# BROWN TOWNSHIP COMPREHENSIVE PLAN

# BROWN TOWNSHIP COMPREHENSIVE PLAN 2005

Adopted by Franklin County Commissioners
May 31, 2005

Adopted by Franklin County Rural Zoning Commission
May 19, 2005

Adopted by Franklin County Planning Commission
May 11, 2005

Adopted by Brown Township Board of Trustees
April 26, 2005

May 31, 2005

RESOLUTION NUMBER 447-05

RESOLUTION TO ADOPT THE
RECOMMENDATION OF THE
RURAL ZONING COMMISSION
OF FRANKLIN COUNTY, OHIO
CASE #ZON-05-05 - **APPROVED**

WHEREAS, the Brown Township Comprehensive Plan provides recommendations for future development patterns in the Township by identifying and assigning priority to land use and development issues and laying out a series of policies and actions that address these issues. The case is described as follows:

Case No. ZON-05-05 Brown Township has asked the Franklin County Development Department to facilitate the process of reviewing their Comprehensive Plan, which replaces the previous 1993 Comprehensive Plan and the 1998 Update. This comprehensive plan is a tool for a wide audience including technical agencies, the Brown Township Board of Trustees, the Franklin County Board of Zoning Appeals, the Franklin County Zoning Commission, the Franklin County Planning Commission and the Franklin County Board of Commissioners, in the course of decision-making in Brown Township. This document is meant to function as a guide for future development; and

WHEREAS, on May 11, 2005, the Franklin County Planning Commission recommended *conditional approval* of the 2005 Brown Township Comprehensive Plan with the condition that when offering a bonus density or open space bonus, the language should read ***may*** not ***will***; and

WHEREAS, on May 19, 2005, the Franklin County Rural Zoning Commission *conditionally approved* the 2005 Brown Township Comprehensive Plan with the condition that the section addressing drainage area calculations for stream corridors be clarified; and

WHEREAS, the conditions set by the Franklin County Planning Commission and the Franklin County Rural Zoning Commission have been met; and

Therefore, on motion of Commissioner _____, seconded by Commissioner _____;

BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF FRANKLIN COUNTY, OHIO:

Section I. That the action of the Franklin County Rural Zoning Commission be and it is hereby sustained and the application of Brown Township (Applicant), being application no. ZON-05-05 be and it hereby is approved.

Voting Aye thereon:

Mary Jo Kilroy
MARY JO KILROY, PRESIDENT

Dewey R. Stokes
DEWEY R. STOKES

Paula Brooks
PAULA BROOKS
BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, OHIO

I HEREBY CERTIFY THAT THE ABOVE IS A TRUE AND CORRECT COPY OF RESOLUTION NO. 447-05 ADOPTED BY THE FRANKLIN COUNTY BOARD OF COMMISSIONERS ON May 31, 2005
Deborah Miller Jr.
CLERK

Voting Nay thereon:

_____
MARY JO KILROY, PRESIDENT

_____
DEWEY R. STOKES

_____
PAULA BROOKS
BOARD OF COUNTY COMMISSIONERS
FRANKLIN COUNTY, OHIO

TJN/jl
c: Journal
Development Department

**RESOLUTION NO. 05-13**

**APRIL 26, 2005**

**RESOLUTION ADOPTING THE**
**BROWN TOWNSHIP COMPREHENSIVE PLAN 2005**

**PREAMBLE**

**WHEREAS**, Brown Township is located within the western portion of Franklin County, with much of the Township being within the Big Darby Creek watershed; and

**WHEREAS,** the Brown Township Board of Trustees and the Township residents have consistently advocated the need for comprehensive land use planning in order to achieve a community vision and to avoid haphazard actions which will undoubtedly occur without the benefit of a cohesive direction; and

**WHEREAS,** in 1992, Brown Township adopted its first Comprehensive Plan, with this Plan being subsequently adopted by the Franklin County Board of Commissioners; and

**WHEREAS,** the 1992 Brown Township Comprehensive Plan was later updated in 1998; and

**WHEREAS,** as part of the 1998 update, an Agricultural Preservation Committee was formed to review agricultural and open space uses within the Township; and

**WHEREAS,** in 2002, the Brown Township Agricultural Preservation Committee recommended to the Board of Trustees that the Township's existing Comprehensive Plan be updated to address various issues within the community; and

**WHEREAS,** in the spring of 2003, the Brown Township Board of Trustees initiated the update process by appointing a Steering Committee of stakeholders who were charged with updating the Brown Township Comprehensive Plan; and

**WHEREAS,** after numerous Steering Committee meetings, public open houses and community forums, the Steering Committee, with the assistance of the Franklin County Development Department, prepared and recommended to the Board of Trustees for adoption the Brown Township Comprehensive Plan 2005; and

**WHEREAS,** upon receipt of the updated Comprehensive Plan and the recommendation of the Steering Committee, the Brown Township Board of Trustees held several public meetings on the updated Plan; and

**WHEREAS,** the Board of Trustees believes that this updated Plan, as recommended for adoption, presents a collective community vision for the Township which includes as its goals the protection of the Big Darby Creek and its tributary areas, the preservation of the unique natural and environmental features located within the Township, and maintaining a high quality of life for existing and future Township residents.

**NOW, THEREFORE,** upon motion of Trustee Dever, seconded by Trustee Williams, **BE IT RESOLVED BY THE BOARD OF TRUSTEES OF BROWN TOWNSHIP, FRANKLIN COUNTY, OHIO THAT:**

Section 1. The Brown Township Board of Trustees does hereby approve and adopt the Brown Township Comprehensive Plan 2005.

Section 2. The Brown Township Board of Trustees, on behalf of its elected officials and the Township residents, hereby expresses its appreciation and thanks to the members of the Steering Committee and to the Franklin County Development Department and its staff for their service and efforts in preparing this Plan.

Section 3. The Brown Township Board of Trustees hereby authorizes forwarding the Brown Township Comprehensive Plan 2005 to the Franklin County Board of Commissioners, the Franklin County Planning Commission and the Franklin County Rural Zoning Commission for their action, and further recommends approval of the Plan by these agencies.

Section 4. This Resolution shall be in full force and effect immediately upon its adoption.

Adopted: April 26, 2005

Attest:

Rosemary Smith, Brown Township Clerk

**BROWN TOWNHIP**
**BOARD OF TRUSTEES**

Pam Sayre, Trustee

Gary Dever, Trustee

Ron Williams, Trustee

LOCAL GOV'T\BROWN\RESOLUTION(ADOPTING COMPREHENSIVE PLAN 05)\4/29/2005

## Brown Township Trustees

Pam Sayre, Chair
Gary Dever
Ron Williams

## Brown Township Steering Committee

Joe Martin, Chair
Steve Rider
Cheryl Lorson
Larry Baumgartner
Harold Jerman
Dick Stahl
Donna Palmer
Dan O'brien
Doug Maggied
Anthony Sasson
Paul Lambert

## Franklin County Development Department Staff

Tammy Noble, interim Director
Erin Prosser, Planner
Lee Brown, Planner
Renee Esses, AICP, Planner
Kusi Akuoko, GIS
Sukirti Ghosh, Project Coordinator
Marti Eckert, Graduate Intern
Ben Weiner, Graduate Intern

Special thanks to the Brown Township Steering Committee for their hard work on behalf of the Brown Township Board of Trustees and their community. Their dedication and contribution has resulted in a plan that will serve the residents of brown township well.

Photo Credit to Anthony Sasson, Jim Murtha, Martti Eckert, Erin Prosser, Joe Martin, Pam Sayre,  and Dick Stahl

Special thanks to ray Bradley and sandy andromeda for providing
information on the township's history

Special thanks to Sukirti Ghosh, Kusi Akuoko and MartTi Eckert for Plan
Layout and Graphics

Special thanks to Tim Richardson and Tracy Hatmaker for their work with the Brown TOwnship Steering Committee

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# INTRODUCTION

EXECUTIVE SUMMARY
HOW TO USE THE PLAN
PURPOSE OF THE PLAN
PLANNING PROCESS
GOALS OF THE PLAN

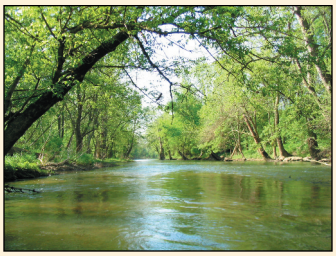
Executive Summary

# EXECUTIVE SUMMARY

In 2002, the Brown Township Agricultural Preservation Committee recommended an update to the Board of Trustees of the Township's existing comprehensive plan to address the development pressure in their community. The Board of Trustees initiated the comprehensive plan update in the spring of 2003. A steering committee of stakeholders was established to draft the updated comprehensive plan.

This plan recognizes Brown Township's strategic location in the Big Darby Creek Watershed. Protecting the Big Darby Creek and its tributaries at the level necessary to ensure the high quality of this outstanding natural resource, its diverse aquatic life, and rare species is a priority for this plan. This effort requires balancing pressure for development with natural resource protection, farmland preservation and open space conservation.

Brown Township's intent is to promote development which will adequately protect the Big Darby Creek and its tributaries. The plan supports development which protects the Big Darby Creek as an EPA Designated Outstanding State Water Resource, the Hellbranch Run at the EPA Designated Superior Quality Level, and meet the 1977 Clean Water Act Use Attainment Standards for all other tributaries. This plan encourages the preservation of the unique rural character and agricultural community present in Brown Township.



The process to write a plan to achieve the goals included a community survey conducted by the Agricultural Preservation committee and public open houses which provided important resident input into the plan recommendations.

The plan will be implemented as a decision making guide and through the execution of a recommended action plan. The plan will communicate the priorities and desires of the residents to Township officials, County boards and commissions and technical agencies as they make decisions on behalf of Brown Township. It also recommends to these bodies specific actions necessary to reach the Township goals.

The policies and recommendations in the plan are divided into three areas: environment, land use, and public facilities.

