011, 385–392 and Appendix B] and the *Standard on Ratio Studies* [IAAO 2013]) provides guidance and relevant measures, namely, the price-related differential (PRD) and coefficient of price-related bias (PRB).

The PRD provides a simple gauge of price-related bias. The *Standard on Ratio Studies* (IAAO 2013) calls for PRDs of 0.98 to 1.03. PRDs below 0.98 tend to indicate assessment progressivity, the condition in which assessment ratios increase with price. PRDs above 1.03 tend to indicate assessment regressivity, in which assessment ratios decline with price. The PRB indicates the percentage by which assessment ratios change whenever values double or are halved. For example, a PRB of -0.03 would mean that assessment levels fall by 3 percent when value doubles. The *Standard on Ratio Studies* calls for PRBs of -0.05 to +0.05 and regards PRBs outside the range of -0.10 to +0.10 as unacceptable.

Because price is observable only for sale properties, there is no easy correction for the PRB, which is usually due to problems in valuation models and schedules. Sometimes other ratio study diagnostics will provide clues. For example, high ratios for lower construction classes may indicate that base rates should be reduced for those classes, which should in turn improve assessment ratios for low-value properties.

5.3 Holdout Samples

Holdout samples are validated sales that are not used in valuation but instead are used to test valuation performance. Holdout samples should be randomly selected with a view to obtaining an adequate sample while ensuring that the number of sales available for valuation will provide

reliable results for the range of properties that must be valued (holdout samples of 10 to 20 percent are typical). If too few sales are available, later sales can be validated and used for the same purpose. (For a method of using sales both to develop and test valuation models, see "The Use of Cross-validation in CAMA Modeling to Get the Most Out of Sales" (Jensen 2011).

Since they were not used in valuation, holdout samples can provide more objective measures of valuation performance. This can be particularly important when values are not based on a common algorithm as cost and MRA models are. Manually assigning land values, for example, might produce sales ratio statistics that appear excellent but are not representative of broader performance for both sold and unsold properties. Comparable sales models that value a sold property using the sale of a property as a comparable for itself can produce quite different results when tested on a holdout group.

When a new valuation approach or technique is used for the first time, holdout sales can be helpful in validating use of the new method. In general, however, holdout samples are unnecessary as long as valuation models are based on common algorithms and schedules and the value assigned to a sale property is not a function of its price. Properly validated later sales can provide follow-up performance indicators without compromising the number of sales available for valuation.

5.4 Documentation

Valuation procedures and models should be documented. Appraisal staff should have at least a general understanding of how the models work and the various rates and adjustments made by the models. Cost manuals should be current and contain the rates and adjustments used to value improvements by the cost approach. Similarly, land values should be supported by tables of rates and adjustments for features such as water frontage, traffic, and other relevant influences. MRA models and other sales comparison algorithms should document final equations and should be reproducible, so that rerunning the model produces the same value. Schedules of rental rates, vacancy rates, expense ratios, income multipliers, and capitalization rates should document how values based on the income approach were derived.

It can be particularly helpful to prepare a manual, booklet, or report for each major property type that provides a narrative summary of the valuation approach and methodology and contains at least the more common rates and adjustments. Examples of how values were computed for sample properties can be particularly helpful. The manuals serve as a resource for current staff and can be helpful in training new staff or explaining the valuation process to other interested parties. Once prepared, the documents should be updated when valuation schedules change or methods and calculation procedures are revised.

5.5 Value Defense

The assessment office staff must have confidence in the appraisals and be able to explain and defend them. This confidence begins with application of reliable appraisal techniques, generation of appropriate valuation reports, and review of preliminary values. It may be helpful to have reports that list each parcel, its characteristics, and its calculated value. Parcels with unusual characteristics, extreme values, or extreme changes in values should be identified for subsequent individual review. Equally important, summary reports should show average values, value changes, and ratio study statistics for various strata of properties. These should be reviewed to ensure the overall consistency of values for various types of property and various locations. (See the *Uniform Standards of Professional Appraisal Practice*, Standards Rule 6-7, for reporting requirements for mass appraisals [The Appraisal Foundation 2012–2013].)

The staff should also be prepared to support individual valuations as required, preferably through comparable sales. At a minimum, staff should be able to produce a property record and explain the basic

approach (cost, sales comparison, or income) used to estimate the value of the property. A property owner should never be told simply that "the computer" or "the system" produced the appraisal. In general, the staff should tailor the explanation to the taxpayer's knowledge and expertise. Equations converted to tabular form can be used to explain the basis for valuation. In all cases, the assessment office staff should be able to produce sales or appraisals of similar properties in order to support (or at least explain) the valuation of the property in question. Comparable sales can be obtained from reports that list sales by such features as type of property, area, size, and age. Alternatively, interactive programs can be obtained or developed that identify and display the most comparable properties.

Assessors should notify property owners of their valuations in sufficient time for property owners to discuss their appraisals with the assessor and appeal the value if they choose to do so (see the *Standard on Public Relations* [IAAO 2011]). Statutes should provide for a formal appeals process beyond the assessor's level (see the *Standard on Assessment Appeal* [IAAO 2016a]).

6. Managerial and Space Considerations

6.1 Overview

Mass appraisal requires staff, technical, and other resources. This section discusses certain key managerial and facilities considerations.

6.2 Staffing and Space

A successful in-house appraisal program requires trained staff and adequate facilities in which to work and meet with the public.

6.2.1 Staffing

Staff should comprise persons skilled in general administration, supervision, appraisal, mapping, data processing, and secretarial—and clerical functions. Typical staffing sizes and patterns for jurisdictions of various sizes are illustrated in *Fundamentals of Mass Appraisal* (Gloudemans and Almy 2011, 22–25). Staffing needs can vary significantly based on factors such as frequency of reassessments.

6.2.2 Space Considerations

The following minimum space standards are suggested for managerial, supervisory, and support staff:

- Chief assessing officer (e.g., Assessor, director)—a private office, enclosed by walls or windows extending to the ceiling, of 200 square feet (18 to 19 square meters)
- Management position (e.g., chief deputy assessor, head of a division in a large jurisdiction, and so on)—a private office, enclosed by walls or windows extending to the ceiling, of 170 square feet (15 to 16 square meters)
- Supervisory position (head of a section, unit, or team of appraisers, mappers, analysts, technicians, or clerks)—a private office or partitioned space of 150 square feet (14 square meters)
- Appraisers and technical staff—private offices or at least partitioned, quiet work areas of 50 to 100 square feet (5 to 10 square meters), not including aisle and file space, with a desk and chair
- *Support staff*—adequate workspace, open or partitioned, to promote intended work functions and access.

In addition, there should be adequate space for

- File storage and access
- Training and meetings

- · Mapping and drafting
- Public service areas
- Printing and photocopy equipment
- Library facilities.

6.3 Data Processing Support

CAMAs require considerable data processing support.

6.3.1 Hardware

The hardware should be powerful enough to support applications of the cost, sales comparison, and income approaches, as well as data maintenance and other routine operations. Data downloading, mass calculations, GIS applications, and Web support tend to be the most computer-intensive operations. Processing speed and efficiency requirements should be established before hardware acquisition. Computer equipment can be purchased, leased, rented, or shared with other jurisdictions. If the purchase option is chosen, the equipment should be easy to upgrade to take advantage of technological developments without purchasing an entirely new system.

6.3.2 Software

CAMA software can be developed internally, adapted from software developed by other public agencies, or purchased (in whole or in part) from private vendors. (Inevitably there will be some tailoring needed to adapt externally developed software to the requirements of the user's environment.) Each alternative has advantages and disadvantages. The software should be designed so that it can be easily modified; it should also be well documented, at both the appraiser/user and programmer levels.

CAMA software works in conjunction with various general-purpose software, typically including word processing, spreadsheet, statistical, and GIS programs. These programs and applications must be able to share data and work together cohesively.

Security measures should exist to prevent unauthorized use and to provide backup in the event of accidental loss or destruction of data.

6.3.2.1 Custom Software

Custom software is designed to perform specific tasks, identified by the jurisdiction, and can be specifically tailored to the user's requirements. The data screens and processing logic can often be customized to reflect actual or desired practices, and the prompts and help information can be tailored to reflect local terminology and convention.

After completing the purchase or license requirements, the jurisdiction should retain access to the program source code, so other programmers are able to modify the program to reflect changing requirements.

The major disadvantages of custom software are the time and expense of writing, testing, and updating. Particular attention must be paid to ensuring that user requirements are clearly conveyed to programmers and reflected in the end product, which should not be accepted until proper testing has been completed. Future modifications to programs, even those of a minor nature, can involve system administrator approval and can be a time-consuming, costly, and rigorous job. (See *Standard on Contracting for Assessment Services* [IAAO 2008].)

6.3.2.2 Generic Software

An alternative to custom software is generic software, of which there are two major types: vertical software, which is written for a specific industry, and horizontal software, which is written for particular applications regardless of industry. Examples of the latter include database, spreadsheet, word processing, and statistical software. Although the actual instruction code within these programs cannot be modified, they typically permit the user to create a variety of customized

templates, files, and documents that can be processed. These are often referred to as commercial off-the-shelf software (COTS) packages.

Generic vertical software usually requires modification to fit a jurisdiction's specific needs. In considering generic software, the assessor should determine

- System requirements
- The extent to which the software meets the agency's needs
- A timetable for implementation
- How modifications will be accomplished
- The level of vendor support
- Whether the source code can be obtained.

(See Standard on Contracting for Assessment Services [IAAO 2008].)

Horizontal generic software is more flexible, permitting the user to define file structures, relational table layout, input and output procedures, including form or format, and reports. Assessment offices with expertise in such software (which does not imply a knowledge of programming) can adapt it for

- Property (data) file maintenance
- Market research and analysis
- Valuation modeling and processing
- Many other aspects of assessment operations.

Horizontal generic software is inexpensive and flexible. However, it requires considerable customization to adapt it to local requirements. Provisions should be made for a sustainable process that is not overly dependent on a single person or resource.

6.4 Contracting for Appraisal Services

Reappraisal contracts can include mapping, data collection, data processing, and other services, as well as valuation. They offer the potential of acquiring professional skills and resources quickly. These skills and resources often are not available internally. Contracting for these services not only can allow the jurisdiction to maintain a modest staff and to budget for reappraisal on a periodic basis, but also makes the assessor less likely to develop in-house expertise. (See the *Standard on Contracting for Assessment Services* [IAAO 2008].)

6.5 Benefit-Cost Considerations

6.5.1 Overview

The object of mass appraisal is to produce equitable valuations at low costs. Improvements in equity often require increased expenditures.

Benefit-cost analysis in mass appraisal involves two major issues: policy and administration.

6.5.2 Policy Issues

An assessment jurisdiction requires a certain expenditure level simply to inventory, list, and value properties. Beyond that point, additional expenditures make possible rapid improvements in equity initially, but marginal improvements in equity diminish as expenditures increase. At a minimum, jurisdictions should budget to meet statutory requirements and the performance standards contained in the *Standard on Ratio Studies* (IAAO 2013) and summarized in Section 5.2.

6.5.3 Administrative Issues

Maximizing equity per dollar of expenditure is the primary responsibility of assessment administration. To maximize productivity, the assessor and managerial staff must effectively plan, budget, organize, and control operations and provide leadership. This must be accomplished within the

office's legal, fiscal, economic, and social environment and constraints (Eckert, Gloudemans, and Kenyon 1990, chapter 16).

7. Reference Materials

Reference materials are needed in an assessment office to promote compliance with laws and regulations, uniformity in operations and procedures, and adherence to generally accepted assessment principles and practices.

7.1 Standards of Practice

The standards of practice may incorporate or be contained in laws, regulations, policy memoranda, procedural manuals, appraisal manuals and schedules, standard treatises on property appraisal and taxation (see section 6.2). Written standards of practice should address areas such as personal conduct, collection of property data, coding of information for data processing. The amount of detail will vary with the nature of the operation and the size of the office.

7.2 Professional Library

Every assessment office should have access to a comprehensive professional library that contains the information staff needs. A resource library may be digital or physical and should include the following:

- Property tax laws and regulations
- IAAO standards
- Historical resources
- Current periodicals
- Manuals and schedules
- Equipment manuals and software documentation.

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IAAO Code of Ethics and Standards of Professional Conduct

Preamble

Members and certificants (referred to herein collectively as "members") of the International Association of Assessing Officers ("IAAO"), as well as non-members of IAAO involved in IAAO activities, should conduct themselves in a professional manner that reflects favorably upon themselves, the organization, the appraisal profession, and the property tax system, and should avoid any action that could discredit themselves or these entities. They should exhibit appropriate professional conduct in their interactions with all individuals whom they encounter in connection with their professional roles, including colleagues, employees, clients, and owners of property subject to assessment.

This Code of Ethics and Standards of Professional Conduct (the "Code") establishes the minimum standards of conduct to which all IAAO members must adhere. We must do more, however, than simply obey the rules. Public trust in our performance is the foundation of our credibility. We must therefore embrace the highest ethical principles, and the pursuit of excellence, accountability, transparency, inclusivity, and responsiveness must be integral to our behavior. This is embodied in the IAAO Statement of Values, which serves as a foundation for the Code.

IAAO Core Values

The core values of the International Association of Assessing Officers include the following:

- We are committed to diversity, equity, and inclusion.
- We embrace transparency, integrity, honesty, and stewardship of resources.
- We respect the worth and dignity of all individuals.
- We are dedicated to excellence in assessment administration and the property tax system worldwide.
- We are accountable to the public good.
- We encourage the appropriate use of technology and tools for fair and equitable assessment administration.

These core values are reflected in the following Code of the International Association of Assessing Officers.

I. The Code

This Code sets out Canons of Ethics, to which all members should strive to adhere in their professional roles and in their activities as a member of IAAO. Each Canon is accompanied by enforceable Ethical Rules. Violation of an Ethical Rule, supplying misleading or false information to the Ethics Committee or refusing to cooperate with an Ethics Committee proceeding may subject a member to disciplinary action, sanction, or revocation of membership.

