



**Colorado Multi-Family Housing Programs  
LANDSCAPE DEVELOPMENT POLICY:  
Toward Establishing a Sustainable Environment**



**Prepared by the United States Department of Agriculture  
Rural Development  
Colorado State Office**



**Rural Housing Service**

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# Colorado Multi-Family Housing Programs Landscape Development Policy:

## Toward Establishing a Sustainable Environment



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# Foreword

“Everybody needs beauty as well as bread, places to play in and pray in, where nature may heal and give strength and soul alike.” - John Muir



[John Muir resided with his wife, Louie, and his two daughters, Wanda and Helen, at a ranch in Martinez, California from 1880 to 1914. Within his "scribble-den," he authored numerous articles and books promoting conservation and natural history.]

# Table of Contents

Landscaping development policy objective	5
Landscaping improvement plan development	12
Selection factors	14
Maintenance factors	17
Financial considerations	18
Areas for consideration for developing a landscaping improvement plan	19
Lawns/groundcovers	19
Xeriscape	20
Irrigation systems	21
Trees and shrubs	22
Sidewalks	23
Parking lots	24
Lighting	26
Signs	29
Trash enclosures	32
Fencing	34
Recreation areas and tot lots	36
Gardens and flower beds	39
Pet runs	40
Drug trafficking and gang issues	41
Aesthetic features	43
Epilogue	45
Recommended resources and references	46
Appendix: Xeriscape Handbook for Apartment Complexes	49



# Landscaping Development Policy Objective

**It starts at the beginning.....**



**.....and it never ends.....**

The U.S. Department of Agriculture, Rural Development, Colorado State Office, has established suggested guidelines for common apartment project landscaping practices in Colorado to develop and promote the concept that all affordable housing can achieve beneficial landscaping environments that will contribute to the positive experience within communities. It is felt that the augmentation of the curb appeal of both new and existing Rural Development financed apartment complexes will decrease vacancies; increase property values; and improve pride of ownership. Rural Development also promotes an emphasis on water conservation to the maximum extent practicable, to include the serious exploration of alternative landscaping methodologies that foster sustainable draught resistance (such as “Xeriscape”, which is discussed in more detail elsewhere in this guide).



**Evolution toward a sustainable community. The goal: regardless of what we have to start with, we can always improve aesthetics and marketability**





**Evolution toward a sustainable community: Improved aesthetics will often lead to improved marketability**





**Evolution toward a sustainable community: Improving aesthetics and maintainability can be accomplished in harmony**





**Evolution toward a sustainable community: Improving water conservation can be approached with aesthetic diversity**



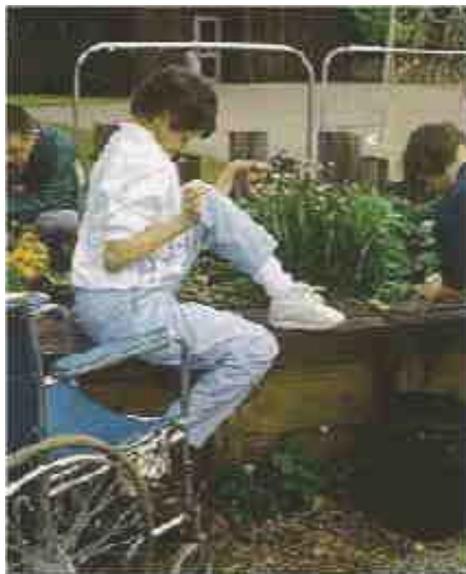


**Evolution of a sustainable community: Improving security and function are equally important and simultaneous goals**





**Evolution of a sustainable community: Changing societal perspectives are placing increased emphasis on improving overall accessibility for persons with disabilities to more fully incorporate them into communities**



# Landscaping Improvement Plan Development

Landscaping improvements should be considered when reviewing capital needs for existing apartment complexes on an annual basis and should be incorporated into the projects' management plans. The guidelines provided in this document are intended to aid in that purpose and should not be considered restrictive, but rather, open to your infinite creativity!



This document is being provided for informational purposes only. It is not intended to establish hard requirements which would result in any safety liability circumstances; adverse social situations; undue financial hardship; regulatory noncompliances, or other adverse conditions for the complex owner, tenants, or visitors at apartment sites and should be viewed as being superseded by all such considerations.