## ENVIRONMENTAL RECOMMENDATIONS

Brown Township's environmental priorities focus on resource protection. Stream corridors are the most essential environmental resource and the plan recommends buffers to preserve the stream corridors in the township. Stream buffers on waterways provide filters for pollutants, floodwater storage, sediment deposition, and maintain water temperature. These functions protect the water quality of the Big Darby Creek, the Township's most valuable natural resource.

Additional priority conservation areas enumerated for protection include wetlands, wooded areas, steep slopes, hydric soils, farmsteads, and other historical or archeological sites.

Stormwater management is highly related to the water quality and quantity of the Township's streams. Therefore the plan recommends improved and adequate stormwater management practices be employed to protect water quality and quantity.

## LAND USE RECOMMENDATIONS

Brown Township promotes conservation style development to protect the Township's natural resources and rural character. This goal is accomplished through density and development pattern recommendations.

The recommended pattern of development encourages conservation style development with clustered home sites and dedicated open space. This dedicated open space shall protect priority environmental features and maintain a rural landscape. The plan recommends that densities remain low throughout the Township. The eastern corridor of the Township is recommended for a transitional density provided the sensitive environmental features in the area are preserved and protected.

### Executive Summary

- Environmental Recommendations
- Land Use Recommendations

Executive Summary

- Land Use Recommendations
- Public Facilities Recommendations

Land use policies also recommend establishing the Darby Creek Overlay Protection Area to require a minimum lot size of five (5) acres with three hundred (300) feet of road frontage.

Limited commercial and office uses are permitted in certain areas according to the future land use map if they adhere to Brown Township design recommendations.

## PUBLIC FACILITIES RECOMMENDATIONS

The plan recommends continuing to identify appropriate alternative wastewater treatment systems and encourage emerging technologies in wastewater treatment to increase design options for conservation developments. Also, the Township supports extension of central water and sewer lines into Brown Township without requiring annexation to facilitate conservation developments that maintain rural character and protect critical natural resources.

Transportation recommendations include supporting the Franklin County 2020 Thoroughfare Plan for needed roadway changes and improvements. The Township supports collaboration with the County Engineer on all traffic studies and roadway improvements. All roadway improvements are recommended for construction that minimizes impervious surface coverage to reduce stormwater runoff. The plan recommends that all roadway improvement projects adhere to the environmental policies in the plan.

The Township and the County Technical Review Committee are encouraged to investigate the feasibility of common access drives. Additionally the plan promotes safe and appropriate bicycle and pedestrian paths networked throughout the Township. Police, parks, fire and EMS shall continue to be high priority services in Brown Township.

# HOW TO USE THE PLAN

The plan is intended to affect decisions, recommend actions and to educate the audience. The audience for this plan is residents, elected officials, technical agencies and staff, developers, land-owners, and surrounding jurisdictions.

## INTRODUCTION

Explains the planning program in Brown Township and names the steering committee, the schedule, and the goals of the plan.

## IMPLEMENTATION

Provides a synopsis of how the plan will affect decisions made by elected officials, boards and commissions, technical agencies, and surrounding jurisdictions. This section provides a summary list of the recommended actions to be taken to reach the goals of the residents.

## BACKGROUND

Provides detailed background on the planning priorities in Brown Township and surrounding areas. This chapter also contains technical background information on environment, land use and public facilities. This chapter is also intended to educate the plan audience on the existing conditions present in the Township when the recommendations were made.

## ANALYSIS

Provides analysis of the issues facing the Township in each of the three policy areas. The analysis provides the reasoning for the recommended policies of Brown Township.

## POLICIES

Contains the specific policy recommendations in each of the three areas.

### How to Use the Plan

- Introduction
- Implementation
- Background
- Analysis
- Policies

### THE PLAN PROVIDES:

Guidance to Decision Makers

An Action Plan to reach plan goals

Education to the Residents

Purpose of the Plan

## PURPOSE OF THE PLAN

The Agricultural Preservation Plan Steering Committee's interim report endorsed an approach to development in Brown Township which balances increasing development pressure with the desire to conserve open space and agriculture. Based upon the interim report and their own discussions, the Board of Trustees broadened the committee's scope to include a comprehensive review of the plan's land use policies. This decision, in turn, led to the conclusion to update the environmental and infrastructure policies.

Based on review of the Agricultural Preservation Plan Steering Committee's work, the Township Trustees agreed on the purpose of the plan:

- Formulate an updated land use strategy for Brown Township within the context of open space and conservation themes included in the interim report and in previous planning documents.
- Identify the tools necessary for making conservation developments feasible.
- Formulate design guidelines based on both environmental and community character concerns.

The Comprehensive Plan Update Committee further specified its mission as follows:

- Motivate and influence appropriate people and agencies toward implementing the recommendations.
- Educate the public about conservation development and non-residential land uses and the need for such planning.
- Establish development policies, processes and standards to facilitate conservation subdivisions independent of political boundaries.
- Allocate areas of the Township to specific land uses.

The formation of an updated comprehensive plan for Brown Township within the context of open space, conservation themes and other land use objectives is the result of a broad review and study

of the issues and related conditions. It has relied heavily on the previous stages of the Township's planning program, especially the work of the Agriculture Preservation Committee. The result is a complete update of Brown Township's comprehensive plan and not an amendment to the previous plan.

## THE PLANNING PROCESS

The Agricultural Preservation Committee suggested employing a broad steering committee for the comprehensive plan update. This broadened committee included representatives from the development community, neighboring municipalities, and other agencies in addition to a principal group of Brown Township residents. The following persons who served on the 2005 Comprehensive Plan Update Committee as members were:

Committee Members
Joe Martin, Chair

| | |
|---|---|
| Dan O'Brien | Harold Jerman |
| Doug Maggied | Cheryl Lorson |
| Joe Martin | Anthony Sasson |
| Steve Rider | Dick Stahl |
| Ron Williams | Donna Palmer |
| Paul Lambert | Larry Baumgartner |

Municipal Liaisons:
John Talentino, City of Hilliard
Elizabeth A. Clark, AICP, City of Columbus

### PLAN SCHEDULE

| | |
|---|---|
| March 4, 2003 | Committee Work Session: Orientation & Goals |
| April 8, 2003 | Committee Work Session: Data Review and Environmental Policy Directions |
| April 29, 2003 | Public Open House: Data and Directions Discussion |
| May 13, 2003 | Committee Work Session Land Use Policy Discussion and Directions |

The Planning Process

- Plan Schedule

THE PROJECT INVOLVED THE FOLLOWING BASIC STAGES:

1. Review of data and identification of general policy directions.
2. Analysis and policy formulation through preparation and review of three working papers.
3. Preparation and review of the plan document.

## The Planning Process

- Plan Schedule

| | |
|---|---|
| June 17, 2003 | Committee Work Session: Review Environmental Policy Framework and Discuss Public Facilities |
| July 22, 2003 | Review Land Use Policy Framework and Public Facilities Policy Framework |
| July 29, 2003 | Public Open House: Working Paper Policy Recommendation Review |
| September. 2, 2003 | Committee First Review: Full Update Draft |
| September 23, 2003 | Committee Second Review: Full Update Draft |
| October. 8, 2003 | Public Open House: Review Plan Update |
| November, 2003 | Draft Forwarded to the Trustees. It was sent back to the Steering Committee |
| August 24, 2004 | Committee reconvened |
| September 14, 2004 | Public Facilities analysis review |
| September 28, 2004 | Public facilities policies review |
| October 5, 2004 | Land Use analysis review |
| October 26, 2004 | Land Use policies review |
| November 9, 2004 | Environment analysis review |
| November 23, 2004 | Environment policies review |
| December 7, 2004 | Implementation Review |
| January 7, 2005 | Submission of draft plan to Steering Committee |
| January 18, 2005 | Review of draft plan |
| February 1, 2005 | Public Open House: Review Plan Update |
| February 8, 2005 | Steering Committee review of public comments |
| February 15, 2005 | Steering Committee review |
| March 8, 2005 | Steering Committee review |
| March 15, 2005 | Steering Committee review |

March 22, 2005 Trustees Public Hearing

Primary and Secondary Goals

## PRIMARY AND SECONDARY GOALS

The primary goal for the 2005 comprehensive plan is as follows:

*It is the goal of Brown Township to support and encourage the protection of the Big Darby Creek watershed and the protection of the rural lifestyle found within the Township. This goal requires the balancing of homeowner desires for large lot, single family residents with natural resource protection, farmland conservation and open space conservation.*

The secondary goals for the 2005 Brown Township plan are:

- Brown Township should protect and preserve the integrity of the Big Darby Creek. It is one of Ohio's most valuable resources, a designated state and national scenic river, home to over 100 recorded fish species and 43 recorded mussel species, among the top streams in biological quality in the midwest, classified as an 'exceptional warm water habitat' by the OEPA and protected as an outstanding state water resource, and designated as a "Last Great Place in the Western Hemisphere" by the Nature Conservancy.

- Brown Township should maintain a rural residential lifestyle that provides for protection of natural resources and open space.

- Brown Township should ensure all forms of agriculture, including animal husbandry, continue to play a role in the Township's lifestyle and economy, partly through conservation of productive farmland.

- Brown Township should protect and preserve open space as an important component of the Township's physical beauty and in maintaining a positive living environment.

## Primary and Secondary Goals

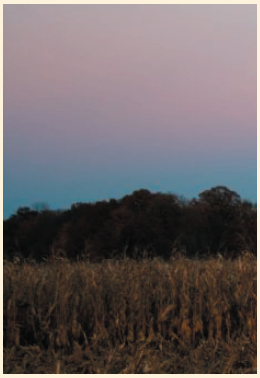
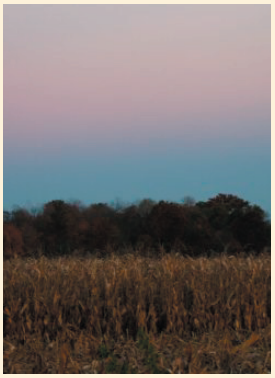
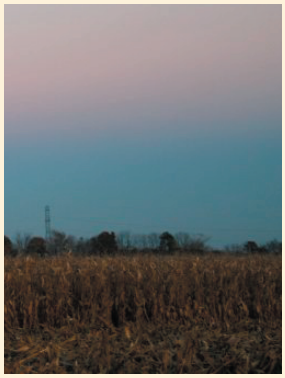
- Brown Township should encourage the extension of central utilities into the Township without municipal annexation in order to better serve conservation development areas.