Exceptions

If compliance with or adherence to any Canon or Ethical Rule set forth in the Code would constitute a violation of the law of any jurisdiction, such Canon or Ethical Rule shall be void and of no force or effect in such jurisdiction.

In stating each individual Canon or Ethical Rule, no attempt has been made to enumerate all of the various circumstances and conditions that will excuse an IAAO member from strict observance; however, IAAO recognizes that illness, acts of God, and various other events beyond the control of an IAAO member may make it inequitable to insist upon a strict observance in a particular case. When an IAAO member, in the exercise of reasonable care, commits a violation due to illness, acts of God, or other circumstances beyond their control, it is expected that the Ethics Committee will act in a manner that will avoid an inequitable result.

Canon 1: Professional Duties

Members shall conduct their professional duties and any activities as a member of IAAO in a manner that reflects credit upon themselves, their profession and the organization.

Ethical Rules

- ER 1-1 Members shall not conduct their professional duties in a manner that could reasonably be expected to create the appearance of impropriety.
- ER 1-2 Members shall not accept an appraisal or assessment-related assignment which they are not qualified to perform.
- ER 1-3 Members shall follow local laws and regulations relating to the appraisal, assessment, and taxation of property within their jurisdictions.
- ER 1-4 Members must make available all public records in their custody for public review, unless access to such records is specifically limited or prohibited by law, or the information has been obtained on a confidential basis and the law permits such information to be treated confidentially.
- ER 1-5 Members must make reasonable efforts to inform the public about their rights and responsibilities under the law and the property tax system.
- ER 1-6 Members shall cooperate with public officials to improve the efficiency and effectiveness of the property tax system, and of public administration in general.
- ER 1-7 Members shall not engage in misconduct of any kind that leads to a conviction, guilty plea, or no contest plea, for a crime directly related to the member's professional role or involving fraud, dishonesty, or false statements, or for which the underlying facts relating to the conviction constitute a violation of these Canons or Ethical Rules.

ER 1-8 Members shall not violate an applicable law in the performance of a member's professional role or in interactions with those a member encounters in connection with the member's professional role, including laws prohibiting harassment, discrimination, or retaliation in the workplace.

ER 1-9 Members shall not engage in harassment, discrimination, or retaliation in connection to IAAO activities.

Canon 2: Truthfulness

Members shall not make false or misleading statements (written or oral) in the course of performing their professional duties.

Ethical Rules

- ER 2-1 Members shall not provide inaccurate, untruthful, or misleading information to solicit assessment-related assignments or use misleading claims or promises of relief.
- ER 2-2 Members shall not claim or imply that they have specific qualifications unless they in fact have such qualifications.
- ER 2-3 Members shall not claim, imply, or hold themselves out as having an IAAO professional designation unless authorized by IAAO to do so.
- ER 2-4 Members shall provide appropriate attribution to the source(s) of any materials quoted or cited in writings or speeches.

Canon 3: Conflict of Interest

Members shall not engage in any activities in which they have, or may reasonably be considered by the public as having, a conflict of interest.

Ethical Rules

- ER 3-1 Members shall not accept an appraisal or assessment-related assignment that can reasonably be construed as being in conflict with their responsibility to their jurisdiction, employer, or client, or in which they have an unrevealed personal interest or bias.
- ER 3-2 Members shall not accept an assignment or responsibility in which there is a personal interest (whether individually or of a member's family or close personal connection) without full disclosure of that interest.
- ER 3-3 Members shall not accept an assignment or participate in an activity where the member is or could reasonably be perceived as being unable to conduct the assignment or activity in an unbiased, objective manner.

Canon 4: Support of IAAO

Members shall abide by and support the provisions of the IAAO governing documents, rules, and policies.

Ethical Rules

ER 4-1 Members shall not violate the IAAO governing documents, rules, or policies.

ER 4-2 Members shall not knowingly make false statements or submit misleading information when completing an IAAO application for membership or professional designation, and shall promptly submit any significant information in the possession of such member when requested to do so as part of an IAAO application.

ER 4-3 Members shall cooperate fully with the IAAO Board of Directors, Ethics Committee and the staff of IAAO in all matters related to the enforcement of this Code, as set forth in the IAAO governing documents and specific rules and procedures for enforcement, as may be adopted and amended by the Board of Directors from time to time, including by timely providing complete and accurate information as requested.

ER 4-4 Members shall submit promptly any significant information in the possession of a member concerning the status of litigation related to an ethics matter when requested to do so by the chair of the Ethics Committee; and shall not knowingly submit misleading information to the chair of the Ethics Committee concerning the status of litigation.

ER 4-5 Members shall not knowingly provide any false information to the IAAO, or cheat or assist another in cheating in connection with any course or examination, including any IAAO professional designation test.

Canon 5: Compliance with Appropriate Professional Practice Standards

Members shall comply with the applicable standards of practice in their jurisdiction.

Ethical Rules

ER 5-1 Members in the United States shall observe the requirements of the *Uniform Standards of Professional Appraisal Practice* and members residing outside the United States shall follow appraisal standards that govern appraisers within their jurisdiction.

II. ENFORCEMENT

Anyone who believes that an IAAO member has violated the IAAO Code of Ethics may submit a written complaint to IAAO.

IAAO may also initiate a review of a member's actions or behavior without the filing of a formal complaint.

Filing a Complaint

Formal complaints or allegations shall be signed by the complainant and officially filed at IAAO Headquarters within one year of the alleged violation. The complaint or allegation shall include the following information:

- The name of the person(s) submitting the complaint and the name and any other identifying detail (e.g., title, jurisdiction) of the person(s) ["respondent(s)"] alleged to have committed the violation.
- A description of the event, including the date and circumstances of the alleged violation.
- A statement explaining any relevant prior interactions or professional or personal relationship that the person filing has with the person(s) named in the complaint.
- Names and contact information of witnesses, if applicable.

To the extent practical, the complainant should provide details, specific facts, and documentation of the allegations. Additionally, the complainant(s) should provide their contact information, including a phone number and email address.

The complaint shall also include the following statement:

I authorize IAAO to contact me regarding this complaint, if deemed necessary. I authorize IAAO to release this complaint and all other supporting material I have provided, or may provide in the future, to the subject of the complaint, members of IAAO's Ethics Committee, the IAAO Board of Directors, IAAO's attorney(s), and others as deemed appropriate by IAAO or as required by law.

The complainant may include verifiable supporting documentation, including signed witness statements. Complaints shall be submitted to IAAO's Headquarters using the *Code of Ethics Complaint Form*.

IAAO has the sole discretion to determine which complaints should be pursued, how they should be pursued, and what action, if any, should be taken. IAAO may also, in its sole discretion, defer review of, or action on, a complaint unless and until the allegations have been investigated by a third-party entity with jurisdiction over the actions and greater investigative authority than IAAO, such as the member's employer or a court.

Process of Evaluating Violations

Upon receiving a complaint, the IAAO Executive Director will conduct a preliminary review to determine whether the complaint, on its face, alleges a violation of the IAAO Code of Ethics. In conducting this preliminary review of a complaint, the IAAO Executive Director may communicate with complainant to clarify or request more information, and/or may supplement the complaint with information that it develops through its own investigation but has no obligation to do so.

If, based on the preliminary review of the complaint, the allegation does not indicate a violation of IAAO's Code of Ethics (e.g., because it relates to matters outside the scope of this Code of Ethics or the conduct does not rise to the level of a violation), the IAAO Executive Director may administratively close the complaint without further action. The complainant and respondent will be notified of this closure. The complainant has the right to appeal the Executive Director's decision, in writing, to IAAO Headquarters within 30 calendar days. In that event, IAAO's Ethics Committee will conduct an independent review and determine whether to uphold the dismissal of the complaint or return the matter to the Executive Director for initiation of a full disciplinary proceeding. The complainant and respondent will be notified of the Ethics Committee's decision.

If the IAAO Executive Director determines the allegation presents evidence of a violation of the Code of Ethics, the IAAO Executive Director shall convene the Ethics Committee and share the complaint with them for further review. The IAAO Executive Director shall also forward the complaint to the respondent unless the Ethics Committee determines that consideration of the complaint should be deferred.

The respondent shall have 30 calendar days from the date of notice of a complaint to respond in writing to the allegations. The respondent should provide a full statement of relevant facts and verifiable supporting documentation, which may include signed witness statements. If the respondent does not respond to the notice or dispute the allegations within 30 calendar days, the allegations against the respondent in the complaint may be deemed to be fact. While the Ethics Committee or the IAAO Executive Director may seek additional information, it is not the duty of the Ethics Committee or any other representative of IAAO to find evidence outside the case presented by the complainant. All submissions from the complainant or respondent and any other information presented to the Ethics Committee for consideration shall be provided to the respondent before the Ethics Committee hearing or determination of the case.

The respondent may also request a virtual hearing on the matter before the Ethics Committee. The respondent may provide a brief statement and respond to questions from the Ethics Committee. The hearing will not include witnesses. If the respondent is represented by an attorney, the attorney may share the respondent's time for presenting a statement but may not appear in lieu of the respondent. If the complaint alleges misconduct towards the complainant, the complainant may also elect to participate in the hearing, make a brief statement, and respond to questions from the Ethics Committee, but the complainant is not obligated to appear for the hearing. If the complainant participates, the respondent may listen to the complainant's portion of the hearing and may respond during the hearing. Documents not submitted to the Ethics Committee in advance of the hearing will not be considered by the Ethics Committee.

If the respondent does not request a hearing, the Ethics Committee will render a decision based on the written record.

The Ethics Committee will meet in executive session to decide on the complaint. The Ethics Committee shall decide, based solely on the record before it, whether the respondent has committed a violation of the Code of Ethics and any sanctions to be imposed.

Notice of the disposition of the proceeding will be given to the complainant and respondent within 30 calendar days. Notice of any disciplinary sanction will be sent to the respondent within 30 calendar days of its issuing. If a disciplinary sanction is imposed, the notice will include an explanation of the basis for the decision and a statement of any appeal rights.

Sanctions

Sanctions for violation of this Code of Ethics may include one or more of the following, in IAAO's discretion:

- Assignment of remedial education
- Private reprimand and warning
- Public letter of censure
- Removal from IAAO volunteer position(s)
- Restrictions on privileges and rights as a member, including holding leadership or committee roles
- Suspension or expulsion from participating in IAAO events or activities
- Suspension or revocation of IAAO instructor credentials
- Denial or non-renewal of professional designation(s)
- Suspension or revocation of professional designation(s)
- Suspension or expulsion from membership or
- Other corrective or disciplinary action, as determined in IAAO's discretion.

Appeals

All respondents have the right to appeal an adverse decision resulting in a sanction (other than assignment of remedial education or a private reprimand and warning) regarding an alleged violation of the IAAO Code of Ethics. Such appeals shall be submitted in writing to IAAO Headquarters within 30 calendar days of the date of the determination notice and shall state with specificity the grounds for appeal. If no request for appeal is made within 30 calendar days, the decision, as issued, will become final.

The IAAO Executive Committee shall review an appeal within 60 calendar days of receipt of the appeal. Appeals shall include a signed statement from the subject of the disciplinary action containing their full statement of the facts relevant to the alleged violation and the specific basis for appeal. New information will not be considered for appeal unless it was unavailable at the time of the Ethics Committee's determination. If such new information is provided, the appeal will be remanded to the Ethics Committee for a determination as to whether it warrants modification of the Ethics Committee's determination or sanction.

The IAAO Executive Committee will conduct an initial review of the appeal to determine whether the specific grounds for appeal raise a question of: (I) a procedural error, or (II) an arbitrary and capricious decision by the Ethics Committee. Appeals that do not meet that threshold standard shall be denied. If an appeal meets that threshold standard, the President shall forward the appeal to the IAAO Board of Directors for review. The Board of Directors shall review the record in the case, including the request for appeal. The Board's review shall be limited to a determination of whether: (I) a procedural error contributed to the Ethics Committee's decision, or (II) the Ethics Committee's decision was arbitrary and capricious. The Board of Directors may affirm, modify, or reverse the adverse decision made by the Ethics Committee. The decision on appeal is final and binding. Notification of the decision on appeal and an explanation of the basis for the decision will be sent to the appellant within 14 calendar days of its issuing.

Reinstatement

If an individual has been expelled from membership or had their professional designation revoked, eligibility for reinstatement may be reconsidered on the following basis:

- In the event of a felony conviction related to the individual's professional role, no earlier than three years from the conviction or completion of sentence (if any), whichever is later.
- In any other event, no earlier than two years from the final decision of expulsion or revocation.

In addition to other facts required by IAAO, an individual seeking reinstatement of eligibility for membership or professional designation shall fully set forth the circumstances of the expulsion

or revocation decision, as well as all relevant facts and circumstances since the decision that are relevant to the application for reinstatement. When expulsion or revocation was because of felony conviction, the individual bears the burden of demonstrating that the individual has been rehabilitated.

Application for reinstatement, relevant documentation required of all applicants for membership or professional designation, and all relevant evidence supporting the reinstatement request shall be submitted in writing to IAAO Headquarters. The IAAO Ethics Committee shall determine whether the reinstatement shall be granted. Unless and until IAAO makes a decision to reestablish eligibility for reinstatement, the individual will remain ineligible for reinstatement. The applicant will be notified of the decision within 60 calendar days of receipt by IAAO of all the required documentation from the applicant. The decision of the IAAO Ethics Committee may be appealed to the IAAO Board of Directors.

Deliberations

An attorney representing IAAO may be present and offer advice for any deliberations contemplated under these procedures.

Majority vote applies, where a quorum is present, for all actions taken by the Ethics Committee or the Board of Directors.

No individual who is a member of the Ethics Committee or the Board of Directors, or the Executive Director, will participate in deliberations or decisions involving the Code of Ethics where the individual has a significant past or current family, business, or personal/social relationship with the complainant or respondent based on the information disclosed by either or otherwise has a conflict of interest.

