

WOLF CREEK PARK

Master Plan



Submitted by

PB PARSONS
BRINCKERHOFF
100 YEARS

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Wolf Creek Park

Master Plan

Prepared For:

FAYETTE COUNTY
URBAN RENEWAL AUTHORITY

By:

PARSONS BRINCKERHOFF

In Association With:

NED CRANKSHAW, ASLA
THRASHER ENGINEERING

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FINAL REPORT

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Fayette County Urban Renewal Authority
Kenneth L. Eskew, Chairman James Lively James Criniti Jeff Proctor Joseph Stone Guy Dooley, Jr. Mike Smith
Fayette County
David Pollard Carl Thompson
Parsons Brinckerhoff Planning Team
David W. Hafley, AICP, Project Manager Molly M. Davis, RLA, Lead Planner Lindsay Walker, Planner
In Association With:
Ned Crankshaw, ASLA Thrasher Engineering

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Chapter 1. Introduction

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The Wolf Creek Park Master Plan is intended to guide development of a 1,064-acre parcel of land located in central Fayette County, West Virginia. Wolf Creek Park is envisioned as a four-season mixed-use development, designed and built to demonstrate environmental sensitivity and to provide jobs linked to the outstanding natural setting and outdoor resources of Fayette County. This Master Plan describes planning measures for Fayette County to articulate the vision of Wolf Creek Park as a “live, learn, work and play” community, and describes the nature and character of the first development of its type undertaken by a public entity in southern West Virginia.

THE WOLF CREEK PARK STORY

Wolf Creek Park is a bold and innovative demonstration of public sector-initiated mixed-use development. Genesis of the idea was the 2001 Comprehensive Plan for Fayette County in which a compelling need for manufacturing employment was expressed by county residents. One impediment to recruiting employers, however, was a shortage of suitable housing. In response, the idea of providing housing and, later, community and educational services, in conjunction with new jobs on an integrated site, was born. This concept was the basic idea behind Wolf Creek Park. County leaders responded by initiating early planning efforts to better clarify development needs and identify a range of desired uses for future county-sponsored development. As planning efforts quickened and discussions about employment and housing opportunities took place, the vision for Wolf Creek Park was enlarged to describe a mixed-use community with many different land uses all carefully planned in harmony with each other and the surrounding natural environment.

Wolf Creek Park is nestled in the heart of West Virginia’s outdoor recreation capital, Fayette County. Envisioned as a four-season mixed use development, the Park is designed to provide jobs linked to the outstanding natural resources of the region.

Once the vision was established, county leaders began looking for a site containing the size, location and features needed to support a large mixed-use development. After carefully studying several possible sites, the Wolf Creek property was recommended and eventually purchased. Its suitability and potential are outstanding, although not without the constraints represented by steep hillsides and deep valley floors found throughout the county.

The Master Plan is depicted in Figure 1 on the following page.

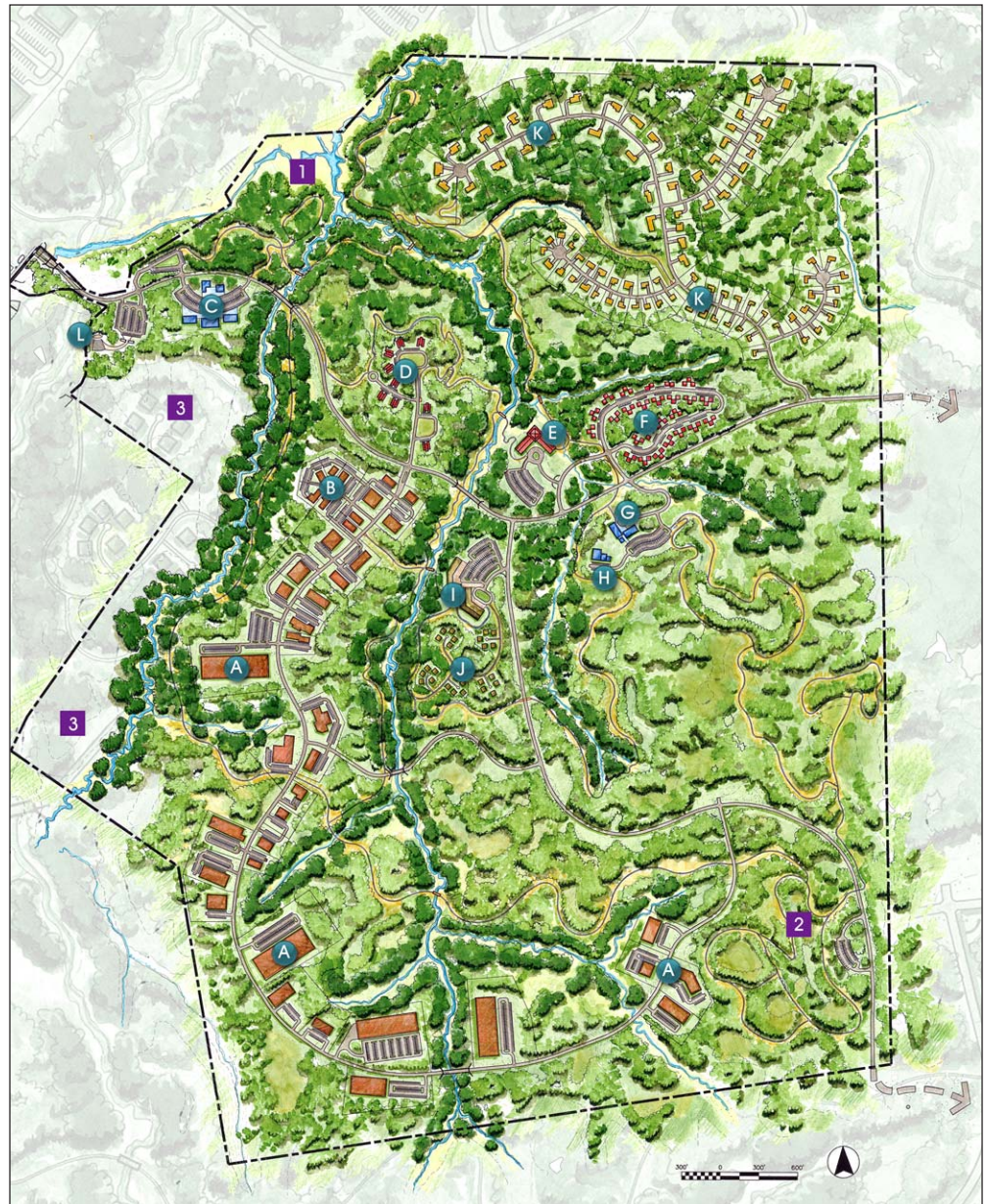
MASTER PLAN

Wolf Creek Park

Figure 1: Wolf Creek Park Master Plan

Legend

- A Industry/Manufacturing
- B Cottage Industry/Manufacturing
- C Retail and Welcome Center
- D Townhouses
- E Retirement Center
- F Independent Living Cottages
- G Community Center and Classrooms
- H Administration, Tourism and Environmental Learning Center
- I Extreme Sports Training Center
- J Cottages
- K Single Family Homes
- L Amphitheatre
- 1 Outdoor Classroom
- 2 Camping and Outdoors Skills
- 3 Land Exchange
- Streams
- Roads
- Hiking and Biking Trails



MASTER PLAN

Wolf Creek Park

The park is located within one of the most important and diverse watersheds in Fayette County – the Wolf Creek watershed. Land use practices at its headwaters have harmed water quality and damaged the natural environment. At the watershed’s lower end, Wolf Creek discharges into the New River, a recreation and environmental resource of national importance. Located mid-watershed, Wolf Creek Park demonstrates an evolution beyond poor land management practices of the past into environmentally sustainable development practices of the future.



*Entrance from US 16 Across
Wolf Creek*

Building a Community

Fayette County business, community and elected leaders came together to envision a vibrant and environmentally sustainable mixed-use development on a previously undeveloped site located in the heart of Fayette County. The 1,064-acre site is strategically located adjacent to US 19 and between the communities of Fayetteville and Oak Hill. An important principle of Wolf Creek Park is to serve as a model of smart growth techniques including mixed uses, appropriately scaled density, pedestrian and bicycle circulation, environmental sensitivity, connectivity and accessibility. Wolf Creek Park will establish a new standard for growth and development that provides greater lifestyle choices and helps to preserve the unique natural and scenic resources of the area.

Citizens of Fayette County and the leaders behind Wolf Creek Park share the same objective: to create a livable, affordable and environmentally sustainable development that can serve as a catalyst for new jobs, housing, training facilities and community facilities. Goals expressed at the beginning of market analysis and master planning include:

- Create a livable, environmentally sustainable community;
- Use land efficiently;
- Protect and enhance natural systems;
- Provide a diversity of housing types and prices;
- Provide a complementary mix of job-producing, commercial, housing, civic and open space uses;
- Encourage walking and biking;
- Provide state of the art facilities for extreme sports and visitor hospitality training; and
- Serve as a model for improved development practices in Fayette County and southern West Virginia.

MASTER PLAN

Wolf Creek Park

These goals are shared by the citizens of Fayette County and community leaders working to make this vision a reality. The vision expressed in these goals is of extraordinary importance not only for future residents and users of Wolf Creek Park, but for all of Fayette County as it will establish a new standard for growth and lifestyle choices.

At Home in Fayette County

Citizens and visitors to Fayette County enjoy an environment and quality of life found few other places in the region. Ask why the community enjoys such a positive reputation and loyal following and you will hear comments about the beautiful natural environment, abundant recreation resources, small town life,

friendly people, ease of accessibility and overall affordability. Combined, these characteristics and qualities make Fayette County a desirable location for persons in all walks and at all stages of life. Planning for Wolf Creek Park has embraced these qualities and seeks to create a place that is an extension of community life and social interaction found in communities like Fayetteville. As development occurs, Wolf Creek Park will evolve as a livable neighborhood extension of Fayetteville and become an integrated element of the larger community in which it is located. This community-based orientation and connectivity will be enhanced by strong and frequent linkages to vehicle, pedestrian and bicycle networks.



Bike and Hiking Trails Connect Residents to the Outdoors



Jobs Linked to Outdoor Recreation

Creating a Quality of Life

A strong outdoor identification dominates Fayette County and provides a reference point for planning at Wolf Creek Park. Attracting employers and residents seeking close connections to the landscape and wanting to live, work and learn in close connection to the outdoor environment are guiding principles of the concept and marketing assumptions. The rugged features and terrain of the property present challenges to the economical development of infrastructure, buildings and public spaces. Yet, these natural qualities have the best ability to define the character of the Park to reflect a commitment to environmental sustainability and low impact development. The planning challenge at Wolf Creek Park is to guide development where impacts to environmental systems are minimized and mitigated.

Organization of the Master Plan

A comprehensive planning effort guided development of the Wolf Creek Park Master Plan; this report documents and explains the planning process and key decisions made during the planning process. Initial efforts began with a site selection study and Phase I Archeological Survey and Reconnaissance Level Cultural Resources Survey of the 1,064-acre site. Following this, a detailed market analysis was conducted to estimate supportable building square footage and absorption rates for various land uses. This was summarized in the building program for Wolf Creek Park, located on pages 35 and 36 of the report. Detailed analysis of existing conditions, opportunities and constraints was conducted and supplemented with extensive fieldwork. Once site conditions, project goals and market assumptions were completed, the preparation of several development scenarios next occurred. Each alternative was evaluated for its ability to support project goals. County leaders then selected the preferred alternative, and detailed land use and infrastructure planning efforts commenced. Public comment on the plans has not been extensive; however, all major planning tasks and decision points occurred at public meetings of the Fayette County Urban Renewal Authority (FCURA), the lead agency for the project.

Chapter 2. Market Analysis



The Market Analysis for the proposed Wolf Creek Park mixed-use facility in Fayette County, West Virginia, is intended solely to guide internal development efforts. Wolf Creek Park was conceived through the Fayette County Comprehensive Development Plan of 2001 as residents across the county placed a high priority on job creation tied to the manufacturing sector.

Fayette County has two major industrial parks, one of which has been full since its development in the 1970s and the second of which has only about eight acres available for development (this park was constructed in the late 1990s). The Wolf Creek Park property contains approximately 1,064 acres and was purchased by the Fayette County Urban Renewal Authority with a grant obtained from the West Virginia Economic Development Grant Committee.

Development of the initial 300 acres of Wolf Creek Park is fully funded through the following sources:

- Economic Grant Committee \$2 million
- US EDA \$1.477 million
- WV Industrial Access Road Program \$800,000
- WV Infrastructure Council \$599,000
- Fayette County Commission \$140,000

All of these funds, with the exception of the Infrastructure Council funds, are grants. The Infrastructure loan is a 20-year loan with interest and principal waived for the first five years of the term. Interest is fixed at 3% per annum.

Plans to develop the remainder of the property will occur through a mix of grants and revenue sources obtained through the lease or out-conveyance of property contained in the initial phase.

Due to the lack of debt service in the project, the Market Analysis focuses on scenarios that will produce the overall vision of the county – with the key goal in that vision being the creation of some 1,500 jobs. It should be noted that short-term construction jobs are included in that total, bringing the total needed to reach the vision to approximately 1,300 jobs. With a projected footprint containing a minimum of 380 acres developed for job creation purposes, the yield is less than four jobs per acre developed.

In researching the data, the report focuses on a mix of housing, manufacturing, educational and retail uses within the project area. Housing is included in the mix of uses because local housing stock is in short supply; in the past, this has been a deterrent to attracting new companies to the area. The educational and retail uses support the need of what is planned in the overall park master plan.

Through this collection of data, much is known about the needs of the targeted industries. However, much remains to be learned and that information is planned for actual marketing documents once developers of the Park prioritize individual targets within the suggested areas.

The suggested footprints for each of the uses reflect not only the overall vision as established through the County Comprehensive Plan and subsequent visioning (data submitted to obtain the various grant funding sources) for the Park itself, but also a loose equation based on both vision and market needs.

RESIDENTIAL COMPONENTS

In performing the market analysis for Wolf Creek Park's residential components, the following issues are considered most critical in the evaluation process:

- What kinds of development/pricing strategies will promise availability of housing for those who will work on site? From previous housing studies it is clear that local demand for these properties will be high, but the main goal of the overall project is to promote job creation. Housing will be crucial in attracting both new and expanding business and the concern is that there will not be sufficient available housing to meet the on-site job creation goals.
- What amenities can be created to enhance market absorption and how can these amenities be sited so as to preserve enough available land to meet the job-creation goals?
- What is the proper mix of single-unit, apartment and retirement housing to best meet the demands and needs of the project?
- How can the ability to provide relatively inexpensive land costs be structured so as to keep from cutting the bottom out of the assessed valuation, while also promoting land sales and development that will provide cash for business park component expansion and the aforementioned housing for business park employees?

Project Background

Wolf Creek Park ("A Live, Learn, Work and Play Community") was borne out of the Fayette County Comprehensive Plan Update of 2001-2002. The county was a founding member of the 4C Economic Development Authority

more than 16 years ago, but, due to limited available space, the county has not had the success of the three other member counties in locating new and expanding companies. The county's first industrial park has been full since it was developed in the 1970s. A second park, developed within the past three years, has just six acres remaining for development. The residents of the county and governmental leadership identified development of a new park as its top priority.

Following an evaluation of six potential sites, it was determined by engineering counsel that the Wolf Creek Park site (containing in excess of 1,000 acres) was the preferred site for development available to the county. Further, due to the size of the parcel, it was determined that a mixed-use concept should be pursued. In addition, that concept was borne out of existing data showing that available housing was in short supply. In fact, two of the most recent developments in the county, the state maximum security prison at Mount Olive, and the Georgia-Pacific OSB plant at Mount Hope, yielded decreased economic benefit because employees of these facilities were forced to locate out of county due to a lack of available housing.

Since the inception of the Wolf Creek Park development, a wide range of government grants have been obtained, providing funds to purchase the property and develop infrastructure for approximately 350 acres in the first phase. Phase one development is expected to include industrial, residential, and commercial uses.

Housing and Demographic Information

The 2000 US Census yields the following information:

- A total of 21,616 housing units exist in the county (2000 figure – building permit data indicates that an additional 235 have been constructed but no figures exist for houses demolished in that same period);
- A total of 2,671 units are vacant – 12.4% of the total – in excess of 750 of these have been identified as dilapidated by the Fayette County Beautification Committee (this body is responsible for removing dilapidated structures but has had no funds to do so);
- The total unit figure includes 464 units constructed for recreational use;
- Of the total units, a full 35% were constructed prior to 1930;
- Of the total units, just 17% were constructed between 1980 and 1990;
- Projected total population for the local primary market area in 2006 is 71,284;
- Projected total households in that same local primary market area in 2006 is 30,154; and

- Primary local market area is defined as Mabscott to the south to Ansted at the north to just west of Oak Hill and east of Hico.

Clearly, the figures suggest that the housing stock is aged – something that can easily be confirmed through windshield surveys in all areas of the county. However, over the course of the past four years, new construction and purchase of property for future residential purposes have soared. This is due to the extension of water service to areas of the county not previously served, as well as to low interest rates and uncertain stock market conditions.

The county is currently evaluating proposals from two Georgia-based firms and an Arizona-based developer for large-scale housing developments. The largest of the three calls for full build-out of 2,400 homes (160 of which would be condominiums with the rest single-family). The two other developments are of a smaller scale in total units, with one being for approximately 400 units and the other calling for approximately 600. Lots in the three developments will range from a low of about \$30,000/acre to a high of nearly \$200,000/acre. Development covenants for the three indicate that construction costs will range from \$120,000 to upward of \$750,000/home.

The Wolf Creek Park property does not possess the scenic qualities of these properties, but in many ways will attract much of the same market – though at a lower price point. Telecommuters and people interested in the scenic qualities and outdoor recreation opportunities presented by Fayette County are that market. Clearly, Wolf Creek Park can benefit from the marketing effort of these other developers.

A local development of note that relates to Wolf Creek Park is the Cooper Land Development at Glade Springs Resort in bordering Raleigh County. Here, lots average \$45,000/two acres. The project has been so successful that discussions are being entertained to move the resort to open up more land for residential development. A second development of note is Whispering Oaks – a subdivision in Fayette County bordering what has to date been the county’s most successful and upscale housing development – Thousand Oaks. Whispering Oaks sold out – a total of 60 lots averaging two acres - in three years. Prices ranged from a low of \$22,000 to a high of \$38,000 for those two-acre parcels, with an average of \$32,000. To date, 20 homes have been constructed on those lots.

Interviews with local realtors indicate that there is a scarcity of homes available in the \$125,000 - \$150,000 range, but also indicate that homes of under \$100,000 are the favored range among local buyers (the escalating interest rates of the past year have taken the market into that range as local buyers base their decisions on payments).

But again, the stated goal of the Wolf Creek project as a whole is to produce employment opportunities through location of new companies. Thus, it remains important that suitable housing opportunities exist for those crucial employees that relocate with the business. The key ingredient in this analysis is to determine wage rates of the target industries as well as their relocation needs – producing a chicken and egg scenario where you do not want to have too little housing, but that you also need to maximize space for business activities. In the best case scenario, purchase of properties within the local market should be restricted to those who obtain employment on site, and only after critical employees have already been located on site.

Mix of Housing Opportunities

Due to the scope of the project, it has been pre-determined that a mix of single-family, townhouse, and rental uses are needed to fulfill the goal and need to provide residential space for business location needs. In addition, a recently completed analysis performed by Greystone indicates market support for a senior living complex that includes 75 independent living units and 48 assisted living units. Because the Greystone project fulfills both a local need and the project need for job development, it is recommended that a total of 15 acres be set aside within the residential component of this project should investors be found to support the development.

