
CHAPTER 12. MISCELLANEOUS

12-1. VALUATION INSTRUCTIONS FOR SPECIAL PROBLEMS AND PROCEDURES.

- A. General. The purpose of this section is to promulgate instructions to assist the appraiser in the solving of special problems. It also contains valuation information relating to HUD policy that requires unusual or special processing methods.
- B. Difficult Market Comparisons. HUD Form 92019 Estimate of Market Price by Comparison, provides a format that permits an orderly graphic analysis of the complex market data. The form will be used at the discretion and direction of the chief appraiser in the analysis of disputed appraisals and the training of both staff and fee panel appraisers in the use of the comparison approach to value.
- C. Difficult Physical Problems. A structural, sanitary engineering, or similar complex problem that requires a specialized examination may be returned to the Field Office or to the Direct Endorsement mortgagee with a memorandum that explains the condition which precludes completion of the processing. The appraiser may telephone the Field Office to discuss the problem and to request guidance when the matter in question can be handled by phone. An appraiser shall not be required to process any case without assistance when, in his/her judgment, assistance from the Field Office is required in order to assure quality processing.
- D. Properties in Resort and Recreational Areas. The constant increase in the formation and growth of resort areas throughout the country and the increase in use of residential properties in such areas for all year use (or for more than seasonal use) has made the application of proper valuation considerations in such communities increasingly more important.

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- (12-1) 1) Eligibility Criteria. It is possible that the term "resort and recreational areas" often leads to general and incorrect assumptions. The fact that an area contains natural attributes that contribute to recreation or vacation purposes does not necessarily remove such areas from use and desirability by homeowners or multifamily tenants who are interested in year round occupancy. Obviously, certain kinds of resort areas and certain types of housing are not acceptable for mortgage

insurance consideration. For instance, a vacation or resort area that can only be used for a particular season or for a particular type of recreation and is largely abandoned at other times would not be acceptable. Properties not suitable for year round occupancy, regardless of the area, are not acceptable.

- a. Areas and communities that have year round amenities and use are not ineligible merely because they have a seasonal influx of vacationers. Homes or apartments may be acceptable if they are livable the year round even though many such homes are occupied seasonally by their owners or tenants.
 - b. Favorable consideration should be given to proposals involving primary or secondary homes of permanent character in localities where residents are both year round and seasonal. Community facilities, utilities, shopping and other necessities and amenities must be present as required, to produce an acceptable rating of location. Such homes must be readily marketable for year round occupancy. There should be no requirement as to the minimum length of occupancy by the owner or tenant any more than such requirements would be imposed in nonresort areas. The important criteria would be suitability for year round use, purchase or rental demand on that basis, and individual ability to pay.
- 2) Market Depth. In an area having all year amenities and use, the Area Economist should be requested to determine not only the market associated with the normal growth, but also the demand on a year round basis which is affected by seasonal occupancy. Where it can be determined that a portion of this demand has sufficient stable characteristics to warrant its inclusion in the total market projection, then to this extent, it should be considered in the underwriting process.

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- (12-1) 3) Rental Properties. In appraisals requiring gross rental income capitalization the customary projection of the monthly rentals obtainable on an annual lease should be used. No difficulty should be encountered here or in finding and applying either the applicable gross rent multiplier or rates. Rentals for "seasons" are considered only for their influence upon rates for annual occupancy. The unit which is susceptible to this seasonal subletting may produce a higher annual gross than another equal property that has no seasonal demand. The higher rental

will have its effect upon value.

- 4) Location Analysis. Those features that affect the marketability and desirability of sites, as set forth in the location analysis, must be objectively analyzed notwithstanding any resort or recreational aspects commonly associated with the area but not exclusive of such characteristics. Predominantly commercial or business locations, present or prospective, or locations subject to noise or other influences adversely affecting the use and enjoyment of the typical owner or occupant should be avoided, with due consideration of the levels of acceptance typical of the area.
 - a. The site must be compared with all locations in the housing market area which are improved with, or appropriate for, structures that offer accommodations, and amenities similar to the dwelling under consideration. Such comparisons are not limited to other locations having seasonal or semi-permanent attributes but would include all competitive sites within the housing market area that offer all or many of the same amenities.
 - b. The Location Analysis, must reflect accurately the attitude of the typical purchaser toward the environmental influence surrounding the resort area site.

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12-2. APPRAISAL OF ACQUIRED PROPERTIES.

A. When requested by the Housing Management Division, the Valuation Branch will assign a fee panel or staff appraiser to prepare an appraisal report setting forth the value and condition of property to assure the most expedient, orderly disposal of a P.D. property. If a fee panel appraiser is used, the Housing Management Division will be responsible for payment of the appraiser's fee.

- 1) Fair Market Value. The value to be reported will be the Fair Market Value "as-is." In addition, the appraiser will identify and estimate the costs of the repairs needed to bring the property up to the Minimum Property Standard (MPS) for Existing Housing - One to Four Family Living Units (HUD Handbook 4905.1).

The appraiser will prepare list of repairs, including cost estimates and the total costs of repairs. Cosmetic and

other non MPS repairs will be excluded from this list.

The value will represent the best price obtainable free and clear of any assessments, liens, or encumbrances within a reasonable time if properly exposed to the market. It contemplates the willing, fully informed, and able purchaser-seller relationship with complete absence of duress.

- 2) Best Price Obtainable. "Best price obtainable" is the price that will contribute to orderly turnover at as rapid a rate as is compatible with the market generally prevailing in the community. The price should produce a sale within a reasonable time assuming the property will be suitably exposed to the market. This, of course, does not imply that the price found will enable the liquidation of a large group of properties within an unreasonably short period of time.

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- (12-2) 3) Appraiser Recommendations. The appraiser should be fully aware that in completing the appraisal report he/she is recommending the best program to follow to bring maximum recovery within a reasonable period of time. The repairs or rehabilitation, the best estimate of the cost of repairs, and the estimate of value "as is" will all be part of the recommendations. If the appraiser determines that the property is not eligible for an insured mortgage, he/she should recommend only those repairs which are necessary to protect the property from further deterioration until such time as an "as is" sale for all cash or on strong terms can be consummated.
 - a. If the property is in good condition for ready sale the appraiser may value the property "as is," in its present condition subject only to cleaning, clearing debris, trimming lawns, checking the plumbing, etc. The appraiser will, under those conditions, always assume a reasonable expenditure for these minor items. In such a case the appraiser would recommend it be sold with HUD mortgage insurance.
 - b. If a property should need \$3,000 or less in repairs in order to meet the Minimum Property Standards for Existing Housing, the appraiser should recommend that the property be sold with HUD mortgage insurance along with a repair escrow established to ensure completion of the repairs.

- c. If a property which, in its present condition, fails to qualify for either of the foregoing, the appraiser should recommend that it be offered for sale without mortgage insurance or rehabilitated under Section 203(k).

12-3. CLAIMS WITHOUT CONVEYANCE OF TITLE (CWCOT).

- A. General. For all mortgages for which a conditional commitment to insure was issued, or under the Direct Endorsement program where the property appraisal report was signed by the Underwriter on or after November 30, 1983, mortgagees may file

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- (12-3) claims for insurance benefits on these mortgages without conveying title to HUD. Mortgagees may also utilize these procedures for mortgages insured prior to the above dates at their option.
- B. Appraisal Procedures. Where the residence is vacant or non-owner occupied, mortgagees shall identify vacant homes and non-occupant owner(s) through sources such as loan origination files, property inspections and collector reports. Presuming that these conditions exist, the lender must take the following steps to obtain an appraisal report:
 - 1) Call the Valuation Branch Assignment Clerk in the local HUD Office which has jurisdiction over the property to obtain the name of a fee appraiser or HUD staff person, if available, to perform the appraisal.
 - 2) Call the assigned appraiser to schedule the appraisal.
 - 3) Forward to the fee appraiser a completed Application for Property Appraisal and Commitment, Form HUD-92800, and a Uniform Residential Appraisal Report (URAR). The mortgagee must stamp the top of the Form HUD-92800, "PROPERTY IN FORECLOSURE." This statement will serve as a "flag" to the appraiser as well as the local HUD office as to the disposition of the appraisal report.
 - C. UD Office Action.
 - 1) When the mortgagee calls the local HUD Office for assignment of a fee appraiser from the panel of approved fee appraisers, or HUD staff, if available, the Valuation Branch must:
 - a. Make an exception for these properties in foreclosure

by accepting telephone assignments if the Field Office normally requires mortgagees to submit written requests for assignments of appraisers and case numbers.

- b. Determine whether to use HUD staff or assign a fee appraiser; and
- c. Provide the name of a fee appraiser or HUD staff person, if available, to perform the appraisal.