Publication and Reporting

IAAO may, as deemed appropriate, report sanctions other than assignment of remedial education or a private reprimand and warning, and the underlying facts of the violation, to interested parties, including without limitation to persons seeking information about an individual's membership or professional designation status, as solely determined by IAAO. IAAO also may publish the information on IAAO's website. If the sanction resulted from a violation reported to IAAO in a disciplinary complaint, IAAO will notify the complainant that it has completed its disciplinary proceeding and, if any public sanction has been imposed, of the disciplinary action taken.

Notifications to the complainant or third parties will not occur until either the time for an appeal has expired or a decision on an appeal is made.

Responsibility for Notifying IAAO of Current Contact Information

IAAO members are solely responsible for ensuring that their IAAO account includes their current mailing and email addresses. If an individual does not receive notice(s) from IAAO related to disciplinary proceedings, actions, or appeals due to the individual's failure to notify IAAO in a timely manner of a change of address, that lack of notification shall not be considered as the basis for an appeal or reconsideration of any decision in the matter.

Revisions to the Code of Ethics were adopted by the IAAO Board of Directors on November 5, 2021; the Enforcement Section was adopted by the IAAO Board of Directors on May 26, 2022.

UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE 2018-2019 EDITION

APPRAISAL STANDARDS BOARD



THE APPRAISAL FOUNDATION

Authorized by Congress as the Source of Appraisal Standards and Appraiser Qualifications

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EFFECTIVE:

January 1, 2018 through December 31, 2019

Standard 5: MASS APPRAISAL, DEVELOPMENT

In developing a mass appraisal, am appraiser must be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce and communicate credible mass appraisals.

<u>Comment:</u> STANDARD 5 applies to all mass appraisals of real or personal property regardless of the purpose or use of such appraisals.⁵³ STANDARD 5 is directed toward the substantive aspects of developing credible analyses, opinions, and conclusions in the mass appraisal of properties. The reporting and jurisdictional exceptions applicable to public mass appraisals prepared for ad valorem taxation do not apply to mass appraisals prepared for other purposes.

A mass appraisal includes:

- 1. Identifying properties to be appraised;
- 2. Defining market area of consistent behavior that applies to properties
- 3. Identifying characteristics (supply and demand) that affect the creation of value in that market area:
- 4. Developing a model structure that reflects the relationship among the characteristics affecting value in the market area;
- 5. Calibrating the model structure to determine the contribution of the individual characteristics affecting value;
- 6. Applying the conclusions reflected in the model to the characteristics of the property(ies) being appraised; and
- 7. Reviewing the mass appraisal results.

The JURISDICTIONAL EXCEPTION RULE may apply to several sections of STANDARD 5 because ad valorem tax administration is subject to various state, county, and municipal laws.

STANDARDS RULE 5-1

In developing a mass appraisal, an appraiser must:

(a) Be aware of, understand, and correctly employ those recognized methods and techniques necessary to produce a credible mass appraisal;

<u>Comment:</u> Mass appraisal provides for a systematic approach and uniform application of appraisal methods and techniques to obtain estimates of value that allow for statistical review and analysis of results.

This requirement recognizes that the principle of change continues to affect the manner in which appraisers perform mass appraisals. Changes and developments in the real property and personal property fields have a substantial impact on the appraisal profession.

To keep abreast of these changes and developments, the appraisal profession is constantly reviewing and revising appraisal methods and techniques and devising new methods and techniques to meet new circumstances. For this reason, it is not sufficient for appraisers to simply maintain the skills and the knowledge they possess when they become appraisers. Each appraiser must continuously improve his or her skills to remain proficient in mass appraisal.

(b) Not commit a substantial error of omission or commission that significantly affects a mass appraisal; and

<u>Comment:</u> An appraiser must use sufficient care to avoid errors that would significantly affect his or her opinions and conclusions. Diligence is required to identify and analyze the factors, conditions, data, and other information that would have a significant effect on the credibility of the assignment results.

(c) Not render a mass appraisal in a careless or negligent manner.

<u>Comment:</u> Perfection is impossible to attain, and competence does not require perfection. However, an appraiser must not render appraisal services in a careless or negligent manner. This Standards Rule requires an appraiser to use due diligence and due care.

STANDARDS RULE 5-2

In developing a mass appraisal, an appraiser must:

(a) Identify the client and other intended users:54

<u>Comment:</u> It is the appraiser's responsibility to identify the client and other intended users. In ad valorem mass appraisal, the assessor, or party responsible for certification of the assessment or tax roll is required to apply the relevant law or statute and identify the client, and other intended user (if any).

(b) Identify the intended use of the appraisal;55

<u>Comment:</u> An appraiser must not allow the intended use of an assignment or a client's objectives to cause the assignment results to be biased.

- (c) Identify the type and definition of value, and, if the value opinion to be developed is market value, ascertain whether the value is to be the most probable price:
 - (i) In terms of cash; or
 - (ii) In terms of financial arrangements equivalent to cash; or
 - (iii) In such other terms as may be precisely defined; and
 - (iv) If the opinion of value is based on non-market financing with unusual conditions or incentives, the terms of such financing must be clearly identified and the appraiser's opinion of their contributions to or negative influence on value must be developed by analysis of relevant market data;
- (d) Identify the effective date of the appraisal;⁵⁶
- (e) Identify the characteristics of the properties that are relevant to the type and definition of value and intended use.⁵⁷ including:
 - (i) The group with which a property is identified according to similar market influence;
 - (ii) The appropriate market area and time frame relative to the property being valued; and
 - (iii) Their location and physical, legal, and economic characteristics;

⁵⁴ See Advisory Opinion 36, Identification and Disclosure of Client, Intended Use, and Intended Users
55 See Advisory Opinion 36, Identification and Disclosure of Client, Intended Use, and Intended Users
56 See Advisory Opinion 34, Retrospective and Prospective Value Opinions
57 See Advisory Opinion 23, Identifying the Relevant Characteristics of the Subject Property of a Real Property Appraisal
Assignment, if applicable

<u>Comment:</u> The properties must be identified in general terms, and each individual property in the universe must be identified, with the information on its identify stored or referenced in its property record.

When appraising proposed improvements, an appraiser must examine and have available for future examination, plans, specifications, or other documentation sufficient to identify the extent and character of the proposed improvement.⁵⁸

Ordinary, proposed improvements are not appraised for ad valorem tax purposes. Appraisers, however, are sometimes asked to provide opinions of value of proposed improvements so that developers can estimate future property tax burdens. Sometimes units in condominiums and planned unit developments are sold with an interest in un-built community property, the pro rata value of which, if any, must be considered in the analysis of sales data.

- (f) Identify the characteristics of the market that are relevant to the purpose and intended use of the mass appraisal including:
 - (i) Location of the market area;
 - (ii) Physical, legal, and economic attributes;
 - (iii) Time frame of market activity; and
 - (iv) Property interests reflected in the market;
- (g) In appraising real property or personal property:
 - (i) Identify the appropriate market area and time frame relative to the property being valued:
 - (ii) When the subject is real property, identify and consider any personal property, trade fixtures, or intangibles that are not real property but are included in the appraisal:
 - (iii) When the subject is personal property, identify and consider any real property or intangibles that are not personal property but are included in the appraisal;
 - (iv) Identify known easements, restrictions, encumbrances, leases, reservations, covenants, contracts, declarations, special assessments, ordinances, of other items of similar nature: and
 - (v) Identify and analyze whether an appraised fractional interest, physical segment or partial holding contributes pro rata to the value of the whole;

<u>Comment:</u> The above requirements do not obligate the appraiser to value the whole when the subject of the appraisal is a fractional interest, physical segment, or a partial holding. However, if the value of the whole is not identified, the appraisal must clearly reflect that the value of the property being appraised cannot be used to develop the value opinion of the whole by mathematical extension.

- (h) Analyze the relevant economic conditions at the time of valuation, including market acceptability of the property and supply, demand, scarcity, or rarity;
- (i) Identify any extraordinary assumptions and any hypothetical conditions necessary in the assignment; and

Comment: An extraordinary assumption may be used in an assignment only if;

- It is required to properly develop credible opinions and conclusions;
- The appraiser has a reasonable basis for the extraordinary assumption;
- Use of the extraordinary assumption results in a credible analysis; and
- The appraiser complies with the disclosure requirements set forth in USPAP for extraordinary assumption.

A hypothetical condition may be used in an assignment only if:

- Use of the hypothetical condition is clearly required for legal purposes, for purposes of reasonable analysis, of for purposes of comparison
- Use of the hypothetical condition results in a credible analysis; and
- The appraiser complies with the disclosure requirements set forth in the USPAP for hypothetical conditions.
- (j) Determine the scope of work necessary to produce credible assignment results in accordance with the SCOPE OF WORK RULE.⁵⁹

STANDARDS RULE 5-3

When necessary for credible assignment results, an appraiser must:

- (a) In appraising real property, identify and analyze the affect on use and value of the following factors: existing land use regulations, reasonably probable modifications of such regulations, economic supply and demand, the physical adaptability of the real estate, neighborhood trends, and highest and best use of the real state; and
 - <u>Comment:</u> This requirement sets forth a list of factors that affect use and value. In considering neighborhood trends, an appraiser must avoid stereotyped or biased assumptions relating to race, age, color, gender, or national origin or an assumption that race, ethnic, or religious homogeneity is necessary to maximize value in a neighborhood. Further, an appraiser must avoid making an unsupported assumption or premise about neighborhood decline, effective age, and remaining life. In considering highest and best use, an appraiser must develop the concept to the extent required for a proper solution to the appraisal problem.
- (b) In appraising personal property, identify and analyze the effects on use and value of industry trends, value-in-use, and trade level of personal property. Where applicable, analyze the current use and alternative uses to encompass what is profitable, legal, and physically possible, as relevant to the type and definition of value and intended use of the appraisal. Personal property has several measurable marketplaces; therefore, the appraiser must define and analyze the appropriate market consistent with the type and definition of value.

<u>Comment:</u> The appraiser must recognize that there are distinct levels of trade and each may generate its own data. For example, a property may have a different value at a wholesale level of trade, a retail level of trade, or under various auction conditions. Therefore, the appraiser must analyze the subject property within the correct market context.

⁵⁹ See advisory Opinion 28, Scope of Work Decision, Performance, and Disclosure, and Advisory Opinion 29, An Acceptable Scope of Work

STANDARDS RULES 5-4

In developing a mass appraisal, an appraiser must:

(a) Identify the appropriate procedures and market information required to perform the appraisal, including all physical, functional, and external market factors as they may affect the appraisal;

<u>Comment:</u> Such efforts customarily include the development of standardized data collection forms, procedures, and training materials that are used uniformly on the universe or properties under consideration.

(b) Employ recognized techniques for specifying property valuation models; and

<u>Comment:</u> The formal development of a model in a statement or equation is called model specification. Mass appraisers must develop mathematical models that, with reasonable accuracy, represent the relationship between property value and supply and demand factors, as represented by quantitative and qualitative property characteristics. The models may be specified using the cost, sales comparison, or income approaches to value. The specification format may be tabular, mathematical, linear, nonlinear, or any other structure suitable for representing the observable property characteristics. Appropriate approaches must be used in appraising a class of properties. The concept of recognized techniques applies to both real and personal property valuation models.

(c) Employ recognized techniques for calibrating mass appraisal models.

<u>Comment:</u> Calibration refers to the process of analyzing sets of property and market data to determine the specific parameters of a model. The table entries in a cost manual are examples of calibrated parameters, as well as the coefficients in a linear or nonlinear model. Models must be calibrated using recognized techniques, including, but not limited to, multiple linear regression, nonlinear regression, and adaptive estimation.

STANDARDS RULE 5-5

In developing a mass appraisal, when necessary for credible assignment results, an appraiser must:

- (a) Collect, verify, and analyze such data as are necessary and appropriate to develop:
 - (i) The cost new of the improvements:
 - (ii) Depreciation;
 - (iii) Value of the land by sales of comparable properties;
 - (iv) Value of property by sales of comparable properties;
 - (v) Value by capitalization of income or potential earnings (i.e., rentals, expenses, interest rates, capitalization rates, and vacancy data);

<u>Comment:</u> This Standard Rule requires appraisers engaged in mass appraisal to take reasonable steps to ensure that the quantity and quality of the factual data that are collected are sufficient to produce credible appraisals. For example, in real property, where applicable and feasible, systems for routinely collecting and maintaining ownership, geographic, sales, income and expense, cost, and property characteristics data must be established. Geographic data must be contained in as complete a set of cadastral maps as possible, compiled according to current standards of detail and accuracy. Sales data must be collected, confirmed, screened, adjusted, and filed according to current standards of practice. The sales file must contain, for each sale, property characteristics data that are contemporaneous with the date of sale. Property characteristics data must be appropriate and relevant to the mass appraisal models being used. The property characteristics data file must contain data contemporaneous with the date of appraisal including historical data on sales, where appropriate and available. The data collection program must incorporate

quality control program, including checks and audits of the data to ensure current and consistent records.

(b) Base estimates of capitalization rates and projections of future rental rates and/or potential earnings capacity, expenses, interest rates, and vacancy rates on reasonable and appropriate evidence;⁶⁰

<u>Comment:</u> This requirement calls for an appraiser, in developing income and expense statements and cash flow projections, to weigh historical information and trends, current market factors affecting such trends, and reasonably anticipated events, such as competition from developments either planned or under construction.

- (c) Identify and, as applicable, analyze terms and conditions of any available leases; and
- (d) Identify the need for and extent of any physical inspection.⁶¹

STANDARDS RULE 5-6

When necessary for credible assignment results in applying a calibrated mass appraisal model an appraiser must:

- (a) Value improved parcels by recognized methods or techniques based on the cost approach, the sales comparison approach, and income approach;
- (b) Value sites by recognized methods or techniques; such techniques include but are not limited to the sale comparison approach, allocation method, abstraction method, capitalization of ground rent, and land residual technique;
- (c) When developing the value of a leased fee estate or a leasehold estate, analyze the effect on value, if any, of the terms and conditions of the lease;
 - <u>Comment:</u> In ad valorem taxation the appraiser may be required by rules or law to appraise the property as if in fee simple, as though unencumbered by existing leases. In such cases, market rent would be used in the appraisal, ignoring the effect of the individual, actual contract rents.
- (d) Analyze the effect on value, if any, of the assemblage of the various parcels, divided interests, or component parts of a property; the value of the whole must be developed by adding together the individual values of the various parcels, divided interests, or component parts; and
 - <u>Comment:</u> When the value of the whole has been established and the appraiser seeks to value a part, the value of any such part must be tested by reference to appropriate market data and supported by an appropriate analysis of such data.
- (e) When analyzing anticipated public or private improvements, located on or off the site, analyze the effect on value, if any, of such anticipated improvements to the extent they are reflected in market actions.