- Brown Township should continue to protect the Big Darby Creek, to support protection efforts throughout the Big Darby watershed and to discourage adverse impacts of further urbanization in the watershed.

- Brown Township should discourage all industrial uses within the Township.

- Brown Township should oppose the creation of any excavation and quarry operations within the Township, because such facilities operate in an industrial manner that impacts the natural environment, land use and residents.

- Brown Township should oppose on-stream dams and reservoirs, upground reservoirs and landfills as incompatible with the physical and land use character of the Township.

# IMPLEMENTATION

DECISION MAKING GUIDE
ACTION PLAN

Decision-Making Guide

THE PLAN IS IMPLEMENTED THROUGH:

A Decision Making Guide
&
An Action Plan

This document is implemented through two mechanisms. One is to provide decision makers with the priorities and goals of the Brown Township residents for their future. Secondly it provides an action plan to reach the goals.

This section provides the two mechanisms in summary form intended for plan users to reference. The remainder of the plan provides the background, analysis, and policies in detail.

## DECISION-MAKING GUIDE

Franklin County boards and commissions, Brown Township Board of Trustees, other applicable technical agencies and decision making bodies will use the plan as a guide in collaborative planning initiatives and decision-making processes.

Specifically the plan should guide decisions as follows:

1. Use the policies in the plan during multi-jurisdictional planning initiatives including the Big Darby Accord to include Brown Township's priorities for the natural environmental features and future land use densities and patterns.

2. Use the policies in this plan as a basis for coordinating with neighboring jurisdictions to establish conservation development standards for land that is annexed into a municipality.

3. Use the policies in this plan as a basis for discussing stormwater management education issues (as per the National Pollution Discharge Elimination System (NPDES) Phase II compliance plan) with the Franklin Soil and Water Conservation District and surrounding jurisdictions.

4. Use the policies in this plan to support access without annexation to central services to facilitate appropriate development in keeping with the policies of this plan.

5. Use the policies in this plan for discussion with the Franklin County Engineer's Office to consider changes to road standards and to support county road improvement policies.

6. Use the policies in this plan to support changes in regional bicycle route policies that designate appropriate Township roads for bicycle routes.

7. Use the policies in this plan to promote the availability and utilization of appropriate and acceptable alternative wastewater treatment technologies.

8. Use the policies in this plan as an ongoing resource for making decisions on conditional use, variance, rezoning requests and applications for subdivisions and requests for other county and state permits.

9. Use the policies in this plan to protect the first and second tier environmental conservation areas.

Decision-Making Guide

Execution of the Action Plan

- Enact Conservation Development Zoning Amendments

## EXECUTION OF THE ACTION PLAN

The following are the necessary actions recommended to reach the goals of the plan:

### ENACT CONSERVATION DEVELOPMENT ZONING AMENDMENTS

The plan recommends necessary revisions to the Franklin County Zoning Resolution to facilitate conservation developments with preserved open space to protect natural resources and the rural character of Brown Township.

The conservation development district amendment to the Franklin County Zoning Resolution shall be a planned unit development. The plan recommends Franklin County implement the Planned Unit Development (PUD) through provisions that allow a conservation development overlay be "floated" over Brown Township

### Execution of the Action Plan

- Enact Conservation Development Zoning Amendments

per Ohio Revised Code Section 303.022 (c). Conservation development options shall be pursued at both rural and transitional densities. This overlay will apply to all undeveloped areas of the Township except the proposed Darby Creek Conservation Overlay District.

Once this overlay is in place, conservation development plans will be approved through the Franklin County rezoning review process. Since this approval will require specific development layout, it shall be coordinated with the County's Technical Review Committee to ensure compliance with county subdivision regulations.

Finally, Brown Township should encourage the City of Hilliard and the City of Columbus to incorporate conservation development zoning based on the outlines contained in this document in their ordinances.

**Please see map on page 90 for density locations

## Low Density Rural Residential Outline

Minimum Development Tract: 20 acres

Permitted Land Uses: Detached single-family dwelling units, accessory uses as permitted in the underlying Rural zoning district.

Maximum Density: 0.2 – 0.4 net dwelling units/acre depending upon ability to provide acceptable wastewater treatment as per Ohio Environmental Protection Agency and the Franklin County Board of Health.

Open Space Ratio: At least sixty percent (60%) of the development tract after floodplains and rights- of-way are removed.

Open Space Use: As approved based on conservation area analysis of the site including natural areas, passive recreation, agriculture (including horticulture, wholesale nurseries, raising of crops, pasture lands and related buildings), limited storm water management, and, if approved, certain wastewater treatment facilities such as leachbeds.

Open Space Ownership: Approved homeowners associations, acceptable public or private management agency if approved in the development review process, private ownership in conjunction with approved agriculture or conservation easements may be permitted.

Open Space Identification: Designed to preserve Brown Township's open spaces, primarily the conservation areas identified in this plan and to minimize the development's impact on the rural landscape.

Open Space Configuration: Unified so that no open space counted toward the minimum requirement is narrower than the development's average lot width in any direction.

Identified before the lot and street layout so that the development is organized around the open space (as opposed to the open space being organized around the development).

Process Notes: Franklin County Commissioners establish Township-wide PUD standards for the township allowing administrative review, overseen by the RZC, including "walk-about" with the developer and the Technical Review Committee and both sketch plan and final development plan consultations (as per ORC 303.022 (c)).

## Residential Transitional Density District Outline

Minimum Development Tract: 15 acres

Permitted Land Uses: Detached single family dwelling units, attached single family dwelling units.

Density: Maximum of 1.0 net dwelling unit per acre.

Open Space Ratio: At least fifty percent (50%) of the development tract after removal of floodplains and ROW.

Open Space Use: Approved open space in the form of passive recreation areas and natural areas based on conservation area analysis of the site including natural areas, passive recreation, and limited stormwater management.

Open Space Ownership: Approved homeowners associations, acceptable public or private management agency

### Execution of the Action Plan

- Enact Conservation Development Zoning Amendments

### Execution of the Action Plan

- Enact Conservation Development Zoning Amendments
- Flexible Density Allowance

### FLEXIBLE DENSITY CALCULATION EXAMPLE

| | |
|---|---|
| Original Tract | 100 Acres |
| Floodplain | 10 Acres |
| Right of Way | 10 Acres |
| Remaining Acreage for Density Calc. | 80 Acres |

Allowable Density 1unit/acre
50% Open Space Requirement

Without Bonus:

80 allowable homesites with 50 acres reserved in open space not including the 10 acres in the floodplain.

With Bonus:

50% of the 20 acres removed for floodplain and ROW is included for density calculation. The developer can recalculate the allowable homesites from 90 acres. Adding 10 additional homesites.

Additionally, 5 acres or 50% of the removed floodplain can count towards the open space requirement.

if approved in the development review process, private ownership in conjunction with approved agriculture or conservation easements may be permitted.

Open Space Identification: Designed to preserve the conservation areas identified in this plan and to minimize the development's impact on the rural landscape.

Open Space Configuration: Unified so that no open space counted toward the minimum requirement is narrower than the development's average lot width in any direction. Identified before the lot and street layout (lots should be designed around open space, open space should not be designed around lots).

Process Notes: Rural tracts rezoned to Residential Transitional Density District with review including "walk-about" with the developer and the Technical Review Committee and both sketch plan and final development plan consultations.

The Township will work with appropriate county agencies to address ownership and maintenance of common open space. Open space may be proposed to be owned by an association, the township or similar governmental entity, a land trust, or other conservation organization recognized by the governmental entity or may remain in private ownership. The ownership of the open space shall be specified in the development plan and shall be subject to the approval of the governmental authority.

## FLEXIBLE DENSITY ALLOWANCE

The standard application of a conservation development in this plan requires the developer to base the available units and necessary open space percentage on the net acreage after the floodplain and right-of-way are removed. The use of net acreage is a tool for the Township to ensure good open space preservation and quality conservation development design. However should the development meet the goals of Brown Township they may seek a flexible density allowance, giving them additional homesite and more flexible open space siting.

The plan provides an opportunity for flexibility from the net acreage requirement if the developer can achieve specific goals. A density bonus is provided by allowing density to be calculated based upon a 50% reduction in floodplain and right of way areas. An open space is provided bonus allowing 50% of the previously removed floodplain to be applied towards the open space requirement. These bonuses are provided if the goals enumerated below are achieved. The developer could then recalculate the allowable density and refigure the open space requirement. This option would be negotiated during the conservation overlay zoning review process.

Execution of the Action Plan

- Flexible Density Allowance

The design goals for conservation development which allows for a bonus density and an open space bonus in Brown Township are as follows:

1. Open space is designed as part of a network with existing or potential (based upon conservation area designations) open space on neighboring parcels; and

2. Water quality-focused stormwater measures that cause runoff to infiltrate into the ground on-site are instituted to the degree possible, while ensuring that pollutants are filtered out of the remaining runoff using the most suitable vegetation. The Franklin Soil and Water Conservation District shall certify these as exceeding minimum requirements for meeting Darby watershed water quality goals of this plan; or

3. Stormwater management tools including retention\detention ponds are not to be located within any floodplain counted as open space.

4. Measures and amenities determined to meet Township planning objectives in a similar fashion, and to a similar degree, as those listed above, in items 1 and 2.

