
**SECTION 7.
OPEN SPACE AND TRAILS PLAN**

MASTER PLAN 2004

TOWN OF COPPER CANYON, TEXAS

SECTION 7. OPEN SPACE AND TRAILS PLAN

Introduction

Natural areas within towns and cities have always been considered a great resource for relaxation and recreation by citizens and also a major tool in the creation and preservation of natural beauty within the Town. This is most certainly true for the residents of Copper Canyon where the preservation of natural areas ensures not only the rural and natural beauty of the Town, but also a rural way of life. To ensure that the rural preservation of the community is solidified, an proactive strategy is necessary. This strategy is three-pronged and includes the creation and preservation of parks, open space and, within some areas, trails.

7.1 Parks

Adjacent to Copper Canyon on its northeastern town limit is the Pilot Knoll Park, owned by the U.S. Corps of Engineers and currently leased by the City of Highland Village. The park is an excellent resource for the residents of Copper Canyon and neighboring communities. The park provides a more than adequate level of recreational opportunities for the Town and therefore the creation of additional parks would be unnecessary. It is important to note that the Community Center, as discussed and shown in the Future Land Use Plan, will be an appropriate area for some recreational activities should interest and funding levels become sufficient to warrant the construction and maintenance of those facilities. Given this, the Town has chosen to focus its efforts on physical improvements to the existing Pilot Knoll Horse and Hiking Trail and expansion and improvements of that trail system through a partnership with the U.S. Army Corps of Engineers (refer to Section 7.4 *Partnering with the U.S. Army Corps of Engineers*). Copper Canyon will also encourage open space set-asides for newly developing residential parcels throughout the Town.

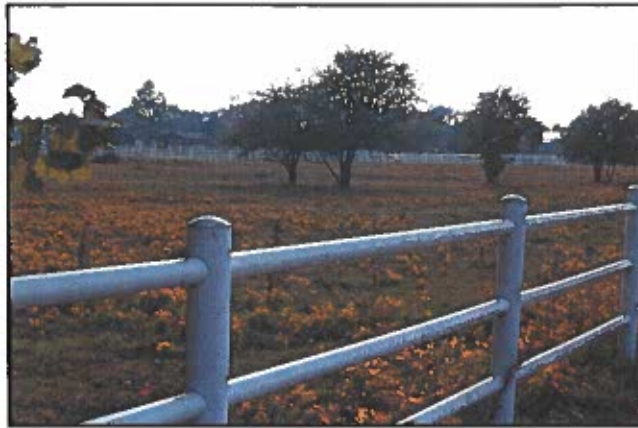
7.2 Open Space

Open space by definition means natural areas of land that provide areas for passive recreation like reading or walking or simply providing scenic views of vast, open territory uninterrupted by the built environment.



Open space provides scenic vistas for relaxing, an enjoyable view or passive recreational uses like walking or reading.

Open space is generally thought of as public land but may also be private land. For Copper Canyon, open space is overwhelmingly held by private hands and generally has a residential use associated with it. The residents of the Town have chosen to protect this open space through a number of measures, but principally through the creation of zoning districts that create and support open areas (refer to the Future Land Use plan section for details). These measures have proven very successful and it the desire of the Town to continue this zoning strategy and, as such, is reflected in this Master Plan.



Open space is primarily dependent upon the large lot acreage of residences within the Town.

Currently, the Town owns virtually no public open space land. It is recommended that lotting arrangements creating additional open space in a subdivision be encouraged through either

voluntary or mandatory participation. Such lot arrangements (or site plans) are simple and create what is known as open space set-asides. The number, or density, of residential units allowed in a particular land use category remains unchanged. What changes is that smaller lots are allowed to then create open space for the use and enjoyment of the entire community. This open space could remain in private hands (though accessible to the public) and maintained by a Home Owners Association (HOA) or donated to the Town for maintenance and legal responsibility. Such a decision could be reached during the development review process of a particular subdivision. Allowing developers this option provides additional areas for trail construction (discussed later in this section) and increases the ability of the Town to further realize its rural vision for the future. Under this open space set-aside feature, the following would apply to the residential land use districts:

- *Residential Estate (minimum 5-acre lots)*: the minimum 5-acre lot would be allowed to reduce to a minimum 3 acre lot in exchange for the remaining parcel being set-aside for open space
- *Semi-Rural Residential (minimum 2-acre lots)*: the minimum 2-acre lot would be allowed to reduce to a minimum 1 acre lot in exchange for the remaining parcel being set-aside for open space
- *Low Density Residential (minimum 1-acre lots)*: the open space set-aside tool would not be allowed in the LDR District
- *Town House District (PD 2); (minimum 25'x100' lots)*: Lots being reduced past the minimum lot standard would be inappropriate. Open space set-asides and creative site planning are nevertheless encouraged in the PD 2 District.

If the Town wishes to *require* that a certain parcel(s) of land participated in this development style, a valid reason must be established, such as for environmental reasons or the unique beauty of the property. In such a case, certain benefits should be provided like allowing for additional lots/units, reduced setback requirements and/or reduced minimum square footage of dwelling units.

Copper Canyon could further enhance and expand its open space areas through a variety of legal tools and practices aimed at allowing private property owners to restrict raw land from development and thus create open space for themselves and the Town. These legal tools and practices fall into two categories for protecting open space: preservation and reservation. *Preservation* refers to the protection of open space in perpetuity (i.e. beyond the lives of the successive property owners). *Reservation* refers to the protection of open space for only a

limited time, however substantial that amount of time is. Ultimately, only easements and deed restrictions are legally enforceable.¹

It is recommended that the Town play an active role in ensuring the Town's property owners are aware of the legal tools and practices, managed by land trusts or a government entity such as the local municipality, available to them. The following methods are for the *preservation* of open space²:

- *Conservation Easements*: This voluntary legal agreement is the most widely used and one of the most flexible conservation tools. A conservation easement allows the landowner to use, own, and pass down the land while permanently limiting how it can be used. As holder of the easement, it is a land trust's duty to monitor the property in perpetuity, thus insuring that the terms of the easement are followed and that the land's conservation values are forever protected.
- *Conservation Developments*: Through the conservation development approach, a parcel of land can be divided, combining residential and/or commercial development with conservation of open space via a conservation easement. This strategy can generate needed cash through profitable development and, at the same time, guarantee the conservation of open space and recreational lands.
- *Gifts of Land*: An outright gift of land for conservation is one of the most generous legacies a landowner can make to future generations. A donation will release the landowner from the responsibility of managing the land and may provide substantial income tax deductions and estate tax benefits.
- *Gifts of Remainder Interests*: A landowner may donate land and continue to live on it for the duration of his or her lifetime; this is known as a gift of a remainder interest, or a gift of land with a reserved life estate. Donors and their beneficiaries reserve the right to continue to live on and continue to use the property during their lifetimes. At the end of the specified life interests, full title and control of the property automatically transfers to a land trust. Usually, the land trust will resell the land, subject to a permanent conservation easement.
- *Bargain Sales*: Land trusts may facilitate a third party to purchase property at less than full-market value. With this strategy, the sale produces needed income for the landowner and the landowner can claim the difference between the sale price and full-market value as a tax-deductible donation.

¹ Telephone interview. David Behm, Connemara Conservancy. November 19, 2003.

² www.connemaraconservancy.org, Land Protection Tools. Retrieved November 19, 2003.

- *Land Purchases:* Land trusts may facilitate a third party to pay full value for land considered highly significant regarding the land's conservation values or how the property adds to a community's quality of life.