If the mortgagee has any problem in promptly arranging for the appraisal, it will call the local HUD Office, Valuation Branch. If necessary, HUD may assign another appraiser.

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(12-3) NOTE: In areas where a pre-foreclosure appraisal must be made by an independent appraiser such as one employed by the Sheriff's Office, the mortgages shall submit the appraisal, if it is obtainable, along with the [HUD-91022](#) in lieu of requesting a HUD-approved fee appraiser.

D. Valuation Branch.

- 1) When the mortgagee calls for an appraiser assignment, the Receiving/Assignment Clerk will assign the case into CHUMS with its old case number and assign an appraiser from the panel of approved fee appraisers or use a HUD staff person if available. Field Offices should use their staff appraisers when available since this presents an opportunity to maintain staff appraisal skills and for purposes of cost efficiency.
- 2) In the event that the appraiser is unable to enter the property, the best estimate of value possible will be made, based upon an exterior review, tax records, a comparison of comparable properties and other available information. The estimate of value should reflect the property in its "As Is" condition. If appropriate, the appraiser must indicate in the report that the property could not be entered and identify the sources employed in making the estimate of value.
- 3) Upon completion of the appraisal or estimate of value, the appraiser will send the report to the Valuation Branch where it will be date stamped, logged into CHUMS and desk reviewed. The desk review will be conducted by Valuation staff. The Valuation Branch will then immediately handcarry the appraisal report to the Single Family Loan

Management Branch. Expeditious handling of the appraisal report must be maintained to insure the success of the CWCOT process.

- 4) Should the mortgagee wish to cancel the appraisal request before the appraisal is done, the mortgagee will notify both the Valuation Branch and the appraiser of the cancellation. The Valuation Branch will enter the cancellation into CHUMS. Also the mortgagee shall confirm such action via letter to the SF Loan Management Branch which will cancel further processing of the Form [HUD-91022](#).

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- (12-3) 5) Those appraisals or estimates of value are good for six months. If a new or updated appraisal or estimate of value is needed, the mortgagee will again contact the Valuation Branch for a new appraiser assignment following the same time requirements.

E. If the mortgagor reinstates the mortgage after foreclosure has been instituted, the mortgagee will:

- 1) Contact the fee appraiser to cancel the appraisal, or if "HUD staff" was assigned, notify the HUD Valuation Branch, and
- 2) Advise the local HUD office SF Loan Management Branch by telephone and follow up with a letter verifying such action. The SF Loan Management Branch must file this letter with the [HUD-91022](#).

12-4. PROPERTIES ENCUMBERED BY EASEMENTS, RESTRICTIONS AND RESERVATIONS. When the property to be purchased is encumbered by covenants running with the land, easements, restrictions, or reservations, the effect on the value resulting from these limitations must be ascertained.

A. Surface and Subsurface Easements. This is the term applied to a right or privilege that one person has in the land of another. Basically, easements are a means of providing convenient use for others, without excessive dilution of the property rights of the owner. Those most commonly encountered in residential transactions involve joint driveways, access to water supply, drainage, pipelines for gasoline and natural gas, and public or private utilities.

- 1) The appraiser must deal with property so encumbered on an individual basis. His estimation of the amount the

property burdened by the easement will suffer must be based on the degree and quantity of the rights released.

- 2) Customs, attitudes, and prevalent practices in a community have direct bearing on the monetary importance to be attached to easements by the appraisers.

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- (12-4) 3) It is possible that a property by reason of an easement may be subject to being used by persons other than the owner to such an extent and in such a manner that its value as a residential property is seriously affected. Under such conditions determination must be made whether the property is eligible as security.

B. Avigation Easements. The general increased volume of air travel has made the problem of noise in take-off and landing zones and its effect on residential properties located therein more significant. (See also paragraph 4-25 A, B, and C)

- 1) An avigation easement grants the rights to use and/or control air space above property to someone other than the owner of the land. It impairs full use and enjoyment by the fee owner of his property and in effect is little different from a surface or sub-surface easement. The appraisal must reflect the decline, if any, in value in the market attributable to the effect of such encumbrance. Each case must be considered and analyzed on its own merits.
- 2) The avigation easement will deprive the fee owner of the right to permit structures, trees, poles, or any other impediments to extend above a specified plane above the property and will convey to the grantee certain prescribed rights to the use of the air above this height. The distance agreed upon above the ground may or may not vary. This plane may be parallel to the ground or may be at a tangent. The closer to the ground that this plane is drawn, the greater will be its adverse effect on the value of the fee.
- 3) Properties subject to avigation easements must be checked to ascertain their eligibility under outstanding noise guidelines.

- (12-4 C. Reservation of Leases of Oil and Mineral Rights.
The appraiser need not be concerned with the fact that ownership of the fee is separated from ownership of oil or mineral deposits since the valuation of the property is based entirely upon the benefits which will accrue to the typical purchaser for residential uses. The degree to which the residential benefits may be impaired or the property damaged by the exercise of the rights set forth in the oil or mineral lease as well as those applicable to neighboring properties must be considered.
- 1) Consideration should be given to:
 - a. The infringement on the property rights of the fee owner caused by the rights granted by the reservation or lease.
 - b. The hazards, nuisances, or damages which may arise therefrom. (See also paragraph 4-26)
 - c. The hazards, nuisances, or damages which may accrue to the subject property from exercise of reservation or lease privileges on neighboring properties.
 - 2) The extent to which the property rights of the owner of the fee is affected by a mineral or oil reservation or a lease of subsurface areas will vary in accordance with the privileges reserved in the instrument. In one instance the privileges may be only to remove subsurface deposits by directional exploration from some area outside of the subject plot. In another instance the privilege may be complete ingress and egress, to explore from any surface area of the plot, to store equipment, or make installation thereon. In the former case, depending on the proximity of exploration area and the attitude of the local market, it is possible that there would be little or no adverse effect on value. In the latter case, the effect on the property rights of the owner of the fee is such that the value of the property for residential use may be destroyed.
 - 3) In mineral areas the problem may be one of subsidence from directional mining. The extent of the hazard is determined by the past history of such operations, a knowledge of the extent of the mining, and the depth and the subsurface soil structure.
 - 4) In oil-producing areas, the hazards and nuisances may arise from the drilling operation, ingress and egress, storage, pipeline transportation, danger of fire or explosion and

(12-4) danger from gusher wells. The effect of such nuisances, hazards, or damages on the subject property would be determined by their proximity and their intensity and attitude of the local market. In an "oil conscious" area a situation may be acceptable which would not be acceptable in an area where gas oil exploration was a minor factor in the area's economy. (See also paragraph 4-22)

- D. In the case of new subdivision proposals it may be possible to suggest certain restrictions to the developer-owner of the fee that will materially lessen risk if he desires to retain the mineral or oil rights. Where a mineral, oil or gas reservation is retained, an agreement may be obtained limiting the exploration area to one undeveloped part of the tract, providing for directional drilling, and restricting against ingress and egress across individual residential lots. In some cases it may be necessary to modify outstanding covenants or obtain protective covenants on neighboring land uses.

Summary. Easements, reservations or restrictions such as discussed in this section may be involved in mortgagees' requests for waiver of objection to title to the mortgaged premises. Such requests are processed as outlined in HUD Handbook 4170.1. The granting of a waiver of objection to title appears to imply also a waiver of objection to the physical condition of any property resulting from the exercise of the rights created by the encumbrance. Consequently, the possibility of any hazards, nuisances or damages emanating from that source should be carefully evaluated before granting the waiver.

- 12-5. MORTGAGE CREDIT REQUESTS FOR APPRAISAL. The Mortgage Credit Section may request in estimate of value on property which is being accepted by the seller as part of the purchase price. This is done in order to establish the equivalent amount of cash which is being paid for the property on which a commitment is to be issued. With the request, the Mortgage Credit Section will furnish the trade-in price which is being allowed for the property by the seller. Such requests will be treated as informal appraisal assignments. A complete appraisal report will not be required. A memorandum type report will suffice. In such a case, a detailed description of property and neighborhood, ratings, operation expense data, supporting sales data, and replacement cost estimates will not be required.

A. Only the following need be furnished:

- 1) Address of property (including city or town).

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- 2) Number of rooms, bedrooms, and baths.
 - 3) Garage or carport facilities.
 - 4) Brief statement as to conformity or any major deficiency having a bearing on value.
 - 5) Estimate of Market Price Obtainable (exclusive of Closing Costs).
- B. Closing Costs will not be added at any point on an appraisal of this type. Although the report may be kept to the briefest terms, the appraiser will make an estimate and draw sufficient comparisons with comparable properties to reach a valid conclusion.

12-6. EXISTING HOUSES BEING MOVED TO NEW FOUNDATIONS.