Apartment complex owners should exercise common sense and adequately research and comply with all pertinent governing regulations, such as requirements of the 1990 Americans with Disabilities Act, Section 504 of the 1973 Rehabilitation Act, the 1988 Fair Housing Amendments to the Civil Rights Act, as well as special requirements of the Consumer Product Safety Commission, the Occupational Safety and Health Administration, the Environmental Protection agency, etc. and legal

precedent. Where there is a question regarding a potential regulatory or legal conflict, the owner should consult the appropriate parties for additional guidance, such as legal advice. Some useful resources in this regard are mentioned in the additional references section near the end of this document.

Consider.....



.....and others.....

The U. S. Department of Agriculture, Rural Development, and its agencies assume no liability for owner/management/tenant/visitor decisions in this regard.

# Selection Factors

One of the attractions of Colorado is that it encompasses a wide range of locales with very diverse environmental conditions.....



The assorted nature of apartment sites with respect to altitude, climate, wildlife presence, location of buildings, traffic circulation, topography, etc. should be fully realized when making smart landscaping regime selections. Rural Development does not expect nor intend all projects to look exactly alike. The tendency for affordable housing developments to clone landscaping regimes in the past is believed to have resulted in stigmas, such as “the project” or “there’s one of these in every town”, and so on. But stigmas can be overcome by thoughtful strategies that respect communities’ expectation levels. Landscaping improvements should fundamentally enhance the comprehensive appearance of project buildings, drives, seating areas, playgrounds, and other site amenities, hopefully resulting in improved tenant and surrounding community pride and with a bit of luck complimenting locale ecologies. Other practical considerations, such as seasonal maintenance needs and planning for growth/maturity should also be equally evaluated. The advice of professional experts, such as landscaping firms, nurseries, and governmental resource agencies, should be sought when appropriate.

Rural Development strongly desires that:

- All landscaping alterations and maintenance work should attempt to improve/coordinate/resolve problematic existing site drainage and wheelchair accessibility scenarios. The photograph below was taken at an existing apartment site where designated wheelchair “accessible” parking spaces were surfaced with gravel in lieu of asphalt or concrete and occurred at low spots. These special spaces and access aisles should always be hard surfaced and properly graded for surface drainage and for comfortable wheelchair operation.....



- All landscaping alterations and maintenance work should comply with local fire department/district requirements, including emergency property and fire hydrant/connection accessibility. Fire department requirements vary in communities across Colorado in this regard.



- All landscaping alterations and maintenance work should take into account project water supply capabilities and their benefits or detriments to project landscaping features. Available water main line pressures vary considerably and could limit options. Additionally, water rates and availability should also be thoroughly researched.



- All landscaping alterations and maintenance work should take into account project management and maintenance capabilities. Caution should be exercised as overly ambitious endeavors could result in the ultimate abandonment of portions of the landscaping due to inadequate resources. Several personnel and equipment options are available and should be considered, including in-house personnel, outside contractors, and interested tenants.



## Maintenance Factors

Management is ultimately responsible for the maintenance of apartment complexes, in all respects. Consideration should be given, however, to the role of tenant involvement and initiative if tenants were interested. Tenants could water their own lawns, plant flowers, etc., for example, if interested and if considered part of the overall project management plan.



This is particularly important in building a sense of community within an apartment complex because it establishes a degree of pride of ownership by tenants, themselves. It is also especially important in the context of apartment projects utilized by senior citizens and/or persons with disabilities where there may exist a greater urgency for providing structured recreational activities.



## Financial Considerations

Landscaping financial considerations are ongoing and require considerable foresight and planning to achieve successful installations.

Rural Development does not consider that its general regulatory cost containment concepts should negatively affect landscaping because proper landscaping design and maintenance are considered fundamentally integral with successful apartment projects.

It is recommended that project owners consider living memorials from families, grants, and matching funds as potential auxiliary funding sources.

**\$\$\$\$ IT'S YOUR MONEY \$\$\$\$**

Additionally, it is recommended that monetary awards or plaques for tenant initiatives be considered. These could be, but not limited to: nominal amounts of cash, a one-month reduction of rent, brass plaques in front of trees or flower beds, children's contests, etc. These tenant initiatives could be considered eligible project expenses.



# Areas for Consideration for Developing a Landscape Improvement Plan

A complete landscaping improvement plan entails a myriad of technological, social, environmental, functional, recreational, aesthetic, and other practical considerations which should all be evaluated and appropriately addressed in the final landscaping development design and maintenance plan. Following are some major areas of consideration:

## Lawns/Groundcovers

Grass species should be appropriate for the area, i.e., and drought resistant, hardy in nature to withstand high winds and pedestrian traffic, and require minimal mowing. Groundcovers should be strategically placed. It is recommended that consideration be given to live groundcovers versus material groundcovers, for example, phlox, and flowering shrubs.