STANDARDS RULE 5-7

In reconciling a mass appraisal, an appraiser must:

- (a) Reconcile the quality and quantity of data available and analyzed within the approaches used and the applicability and relevance of the approaches, methods and techniques used; and
- (b) Employ recognized mass appraisal testing procedures and techniques to ensure that standards of accuracy are maintained

<u>Comment:</u> It is implicit in mass appraisal that, even when properly specified and calibrated mass appraisal models are used, some individual value conclusions will not meet standards or reasonableness, consistency, and accuracy. However, appraisers engaged in mass appraisal have a professional responsibility to ensure that, on an overall basis, models produce value conclusions that meet attainable standards of accuracy. This responsibility requires appraisers to evaluate the performance of models, using techniques that may include but are not limited to, goodness-of-fit statistics, and model performance statistics such as appraisal-to-sale ratio studies, evaluation of hold0out samples, or analysis of residuals

Standard 6: MASS APPRAISAL, REPORTING

In reporting the results of a mass appraisal, an appraiser must communicate each analysis, opinion, and conclusion in a manner that is not misleading.

<u>Comment:</u> STANDARD 6 addresses the content and level of information required in a report that communicates the results of a mass appraisal.

STANDARD 6 does not dictate the form, format, or style of mass appraisal reports. The form, format, and style of a report are functions of the needs of intended users and appraisers. The substantive content of a report determines its compliance.

STANDARDS RULE 6-1

Each written report of a mass appraisal must:

- (a) Clearly and accurately set forth the appraisal in a manner that will not be misleading;
- (b) Contain sufficient information to enable the intended users of the appraisal to understand the report properly; and

<u>Comment:</u> Documentation for a mass appraisal for ad valorem taxation may be in the form of (1) property records, (2) sales ratios and other statistical studies, (3) appraisal manuals and documentation, (4) market studies, (5) model building documentation, (6) regulations, (7) statutes, and (8) other acceptable forms.

(c) Clearly and accurately disclose all assumptions, extraordinary assumptions, hypothetical conditions, and limiting conditions used in the assignment.

Comment: The report must clearly and conspicuously:

- State all extraordinary assumptions and hypothetical conditions; and
- State that their use might have affected the assignment results

STANDARDS RULES 6-2

Each written report of a mass appraisal must:

(a) State the identity of the client, unless the client has specifically requested otherwise; state the identity of any intended users by name or type; ⁶²

<u>Comment:</u> An appraiser must use care when identifying the client to avoid violations of the <u>Confidentiality</u> section of the ETHICS RULE. If a client requests that the client's identity be withheld from the report, the appraiser may comply with this request. In these instances, the appraiser must document the identity of the client in the work file and must state in the report that the identity of the client has been withheld at the client's request.

- (b) State the intended use of the appraisal; 63
- (c) Disclose any assumptions or limiting conditions that result in the deviation from recognized methods and techniques or that affect analysis, opinions, and conclusions;

See Advisory Opinion 36, *Identification and Discloser of Client, Intended Use, and Intended Users.*See Advisory Opinion 36, *Identification and Discloser of Client, Intended Use, and Intended Users.*

(d) State the effective date of the appraisal and the date of the report;

<u>Comment:</u> In ad valorem taxation the effective date of the appraisal may be prescribed by law. If no effective date is prescribed by law, the effective date of the appraisal, if not stated, is presumed to be contemporaneous with the data and appraisal conclusions.

The effective date of the appraisal establishes the context for the value opinion, while the date of the reports indicates whether the perspective of the appraiser on the market and property as of the effective date of the appraisal was prospective, current, or retrospective.⁶⁴

(e) State the type and definition of value and cite the source of the definition;

<u>Comment:</u> Stating the type and definition of value also requires any comments needed to clearly indicate to intended users how the definition is being applied.⁶⁵

When reporting an opinion of market value, state whether the opinion of value is:

- In terms of cash or of financing terms equivalent to cash; or
- Based on non-market financing with unusual conditions or incentives.

When an opinion of market value is not in terms of cash or based on financing terms equivalent to cash, summarize the terms of such financing and explain their contributions to or negative influence on value.

(f) State the properties appraised including the property rights;

<u>Comment:</u> The report documents the sources for location, describing and listing the property. When applicable, include references to legal descriptions, addresses, parcel identifiers, photos, and building sketches. In mass appraisal this information is often included in property records. When the property rights to be appraised are specified in a statute or court ruling, the law must be referenced.

(g) Summarize the scope of work used to develop the appraisal;⁶⁶ exclusion of the sales comparison approach, cost approach, or income approach must be explained;

<u>Comment:</u> Because intended users' reliance on an appraisal may be affected by the scope of work, the report must enable them to be properly informed and not misled. Sufficient information includes disclosure of research and analyses performed and might also include disclosure of research and analyses not performed.

When any portion of the work involves significant mass appraisal assistance, the appraiser must describe the extent of that assistance. The signing appraiser must also state the name(s) of those providing the significant mass appraisal assistance in the certification, in accordance with Standard Rule 6-3.⁶⁷

⁶⁴ See Advisory Opinion 34, Retrospective and Prospective Value Opinions.

⁶⁵ See Advisory Opinion 34, Retrospective and Prospective Value Opinions.

⁶⁶ See Advisory Opinion 28, Scope of Work Decision, Performance and Disclosure and Advisory Opinion 29. An Acceptable Scope of Work.

⁶⁷ See Advisory Opinion 31, Assignments Involving More than One Appraiser.

(h) Summarize and support the model specification(s) considered, data requirements, and the model(s) chosen;

<u>Comment:</u> The appraiser must provide sufficient information to enable the client and intended users to have confidence that the process and procedures used conform to accepted methods and result in credible value conclusions. In the case of mass appraisal for as valorem taxation, stability and accuracy are important to the credibility of value opinions. The report must include a summary of the rationale for each model, the calibration techniques to be used, and performances measures to be used.

(i) Summarize the procedure for collecting, validating, and reporting data;

<u>Comment:</u> The report must summarize the sources of data and the data collection and validation processes. References to detailed data collection manuals or electric records must be made, as appropriate, including where they may be found for inspection.

- (j) Summarize calibration methods considered and chosen, including the mathematical form of the final model(s); summarize how value conclusions were reviewed; and, if necessary, state the availability and location of individual value conclusions;
- (k) When an opinion of highest and best use, or the appropriate market or market level was developed, summarize how that opinion was determined;

<u>Comment:</u> The mass appraisal report must reference case law, statute, or public policy that describes highest and best use requirements. When actual use is the requirement, the report must discuss how use-value opinions were developed. The appraiser's reasoning in support of the highest and best use opinion must be provided in the depth and detail required by its significance to the appraisal.

- (I) Identify the appraisal performance test used and the performance measures attained:
- (m) Summarize the reconciliation performed, in accordance with Standards Rule 5-7; and
- (n) Include a signed certification in accordance with Standards Rule 6-3.

STANDARDS RULE 6-3

Each written mass appraisal report must contain a signed certification that is similar in content to the following form:

I certify that, to the best of my knowledge and belief:

- The statements of fact contained in this report are true and correct
- The reported analysis, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are my personal, impartial, and unbiased professional analysis, opinions, and conclusions.
- I have no (or the specified) present or prospective interest in the property that is the subject of this report, and I have no (or the specified) personal interest with respect to the parties involved.
- I have performed no (or the specified) services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to any property that is the subject of this report or to the parties involved with this assignment.
- My engagement in this assignment was not contingent upon developing or reporting predetermined results.

- My compensation for completing this assignment is not contingent upon the reporting of a
 predetermined value or direction in value that favors the cause of the client, the amount of
 the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent
 event directly related to the intended use of his appraisal.
- My analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- I have (or have not) made a personal inspection of the properties that are the subject of this report. (If more than one person signs the report, this certification must clearly specify which individuals did and which individuals did not make a personal inspection of the appraised property.)⁶⁸
- No one provided significant mass appraisal assistance to the person signing this certification. (If there are exceptions, the name of each individual providing significant mass appraisal assistance must be stated.)

<u>Comment:</u> The above certification is not intended to disturb an elected or appointed assessor's work plans or oaths of office. A signed certification is an integral part of the appraisal report. An appraiser, who signs any part of the mass appraisal report, including a letter of transmittal, must also sign this certification.

In an assignment that includes only assignment results developed by the real property appraiser(s), any appraiser(s) who signs a certification accepts full responsibility for all elements of the certification, for the assignment results, and for the contents of the appraisal report. In an assignment that includes personal property assignment results not developed by the real property appraiser(s), any real property appraiser(s) who signs a certification accepts full responsibility for the real property elements of the certification, for the real property assignment results, and for the real property contents of the appraisal report.

In an assignment that includes only assignment results developed by the personal property appraiser(s), any appraiser(s) who signs a certification accepts full responsibility for all elements of the certification, for the assignment results, and for the contents of the appraisal report. In an assignment that includes real property assignment results not developed by the personal property appraiser(s), any personal property appraiser(s) who signs a certification accepts full responsibility for the personal property elements of the certification, for the personal property assignment results, and for the personal property contents of the appraisal report.

When a signing appraiser(s) has relied on work done by appraisers and others who do not sign the certification, the signing appraiser is responsible for the decision to rely on their work. The signing appraiser(s) is required to have a reasonable basis for believing that those individuals performing the work are competent. The signing appraiser(s) also must have no reason to doubt that the work of those individuals is credible.

The names of individuals providing significant mass appraisal assistance who do not sign a certification must be stated in the certification. It is not required that the description of their assistance be contained in the certification, but disclosure of their assistance is required in accordance with the Standards Rule 6-2(g).⁶⁹

68 See Advisory Opinion 2, *Inspection of Subject Property*.
69 See Advisory Opinion 31, *Assignments Involving More than One Appraiser*.

NEW CONSTRUCTION PERCENTAGE OF COMPLETION GUIDE

This guide is to be used in estimating the percentage of completion of both residential and commercial buildings under construction.

PECENT COMPLETION GUIDE

Cleared lot/rough grade	1%
Footings poured	4%
Foundation walls/piers	7%
Floor frame: joists/slab	4%
Subfloor	4%
Outside studs/ceiling joists	4%
Inside studs/ceiling joists	4%
Roof framing	4%
Roof sheathing & felt	3%
Roof covering (shingles)	4%
Plumbing (rough-in)	3%
Electrical wiring (rough-in)	2%
Heating and cooling (rough-in)	2%
Outside windows and doors	4%
Exterior wall (Siding, brick veneer,etc)	7%
Exterior trim (gutters)	3%
Insulation (walls/ceiling/subfloor)	2%
Interior Walls/Ceiling (drywall or alternative)	6%
Interior trim (molding)	4%
Kitchen cabinets	3%
Interior doors	2%
Interior paint (prime)	1%
Bathroom tile/drop-in tub	3%
Plumbing complete	2%
Interior paint complete	2%
Hardware (doors/windows)	2%
Electrical wiring complete	2%
Heating and cooling unit (installed)	4%
Floor covering	4%
Screens/storm windows	1%
Misc.	2%
Total	100%

WEIGHTS AND MEASURES

Tables of Weights and Measures and Other Information That May Be Helpful to the Assessor/Appraiser.

3 C'11'	Г	0.001		
Millimeter	=	0.001 meter		
Centimeter	=	0.01 meter		
Decimeter	=	0.1 meter		
Meter	=	39.3685 inches		
Kilometer	=	1000 meters		
Kilometer	=	.062137 miles		
Meter	=	1.0935 yards		
Meter	=	3.2807 feet		
1 Foot	=	0.30480 meter		
1 Foot	=	3.04 centimeters		
1 Inch	=	2.54 centimeters		
Linear Measure	<u> </u>			
1 Foot	=	12 inches		
1 Yard	=	3 feet-36 inches		
1 Rod	=	5½ yards-16½ feet		
1 Furlong	=	40 rods-220 yards-660 feet		
1 Mile	=	8 furlongs-320 rods-1,760 yards-5,280 feet		
Surveyor's Linear Measure	<u> </u>			
1 Link	=	7.92 inches		
1 Rod	=	25 links		
1 Chain	=	4 rods-100 links-66 feet		
1 Furlong	=	10 chains		
1 Mile	=	8 furlong-80 chains		
Square Measure	 	-		
1 Square Foot	=	144 square inches		
1 Square Yard	=	9 square feet-1,296 square inches		
1 Square Rod	=	1 pole/perch-30 ¹ / ₄ square yards-272 ¹ / ₄ square feet		
1 Rood	=	40 square rods		
1 Acre	=	160 square rods-4,840 square yards-43,560 square fl		
1 Square Mile	=	640 acres		
Surveyor's Square Measure	1 1			
1 Square Rod	=	625 square links		
1 Square Chain	=	16 square rods		
1 Acre	=	10 square chains		
1 Square Mile	=	640 acres		
Cubic Measure	1 1	1.720 1' ' 1 .7.401 11		
1 Cubic Foot		1,728 cubic inches-7,481 gallons		
1 Cubic Yard 1 Cord Foot		27 cubic feet 16 cubic feet		
1 Cord of Wood		8 cord-128 cubic feet		
1 Perch of Masonry		24¾ cubic feet		
1 1 01011 01 171430111 7	1 1	2-1/4 CUOIC ICCL		

Vance County 2024

1 Minute	=	60 seconds		
1 Degree	=	60 minutes		
1 Right Angle	=	90 degrees-1 quadrant		
1 Circumference	=	360 degrees-4 quadrants		
Board Measure	-			
1 Board Foot	=	Length in feet x width in feet x thickness in inches		

Measurement In General Use				
1 Link	=	7.92 inches		
1 foot	=	12 inches		
1 yard	=	3 feet or 36 inches		
1 rod	=	16½ feet, 5½ yards or 25 links		
1 surveyor's chain	=	66 feet, or 4 rods, or 100 links		
1 furlong	=	660 feet, or 40 rods		
1 mile	=	8 furlongs, 320 rods, 80 chains, or 5,280 feet		
1 square rod	=	2721/4 square feet or 301/4 square yards		
1 acre contains	=	43,560 square feet		
1 acre contains	=	160 square rods		
1 span	=	9 inches		
1 hand	=	(horse measurement) 4 inches		
1 knot	=	(nautical) 6,080.27 feet		
1 fathom	=	(nautical) 6 feet		
1 stone	=	14 pounds		
1 square acre	=	Approximately 208.7 feet on each side		
1 acre	=	Approx 8 rods by 20 rods, or any two combinations or rods whose product is 160		

SIMPLE FORMULA CONVERTING SQUARE FEET TO ACRES

Multiply by 23 and point off 6 places (This method is not exact but is useful for rough calculations) Example: 1500 feet x 2050 feet = 3,075,000 square feet x 23 = 70.73 acres

BOARD MEASURE

Multiply thickness in inches by width in inches, divide product by 12 and multiply result by the length in feet. The result is board measure content.