The following are the main methods for the *reservation* of open space³:

- *Agriculture land use classification:* classifying land for agriculture use is a "holding" category and not a zoning district. The classification does allow for some minimal development such as a dwelling unit. The classification does not give exemption to property taxes, but substantially reduces the amount of property taxes ordinarily required under its assessed value. When land passes to an heir, it is critical that this classification continue, and not end at the transfer of the land. Failing to do so may result in a substantial increase in property taxes and force the land to become available for development to offset property taxes.
- *Wildlife land use classification:* often times, land that is classified as agriculture may not rightfully stay as such if the heir does not intend to make a living off of the land or lease it out for agricultural purposes. In such a circumstance, the land may be classified for wildlife use, based on a review by the appraisal district, and the same property tax reduction enjoyed. Under this classification, the land would not have to be leased out continuously for agricultural uses.

Sometimes, property owners will want to set aside land for open space because of their strong commitment to the enhancement of the community and/or their desire to have the land that they have enjoyed, and want to pass on to future generations of their family, to never be allowed to develop. The Town can play a positive role by acknowledging persons for their stewardship of the land and commitment to the community. This acknowledgement may just be awarding a plaque to the property owner at a town meeting. Whatever the acknowledgement, it is a simple way for the Town to give thanks for these generous and thoughtful actions by property owners.⁴

Whatever legal tool or practice is employed for protecting open space, professionals at a land trust should always be consulted to ensure all proper procedures are followed.

Two existing features within the Town hold an opportunity for additional open space preservation. A man-made feature/open space area has been created by the existence of a major utility easement that runs east-west through town and features a two hundred forty foot (240') easement. A second feature that presents an opportunity for open space preservation is the

³ Telephone interview. David Behm, Connemara Conservancy. November 19, 2003.

⁴ Ibid.

floodplain along Poindexter Creek. It is recommended that development within the floodplain be strongly discouraged through adopting measures during the development review process.



Floodplain areas, like that defined by Poindexter Creek in the background, should be preserved for open space and development discouraged.

Please refer to the Open Space and Trails Plan map (Plate 7.1) in this section for locations of the floodplain and the utility easement discussed.

7.3 The Pilot Knoll Horse and Hiking Trail

Purpose and Use

In May of 1997, an easement 40 feet wide for public recreational hiking and equestrian trails on Corps lands on Lewisville Lake adjacent to and through a portion of Pilot Knoll Park was granted to the Town of Copper Canyon by the U.S. Army Corps of Engineers (Corps). This trail was then constructed, using a natural surface, for equestrian uses and hiking. The trail has been a major asset to the community and a source of enjoyment and recreation for the Town's citizens. Furthermore, this trail connects to existing trails and recreational areas within the region.

7.4 Partnering with the U.S. Army Corps of Engineers

The Pilot Knoll Horse and Hiking Trail is dependent upon the funding and efforts made by participating communities, including Copper Canyon, and a partnership with the Corps. The major role of the Corps is to assess various ideas/concepts for improvements to the trail system and provide funding assistance to priority improvements discussed with the participating communities. This funding is awarded through the Challenge Cost Sharing Program. There is

no specific formula or ratio assigned to various improvements by the Corps to determine the amount of funding awarded. All possible improvements are discussed on a case-by-case basis to determine its validity and the amount of funding the Corps wishes to provide. Furthermore, this budget allocation can vary year to year; there is no set annual budget amount from which funds are appropriated. The Corps takes into account, when considering proposed projects, the amount of financial and volunteer labor participation by the Town in determining its level of participation. No financing, on the part of the Corps, may be allocated for the actual 40 foot easement where trails are located. Financing will only be awarded for improvements outside of the easement and on Corps land.