For single-family homes, the local market appears to be able to easily support and absorb the same 60 two-acre lot model as Whispering Oaks. Property attributes are similar in terms of taxes, schools and proximity to retail services. Due to the mechanism for property acquisition and infrastructure development, prices per lot could be subsidized but this would jeopardize values. In addition, incomes sufficient to absorb this housing indicate market penetration of just 0.5% would be necessary were lot prices kept in that \$22,000 - \$38,000 range for two-acre sites.

For the purposes of this analysis, it is estimated that up to 20% of the workforce will relocate with the business entities on site at Wolf Creek Park. Further, it is assumed that one of the great advantages the project has is the ability to live, work, learn and play on site so it is assumed that of that percentage a minimum of 50% will be captured. Based on the project goal of providing space for up to 1,500 employees, 150 home spaces could be absorbed by the relocating employees. Add in projected demand from local employees who might eventually relocate and the demand seems to easily outpace the availability of land for this purpose.

Townhouses are largely missing from the local market area. However, market research performed by Land Resources for their proposed Fayette County project calls for 7.5% of their units to be townhouses. This, of course, allows for greater density of development and by local code, could include up to 12

units per acre. However, because of the Planned Unit Development designation for the property, no density trade-offs are required. Further, the required green-space amenities (based on the overall project concept) render the density issue mute with the exception of the need for the residential component to fit and blend with the remainder of the project and its goals.

Local realtors indicate that suitable rental housing is nearly impossible to find within the local market area. Should the training center component of the Wolf Creek project materialize, the need for rental units will be substantial. This need will be heightened by the Hospitality Training/Learning Center component that will likely bring in employees from throughout West Virginia for certificate training needs. Due to the nature of the organizations who will likely take advantage of these certificate training opportunities, week-long housing must be affordable. Add to this the potential employees of expanding/relocating businesses who are expected to make short-term visits to the Wolf Creek site and you are presented with a difficult need to assess.

In analyzing the available data, and talking to target industry representatives, local realtors and local residents, the following residential suggestions are proposed:

- Set aside space for 60 single-family homes. Based on a two-acre minimum, this would entail a total of 120 acres. Should need and demand exceed available space, lots could be reduced in size to a combination of ½-acre, 1-acre and two-acre lots.
- Set aside space for 24 townhouse units on two acres of land.
- Set aside space for both dormitory and single unit rental housing. If 12 townhouses were erected on a single acre, another acre could be set aside for the dormitory. Townhouses could later be sold if the market indicated it was a better use.
- Set aside 15 acres for retirement community use.
- Total acreage for residential uses is proposed to be approximately 140 acres.

Property Productivity

The Wolf Creek Park site is owned by the Fayette County Urban Renewal Authority (FCURA), a public body appointed by the Fayette County Commission. Under state code, urban renewal authorities possess a wide range of statutory powers to negotiate land sales and leases with developers. The FCURA purchased the property with a grant from the West Virginia Economic Development Grant Committee and is in the process of providing infrastructure to the site through a wide range of state and federal grant and loan sources.

Wolf Creek Park is located directly adjacent to US Route 19 (Appalachian Corridor L), the area's major north-south highway corridor. Traffic counts at the Lochgelly intersection (less than ½ mile south of Appalachian Drive) are 24,000 vehicles per day. Due to congestion and accident rates, that intersection will be redesigned into a cloverleaf in 2005, with West Virginia 16 (the road that Wolf Creek Park will be directly accessed from) being cut through to provide two direct access points to the park. Approximately 12 miles south of Wolf Creek Park, US Route 19 merges with I-77 and I-64, major north-south and east-west interstate corridors.

The property is zoned PD-IP (Planned Development Industrial Park) with all uses discussed in this report granted by right of the zoning designation. The only zoning issue remaining to be resolved is the submittal of the final development plan, including a traffic analysis. There are no bulk regulations, maximum density regulations, or open space requirements within this designation.

Market Delineation

The primary market for the housing component of Wolf Creek Park is employees of businesses to be located within the development. As previously noted, there is a lack of available housing in the local market and housing on-site is desirable not only from commuting perspectives, but also so that relocating companies have space for those critical employees they bring with them to Fayette County.

The goal of the project is to generate up to 1,500 jobs. Thus, by capturing approximately 6% of that potential market, the planned residential units can be filled.

In addition to that primary market, there is a secondary local market covering a 15-mile radius from the site. A third local market stretches to areas in the far reaches of Fayette County that could be tapped should persons currently living in places like Montgomery and Meadow Bridge procure employment on site.

The secondary local market, as previously noted, will have a projected 30,154 households in 2006 with a projected population of 71,284.

Yet another factor in market delineation lies in the goal to develop a retirement community on site. The primary market for that portion of the project is the same as the secondary local market projected for other housing components of this project.

The secondary local market, as previously noted will have a projected 30,154 households in 2006 with a projected population of 71,284.

Yet another factor in market delineation lies in the goal to develop a retirement community on site. The primary market for that portion of the project is the same as the secondary local market projected for other housing components of this project.

Demand Forecast

The underlying assumption of this residential market analysis is that:

- Wolf Creek Park will meet its goals of supplying 1,500 jobs;
- That a full 20% of those jobs will be filled by persons moving to the area with relocating companies;
- That a lack of housing in the \$100,000 - \$150,000 range in the local market will be met by this project;
- That large-scale residential projects now being developed in Fayette County will supply additional markets and fuel additional housing demand; and
- That in order to meet the job creation goal of the project, housing supply on Wolf Creek Park will be significantly lower than demand.

Space for housing development in the county abounds, as is evidenced by the aforementioned development plans. However, Wolf Creek Park is the first mixed-use development of its kind in southern West Virginia and one of just two projects of its kind currently in development in the state. Careful attention to providing amenities for home owners – such as easily accessible trails, easy access to the workplace, easy access to necessary retail shopping opportunities, and easy access to schools – increase the likelihood that the residential component of this project will succeed.

County employment is paced by the following sectors:

- Government – the largest individual employer;
- Health Care;
- Natural resources; and
- Tourism.

Statistics provided by the West Virginia Development Office have indicated that tourism is responsible for up to 75% of all new economic activity in Fayette County. It is important to note that not all of this employment is directly tied to tourism development. Rather, that the influx of outside capital generated through tourism is fueling the other development. This is clearly the market fueling the aforementioned housing developments.

Recently however, a rebirth in the extractive industries sector has occurred due to escalating prices for coal and timber. This will continue to be largely

influenced by national and international trends, particularly pricing within the energy sector.

On the tourism side, hotel/motel tax generation continues to climb without a significant increase in the number of lodging units. In fact, New River Convention and Visitors Bureau (CVB) hotel/motel tax collections grew a full 25% in 2004, in a year when the number of rafting trips decreased by 12%.

Household income and employment continue to lag behind the national averages but consumer spending data shows that southern West Virginians have many of the same spending habits (and thus less savings) as people in adjoining states with higher income levels.

Population has been largely stable / stagnant in Fayette County for the past 10-15 years. The average age is higher than the national average.

Competitive Supply Analysis

The housing development strategy for Wolf Creek Park attempts to fill niches where there is little to no competition in the marketplace by hitting the price range where there is a scarcity of available homes and by providing for the needs of employers relocating to the area. And, since the only true investment of the project owner will be the set-aside of properties for these purposes, there is little financial risk involved. Inquiries from local housing developers have been numerous, so it is the assumption of this report that developers can and will be found to meet the needs of this project.

As previously noted, three large-scale housing projects will attempt to bring in residents from outside the area, largely for second homes. This market is expected to mirror the marketing basis for Wolf Creek Park itself – the marketing of the scenic attributes and quality of life issues that make southern West Virginia attractive to people interested in outdoor recreation and a rural lifestyle. The Wolf Creek plans are minor in scope compared to the numbers of units being planned within these developments. Other than these developments and on-going development in neighboring counties, there are currently no competing developments as housing is largely confined to demand building for individual clients and not through sub-division development.

Median home value within the local market area is approximately \$60,200, slightly less than the West Virginia median and just half of the national median.

Conclusions

In summary, the following recommendations are offered:

- The Fayette County Urban Renewal Authority and the master planners should move forward with plans to provide four recommended residential uses on site – single-family, townhouse, rental and retirement.
- No more than 140 acres of the total development should be devoted to this use so as to maximize available space for the primary purpose of the project – job creation.
- Planners should consider a mix of lot sizes that could minimize that acreage total while still maximizing the number of available units. However, at least some larger lot sizes should be included in the development mix to meet the demand of the marketplace for a rural lifestyle. It should be noted that land devoted for the purposes of residential development can and should include some of those areas that would be denoted as green space.
- Residential green space amenities should be developed as part of a unified system that also enhances the environment for the commercial/ industrial sectors of the project.
- A strategy which provides incentives for prospective employers should be developed that results in the housing development working in close coordination with the projected need for housing of their employers. This strategy should take advantage of the ability to provide subsidized land costs for housing while also maintaining assessed value – i.e. keeping the residential land value at or above most local market conditions while providing for incentives on the lease/purchase of commercial/industrial property.

MANUFACTURING COMPONENTS

Development of Wolf Creek Park is based on the premise that the size of the property and the needs of the Fayette County area support the creation of a mixed-use, live, learn, work and play community. Components of the project include residential development, education, training and conference facilities, retail and office space, retirement and assisted living facilities and environmentally sensitive green spaces combined with hiking/biking and outside recreational areas. At the heart of these and other components of the Park that may potentially surface, is the development of a stable manufacturing base of employment. A survey of existing industrial parks in Fayette County indicates that those designated areas of development are at, or near, capacity.

The earliest visions of the Wolf Creek Park development were based on the assumption that good paying jobs, generated through the attraction of quality manufacturing and distribution companies, were the key to successfully developing a sustainable project and creating a positive impact on the local and regional economy.

Wolf Creek Park, as a place for the creation of a successful manufacturing center, appears to incorporate many of the strengths identified in various studies as essential strengths that attract business and industry to a particular location.

Industry Location Issues

Locally, Fluor Global Services was retained by 4-C Economic Development Authority (4-C EDA) to prepare an in-depth assessment of the region from a corporate site locator's perspective and to identify industries where growth was projected at the time of the report. A part of this project assessed the four-county service area (Nicholas, Raleigh, Summers and Fayette) for strengths and weakness as they related to the area's attraction as a corporate site location. Conclusions drawn from this 2000 study should be based on the nearly five years that have passed since the study was completed. It appears that much of the data is essentially the same; however, there have been improvements in other areas.

Community attributes important for a company in its location considerations were identified as:

1) High quality work force

Area employers interviewed in the Fluor study rated their overall work force as exceptional. The general sentiment was that work ethic and productivity of area workers were outstanding. These factors, combined with a large number of institutions of higher learning in the region offering industry-driven programs and upgrading essential retraining and continuing education programs, assure a solid work force in the region. The labor force available to Fayette County

has demonstrated a willingness to commute forty-five minutes to one hour for employment opportunities.

The latest annual unemployment data available is for 2003 when the rate was 8.0%. The most current monthly rate for October 2004 shows an unemployment rate of 5.3%.

A labor study prepared for the 4-C Region by Walter Harper and Associates, Greensboro, NC and Research Division of Edens & Avant, Inc., Columbia, SC contained a survey with questions regarding industry's opinion of the local work force. Respondents indicated their work force is highly productive and loyal with a low rate of absenteeism and turnover.

- Low turnover - 6.7% (almost half the national average);
- Ample labor supply - 150-300 applications per job opening (this number may be lower at this time related to current unemployment data);
- Survey of approximately 150 businesses revealed none had problems recruiting for second/third shifts or part-time employees; and
- Productivity - 50% of branch operations surveyed rated their WV labor force's productivity as higher than "sister" operations - 20% rated their productivity as equal to facilities.

2) Low cost of doing business

In general, the cost of living and some of the costs associated with doing business in southern West Virginia are lower than in many other parts of the country. These factors, combined with a willing and able work force, as well as many exceptional quality of life attributes of the area, should be a clear attraction to companies considering Wolf Creek Park as a place to do business.

3) Quality of life

The southern West Virginia region surrounding Wolf Creek Park has one of the lowest crime rates in the nation. The area in general has a small town, rural atmosphere, while at the same time offering the modern conveniences and amenities people have come to expect in modern society.

The quality of natural resources surrounding the New River Gorge has already made the region a popular tourist destination as well as a place many have chosen to relocate to and now call home. Recognized as the hub of the whitewater rafting industry, vacationers choose the area for its outdoor adventure sports, historic sites, bird watching, camping, fishing and the experience of a total escape to the mountains of West Virginia. Among many of the area's outdoor recreational accolades, West Virginia received the highest

grade in the 2004 edition of the International Mountain Bicycling Association's annual survey of mountain biking and has established an international reputation through hosting whitewater competitions. The region has increasingly established a reputation as a premier birding destination and is a prime nesting habitat for many neo-tropical species.

Quality of education issues are a high priority for both consumers and the area's school systems. Without exception, school systems in any given community face various strengths and weaknesses as they are challenged to deliver quality programs. In general, an assessment of the primary and secondary school systems within the four-county region reveals schools engaged in various efforts of improvement and excellence.

The area appears to be consistent with national trends which show small town and rural school districts flourishing. Over the past several years, area school systems have received high ratings for programs designed to put educational excellence on the agenda.

West Virginia was the first state in the nation to wire every school for the internet. In recent years, area schools have earned high marks in curriculum standards, student assessments, quality of teaching and school climate, and a number of schools in the region have achieved Schools of Excellence status.

The West Virginia PROMISE Scholarship Program, established in 1999, strongly encourages and motivates excellence and academic achievement. PROMISE offers a full tuition scholarship to each West Virginia high school graduate with a 3.0 grade point average as well as a composite ACT score of 21 or a combined SAT score of 1000. The PROMISE scholarship is based strictly on a student's achievement.

The National Center for Public Policy and Higher Education reports that West Virginia is a top-performing state in percentage of high school students enrolled in upper-level math and science. Also noted, compared to other states, West Virginia shows a large percentage of freshmen at 2- and 4-year colleges and universities returning for the second year. Seven colleges and universities offer programs in the region with a combined enrollment of approximately 11,000.

4) Excellent transportation access

The current interstate system and a continued emphasis on improving that system places the region in an ideal location for both north/south as well as east/west transportation routes. Wolf Creek Park is situated to provide direct highway access on US 19 which connects to Interstate 79 to the north and Interstates 64 and 77 in all other directions.

Both Raleigh County Airport and Yeager Airport in Charleston provide accessible air transportation to and from the area. Several local airports in the area offer take off and landing, hangar rental and other services for private aircraft. Accessibility to Charlotte, Pittsburgh, Roanoke, Richmond, Lexington and Knoxville are all within a 200-mile radius, and given the number of major markets when the radius is expanded to a 400- to 500-mile area, puts Fayette County in a strategic location to access approximately 60% of the United States population and 20 major metropolitan markets.

5) Market site availability

Wolf Creek Park is being developed on a 1,000-acre plus tract that has been purchased through the acquisition of development grants. Remaining funds will provide for the development of the necessary infrastructure for approximately 350 acres in phase one. As noted previously, the attraction of companies involved in the manufacture and distribution of quality product will be the driving force behind the total design and creation of a comprehensive mixed-use community on the property.

The ready-for-market availability of Wolf Creek Park will provide potential industries a very important enticement. When consideration is given to the region's quality of life offerings, a ready and willing work force, the lower cost of doing business and the necessary transportation access that exists in the area, the total picture suggests that companies will be enticed to look seriously at Wolf Creek Park as a viable place to expand or relocate.

In the 4-C EDA study, two areas identified as weaknesses of the region in attracting business and industry were:

1) West Virginia's image as a pro-union state

If this issue is, in fact, an image/perception problem that concerns prospective companies targeted for expansion or relocation to Wolf Creek, it will need to be studied further and the pros and cons of the issue evaluated. As further pointed out in the Fluor Study, West Virginia and the 4-C region can make a strong case that a positive labor posture exists. Some of the largest employers in the region operate non-union facilities. Current evidence suggests that there is a healthy balance of union and non-union sentiment in the region and across the state. It is also important to note that many of the union workers are employees of utilities, phone companies, etc. which are unionized across the country. The unionized construction trades also have a bearing on the issue.

2) West Virginia's weak incentives for attracting business and industry

This issue may well represent an area of past concern that has seen marked improvement over the past five years. Clearly, Wolf Creek Park is at a distinct advantage in that it has funding for one of the key issues under the incentive category: infrastructure. After the purchase of the 1,000-plus acres that make up the Park, enough funds remain to provide the necessary infrastructure in the development of the first 300-plus acres.

Another significant development is that since the Fluor study in 2000, the West Virginia TIF (Tax Increment Financing) program was established in 2002. As highlighted in several resource materials, West Virginia's Strategic Research and Development Credit strengthens the focus on attracting technology companies in particular. These programs and at least a dozen other incentive programs are in place and appear competitive with many other states. Corporate Headquarters Credits, Economic Opportunity Credits, Manufacturing Investment Credits, Manufacturing Sales Tax Exemptions, Strategic R&D Credit, and Warehouse "Freeport" Tax highlight the list of incentive programs ready and available for business and industry considering expansion and relocation to West Virginia. Additionally, unparalleled support from Fayette County's leadership, and the 4-C Economic Development Authority's readiness to assist and facilitate companies with their expansion/relocation plans puts Wolf Creek Park in a strong position to compete for, attract and sustain a strong manufacturing base.

Expansion Management Magazine reported in its September 2003 edition that "... West Virginia... has revamped its major incentive programs, changing credit values, utilization terms, carry forwards... and application processes". Currently West Virginia's newly elected Governor, Joe Manchin, is promoting added incentives and initiatives to attract and sustain new business across the State. It should be noted that most incentives in place are targeted toward small to mid-sized companies which analysts point out is where most growth is taking place. These are the type of companies that should be an ideal fit for Wolf Creek Park.

Manufacturing Expansion

Movement of manufacturing and distribution industries into smaller towns and rural areas has been a steadily increasing trend for the past 30 years. Wolf Creek Park is in a position to capitalize on that trend and to create a model for attracting manufacturing interests. It will require packaging of the numerous incentive programs available and it will involve promoting the livability of the area. With the creation of a comprehensive manufacturing recruitment plan in place, Wolf Creek should attract companies and in turn foster the development of good paying jobs for Fayette County and the region.

Much has been made over the overall loss of manufacturing jobs in the United States over the past 25 to 30 years and there have been some alarming trends. In the development of the Wolf Creek Park analysis, numerous resources have been reviewed regarding the health of American manufacturing, the importance of manufacturing to the economy and current trends of American manufacturing. The overriding sentiment of most is that there are positive, encouraging signs in the American manufacturing industry. A majority of the evidence suggests that the continuing development and expansion of manufacturing is vital to a stronger national economy and that US manufacturing has shown a nearly two year period of expansion. 2004 saw a 5.6% increase in manufacturing productivity, continuing the two-year trend. The Association for Manufacturing Technology used the International Manufacturing Technology Show in September, 2004 as a forum to deliver its views that North American manufacturing is on the cusp of a boom unprecedented in the last 25 years.

The US Labor Department recently reported that in productivity growth, manufacturing well outpaced the overall non-farm business sector. Overall, 2004 saw productivity, growth and an increase in new orders for manufactured goods according to the report. Anthony Chan, senior economist at JP Morgan-Fleming Asset Management, says that the data is “telling me that the manufacturing sector news is positive, which bodes well for the overall economy as we enter 2005.”