- A. Eligibility. Three types of properties are eligible:
- 1) Emergency moves of properties already covered by HUD insurance. The move can be made at the risk of the mortgagee without prior approval of HUD.
 - 2) Non-emergency moves of properties covered by HUD insurance requiring prior approval by HUD.
 - 3) Non-emergency moves of properties not insured by HUD but seeking such insurance and requiring prior approval.
- B. Applications for Insurance. Applications for insurance may be submitted under any home mortgage section of the National Housing Act. On properties already insured, the request for non-emergency moving of structures is made in the form of a letter of proposal from the mortgagee setting forth the conditions and reasons for the move.
- 1) Application for insurance or letter of proposal after insurance must clearly outline all aspects of the proposed transaction, including the present address or location of the dwelling to be moved, and the location of the site to which the dwelling will be moved.
 - 2) No Builder's Warranty will be required.
- C. Architectural/Valuation Processing. (All proposals except emergency.) The following steps will be followed:
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- (12-6) 1) Exhibits shall be submitted with each application and will be reviewed by the Architectural section. Exhibits for the new location shall include a plot plan showing proposed location of the house, garage, terraces, stoops, walks, driveways, utilities, etc., as well as footings, inundations, and slab details. Drawings of the existing structure are necessary only to the extent required to show any proposed alterations or repairs. If pertinent, subdivision exhibits and exhibits required for individual water supply and sewage disposal systems shall be submitted.

Form HUD-92005, Description of Materials, completed to the extent necessary, shall be submitted to describe any features of the new construction which cannot be shown on the drawings.

- 2) Proposed on-site improvements, e.g., footings, foundations, walks, etc., shall comply with or exceed all applicable Minimum Property Standards in 24 CFR 200.926d (HUD Handbook 4910.1, Appendix K). Existing construction, including repairs, alterations, and additions thereto, shall comply with the General Acceptability Criteria of the Minimum Property Standards as shown in the beginning of this chapter and the stated objectives of all other applicable standards. Repairs, alterations, or additions not started or completed at the time of commitment for insurance or at the time of issuance of HUD letter of approval to move a structure already insured, shall be done in accordance with the specified standards wherever practicable.
- 3) Field inspection of the existing property prior to moving should be made concurrently by an appraiser and inspector. The local building authority will require a moved house to be brought up to the present building code. Such requirements are reflected in the cost of repairs and are made a specific condition of the commitment. This will assure HUD that all items of repair or replacement necessary to bring the property into good saleable and eligible condition have been discovered and the repairs required as a condition of the commitment. The inspector should note structural defects which might be aggravated by the move and which need special commitment requirements for correction.
- 4) After inspecting the proposed new location the appraiser will appraise the property as it will exist at the completion of the move assuming compliance with all requirements. The Uniform Residential Appraisal Report will be used in the usual manner.

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- 5) Except in those instances where the complexity of the case warrants or when requested by the Director of Housing/Housing Development, cost estimates, including any involving alterations, additions or repairs, will be prepared by the appraiser. The URAR will be completed by the appraiser as in the case of any existing property.
 - 6) When examination of the structure reveals noncompliance with the objectives of the Minimum Property Standards and correction is feasible, an appropriate specific condition is recommended in the report. Where no correction is feasible and compliance can be effected only by excessive major repairs, rejection is indicated, and the reasons clearly explained in the report.
 - 7) Requirements for compliance inspections will be made on all new work (footings, foundation walls, gradings, etc.) as well as proposed or required alterations, additions, or repairs. The mortgagee shall notify HUD 48 hours prior to start of construction of proposed improvements and shall notify HUD of the date the house is to be placed on the new foundation.
 - 8) The appraiser shall require an architectural inspection of the foundation before the house is placed on the new foundation. A second inspection shall be required before the covering of any structural elements or major components (electrical, plumbing, etc.) when new additions or major alterations are proposed. A final inspection is always required upon the completion of the dwelling.
 - 9) In cases involving proposed individual water supply and/or sewage disposal systems, necessary requirements will be made pursuant to outstanding instructions.

12-7. HUD ACCEPTANCE OF VA CERTIFICATE OF REASONABLE VALUE (CRV). The Certificate of Reasonable Value (CRV issued by the Department of Veterans Affairs shall be accepted by the Field Offices as the basis for establishing value, mortgage term, and specific conditions in issuing commitments in cases involving a known borrower subject to the restrictions and processing instructions shown below. Field Offices shall accept CRVs for both existing and proposed construction at face value. No CRV shall be rejected unless there is evidence in the office of unacceptability in which case it may be rejected, but the Field Office is to send a copy of the Rejection notice to the Single Family Valuation and Technical Support Branch

in Headquarters for informational purposes.

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- (12-7) A. General Processing Procedures. In order to be eligible for processing under this procedure, the mortgagee's application must involve a known borrower, include completed Form HUD-92800 and 92900 with all required exhibits (except those normally required to establish value), the CRV (VA Form 26-1843), and evidence of compliance with any requirements established by VA which have been satisfied before the application is submitted.
- 1) Proposed Construction. The mortgagee must submit a Builder Certification of compliance with HUD regulations and the exhibit requirements in HUD Handbook 4145.1, and ensure that the builder has attached the proper certification on the front page of each set of plans prior to submitting an application. It is not necessary for mortgagees to review the plans. On individual proposed VA-CRV's, a certification must be attached to each case. On Master VA-CRV's, a value for each model to be converted must be submitted. Plans need not accompany VA-CRV conversion requests.
 - a. In the case of a master CRV, the value of the basic house is shown on an attached list and the first page of the master CRV shows the value of available alternates. When the application is accompanied by such a master CRV, the alternates included in the property covered by the application must be circled.
 - b. In these cases, the value of the basic house and the value of included alternates will be added and the sum will indicate the Value of Property. If on alternates are circled, the mortgage credit (examiner will assume that no alternates are included and will record the value of the basic house as Value of Property. (These cases are the sole exception to the requirement that any change in value be made by VA. If value was determined on the basis of a master CRV without considering alternates and the mortgagee later submits evidence that alternates should have been included, the Field Office may adjust the HUD Value accordingly without reference to VA.)
 - c. Closing costs and other information necessary for mortgage credit processing will be taken from the form entitled "Mortgagee Request for Conversion - VA CRV" to be provided by the mortgagee. When necessary for mortgage credit processing, the estimate of monthly

rent will be provided by the Valuation Branch from data available in the office.

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- (12-7) 2) Existing Construction. Upon receipt of the entire application by the Valuation Branch, the case is immediately assigned to an appropriate staff member for review of the documents and other items such as flood hazard area, etc., and then forwarded to the Mortgage, Credit Branch. An expired CRV is unacceptable unless evidence is provided that a sales contract had been executed prior to its expiration.
- a. Unsatisfied Repair Conditions. Any repair conditions listed on the CRV shall be transferred to the Firm Commitment and may not be modified except by VA. Evidence must be submitted at insurance endorsement that all specific conditions requiring inspection by other than the mortgagee have been met to the satisfaction of VA which is responsible for making any necessary inspections of proposed construction properties and for resolving any construction complaints. When the application involves an existing property and the CRV requires repairs, VA must be asked to clear them. A mortgagee's certification that the repairs have been completed is acceptable if so stated on the CRV.
 - b. Mortgage Term. The term of the mortgage will be calculated from the Remaining Economic Life entry on the CRV. HUD will make no change in the estimate of economic life shown by VA and will assume the VA estimate to be correct, even though this may result in a shortened mortgage term. Mortgagees questioning the VA estimate should be directed to that agency for relief.
 - c. Changes in Value or Mortgage Term. Any request for changes in value or mortgage term must be submitted by the mortgagee to the Department of Veterans Affairs and may be used by the Field Office only if VA issues an amended CRV. When value and mortgage term are based on a CRV, the Director of Housing Development does not have the prerogative of making changes in either item during the life of the original, unextended commitment.
 - d. Outstanding Conditional Commitments. HUD will not knowingly accept a CRV application for conversion when

there is an outstanding HUD conditional commitment

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(12-7) involving the same property. If the HUD conditional commitment is returned for cancellation in connection with the CRV conversion transaction, the resultant HUD commitment may not exceed the value shown on the cancelled commitment.

- e. Mortgagor Complaints. Complaints received by the Field Office regarding VA inspection procedures, the appraisal made by VA, a lack of specific repairs on the CRV, etc., are to be referred to the local VA office for handling.

12-8. APPLICATION FOR OPERATIVE-BUILDER COMMITMENTS.

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12-9. FINISHED FLOORING IN PROPOSED CONSTRUCTION CASES. HUD allows carpeting as well as hardwood or other types of flooring as a finished floor. The value to be attributed to carpeting is set forth in the Marshall and Swift Cost Handbook.