Is bark the best choice in a high wind area? Is rock the best type in a family project? Rock beds and groundcovers can be very appealing if placed with some thought. Consulting professionals is highly recommended.

## Xeriscape

Xeriscape is a concept for systematically conserving water in landscaped areas. For most of the country, over 50% of residential water usage is applied to landscape and lawns. Making use of the xeriscape concept does not mean dry only. Xeriscape is not just rocks and gravel and not necessarily “lawn-less” landscaping. It is not a boring collection of spiny plants and it is not only native plants. Well-planned Xeriscape environments are splendid examples of beauty and diversity. Well designed Xeriscape environments can potentially increase property values by as much as 15%. The use of Xeriscape techniques can also reduce water and maintenance costs by up to 60%. Xeriscape also helps extend water supplies. When water use is restricted; inefficient, water-thirsty landscapes suffer first. It is recommended that project landscape investments be protected by drought proofing them to the maximum extent practicable.



Xeriscape is generally considered to entail seven fundamentals:

- ❑ Plan and design for water conservation and beauty from the start.
- ❑ Create practical areas of turf that are of manageable size, shape, and appropriate grasses.
- ❑ Select plants that require low water application and group plants with similar water consumption needs together.
- ❑ Use soil amendments like compost or organic fertilizer as needed by the site and the type of plants utilized.

- Use mulches, such as wood chips, to reduce evaporation and to keep the soil cool.
- Irrigate efficiently with properly designed systems and by applying the right amount of water at the right time.
- Maintain the landscape over the long term properly by moving, weeding, pruning and fertilizing properly.

The services of a professional landscaper are highly recommended for establishing a proper xeriscape landscaped environment. Some of the fundamentals of this landscaping strategy are discussed in greater detail in Appendix A to this document which focuses on Xeriscape.

## **Irrigation Systems**

Selection of the proper type of irrigation system should be considered at the time of the initial loan and reviewed annually as project landscaping evolves, (i.e. consider changing from a conventional, high volume sprinkler system to a drip type system). Rural Development considers the employment of an irrigation system with automatic controls highly desired for newly constructed projects involving building types other than detached or duplexes. Project managers should ensure sprays are directed at appropriate planted areas and are minimally directed toward sidewalks, streets, and buildings.



Sprinkler heads, supplies, and other system components should be of adequate size and design for the intended application (i.e., area coverage, pattern of coverage, continuous spray versus pulse). Tenant peak activity should be considered when evaluating timing options. Utilization of the services of a qualified professional is highly recommended as there are

many esoteric do's and don'ts (i.e. spray droplet size versus wind constraints).

## **Trees and Shrubs**

Trees and shrubs should be routinely trimmed and not allowed to reach an overgrown condition. Dead branches and other debris should be periodically removed. Undesired new growth should similarly be removed as soon as possible before it can solidly establish.

Rural Development desires that, where a tree or shrub is removed, a replacement should be planted, although not necessarily at the precise same location. If an apartment complex is lacking trees and shrubs, it is recommended that at least one tree or shrub be planted every year.



The choice and placement of the trees and shrubs should be viewed in light of a variety of considerations (i.e., mature height/area versus space allowance, moisture requirements, maintenance requirements, building foundations, sewer lines, power lines, walkways, doorways, future plans for the project, etc.). These plant materials are frequently planted too closely together during the initial construction of apartment projects in the interest of providing maximum visual appeal from the start and they, therefore, establish a situation where tree and shrub thinning may be necessary in future years. Trees and shrubs should be strategically placed with respect to site climatology to serve as wind barriers and provide much needed shade during the summer. Some unobstructed sight lines should be maintained across projects to enhance public surveillance and eliminate blind spots, for security purposes. Seeking the advice of qualified professionals is highly recommended with regard to selecting and establishing tree and shrub plant materials.

## Sidewalks

Sidewalks should be kept free of large cracks, broken edges, and debris. Sidewalks should also be visually inspected and repaired to remove any excessive vertical variances between slab sections that could pose potential trip hazards. Trip hazards should be identified with some type of noticeable marker for tenant protection and for eventual repair.



It is recommended that all pavement sections be inspected at least annually for damage and safety concerns. Following are some different methods of sidewalk correction that are available:

- Filling and patching of slabs
- Replacement of slabs
- Mudjacking to reposition slabs
- Abandonment of slabs
- Installation of new slabs along new routes



Consider phasing repairs.

Consider whether or not stepping-stones or flagstone would be appropriate rather than constructing traditional concrete sidewalks at certain locations.