Industries identified by the National Institute of Supply Management expected to show improvement in the foreseeable future were electronic components, primary metals, textiles, furniture, rubber and plastics, food, wood products, glass, stone and other aggregates, printing, publishing, toys, musical instruments and sporting goods.

Facilities Footprint Planning / Employee Numbers / Shipping and Receiving

The industrial/manufacturing complex will be the largest single component of the Wolf Creek Park Development. This part of the total development will, upon completion, occupy some 380 acres. Projections about numbers of different industries, space requirements and unique industry needs are difficult to precisely define based on current data, which is incomplete and, to a large extent, based on hypothetical scenarios. However, based on the categories of industries identified and conclusions drawn from previous studies, published industry data and an examination of potential industry fits, projections about facility footprints are beginning to take shape.

What is known is that among many of the manufacturers of outdoor recreational products, small outdoor products such as specialty fishing tackle, certain climbing industry products and specialized golfing items, to name a few, are relatively small companies employing six to 20 people. Facility size is projected

in the 7,000 to 10,000 square foot range. Requiring even smaller facility space is a range of potential cottage industries clustered and tied, in part, to a projected retail component of the development. Square footage estimates for smaller cottage industries range from 3,000 to 7,000 with an anticipated employee average of nine. Where larger products are produced and more extensive storage of raw materials are needed, square footage requirements move into the 10,000 to 20,000 range with more property area needed as well. Employment numbers of 20 or more are projected for these companies. Large manufacturers, who require square footages of 30,000 to a maximum of 100,000, and sometimes more, will predictably make up a smaller number of industries attracted to Wolf Creek, but will demand the most acreage and provide the largest bases of employment with 200 to 400 employees each. The total employment projections for Wolf Creek are 1,200 to 1,500, with several hundred of these jobs being short-term construction employment.

An analysis of an Eco-Industrial Park in Burlington, Vermont provides some helpful information on which some assumptions can be made. The park, located on 211 acres, accommodates 11 companies and one 50-acre commercial farming operation. Apart from the farming component, the 11 facilities occupy the remaining 161 acres. Of the 11, the three largest facilities occupy 120 acres, and eight smaller industries are located on the remaining 41 acres.

A survey of several industrial parks in and around Brookfield, Wisconsin reveals footprint data that becomes helpful as the master plan for Wolf Creek Park is developed. An area of light industrial development, several large manufacturers, wholesale distributors, small and medium-sized manufacturers and office space occupying 193 total acres make up an average scenario. The park boasts 23 buildings with total square footage of approximately 600,000. Using this information as a basis of assumption for development in Wolf Creek, one conceptual outline could be three large industries occupying a total of 300,000 square feet and 20 companies including a cluster of cottage industries, a group of small and medium sized manufacturers, several wholesale distributors with a central distribution center occupying the remaining available acreage which will also include buffers, adequate space for easy, non-congested transportation flow, adequate parking, trees and green space. Although hypothetical, the concept can provide a potential blueprint from which to work.

A proposal for an Industrial Center in Romeoville, Illinois on a 159-acre tract projects 12 build-to-suit sites with buildings ranging from 20,000 to 800,000 square feet. The proposed sites range in size from two to 40 acres.

The initial industrial/manufacturing concept for Wolf Creek Park was an inclusive array of industries from small cottage to large manufacture and distribution centers. Planning will be done in such a way as to cluster categories of industries based on size, materials and transportation needs, as well as aesthetics and environmental sensitivity.

As a general rule, transportation demands of Wolf Creek Park will be similar to other industrial park developments and will require full-size 18-wheel transfer trucks for delivery of raw materials and back loads of products for distribution. In the case of smaller cottage industries, smaller 6- and 8-wheeled trucks may fit the need. The primary issues for the Wolf Creek master plan are addressing the need for adequate accessibility for the largest trucks entering and leaving the site, and how the transportation traffic impacts the livability of the rest of the park.

Raw material needs in the diverse outdoor products industry typically include plastic, metals, glass and wood products. West Virginia has a history of diversity in the raw materials arena and the historical experience across the State will be helpful in better understanding and addressing the raw materials issues for the various industries attracted to Wolf Creek. Companies expanding or relocating to Wolf Creek will also bring with them a history of dealing with raw material needs as well as shipping and receiving issues.

A potential pattern of industrial development at Wolf Creek Park may well be designed with some of the concepts and characteristics of the increasingly popular eco-industrial developments. While there is no single definition for eco-industrial development, most are characterized by closely cooperating industries who work together to improve environmental quality and economic performance. Firms coordinate activities to increase efficient use of raw materials, reduce waste, conserve energy, and reduce transportation requirements.

Wolf Creek developers will, by design, create an industrial/manufacturing complex that reflects the most efficient use of space, shows respect for the natural environment, concern about environmental impact and assures compatibility with the total Wolf Creek mixed-use development plan.

A compilation of existing companies that, with further study, could provide a better blueprint of a potential development model have been identified. The mixture includes 20 outdoor recreational product manufacturers and distributors identified as targets for Wolf Creek Park, a cluster of cottage industries with an accessible retail outlet, and consideration for shipping and receiving. Square footage needs of the companies run the gamut of potential fits from the small cottage type to the largest that will comfortably fit into Wolf Creek Park. Total space projections are 500,000 and 700,000 square feet.

In conclusion, the ability to meet the 1,500-job threshold is an important part of the Wolf Creek vision. With 380 acres available for full development, it would seem well within reason to double or even triple the number of jobs upon full build-out. The 1,500 job estimate amounts to four jobs per acre.

Attracting Business and Industry

In the competitive world of attracting and retaining business and industry in a community, a number of important issues must be explored and understood by all parties at the table. As companies are attracted to consider Wolf Creek Park as a good place to locate and do business, those involved in selling Wolf Creek must be totally prepared with complete, current and accurate information, and a total commitment to the notion that Wolf Creek Park and the region are, in fact, a great place to live, learn, work and play.

Companies will look for strong, industry-driven workforce training. Companies will want assurances of a ready and willing work force. Companies will closely evaluate incentive packages. Companies will rely on the availability of the needed technology base required by today's computer-driven industries. Companies will closely examine the evidence of broad-based community support and the existence of a business-friendly environment. And, last, but not least, companies will want a real sense of the quality of life issues important to their employees and families.

Fayette County sits at the center of the four-county economic development efforts. Known as the 4-C Region, the counties are linked by common resources and a unified economic development commitment. It is well documented that communities that participate in a regional economic development plan are able to more effectively attract business and industry to an area. In addition to the existing regional structure, there is an effort underway to create a regional manufacturing consortium to supply additional momentum and support for attracting new industry and maintaining current industry.

“In 1988, leaders in the Counties of Fayette, Nicholas, Raleigh and Summers in southern West Virginia recognized the importance of collaboration to the economic growth of the Region. The county commissions of the four counties joined forces to form the first regional economic development effort in the State - the 4-C Economic Development Authority (EDA). The 4-C EDA's major charge is to assist with expansion and diversification of the economic base thereby improving the quality of life for all of the citizens.

Historically, the economic base of the Region has been coal related. However, employment in the coal industry has dropped dramatically. Technological advances in the industry have resulted in more production today than ever before with a fraction of previous employment. Although coal mining and processing are still important components of the total economic picture, changes are taking place. In recent years, new jobs have been created in 1) valued added wood products manufacturing, 2) teleservices,

3) tourism, 4) scientific services, and 5) electronics assembly.”

(4-C Economic Development Authority)

The Wolf Creek Park local planning team, in meetings with the consulting firm Parsons Brinckerhoff, identified and outlined four industrial/manufacturing scenarios as potential fits for Wolf Creek’s manufacturing base. In the final analysis, these four scenarios may be pursued as they are currently laid out. The other possibility is that some combination of industry types may well develop as a workable fit. The four categories of industries are:

- 1) Outdoor recreation and extreme sports products;
- 2) Targeted industries identified in the 2000 Fluor study as good fits for the region;
- 3) High Tech corridor model industries; and
- 4) A mixture of industries based on a “get anything we can” attitude.

Outdoor Recreation And Extreme Sports

The first category of industries is related to tourism and identifies companies that have some connection to the outdoor recreation/extreme sports industries that have a very visible and increasingly important place in the region. Over the past 25 to 30 years, whitewater rafting, kayaking, canoeing, mountain biking, climbing, camping, fishing, horseback riding, street luge, skiing, snow tubing and other outdoor sporting and recreational interests have become important businesses in southern West Virginia and especially in the area of Wolf Creek Park. Because Fayette County and the region are already so involved in the outdoor recreation and extreme sports activities and competitions, it has been felt since the earliest visions of Wolf Creek Park that a natural fit would be companies involved in the manufacture and distribution of outdoor recreational products. As a part of this report, American manufacturing and distribution companies have been identified whose product lines include, but are not limited to, rafts, kayaks, canoes and related accessories, fishing, hunting, mountain bikes, camping, rock climbing, snow sports, outdoor gear, skateboarding, boating, sky diving and the general category of sporting goods.

In general, we know the expansion potential of the outdoor products industry is expected to continue with its positive trend. Identifying specific companies poised for expansion or relocation and presenting Wolf Creek Park to them will be the next step in the ongoing planning of the project.

All total, some 300 companies involved in the manufacture and distribution of outdoor recreational products have been identified by product line and current location.

4-C Target Industries (2000 Fluor Study)

The second set of industries explored involves those target industries identified by Fluor Global Services in its 2000 study done for the 4-C Economic Development Authority. In that study a number of industry categories were identified. Under manufacturing targets, the six identified were:

- 1) Medical equipment;
- 2) Automotive-related;
- 3) Wood products;
- 4) Plastics;
- 5) Food processing; and
- 6) Commercial printing.

Each of these manufacturing targets was further broken down into specific product lines.

For example, under the category of **Medical Equipment**, the study identified specific lines such as surgical and medical instruments, appliances and supplies, diagnostic products, optical instruments/lenses, and electro-medical equipment. Under **Automotive Related**, specific targets were motor vehicle parts and accessories, fluid meters, counting devices, and engine electrical equipment. Each of the other four target industries was broken down into specific product lines as well.

An overall assessment of these industry types would suggest that some categories of the automotive segment and the medical equipment segment would be the most likely fits for Wolf Creek if this scenario were pursued. Further, in researching numerous industry types from several different sources for this market analysis, it became obvious that other industries could be added to this scenario if the Wolf Creek planners choose to go in that direction. In addition to the Fluor Study targets, the West Virginia Development Office has identified a number of statewide targeted industries. Additionally, the manufacturing industry nationwide offers extensive listings of industries and products where growth and expansion are predicted. A complete analysis of Fluor Study industries is found in the Target Industry Reports completed by Fluor Global Services in August 2000 and is available through the 4-C Economic Development Authority office. An initial data base is being developed and will be updated and expanded as needed.

High Tech Industries

The third industry category identified for Wolf Creek consideration is in the area of high technology. It is pointed out in an analysis prepared for the US Route 19 Corridor Management Plan that growth in West Virginia's high technology industry has developed with both public and private initiatives in several key areas of the state. One area has been the growth of high technology government contracting facilities and an emerging ability to win government contracts. This has resulted in what is commonly known as the I-79 Technology Corridor in the Morgantown region. This corridor has seen the development of both public and private initiatives in advanced technologies. Likewise, along West Virginia's Eastern Panhandle, within easy commuting distance to Washington, DC, a number of initiatives, especially in the area of bioscience, have developed. In the Huntington area, Marshall University focuses on biotechnology with expertise in forensics, environmental science and medical research. In conjunction with Huntington's corridor concentration of chemical companies, bio-manufacturing and industrial biotechnology initiatives have emerged.

In the 4-C region, Summers County is beginning to see the results of a public and private push in the development of the Hinton Technology Center with several high tech companies established in the community. The initiatives in Summers County are a part of what is promoted as the I-64 High Tech Corridor, part the of Connected Technologies Corridors (CTC) initiative.

With continually emerging technology, West Virginia's citizens and businesses enjoy the ability to communicate with each other and the rest of the world, thanks to advances in point-to-point wireless, satellite services, broad-band deployment and peer-to-peer technologies.

The prospects for growth and expansion in the high technology area appear to be strong. As an example, Ken Krizner, Managing Editor of Expansion Magazine, reports that from 1992 to 2003, the biotechnology industry tripled in size. Most states recognize the stability, profitability and growth in the life sciences sector, primarily defined as companies involved in biotechnology and pharmaceutical industries. Worldwide, the life sciences industry is a \$800 to \$900 billion dollar industry and continued growth is expected.

In close collaboration with the West Virginia University School of Technology in Montgomery, 4-C Economic Development, and utilizing Corridor L, development of a high tech cluster at Wolf Creek under the CTC initiative should remain a viable option. The challenge would be in choosing a particular focus of the high tech industry for the best fit within the Wolf Creek Development.

The New Mexico Development Alliance makes a strong point about some of special challenges of high tech industries which are illustrated in the fact that so

much high technology development has occurred in technology clusters. The Alliance notes that technology clusters are designed that way because they require a critical mass of intellectual resources, technical alliances, research programs, high caliber training programs and venture capital. New Mexico found that its best approach was in focused technology clusters, and this is apparently the approach West Virginia has taken to date.

An ongoing listing of industries and collection of data in the high technology category will be maintained in the event this segment of industry becomes the focus of the Wolf Creek Project.

Mixed Manufacturing Scenario

While planners of Wolf Creek Park are very interested in pursuing a totally themed and compatible development, political and fiscal realities may force the Urban Renewal Authority to consider a mix of industrial uses that do not have synergistic qualities in the marketplace. Ultimately, the goal of the park is to produce well-paying jobs with benefits, and a tax base for the county. Passing by opportunities for the lease or out-conveyance of property may not be feasible when these considerations are taken into account. Thus, it remains important that Wolf Creek be designed with the type of flexibility that will allow for these mixed industrial uses to take place without compromising overall development of the property.

In keeping with the need to provide jobs and tax base, it remains entirely feasible to mix uses as is done throughout West Virginia in industrial/business parks – and indeed across the nation. However, due to the mixed-use nature of the remainder of the development, it is important that any mixed-use be compatible with the residential components of the park as well as with the environmental goals so that the project will sustain itself over time.

It appears that the best opportunity to mix uses within the complex comes in the sections designed for large manufacturing/distribution and in one of the smaller pods for cottage industry. Should manufacturing uses be sited in this fashion, a single pod for synergistic manufacturing/distribution would remain in the park concept and allow for the cluster development so vital to the economic vitality of the area.

Research in this analysis demonstrates that the manufacturing sector does indeed have potential, but economic factors such as interest rates, the ability to provide competitive incentives, and long-standing development patterns will continue to drive the market. Already, a number of manufacturing uses not necessarily fitting within the themes of the other development scenarios have expressed interest in locating within Wolf Creek Park – so it remains incumbent that the county and Urban Renewal Authority find ways to accommodate the interest within Wolf Creek Park or at some other as yet to be determined site.

It is not anticipated that this type of use for the park would change any physical footprint. The residential component, retail components and at least one of the smaller industry pods should remain unchanged in terms of footprints, while the two remaining pods for manufacturing/distribution should be developed with enough flexibility to accommodate this scenario.

In summary, a fourth and final approach to creating a manufacturing base within Wolf Creek Park is to look at a mixture of industries. Initially, this scenario was envisioned as a fall back position in the event that other plans did not prove successful.

Based on what we now know, a mixture of industry types may well be seen as a positive move. As stated, many industrial parks are based on a mix of companies with varying product types. Others, such as those in the high tech category have tended to cluster because of common needs and interests.

The development of Wolf Creek Park is based on finding a compatible balance of industrial, residential, educational, business, environmental and recreational components. Types of industries and how they fit into the entire Wolf Creek concept is an important issue. A sensitivity to both the physical and functional integration of all components of the development needs to be maintained.

Conclusions

Fayette County and the Wolf Creek Park area possess many of the very important quality of life issues commonly identified as important by companies looking to expand or relocate to an area. Low crime rates, good schools, lack of congestion, sense of community, unique local restaurants, friendly people, environmental quality, natural and scenic beauty, abundance of recreational activities, affordable housing and accessibility to cultural activities all combine to make the area an attractive place to live, learn, work and play. The plan to combine these attributes with good paying jobs through the development of a strong manufacturing base in Wolf Creek Park will be a winning combination.

The idea of a well-planned mixed-use community driven by solid, growing manufacturing interests and good paying jobs gives Fayette County an outstanding opportunity to create a model live, learn, work and play community.

The Fayette County area meets or exceeds many of the important industry location issues such as quality of work force, affordability, transportation access, market site availability, and infrastructure. These, combined with the quality of life issues previously outlined, project a very positive picture for the Wolf Creek Park effort.

The strategic location of the area to major markets in the eastern US as well as some Canadian markets and numerous smaller markets in between, make the ease and convenience of marketing and distribution an important factor in promoting Wolf Creek Park.

Collaboration on a strategic plan to package and market Wolf Creek Park to potential companies is an essential next step. This effort will also be linked with continued research of the target industries in the areas of expansion and relocation potential, facility requirements, special infrastructure needs, raw material requirements and other issues as they arise.

The opportunity to develop Wolf Creek Park into a model mixed-use community is both a complex and an exciting process. Mixed land uses have become an important development form, enhancing opportunities for improved accessibility. Wolf Creek Park should meet and exceed the standard definitions of mixed-use developments. The end results should produce several significant revenue-producing components within the park, and careful planning will produce an attractive, well planned integration of both the physical and functional components of the project.

EDUCATIONAL, CONFERENCE AND COMMUNITY FACILITIES

An important component to be integrated into the Wolf Creek Park development is a comprehensive community and educational facilities plan. Because of the nature of the mixed-use focus, a well-planned multi-functional community center has been envisioned throughout the planning process. Add to that several educational/training complex ideas and what has developed is the need to design a facility complex that will meet the expected long-term needs of various programs that are shaping up to be a vital part of Wolf Creek Park.

Currently in the planning stages is a comprehensive Tourism Learning Center. This training center concept will require specific components for meeting the training needs of a broad spectrum of tourism employees and employers as well as some general space needs. This proposal recommends that the tourism center be integrated into a collaborative plan that creates a comprehensive educational and community facility.

In addition to a general community meeting/recreational facility and the tourism learning center, research has been initiated into the training needs of a variety of extreme sports athletes who increasingly make Fayette County and the New River Gorge region their destination of choice to pursue the extreme sports in which they participate. From mountain bikers to kayakers and from rock climbers to base jumpers, extreme sports enthusiasts spend many hours of training and competition time in the region surrounding Wolf Creek. At present, there is no training facility designed to meet the bio-medical or other pre or post-training needs of extreme sports athletes. Individuals and groups of athletes who currently come to the area in pursuit of their sports interests rely on an informally organized network. Some organization is seen with some groups who rent base-camp space for participation in events such as the Endorphin Fix, a multi-sport endurance challenge which takes place over a several day period. The development of a sports complex designed to meet specific pre- and post-training needs, as well as a base-camp concept for these and other athletes, has been added to the facility needs to be included in Wolf Creek Park.

The final component proposed in the creation of a collaborative facility is that of an environmental, nature-based training program that uses the Wolf Creek property and the expansive New River Gorge region as an outdoor classroom. Working in consultation with the West Virginia State University and a local team of science teachers, National Park Service and State Natural Resources employees, a plan has been outlined and is beginning to be fine-tuned to determine the facility needs of a model program that brings all parties involved in nature-based education to the table. Out of this collaboration, a program

and facility that provides the needed indoor space and the related outside space for the program is being proposed.