Conversion factors for converting lineal feet of lumber into board feet.

Example:50 –2 inches x 10 inches 20 feet long
50 x 20 feet = 1000 lineal feet
2 inches x 10 inches = 20 square inches divided by 12 =
1.667 board feet x 1000 lineal feet equals 1,667 board feet

2 inches x 4 inches	(1 lineal foot)	.667 board feet
3 inches x 4 inches	(1 lineal foot)	1.000 board feet
2 inches x 6 inches	(1 lineal foot)	1.000 board feet
2 inches x 8 inches	(1 lineal foot)	1.333 board feet
2 inches x 10 inches	(1 lineal foot)	1.667 board feet
2 inches x 12 inches	(1 lineal foot)	2.000 board feet
2 inches x 14 inches	(1 lineal foot)	2.333 board feet
2 inches x 16 inches	(1 lineal foot)	2.667 board feet
3 inches x 6 inches	(1 lineal foot)	1.500 board feet
4 inches x 6 inches	(1 lineal foot)	2.000 board feet
4 inches x 8 inches	(1 lineal foot)	2.667 board feet
4 inches x 10 inches	(1 lineal foot)	3.333 board feet
4 inches x 12 inches	(1 lineal foot)	4.000 board feet
6 inches x 6 inches	(1 lineal foot)	3.000 board feet
6 inches x 8 inches	(1 lineal foot)	4.000 board feet
10 inches x 12 inches	(1 lineal foot)	10.000 board feet
12 inches x 12 inches	(1 lineal foot)	12.000 board feet

Table For The Conversion Of Lineal Feet Into Board Feet

PRINCIPLES

PLANE FIGURE –A plane surface bounded by either straight or curved lines and having no thickness.

SOLID – A body, such as a barrel, building, etc.

SQUARE MEASURE – Area calculation requiring only two dimensions, length and width.

CUBIC MEASURE – Cubic or cubage means volume and gives size in terms of its bulk. Calculation requires 3 dimensions, length x width x depth or height or thickness.

MEASURES AND THEIR EQUIVALENTS

A gallon of water (U.S. Standard) weighs 8 1/3 pounds and contains 231 cubic inches.

A cubic foot of water contains 7½ gallons, 1,728 cubic inches and weighs 62½ pounds.

Doubling the diameter of a pipe increases its capacity four times.

To find the pressure in pounds per square inch of a column of water, multiply the height of the column in feet by .434.

To find the capacity of tanks any size, given the dimensions of a cylinder in inches, to find its capacity in U.S. gallons: square the diameter, multiply by the length and by .0034 (Note: See table of tank capacities.)

Rectangular tanks multiply the length by the width by the depth (All in inches) and divide the result by 231. The answer is the capacity in gallons.

31½ gallons equals one barrel.

B.T.U. (British Thermal Unit) is the amount of the heat required to raise one pound of water one degree Fahrenheit.

A ton of refrigeration is measured by the displacement of the amount of heat required to melt a ton of ice in 24 hours. One motor horsepower of an electrically powered unit is normally required to produce one ton of refrigeration. 12,000 B.T.U. equals one tone.

Kilowatts multiplied by 1.3405 equal horsepower.

WEIGHTS & MEASURES

1 cubic inch of Cast Iron weighs	0.26 pounds		
1 cubic inch Wrought Iron weighs	0.28 pounds		
1 cubic inch Water weighs	0.036 pounds		
1 inch of Water weighs	62.321 pounds		
1 United States gallon weighs	8.33 pounds		
1 Imperial gallon weighs	10.00 pounds		
1 United States gallon equals	231.01 cubic inches		
1 Imperial gallon equals	277.274 cubic inches		
1 cubic foot of Water equals	7.48 U.S. gallons		
1 gallon of water weighs	8.34 pounds		
1 gallon equals	.1337 cubic feet		
1 gallon equals	.1074 bushels		
cubic foot equals .8032 bushels			
1 barrel (oil) equals	42 gallons		
1 barrel (water) equals	31.5 gallons		

Pressure in pounds per square inch of column of water equals .434 times the height of the column in feet.

AREAS

Square foot area of surface equals square of one side multiplied by factors shown.

Regular Shaped	Number of Sides	Factor
Equilateral Triangle	3	.433
Pentagon	5	1.721
Hexagon	6	2.598
Heptagon	7	3.634
Octagon	8	4.828
Nonagon	9	6.182
Decagon	10	7.694
Undecagon	11	9.366
Dodecagon	12	11.196

2024

TABLES – For Use in Area and Content Capacity Computations

Capacity of Circular Tanks – Per Foot of Height in Gallons & Bushels

Diameter in Feet	Circum.	Square Foot Area	Gallons	Bushels	Barrels (Oil) (Oil-42 gals. Ea.)
3	9.42	7.07	53	6	1.26
4	12.57	12.57	94	10	2.24
5	15.71	19.63	147	16	3.5
6	18.85	28.27	212	23	5.0
7	21.99	38.48	288	31	6.8
8	25.13	50.27	376	42	9.0
9	28.27	63.62	477	51	11.3
10	31.42	78.54	587	63	14.0
11	34.56	95.03	711	76	16.9
12	37.69	113.10	846	91	20.2
13	40.84	132.73	993	107	23.7
14	43.98	153.94	1,151	124	27.4
15	47.12	176.72	1,322	142	31.5
16	50.26	201.06	1,504	162	35.8
17	53.41	226.98	1,698	182	40.4
18	56.55	254.47	1,903	204	45.3
19	59.69	283.53	2,121	228	50.5
20	62.83	314.16	2,350	252	56.0
21	65.97	346.36	2,591	278	61.7
22	69.12	380.13	2,843	305	67.7
23	72.26	415.48	3,108	334	74.0
24	75.40	452.39	3,384	364	80.6
25	78.54	490.87	3,672	394	87.4
26	81.68	530.93	3,971	427	94.6
27	84.82	572.56	4,283	460	102.0
28	87.97	615.75	4,606	495	109.7
29	91.11	660.52	4,941	531	117.6
30	94.25	706.86	5,287	568	125.8
31	97.39	754.77	5,646	606	134.4
32	100.53	804.25	6,016	646	143.2
33	103.67	855.30	6,398	687	152.3
34	106.81	907.92	6,791	730	161.6
35	109.96	962.11	7,197	773	171.3
36	113.10	1,017.88	7,614	818	181.3
37	116.24	1,075.21	8,043	864	191.5
38	119.38	1,134.11	8,483	911	202.0
39	122.52	1,194.59	8,936	960	212.7
40	125.66	1,256.64	9,400	1,010	223.8

To find the capacity in barrels (oil) =Diameter squared x height.

To find the capacity in gallons = Diameter squared x 5.8748 x height (Diameter & height in feet).

2024

AREAS AND MEASUREMENTS

To find the circumference of a circle, multiply the diameter by 3.1416.

To find the diameter, multiply circumference by 0.3183 or divide circumference by 3.1416.

To find the radius, multiply circumference by 0.15915.

To find the side of an inscribed square, multiply the diameter by 0.07071 or multiply the circumference by 0.2551.

To find the side of an equal square, multiply the diameter by 0.8863 or multiply the circumference by 0.2821.

Square: A side multiplied by 1.1142 equals the diameter of its circumscribing circle.

A side multiplied by 4.443 equals the circumference of its circumscribing circle.

A side multiplied by 1.126 equals the diameter of an equal circle.

A side multiplied by 3.547 equals circumference of an equal circle.

To find the area of a circle, multiply the circumference by one-quarter of the diameter or multiply the square of the diameter by 0.7854 or multiply the square of the circumference by 0.07958 or multiply the square of one-half of the diameter by 3.1416.

To find the surface of a sphere or globe, multiply the diameter by the circumference or multiply the square of the diameter by 3.1416 or multiply four times the square of the radius by 3.1416.

To find tank capacities, diameter square x .0034 = gallons per inch of height – Base 42 gallons per barrel.

To find area of a triangle – multiply base by ½ perpendicular height.

To find area of an ellipse – product of both diameters x .7854.

To find area of a parallelogram – base x altitude.

To find cu. inches in a ball – multiply cube of diameter by .5236.

To find cubic contents of a cone – multiply area of base by one-third the altitude.

Area of rectangle equals length multiplied by width.

Surface of frustum of cone or pyramid equals sum of circumference of both ends x $\frac{1}{2}$ slant height plus area both ends.

Contents of frustum of cone or pyramid: multiply area of two ends and get square root – add the two areas and time 1/3 altitude.

2024

CONVERSION TABLES

To convert bushels to ton, multiply number of bushels by 60 and divide the product by 2000 (average maximum weight of commodities 60 pounds per bushel.)

To convert gallons to bushes, divide gallons by 9.35. Answer in bushels.

To convert cubic measure into bushels, multiply by 0.8035.

To find capacity of cylindrical tanks standing on end: To find the capacity in cubic feet of a round tank or cistern, multiply the square of the average diameter by the depth and multiply the product by .785.

STRUCTURAL COMPONENTS

DESIGN

One of the most significant factors influencing quality classification and cost of Construction is design. The design of a house relates not only to the degree of functional efficiency attained in layout, but also to its overall appearance. In this sense, appearance means the refinement of exterior elevations, interior finish, and perimeter shape. The degree of refinement is usually evident in the complexity of foundation and roof outlines, plus the elaborateness of finishing materials and attention given to details.

Lower quality houses will generally be simple rectangular shaped structures with straight lines on all four walls, and a higher ratio of floor area per lineal foot of exterior wall. Higher quality structures will generally have an irregular foundation outline and a lower ratio of floor area per lineal foot of exterior wall.

In other words, the design of a higher quality house substitute's esthetics for efficiency (economy of construction) but does not sacrifice functional utility. In fact, the integration of areas given to living, dining, food preparation, sleeping, hygiene and storage into a functional or logical whole can best be accomplished when design is not restricted by a rectangular or "boxed" perimeter shape.

An irregular perimeter or foundation outline generally denotes higher quality construction, because replacement cost is increased by a greater amount of exterior wall area plus special floor and roof framing.

ELECTRICAL

In new construction, the typical electrical service consists of 120-240 volt; 3 wire, 200 amp circuit breaker systems for houses with electric heat and 150 amp services for houses with gas heat. Minimum Property Standards requires one wall switch per room with a minimum of 6' between convenience outlets. 220 volt service is required for electric ranges and clothes dryers, whereas 110 volt service is required for convenience outlets. The majority of residential wiring is done with Romex, a non-metallic sheathed cable. More expensive homes have BX or steel armored cable. Conduit wiring is seldom found in residential construction. Older homes may be wired with Knob & Tube or porcelain insulators. Houses with old style fuse boxes, Knob & Tube wiring, or 60 amp service are generally of low quality or will soon need rewiring.

EXTERIOR WALLS

Exterior wall construction represents one of the most significant components of a residential building. It normally accounts for 25% to 35% of replacement cost new and consists of (1) The Basic Structure – wood framed houses usually have 2" X 4" studs placed directly over floor joists on 16" centers - a 2" X 4"sole plate secures the studs at floor level and a 4" X 4" ceiling plate ties the studs together at the ceiling line (2) Exterior Finish- consists of sheathing, the visible exterior wall cover, trim and painting. The materials used in the basic structure and exterior wall finish will determine the type of construction, i.e., wood framed - brick veneer, etc. (3) Interior Facing& Finish - new construction is generally 1/2" to 5/8" dry wall, taped & painted; older houses may have lath and plaster; 2" to 3 1/2" batt insulation is normally placed between the studs behind the drywall. (4) Window & Door Openings - the size and number of openings will have a significant influence on replacement cost.

FLOOR STRUCTURE & FINISH

Conventional wood floor construction consists of the sill plates, girders, floor joists, bridging, sub floor and finished flooring. The sill plate is the first wood member of a frame structure; and is usually a horizontally laid 2" X 6" board secured to the foundation by 1/2" X 16" anchor bolts. A girder is the main horizontal interior supporting member of the floor structure. It may be steel or wood, but a 3-ply 2" X 10" frame girder is typical. Minimum Property Standards call for no less than 2" X 8" floor joists on 16" centers with a maximum span of 131/2'; and 2" X 10" floor joists on 16" centers if span is between 131/2' and 16'. Better quality construction will have 1" X 3" cross bridging every 8' to 10' span. However, 2" X 6" or 2" X 8" block-bridging is typical of fair and average quality construction. However, diagonally laid 1" X 5 " tongue & groove boards are found in some older homes and in high quality new construction. Basically, the finished flooring of a house will be either pine or hardwood. Generally, the kitchen will have an inlaid linoleum cover and the bath will have ceramic or vinyl tile. Wall to wall carpets may be laid over a hardwood finished floor or over 5/8" pressboard (particleboard).