If an existing sidewalk is being displaced by tree growth, consideration should be given to moving the sidewalk or perhaps installing a new, serpentine, circumnavigating sidewalk that might simultaneously improve aesthetics. It is important to realize that tree roots will always win and sidewalks will always lose in the end though some mitigative tree root control products are now becoming available on the market for redirecting tree root growth.

How close should trees be planted to sidewalks? Following are some general limits that may work in most cases:

<3': No trees  
3' to 4':Max. 30' tall trees  
4' to 5':Max. 50' tall trees  
5' to 8':Over 50'tall trees

What shallow rooted trees should not be planted near pavements? Following are some likely candidates:

Norway maple  
Red maple  
Sugar maple  
Ash  
Sweetgum  
Tuliptree  
Pin oak  
Poplars  
Cottonwoods  
Willows  
American elm  
Ponderosa pine

Thought should also be directed to installing additional sidewalks or moving present locations to address the evolution of pedestrian routes across apartment complexes and to improve aesthetics.

## **Parking Lots**

Hard surfaced parking lots should be free from large cracks, potholes, oil spots, debris, and vegetation. Graveled parking lots should consist of the

appropriate type of gravel and size to provide proper vehicular and pedestrian traction.

Parking lot areas intended for full usage by persons with disabilities (i.e. confined to wheelchairs or other impairments) should be hard surfaced and appropriately marked in accordance with the design criteria of *the "Uniform Federal Accessibility Standards"* (UFAS) as well as applicable provisions of the *"Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities"* (ADAAG).

A text version of the UFAS in .HTML format is available for downloading at the following website:

<http://www.access-board.gov/ufas/ufas-html/ufas.htm>

UFAS figures are also downloadable at the following website:

<http://www.access-board.gov/ufas/ufas-html/figures.htm>

A text version of the ADAAG in .HTML format is available for downloading at the following websites:

<http://www.access-board.gov/adaag/html/adaag.htm>

<http://www.handinet.org/adaag.htm>

ADAAG figures are also downloadable at the following website:

<http://www.handinet.org/figures/adfig.html>



Proper maintenance of parking lots is strongly encouraged in order to reduce long-term replacement cycles. Asphalt surfaces should be patched, filled, sealed, oiled, repainted, and otherwise maintained on a regular basis. Concrete surfaces should similarly be filled, leveled, patched, repainted, and otherwise maintained on a recurring basis of evaluation and repair.



New technology is now available in products coming on the market for repairs, providing more flexibility for all situations:

- Concrete patching
- Asphalt cold patching
- Asphalt hot patching
- Asphalt sealing

Capital needs assessment plans and maintenance plans should address all such resurfacing and repair issues.

On a final note, consideration should also be given to installing appropriate speed bumps to control vehicular speeds and in an effort to discourage drive-throughs of apartment complexes from a security standpoint.

## **Lighting**

Lighting is a major tool for defining aesthetics; assisting normal site functions; and providing security within apartment complexes. Common area lighting patterns should respect individual apartment window privacy and still provide adequate illumination levels to assist tenants and visitors. All pedestrian walks, parking areas, patios, steps, stairs, trash enclosures,

and security problem prone areas should be evaluated for the presence of sufficient lighting levels.



Rural Development recommends that proper consideration be directed to providing adequate exterior lighting to prevent injury from hazards along pedestrian routes. Some examples of lighting projection shortcomings are:

- Inadequate illumination of selected areas
- Glare areas
- Blind spots

Project site lighting scenarios may be augmented or detracted by lighting regimes occurring on adjacent properties. Strong nearby commercial lighting, for example, may result in dark areas on the backsides of buildings and solid fencing within projects.



**Existing low levels and glare**



**Improved**

Lighting fixture lamps in public areas should be routinely monitored for full function as well as effectiveness. Broken and burned out lamps should be replaced with the lamps having sufficient wattage to illuminate the areas

intended, yet not intrude into surrounding areas where privacy is the primary consideration. High efficiency lighting fixtures are recommended for the lowering of long-term energy and maintenance costs.

Various apartment complex signage should be well lit at night, including, but not limited to, main project signs, signs for offices and laundries, and signs for designated parking for persons with disabilities.

Consideration should be given to the attractiveness of the lighting fixtures, themselves, and to their strategic placement to discourage vandalism, drug trafficking, and other potential problems. The services of professional lighting design consultants are recommended for projects with special lighting concerns. Many technical issues can be involved in lighting fixture and lamp selection as well as with their placement including:

- Necessary rewiring design
- Special controls (i.e. photocell management)
- Lamp maintenance requirements
- Desired lighting patterns
- Desired color rendition
- Desired illumination levels
- Vandalism concerns

Typical fixture locations include:

- Ground mounted
- Pole mounted
- Building mounted

Ground mounted and short pole mounted fixtures are often prone to more vandalism than high mounted fixtures.