The complete design envisioned at this stage of planning includes a 5,000- to 6,000-square foot community building and conference center. Off of this central center will be 18 to 20 400-square foot classroom type spaces. In total, the center will be about 14,000-square feet. Two adjacent buildings approximately 5,000-square feet each are proposed for two of the primary programs. These two units are possibly connected by a short covered walkway. The first will house the Tourism Learning Center's commercial kitchen, dining area (snack bar and community cafeteria) and meeting space. The second will headquarter the environmental, nature-based field station and training center. Attached to this section of the complex is 6,000-square feet of shared office, divided into approximately 20 spaces providing for, at least limited, privacy for the different program components.

RETAIL COMPONENTS

Neighborhood Scale

If completed to design specifications, Wolf Creek Park will contain roughly half of the full-time residential population of Ansted, with a working population that nearly doubles the size of that community. Based on those numbers, it is easy to assume that at least some commercial components will be feasible in terms of providing retail services for those living, working and/or playing in the development.

For those either working or living in Wolf Creek Park, the nearest retail services are across US Route 19 at the Fayette Square shopping center where grocery services, apparel services and small-scale chain food services are available. However, the retail census data contained in the Fayette County Comprehensive Plan casts some doubt upon the continued viability of this shopping center due to the development of a new Super Wal-Mart and associated retail some four miles to the north on US 19 in Fayetteville.

Should Fayette Square continue to be viable, park residents and workers would have to leave Wolf Creek Park, turn left on Route 16 and access the development via the new interchange that is planned for the Lochgelly area. If this development closes due to market forces imposed by the Wal-Mart development, park residents and workers would then access these services by leaving Wolf Creek, proceeding up Appalachian Drive and turning right (north) on US Route 19 and heading toward Fayetteville.

Clearly, either of these options is less attractive than being able to handle these retail needs on site at Wolf Creek Park – particularly in terms of food service during working hours.

Based on the build-out goal of approximately 1,200 full-time workers at the park, it can safely be assumed that at least half will purchase lunch services on site given the opportunity. However, it must be noted that a developer with property just on the boundary of Wolf Creek Park is planning for the development of a hotel and restaurant which is also poised to capture some of this market.

Discussions with local residential developers indicate that they are not interested in taking on the responsibility of retail development. However, small-scale entrepreneurs involved in food and beverage sales have indicated that Wolf Creek Park could be a viable location for them, particularly if the new Wal-Mart development ends up having a negative impact on the downtowns of Oak Hill and Fayetteville.

Overall yield on a small pod for food and beverage sales is not likely to equal that of manufacturing or residential development. However, when viewed as part of the whole, it makes sense to meet the needs of the workers and residents by making space available for these services. In coming back to the size comparisons with the Town of Ansted, it would appear that no more than five acres for small restaurants and perhaps a convenient mart would need to be made available to serve this purpose.

Community Scale

Initial discussions concerning the concept plan for Wolf Creek Park included space for niche retail that was in keeping with the outdoor recreation mecca that already exists for Fayette County. And, should the extreme sports manufacturing model be fully pursued, it would seem that retail outlets for those products would be viable simply because of the more than one million tourist visits the county receives each year.

Additional discussions during early planning stages for Wolf Creek Park indicated that an anchor retailer – in the mold of an REI or Bass Pro Shops/ Gander Mountain would fit nicely with the overall park goals. Bass Pro and Gander Mountain are both in expansion mode, however, these developments seem to be in mid-major metro markets. It is not likely that local population base or traffic counts would currently make this a competitive market in itself, but if combined with a distribution center for the east coast market it would seem viable. This concept has been deployed successfully by Coldwater Creek in Parkersburg, West Virginia and has been developed by Cabella's near Wheeling – however, that development is too new to determine its long-term viability.

REI has expanded to the east coast in the Washington DC metro area. What must be gauged in this arena is whether or not there would be economic gain with this type of facility or if it would be merely a redistribution of sales already

conducted at the local level by those selling similar types of equipment. The one real plus of an REI type of outlet is that many outdoor gear manufacturers list REI as their largest retail customer. Thus, this type of facility would seem to be a positive component in the overall development scheme in that it could lure the desired manufacturers to the Wolf Creek development.

Clearly, for larger-scale retail to work, some type of visibility – either through signage or actual sight-lines – needs to be made available from US 19. In conjunction with this visibility, there would need to be a sensible location that would make access from the US 19 corridor and egress back to that corridor easy for the traveling public that is likely to fill much of the demand for the products.

If the goal is to try to secure an anchor of the magnitude of the aforementioned outlets, study of similar retail projects across the United States indicate that a minimum of 20 acres needs to be set aside to accommodate the use. In terms of generating county tax base, these types of retail developments can indeed yield significant dollar benefits. However, the use should not be considered if it in any way endangers either the manufacturing or residential goals of the park.

If, however, 20 acres can be set aside that meet the visibility needs without compromising the overall development it should be considered as a viable addition to Wolf Creek Park.

PROGRAM SUMMARY

From the market analysis, a programming document was developed as a guide for the amount of land allotted to each specific development use. The programming document is included on the following pages for reference. It is broken down into the specific acreage needed / required for different sized developments including both lot sizes and different manufacturing building footprints. At the end of each land use is a summation of the total acres. Residential has the highest amount of acreage listed at 89 acres, with manufacturing second at 81 acres. Commercial / retail land use has the lowest total amount of acreage at 20 acres.

**Wolf Creek Park Development Program
 Summarized From Market Analysis**

Residential Land Use		
Retirement Center		
75 independent living units		
48 assisted living units		
Building support/dining (a centralized building)		
	Total Acreage	15
Single Family		
60 houses		
20 homes on 2-ac. lots	40	
20 homes on 1-ac. lots	20	
20 homes on 1/2 ac. lots	10	
	Total Acreage	70
Townhouses		
24 townhouse units (12 units per acre)		2
Rental		
12 townhouse units	1	2
Dormitory	1	
	Total Acreage	4
Total Residential Acreage		89

Manufacturing Land Use		
3 sites at 10 acres each (each site could support a 100,000SF building)		
	300,000	
	Total Acreage	30
6 sites at 5 acres each (each site could support a 20,000SF building)		
	120,000	
	Total Acreage	30
7 sites at 2 acres each (each site could support a 10,000SF building)		
	70,000	
	Total Acreage	14
7 sites at 1 acre each (each site could support a 7,000SF building)		
	49,000	
	Total Acreage	7
1 site that provides unified services for the 14 smaller sites at 5 acres (note: may be divided into 2 locations)		
	60,000	
Total Square Footage	539,000	Total Acreage
		5
Total Manufacturing Acreage		81

MASTER PLAN

Wolf Creek Park

Educational, Conference and Community Facilities Land Use			
1	Community Building & Conference Center	6,000	
	Classroom Building	8,000	
2	Tourism Learning Center	5,000	
3	Environmental Learning Center	5,000	
4	Administrative Space (Supports buildings 1, 2, and 3)	6,000	
Total Square Footage		30,000	Total Acreage 35
5	Extreme Sports Training Center	7,200	
	Base Camp		
	Lodge	3,000	
	Cottages (6 @1,000SF each)	6,000	
Total Square Footage		16,200	Total Acreage 15
<i>Total Educational, Conference and Community Facilities Acreage</i>			50

Commercial/Retail Land Use			
Small-scale retail convenience services			
Total Acreage			2
Optional: Large-scale retail			
Total Acreage			20

Outdoor Recreation Land Use

Future Development Areas

Chapter 3. Context, Location and Natural Features Shaping Development

The context and location of Wolf Creek Park are examined in this chapter, along with an analysis of the natural features shaping development of the site.

CONTEXT AND LOCATION

Location and Setting

The Wolf Creek Park development site is situated in the center of Fayette County, West Virginia (refer to Figure 2). Fayette County is located in the southern portion of West Virginia, and is considered to be the center of outdoor recreation in southern West Virginia. The New River runs through the county, and the Gauley River runs along the northern border of the county, providing one of the premier locations in the country for whitewater rafting. The New River Gorge provides a prime location for the pursuit of extreme sports such as mountain biking, kayaking, rock climbing, and base jumping. Currently, extreme sports enthusiasts spend many hours of training and competition time in the Wolf Creek area. The entire site contains in excess of 1,000 acres. Through the procurement of government grants, funds have been provided to purchase the property and develop infrastructure for approximately 350 acres identified as the first phase of development.



Jeep trails are extensive throughout the site.

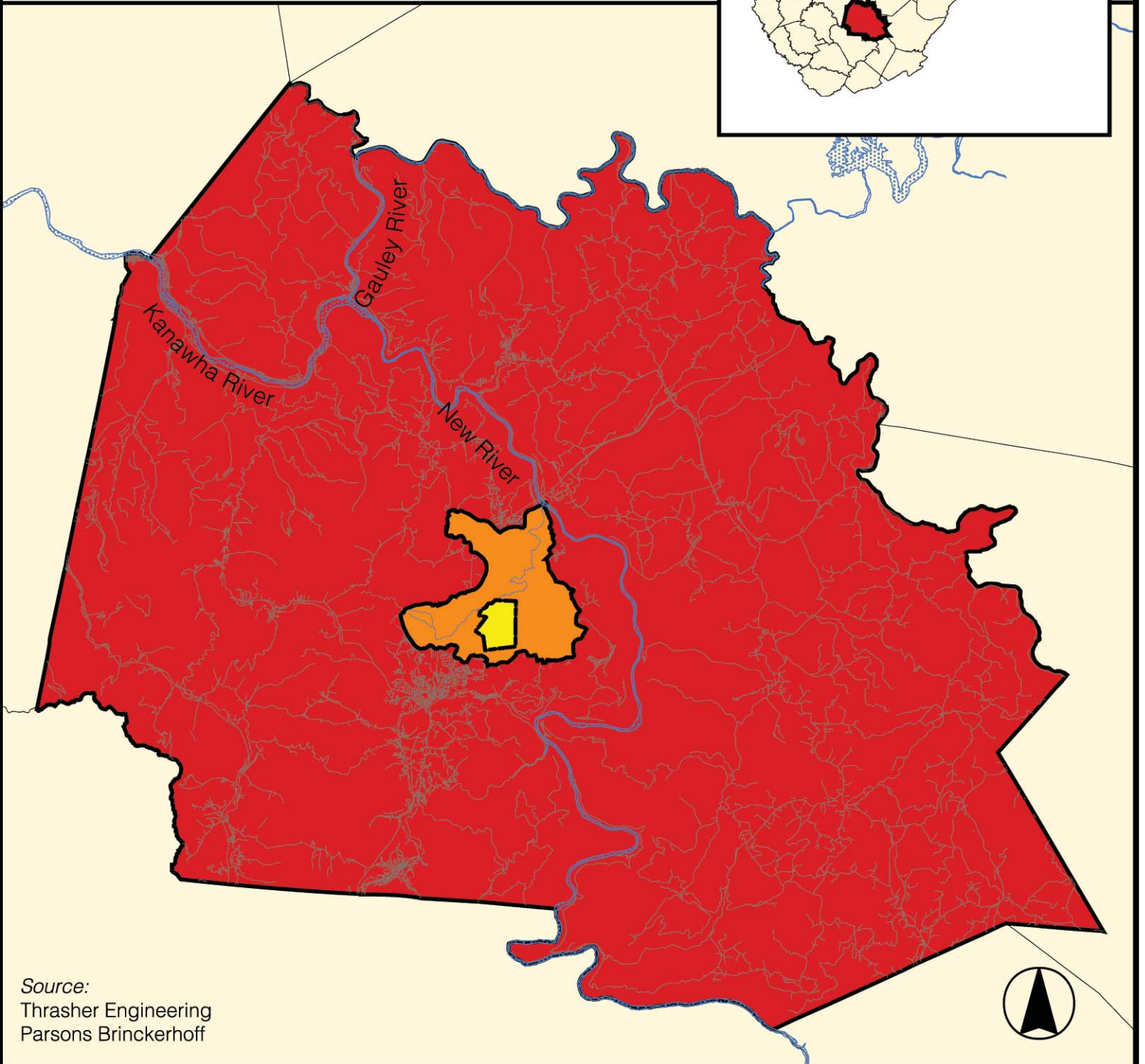
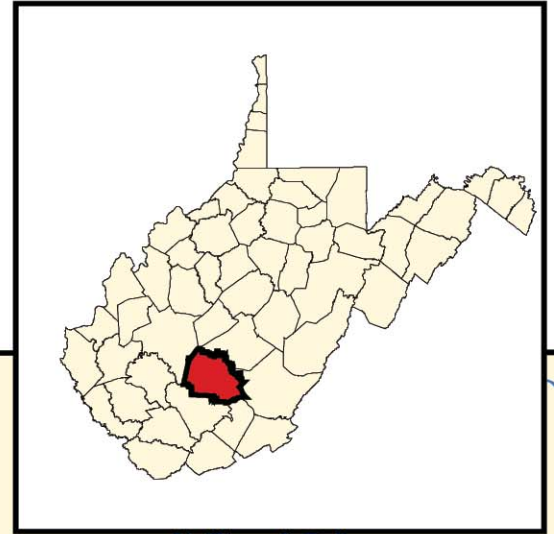
Vehicular Transportation Access and Circulation

Wolf Creek Park is located directly off of US Route 19, the area's major north-south highway corridor. US Route 19 connects to two major north-south and east-west interstate routes (I-64 and I-77) approximately twelve miles south of Wolf Creek Park. In addition, West Virginia 16 runs adjacent to US Route 19 along the length of the development site. It is expected that the access road from Wolf Creek Park will intersect with WV 16 approximately 330 feet north of Appalachian Drive. Additional county and local roads surround the Wolf Creek Park site. Jeep trails are scattered throughout the site, providing the only current vehicular access.

Figure 2:

Location Map

-  Fayette County
-  Wolf Creek Watershed
-  Wolf Creek Park
-  Water Bodies



Source:
Thrasher Engineering
Parsons Brinckerhoff

Refer to Figure 3 for the location of the site compared to the regional transportation system and Figure 4 for the local circulation system. Overall, the existing roadway network provides excellent access locally, regionally, and nationally to the site through the existing interstate, national, and state highways.

Bicycle and Pedestrian Circulation

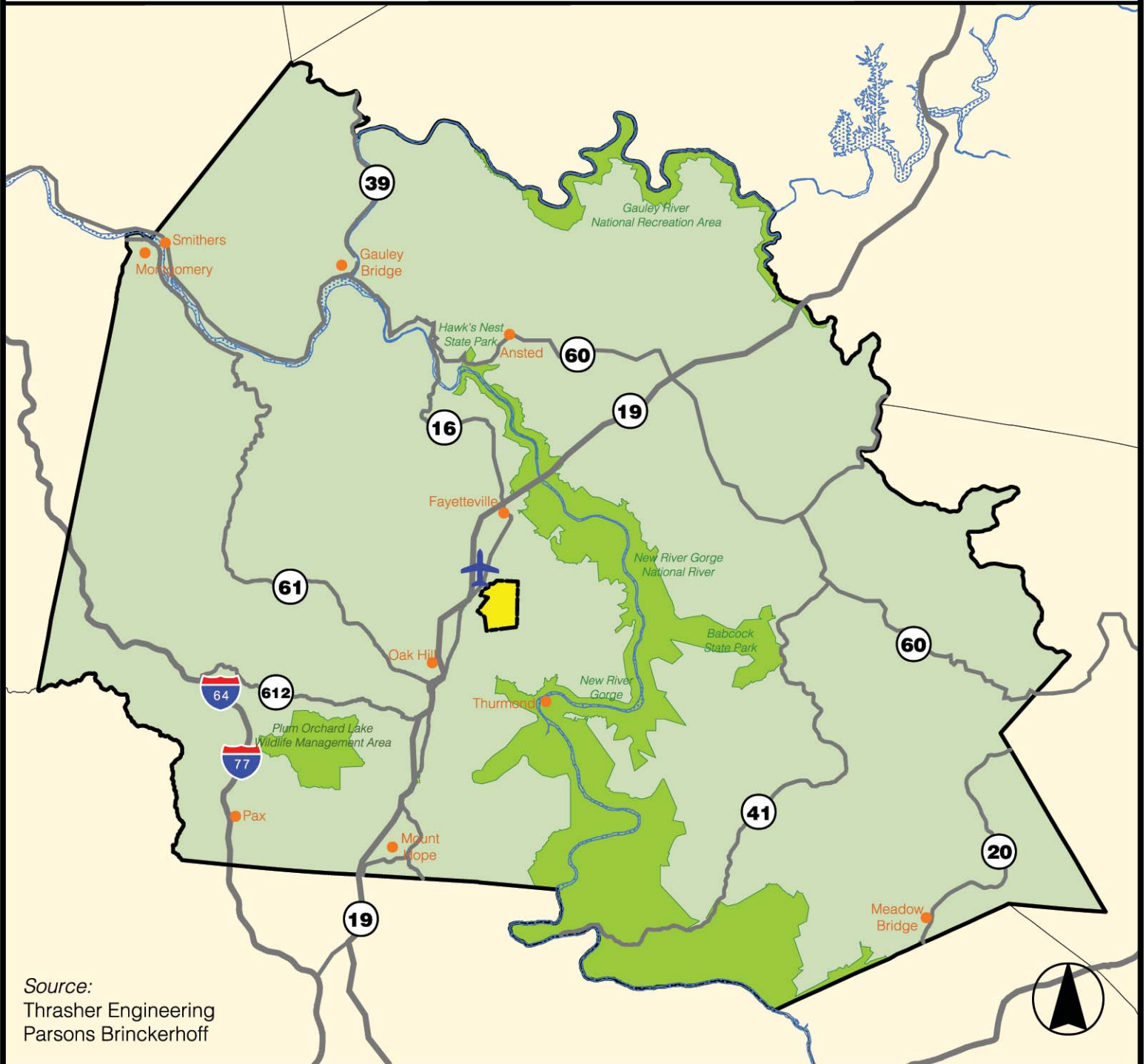
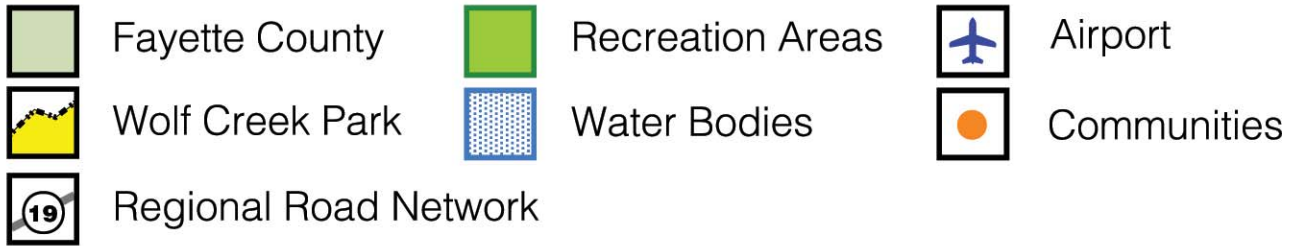
Currently, there are no fully interconnected bicycle / pedestrian paths though the project site. There are some walking paths located in the county, including sidewalks in the developed areas (primarily the communities of Fayetteville and Oak Hill). However, it is recognized that current bicycle / pedestrian facilities are deficient, and provisions / guidance for the development of these is included in the Fayette County Comprehensive Plan. The Land Use Planning Concept for the Fayette County Comprehensive Plan specifies that pedestrian access should be a component of activity centers (Fayetteville and Oak Hill) / incorporated towns, and that greenways / bike paths should link various developments.

There are also bicycle paths in the county, but these are primarily for mountain bicycling, and are typically not signed routes. The sometimes rugged and steep terrain in the area makes it a prime location for the extreme sport of mountain bicycling, and West Virginia has received the highest grade in the 2004 edition of the International Mountain Bicycling Association annual survey of mountain biking.