5. The required open space and maintenance plan includes funding with a sufficient reserve for maintenance, such as an endowment, provided by the applicant; and

6. Development of the property includes an approved stream reclamation project and/or provision of properly designed bicycle or pedestrian paths; or

7. Measures and amenities determined to meet township planning

Execution of the Action Plan

- Establish Darby Creek Conservation Zoning Overlay District
- Consider Adopting a Township Zoning Resolution & Zoning Administration
- Affect the Revisions of Franklin County Subdivision Regulations

objectives in a similar fashion, and to a similar degree, as those listed in items 4 and 5.

## CHANGES TO THE RURAL DISTRICT UNDER FRANKLIN COUNTY ZONING

In addition to the conservation development overlay, the Township recommends amending the Franklin County Rural District to straight five (5) acre lots when the land is not developed in a conservation style. Currently, the Rural District in the Franklin County Zoning Resolution permits four lots of less than five acres, but not less than two-and-one-half acres, within the boundaries of any parcel that existed as of 1966. The remaining parcel, including residuals of parcel tracts, must be at least five acres in size.

## ESTABLISH DARBY CREEK CONSERVATION ZONING OVERLAY DISTRICT

Darby Creek Corridor Overlay (DCCO) Zoning District shall be created and adopted by Franklin County to ensure that new single-family development be on lots of at least five (5) acres (in all cases) and have at least three hundred (300) feet of road frontage. This area is shown on the future land use map. This area will be reserved for undeveloped tracts and large lot development.

## CONSIDER ADOPTING A TOWNSHIP ZONING RESOLUTION AND ZONING ADMINISTRATION

The Brown Township Board of Trustees will consider the appointment of a zoning committee for the purpose of determining the desirability of adopting and implementing Township zoning. Township zoning would allow Brown Township greater control over the zoning resolution contents and administration, thus simplifying and streamlining implementation of this plan. Such an approach would also allow zoning requirements and procedures that are more closely suited to Brown Township issues and priorities.

## AFFECT THE REVISIONS OF FRANKLIN COUNTY SUBDIVISION REGULATIONS

The Franklin County Subdivision Regulations provides regulations and standards for the division and improvement of land. The policies adopted by the Township as part of this plan recommend careful planning to address stormwater impacts to stream protection. Additionally, the policies of the plan recommend recognizing the development limitations existing in Brown Township including flat topography, poor drainage, and the presence of hydric soils.

- Revise the subdivision regulations to recognize that major or minor subdivisions requiring easements for drainage or access should be platted according to the requirements of the subdivision regulations. In order to facilitate access management concern for small scale developments, work with the Technical Review Committee to create and implement a common access drive standard that allows a limited number of lots to be accessed by a private street built to less stringent standards than public streets though still acceptable from a public safety perspective.

- Provide a simplified platting process, which allows plats including fewer than five lots, not including streets (but possibly including common access drives) and not requiring a variance, to be reviewed as a combined preliminary / final plat. This review would be limited to vegetation setbacks (discussed below), drainage and access issues. This review procedure would often be used in conjunction with the common access drive subdivision concept discussed above.

- Change the review process so that the Franklin County Development Department, with assistance from other technical review agencies, determines the need for review based upon the presence of hydric soils and abutting arterial thoroughfares at the site.

### Execution of the Action Plan

- Affect the Revisions of Franklin County Subdivision Regulations
- Affect Wastewater Treatment Regulatory Revisions

Execution of the Action Plan

- Affect Wastewater Treatment Regulatory Revisions

- Include the stream buffer recommendations of this plan in the revisions of the Franklin County Subdivision Regulations.

## AFFECT WASTEWATER TREATMENT REGULATORY REVISIONS

Rural development with safe and efficient wastewater treatment is an important theme of this plan. The Township encourages emerging technologies for rural, non-discharge wastewater treatment systems and the responsible use of appropriate small, centralized community wastewater treatment systems as two initiatives in which the Township should participate.

These strategies for providing this important public facility in rural areas recognizes the benefit of both low densities and responsible wastewater treatment technology to maintain water quality in the Darby watershed. These systems would be subject to regulation and administration by the Franklin County Board of Health, Ohio Environmental Protection Agency, and all other applicable agencies.

Brown Township will work closely with officials of the Franklin County Board of Health and other relevant agencies to support efforts to identify emerging wastewater treatment technologies that have an established record of performance. Such technologies include approaches that employ devices such as mounds and modules containing organic or synthetic filtering media.

The Township shall work to facilitate the use of responsible and appropriate alternative wastewater treatment systems in rural areas as a tool for creating rural conservation developments. These systems would be subject to regulation and administration by the Franklin County Board of Health, Ohio Environmental Protection Agency, Ohio Department of Health or any other applicable agencies. Questions of ownership and maintenance questions must be addressed before approval.

The following steps should be followed to support alternative wastewater treatment in Brown Township:

1. Treatment Technologies: Alternative wastewater treatment technology must be approved for use in Franklin County by all applicable state and county agencies.

2. Maintenance Entity: It is essential that both the Township and the regulating state and county agencies designate an on-going responsible entity for management of the system. Such entities have included certain government agencies, private sewer and water utilities and utility co-ops. The Township should work to identify such an entity with which to cooperate in establishing a dependable mechanism for managing these systems.

3. Central Scioto Water Quality Management Plan Update (208 Plan) Opt-Out: Small community wastewater treatment systems may not be used until the criteria to be formulated by the External Advisory Group mandated in the Environmentally Sensitive Development Area portion of the 208 Plan are approved by the Ohio Environmental Protection Agency. At that time, they may only be used if the Township successfully completes an opt-out procedure outlined in the plan. This review will be water quality focused and be contingent on a reliable ownership and management entity.

Execution of the Action Plan

- Affect Wastewater Treatment Regulatory Revisions
- Improve Stormwater Management Standards

## IMPROVE STORMWATER MANAGEMENT STANDARDS

Stormwater related policies shall be implemented to protect surface water quality through a strategy that includes three base elements: making desirable revisions to the development review and approval process, lessening impervious surfaces and establishing open space development patterns.

This leg of the Township's stormwater management strategy will involve cooperation with county wide agencies to implement recommendations in establishing stormwater management policies and manuals. These efforts involve support for the County's Na-

**Execution of the Action Plan**

- Improve Stormwater Management Standards

tional Pollutant Discharge Elimination System (NPDES) Phase II recommendations related to extended review of development in terms of stormwater management and erosion and sediment control policies. They also include working with the Franklin Soil and Water Conservation District and other appropriate agencies to establish a protocol for identifying stormwater management measures that are sensitive to water quality.

1. NPDES Phase II and Development Review Thresholds

The Township shall ensure that County agencies recognize the need to implement the NPDES Phase II compliance plan as they work to improve review systems for zoning cases, subdivisions and improvement projects. Among other concerns, these efforts will ensure that stormwater and sediment and erosion plans are reviewed for all developments involving the disturbance of more than one acre, as required under NPDES Phase II requirements. This effort will allow review of grading and earth disturbing activities on sites that have had no review to date.

2. Management Techniques: Dialogue with the Franklin County Technical Review Committee

Franklin County Technical Review Committee shall establish a protocol that will assure the Township that the most water-quality sensitive techniques are used as part of stormwater systems for new developments.

This plan recognizes the "Rainwater and Land Development Handbook", "Darby Task Force Stormwater Strategies and Standards", and the "Environmentally Sensitive Development Area External Advisory Group Recommendations" as the most acceptable resources for identifying such measures. The Township encour-

ages the implementation of the most environmentally protective standards as recommended by these technical resources.

## ESTABLISH OPEN SPACE SITING CRITERIA

Open space conservation area criteria shall preserve rural character, protect the tier one and tier two conservation areas, and reduce impervious surface coverage which reduces stormwater runoff.

1. Conservation Development Zoning and Stormwater Quality

The Franklin County Zoning Resolution amendments related to conservation development will include open space criteria designed to protect water quality-related features as part of open space, as well as reduce impervious surfaces through a more compact design. Allowance may be made for pervious surfaces that meet certain criteria for absorption.

2. Low Density Open Space Development as a strategy for ensuring high water quality in the Darby Watershed

Brown Township will emphasize the water quality benefits resulting from low density conservation developments with preserved open space with local, state and regional entities. These will include the Franklin County Planning Commission, the Big Darby Accord Planning Process and officials at the Ohio Environmental Protection Agency and other public entities concerning the use of small community wastewater treatment systems.

Connecting the open spaces of adjoining developments will facilitate development of a community-wide open space network. By following the defined conservation areas that often transcend

### Execution of the Action Plan

- Establish Open Space Siting Criteria
- Establish Design Guidelines for Non-Residential Development

**Execution of the Action Plan**

- Establish Design Guidelines for Non-Residential Development
- 208 Water Management Plan
- Revisitation of the Comprehensive Plan

parcel boundaries, developments can feature a continuous open space area. This strategy of following natural features coupled with requirements and incentives for coordinating open space, will enhance the community-wide open space network.

## ESTABLISH DESIGN GUIDELINES FOR NON-RESIDENTIAL DEVELOPMENT

Brown Township will work with the appropriate County agencies to develop design guidelines for non-residential land uses called for in this plan. These guidelines will focus on providing a compact, unified layout, as opposed to a linear strip commercial layout. The character of these developments must be in keeping with the rural, agricultural character of Brown Township.

These guidelines should also provide architectural and stormwater management standards that protect the aesthetic and natural environment, including first and second tier conservation areas, where these developments take place.

## 208 WATER QUALITY MANAGEMENT PLAN

The Township Trustees will consider establishing a committee to study the OEPA's Central Scioto River Basin and Blacklick Creek 208 Water Quality Management Plan and its effects on development in Brown Township.

## REVISITATION OF THE COMPREHENSIVE PLAN

Brown Township shall revisit the comprehensive plan upon any significant change of events including recommendations from the Big Darby Accord. Otherwise no longer than five years from the date of its adoption.