Several lamp families are now available in this highly competitive industry, each offering advantages and disadvantages, many competing with each other for the same market share. Following are some prevalent examples:

Incandescent:

- Partial spectrum
- Full spectrum
- Standard life and very long life versions



### Fluorescent:

- Special shapes
- Replacements for incandescent lamps
- High efficiency ballast
- Partial spectrum
- Full spectrum



### Halogen

- Incandescent replacements
- Partial spectrum
- Limited spectrum



### High efficiency discharge

- Metal halide
- Pulse-start metal halide
- Mercury vapor
- Low pressure sodium
- High pressure sodium
- Limited spectrum



## Signs

First impressions are very important and one of the first project features to impress is the apartment complex main sign.

The apartment complex main sign should present all pertinent identification information so emergency services providers could easily and correctly respond to the property. Complex main signs should also present all necessary contact information so prospective tenants could

easily contact management. They should be designed in a very aesthetic manner to attract tenants and to enhance the overall aesthetics of the complex.



Placement of the main complex sign should be carefully considered with regard to visibility. They should be located at the primary site entrance so as to be easily recognizable and readable from the roadside. Attention should be directed at the placement and growth of plantings in the near vicinity of complex signs keeping in mind that mature heights and sizes may be detrimental to the effective visibility of the signs. Adequate lighting of the complex sign at night should also be provided.



Federal, state, and local special requirements for signage should also be addressed. Federal height placement requirements with respect to design for persons with disabilities, for example, are very technically specific. The Rural Development State Architect may be consulted for assistance in this regard.



Rural Development regulations require the following visual information and other criteria be provided/met within the design and construction of the main complex sign along with other items required by other entities:

- ❑ Location at primary site entrance.
- ❑ Location near site manager's unit or office, if possible, or direction on how to get there.
- ❑ For complexes of eight or more living units, not less than sixteen square feet of surface area.
- ❑ The usage of durable, permanent materials.
- ❑ Display of the complex name, rental contact information, telephone number, office location, the Equal Housing Opportunity logo and/or slogan (at least equal to approximately three to five percent of the sign's total surface area),



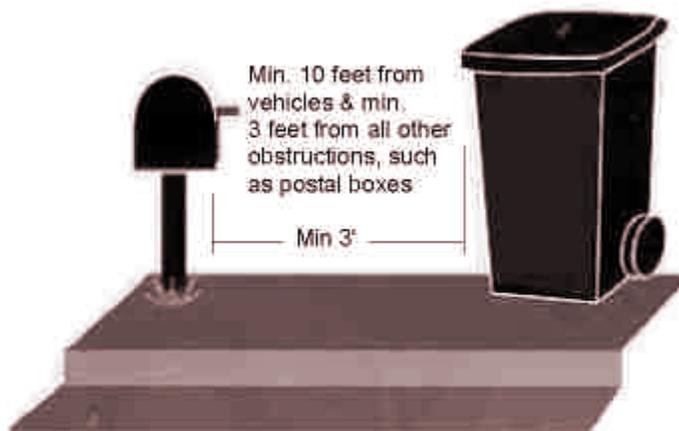
- The TTY phone number or relay station number, the wording, “Financed by the U.S. Department of Agriculture, Rural Development”. (Reference the requirements of FmHA Instruction 1930-C, Exhibit B, VI, C, 2, b for more information on this display information).
- The international symbol of wheelchair accessibility.



Rural Development also requires that all apartment signage intended for persons with disabilities be provided in accordance with the design parameters of the “*Uniform Federal Accessibility Standards*” (UFAS) as well as the applicable provisions of the “*Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities*” (ADAAG).

### **Trash Enclosures**

Proper placement, type, and enclosure of apartment complex trash receptacles should be evaluated.



Placement should allow for reasonably short walking distances from apartments. A sufficient number of trash collection stations should be dispersed throughout the projects to achieve this goal. Placement should address full access to a adequate number of the stations by persons with disabilities in accordance with the design criteria of the “*Uniform Federal Accessibility Standards*” (i.e. accessible routes, dumpster lid approach clearances, dumpster lid operation by persons in wheelchairs, signage, etc.). Placement should also consider trash collection provider parameters, visual setting, pavement strength, lighting levels, and other pertinent factors.

Avoid too close proximity to apartment windows.....



.....but the hollyhocks are so nice!