Overall, pedestrian / bicycle access needs to be developed not only to provide safe and convenient paths for people who use these modes as their primary form of transportation, but also for recreational users. The existing culture, history, and natural scenery is a resource that could be made more available to all through the development of a trail system, though care should be taken in the planning process to avoid environmental degradation.

Figure 3:


Connections to Regional Transportation System

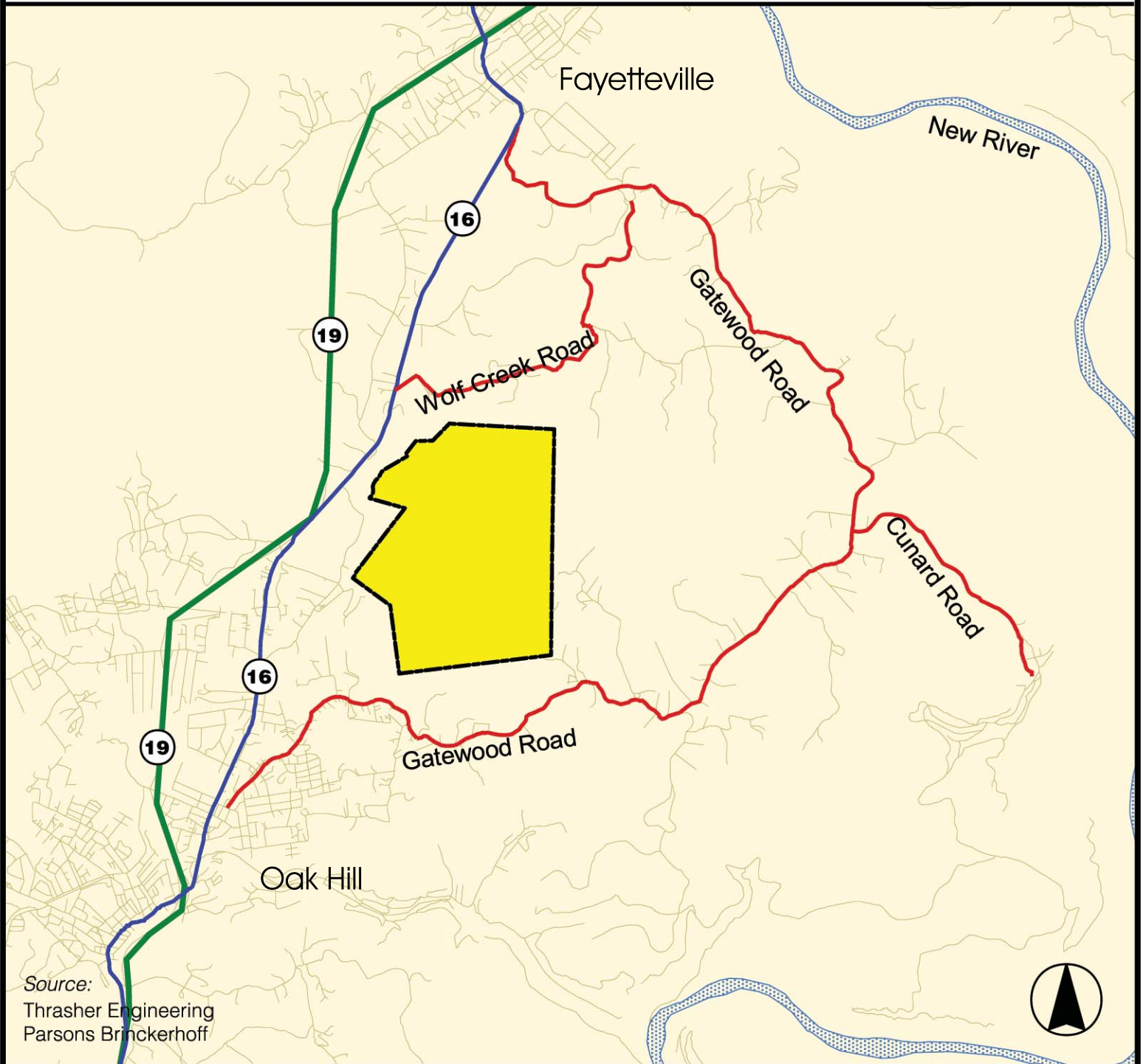


Source:
Thrasher Engineering
Parsons Brinckerhoff

Figure 4:

Local Circulation System

-  Fayette County
-  Area Road Network
-  Wolf Creek Park
-  Other Roads and Local Streets
-  Water Bodies



Source:
Thrasher Engineering
Parsons Brinckerhoff

Adjacent Land Uses

Currently, the primary land use for the development site is forestland, while the area that lies adjacent to the entrance (outside the development property boundaries) has been developed for commercial land use. These commercial land use areas are of uneven quality, containing minimally maintained sites that serve tourists. Outside the boundaries of the development site, to the west, are several locations where residential development has occurred, particularly along US 19 and WV 16. Scattered amongst these residential land uses are pockets of agricultural land use. Northwest of the site, along US 19, are commercial land use areas. This includes the Fayette Square shopping center with grocery, apparel, and small-scale chain food services. Figure 5 illustrates the adjacent land uses.

Wolf Creek Watershed

The project site lies in the Wolf Creek Watershed, located in the center of Fayette County. The Wolf Creek Watershed covers approximately 10,947 acres, including parts of Fayetteville and Oak Hill. The northern boundary of the watershed runs through the northern section of Fayetteville, with the southern boundary running through the northern section of Oak Hill. The Fayetteville Reservoir, which provides emergency drinking water to the residents of Fayetteville, is also located within the Wolf Creek watershed.

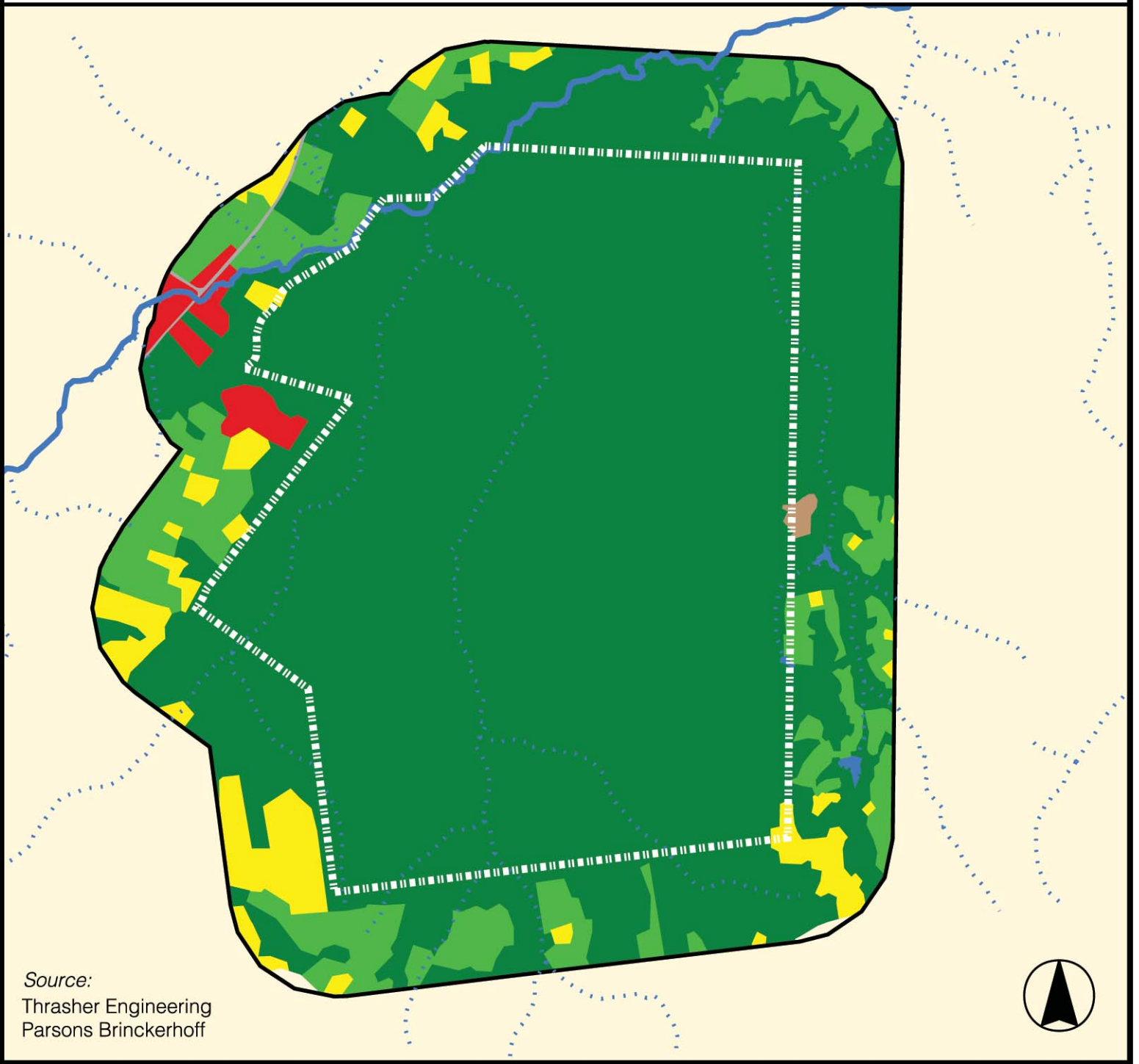
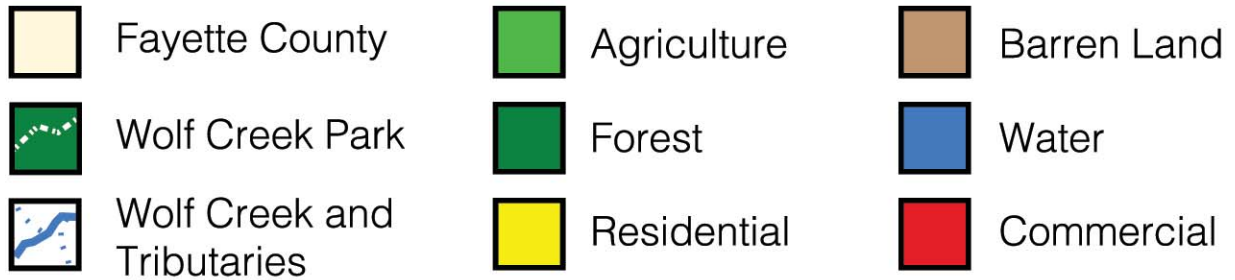
The *Wolf Creek Watershed Stormwater Management and Flood Hazard Mitigation Plan* was prepared for and adopted by the Fayette County Urban Renewal Authority in 2004, as part of an overall economic and flood recovery strategy for southern West Virginia. Due to a number of factors, including, but not limited to, steep topography, previous mining and industrial activities, and land use practices, southern West Virginia experienced devastating flooding in July 2001 and May 2002. The plan is intended to serve as a basis for policy and guideline recommendations for stormwater management and floodhazard mitigation, an outline for minimizing risk for existing and future development within the Wolf Creek watershed and to serve as a model for county-wide programs. The plan lists four goals:

1. Reduce flood impacts in the Wolf Creek Watershed;
2. Manage stormwater in the Wolf Creek watershed to reduce impacts and improve quality;
3. Maintain or improve water quality and protect the natural resources in the Wolf Creek watershed;
4. Promote sustainable, environmentally sensitive economic development within the Wolf Creek watershed.

The Wolf Creek Park Master Plan is intended to serve as a model to highlight how development could occur and be both economically feasible, as well as

Figure 5:

Adjacent Land Use



Source:
Thrasher Engineering
Parsons Brinckerhoff

in keeping with the guidelines set out in the Stormwater Management and Flood Hazard Mitigation Plan.

NATURAL FEATURES SHAPING DEVELOPMENT

Site Features and Characteristics

The site contains a variety of natural features including several streams, wetlands, and forests. The site is undeveloped with a few structures located along the existing road network near property boundaries. Additional information regarding the site topography, streams, wetlands, and buildability are provided in the following sections. Refer to Figure 6 for more details on the location of the existing site features.

Both an on-site archeological survey (for the area initially identified as the phase one development site) and an off-site cultural-historic reconnaissance level survey were performed by Cultural Resource Analysts in the fall of 2004. The archeological survey was completed through information obtained during a records search, as well as through field survey and shovel probing. The records search indicated that three previously recorded rockshelter sites are located within the project area. The field survey and shovel probes yielded an additional nine sites that have one or more prehistoric components. Two have sufficient integrity to be considered eligible for listing on the National Register of Historic Places (NRHP). One site is located in the south central portion of the survey area near a tributary of Wolf Creek. It is described as an open-air lithic scatter or camp / station of unknown age and cultural affiliation. The second site is located in the center of the northern boundary and is described as a rockshelter of unknown age and cultural affiliation. It is recommended that these sites be avoided by proposed development. If it is not possible, an assessment of NRHP eligibility should be performed through the completion of Phase II testing.

For the cultural-historic reconnaissance survey of the area surrounding the project, both a records search and field investigation were performed. The records search indicated that there were no previously recorded National Register-eligible sites in the survey area. During













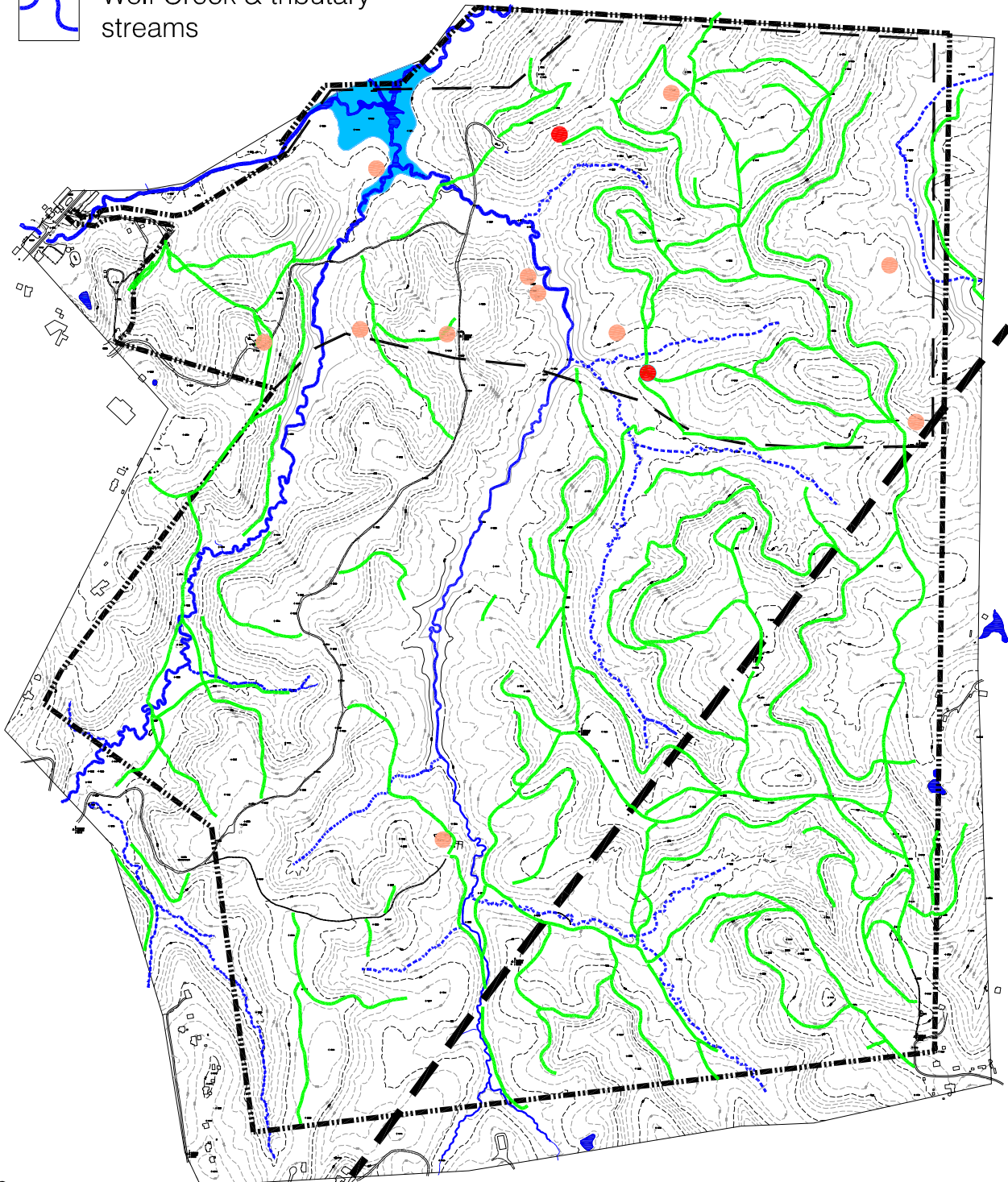
Trails, exposed rock outcroppings and streams add visual interest and recreation opportunities.



Old mine works structure is the only building on the site.

Figure 6:
Existing Features

- | | | | | | |
|---|-----------------------------------|---|-------------------------|---|---|
|  | Wolf Creek Park
Property Line |  | Small tributary streams |  | Utility
Easement |
|  | Proposed Phase 1 |  | Wetlands |  | Potentially eligible
for inclusion in
National Register |
|  | Structures |  | Jeep trails |  | Cultural Sites identified
by PB or CRAI fieldwork |
|  | Wolf Creek & tributary
streams | | | | |



Source:
Thrasher Engineering
Parsons Brinckerhoff, Inc.

the field survey, six previously unidentified cultural resources were documented, such as houses and archeological sites; however, none of these resources was determined to be eligible for listing in the NRHP.

Elevations and Views

Site elevations range from approximately 2,100 feet above mean sea level at the southeast corner to approximately 1,850 feet above mean sea level at the northwestern portion of the site along Wolf Creek, as shown on Figure 7. The

low-lying areas of the valleys are prone to flooding; that capacity should be preserved in order to hold run-off to reduce downstream impacts. The higher elevations at the north ends of ridges overlooking the Wolf Creek valley are prominently visible from the valley and from the entry area. Development on these prominent ridges should be sensitive to its visibility. The same locations also present the best views of wooded slopes and streams. Ridgelines act as natural buffers, providing an opportunity to control the density of development by clustering like uses.