FOUNDATION

The foundation of a residence with conventional wood floor construction consists of the footings, foundation wall and interior piers. A solid perimeter foundation wall is generally constructed with 8" concrete blocks; brick-to grade construction has 12" blocks to grade level with the balance being 8" block allowing a 4" brick to rest on the outer edge of the 12" block. Interior piers are generally of the same materials as the foundation wall. Footings are poured concrete and must be a minimum of 8" deep and 3" wider (on each side) than the foundation wall.

With concrete slab floor construction, the floor, foundation walls and footings are poured monolithically. In such, case, there are no framing members for the floor structure.

Obviously, the footings and lower levels of the foundation wall cannot be seen. Therefore, unless you are informed of structural weakness or see evidence of excessive settlement, you must assume that the foundation has been properly constructed.

HEATING

The type and adequacy of the heating system is not only a cost important factor, but also one which has a significant influence on the functional utility and value of a building. There are several types and variations of heating systems used depending on location and availability of fuel. The systems described here are those most frequently encountered.

Floor Furnace - may be oil or gas fired. This type heating system is normally found in lower quality one story houses with crawl space. There is no duct work, and circulation is by gravity. The unit is generally placed near the center of the house. Its capacity is rated from 30,000 to 50,000 ETU.

Gravity Furnace - This system is generally found in the basements of older houses, since it must be below the level of the rooms to be heated. Coal, either stoker or hand-fired, was the main source of fuel. However, many systems still in use have been converted to oil or gas. Heat is provided as the air comes in contact with heated surfaces in the furnace. The warm air rises and flows through inclined leader pipes to supply registers usually installed in the floor or baseboard adjacent to the outside walls of the various rooms. The cooler air is drawn down through large return-air-intakes located in the floor near an outside wall to the bottom of the furnace casing for re-heating. The duct work for a gravity warm-air heating system is quite large and must be slanted in such a way as to permit the natural flow of warm and cool air. This significantly reduces the amount of useable head room in the basement. The gravity warm-air heating system is relatively inexpensive and lacks functional utility when compared to more modern systems. The cost of this type system generally ranges from 15% to 20% less than a forced warm-air system with a comparable BTU rating.

Forced Warm Air - May be electric, oil or gas fired. Air is warmed by heated surfaces in the furnace and then distributed to the various rooms through supply ducts by a blower (fan) in the furnace. The blower also draws the room air back to the furnace through returnair intakes which are usually located at the baseboard of inside walls. Adjustable registers or diffusers for the warm air are generally located on the outside wall at the floor level (baseboard), preferably below windows. This system requires less space for the furnace and ducts than the gravity system, and it does not need to be centrally located or below the level of the heated area.

Electric Radiant Ceiling - Perhaps one of the most frequently encountered heating systems. Found in fair to average quality homes. Each room is thermostatically controlled. The heating element (cable) is attached to the ceiling drywall; coated with a layer of plaster and then laminated between a second thickness of drywall. The wattage required for each room is determined by factoring ceiling height by 1.5 and multiplying that product times the square feet of floor area. For example, a 12' X 12' room with an 8' ceiling height would require 1728 watts of heating. (8' x 1.5 = 12 x 12 x 12 = 1728 watts).

Electrical Wall Heaters - This system follows the same principle as electric ceiling heat but is substantially cheaper; and concentrates all heat from one point in the room. Its size is also measured in wattage per coil or unit stack. The typical unit will range from 1500 watts up to 4000 watts.

Electric Baseboard Heat - This is merely a modification of the electric wall heater. However, it distributes the heat over a somewhat wider area, and costs approximately 20% more than electric wall heaters of the same wattage.

Hot-Water (Gravity System) - may be coal, oil or gas fired. In this system, hot water serves as the medium for carrying heat to all parts of the building. Circulation in a gravity system is created when the hot water ascends through the flow pipe and then flows down through return pipes which pass successively through radiators on the various floors of the building. Since heat is released as the water passes through each radiator, the ones on the lower floors must be larger. The "two-pipe" system relieves this problem since each radiator has its own individual hot-water feed. A hot water system for residential use is rather uncommon due to the cost of the system (which may run from 40% to 60% more than forced warm-air or radiant ceiling systems) and the bulkiness of the materials.

Steam Heating - Maybe coal, oil or gas fired. In this type system, water in the boiler is converted to steam which rises through the main distribution pipe. From this pipe, the steam moves into the radiators, gives off its heat and condenses. The condensed steam (water) then flows back to the boiler for reheating. In the "two-pipe" the steam and the condensate flow in separate pipes. With the two – pipe system, the steam always enters the radiators from the top and subsequently emerges as condensate from the bottom. If the return-flow pipe is situated below the water level of the boiler, it is described as a "wet" condensate return, whereas if it is above the water level, it is a "dry" condensate return. In a single pipe system, steam and condensate flow in the same pipe and must enter the bottom of the radiator. As with the hot-water system, steam heating is expensive and somewhat cumbersome.

INTERIOR FINISH

Interior construction and finish, as a whole can account for 10% to 30% of replacement cost new, depending on the elaborateness of trim, number and sizes of closets, kitchen cabinets, special wall finishes, etc.

Interior partitions are generally wood framed with 2" X 4" studs on 16" centers. The most common basic interior facing is 1/2" or 5/8" drywall, taped and painted. Older houses often have walls and ceilings finished with plaster on wood or gypsum lath. However, due to the wide use and acceptance of drywall in most quality levels, plaster does not necessarily increase value in proportion to cost. The exception occurs in the luxury or mansion type house where plaster is consistent in cost and quality with the entire structure.

The type and quality of materials available for finishing the interior of a house varies greatly. However, the basic wall and ceiling finish will generally conform to the grade of

materials and quality of workmanship evidenced by exterior wall finish and design. Special attention should be given to the amount and quality of kitchen cabinets, closets and the finish of special areas such as the bath and den.

MECHANICAL - CENTRAL AIR CONDITIONING

The majority of residential central air-conditioning is done with either "split" refrigerated systems, ranging from one to five- ton capacity. The combination heating/ cooling or package unit utilizes the same duct work with gas heating and electric cooling. This is a central system for original construction and generally results in some savings (per system capacity) in construction costs.

The split system is usually added to an existing forced warm-air furnace. The fan coil is normally installed in the top of the furnace and the condensing unit (with compressor and condenser in the same cabinet) is located outside the house. The efficiency of this system is equal to that of the package system, although cost may be somewhat higher if it is added after original construction.

The heat-pump is an electric powered combination heating and cooling unit which consists of a compressor, condenser, throttle valve and evaporator. It operates on the principle that fluids under high pressure evaporate at a higher temperature than fluids under low pressure. The heat transfer medium is heated under low pressure in the evaporator then transferred by the compressor to the high- pressure condenser where the heat is given off and blown through a duct system in the house. The cooling system is activated by thermostatically reversing a four-way valve which reverses the cycle of the unit. The heat pump is somewhat more expensive than the comparable gas-electric package unit described above, and generally requires electric resistance heaters to provide supplementary heat during periods when the temperature drops below 25°F.

The variation in models, sizes and capacities of central air-conditioning systems is virtually boundless. The only sure way to determine the type, size and capacity of a system is to note the model number and brand name and call the dealer. However, the horsepower of the compressor motor is approximately equal to the ton capacity of the cooling unit. Using the same duct work as the forced air heating system, central air-conditioning may run 20° to 30° more if separate duct work is required.

PLUMBING

A standard complement of plumbing for a fair or average quality house consists of one 2 to 3-fixture bath with shower over tub, one flat rim kitchen sink with two compartments and one 40- gallon gas or 52- gallon electric water heater. Plumbing represents a relatively fixed cost in building construction. Some nominal additional cost for laterals would be incurred in the larger house, but this would be hardly noticeable in the overall price per square foot. It is pointed out that colored fixtures cost approximately 5 % more than white fixtures. The kitchen sink and each bathroom should be vented with a metal stack extending through the roof. It is also important to determine whether waste is disposed of by public sewer or individual septic system.

ROOF

There are generally six types or styles of roof structures used in residential construction. The typical roof structure consists of 2" X 6" rafters placed on 16" centers and secured at the peak by a 2" X 8" ridge board. Sheathing is typically 3/8" to 1/2" plywood covered with felt under-lament and 235 lb. composition shingles. Ceiling joists, which are often considered part of the composite roof structure, should be at least 2" X 6" on 16" centers with a maximum span of 14'.

The rafters and ceiling joists are attached to the 4" X 4" ceiling plates at the line of the exterior wall. The span of a roof is the distance between the outer edges of the ceiling plates, typically the width of the house. The rise of the roof is the distance from the level of the ceiling plates to the top of the ridge. The Run of a rafter is the horizontal distance from the outside of the ceiling plate to the right- angle intersection of the ridge. The slope of a roof is expressed in terms of the rise of the roof in inches per foot of run of rafters. The slope of a roof is typically 5/12 but should not be less than 4/12. Generally better-quality construction will be reflected by steeper pitched roofs with more overhangs at the eaves. Pitch is the ratio of the rise of the roof to the span. Therefore, to find the rise of the roof in inches per foot of run of rafters (slope), multiply pitch by 24.

With exception of a trussed frame, 2" X 4" rafters do not meet Basic Standards

With a residential truss roof, rafters and ceiling joists are placed on 24" centers and are constructed with 2" X 4" boards, however, the engineering design of the truss creates structural capacity like a conventionally framed roof and results in a savings in construction cost.

TERMS AND DEFINITIONS

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 apartment 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, 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.

a type of construction in which the exterior walls are Construction, mill

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 a type of construction in which the principal structural

members, such

Concrete 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.

a projecting element at the top of a wall, serving principally Cornice

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.

Vance County 2024

Schedule of Values

a uniform horizontal layer of brick, stone, terra cotta, Course

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.

(1) a relatively small structure projecting from a sloping Dormer

roof. (2) a window set upright in the face of such a structure.

any building or portion thereof designed or occupied in **Dwelling**

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.

a building designed as a place of residence for more than two families or households; e.g., an apartment house or tenement. Dwelling, Multi-family

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.

a drawing which represents a projection of any one of the Elevation

vertical sides or vertical cross-sections of a building or of

any other object. Compare plan.

Façade 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.

(1) any one floor of a building two or more stories high, each Flat

> 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 buildings extending from the remainder of the building and

covered with a gable roof.

a large or principal beam (q.v.) used to support concentrated loads at isolated points along its length. (Girders usually Girder

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.

one of a series of small parallel beams laid on edge and used Joist

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 a non-partitioned or relatively open 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.

Marquee 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, *Note:* 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.

a finished portion of a building having full story height **Overhang**

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, such 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 more 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 walk or passage 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 with a ridge at the center and a double slope on each

if its two sides.

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 ridged roof with two slopes on each side, the lower having

a steeper pitch.

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 of the lower part is very great; a series

of dormers projects from the lower part.

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)

Sub floor

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 ceramic clay 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 meets 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; such

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 unit of signaling 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

Vance County 2024

Schedule of Values

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.

the instructions that enable a computer to process data. Program

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.

a collection of related items of data treated as a unit. Record

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.

the programs and routines used to extend the capabilities of Software

> 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

Vance County 2024

fall within one standard deviation of the mean or average

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 depreciation.*

Actual age the number of years elapsed since the original construction,

as of the effective valuation date. Compare with effective

age.

Ad valorem tax in reference to property, a tax based upon the value of the

property.

Aesthetic value a value, intangible in nature, which is attributable to the

pleasing appearance of a 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

owner- ship; amenity value 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 *valuation or appraised value*.

Appraisal schedules any standardized schedules and tables used in conjunction

with a revaluation program, such as replacement cost pricing

schedules, depreciation tables, land depth tables, etc.

Appraised value see appraisal.

Appraiser one who estimates value. More specifically, one who

possesses the expertise to execute or direct the execution of

an appraisal.

Assessed value see assessment.

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 assessed value, taxable value, and tax

base.

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 tax list, tax book, tax duplicate, and tax roll.

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

appraisement.

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 Board of Appeals, and Board of Review.

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 income approach.

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 a city - in which the primary commercial,

governmental, and recreational activities are concentrated.

Certified assessment Evaluator a professional designation (C.A.E.) conferred upon

qualifying assessors by the International Association of

Assessing Officers (IAAO).

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 unit-in-place

method.

Corner influence the enhancement to the value of a property due to its corner

location; most generally applicable to commercial

properties.

Cost approach one of the three traditional approaches to determination of

the value of a property; 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 "costto- market approach" 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 quitclaim deed conveys the interest described

therein without warranty of title. A *trust deed* conveys interest described therein to a trustee. A *warranty deed* 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 *physical*, referring to the loss of value caused by physical deterioration; *functional*, referring to the loss of value caused by obsolescence inherent in the property itself; and economic, referring to the loss of value caused by factors extraneous to the property.

Accrued depreciation refers to the actual depreciation existing in a particular property as of a specified date. Normal 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 *physical depreciation*.

Economic depreciation

See depreciation.

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 *economic depreciation*.

Economic rent

the rent which a property can be expected to bring in the open market as opposed to *contract rent* 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 *actual age*.

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 economic 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

revaluation program.

Equity in reference to property taxes, a condition in which the tax

load is distributed fairly or *equitably;* opposite of *inequity* which refers to a condition characterized by an unfair or unequitable distribution of the tax burden. *Inequity* is a natural product of changing economic conditions, which can only be effectively cured by periodic 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 *tax exemption*.

Fee appraisal see mass appraisal.

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 see depreciation.

Functional Obsolescence obsolescence caused by factors inherent in the property

itself. Also referred to as functional depreciation.

Vance County 2024

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 grantor.

Grantor a person who transfers property or grants property rights by

deed, trust instrument, or other similar documents. Compare

with grantee.

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 determination of

value; 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 equity.

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.

the rate of return from an investment. Interest rate

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 buildings 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 at a small scale, and showing comparative unit land

values on a block to block basis.

Lease, Lessee, Lessor a written contract by which one party (lessor) gives to

> another party (lessee) the possession and use of a specified property, for a specified time, and under specified terms and

conditions

Vance County 2024

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 contract

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 or data collector whose principle duty is to

collect and record property data (not an appraiser).