The types of physical improvements allowable on Corps land are determined by its status as recreational or wildlife lands. For Copper Canyon, the area in its immediate vicinity, and which will be most heavily used by its citizens, is wildlife land. Under this classification, certain restrictions apply. In general, this land should only be improved to allow for the ingress/egress of emergency vehicles to this area. However, the wildlife land is considered appropriate for fishing, hunting and educational activities. **Herein lies the major opportunity for the Town of Copper Canyon.** Any physical improvements, so long as they are low impact in nature and do not seriously interrupt the natural state of the area, that are related to the activities just described, will be considered by the Corps for possible funding. Some of the more major ideas that may be considered are a possible fishing area (generally consisting of shoreline improvement and could be done in conjunction with the Engineering Research and Development Center), viewing areas (generally a seating area with improved natural vegetation allowed), rest stop areas, information kiosks and trail expansions. Minor physical improvements like benches and horse hitching posts are appropriate in the Corps land. Any physical improvements are subject to environmental mitigation whereby the degree of environmental interruption is assessed and must be offset (in any combination of labor, materials, financing appropriate) by the parties involved in the improvement.

Trail Expansion

As part of the Challenge Cost Sharing Program, the Corps may participate in efforts related to the creation of additional trails stemming from the existing Pilot Knoll trails system. These additional trails would most feasibly be done in a looping fashion along this trail system and in undeveloped Corps land. Proposed routes for trail extension within Corps land are currently in place. Trail extensions may also be possible within the Town but would be subject to volunteer easement granting by private property owners. Such easement granting is encouraged and the Town should take measures to ensure all interested parties are aware of what is involved in providing trail easements. These easements may be provided for by replatting (in which case the

Town should consider waiving costs) or separate instrument. Where available right-of-way exists at appropriate widths, and can connect to the Pilot Knoll trail system, the trail is shown on Plate 7.1 Open Space and Trails Plan map on the following page. This trail covers sections along Chinn Chapel Road and Orchid Hill Road.

Partnering with Outside Organizations

Many organizations within the Town have a direct interest in the physical improvement of the existing trail system, particularly for educational purposes. These organizations may be the Boys and Girls Scouts of America, school districts and/or individual schools interested in such activities as nature studies, preservation studies and general wildlife education. It is recommended that these organizations be made aware of the opportunities that exist. Their participation, when partnering with a participating community, is welcomed by the Corps. In fact, any funding from any governmental agency or group interested in the improvement of this trail system should be encouraged and sought by those persons/groups participating on behalf of their respective participating community.

Annexation

Currently, the Town has no jurisdiction to provide law enforcement or police, fire, emergency services to the area of Corps land being discussed. In order to gain this jurisdiction, it is recommended that the Town go through an annexation process, on a voluntary basis, with the Corps. Such a process could take a substantial amount of time to process. It is recommended that the Town file for annexation, under the prescribed rules and procedures of the Corps, as soon as possible.

7.5 Trail Standards

Origin

The trail standards recommended in this plan are derived from two principal sources. The first source is the Trinity Trails Management Guide. This guide was developed between 1997-1998 by a broad coalition of organizations and persons qualified to establish the safest and most beneficial trail standards for use by hikers and equestrian riders alike. This coalition consisted of the following groups:

- The National Park Service
- Texas Parks and Wildlife Department
- Texoma Council of Governments
- U.S. Army Corps of Engineers, Fort Worth District

In early October, 2003, a trails standards document was presented by several area communities, including the Town of Copper Canyon, to the U.S. Army Corps of Engineers for standards for the Elm Fork Hiking and Equestrian Trails that includes the Pilot Knoll Trails. This document was accepted in its entirety and is the second major source for trail standards recommended. Due to the highly detailed nature of the parks standards prescribed in the plan, it is recommended that this adopted document, the Elm Fork Hiking and Equestrian Trails Plan, be referred to and act as the ultimate document to provide clarification on any issues that may arise.

During the creation of the standards that follow, certain resources were referenced to further ensure that the standards recommended by the Trinity Trails Management Guide were appropriate to the needs of Copper Canyon and the uses intended. These resources include The U.S. Department of Agriculture's "Trails Construction and Maintenance Notebook" and the document entitled "Additions to the June 1985 Lewisville Lake Master Plan for the Hickory Creek area, the Poindexter Creek area and Pilot Knoll Park".