The type(s) of dumpsters provided and their locations and approaches by trash collection trucks should address local provider concerns and initial contact with provider is strongly recommended prior to either design or construction.



Rear loading collection truck



Side loading collection truck

Rural Development also recommends that trash enclosure construction and screening techniques be closely evaluated with the intent of blending with apartment complex surroundings in an aesthetic manner (i.e. screen trash enclosures with plant materials). Match surrounding material surfaces, textures, and colors as best as possible.

Strength and durability are very important. Special thought should be directed toward pavement construction reinforcement in the vicinity of trash enclosures. Thought should also be given to the selection of trash enclosure construction methods and materials, themselves. It is recommended that barriers be installed inside the trash enclosures to restrict the overall movement of the portable trash dumpsters with the intent of protecting the walls of the enclosures. Access by tenants (including the disabled) and trash removal companies should be planned for.

The following photograph illustrates a novel attempt by a project owner to address durability by providing a very strong gated entrance to a wheelchair accessible trash enclosure area. The painted steel gate and supports were actually custom fabricated for this apartment project.



On a related note, it is recommended that special trash cans and cigarette receptacles be strategically located throughout complexes where warranted. Some communities may also enforce segregated trash receptacles for materials recycling programs.

## **Fencing**

There are many kinds of fencing.....



.....but some work better than others for apartment complexes!

Fencing does not necessarily automatically mean metal chain link or wood. Trees and hedges should also be considered as designer elements for project fencing. Hedges, for example, could be placed to delineate visual perimeters and routes.....



Fencing should accomplish several functions including providing privacy; restricting access to certain areas; improving aesthetics; creating wind barriers where needed; screening out undesirable views, and contributing useful shade. Reasonable aesthetics should be provided in all instances.



Fencing should be well maintained as its degradation contributes overwhelmingly to the visual downfall of an apartment project. Wind, impacts, and other elements eventually take their toll. Tree and hedge fences should be watered, fertilized, and trimmed on a regular basis as predetermined by landscaping maintenance plans.

Apartment project fencing should also be evaluated in light of potential drug and crime activities. Attention should be paid to maintaining visual surveillance sight lines; eliminating graffiti; preventing blind spots; and controlling vehicular and pedestrian flow across sites.

### **Recreation Areas and Tot Lots**

Rural Development considers apartment complex recreational facilities to ideally be an assortment of various features of the appropriate type and size for the specific demographics and scale of the apartment complex in question and taking similar offsite nearby amenities into account.

Recreational areas are not just tot lots, a bench, or a barbecue grill, but rather, a combination of these plus playing fields, sitting areas, and other reasonable features. In unison, they should provide a decent, attractive psychological retreat for external play within the overall context of the apartment complex.

Both active and passive recreational facilities should be provided for the special needs of children, young adults, and senior citizens.

The following photograph illustrates an example of one of the various types of active recreation offerings that might be provided. In this case, a pre-manufactured system was selected in lieu of a site-built system. Both are considered equally acceptable by Rural Development and both offer numerous possibilities for design and functional creativity.



**Modular playground equipment just installed prior to the addition of a perimeter fenced enclosure**

Playground and tot lot equipment, enclosures, ground surfaces and other constructed features should be designed and maintained in the best interests of safety, function, accessibility for the disabled, and aesthetics in accordance with applicable federal, state and local guidelines and good practice.

The size of the grassed fields and other such amenities provided at apartment complexes should be evaluated in light of available similar adjacent park or school facilities, where available.

The following photograph illustrates an example of a rather large active and passive recreational park/playing field within an apartment project that would be suitable for picnics, walking, organized sports, etc. The exceptional size of this field resulted from special multi-easement concerns at the site.



Some type of shading scheme respite should be considered for heavily used active recreational areas, such as tot lots, for well designed solar shading improves project aesthetics and serves to help moderate the micro climates of such play environments. Trees, shrubs, trellises, and fences could be employed as shading devices. Special structures, such as gazebos and arbors, could also provide refuges from solar effects.

Following is example of an aesthetically pleasing arrangement of diffused lighting, primarily accomplished via large trees, at a partially fenced site play area.



Basketball courts, volleyball nets, picnic areas, soccer goals, baseball diamonds, tetherball poles, grassed fields, picnic tables, grills, benches, and bike racks are some examples of other prudent amenities that should also be considered.



Wheelchair accessibility should ideally be provided to as many site recreational amenities as practical. New products, such as modular rubber ground mats, now afford wheelchair accessibility and a greater degree of safety from injury directly underneath and adjacent to playground equipment.