Market data Approach one of the three traditional approaches to determination of

the value of a property; arrived at by compiling data on recently sold property 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 accomplish uniform equitable valuation with a minimum of detail, within a limited time period, and at a limited cost ... as opposed to a *fee appraisal* 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 upon

qualifying real estate appraisers by the American Institute

of 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

improving stage characterized by development and growth; the *static stage* characterized by a leveling off of values; and the *declining stage* 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 net net, or net net lease.

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

functional depreciation and economic depreciation.

the fixed expenses, operating costs, and reserves for **Operating expenses**

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.

Average 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.

Over assessed a condition wherein a property is assessed proportionately

higher than comparable properties.

piece of land held in one ownership, Parcel

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.

property, which is not permanently affixed to and a part of Personal property

the real estate, as specified by state statutes.

Physical depreciation see depreciation.

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. See classified property tax.

a physical inspection of a property for the purpose of **Property inspection**

collecting and/or reviewing property data.

Property record card a document specially designed 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 real property.

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 *economic*

rent.

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

reproduction cost.

Reproduction cost the current cost of reproducing a replica property. Compare

with replacement cost.

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 *equalization program*.

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 *lease*; 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 traceable to the

party(s) legally liable for payment thereof.

Tax book see assessment roll.

Tax district a political subdivision over which a governmental unit has

authority to levy a tax.

Tax duplicate see assessment roll.

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 assessment roll.*

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.

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 tax levy, by the

total assessed value of the taxing district.

Tax roll see assessment roll.

Tillable land land suitable for growing annual crops.

Vance County 2024

Under assessed a condition wherein a property is assessed proportionately

lower than computable 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 un-rented unit of rental property.

Vacant land unimproved land; a parcel for which there is no

improvement value.

Valuation *see appraisal.*

View the scene as viewed from a property.

Water frontage 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 grouped frequency distribution*, 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 *arithmetic* average or arithmetic mean.

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 failing 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

less than 1 would indicate the converse relationship. positions in a distribution at 25 percentile intervals; the *first quartile* being equal to the 25th percentile, the *second quartile* being equal to the 50th percentile or the median, and the *third quartile* 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 predicator (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.

A probability sample is a sample in which each parcel in the universe is given equal chance of being included. Also

referred to as random sample.

A non-probability sample 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 population.

CLASSIFICATION OF REAL AND TANGIBLE PERSONAL PROPERTY

In general, machinery and equipment used primarily as part of a manufacturing process (process equipment) is taken as <u>Personal Property.</u> Machinery and equipment which is part of the land or building improvement is taken as <u>Real Property.</u>

DESCRIPTION	REAL	PERSONAL
AIR CONDITIONING- BUILDING	XX	
AIR CONDITIONING- MANUFACTURING/PRODUCT		XX
AIR CONDITIONING- WINDOW UNITS		XX
AIRPLANES		XX
ALARM SYSTEMS (SECURITY OR FIRE) & WIRING		XX
ASPHALT PLANTS & EQUIPMENT		XX
ATM- ALL EQUIP/ & SELF STANDING BOOTHS		XX
AUTO EXHAUST SYSTEMS FOR BUILDING	XX	
AUTO EXHAUST FOR EQUIPMENT		XX
AWNINGS		XX
BALERS (PAPER, CARDBOARD, ETC)		XX
BANK TELLER LOCKERS- MOVEABLE OR BUILT-IN		XX
BAR AND BAR EQUIPMENT- MOVEABLE OR BUILT-IN		XX
BARNS	XX	
BILLBOARDS		XX
BOAT AND MOTORS- ALL		XX
BOILER- FOR SERVICE OF BUILDING	XX	
BOWLING ALLEY LANES		XX
BROADCASTING EQUIPMENT		XX
C-I-P EQUIPMENT		XX
CABINETS		XX
CABLE TV DISTRIBUTION SYSTEMS		XX
CABLE TV EQUIPMENT & WIRING		XX
CABLE TV SUBSCRIBER CONNECTIONS		XX
CAMERA EQUIPMENT		XX
CANOPIES-FABRIC, VINYL, PLASTIC		XX
CANOPIES- GENERAL	XX	
CANOPY LIGHTING	XX	
CAR WASH- ALL EQUIPMENT, FILTERS & TANKS		XX
CARPET-INSTALLED	XX	
CATWALKS		XX
CEMENT PLANTS		XX
CHAIRS- ALL TYPES		XX
CLOSED CIRCUIT TV		XX
COLD STORAGE- EQUIPMENT, PARTITIONS		XX
COMPRESSED AIR OR GAS SYSTEMS (OTHER THAN BLDG HEAT		XX
COMPUTER ROOM A/C	XX	XX
COMPUTER ROOM RAISED FLOOR		XX
COMPUTER SCANNING EQUIPMENT		XX

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CONCRETE PLANTS CONSTRUCTION AND GRADING EQUIPMENT XX CONTROL SYSTEMS- BUILDING AND EQUIPMENT CONVEYOR & MATERIAL HANDLING SYSTEM COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE IN MANUFACTURING XX COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS XX DANCE FLOORS XX DATA PROCESSING EQUIPMENT- ALL ITEMS DELIE QUIPMENT DESK- ALL XX DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN XX DISPLAY CASES- MOVEABLE OR BUILT-IN XX DOCK LEVELERS XX XX DRAPES & CURTAINS, BLINDS, ETC DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL XX DRIVE-THRU WINDOWS- ALL XX DUST CATCHERS, CONTROL SYSTEMS, ETC XX DUST CATCHERS, CONTROL SYSTEMS, ETC XX ELECTRONIC CONTROL SYSTEMS ELECTRONIC CONTROL SYSTEMS FARM EQUIPMENT- ALL FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) FLAGPOLE FOUNDATIONS FOR MACHINERY AND EQUIP XX FENCING- OUTSIDE (PERMANENT) FLAGPOLE XX FURNACES- STEEL MILL PROCESS, ETC XX GEBERNHOULSE REALING SYSTEM FTC XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX COPERNHOUSE REALING SYSTEM FTC XX COMMENTAL TO THE COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX COLORISON CONTROL SYSTEMS XX FURNACES- STEEL MILL PROCESS, ETC XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX XX COPERNHOUSE REALING SYSTEM FTC XX XX COPERNHOUSE REALING SYSTEM FTC XX XX XX COMMENTS XX XX XX COLORISON CONTROL SYSTEM FTC XX XX XX XX COLORISON CONTROL SYSTEM FTC XX XX XX XX COLORISON CONTROL SYSTEM FTC XX XX XX XX XX COLORISON CONTROL SYSTEM FTC XX XX XX XX XX XX COLORITON CONTROL SYSTEM FTC XX XX XX XX XX XX XX XX XX	COMPUTERS AND DATA LINES		xx
CONTROL SYSTEMS- BUILDING AND EQUIPMENT CONVEYOR & MATERIAL HANDLING SYSTEM COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE IN MANUFACTURING COULING TOWERS- PRIMARY USE IN MANUFACTURING XX DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS DATA PROCESSING EQUIPMENT- ALL ITEMS DATA PROCESSING EQUIPMENT ALL ITEMS DELI EQUIPMENT DESK- ALL XX DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DOCK LEVELERS XX DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS XX DRINKING FOUNTAINS XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL DRINKING FOUNTAINS XX DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS, ETC XX ELEVATORS XX ELEVATORS XX FARM EQUIPMENT- ALL FENCING- OUTSIDE (PERMANENT) FLAGPOLE XX FENCING- OUTSIDE (PERMANENT) XX FUNDATIONS FOR MACHINERY AND EQUIP XX FUNDATIONS FOR MACHINERY FUNDATIONS FOR MACHINERY FUNDATIONS FOR MACHINERY FUNDATIONS FOR MACHINERY XX FUNDATIONS FOR MACHINERY XX FUNDATIONS FOR MACHINERY XX FUNDATIONS FOR MACHINERY XX FUNDATION	CONCRETE PLANTS		XX
CONVEYOR & MATERIAL HANDLING SYSTEM COOLERS- WALK-IN OR SELF STANDING COOLING TOWERS- PRIMARY USE FOR BUILDING XX COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE IN MANUFACTURING COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN XX DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS XX DANCE FLOORS XX DATA PROCESSING EQUIPMENT- ALL ITEMS XX DELI EQUIPMENT XX DESK- ALL XX DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN XX DISPLAY CASES- MOVEABLE OR BUILT-IN XX DOCK LEVELERS XX XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL DRYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS XX DUST CATCHERS, CONTROL SYSTEMS, ETC XX ELECTRONIC CONTROL SYSTEMS ELEVATORS XX FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FENCING- OUTSIDE (PERMANENT) XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) YX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX	CONSTRUCTION AND GRADING EQUIPMENT		XX
COOLERS- WALK-IN OR SELF STANDING COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE IN MANUFACTURING COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS DANCE FLOORS DATA PROCESSING EQUIPMENT- ALL ITEMS DELI EQUIPMENT DESK- ALL DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS DOCK LEVELERS DRINKING FOUNTAINS DRINKING FOUNTAINS DRIVE-THRU WINDOWS- ALL DRYING SYSTEMS- PROCESS OR PRODUCT DUMPSTERS DUMPSTERS DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC XX ELECTRONIC CONTROL SYSTEMS ELECTRONIC CONTROL SYSTEMS FARM EQUIPMENT- ALL FENCING- INSIDE FARM EQUIPMENT- ALL FENCING- OUTSIDE (PERMANENT) FLAGPOLE XX FUNDATIONS FOR MACHINERY AND EQUIP XX FUNDATIONS ON ACHINERY AND EQUIP XX FUNDATIONS ON XX FUNDATIONS FOR MACHINERY AND EQUIP XX FUNDATIONS ON XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX COLFOURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX COLFOURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX XX XX XX XX XX XX XX XX	CONTROL SYSTEMS- BUILDING AND EQUIPMENT		XX
COOLING TOWERS- PRIMARY USE FOR BUILDING COOLING TOWERS- PRIMARY USE IN MANUFACTURING COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS XX DATA PROCESSING EQUIPMENT ALL ITEMS DELI EQUIPMENT DESK- ALL XX DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN XX DOCK LEVELERS XX DRINKING FOUNTAINS DRINKING FOUNTAINS DRINKING FOUNTAINS DRIVE-THRU WINDOWS- ALL XX DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ELEVATORS XX FARM EQUIPMENT- ALL FENCING- INSIDE FARM EQUIPMENT- ALL FENCING- OUTSIDE (PERMANENT) FLAGPOLE FULLY AND EXAMPLED XX FULLS- NOT FOR MACHINERY AND EQUIP XX FURNACES- STEEL MILL PROCESS, ETC XX GAZEBOS XX GRAIN BINS XX SCALATORS XX SCALATORS XX XX XX XX XX XX XX XX XX	CONVEYOR & MATERIAL HANDLING SYSTEM		XX
COOLING TOWERS- PRIMARY USE IN MANUFACTURING COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN XX DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS XX DATA PROCESSING EQUIPMENT ALL ITEMS DELI EQUIPMENT XX DESK- ALL XX DISPLAY CASES- MOVEABLE OR BUILT-IN XX DISPLAY CASES- MOVEABLE OR BUILT-IN XX DOCK LEVELERS XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL XX DUMPSTERS XX DUST CATCHERS, CONTROL SYSTEMS, ETC XX ELEVATORS ELEVATORS ESCALATORS XX FARM EQUIPMENT- ALL FENCING- INSIDE FOUNDATIONS FOR MACHINERY AND EQUIP XX FOUNDATIONS FOR MACHINERY AND EQUIP XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) FURNITURE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX GRAIN BINS XX XX XX CRAIN BINS XX XX XX XX XX XX XX XX XX X	COOLERS- WALK-IN OR SELF STANDING		XX
COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS XX DATA PROCESSING EQUIPMENT- ALL ITEMS DESK- ALL DESK- ALL DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN XX DOCK LEVELERS XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL DWIPSTERS DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ESCALATORS FARM EQUIPMENT- ALL FENCING- INSIDE FENCING- OUTSIDE (PERMANENT) FLAGPOLE FUNDATIONS FOR MACHINERY AND EQUIP XX FURDAS- STEEL MILL PROCESS, ETC XX FURDAS- STEEL MILL PROCESS, ETC XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX GRAIN BINS XX XX XX XX XX XX XX XX XX	COOLING TOWERS- PRIMARY USE FOR BUILDING	XX	
DAIRY PROCESSING PLANTS- ALL PROCESS ITEMS, BINS, TANKS DANCE FLOORS XX DATA PROCESSING EQUIPMENT- ALL ITEMS XX DELI EQUIPMENT XX DESK- ALL XX DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN XX DISPLAY CASES- MOVEABLE OR BUILT-IN XX DOCK LEVELERS XX XX DRAPES & CURTAINS, BLINDS, ETC XX DRIVE-THRU WINDOWS- ALL XX DRYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS XX DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ELEVATORS XX ELEVATORS XX FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FUNDATIONS FOR MACHINERY AND EQUIP XX FUNDATIONS ON ALL XX FUNDATIONS ON ALL XX FUNDATIONS ON ALL XX FUNDATIONS ON ALL XX FUNDATIONS ON ALCHINERY AND EQUIP XX XX FUNDACES- STEEL MILL PROCESS, ETC XX FUNDACES- STEEL MILL PROCESS, ETC XX GAZEBOS XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX XX XX XX XX XX XX XX XX	COOLING TOWERS- PRIMARY USE IN MANUFACTURING		XX
DANCE FLOORS DATA PROCESSING EQUIPMENT- ALL ITEMS DELI EQUIPMENT DESK- ALL DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS XX DRAPES & CURTAINS, BLINDS, ETC AXX DRINKING FOUNTAINS DRIVE-THRU WINDOWS- ALL DRIYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ELEVATORS FARM EQUIPMENT- ALL FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) FLAGPOLE FUNDATIONS ON MACHINERY AND EQUIP XX FURNACES- STEEL MILL PROCESS, ETC XX GAZEBOS XX GENERATOR XX GRAIN BINS XX SX SX SX SX SX SX SX SX	COUNTERS/RECEPTION DESKS- MOVEABLE OR BUILT-IN		XX
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DELI EQUIPMENT DESK- ALL DISSN- ALL DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL DRYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC XX ELECTRONIC CONTROL SYSTEMS ELEVATORS XX ESCALATORS XX FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FREIGHT CHARGES FUNDATIONS FOR MACHINERY AND EQUIP XX FULLS- NOT FOR SALE (LIST AS SUPPLIES) FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GRAIN BINS XX XX GRAIN BINS XX	DANCE FLOORS		XX
DELI EQUIPMENT DESK- ALL DISSN- ALL DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL DRYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC XX ELECTRONIC CONTROL SYSTEMS ELEVATORS XX ESCALATORS XX FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FREIGHT CHARGES FUNDATIONS FOR MACHINERY AND EQUIP XX FULLS- NOT FOR SALE (LIST AS SUPPLIES) FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GRAIN BINS XX XX GRAIN BINS XX	DATA PROCESSING EQUIPMENT- ALL ITEMS		XX
DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS XX XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS DRIVE-THRU WINDOWS- ALL XX DRYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ELEVATORS XX ELEVATORS FARM EQUIPMENT- ALL FENCING- INSIDE FENCING- OUTSIDE (PERMANENT) FLAGPOLE XX FUNDATIONS FOR MACHINERY AND EQUIP XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) TYN GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX GRAIN BINS XX XX XX XX XX XX XX XX XX			XX
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DISPLAY CASES- MOVEABLE OR BUILT-IN DOCK LEVELERS XX XX XX DRAPES & CURTAINS, BLINDS, ETC XX DRINKING FOUNTAINS XX DRIVE-THRU WINDOWS- ALL XX DRYING SYSTEMS- PROCESS OR PRODUCT XX DUMPSTERS XX DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ELEVATORS XX ESCALATORS XX FARM EQUIPMENT- ALL FENCING- OUTSIDE (PERMANENT) XX FENCING- OUTSIDE (PERMANENT) XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) FURNACES- STEEL MILL PROCESS, ETC XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX KX XX XX XX XX XX XX XX X	DIAGNOSTIC CENTER EQUIPMENT- MOVEABLE OR BUILT-IN		XX
DRAPES & CURTAINS, BLINDS, ETC DRINKING FOUNTAINS DRIVE-THRU WINDOWS- ALL DRYING SYSTEMS- PROCESS OR PRODUCT DUMPSTERS DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS ELEVATORS FENCING- INSIDE FARM EQUIPMENT- ALL FENCING- OUTSIDE (PERMANENT) FLAGPOLE FOUNDATIONS FOR MACHINERY AND EQUIP XX XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) TURNACES- STEEL MILL PROCESS, ETC XX GAZEBOS XX GENERATOR XX XX XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX XX XX XX XX XX XX GRAIN BINS XX XX XX XX XX XX XX XX XX	DISPLAY CASES- MOVEABLE OR BUILT-IN		
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DUST CATCHERS, CONTROL SYSTEMS, ETC ELECTRONIC CONTROL SYSTEMS XX ELEVATORS XX ESCALATORS XX FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FLAGPOLE FUNDATIONS FOR MACHINERY AND EQUIP XX XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION) XX XX XX XX GRAIN BINS XX XX XX XX XX XX XX XX XX	DRYING SYSTEMS- PROCESS OR PRODUCT		XX
ELECTRONIC CONTROL SYSTEMS ELEVATORS ESCALATORS XX FARM EQUIPMENT- ALL FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) FLAGPOLE XX FOUNDATIONS FOR MACHINERY AND EQUIP XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX XX XX XX XX XX XX XX XX	DUMPSTERS		XX
ELEVATORS ESCALATORS XX FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) FLAGPOLE FLAGPOLE XX FOUNDATIONS FOR MACHINERY AND EQUIP XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX XX XX XX XX XX XX XX XX	DUST CATCHERS, CONTROL SYSTEMS, ETC		XX
ESCALATORS FARM EQUIPMENT- ALL FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) FLAGPOLE FLAGPOLE XX FOUNDATIONS FOR MACHINERY AND EQUIP XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX XX XX XX XX XX XX XX XX	ELECTRONIC CONTROL SYSTEMS		XX
FARM EQUIPMENT- ALL XX FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FLAGPOLE XX FOUNDATIONS FOR MACHINERY AND EQUIP XX XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX XX	ELEVATORS	XX	
FENCING- INSIDE XX FENCING- OUTSIDE (PERMANENT) XX FLAGPOLE XX FOUNDATIONS FOR MACHINERY AND EQUIP XX XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX	ESCALATORS	XX	
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FLAGPOLE FOUNDATIONS FOR MACHINERY AND EQUIP XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX XX XX XX XX XX XX XX XX	FENCING- INSIDE		XX
FOUNDATIONS FOR MACHINERY AND EQUIP XX XX FREIGHT CHARGES XX FUELS- NOT FOR SALE (LIST AS SUPPLIES) XX FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX	FENCING- OUTSIDE (PERMANENT)	XX	
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FUELS- NOT FOR SALE (LIST AS SUPPLIES) FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION GRAIN BINS XX XX XX XX	FOUNDATIONS FOR MACHINERY AND EQUIP	XX	XX
FURNACES- STEEL MILL PROCESS, ETC XX FURNITURE AND LIGHT FIXTURES XX GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX	FREIGHT CHARGES		XX
FURNITURE AND LIGHT FIXTURES GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION GRAIN BINS XX XX XX	FUELS- NOT FOR SALE (LIST AS SUPPLIES)		XX
GAZEBOS XX GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX	FURNACES- STEEL MILL PROCESS, ETC		XX
GENERATOR XX GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX	FURNITURE AND LIGHT FIXTURES		XX
GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION XX GRAIN BINS XX XX	GAZEBOS	XX	
GRAIN BINS XX XX	GENERATOR		XX
	GOLF COURSE AND IMPROVEMENTS (DRAINAGE/IRRIGATION	XX	
GREENHOUSE BENCHES HEATING SYSTEM FTC	GRAIN BINS	XX	XX
GREENHOOSE BENCHES, HEATING STSTEIN, ETC	GREENHOUSE BENCHES, HEATING SYSTEM, ETC		XX