Wetlands area where surrounding ridges can be viewed

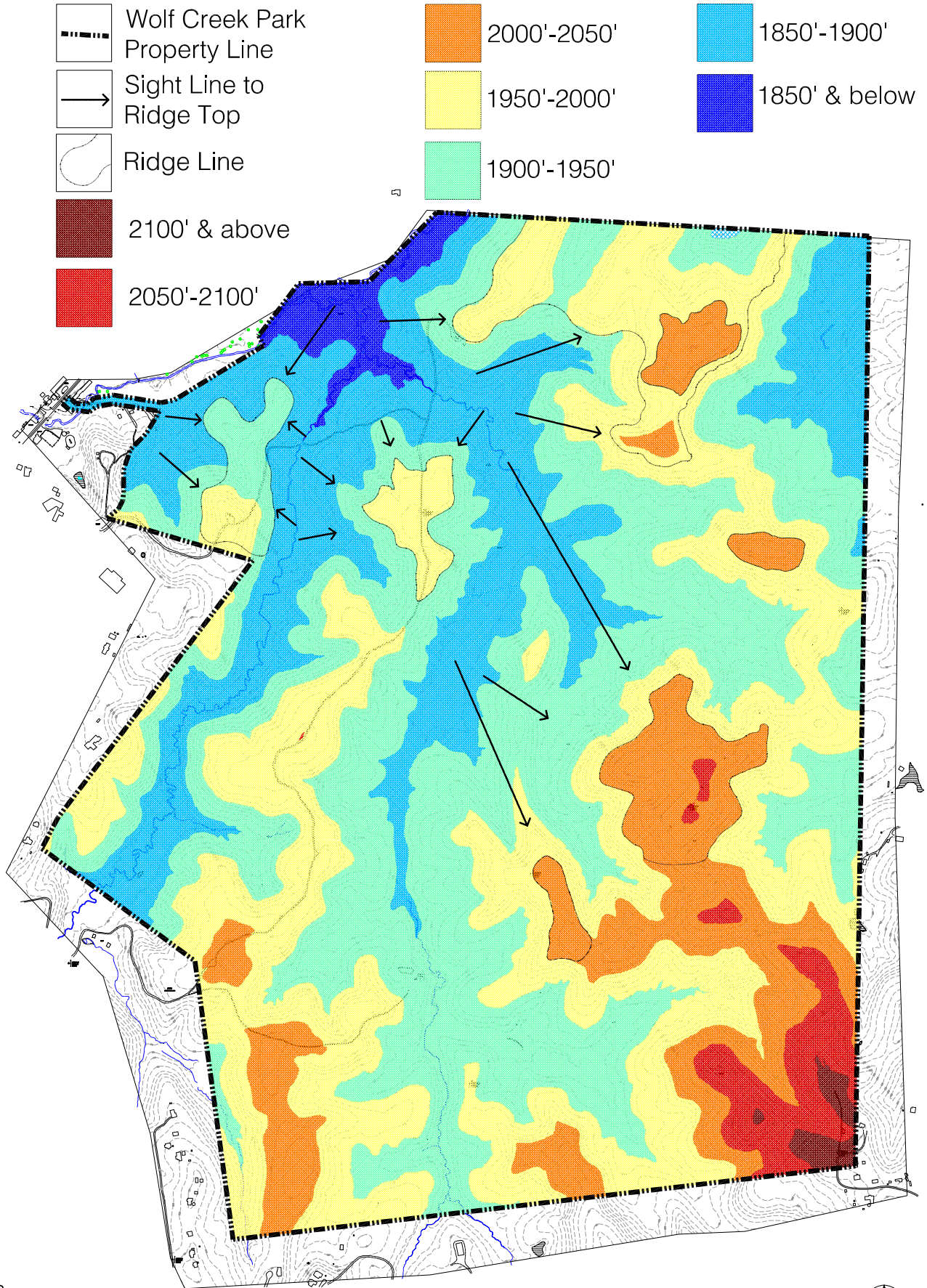
Slope Characteristics

The project site is characterized by a forested landscape with broad ridge tops, moderately steep to very steep sideslopes, and narrow to moderately broad hollows and bottoms that include wetlands. Valleys tend to be narrow with very steep side slopes (20-30%). The plateau areas between the stream valleys tend to be more gently rolling with slopes commonly less than 10%.

The southern end of the site lies higher in the watershed, thus, the character of the landform is more steep and rugged. The northern portion of the site tends to have a broader and wider valley character. Refer to Figure 8 for a graphical illustration of the slope analysis.

Figure 7:

Elevations & Visually Prominent Ridge Tops

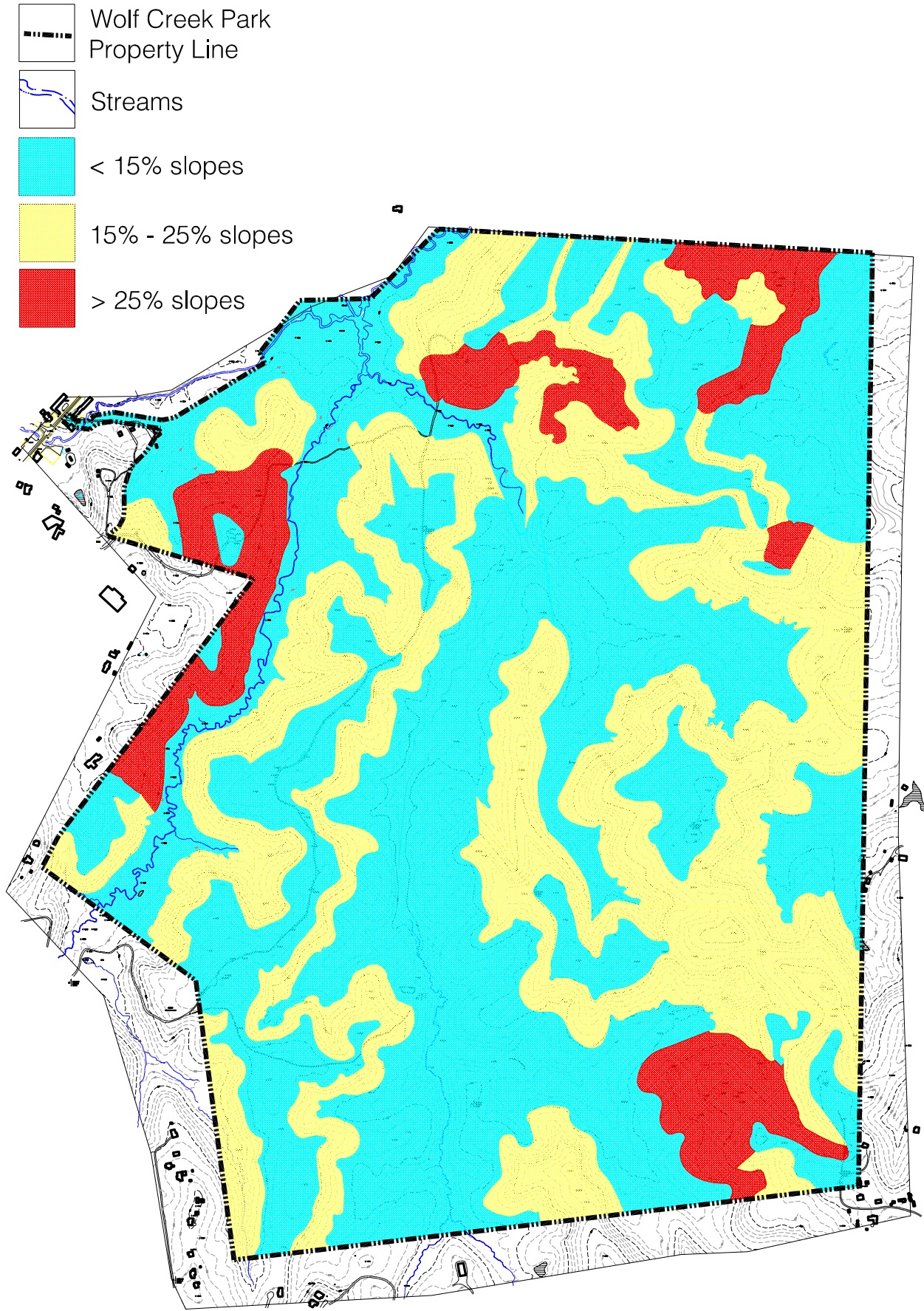


Source:
Thrasher Engineering
Parsons Brinckerhoff, Inc.



Figure 8:

Slope Analysis



Source:
Thrasher Engineering
Parsons Brinckerhoff, Inc.





Looking east toward the wetland area from Wolf Creek; degraded site on left is outside Wolf Creek Park.



Dam created by beaver on the northern portion of the site

Streams and Wetlands

Wolf Creek runs along the northwestern edge of the development site, with two primary tributaries branching off of Wolf Creek and running north-south through the site. The western-most tributary is Adkins Branch. The second tributary which is located in the central part of the site is not named. Other, smaller tributary streams flow into the larger unnamed branch. A large wetland is located at the confluence of Adkins Branch and the unnamed tributary. This wetland may be enlarged by fifteen acres to mitigate for the loss of wetlands as a result of interchange construction at US 19 and Lochgelly Road. Numerous beaver ponds have recently created additional wetlands along both of the main tributaries on the property. Refer to Figure 9 for a graphical view of the streams and wetlands located within the project site.







Stream and Wetland Buffers

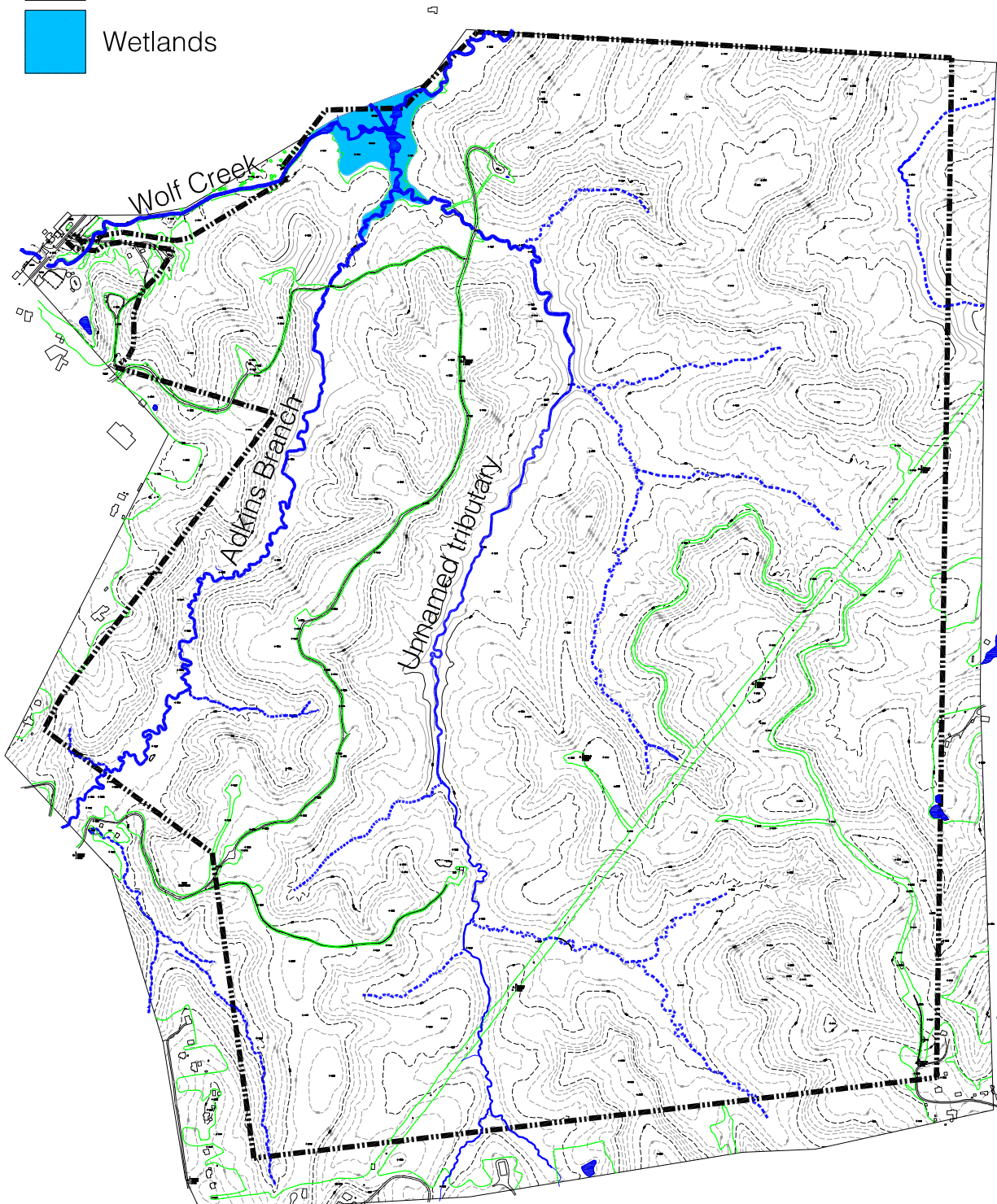
Stream and wetland buffers are specified, in keeping with the watershed management plan, along Wolf Creek, Adkins Branch tributary, the unnamed tributary, and the wetland area where the two tributaries flow into Wolf Creek. A buffer is an area where natural vegetation is protected or restored, and no grading or other development activity takes place. Buffers help ensure the natural functioning of floodplains; provide habitat for aquatic life; remove sediment, nutrients, pollutants, and bacteria; and help to stabilize and protect stream and wetland banks.

For this site, the slope of the land surrounding the streams and wetlands was used to determine the distance of the buffer from the stream or wetland. For slopes between 0 to 14%, 50 feet of buffer is required. For slopes ranging from 15 to 25%, 75 feet of buffer is required. For slopes greater than 25%, 100 feet of buffer is required. Due to the steep terrain in the area, there are several locations along these streams and wetland where 100 feet of buffer is specified. This is shown on Figure 10, along with the calculations of the stream buffer criteria.

Figure 9:

Streams & Wetlands

-  Wolf Creek Park Property Line
-  Wolf Creek & Tributary Streams
-  Small tributary streams
-  Wetlands
-  Farmponds
-  Treeline



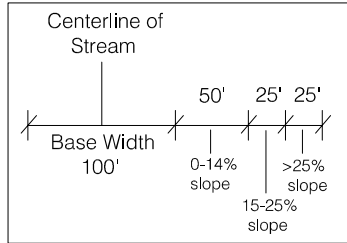
Source:
Thrasher Engineering
Parsons Brinckerhoff, Inc.



Figure 10:

Calculation of Stream Buffer Criteria

Percent Slope	Type of Stream Use
	Sensitive Stream Habitat
0% to 14%	add 50 feet
15% to 25%	add 75 feet
Greater than 25%	add 100 feet



Wolf Creek Park Property Line



Wolf Creek & Tributary Streams



Small tributary streams



Farmponds



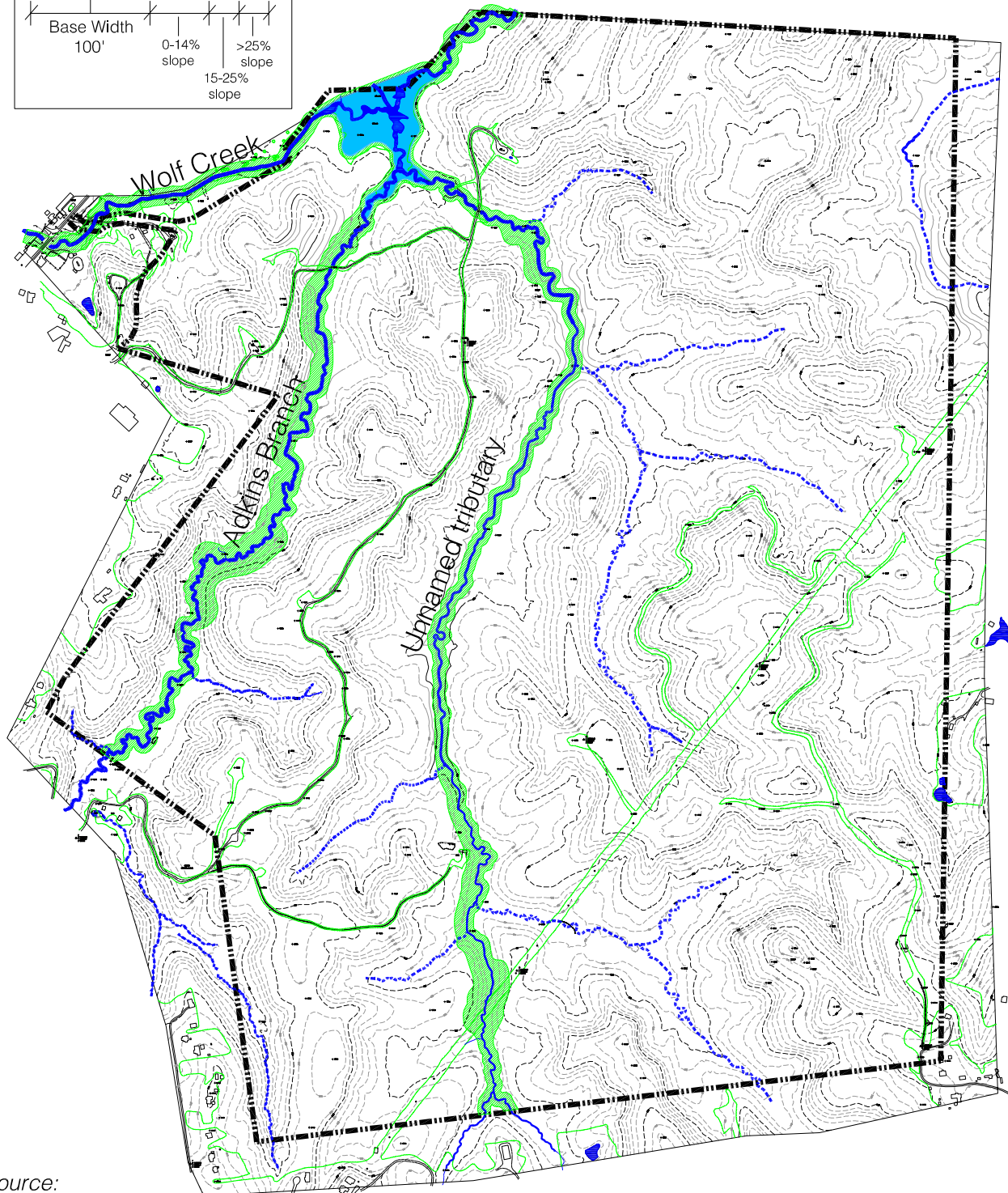
Treeline



Stream Buffer Limits



Wetlands



Source:
 Thrasher Engineering
 Parsons Brinckerhoff, Inc.
 Wolf Creek Watershed Stormwater Management and Flood
 Hazard Mitigation Plan