- A. In the event that the carpeting is installed over another type of finished floor, both the finished floor and the carpeting are to be included in value.
- B. It is therefore important that the appraiser make a visual inspection of the subfloor by lifting a small corner of the installed carpeting and examining the underlayment regardless of what is stated in the specifications.
- C. Carpeting in bathrooms and kitchens is not permitted as a finished floor in proposed construction cases unless a water-resistant (linoleum or tile) finish is placed on the subfloor prior to installing the carpet.

12-10. CARPETING IN EXISTING HOUSES.

- A. In existing cases, carpeting in kitchens and bathrooms may be accepted as a finished floor provided that a statement is obtained from the purchaser acknowledging this fact. It is not to be considered in value.
- B. Acceptable but worn carpeting in other rooms shall be evaluated separately to determine its influence on the value of the property being appraised. The value of the acceptable carpeting is to be included in the value found for the property.

- 12-11. SOIL TREATMENT WITH INDIVIDUAL WATER SYSTEMS. Where termite infestation is found or suspected in existing dwellings using individual water supply systems, precaution must be taken in the type of exterminating treatment to be required in order to prevent the possibility of infiltrating and endangering water supply. Soil poisoning in such cases is an unacceptable treatment method unless satisfactory assurance is provided that the construction and location of the water supply system meets the specific requirements of 24 CFR Part 200.926d.
- 12-12. ESTIMATE OF VALUE OF FRAGMENTAL PROPERTIES. Cases arise in which mortgagees may request consent to the release of a portion of a property which is subject to an insured mortgage. A special Valuation Report is required in connection with these cases. (See HUD Handbook 4170.1 REV., page 4-7.)
- A. Value of a Small Area. Frequently the area involved in the release is small and unusable by itself. Because of its lack of utility taken by itself, it might appear logical to assign no value to it, but this would be incorrect. If a small area contributes something to the utility of the whole property, it must have some value even though it may be nominal.
- B. Property Sold to an Adjacent Owner. The release of a portion of the property from the mortgage may be sought so that it may be sold to the owner of an adjacent property. Under these circumstances the purchase price is a guide to the estimate of value though it often may greatly exceed a plausible valuation. Because of matters such as the presence of necessity or extraordinary motivation on the part of the buyer.
- 12-13. CONSIDERATION IN AREAS AFFECTED BY MILITARY INSTALLATIONS. Field Offices may have situations in which HUD mortgage insurance may not be proper because of the housing demand attributable to military installations in the area. Such situations arise when the permanence and stability of the demand for housing to serve these installations are not evident. The phrase "military-connected civilian personnel" means civilian employees of military installations, and of contractors and subcontractors directly associated with the military.)
- A. Market Considerations. All considerations respecting the use of HUD insurance in military-impacted areas must recognize that the permanency of the "permanent" military installation is by no means assured. Changing world conditions and technological advances can materially affect the activities and assigned personnel strength of military installations. Further, a rapid

- (12-13) turnover of personnel in these areas may be anticipated. Current housing needs, therefore, may not provide the basis for long-term support of either the sales or rental market, or both.
- 1) Even though housing can meet sales prices or rent ranges commensurate with the capacity of military and military-connected civilian personnel and be within the commuting radius authorized for personnel of the installation, the following considerations will continue to be paramount in determinations with respect to mortgage insurance:
 - a. The type and mission of installation, its historical stability, and the projected continued necessity for this type of activity or a logical replacement.
 - b. Stability in the assigned strength (military and civilian) of the installation and the prospective maintenance of this strength over a long term.
 - c. The magnitude of the total current housing requirements for installation personnel relative to the total housing needs (i.e., occupied housing units) of the support area.
 - 2) These factors cannot always be determined with a high degree of certainty. For some areas, however, the situation is practically self-evident and there is no need for a thorough examination of the basic considerations. For example, in localities with an economic background that will clearly assure absorption and the continued marketability of additional housing, despite substantial or complete curtailment of military activity, mortgage insurance is permissible for military personnel as well as civilian employees of the installation.
 - a. Any large metropolitan area in which the number of military and military-connected civilian personnel is minor, compared with the number constituting continued demand from other sources, would fall in this classification.
 - b. In such areas, however, locations within a military reservation (or near such a reservation, but inconveniently situated with respect to any other source of employment) will be ineligible for mortgage

insurance.

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- (12-13) 3) As an opposite example, in any small community where the demand for housing from military and military-connected civilian personnel is clearly predominant, compared with the number constituting continued demand from other sources, mortgage insurance is not to be utilized in the satisfaction of military-oriented demand.
- 4) Between these two extremes there is a wide diversity of military impact. In those areas of military impact in which use of mortgage insurance is considered marginal, (after carefully considering the historic economic background of the community and the continuing marketability of additional units in the event of a change in mission or a significant decline in strength, i.e., 20 percent or more) a request through the Regional Administrator to the Assistant Secretary for Housing for consideration shall be made for Field Office guidance on operating procedure. (See HUD Handbook 4010.1.)
- B. Marginal Situations. In the interest of consistency among Field Offices, marginal situations will be deemed to include all areas in which either or both of the following conditions exist:
- 1) The Secretary of Defense, or his designee, shall have certified to the Commissioner that the housing is necessary to provide adequate housing for civilians employed in connection with a research or development installation of one of the military departments of the United States, or a contractor thereof, and that there is no present intention to substantially curtail the number of the civilian personnel assigned or to be assigned to such installation. The certificate shall be conclusive evidence to the Commissioner of the need for such housing.
 - 2) Annual volume of residential construction in the housing market area, either has increased during the last 12 months or is expected to increase 50 percent or more as a result of recent or prospective military expansion.
 - 3) Military and military-connected civilian personnel currently occupy 25 percent or more of all occupied residential units (permanent and temporary type) in the housing market area, including housing on the military reservation.
-

(12-13) Note: The Field Office Economic and Market Analysis Division should be consulted for information and recommendations concerning marginal situations. Where questions arise concerning the conditions, intensity, and duration of characteristics of housing markets, the Area EMAD will undertake any appropriate market studies that are necessary to (1) describe the severity and problems of the housing market and (2) to formulate specific recommendations to the Office Manager for coping with these problems.

C. Headquarters Referrals. The referral of these marginal situations to Headquarters will include the data accumulated by the Field Office during its analysis of the matter plus comments and recommendations.

D. Periodic Re-analysis. Periodic re-analysis of military impacted areas must be made by the Field Office because with increases in population, and expanded patterns of growth around metropolitan areas, changes in demand from other sources can occur rapidly.

When demand from other sources becomes predominant or can be accurately predicted, requests for changes in the office's policy will be forwarded through the Regional Administrator to the Assistant Secretary for Housing.

E. Conditions of Application Acceptance. Home Mortgage Applications can be accepted for individual conditional commitments in all military impacted areas when a buyer is known and a bona fide sales contract is submitted by the mortgagee. These commitments are limited to prospective owner-occupants. All mortgagors including military connected mortgagors as defined above are eligible. The mortgagor must meet the criteria for the Section of the Act under which application is made.

12-14. SOLAR ENERGY.

A. To encourage the use of solar energy in homes, HUD will insure a mortgage up to 20 percent above the maximum allowable insurable amount in a geographical area if such increase is necessary to account for the increased cost of the residence due to the installation of a solar energy system which may not exceed 20 percent of the value of the property. HUD programs eligible for this allowance are 203(b), 203(k), 203(n), 233, 244, 245, 809 and 203(i). While Section 234 is not included as an eligible program for an increased mortgage amount, there is no reason that solar energy may not be included in a condominium with added value for the system provided that the mortgage amount

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- (12-14) does not exceed the maximum insurable amount for the geographical area in which it is located. Applicable mortgage amounts for two-, three- and four-unit dwellings are appropriately affected. Proper documentation of the Homeowners Association acceptance and a hold harmless covenant executed by the mortgagor(s) must be submitted with an application for a condominium unit.
- B. An eligible solar energy system is defined as any addition, alteration, or improvement to an existing or new structure which is designed to utilize wind or solar energy to reduce energy requirements obtained from other sources. Solar heating and domestic hot water systems are not acceptable without operational 100 percent back-up conventional systems. Active and passive solar energy systems are permitted in this program. The systems must comply with HUD Handbook 4930.2, Intermediate Minimum Property Standards for Solar Heating and Domestic Hot Water Systems. Descriptions of various types of active and passive solar systems are included in Appendix C of these standards.
- C. The solar energy system's contribution to value will be limited by its replacement cost or by its effect on the market price of the dwelling. In the event that market data is not available to indicate the additional amount which would be paid for a property containing a solar energy system, the amount of increase would be the lesser of the actual cost of the solar system installed in the subject house or 20 percent of the market value of the property. The difference in added value contributed by the solar system in comparison to the conventional system must represent a reasonable proportion of the total value of the property and may never exceed 20 percent of the market value of the property without a solar energy system.
- D. If a Veterans Administration Certificate of Reasonable Value for existing construction is involved, and a solar system is included, the value established on the CRV will reflect the presence of the solar system. If the mortgagee requests a mortgage based on the solar system which exceeds the maximum mortgage amount for the area, it is the responsibility of the mortgagee to secure from the local VA office a copy of the uniform Residential Appraisal Report on the property, URAR, and submit it with the VA CRV. This form will enable the local HUD Office to determine the incremental increase in the value of the property added by the solar system. Once the increase has been identified by the HUD Office, the aforementioned procedure for

determining the maximum mortgage amount would govern. It is

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(12-14) appropriate to note that in arriving at the VA established reasonable value of a property with a solar system, the amount by which the solar system increases the value is based on market comparisons and not on the actual cost of the solar system.