DESCRIPTION	REAL	PERSONAL
GREENHOUSES- STRUCTURE IF PERM. AFFIXED	XX	

HEATING SYSTEMS, PROCESS		XX
HOPPERS- METAL BIN TYPE		XX
HOSPITAL SYSTEMS, EQUIPMENT & PIPING		XX
HOT AIR BALLOONS		XX
HOTEL.MOTEL TELEVISIONS & WIRING		XX
HUMIDIFIERS- PROCESS		XX
INCINERATORS- EQUIPMENT AND/OR MOVEABLE		XX
INDUSTRIAL PIPING- PROCESS		XX
INSTALLATION COST		XX
IRRIGATION EQUIPMENT		XX
KILN HEATING SYSTEM		XX
KILNS- METAL TUNNEL OR MOVEABLE		XX
LABORATORY EQUIPMENT		XX
LAGOONS/SETTLING PONDS	XX	
LAUNDRY BINS		XX
LAW & PROFESSIONAL LIBRARIES – ALL FURNITURE/BOOKS		XX
LEASED EQUIPMENT- LESSOR OR LESSEE POSSESSION		XX
LEASEHOLD IMPROVEMENTS (LIST IN DETAIL YEARLY)		XX
LIFTS-OTHR THAN ELEVATOR		XX
LIGHTING- PORTABLE, MOVEABLE, SPECIAL		XX
LIGHTING- YARD LIGHTING	XX	
MACHINERY AND EQUIPMENT		XX
MILK HANDLING- MILKING, COOLING, PIPING, STORAGE		XX
MINERAL RIGHTS	XX	
MIRRORS (OTHER THAN BATHROOM)		XX
MONITORING SYSTEMS BUILDING OR EQUIPMENT		XX
NEWSPAPER STANDS		XX
NIGHT DEPOSITORY		XX
OFFICE EQUIPMENT- ALL		XX
OFFICE SUPPLIES (LIST AS SUPPLIES)		XX
OIL COMPANY EQUIPMENT - PUMPS, SUPPLIES, ETC		XX
OVENS - PROCESSING, MANUFACTURING		XX
OVERHEAD CONVEYER SYSTEM		XX
PACKAGE AND LABELING EQUIPMENT		XX
PAGING SYSYTEMS		XX
PAINT SPRAY BOOTHS		XX
PAINTING- NO ADDED VALUE		XX
PARTITIONS		XX
PAVING	XX	
PIPING SYSTEMS- PROCESS PIPING		XX
PLAYGROUND EQUIPMENT- ALL		XX
PNEUMATIC TUBE SYSTEMS		XX

DESCRIPTION	REAL	PERSONAL
PORTABLE BUILDINGS		XX

POWER GENERATORS SYSTEM (AUXILLARY, EMERGENCY, ETC		XX
POWER TRANSFORMERS- EQUIPMENT		XX
PUBLIC ADDRESS SYSTEM (INTERCOM, MUSIC, ETC)		XX
RAILROAD SIDINGS (OTHER THAN RAILROAD OWNERS)	XX	
REFRIGERATION SYSTEM- COMPRESSORS, ETC		XX
REPAIRS- BUILDING	XX	
REPAIRS- EQUIPMENT (50% COST)		XX
RESTAURANT FURNITURE (INCLUDE ATTACHED FLOOR OR		VV
BLDG)		XX
RESTAURANT/KITCHEN EQUIPMENT, VENT HOODS, SINKS, ETC		XX
(COMMERCIAL)		**
RETURNABLE CONTAINERS		XX
ROLL-UP DOORS (INSIDE WALL)		XX
ROLL-UP DOORS (OUTSIDE WALL)	XX	
ROOFING	XX	
ROOM DIVIDERS/PARTITIONS- MOVEABLE OR BUILT-IN		XX
ROOMS SELF CONTAINED OR SPECIAL PURPOSE (WALLS,		VV
CEILING, FLOOR)		XX
SAFES WALL OR SELF-STANDING		XX
SALES/USE TAX		XX
SATELLITE DISHES (ALL WIRING & INSTALLATION TO TV &		VV
EQUIPMENT)		XX
SCALE HOUSES (UNLESS MOVEABLE)	XX	
SCALES		XX
SECURITY SYSTEMS		XX
SERVICE STATIONS EQUIPMENT - PUMPS, TANKS, LIFTS &		VV
RELATED		XX
SEWER SYSTEMS	XX	
SHELVING		XX
SIGNS ALL TYPES INCLUDING ATTACHED TO BLDG		XX
SINKS-BATHROOM	XX	
SINKS - KITCHEN AREA	XX	
SOFTWARE- CAPITALIZED		XX
SOLAR PANELS		XX
SOUND SYSTEMS & PROJECTION EQUIPMENT		XX
SPARE PARTS-LIST AS SUPPLIES		XX
SPEAKERS- BUILT-IN OR FREESTANDING		XX
SPRAY BOOTHS		XX
SPRINKLER SYSTEM - ATTACHED TO PRODUCTS STORAGE RACKS		XX
SPRINKLER SYSTEM- BUILDING	XX	

DESCRIPTION	REAL	PERSONAL
SUPPLIES (OFFICE & OTHER)		XX
SWIMMING POOLS	XX	
TANKS (ALL ABOVE & BELOW GROUND)	XX	XX
TELEPHONE SYSTEMS & WIRING- PRIVATE		XX
THEATRE SCREENS- INDOOR		XX
THEATRE SCREENS- OUTDOOR	XX	
THEATRE SEATS		XX
TOOLING, DIES, MOLDS		XX
TOWERS - MICROWAVE, EQUIPMENT, WIRING & FOUNDATION		XX
TOWERS - TV, RADIO, CATV, TWO-WAY RADIO, WIRING & FDN		XX
TRANSPORTATION COST-ALL		XX
TUNNELS-UNLESS PART OF PROCESS SYSTEM	XX	
UPGRADES TO EQUIPMENT		XX
VACUUM SYSTEM, PROCESS		XX
VAULT	XX	
VAULT DOOR, INNER GATES, VENTS, & EQUIPMENT		XX
VENDING MACHINES		XX
VENT FANS		XX
VENTILATION SYSTEMS- GENERAL BUILDING	XX	
VENTILATION SYSTEMS- NEEDED FOR MANUFACTURING PROCESS		XX
VIDEO TAPES/MOVIES/REEL MOVIES		XX
WALLCOVERING	XX	
WALLS- PARTITIONS, MOVEABLE 7 ROOM DIVIDERS		XX
WATER COOLERS-ALL		XX
WATER LINES- FOR PROCESS ABOVE OR BELOW GROUND		XX
WATER SYSTEM- RESIDENTIAL OR GENERAL BUILDING	XX	
WATER TANKS & SYSTEM- FOR PROCESS EQUIPMENT		XX
WHIRLPOOL/JACUZZI/HOT TUBS	XX	XX
WIRING- POWER WIRING FOR MACHINERY AND EQUIPM		XX

Table of Contents

	_
1	Components of a Reappraisal
2	Statutory Requirements
3	Appraisal Theory
4	Replacement Cost Schedules and Tables
5	Residential Pricing Schedules
	Other Building and Yard Items Pricing Schedules
	Exempt/Institutional Buildings
8	Commercial/Industrial Schedules
9	Multi-Family Apartments
10	Franchise Food Restaurants
11	Mobile Home Parks
12	Golf Courses
13	Solar Farms and Cell Towers
14	Section 42 Housing
15	Percent Good Schedules and Tables
16	<u>Land Schedules</u>
17	<u>Flood</u>
18	Commercial/Industrial Income Models
19	Neighborhood Delineation
20	<u>Zoning</u>
	Land Use
22	IAAO Standards on Mass Appraisal of Real Property
23	Code of Ethics
24	Uniform Standards of Professional Appraisal Practice
25	New Construction Percentage
26	Weights and Measures
27	Structual Components
28	<u>Terms and Definitions</u>

Property Classification