Special secured, safe play areas should also be provided. Consider an area, for example, where small children and toddlers could ride their tricycles and bicycles away from main traffic areas, both pedestrian and vehicular.

Achieving all these goals requires comprehensive planning and probably the gradual phasing in of some new project amenities. Rural Development expects a grassed playing field and a fenced tot lot with playground equipment to be provided at each apartment project at the outset. These recreational facilities should to be scrutinized periodically for augmentation and modification to address feedback from the lifestyles actually encountered and intended. They can be expected to cause apartment complexes' original landscaping, irrigation, pedestrian routes, lighting, and other features to evolve to accommodate them.

### **Gardens and Flower Beds**

A great tenant initiative.....for both seniors and the younger set!

Rural Development suggests getting tenants involved in garden and flowerbed activities by having structured contests. Nominal awards may be considered an eligible project expense if identified in project Management Plans and budgeted. Awards could be given for the best looking yard, most attractive patio, most innovative flower garden, etc.

Consider planting perennial flowers in family projects.



Tenants could actually build and care for gardens and flowerbeds. Consider establishing an arrangement where tenants from one apartment complex (i.e. possibly from a senior housing project) care for flowers at another apartment complex (i.e. possibly a family housing project) as a tenant activity and community involvement initiative. Consider organizing a potluck using vegetables from the complex's garden. Consider dedicating a tree or shrub to a family with a plaque indicating this. Even consider orchestrating annual and season horticultural events. The possibilities are endless!



.....and don't forget to plan for an adequate water supply for these extra horticultural amenities if one is not already present!

## **Pet Runs**

“Hey, where are Sparky and Fido?”

Rural Development highly recommends the installation of pet runs in complexes that allow for pets.

Pet runs should be easily accessed by project tenants but should also be located away from normal traffic areas. Consider privacy concerns and solar shading.

## Drug Trafficking and Gang Issues

The control of drug trafficking and other gang issues at apartment sites is critical for their long-term survivability. It involves perpetual careful consideration and management of many key physical elements across project sites. It also entails an organized process of screening prospective tenants and visitors in the common interest of the apartment community to the point of arranging for varying degrees of visual surveillance. Police departments are a first contact for establishing an interactive repoire and for implementing ongoing organized anti-crime programs.



Rural Development strongly recommends on-site managers implement police department supervised neighborhood watch programs among the tenants, where available. This entails promoting tenant visual surveillance across project sites and is virtually as important as selective tenant screening. The bottom line: management and tenants must be able to recognize when a problem exists and take appropriate measures to control it.

The following site features and regimes are considered by most police departments to be weaknesses and warning signs:

- ❑ Thoroughfares:
  - ❑ Vehicular
  - ❑ Pedestrian
- ❑ Inadequate lighting
- ❑ Concealed areas
- ❑ Lack of visual surveillance

- ❑ Lack of apartment identification
- ❑ Unassigned parking areas
- ❑ Run-down character/graffiti

There are many suggestions by the experts for management practices and physical project changes that can help alleviate drug trafficking and gang problems. Following is a brief discussion of a few.

- ❑ It is suggested that the lighting around the perimeter of properties be increased where lighting levels are traditionally on the low side. Doors that open to the exterior should all be well lighted.
- ❑ All buildings and residential units should be clearly identifiable by street address numbers that are a minimum of five inches high and well lighted at night.
- ❑ Tree limbs above and around the buildings should be trimmed. Shrubbery should be no more than three feet high for clear visibility. Similarly, trees and shrubbery should be thinned to eliminate hiding places and provide unobstructed sight lines to encourage public surveillance. Low shrubbery and fencing should allow visibility from adjacent streets. To the maximum extent practical, blind spots should be eliminated in general.
- ❑ Parking spaces should be assigned to each unit and located in the general proximity of the units, but not be marked by unit numbers. Visitor parking should be designated.
- ❑ Recreation areas should be visible from a multitude of windows and doors. Dumpsters should not cause or possess blind spots or hiding areas. Elevators and stairwells should be clearly visible from windows and doors.
- ❑ Providing areas for tenants to enjoy the complex outside would help to eliminate vandalism and unwelcome guests for fear of identification.
- ❑ Controlling project vehicular access is also important, to reduce drive-by incidents. Concrete barricades offer temporary blockage to unwanted vehicular access points. Speed bumps discourage drive-throughs. Entrances into parking lots should be defined by landscaping, architectural design, or monitored by a form of visual surveillance. Dead end spaces should be blocked by a fence or gate.