- E. APPRAISAL PROCEDURE. The appraiser shall reflect in value the local market acceptance of solar heating equipment. Solar heating and hot water systems are not acceptable without operational 100 percent backup conventional systems. Solar collectors must be located where they will be free from natural or man made obstructions to the sun.
- 1) Acceptability. When such systems are proposed to be installed, they shall comply with the provisions of Handbook 4930.2, Intermediate Minimum Property Standards Supplement for Solar Heating and Domestic Hot Water Systems. When such a system is already installed in an existing home, the appraiser may request an inspection of the system by the person responsible for the architectural or engineering aspects of the solar energy program in that Field Office for recommendations as to acceptability.
 - 2) Limits to Value. The solar heating or hot water system's contribution to value will be limited by its replacement cost and by its effect on the market price of the dwelling. In completing the estimate of value by market comparison between a subject property which includes a solar heating system and a recently sold comparable property which includes a fossil fuel system only, the sale price of the comparable is increased by the amount typically paid in the market for the solar heating system, to arrive at the indicated market price of subject property.
 - 3) Temporary Procedure - Lack of Market Data. In the event that market data is not available to indicate the additional amount which would be paid for a property which does include solar heating or hot water system, then the amount of the increase shall be the difference in cost between all heating equipment including solar installed in the subject house less the cost of all heating equipment installed in the comparable property without a solar installation. However, in making this adjustment based on differences in cost, the appraiser shall consider the ratio between the value added by solar heating system and the value of the property with a conventional heating system only, to ensure that the contribution of a solar heating

system to total value represents a reasonable proportion of the total value of the property.

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- (12-14) 4) Responsibility for Temporary Limit. The Field Office shall consider the costs of acceptable solar energy systems for homes of several sizes, and shall consider the market prices of typical homes of these several sizes (without solar energy systems) in order to set a limit on the amount which a solar energy system can add to the estimated value of the subject property. This limit shall be expressed as a percentage of the market value of the subject property (before consideration of the solar energy system) and this limit shall not exceed 20 percent of the market value of the subject property (without a solar energy system).

F. The following steps set forth the procedure which will be utilized in determining the applicability of the authorization:

1) Market Data Survey

Market data may be collected in two ways. The Field Office may use either or both methods with the understanding that method #1 be considered more reliable and that method #2 will require additional consideration during analysis.

2) Method #1 - Price Extraction

- a. The Valuation Branch surveys builders of new subdivisions or custom homes to determine the price of solar water systems when sold to new home buyers as an add-on or alternate feature. These incremental price increases should be expressed as a percentage of value by dividing the price of the solar application by the total sales price.

Example:	Base Price of Home	\$110,000
	Solar Hot Water (alternate)	4,000
	Upgrades (all other alternates)	3,700
	Total sales price	<u>\$117,700</u>

$\$4,000 / \$117,700 = 3.4\%$ (shown below as Data #6)

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- (12-14) b. There should be at least ten such data indicators from which to develop an overall value percentage for the Market Value Guide. DO NOT AVERAGE! Use of a median or mode (typical) is preferred to averaging.

Example:	Data #1	2.8%
	Data #2	2.9%
	Data #3	3.1%
	Data #4	3.1%
	Data #5	3.2%
	Data #6	3.4%
	Data #7	3.5%
	Data #8	3.5%
	Data #9	3.5%
	Data #10	3.9%

Selected	3.5% (most typical)
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If this type of data is not available to the Field Office, then Method #2 may be used.

3) Method #2 - Paired Sales

- a. The Valuation Branch develops a number of paired sales, which will compare existing homes with solar water heating systems against similar sold properties without solar water heating. Since this is a crude measurement, the difference in adjusted values should be expressed as a percent of value of the home with solar.

Example:

	Comp. Sale Without Solar	Comp. sale With Solar	\$ Difference	% Difference
Pair #1	80,100	82,750	2,600	3.1%
Pair #2	79,000	81,500	2,500	3%
Pair #3	101,000	102,000	1,000	1%
Pair #10	98,000	101,500	3,500	3.4%
Median	80,000	82,500	2,500	3.125 selected

(12-14)

- b. Since this method measures the relative market value of existing solar applications in used or unknown condition, a depreciation factor can be applied by the appraiser in order to approximate the market value of a new system.

4) Depreciation Factor

- a. The Depreciation Factor should be selected by the Valuation Branch, based on "straight line" applied to the typical (prevalent) age of solar heaters used for the sample. For example: Based on a 20 year life and assuming straight line depreciation or 5 percent per year, if the comparable solar systems are mostly 4-6 years old - then, the depreciation factor of 25 percent could be selected (for 5 years.). This factor should be expressed as 125 percent (one hundred added). Example:

$$.05 \text{ (per yr.)} \times 5 \text{ (yrs)} = 25\% \text{ Depreciation}$$

(convert to 125)

$125 \times 3.125 = 3.9$ (Factor which represents percentage difference between solar and non-solar equipped homes approximately five years old plus 125 percent addition to equate to NEW system.

5) Correlation

The Valuation Branch may issue its value guide based on the results of Method #1, Method #2, or a correlation of two methods. Example:

Method #1 = 3.5% (superior method)
Method #2 = 3.9%

Selected - 3.5% (to be issued in guide)
(Method #1 given most weight because data is more reliable)

Valuation Branch may select either or make an interpolation of the two numbers.

6) Use of Appraisal Addendum

A sample worksheet for use by underwriters is exhibited on pages 12-32 thru 12-36 as a guide. It may be completed and submitted with the appraisal as an addendum.

-
- (12-14) 7) Cost Approach to Value
- a. When the Field office determines the market approach is not appropriate for use because of inadequate market data, then the cost approach to value will be used.
 - b. Cost will be calculated by Regional Offices of Housing for all Regional-accepted solar water heating systems, and will be included as part of the Regional Utility Engineers' written acceptance of each system. If there are system size difference - more than one cost will be shown (see Exhibit #2, pages 12-29 through 12-31).
 - c. Regional Offices will also furnish locality adjustment factor's to Field Offices on an annual basis, if applicable.
- 8) Amendment of URAR - Appraisal
- After the reconsideration of value action is completed using an addendum worksheet, the resulting new value should be entered on the original URAR Appraisal as the new (amended) market Value and re-dated and signed. A comment should be made in the last Comments Section of the URAR "See Solar Value Worksheet or Addendum, attached."
- 9) Effect of Value on Mortgage Amount
- a. The full value of the appraised solar water heating system will be allowed when determined by the methods outlined in these instructions, except that a maximum of \$4,000 will be allowed per unit. The maximum mortgage limits for 1-4 unit properties may be exceeded by the value of the solar water heating system where needed to provide for the allowable costs or value of such installations.
 - b. The maximum mortgage limits for condominium units (Section 234) may not be exceeded under any circumstances.

Solar Water Heating Market Value Guide - Field Office

The market value of solar water systems for this jurisdiction has been determined to be as shown below. The values from this guide will be used by all appraisers and DE underwriters to complete the addendum to appraisal: Solar Reconsideration of Value.