Development Opportunities and Constraints

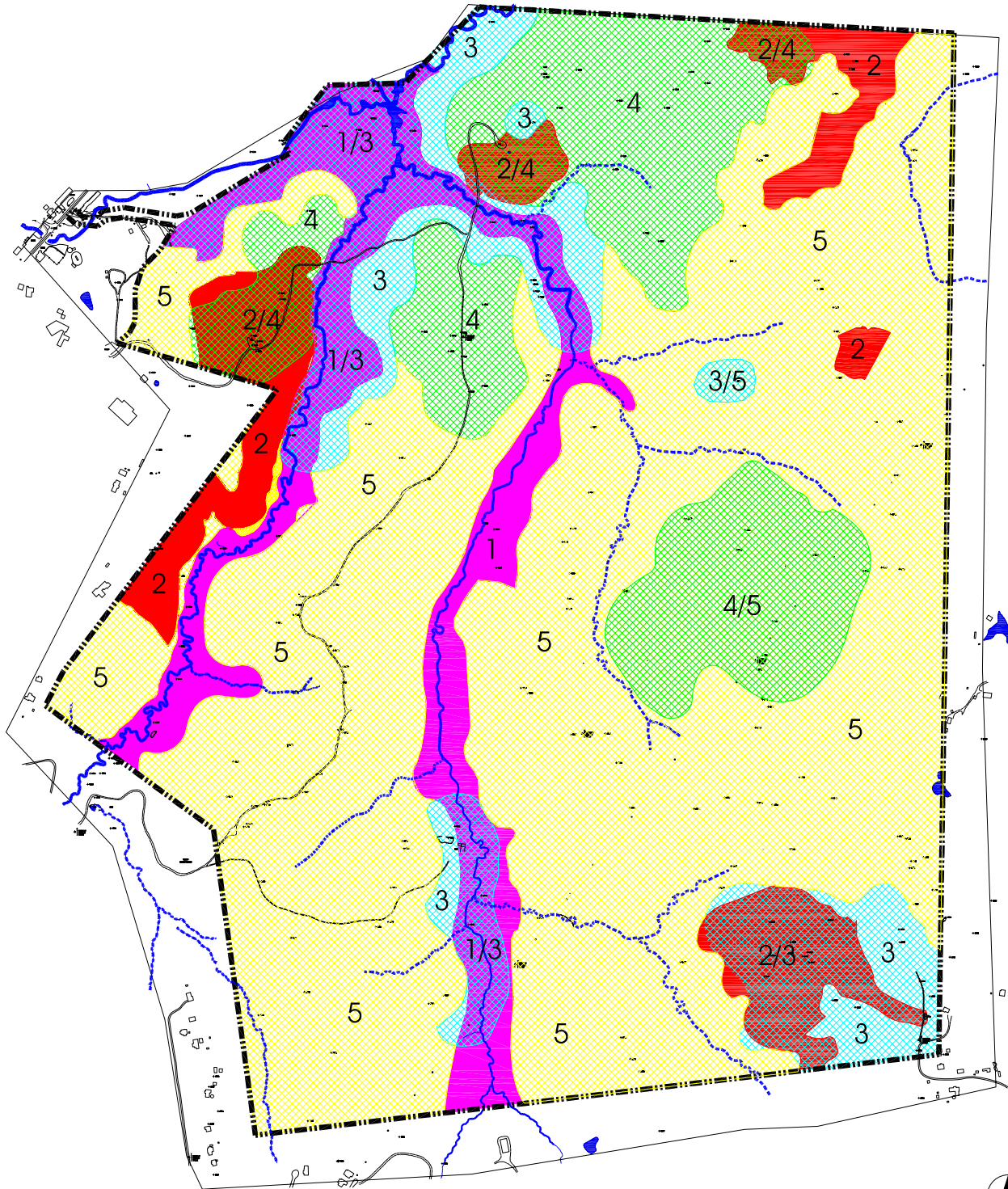
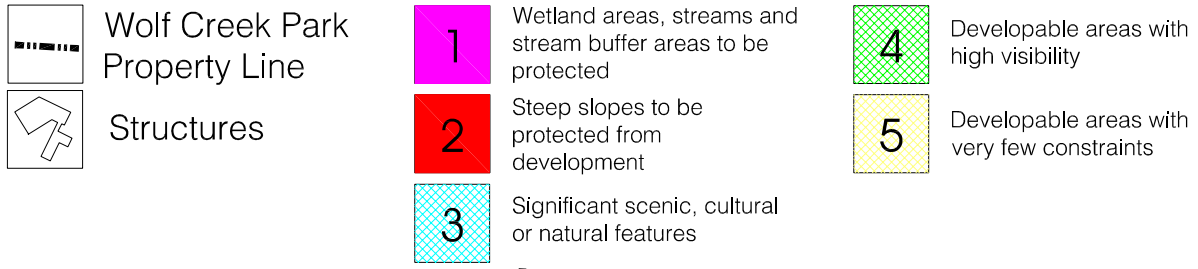
Figure 11 (Summary of Development Opportunities and Constraints) depicts the continuum of land areas suitable for development to those that should be protected or not developed. Five categories are depicted on Figure 11:

- 1 - Wetland areas, streams and stream buffer areas that should be protected;
- 2 - Steep slopes that should be protected;
- 3 - Significant scenic, cultural or natural features;
- 4 - Developable areas with high visibility; and
- 5 - Developable areas with very few constraints.

The areas surrounding Wolf Creek, its two tributaries, the wetland and the buffers associated with all the above should be protected, in keeping with the criteria established in the *Wolf Creek Watershed Stormwater Management and Flood Hazard Mitigation Plan*. Most areas surrounding small tributary streams have fewer constraints to development than the larger stream categories. Areas where steep slopes occur should not be developed because of the potential environmental impacts associated with their development. Significant scenic, cultural or natural features should be developed in a manner that protects their integrity; interpretation of these features may be considered. Developable areas that are neither environmentally sensitive nor visually outstanding are also depicted; the majority of the proposed development should be confined to these areas. Figure 11 is located on the following page.

Figure 11:

Summary of Development Opportunities & Constraints



Source:
Thrasher Engineering
Parsons Brinckerhoff, Inc.



Chapter 4. Alternative Development Scenarios



Development of alternatives occurred following the preparation of the market analysis and analysis of the natural features shaping development. As a part of the planning process, goals for the development of Wolf Creek Park were established by the planning team. These guided the development of alternatives and helped to establish a hierarchy by which to evaluate the alternatives. The goals relate both to the natural systems (topography, streams, slopes, etc.) and to the man-made systems (land use, infrastructure, sense of community, trails) that will be affected by and created for the development of Wolf Creek Park.

DEVELOPMENT GOALS

The development goals are as follows:

1. Land use compatibility;
2. Infrastructure efficiency;
3. Community-focused development;
4. High quality entry corridor experience;
5. Avoid and buffer streams and wetland areas;
6. Avoid steep slopes;
7. Continuity of green space;
8. Comprehensive trail system to encourage bike and pedestrian travel;
9. Compatibility with *Comprehensive Plan* and the *Wolf Creek Watershed Stormwater Management and Flood Hazard Mitigation Plan*.

DEVELOPMENT ALTERNATIVES

Based on the market analysis and opportunities and constraints identified in the analysis process, fifteen initial alternatives were developed for consideration. Knowing that the site is to follow the concept of a “live, learn, work, and play” community, the following land uses were determined to be appropriate for inclusion in the development of concepts:

- Residential (Single Family, Multi-Family, and Mixed-Use);
- Manufacturing;
- Community / Educational / Conference Facilities;

- Retail/Commercial;
- Extreme Sports Training Center;
- Open Space / Recreation / Trails; and
- Designated Land for Future Development.

The initial 15 alternatives incorporated these land uses in different configurations. A qualitative analysis was used to evaluate these alternatives against the project goals. The result of the analysis was that four alternatives (A, B, C and D) were recommended for further conceptual development. Each of these four alternatives incorporated all of the required land uses; the acreage for each land use typically was consistent in each alternative. The eventual four alternatives (A, B, C and D) differ in the locations proposed for commercial development, retirement center, mixed-use residential, and community facilities. However, all locate the following land uses in the same areas for the following reasons:

Manufacture/Industry

- Locate manufacture / industry higher in the Wolf Creek watershed to have the greatest ability to mitigate for downstream impacts (i.e. the higher in the watershed, the greater length of stream to mitigate and least topographic restriction in grading of large pad sites);
- Maintain physical separation from residential land use areas;
- Provide early ability to develop manufacture / industry sites; and
- Circulation network should be able to accommodate truck traffic associated with manufacture / industry, yet other users and residents should not have to encounter truck traffic more than is absolutely necessary.

Single Family Residential

- Maintain physical separation from manufacture / industry;
- Less need to be able to mitigate for impact on watershed;
- Locate close to wetlands for recreation amenity; and
- Locate on steepest topography because single family residential has the least monolithic footprint in terms of building and parking facilities.

Extreme Sports Center and Dormitory

- Less concern about physical proximity to manufacture / industry;
- Locate in area with varied topography; ability to access most rugged topography (in southeast corner) a plus; and
- Locate proximate to community facilities to foster interaction between various user groups.

Future Development

- Designate multiple locations; and
- Predicated on development of secondary access road to single family residential and ultimate development of primary access road to southeast quadrant of site.

Circulation

The circulation concepts in the initial 15 alternatives varied considerably and were developed in response to topography encountered on the site. The eventual four alternatives (A, B, C and D) incorporate the same concept for circulation. The reasons for this are:

1. The entry point to the site is fixed; all vehicular traffic must enter and exit the site from US 19.
2. Future development of lands lying to the southeast of the Wolf Creek Park site will likely occur in the long term (residential development near the New River Gorge National River is currently under discussion with the National Park Service and the FCURA). The ability to access these properties in the future via a road through Wolf Creek Park is highly desired by the FCURA.
3. The primary access road through Wolf Creek Park, thus, will function in the short-term to provide access to Wolf Creek Park and, in the long-term, to future off-site development. An approximate location for this future cross-county connector is depicted on alternatives A, B, C and D.
4. The first phase of development of Wolf Creek Park, including the primary access road, should provide access to land uses that will encourage economic development. Thus, the land use categories for which there is a demonstrated need (i.e. cottage industry, small-scale manufacture and residential) should be accommodated as early in the development of Wolf Creek Park as possible.
5. The locations of streams and associated ridge and valley topography divide the site into three distinct areas occurring along a north/south axis. Three streams must be crossed in order to access the full extent of the site. The first stream crossing, over Wolf Creek, occurs at the northwest edge of the site. Crossing this stream is essential to access any portion of the site. The second stream crossing, over Adkins Branch, and the construction of an associated road, will open up development opportunities extending from a location south of the wetland to a point as far south as it is economically feasible to develop building sites. A third stream crossing, over the unnamed tributary, is envisioned to occur after the first phase of development has been successfully established.

Alternatives A, B, C and D are discussed in further detail below. Figures 12–15 on the following pages depict alternatives A, B, C and D.

Alternative A

For this alternative, the commercial / retail / showroom development two-acre area is located in the northwest corner of the site, immediately following the entry corridor. This sets the tone for Wolf Creek Park. Shortly after crossing Adkins Branch via bridge, a 15-acre mixed-use residential area occurs north of the primary circulation roadway, with manufacturing / industry to the south. A 15-acre retirement center follows after crossing the unnamed tributary, with the community facilities center located directly to the south. For this alternative, conference and community facilities are grouped together, and include the Community Building and Conference Center, Classroom Building, Tourism Learning Center, the Environmental Learning Center, and administrative space to support these functions.

Alternative B

In this alternative, the Environmental Learning Center and the Training / Conference facilities are separated from the rest of the community facilities center and occur soon after the entry corridor experience. These two developments are located at the front of the park in place of the commercial development to set the tone for Wolf Creek Park. With the space at the front of the site now occupied, the commercial development is shifted south between the mixed-use residential area and the manufacturing / industry area. The commercial / retail area effectively becomes a buffer between the residential and manufacturing / industry land uses.

Alternative C

In alternative C, the 15-acre mixed-use residential component is not included in the concept. The consolidated community facilities development area is moved to this location, with three acres reserved at the front of the site for townhouses. The commercial / retail development area remains in the same location as alternative B. With this arrangement, no single family housing is located at the front of the site.

Alternative D

Alternative D is a combination of concepts from the previous three alternatives. This alternative is distinguished by the fact that there is no development along the entry corridor. The 15-acre mixed-use residential development is located just north of the commercial / retail and manufacturing / industry sites, similar to alternative B. All community facilities are consolidated into one area, similar to alternatives A and C, and located south of the retirement center, similar to alternative A. The commercial / retail area separate the residential areas from the manufacturing / industry sites as in alternatives B and C.

Figure 12: Wolf Creek Master Plan Alternative A

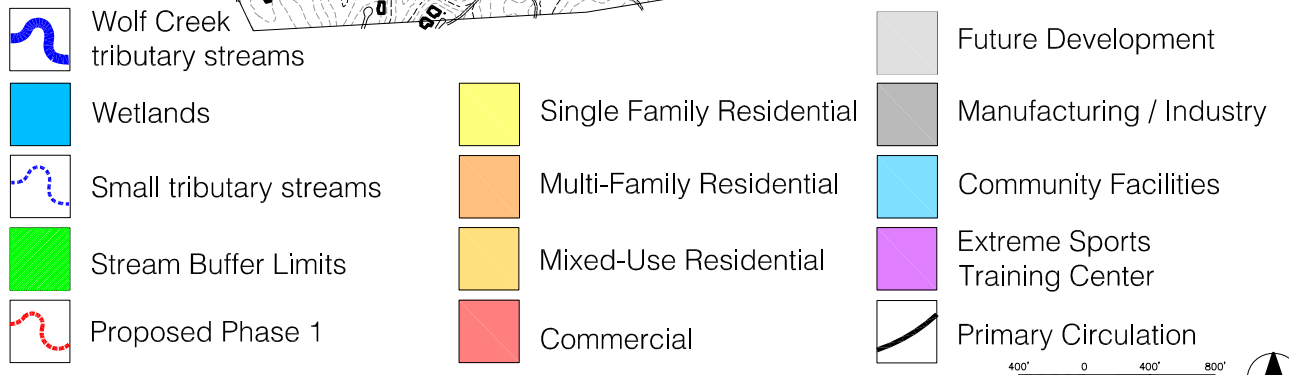
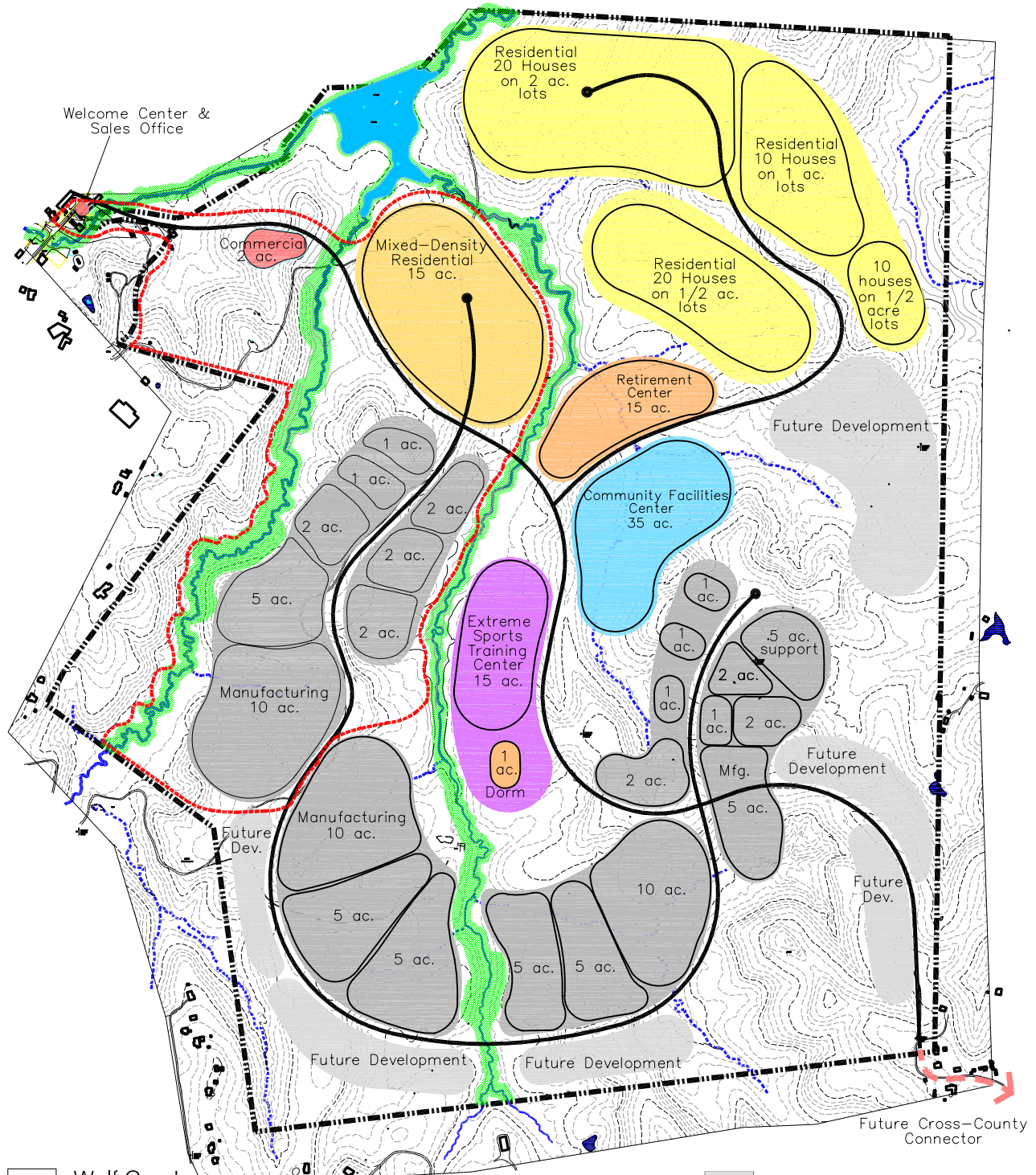
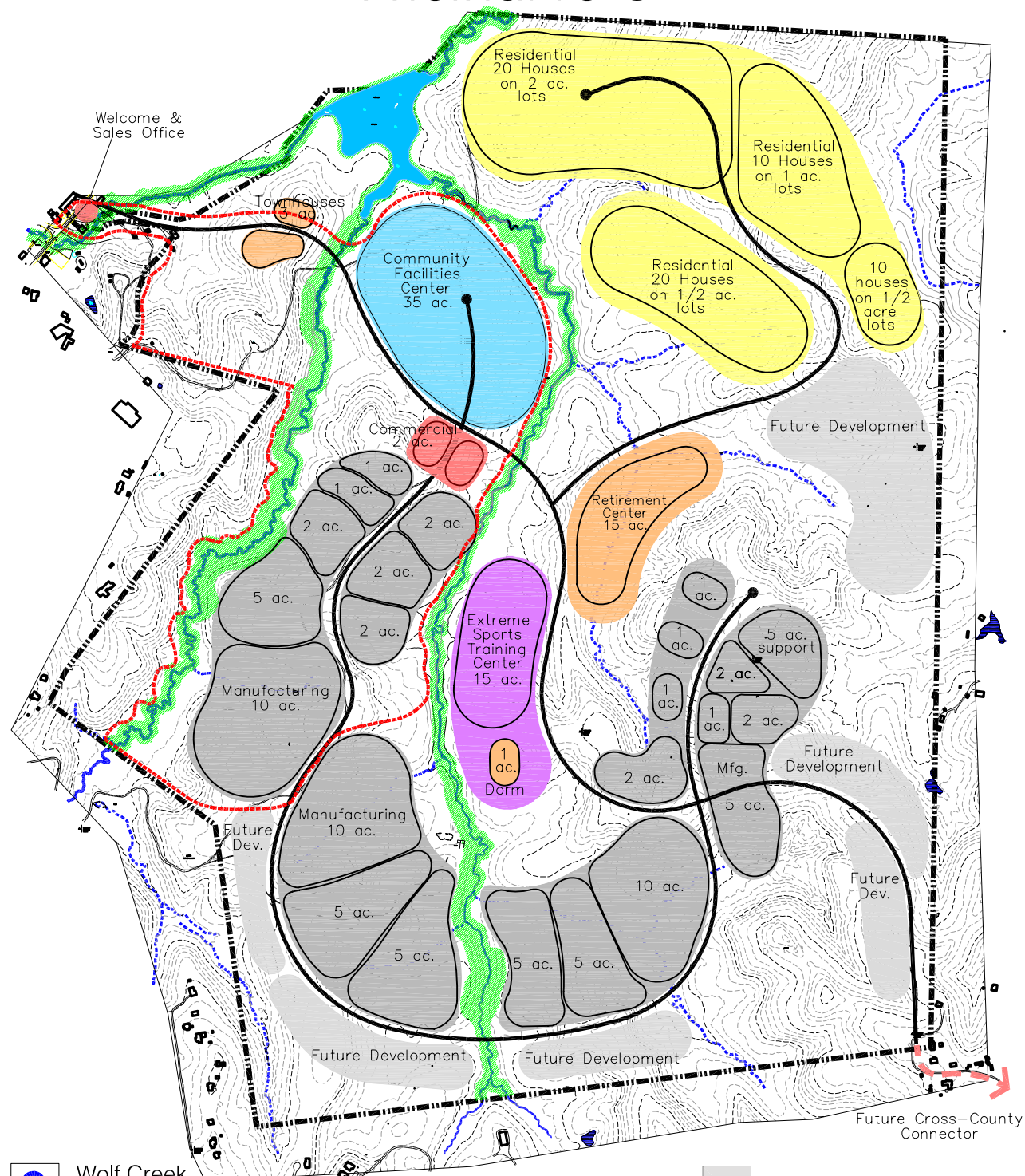