- ❑ The installation of ironwork fences around properties should be considered where warranted to eliminate multi-access points. The usage of solid fencing may limit the effects of visual surveillance by project tenants and by neighbors.
- ❑ All graffiti that appears should be removed immediately by washing or repainting. Every time a bulb is removed or broken, it should be replaced immediately with the proper wattage.

And the list goes on.

The above discussion was not intended to be all-inclusive. Much additional information on this subject is available on the Internet at police department and housing management web sites and many seminars are now available for apartment managers on this topic.

## **Aesthetic Features**

Time to get really creative! If you build it, will they come???

Ultimately, the aesthetics of apartment complexes form a significant aspect of their marketability. Special features, such as gazebos, arbors, fountains, ponds, waterfalls, and other special landscaping elements are definite ways to improve curb appeal and attract tenants. Strong eclectic elements, such as these, could form key visual focal points to define special areas within large projects and for entire smaller projects.

There are all kinds.....



Many resources may be available to assist in this effort. Some developers, architects, local organizations, churches, and other volunteer groups may be willing to donate materials and/or labor for these goals.

## Epilogue

In closing, Rural Development financed apartment complexes offer the potential to be very positive environmental experiences, assets, and influences in rural communities. Don't sell these projects short! The purpose of this guide is to assist those involved in the ongoing effort toward realizing this goal in a sustainable manner. Consider the possibilities and let your mind soar!



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# Recommended Resources and References

## Organizations

Botanical gardens  
Colorado State Forest Service  
Colorado State University Cooperative Extension Service  
Landscape architects  
Local nurseries  
National Arbor Day Foundation  
U.S. Department of Agriculture, National Forest Service  
U.S. Department of Agriculture, National Resource Conservation Service

## Printed References

- “Landscaping for Water Conservation: Xeriscape!”*, City of Aurora, 1989.
- “Sustainable Building Sourcebook”*, City of Austin, Texas.
- “Service in Action”*, Colorado State University Cooperative Extension, Fort Collins, Colorado, 1994.
- “Xeriscape Plant Guide”*, Denver Water Board, Fulcrum Publishing, 1996.
- “Month-to-Month Gardening”*, Kelli Dolecek, Four Sisters Publishing, 1998.
- “From Grassland to Glacier”*, John C. Emerick and Cornelia Fleischer Mutell, Johnson Printing, 1992.
- “Gardens”*, Holly Hughes, Running Press, 1994.
- “Gardening in the Mountain West”*, Barbara Hyde, Associated Printers, 1993.
- “The Xeriscape Flower Gardener”*, Jim Knopf, Johnson Publishing, 1991.
- “Yard: Lawn Care”*, T. Koski and V. Skinner, Colorado State University Cooperative Extension, 1996.
- “Xeriscape Handbook”*, Gayle Weinstein, Fulcrum Publishing, 1999.
- “Xeriscape Gardening”*, Ellefson, Stephens & Welsh, MacMillan Publishing.

*“At Home with Xeriscape, Landscaping for Water Conservation: Xeriscape”*, Fort Collins Water Utilities

*“GANGS: The Origins and Impact of Contemporary Youth Gangs in the United States”*, Scott Cummings and Daniel J. Monti, State University of New York Press, 1993.

## **Internet Sites**

<http://www.xeriscape.org/middle.html>

(XERISCAPE COLORADO!, INC. is a non-profit membership group promoting creative approaches to water conserving landscapes)

<http://www.greenbuilder.com/sourcebook/xeriscape.html>

(“How to” site including the Seven Principles of Xeriscape)

<http://www.ext.colostate.edu/menugard.html>

(Colorado State University Cooperative Extension online gardening technical site)

<http://www.access-board.gov/ufas/ufas-html/ufas.htm>

(Downloadable version of the *“Uniform Federal Accessibility Standards”*)

<http://www.access-board.gov/ufas/ufas-html/figures.htm>

(Downloadable version of the figures of the *“Uniform Federal Accessibility Standards”*)

<http://www.handinet.org/adaag.htm>

(Downloadable version of the *“Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities”*)

<http://www.ncsu.edu/ncsu/design/cud/>

(The home page of The Center for Universal Design)

<http://www.gangsorus.com>

(An excellent reference on youth and prison gang identifiers)

<http://www.lib.msu.edu/harris23/crimjust/gangs.htm>

(A compilation of resources focusing mostly on youth gangs)

<http://www.icdi.wvu.edu/others.htm>

(“Untangling the Web”: links to numerous web-sites regarding persons with disabilities)

<http://www.cpted-watch.com/>  
("Crime Prevention Through Environmental Design")

# Appendix

**(Xeriscape Handbook for Apartment Complexes)**