Metro - _____ City	3.5%
Rural & Small Towns	4.0%

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EXHIBIT #2

Gentlemen:

Subject: Domestic Hot-Water Solar Systems

Our office has reviewed your latest submittal covering your recirculation solar systems. We find the recirculation systems, _____ as shown on your FHA-001 Thru FHA-008 drawings, to be acceptable for mild temperature areas in HUD Region _____. Your _____38 and _____ 41 _____ model collectors consist of black chromed copper absorber fins mechanically wrapped around 1/2" O.D. copper tubing risers at 4.3" centers, low-iron tempered glass glazing, foil-faced foam and fiberglass insulation, extruded aluminium frame with baked Polyester finish, and aluminum backsheet. Your submitted system is now acceptable for single-family home mortgage insurance subject to the following conditions:

1. The solar system must be installed in strict compliance with the submitted documentation, identified as Drawings FHA-001 thru FHA-008.
2. The solar system must be installed utilizing the materials which were submitted. The acceptable materials are as follows:
 - Collector: models 38 and 41
 - Mounting Hardware: models as required, bronze painted aluminum.
 - Storage Tank: American Appliance MFG SSTA66XV, SSTA82XV; or A.O. Smith.
 - Control, Independent Energy C30-1S
 - Pump, Grundfos UM15-18SU
 - Isolation end set, 3/4" compression

- 4-Way valve, Fluidtech 3/4"
- Tempering valve, Taco #426
- Thermometer, Letro SL2DW
- Check valve, Nibco S413Y, 3/4" CxC

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- Pressure-temperature relief valve, NCLX5, 3/4"
 - Pressure relief valve, FWL2
 - Air vent, MOM #75
 - Solar flashing, Oatey, 1/2" to 1"
 - Hose bibb, 3/4"Cxhose
 - Dielectric union, 3/4"FPTx3/4"C
 - Freeze Valve: Dole FP-35, 1/2", opens at FP-45 opens at 43 deg.F or ASCO 8210C33, 3/8", opens on power outage.
3. The collector must be installed in a generally "solar south" orientation, of adequate slope, and in a location that is not now shaded (such as by trees), nor will be shaded in the foreseeable future.
 4. Recirculation solar systems are permitted only when provided with both primary and secondary freeze protection, and then only in mild temperature areas. (defined as a geographic location where the ASHRAE "97.5% Temperature Condition" is not less than the following:)

With Dole FP-35 or FP-45 Freeze Valve	35 deg.F
With Solenoid Drain Valve	30 deg.F
 5. If water pressure serving the house exceeds 60-psi, a pressure reducing valve (complete with strainer and discharge pipe) must be installed when a freeze valve is used.
 6. When applying for mortgage insurance, the solar firm must certify that the roof can adequately support the solar equipment, or provide such adequacy determination from the local building official.
 7. The system shall carry a full material and labor warranty not less than the following:

- Collector - Five years material and labor.
 - Storage Tank - Three years material and labor, plus two years material limited warranty on tank.
 - Other Equipment - One year material and labor.
8. The entire system shall be installed to meet the requirements of the local building inspection department.

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9. Collectors shall be labeled to show the manufacturer's name and address, model number, serial number, and collector weight (dry). Technical data sheets shall also be provided which include collector efficiency, maximum allowable operating and no-flow temperature and pressure, minimum allowable temperatures, and the types of fluids which can and cannot be used.

We reserve the right to withdraw our acceptance at any time. It will be your responsibility to make sure that your contractors make no deviations from the conditions of this acceptance. Any changes in materials, methods of installation, or conditions of installation will invalidate our acceptance.

Very sincerely yours,

Director
Office of Housing

MAXIMUM INSTALLED COST:

1 - Panel, 40 sq. ft. \$3,000 Model 41-1
2 - Panel, 48 sq. ft. \$3,240 Model 38-2
2 - Panel, 80 sq. ft. \$4,200 Model 41-2

ADD \$100 PER PANEL FOR RACK MOUNTING.

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EXHIBIT #3

EXAMPLE

Case # _____
Address _____

ADDENDUM TO APPRAISAL
SOLAR RECONSIDERATION OF VALUE

The installation of Energy Conserving Solar Water Heating Systems is an amenity that increases the value of Single Family Homes. In order to assist in the development of the incremental value created, the following worksheet may be used by HUD staff and DE Underwriters to document the approach to value most appropriate for the subject property.

Only one approach to value will be completed. The market approach is preferred where data is sufficient. The Cost approach may be used if market data is insufficient. If a Market Value guide has been issued by the Field Office, it must be used and the Cost approach will not be valid.

The FOLLOWING ANALYSIS supports the final determination of value for the Subject Property.

MARKET APPROACH

Check if Field Office Has No Market Data
Table and Use Cost Approach

- 1. Value of property (Original Appraisal) \$ _____ (1)
- 2. Value of Solar Hot Water from Market Data
Guide (Furnished by Field Office \$ _____ (2)
factor % _____ x _____ (line 1) = \$ _____
- ADJUSTED MARKET VALUE \$ _____ (3)
(Total lines 1 and 2) (Enter on URAR)

COST APPROACH

- 1. Value of property (Original Appraisal) \$ _____ (1)
- 2. Base Cost From Region _____ Cost Analysis \$ _____ (2)
Includes locality adjustment
(See attached Region _____ Cost Table)
- ADJUSTED MARKET VALUE \$ _____ (3)
(Total lines 1 and 2) (Enter on URAR)

UNDERWRITER - CHUMS # DATE

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 ADJUSTED MARKET VALUE
 (Total lines 1 and 2)

 \$ _____ (3)
 (Enter on URAR)

Rose Gardens - GGY3 12/12/88

 UNDERWRITER - CHUMS # DATE

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12-15. WEATHERIZATION PROGRAM.

A. Thermal Protection. The purpose of this program is to assist the homeowner in reducing the heating and cooling expense of maintaining a home. Mortgagees and real estate brokers should be encouraged to inform prospective purchasers of the fact that thermal protection improvements are considered in each appraisal and that they should consider having a home energy audit performed by their local utility company. The following types of energy-saving improvements may be included:

- 1) Thermostats.
- 2) Insulation wrap for water heaters.
- 3) Insulation of ducts and pipes in unheated spaces of heating/cooling systems.
- 4) Attic insulation.
- 5) Insulation for floors and foundation walls.
- 6) Installation of weather stripping/caulking.
- 7) Installation of storm windows/doors.

The installation of thermal improvements usually make them cost-effective. The Department is committed to encouraging the installation of thermal improvements to conserve energy whenever possible.

B. Mortgagees should emphasize the benefits of the trade-off between energy conserving capital costs and subsequent operating

expenses in underwriting single family housing. Utility schedules require constant updating to reflect current utility costs in properties having similar thermal protection improvements. The utility costs after installation of thermal improvements should be lower and therefore should offset some of the cost due to the installation of energy saving devices.

- C. Conditional commitments/statements of appraised value (form HUD 92800-5B) issued on existing construction contain a recommendation that homebuyers contact their local utility company for a home energy audit. If estimated value and the mortgage amount are to be increased, as stated subsequently herein, the improvements must follow the procedure prescribed below:

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- 1) The value of the property, as recorded by the appraiser on the Uniform Residential Appraisal Report will not include recommended thermal protection improvements.
- a. The estimated value may later be increased by the Mortgage Credit Branch or by a Direct Endorsement Mortgagee Underwriter by the amount of the cost of improvements when such improvements have been made and a request is received for an increase in value and mortgage amount based upon those improvements.
 - b. This increase shall be made by one of the following methods if such improvements have been made and money has been expended for weatherization and/or energy conservation improvements to the property. A contractor's statement of cost of work completed or buyer/seller's copy of a statement showing the cost of materials used must be submitted.
 - 1. \$2,000 or less without a separate value determination. (Submission of a contract for the work to be done.)
 - 2. From \$2,001 to \$3,500 if supported by a value determination made by a HUD review appraiser, staff appraiser, or Direct Endorsement Mortgagee Underwriter. (This is based upon submission of a contract or firm bid for the work to be done. The value determination is normally made by the desk reviewer in house; however, some value determinations may require a field inspection of the property. The review appraiser shall make this inspection if necessary.

3. \$3,501 or more subject to an inspection made by a HUD-approved fee appraiser/inspector or DE staff appraiser. The lender will mail all proposals submitted by the homeowner concerning the addition of thermal protection improvements to the Field Office or the Direct Endorsement Mortgagee Underwriter for review. The appraiser/inspector must review the expense involved in adding the thermal improvements and determine what effect the improvements will have on value. This will be done by an on-site inspection.

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4. In addition, appraisers should estimate any expected utility cost savings resulting from energy-related improvements.
5. The appraiser/inspector will bill the lender for the inspection, but the fee charged cannot exceed those charged for inspections in the geographical area. The lender is responsible for paying the fee appraiser/inspector for this service.

- 2) The following standards must be observed:

Thermal protection for glazing shall be provided for all habitable heated areas in locations having more than 1001 heating degree days annually for electric resistance heat and for 3501 or more heating degree days for all other fuels. This should be effected through the installation of storm sash, inserts or insulating glass. Storm doors should be provided for exterior doors in locations having more than 1001 annual heating degree days for electric resistance heat and for 3501 or more heating degree days for all other fuels. Material and installation may be the most economical locally acceptable.

- a. Recommendations for storm doors need not be made for double front doors, double French doors, sliding glass doors or any other door, the dimensions of which require custom manufacturing which is not generally available or the cost of which would be excessive.
- b. Casement, awning windows, and other types of sash having discontinued sizes or unusual opening configurations for which no storm inserts are manufactured and for which the cost of custom

manufacturing would be excessive shall not be included.