# BACKGROUND

HISTORY
DEMOGRAPHICS
PREVIOUS BROWN TOWNSHIP PLANS
REGIONAL CONTEXT
SURROUNDING PLANS
EXISTING CONDITIONS

Background

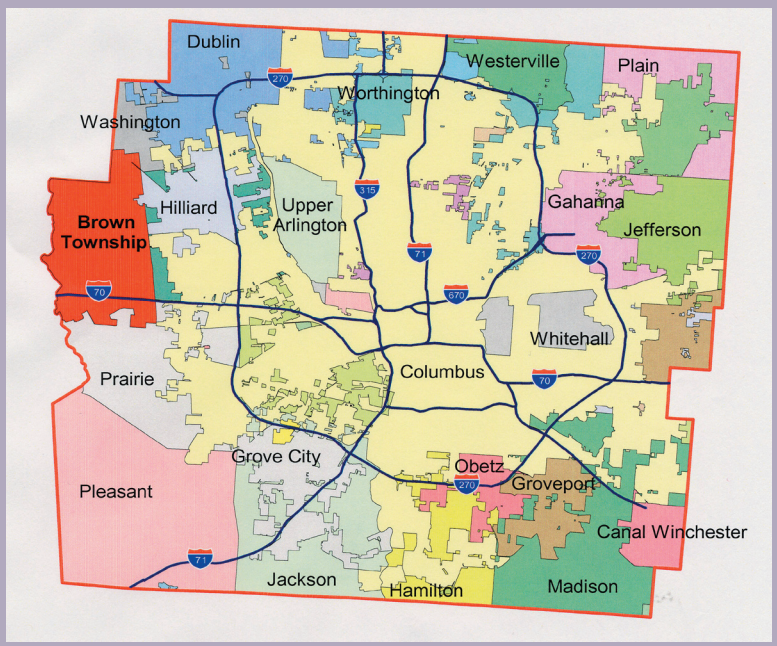
# BACKGROUND

This section of the plan is intended to provide information on the planning program in Brown Township that has led to the 2005 Comprehensive Plan and to provide background information on the environment, land use and public facilities in Brown Township and the surrounding region.

Brown Township's previous planning efforts began with a comprehensive plan originally adopted in 1992. In 1998 the Township amended the 1992 plan to update the content and policies. In 2002, the Brown Township Trustees established the Agricultural Preservation Committee. This effort yielded a community survey and made the recommendation for the 2005 Comprehensive Plan.

Brown Township is located in the far western corridor of Franklin County bordered on the north by Washington Township, Hilliard

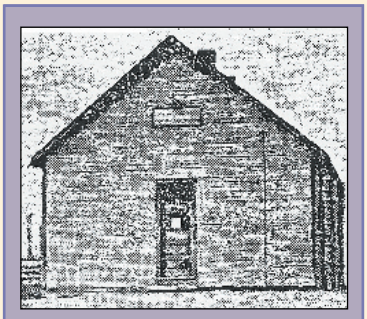
PLANNING AREA
Brown township
Franklin County, Ohio



and Columbus are to the east, Madison County is to the west and Prairie Township is to the south. Brown Township is home to a portion of the Big Darby Creek, a national and state scenic river. The land use is predominantly rural residential throughout the Township. Since the Township does not currently have access to centralized sewer and water; development continues to be served by on site septic systems and wells.

Background

Brown Township History



Original Brown Township Hall

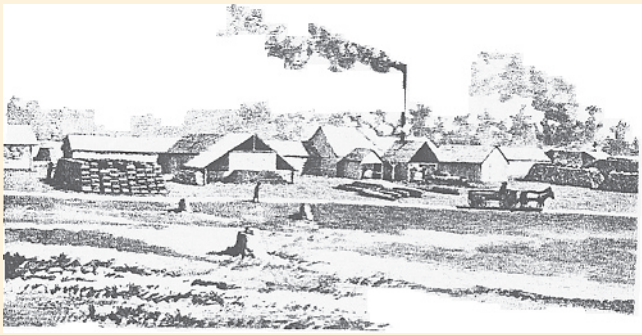
## HISTORY

Brown Township evolved as a prime agricultural territory. It remains so today as evidenced by its scenic rural character. Brown Township has a rich and varied history extending back thousands of years. Before the arrival of the early settlers in 1808, the natives found this area an excellent hunting area rich in game, especially along the Big Darby Creek, which the local natives called Crawfish Creek. During the pioneer era there were more Haudenosaunee living in the area than European settlers. The famous Shawanese leader Tecumseh frequented the area, and Jonathan Alder, who was once a captive of the natives, lived most of his life along Big Darby Creek in and near Brown Township.

The petition to create Brown Township was submitted to the Franklin County Commissioners on March 1, 1830. Two days later, on March 3rd, 1830 the eighteenth of Franklin County's nineteen townships was organized. Brown Township, being the last land to be settled in Franklin County, was created from parts of Norwich, Prairie, and Washington Townships and is the smallest township in the county. The name "Brown" was for Sylvester Brown, a merchant who had opened the first store in the Township. Many of the early settlers were natives of Virginia, settling on land granted to them in the Virginia Military District. This was an area reserved for former Virginia soldiers. All of Brown Township is located within this reserve. The Welsh largely settled in the eastern portion of the Township. At that time a major portion of north central Brown Township was a timbered marsh. Settlements first occurred along Big Darby Creek and then moved westward.

## Brown Township History

Henry Francis homestead



Appledale Tile Works 1880

Big Darby Creek was the source of energy for the first sawmill in Brown Township built by Isaac Hayden in 1837 about halfway between the lines of Roberts Road and Morris Road.

The second mill was powered by a steam engine and was used to cut timbers for the Columbus, Piqua and Indiana Railroad that John Reed Hilliard constructed through the Township. George Jennings later operated a sawmill at the ravine near the northeast corner of Roberts Road and Hubbard Road after he purchased the Union Seminary property.

Solomon Jackson Wooley owned property near the center of the area bordered by Davis, Alton & Darby Creek, Walker and Scioto & Darby Creek Roads with frontage on Scioto & Darby Creek, Davis, and Walker Roads. This land was in poor condition and unusable when he purchased it. After years of effort, Wooley

Brown Township History

drained the area and created one of the most productive farms in Franklin County. A vegetarian, Wooley first established his farm with a grape vineyard and an apple and peach orchard.

He needed so many tiles to drain the water from his land that he purchased a small shop to make his own. After discovering a great need for drain tile in his neighborhood, Wooley entered the brick and field drain tile manufacturing business. He founded the Appledale Tile Works in 1866, and by 1880 this factory employed a staff of 12 men. The driveway to his property, off Scioto & Darby Creek Road near Langton Road, passed through his 40-acre apple and peach orchard. This may be why he chose the name Appledale. The large factory powered by steam engines was located near the center of his property and south of his home. To meet an ever-increasing demand for tile in this flatland area, Wooley used the locally available slate- colored fire clay from his farm and others in the area.

A prominent black abolitionist, writer, orator, and lecturer, Frances Ellen Watkins, also known as The Bronze Muse, was one of the teachers at the Seminary of the African Methodist Episcopal Church in Brown Township. Watkins became its first female teacher in 1850 when she traveled from Baltimore, Maryland to take this position. While teaching in Brown Township, she published the first of her many books. This 1851 book of prose was titled Forest Leaves. In 1852, while teaching a class of 53 active children, she wrote a letter to her friend William Still, who quoted her many times in his book, The Underground Railroad.

The Union Seminary of the African Methodist Episcopal Church settlement was located on the north side of Roberts Road. Today Amity Road, Interstate 70, and Hubbard Road all cut through the area where it stood. The property extended west to Big Darby Creek.

Only two towns by name exist in Brown Township and one of these, Mudsock, is disappearing. Mudsock is located at the intersection of Roberts Road and Alton & Darby Creek Road. This town is partly in Brown Township and partly in Norwich Township. The other town is Hayden, located where the Columbus,

## Brown Township History

Brown Township's own Railroad Station in 1895. On the platform left to right is Frank Winterringer; Von Schalle, Harry Barnett and Eli Latham.

Piqua and Indiana Railroad once crossed Hayden Run Road. In earlier times this town was called West Hayden.

Hayden was comprised of a store, a Baptist Church, the West Hayden Post Office, and the only railroad station in Brown Township. The name Hayden is taken from the Hayden family. At its peak, the population of this town was around 25. The Hayden Store and west Hayden Post Office are long gone.

The Baptist congregation relocated their church because of the close proximity to the railroad. The then-busy railroad, with trains on two sets of tracks and three sets next to the church traveling in both directions, frequently interrupted church services.

At one time there was a park in the Township. It was privately owned and operated by a farmer, Robert Reece and located west of Amity Road midway between Carter and Scioto & Darby Creek Roads. This former quarry had a swimming hole in Big Darby Creek and picnic grounds.

# DEMOGRAPHIC INFORMATION

Demographics

## POPULATION

The population of Brown Township according to the 2000 Census was 2031. Brown Township residents' average age is 40.3 years old. 27.5% of the population has a high school diploma, 20.1% have a college degree and 10.8% have a graduate or professional degree. 97.1% of the population is white, 1.1% is Asian and 0.4% is black. Residents listed their ethnicity as German at 39.2%, Irish at 15.5% and English at 14.0%.

There are 692 households in Brown Township with 40.8% being families with children at home under the age of 18. 69.3% of the population is married. 72.6% of the residents are over 18 years old.

## HOUSING

There are 720 housing units in Brown Township according to the 2000 census. All of those are single unit detached structures. 16.7% of the housing was built before 1939 and 22% was built after 1990. The median home value in Brown Township is $189,900. 57.5% of the units are valued less than $200,000.

## ECONOMICS

The median household income in Brown Township is $68,603 per year. 78% of residents 16 years old and older are in the labor force. 41.2% are in management, professional, and related occupations,

Demographics

Previous Brown Township Plans

- The 1992 Plan

14.6% are in service occupations and 26.9% are in sales and office occupations. The most common industries are professional, scientific, management, administrative and waste management with 15.4% of residents and 15.2% in educational, health and social services industries. The average commute time for Brown Township residents is 26.7 minutes.