Summary of Hike/Equestrian Trail Standards

The standards presented here simultaneously address concerns for hikers and equestrian uses. For Emergency Medical Service (EMS) vehicle access and associated safety and liability concerns, it is recommended that trails provide a minimum ten foot (10') wide *clearance* and twelve feet (12') in height. This allows for adequate vehicle maneuverability beyond its actual dimensions. For example, the EMS vehicle is a standard eight feet (8') wide, a minimum ten foot (10') trail width allows for one foot (1') on each side of vehicle for maneuvering. Regarding

dimensions, a twenty five foot (25') easement corridor is recommended along all trails. The dimensions recommended are based on the Elm Fork Hiking and Equestrian Trails Plan. This plan, as mentioned previously, was adopted by the U.S. Army Corps of Engineers and provides one continuous trail standard throughout the multi-community trail system. For a detailed description of all standards addressing issues like grade, back slopes, fencing and trail tread, the Elm Fork Hiking and Equestrian Trails Plan should be referenced.



Common sections of trail. Widths along the existing trail vary from 6' to over 20' in some areas. Ensuring a minimum width of 10' gives continuous access to fire and EMS vehicles.



Step-over bars, like the one pictured, discourage bikes and motor vehicles from entering the hike/equestrian trail.

All trails and access areas should be built in compliance with applicable ADA requirements or other standards as required by law at the time of construction.

For maintenance standards, optional trail improvements and amenities, user safety and other related issues, please refer to the Elm Fork Hiking and Equestrian Trails document.

Safety Issues

It is recommended that safety be the highest priority in the construction and maintenance of any trails within the community. For trails, safety is thoroughly addressed through the standards proposed in this plan. The safety concerns are two-fold. First, that the physical features of the trail are safe, marked with signs and well-maintained for normal use by hikers, horses, and their riders.



Markers like this provide valuable information for knowing the exact location of a trail user in an emergency

Second, should an accident occur, that those injured persons (or horses) be easily accessible by emergency medical service (EMS) vehicles at any point along the trail. Simply accessing the trail by alternative and smaller vehicles to relocate injured persons/animals does not address concerns for those injuries that require on-site medical attention and special transportation needs. This safety feature is the basis for the trail dimensions recommended in this document. By setting these dimension standards for EMS vehicle access, it also provides for fire apparatus to enter trails at any area for fire fighting purposes such as grass fires. EMS vehicle access points will be located at intervals to be decided at the time of trail construction and will vary based upon variables like proximity of trails to roads. Where these access points are located and gates needed, gates should be constructed in a step-over bar/gate type with padlocks keyed the same and EMS officials provided with keys to padlocks.



Slide bars provide the Town maintenance and emergency access to the trail system

To ensure safety and a continuous connection on the section of existing trail scheduled to be interrupted by the proposed F.M. 2499, a tunnel has been proposed to be located under the new roadway section (should the route shown be used). The location of the proposed tunnel is shown on Plate 7.1. *Open Space and Trails Plan*. No official temporary trails are recommended in the text or map portion of this section.

7.6 Trail Construction and Maintenance, Funding

Funding for trail construction/expansion and maintenance has been addressed under the Challenge Cost Sharing Program described in Subsection 7.4. This section expands on the list of possible organizations that may be sought for additional funding:

State and Federal Funding/Assistance Opportunities:

The following organizations and funds are possible trail funding sources: National Park Service, Texas Recreational Trails Fund and the National Bicycle and Pedestrian Clearinghouse.

Private and Non-Profit Funding Opportunities:

Some of the most well-known names in this group are Home Depot and DuPont; these organizations provide grants along with non-profit organizations like the World Wildlife Fund, Rails-to-Trails Conservancy and the Student Conservation Association.

Creation of a 501C3:

Establishing a non-profit group, like a 501C3, establishes a non-taxable entity that is able to take on fundraising activities related to trail system enhancement.

Local government sources:

The Town itself can take part in revenue-generating activities by issuing debt (local bonds) and dedicating a portion of sales tax to trail conservation. Furthermore, the Parks Committee is allocated a small annual budget to be used for planning and implementation of park objectives.