- 3) Heating winter degree days and summer cooling hours for various cities will be found in the "NAHB Insulating Manual for Homes and Apartments." Data for cities and towns not shown may be estimated by comparison or interpolation, or may be obtained from the local Weather Bureau.

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- (12-15) 4) Ceiling insulation equal to the following R values shall be recommended for all habitable heated and cooled areas as follows:

Degree Days	Type of Energy		
Annual Heating Degree Days	Electric Resistance Heating	Electric Heat Pump	All Other Fuels
0-1000	19	19	19
1001-2500	22	19	19
2501-3500	30	22	22
3501-6000	30	30	30
6001-7000	38	38	30
7001 or more	38	38	38

- 5) Additional insulation shall not be recommended unless the recommended level is approximately 3 inches greater than the existing insulation.
- 6) Exemption of the ceiling insulation recommendation will be made for dwellings having flat roofs or other ceiling areas when installation is determined to be impractical.
- 7) Doors and windows shall be weather stripped to reduce infiltration of air when weather stripping is inadequate or nonexistent; additional weather stripping is not required when openings are protected by storm doors or storm windows.
- 8) Caulk, gasket, or otherwise seal all openings, cracks, or joints in exterior walls when existing materials are inadequate.
- 9) In all instances, the adequacy of attic ventilation must be ascertained.
- 10) The approximate thickness of mineral fiber insulation for

each R value is indicated below. The R value will vary with different materials, and when labels or bags are present, it will appear thereon.

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INSULATION CONVERSION TABLE
EQUIVALENTS

R Value	Batt or Blanket	Loose Fill
19	5 1/2 - 6 1/2 Inches	6 1/2 - 8 3/4 Inches
22	6 1/2 Inches	7 - 9 1/2 Inches
30	9 Inches	10 - 11 Inches
38	12 Inches	13 - 17 Inches

- 11) Crawl space insulation of R-11 or R-19 value should be placed beneath all habitable heated areas in locations having more than 2500 annual heating degree days when electric resistance heating is used and for areas of more than 3500 heating degree days for all other fuels. It is also very important that a vapor barrier be placed on the ground.
- 12) Upon receipt of a firm application where the thermal protection recommendations have been met or are anticipated to be met, the mortgagee submits paid bills or invoices indicating the cost to the homeowner for weatherization and/or energy conservation improvements to be installed on the property. The Mortgage Credit examiner or DE underwriter shall add the appropriate cost to the value of the property in accordance with the limitations cited heretofore. A new mortgage amount will then be calculated. The firm commitment will reflect the new mortgage amount. The improvements need not be inspected by HUD. The commitment will be conditioned that a mortgagee certification must be received to assure HUD that the thermal protection devices have been properly installed.
- 13) In the event the improvements are not completed and inspected prior to firm commitment (but will be made later), a firm contract bid by the installer must be presented to the Mortgage Credit examiner or DE underwriter for consideration of the contract amount prior to issuing the firm commitment. The firm contract price shall also serve as the amount to escrow should there be any delay in completing the conservation requirements between firm commitment and insurance endorsement. Form HUD-92300, Mortgagee's Assurance of Completion, shall be used where an

escrow is required. If the improvements are not completed within a reasonable amount of time, the escrow will be applied to reduce the loan principle.

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12-16. WATER AND SEWAGE SYSTEMS. There are three types of water and sewer systems which may be acceptable to serve a dwelling:

- A. A public system which is owned, operated and maintained by the city, county or local unit of government with power of taxation or assessment. This system is most preferred for safety and reliability.
- B. A community system, which is a central system, owned, operated and maintained by a private corporation or a non-profit property owners association.
 - 1) For both proposed and existing construction community water systems must:
 - a. Have current water supply permit from the local Health Department with evidence that the water supply:
 - 1. Meets State Drinking Water Standards for quality and
 - 2. Provides sufficient quantity to supply peak demands in the development.
 - b. Be in compliance with requirements of the local or state Health Authority. Deficiencies in the water system should not adversely affect the health of the consumers, the acceptability of the quality of the water for all household purposes nor provide for less than the quantity of water required in the development.
 - c. Have organizational documents providing for ownership and operation which meet requirements of HUD Handbook 4075.12 Rev. to assure continuity of service at reasonable rates.
 - d. Private systems operated for profit must be under jurisdiction of State Public Utility Commission or have a Trust Deed of Third Party Beneficiary Agreement as per HUD Handbook 4075.12 Rev.

- 2) A Community Sewer System must:

- a. Be in compliance with requirements of the Health Authority having jurisdiction for satisfactory operation of the sewage treatment plant and discharge of treated wastes.

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- (12-16)
 - b. Have capacity in the sewage collection system and treatment plant to adequately serve the properties in the development.
 - c. Have organizational documents which assure continuity of service at reasonable rates as required in HUD Handbook 4075.12 Rev.
 - d. If a private system operated for profit, be regulated by the State Public Utility Commission or have a Trust Deed of Third Party Beneficiary Agreement as specified in HUD Handbook 4075.12 Rev.
 - 3) Farmers Home Administration approval of water and/or sewage systems is sufficient for eligibility on individual cases where both agencies are involved.
 - 4) Articles of Incorporation and By-Laws for water and sewerage systems owned by property owner associations or cooperatively owned systems will also be acceptable for assuring continued service and reasonable rates if approved by the Farmers Home Administration.
 - 5) Whenever public or community facilities are within a reasonable distance from the property, a connection must be made to these utilities. However, if the cost to connect to it would cause a financial hardship, this requirement may be waived.
 - 6) Field Offices should maintain a list of all approved community systems for distribution to appraisers and Direct Endorsement underwriters.
 - 7) More detailed information concerning central water and sewer systems may be found in HUD Handbook 4075.12 Rev.
- C. Individual Systems are owned and maintained by the homeowner but subject to compliance with requirements of the local or State health authority having jurisdiction.
- 1) Proposed Construction Properties.
 - a. Individual water supply systems may be acceptable when

connection to a satisfactory public or community system is not feasible and there is assurance of a continuing adequate supply of safe potable water for

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domestic needs and for auxiliary uses, such as lawn and garden maintenance. Possible sources of pollution of the water from the subject and adjoining properties must be considered.

- b. Individual sewage disposal systems may be acceptable when connection to a public or community system is not feasible and the site conditions are such that the individual system can be expected to function satisfactorily. Examination of neighborhood conditions is necessary to assist in this determination. Local health department approval is required.

2) Existing Construction Properties.

- a. Individual wells should be checked to ascertain the distance from the septic system, ease of maintenance and repair of the well, and adequacy of the water pressure. The distance from the well to the septic system must be in accordance with 24 CFR 200.926d (HUD Handbook 4910.1, Appendix K). A well located within the foundation walls of a dwelling is not acceptable except in arctic or subarctic regions. The appraiser should turn on several cold water faucets in the house to check water pressure and flow, letting the system run during the time of the inspection. Flushing a toilet at the same time will also reveal any weakness in water pressure.
- b. Individual sewerage systems may be acceptable where soil conditions are satisfactory for proper installation and absorption of the effluent. After checking the interior of the house and water pressure, the appraiser should then check the outside area for any evidence of subsurface sewage failure, and/or evidence of failures in the surrounding neighborhood.
- c. Failure of individual sewerage systems on adjoining properties may be cause for rejection of the subject property due to the health hazards involved.
- d. If either system in the subject property is failing, the property should be rejected with a requirement for

a repair proposal acceptable to local and State authorities and HUD.

- e. If the home is not occupied and the systems have not been in use for several months, an inspection of the sewerage system must be made by a State licensed sanitation or civil engineer, a State licensed

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contractor for sewage disposal systems or a member of a qualified inspection service to determine if the sewage disposal system was operating in a satisfactory manner at the time of inspection and if the sewerage system is considered adequate to dispose of all domestic wastes in a manner which will not create a nuisance or endanger the public health. (If the system has not been in use for thirty days, a dye test is recommended.)

- f. There must also be an inspection of the water system and a certificate from a local health authority or a State EPA approved laboratory to determine if the system was operating in a satisfactory manner at the time of inspection, and if the quality of water supply meets the local health or State drinking water standards based on results of:

1. Bacteriological analysis of the water supply source.
2. Chemical analysis of the water supply source where there is a history of ground water contamination in the area.

NOTE: Only the laboratory may perform the sampling. A third party is not acceptable.

3. The well construction must meet the requirements of the health authority.

D. Suitability of Soil. The soil and subsoil conditions of the site must be considered. The type and permeability of the soil, the location of the water table, surface drainage conditions, compaction, and the existence of rock formations are among the physical features that are important in the analysis of the site. Effects of the adverse features of the adjoining land must also be observed.