## PREVIOUS BROWN TOWNSHIP PLANS

Brown Township has pursued an active planning program since adoption of its 1992 Comprehensive Plan. This ongoing process has been directed toward maintaining a public dialogue on land use issues and focusing on action-based solutions. Hallmarks of this continuing effort are extensive resident surveys, examination of land use development tools and identification of resource conservation areas. These efforts have resulted in the following documents:

-The 1992 Comprehensive Plan
-The 1998 Comprehensive Plan Update and
-The 2002 Agricultural Preservation Committee Report.

Each of the previous plans have seen Brown Township's planning efforts become more specific in regard to tools and strategies for accomplishing the goals and objectives established in the 1992 Plan. This 2005 update is intended to build upon the 1998 Update and the 2002 Agricultural Committee Report by providing a comprehensive framework that emphasizes and encourages appropriate conservation development techniques in the Township.

### THE 1992 COMPREHENSIVE PLAN

The 1992 plan contained analysis, goals, objectives and recommendations related to land use, natural environment and public facilities and services. The thrust of this document was to preserve the rural character and natural environment of Brown Township, while guiding a limited amount of development in patterns supportive of this overall goal. That plan recommended large lot residential development to achieve this goal.

## ENVIRONMENT

The 1992 Comprehensive Plan defined nine categories of natural environmental features in Brown Township: geology, soils, topography, prime agricultural soils, groundwater, tributary system, woodlands, wetlands and wildlife. The plan included four objectives and related actions to address the nine categories of natural features.

The plan called for policies that would continue to ensure that building sites, including wastewater systems be appropriately located based on soils, topography, drainage, wetlands and woodlands and other factors. It also sought to protect environmentally sensitive areas, such as floodplains and woodlands, from adverse land use changes and impacts. In addition, the plan aimed to protect and preserve agriculture as a viable land use in Brown Township.

Finally, the Township wanted to continue and expand efforts to protect the Big Darby Creek from the adverse impacts of development. To achieve this goal, the plan recommended that the county include a "Darby Creek Corridor Overlay District (DCCO) in its zoning resolution that would require a five-acre minimum lot size and at least 300 feet of road frontage for each new parcel. This special layer of zoning protection was recommended in order to provide a tool with which to manage land use changes and ensure that changes are sensitive to the aesthetic and environmental characteristics of this special area.

### Previous Brown Township Plans

- The 1992 Plan

## LAND USE

The Land Use Element included four objectives and related actions:

- Adoption of a Land Use Concept and appropriate zoning to implement the 1992 plan.
- Ensure all land use changes are sensitive and appropriate to preserve and protect unique natural features.
- Implementation of the 2010 Land Use Concept which includes four land use categories; conservation areas,

Previous Brown Township Plans

- The 1992 Plan

Managing stormwater drainage: a priority of the 1992 plan

open space areas, a scenic corridor and countryside areas.

- Provide input to ongoing City of Columbus planning projects that impact Brown Township and the recommendations of the Comprehensive Plan.

## PUBLIC FACILITIES

The plan drew many policy objectives from previous transportation plans: 1971 Thoroughfare Plan, 1991 Transportation Plan, 1992-1996 Transportation Improvement Plan (TIP), Franklin County Engineers improvements project schedule, 1988 to 1990 traffic volumes and the household survey that was conducted for the plan, and the 1974 Mid Ohio Regional Planning Commission (MORPC) bikeway plan. The 1992 plan used these resources to determine the following objectives for Brown Township:

- To manage stormwater drainage and minimize negative impacts to property owners.
- To improve the road system within Brown Township by removing hazards, continuing improvements, continuing road maintenance and improving enforcement. The update expressed concern about the current safety of using existing roads as bike routes and emphasized the County's responsibility for seeing that this plan is properly and safely implemented.
- To protect historic structures and archeological areas from the negative impacts of land use change and development.
- To create a natural area and preserve along the Big Darby Creek as a means of further protecting this vital environmental resource.

Additionally, the plan included a brief section called "Safety Services and Township Facilities" regarding Police and Fire services within Brown Township. Additionally, the plan called for a "Community Facilities and Resources" section that addressed parks and recreation, schools, historic resources and archeological resources within the Township.

## 1998 UPDATE TO THE 1992 COMPREHENSIVE PLAN

The 1998 Plan Update focused on examining conservation-related land use tools, including the Farm Village zoning option and the OSCAR lots, available through the Franklin County Zoning Resolution. This analysis resulted in recommendations that conservation style development not be pursued in the Township until wastewater treatment technology-related issues were resolved. The update also revisited maps and policies from the 1992 Plan, including the Conservation Area Boundary Map and the Recommended Zoning Map. These recommendations were predicated upon the completion of the Columbus Comprehensive Plan and updates to Franklin County's Zoning Resolution.

Previous Brown Township Plans

- 1998 Update to the 1992 Plan

### ENVIRONMENT

The 1998 update included the following environmental recommendations:

- Alternative subdivision design.
- Monitoring the feasibility of transfer of development rights.
- Adoption by the City of Columbus of the Environmental Conservation District in the eastern tier of the Township.
- Working to solve the existing drainage problems with environmentally friendly techniques.
- Implement a buffer for the Big and Little Darby Creeks.

**Previous Brown Township Plans**

- 1998 Update to the 1992 Plan
- 2002 Agricultural Preservation Committee

## LAND USE

The 1998 Comprehensive Plan Update explored a wide range of land use issues including:

- Transfer of development rights.
- Acknowledged Columbus' Environmental Conservation District by officially adopting it into the Township's comprehensive plan.
- Changes to maps addressing development factors and zoning recommendations.

## PUBLIC FACILITIES

The 1998 plan made the following recommendations:

- Adopt the recommendation by the 1993 Columbus Comprehensive Plan's Environmental Conservation District that neither centralized wastewater nor water systems be extended into this sensitive area in Brown Township.
- Recommends that the Trustees work with the Franklin Soil and Water Conservation District and the Franklin County Engineer's Office to address existing stormwater drainage problems. It also recommends that residents confer with technical review agencies early in the planning process and that they take care in planning and caring for their yards and lawns.
- Express continued support for development of Prairie Oaks Metro Park, as well as support for continuing to cooperate with Norwich and Washington Townships in supporting Homestead Park.
- General recommendations of the 1998 update include cooperation with the Hilliard City School District in addressing growth issues, the need for a cost impact study, and revisions to Map 10.

## 2002 AGRICULTURAL PRESERVATION COMMITTEE

The Brown Township Trustees formed the Agriculture Preservation Committee (APC) to address the subjects of agriculture and open

space preservation in 2002. The 1998 Update explicitly called for the formation of this group. The Trustees charged the committee with addressing farmland preservation, cluster development/farm village development, wastewater treatment issues, open space conservation, and township zoning. This project involved extensive research in addressing these issues including consultations with technical experts, site visits and conducting a community survey. The group's work also included analyzing natural and man-made features within the Township that will influence growth patterns.

### Previous Brown Township Plans

- 2002 Agricultural Preservation Committee
- 2002 Agricultural Preservation Committee Resident Survey

## ENVIRONMENT

The APC submitted a report to the Brown Township Board of Trustees in August 2002. The report explained that agricultural preservation is inextricably linked to broader open space preservation and rural-based planning themes. The report also noted that those themes are often tied to environmental preservation goals. As a result, several of the general approaches and specific tools recommended in the report relate to the environment. Recommendations under the topics "Cluster Development," "Wastewater Treatment" and "Open Space" most directly point to environmental issues and policies.

## LAND USE

The Agriculture Preservation Committee (APC) recommended that the following areas be addressed by this comprehensive plan update:

- Farmland preservation
- Conservation development/farm villages
- Open space conservation

## PUBLIC FACILITIES

The wastewater treatment section of the report made a variety of recommendations including but not limited to: environmentally responsible wastewater treatment options, exploration of alternative systems, and exploration of options that could be used in rural cluster developments.

Previous Brown Township Plans

- 2002 Agricultural Preservation Committee Resident Survey

Regional Context

- ESDA\EAG

## 2002 AGRICULTURAL PRESERVATION COMMITTEE RESIDENT SURVEY

### LAND USE RESPONSES

The strongest positive responses for land use were support for Township collaboration in preserving open space, and preserving historic and cultural resources. Support for maintaining rural character through the use of neighborhoods with open space was also expressed. Also the belief that the Township is growing too fast had significant support.

Statements asserting that the Township does not need to control growth and does not need zoning received the weakest support. Giving density bonuses to preserve sensitive areas, and considering only economic value in determining zoning lacked support, while statements suggesting that architectural controls on development are not necessary and supporting cluster developments with lots of open space received weak to mediocre support.

### ENVIRONMENTAL RESPONSES

Environmental issues received strong positive responses on the resident survey. The strongest responses were support for protection of the Big Darby Creek and the Big Darby Creek corridor. Forested buffers along all streams also received strong support. Efforts to establish facilities that would be attractive for outdoor recreation rated lower.

### PUBLIC FACILITIES RESPONSES

The survey results indicated that Brown Township residents are generally satisfied with road maintenance and fire and police protection. The respondents were also satisfied with availability of parks and recreational activities. Residents were less satisfied with the quality of life in the Township because of traffic congestion. Respondents also expressed concern about the efficiency of stormwater drainage systems.

# REGIONAL CONTEXT

Regional Context

- ESDA External Advisory Group

## ESDA EXTERNAL ADVISORY GROUP

### Water Quality Management Plan; Scioto River Basin and Blacklick Creek (208 Plan)

The Ohio Environmental Protection Agency required the City of Columbus, as the Designated Management Authority (DMA) for central Ohio, to offer recommendations on protecting the Big Darby Watershed from development resulting from extension of water and sewer lines into the area.