Figure 14:

Wolf Creek Master Plan Alternative C

















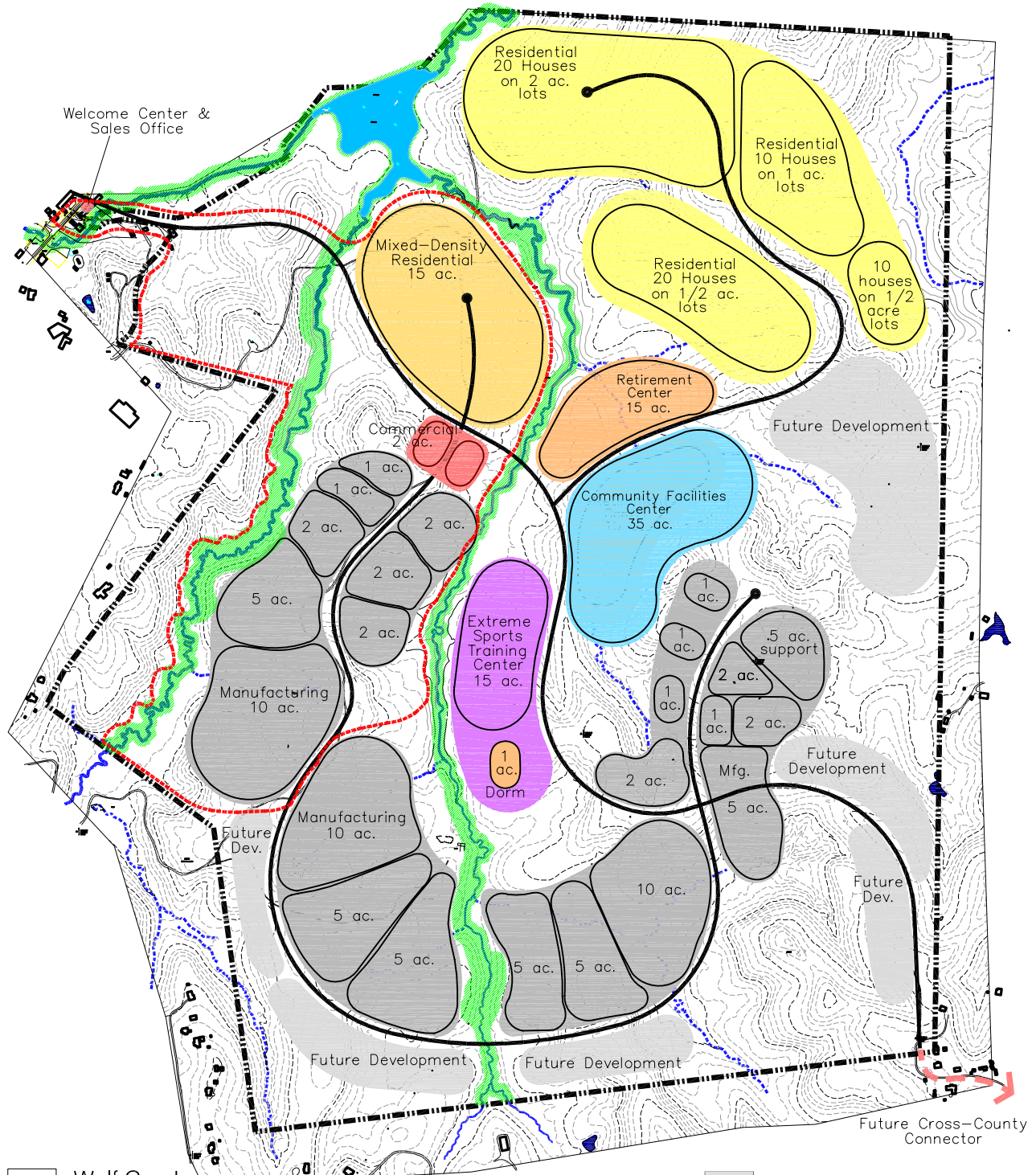














- | | | | | | |
|---|------------------------------|---|---------------------------|---|--------------------------------|
|  | Wolf Creek tributary streams |  | Single Family Residential |  | Future Development |
|  | Wetlands |  | Multi-Family Residential |  | Manufacturing / Industry |
|  | Small tributary streams |  | Mixed-Use Residential |  | Community Facilities |
|  | Stream Buffer Limits |  | Commercial |  | Extreme Sports Training Center |
|  | Proposed Phase 1 | | |  | Primary Circulation |



Figure 15:
**Wolf Creek Master Plan
 Alternative D**



- | | | |
|--|---|--|
|  Wolf Creek tributary streams |  Single Family Residential |  Future Development |
|  Wetlands |  Multi-Family Residential |  Manufacturing / Industry |
|  Small tributary streams |  Mixed-Use Residential |  Community Facilities |
|  Stream Buffer Limits |  Commercial |  Extreme Sports Training Center |
|  Proposed Phase 1 | |  Primary Circulation |



SELECTION OF PREFERRED ALTERNATIVE

Of the four alternatives, alternative A was selected as the preferred alternative. Compared to the three other alternatives, alternative A best met the project goals of land use compatibility, a community-focused plan and a high quality entry corridor experience. The location of the commercial / retail / showroom land use will provide a location that is both convenient for production, as well as visible and accessible to visitors to Wolf Creek Park. The goal of land use compatibility is met through the grouping of like uses, and separating dissimilar uses by environmental features, such as ridge tops, or by using an intermediate land use as a buffer. The concept is community-focused by providing a central location for all community activities and education opportunities, as well as providing an area for a mixed-use residential development.

The remaining seven goals are met in some capacity in alternative A, but were not used as distinguished by them since alternatives B, C and D also could be shown to achieve those goals.

Chapter 5. The Plan

F

Following the selection of the preferred alternative for the Wolf Creek Park Master Plan, a draft plan was developed and refined to provide specific details and layouts for the various land use components. This included showing potential lot divisions and locations for the different types of housing (single-family, townhouses, retirement center), possible industry / manufacturing footprints, along with the various other community / retail / recreation opportunities. An initial network of roadways and trails was also developed for the site to provide connections between the different land uses and to the main entrance. Each element of the plan was designed to function as part of a whole community. It is expected that Wolf Creek Park will serve as a progressive community model in the fact that it provides unique opportunities for both residents and visitors to enjoy multiple facets of life in one setting that is minimally intrusive on the environment. As demonstrated throughout the study, the Master Plan attempts to provide a balance between environmental, economic, community, and social needs of the region. The following sections provide more detail on the Master Plan, illustrating how it achieves these goals.

LAND USE

Low Density Residential

This component of the Wolf Creek Park development consists of single family homes, allowing for an independent lifestyle choice within the residential offerings. The section allocated for this use is located in the northeastern section of the site just off of the primary access road. This portion of Wolf Creek Park was determined to be the most suitable for low density residential development because it overlooks some of the more environmentally sensitive areas of the site. The Master Plan depicts approximately 88 lots ranging in size from 0.5 to 2 acres. Circulation through the housing development will include roadways appropriate for a residential neighborhood, with winding streets ending in



multiple cul-de-sacs. Streets are typically 20 feet wide to reduce development impacts.

High Density Residential

High density residential areas are used to provide the maximum number of units on the least possible acreage. The high density residential portion consists of a retirement center paired with fifty independent living cottages. The retirement center and cottages are located just north of the primary access road across from the community center and classrooms. A secondary road connects both the retirement center and the cottages to the primary access road. Based on a recently completed analysis, there is market support in the area for a senior living complex. With an expressed need for this type of housing, the Wolf Creek Park development provides an appropriate setting for these units since it attempts to provide a lifestyle where all activities can occur (living, working, learning, and playing) in one location.



Mixed-Use Residential

Another option for housing is a mixed-use residential area composed of townhouses. The current plan shows space for 27 townhouses located on a cul-de-sac off the primary access road. As housing needs increase, this could possibly be expanded to include additional units. It is considered a mixed-use facility due to its proximity to the other land uses in the park, including the industrial / manufacturing site located across from the entrance to the townhouses. It also has convenient access to the commercial area at the front of the site and the community facilities located in the center of the development.

MASTER PLAN

Wolf Creek Park



Manufacturing

Manufacturing / industry accounts for the largest developed land use within the site. As shown on the Master Plan, the location for the manufacturing facilities begins south of the primary access road just east of Wolf Creek. Possible facility footprints are shown on either side of this secondary road, with smaller cottage industries clustered near the beginning of the roadway. As development occurs, it is expected that it will begin in and around the cottage industry site, then continue south and eventually expand east along the border of the Wolf Creek Park site. The attraction of quality manufacturing and distribution companies to this site is key in providing good paying jobs which attract people to work and live in this development. The industrial sites should be developed in keeping with the intended vision of the community which is a place to “live, learn, work and play”. Therefore, this portion of the development should be easily accessible from all parts of the site, blending with the surrounding natural environment. The most desirable type of manufacturing / industry for this site would be outdoor recreation / extreme sports industries. These types of manufacturers would produce goods which are used in abundance in this region due to the plentiful opportunities for outdoor recreation.



Conference, Education and Community Center

Scattered throughout the site are several planned facilities that serve conference, educational, and community needs. At the entrance to the site is a welcome center for visitors and potential residents to obtain information about Wolf Creek Park, as well as recreation and employment opportunities. Adjacent to the welcome center is ample parking and an amphitheater. The amphitheater could serve multiple uses including information meetings about the site, community plays / activities, and educational opportunities for various groups. Further into the site along the primary access road is a complex of community and tourism-oriented buildings including a community center and classrooms, administration space, and a tourism and environmental learning center. This amenity is expected to be the focal point of the community, as it provides a central gathering place for residents of Wolf Creek Park from all of the housing types and is conveniently located to the retirement center to allow easy access for these residents. This area also is expected to provide a much needed service in training for tourism employees.

MASTER PLAN

Wolf Creek Park



Commercial

Also located near the entrance to the development is the retail component. It is expected that any services built as part of the site will be designed and constructed to a scale appropriate to the needs of the proposed community. The retail portion likely will be limited to small restaurants, a convenience store, and retailers for outdoor recreation equipment manufactured on site. This will provide the residents of Wolf Creek Park with a convenient way to purchase essential day-to-day items and will reduce the need to travel to other shopping centers that are off-site. It will also provide the opportunity to purchase food, beverages and other commodities for residents, workers and visitors to the site.



Extreme Sport

A secondary focus of the development is a sports complex that will be used to provide a centralized training area for the multitude of outdoor activities that are prevalent throughout the region. It is here that visitors may come to learn about different activities such as mountain biking, kayaking, rock climbing, base jumping, and other extreme sports, as well as be provided with other training opportunities. The extreme sports training center is located just off of the primary access road. Immediately south of the center is a cluster of 25 cottages that can be used as rental property or temporary housing for sports enthusiasts who come to the center. This element is key to promoting the on-site recreational amenities and provides opportunities that have been lacking in the region for people pursuing these forms of recreation. Overall, it could become a good tourism tool to draw people to Fayette County and the New River Gorge.

Land Exchange

In order to obtain the land designated for the entrance to Wolf Creek Park, an agreement was made with the adjacent land owner (Imre Szilagyi) to acquire this land in exchange for property currently held by the Fayette County Urban Renewal Authority (FCURA). It is estimated that 2.31 acres would be given to the FCURA in exchange for 67 acres located along the western edge of the Wolf Creek Park site. This arrangement is agreeable to both parties. It allows the FCURA to obtain the land that has been designated by planning and engineering counsel as the optimum location for entrance to the park, providing a more dramatic visual entry to the property, as well as a more cost-effective and environmentally sensitive way of gaining access. It also provides Mr. Szilagyi additional land that he can use to expand operations at his principal business, Appalachian Wildwaters. Several conditions were set forth on which the trade of these properties is contingent. These conditions specify the following:

- Independent property appraisals of both properties;
- Methods to resolve any differences in appraised amounts (including what happens if one property appraises higher than the other);
- Property designations for the exchanged land (B-3 Business Tourism);
- Future transfer rights of the exchanged land;
- Allowances for development of connections between the exchanged land and Wolf Creek Park;
- Support by FCURA to develop a hotel site on an adjacent tract owned by the land owner; and
- Allowances for access to the Appalachian Wildwaters gate for local EMS personnel as well as provision for future access to Wolf Creek Park though the swapped property should it be required.

Assuming these requirements are met and any necessary paperwork / forms are prepared and submitted, the proposed land swap may be completed. For full details on the land exchange, refer to the proposal developed by the FCURA for the Wolf Creek Park entrance.

INFRASTRUCTURE

Transportation

Access to Wolf Creek Park will be provided off West Virginia 16. The entrance to the park will be located approximately 330 feet north of Appalachian Drive. Appalachian Drive intersects with US 19, providing a fairly direct and convenient path for local and regional traffic traveling to and from the site. At the site entrance, a three-lane entrance is proposed, with two lanes exiting and one lane entering. The roadway network for Wolf Creek Park is expected to be built in phases based on the pace of development and market response. The first phase is expected to include construction of the primary access road up to the second creek crossing (i.e. over the unnamed tributary), including a visually attractive bridge over Adkins Branch, the first creek crossing, that is in keeping with the natural character of the development site. Secondary roads will be constructed as needed, with portions built initially to provide access to the phase one development.

Ultimately, the primary access road could become a primary arterial if it is extended east and south toward the New River. Currently, one of the main rafting put-in locations to the New River is served by county roads near Cunard. If the primary access road is extended, this would provide better east-west access to the New River rafting area. In addition, large new land areas would be opened up for potential development along the extended portions of the road.

Water

Water service will be provided by West Virginia American Water Company. To provide water service to the site, a 6-inch water main extension will be constructed off of a main line currently in place on the west side of US 19. The 6-inch extension is expected to be brought under US 19, run along the vicinity of Appalachian Drive, then turn north to the entrance of the property. Once at the site, it is expected that the 6-inch main line would be extended along the primary access road within the phase one area (up to the second creek crossing) within the right-of-way of the new road. Fire hydrants will be set to meet requirements and insurance standards. Submains will be extended with stub outs for future development. All initial development in phase one will have access to public water. Ultimately, water lines could be extended through the site and provide water to adjacent properties. Looping of infrastructure services is desired.

Sanitary Sewer

The nearest sanitary sewer line to the park is located in the City of Oak Hill. It is a private 8-inch PVC line in the vicinity of Shoney's Restaurant. This private line may be taken over by Oak Hill and extended to provide service to Wolf Creek Park. Within the development site, gravity lines would be extended up

Adkins Branch and the unnamed tributary to pick up phase one land uses. The gravity lines would be sized accordingly for the developments in the park.

A force main / lift station will be required to provide service from the sanitary sewer line in Oak Hill to Wolf Creek Park. It will likely be located where Adkins Branch and the unnamed tributary flow into Wolf Creek. Similar to the water service lines, it is expected that the new sanitary sewer line would go under US 19 and follow Appalachian Drive to where it intersects with WV 16 and then turn north to follow the roadway to the development site. Currently, the Oak Hill plant has capacity to support the first phase of development. An upgrade may be necessary upon full build-out of Wolf Creek Park. It is expected that the majority of Wolf Creek Park can be serviced with gravity lines. Some residential developments may need small lift stations to provide sanitary sewer service. All developed uses are anticipated to be provided with public sewer.

Storm Sewer

Open channels and culverts are expected to be constructed along all roadway sections within the park with the exception of the entrance section. At the entrance to the site, it is recommended that a curb and gutter section be constructed. The stormwater management plan for Wolf Creek Park should comply with the requirements set forth in the newly adopted Stormwater Management and Flood Hazard Mitigation Plan for the Wolf Creek Watershed. Within the plan are guidelines for minimizing localized flooding and impacting water quality associated with land development. The plan identifies stormwater treatment Best Management Practices (BMP) designed to filter stormwater and reduce the speed and volume of the runoff. As a result, these BMPs help to reduce stormwater pollution and protect streambanks from channel erosion and bank failure. Some examples of techniques include:

- Infiltration methods that encourage the infiltration of stormwater;
- Filtration systems that work to remove various pollutants;
- Constructed wetlands;
- Retention systems;
- Detention systems; and
- Alternative outlet designs.

It is possible that with the reconstruction of the Lochgelly intersection, 15 acres of wetlands would be removed and reconstructed as part of the wetlands located at the northern part of Wolf Creek Park. As the wetlands are an important resource, they should not only be protected, but should be integrated into the park to further blend development with nature. Stormwater management is particularly important with regard to industrial developments to ensure water

quality is maintained. As a result, any industrial developments will be required to have a National Pollutant Discharge Elimination System (NPDES) permit.

Electric, Cable, Gas, Telephone, and Communications

Main and distribution lines are all located across US 19 from Wolf Creek Park. For Wolf Creek Park, main and distribution lines will need to be run from these lines. All lines will be run underground, primarily following the roadway corridor.

OPEN SPACE

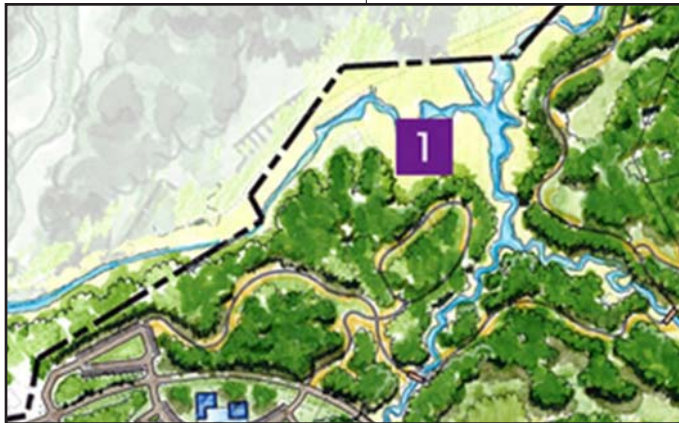
Environmental Zones

Wolf Creek Park will be developed to leave undisturbed wetlands, steep slopes, streams and stream buffers, thus providing ample areas of open space for both residents and visitors to the park.

Outdoor Classroom

This site and the surrounding environment of relatively undisturbed natural features including forestland, streams, and wetlands, provide a unique

opportunity to devote a portion of the land for an outdoor learning center. It is envisioned that the classroom will be located in the northwest section of the property at the edge of the wetlands. It will be a place to bring school groups to learn about the environment in a natural setting, but can also be used by many other visitors wanting a place to learn about the natural surroundings. Parking will be provided at the entrance to the classroom site, with the learning area accessed by a short trail that should be easily navigable by users of all ages and physical abilities. The primary purpose of this feature is to provide an informative, educational opportunity for learning about the environment.



Recreation, Camping and Trails

Provided throughout the site for both residents of the community and visitors to Wolf Creek Park are numerous trails and a rustic camping site. The trails will be for non-motorized use to include activities such as walking, hiking, and bicycle riding. As much as possible, the trail network is expected to follow the streams and use existing paths. However, some new paths will be necessary to accommodate connections between certain parts of the development. Overall, the goal is to provide a network of trails that connect to each part of the site, as well as connections between the different uses. With a well-planned trail network in place, residents and visitors will be able to use an alternate method to vehicular travel throughout the site, thereby reducing the need for vehicular travel for all trips. Additional opportunities to connect the trails in Wolf Creek Park to other parts of the surrounding community will be explored in the future and pursued if feasible.