12-17. SHARED WELLS. To be eligible for consideration for mortgage insurance, any shared well must:

- A. Serve existing properties which cannot feasibly be connected to an acceptable public or community water supply system.
- B. Serve proposed construction only if:
 - 1) It is infeasible to serve the housing by an acceptable public or community water system; and

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- (12-17) 2) The housing is located other than in an area where local officials have certified that installation of public or adequate community water and sewer systems are economically feasible.
 - C. Be capable of providing a continuing supply of water to involved dwelling units so that each existing property simultaneously will be assured at least three gallons per minute (five gallons per minute for proposed construction) over a continuous four-hour period. (The well itself may have a lesser yield if pressurized storage is provided in an amount that will make 720 gallons of water available to each connected existing dwelling or 1,200 gallons of water available to each proposed dwelling during a continuous four-hour period. The shared well system yield should be demonstrated by a certified pumping test or other means acceptable to all agreeing parties.)
 - D. Provide safe and potable water. This may be evidenced by a letter from the health authority having jurisdiction or, in the absence of local health department standards, by a certified water quality analysis demonstrating that the well water complies with the U. S. Environmental Protection Agency's National Interim Primary Drinking Water Regulations, as set forth in CFR 40, Subpart B, Section 141.11.
 - E. Have a valve on each dwelling service line as it leaves the well so that water may be shut off to each served dwelling without interrupting service to other properties.
 - F. Serve no more than four living units or properties. If more than four properties will be served by one well, one of the ownership and organizational alternatives identified in HUD 4075.12 Rev., paragraph 3b, shall be implemented instead of a shared well agreement.
 - G. Be directly connected to the pumping energy source (not through a dwelling) and energy used for pumping must be separately metered.

- H. Be covered by an acceptable well-sharing agreement. Such an agreement must:
- 1) Be binding upon signatory parties and their successors in title;
 - 2) Be recorded in local Deed Records;
 - 3) When executed and recorded, reflect joinder by any mortgages holding a mortgage on any property connected to the shared well; and

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(12-1.7) 4) comply with guidance provided below.

I. The same agreement provisions are essential regardless of whether the well will serve existing or proposed properties. Provisions that should be reflected in any acceptable well-sharing agreement include the following:

- 1) Shall permit well water sampling and testing by a responsible local authority at any time at the request of any party.
- 2) Shall require that corrective measures be implemented if testing reveals a significant water quality deficiency, but only with the consent of a majority of all parties.
- 3) Shall assure continuity of water service to "supplied" parties if the "supplying" party has no further need for the shared well system. ("Supplied" parties normally should assume all costs for their continuing water supply.)
- 4) Shall prohibit well water usage by any party for other than bona fide domestic purposes.
- 5) Shall prohibit connection of any additional living unit to the shared well system without:
 - a. The consent of all parties,
 - b. Appropriate amendment of the agreement, and
 - c. Compliance with items C through F, above.
- 6) Shall prohibit any party from locating or relocating any element of an individual sewage disposal system within 50 feet (100 feet for proposed construction) of the shared well.

- 7) Shall establish easements for all elements of the system, assuring access and necessary working space for system operation, maintenance, replacement, improvement, inspection, and testing.
- 8) Shall specify that no party may install landscaping or improvements that will impair use of the easements.
- 9) Shall specify that any removal and replacement of pre-existing site improvements, necessary for system operation, maintenance, replacement, improvement, inspection or

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- (12-17) testing, will be at the cost of their owner, except that costs to remove and replace common boundary fencing or walls shall be shared equally between or among parties.
- 10) Shall establish the right of any party to act to correct an emergency situation in the absence on-site of the other parties. An emergency situation shall be defined as failure of any shared portion of the system to deliver water upon demand.
 - 11) Shall permit agreement amendment to assure equitable readjustment of shared costs when there may be significant changes in well pump energy rates or the occupancy or use of an involved property.
 - 12) Shall require the consent of a majority of all parties upon cost sharing, except in emergency situations, before actions are taken for system maintenance, replacement or improvement.
 - 13) Shall require that any necessary replacement or improvement of a system element(s) will at least restore original system performance.
 - 14) Shall specify required cost sharing for:
 - a. The energy supply for the well pump;
 - b. System maintenance including repairs, testing, inspection and disinfection;
 - c. System component replacement due to wear, obsolescence, incrustation or corrosion; and

- d. System improvement to increase the service life of material or component, to restore well yield, or to provide necessary system protection.
- 15) Shall specify that no party shall be responsible for unilaterally incurred shared well debts of another party, except for correction of emergency situations. Emergency situation correction costs shall be equally shared.
- 16) Shall require that each party be responsible for:
- a. Prompt repair of any detected leak in his water service line or plumbing system;
 - b. Repair costs to correct system damage caused by a resident or guest at his property; and

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- (12-17) c. necessary repair or replacement of the service line connecting the system to his dwelling.
- 17) Shall require equal sharing of repair costs for system damage caused by persons other than a resident or guest at a property sharing the well.
- 18) Shall assure equal sharing of costs for abandoning all or part of the shared system so that contamination of ground water or other hazards will be avoided.
- 19) Shall assure prompt collection from all parties and prompt payment of system operation, maintenance, replacement, or improvement costs.
- 20) Shall specify that the recorded agreement may not be amended during the term of a Federally insured or guaranteed mortgage on any property served, except as provided in items 5 and 11, above.
- 21) Shall provide for binding arbitration of any dispute or impasse between parties with regard to the system or terms of agreement. Binding arbitration shall be through the American Arbitration Association or a similar body and may be initiated at any time by any party to the agreement. Arbitration costs shall be equally shared by parties to the agreement.

12-18. EARTH SHELTERED HOUSING.

- A. Earth sheltered housing can be built under Title 11 to conform

to Minimum Property Standards (MPS). For proposed construction, see HUD Handbook 4151.1. Typically such housing is built on sloped sites or in rolling terrain. Designs which include judicious relations between buildings and grades should permit easy access to existing or proposed streets and convenient access for deliveries, maintenance, fire equipment and car parking.

- B. Foundation walls and roofs retaining or supporting earth, must be designed for the imposed loads. They must resist the penetration of moisture.

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(12-18)C. Since a major national goal is the conservation of energy, every consideration must be given to housing which provides the possibility that energy use will be reduced. In addition to reduced energy costs, there is considerable interest in earth sheltered housing in areas subject to tornados.

Earth sheltered housing in some locations is obviously inappropriate:

- 1) In costal areas where wind driven seas would prove a flood hazard.
- 2) In flood prone areas.
- 3) In areas having high water tables.
- 4) In any area where hydrostatic or other forces would make earth sheltered homes hazardous to life safety.
- 5) In any area where it is not homogeneous with other homes in the neighborhood and is not sited in such a manner which will lead to its attractiveness and marketability.

- D. Earth sheltered housing proposals present a problem in determining marketability and value. generally speaking, a well designed, attractive and well sited proposal which provides amenities commensurate with conventionally built housing and with an approximately similar replacement cost should, pending the development of market comparable data, have an estimated value at least approximating that of the conventionally built new housing.

12-19. DOME HOMES. The same considerations apply to dome homes as earth sheltered homes insofar as location is concerned. In order for such a property to be fully marketable it must be located in an area of other similar types of construction and blend in with the

landscape.

- 12-20. UREA FORMALDEHYDE FOAM INSULATION. Since the Consumer Product Safety Commission has been unable to determine any absolute safe level of formaldehyde exposure, the Department does not prohibit the use or presence of urea formaldehyde insulation in single family residential buildings.
- 12-21. ASBESTOS. Although asbestos has been used in many products in the past, it is not an easily recognized material. This material may be found anywhere in a home but may not be obvious to an appraiser. While an appraiser may recognize an asbestos shingle roof or asbestos siding on a house, asbestos used in this manner does not

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(12-23)pose a danger as would be if the material were deteriorating within the confines of a home. Where it is used as an insulation wrap for hot water pipes, it is usually covered and poses no danger. When the material is deteriorating into a fine powder and can be inhaled, it may pose a danger to one's health. Also it could be in hidden areas to which the appraiser has no access.

Asbestos wrapping around hot water pipes in the basement of a dwelling is usually found only in very old homes. If an appraiser notices this he/she should make a note on the appraisal report that there appears to be asbestos insulation wrap around the hot water pipes. If there is no obvious deterioration of the asbestos such as punctures or other damage, it should be left alone. If there is obvious damage, the appraiser should require that the pipes be wrapped with heavy plastic or other appropriate material. The appraiser should not require that the asbestos be removed unless it is in such a deteriorated condition as to pose a serious health threat. In such a case an asbestos expert must be employed to remove it.

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