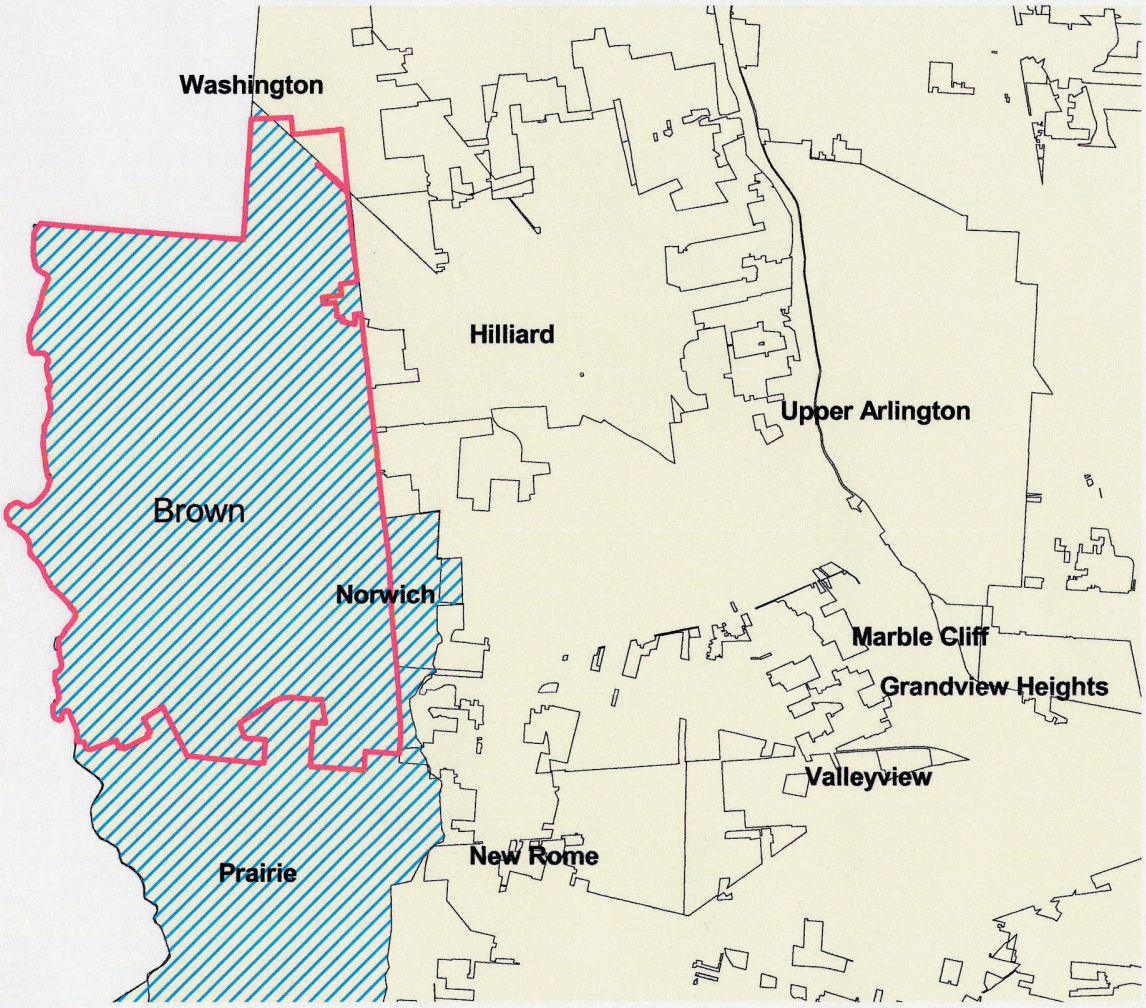
The Ohio Environmental Protection Agency will use the recommendations as part of its review of wastewater treatment permits. The OEPA established a geographical area of interest for this process known as the Environmentally Sensitive Development Area (ESDA) which includes all of the Big Darby watershed within Franklin County west of a line formed roughly by the Hellbranch Run, Clover Groff Run and various political boundaries to the west of this area (see map on page 43).

The City of Columbus gathered stakeholders together to act as the External Advisory Group (EAG) for the ESDA. They were charged with recommending policies to protect the Big Darby Creek in the following four areas:

- Riparian buffers
- Comprehensive stormwater management planning
- Conservation development restrictions including cluster development to preserve tracts of open space, including farmland; and
- Adequate public facilities, including roadways, existing or are planned to support any proposed development.

The EAG process utilized a host of studies, reports, and background information, including the Darby Creek Stormwater Management Strategies and Standards, in an effort to develop consen-

# ENVIRONMENTALLY SENSITIVE DEVELOPMENT AREA (ESDA) DESIGNATED BY OEPA IN THE SCIOTO BASIN WATER QUALITY (208) PLAN




**Legend**

- Brown Township Boundary
- ESDA
- Corporate Boundary

2 0 2 4 Miles

Franklin County
Where Government Works
Franklin County Development Department
March 24, 2003

N W E S

Data Source: Franklin County Development Department, City of Columbus

Disclaimer: Franklin County Development Department assumes no liability either for any error or inaccuracies in the information provided on this map.

Saved as: j:/special projects/brownlownship/browncomp-conserv.apr (ESDA)

sus recommendations in the four areas.

The OEPA will review the recommendations offered by the External Advisory Group and determine if the protections recommended are sufficient prior to the extension of water and sewer lines further into the Big Darby Watershed.

The External Advisory Group (EAG) forwarded its recommendations to the City of Columbus and the Director of the Ohio Environmental Protection Agency in November 2004. As of April 2005 the Director of the OEPA had not made a determination on acceptance of the EAG recommendations.

Regional Context

- ESDA External Advisory Group
- Total Maximum Daily Load Report (OEPA)
- The Big Darby Accord
- Darby Creek Stormwater Management Strategies and Standards

## TOTAL MAXIMUM DAILY LOAD (TMDL) REPORT

The Ohio Environmental Protection Agency's Total Maximum Daily Load Report on the health of the Big Darby Creek Watershed is anticipated to be released in May of 2005. The report evaluates the effect on water quality that past land uses in the Darby Watershed have had. The report will then offer recommendations on the necessary protection strategies in the watershed for future development.

## THE BIG DARBY ACCORD

The Big Darby Accord is intended to create a unified and enforceable development policy that protects the Big Darby Creek. The process involves Brown Township, Washington Township, Pleasant Township, Prairie Township, Norwich Township, Columbus, Hilliard, Harrisburg, Grove City and Franklin County.

Establishing responsible growth mechanisms in this area would be beneficial to all parties having an interest in balancing the impact of new development with the protection of unique environmental resources like the Big Darby Creek. Brown Township strongly supports the continuation of these multi-jurisdictional discussions to reach agreement on how future development may occur without causing further degradation to the environmental features. Brown Township also encourages the use of this plan and the recommendations in the Big Darby Accord discussions.

Regional Context

- Darby Creek Watershed Stormwater Management Strategies and Standards

## DARBY CREEK WATERSHED STORMWATER MANAGEMENT STRATEGIES AND STANDARDS

In January 2001, The Mid Ohio Regional Planning Commission's Central Ohio Regional Forum (CORF) produced a report by its Darby Creek Watershed Taskforce. The report entitled "Darby Creek Storm Water Strategies and Standards for New Development" addresses a range of issues associated with the impacts of continued urbanization on the Darby. Participants included local, state, and federal government agencies, citizens and stakeholder groups and non-profit organizations. The focus of the effort was to "develop uniform storm water management design standards, create administrative mechanisms to protect the watershed, improve floodplain management and develop riparian corridor protection standards".

The guidance manual is intended to be used as an aid to creating responsible decision- making techniques for new development.

The report links the level of impervious land cover (streets, rooftops, parking lots etc.) to stream health and environmental quality. Twenty-two (22) model development principles were developed from three broad categories: 1) Residential streets and parking lots (nine principles); 2) Lot development (six principles); 3) Conservation areas (seven principles).

Six principles were chosen as the highest priority for the watershed for short term implementation:

•Principle 10: Open Space Development- Advocate open space development that incorporates smaller lot sizes to minimize total impervious area, reduce total construction costs, conserve natural areas, provide community recreational space and promote watershed protection.

•Principle 16: Perennial Stream Buffer- Create a variable width, naturally vegetated buffer system along all perennial streams that also encompasses

critical environmental features such as the 100-year floodplain, steep slopes and freshwater wetlands.

•Principle 18: Clearing and Grading- Clearing and grading of forests and native vegetation at a site should be limited to the minimum amount needed to build lots, allow access, and provide fire protection. A fixed portion of any community open space should be managed as protected green space in a consolidated manner.

•Principle 20: Conservation- Incentives and flexibility in the form of density compensation, buffer averaging, property tax reduction, storm water credits and by-right open space development should be encouraged to promote conservation of stream buffers, forests, meadows and other areas of environmental value. Off-site mitigation for open space storm water management and forest resources (excluding riparian buffers) within the same watershed should also be encouraged.

•Principal 21: Manage Stormwater- New development should not discharge un-managed storm water.

•Principle 22: Maintain Stream Integrity- Enclosing, straightening and relocating streams should be discouraged during all new development.

Importantly, the CORF project recognized its limitations. The report states: "The Darby Creek Project should be considered as one 'piece of the puzzle' for protecting and conserving the Darby Creek Watershed. For responsible development to take place in the Darby, key decisions regarding land use, transportation, and services to commercial and residential development must be made and implemented in a collaborative, watershed-based manner. If not, the Darby will not survive as it exists today".

## PHASE II NATIONAL POLLUTANT DISCHARGE

### Regional Context

- Darby Creek Watershed Stormwater Management Strategies and Standards
- Phase II NPDES

Regional Context

- Phase II NPDES
- 2020 Thoroughfare Plan (2001)
- 2030 Transportation Plan

## ELIMINATION SYSTEM (NPDES)

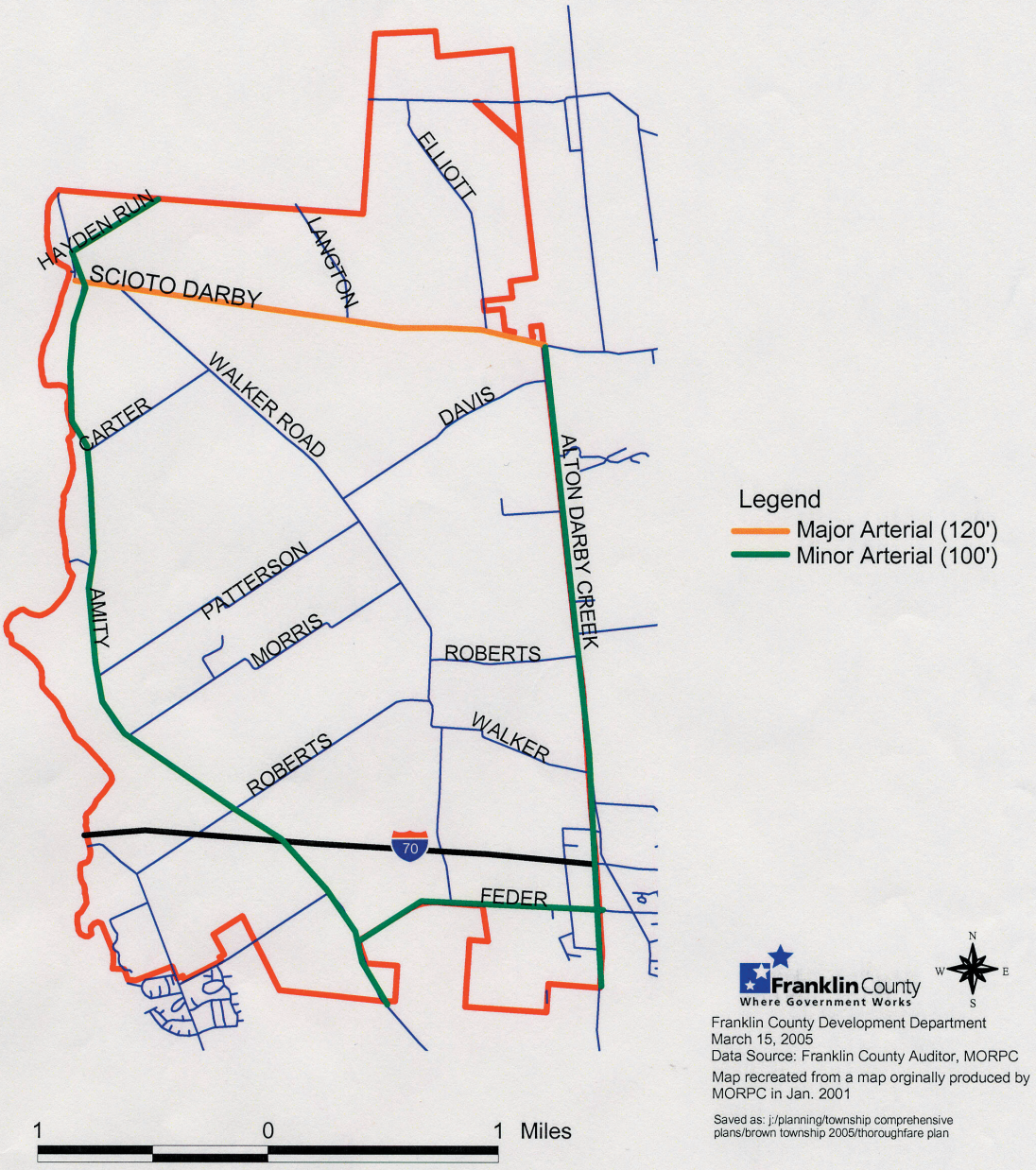
Brown Township has worked in partnership with Franklin County and other townships to produce a National Pollutant Discharge Elimination System, Phase II compliance plan. The Phase II requirements reflect the growing attention that pollutants contained in surface runoff quality is receiving as part of the overall water quality equation. This plan refers to standards included in Rainwater and Land Development; Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection. Implementation of the plan requires townships and the county to incorporate these and similar standards into their land use development review.

## 2020 THOROUGHFARE PLAN (2001)

The current Franklin County Thoroughfare Plan designates major roads by their position in the overall county road hierarchy. Freeways/expressways and major arterial roads are roads intended for higher traffic volumes traveling longer distances. These roads are designed to provide direct access to abutting land uses. Minor arterials and collectors serve lower volumes over typically shorter distances with somewhat more of an access function, while local roads are intended primarily for property access. The following roads are designated in this plan:

| | |
|---|---|
| Freeway/Expressway: | I-70 |
| Major Arterial: | Scioto and Darby Creek Road |
| Minor Arterials: | Alton-Darby Creek Road; Amity Road; Hayden Run Road |
| Collectors: | Elliott Road; Davis Road; Walker Road; Roberts Road Patterson Road; Roberts Road; Hubbard Road; Dellinger Road; Jones Rd |

# Brown Township 2020 Thoroughfare Plan Map

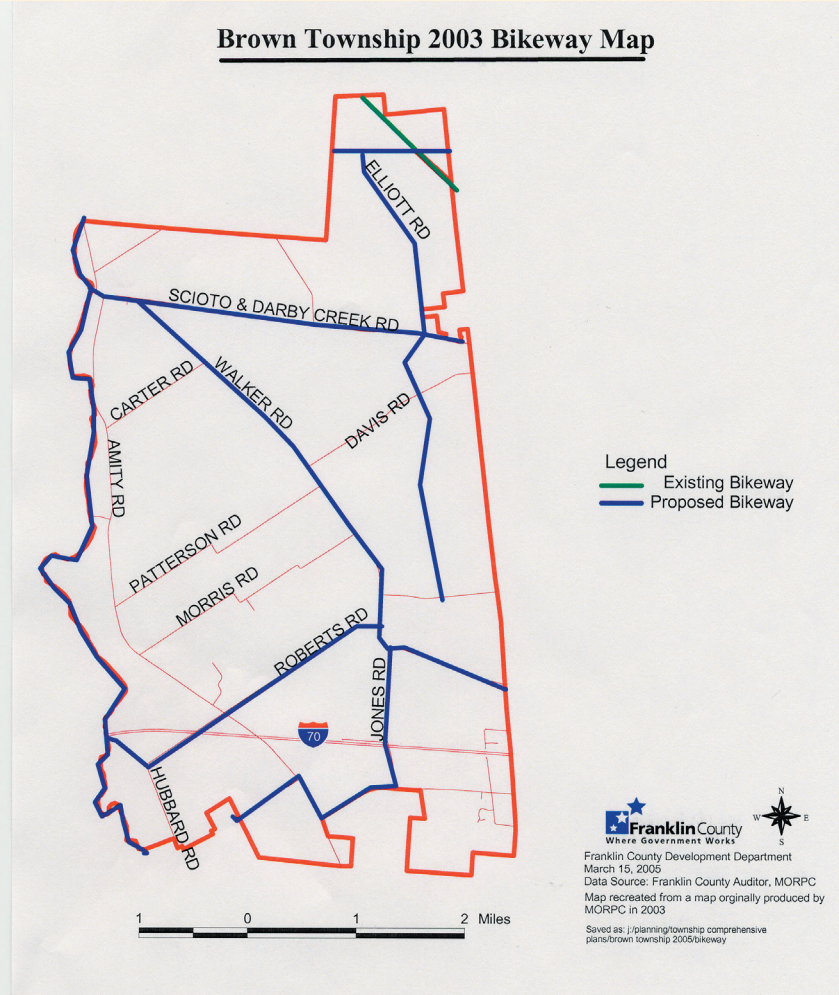


Regional Context

- 2003 Regional Bikeway Plan

## 2030 TRANSPORTATION PLAN

This plan designates nine road projects in Brown Township. These include turn lanes for two approaches at the intersection of Roberts Road and Amity Road and the intersection of Roberts Road and Walker Road. Other road improvement plans are included for



Scioto-Darby Creek Road (two projects) and Alton-Darby Creek Road (two projects). The plan also includes a new roadway connecting Elliott Road to Alton-Darby Creek Road.

### 2003 REGIONAL BIKEWAY PLAN

Mid Ohio Regional Planning Commission (MORPC) produced the 2003 Regional Bikeway Plan. The plan was designed to designate possible future bikeways throughout the county to encourage intermodal transportation and improve bikeway facilities in the future.

### 2004 - 2007 TRANSPORTATION IMPROVEMENT PLAN

The 2004 – 2007 Transportation Improvement Plan includes two projects related to minor widening of Scioto-Darby Creek Road from Amity Road to Alton-Darby Creek Road.

### ACCESS MANAGEMENT PLANNING

The Franklin County Engineer's Office has prepared access management regulations which will help to address the need for safe access to and from major roads during the subdivision and development process.

## SURROUNDING MUNICIPALITIES' PLANS

The first annexation from Brown Township to a municipality occurred in 1991 with an annexation to Hilliard. At the same time, the City of Columbus prepared a draft comprehensive plan for the city as a whole. Additionally, Columbus adopted the West Columbus Interim Development Concept that specifically addressed the portions of Columbus between Brown Township and I-270.

The cities of Columbus and Hilliard have addressed planning and development issues in portions of Brown Township. The portion of Brown Township located within the Hellbranch Run watershed

**Regional Context**

- 2004-2007 Transportation Improvement Plan
- Access Management Plan

**Surrounding Municipalities Plans**

- Columbus Comprehensive Plan

Surrounding Municipalities Plans

- Columbus Comprehensive Plan
- The Hilliard Comprehensive Plan

and north of Roberts Road is addressed in the Hilliard Master Plan. According to a service agreement between Columbus and Hilliard, this area may be annexed and developed as part of the City of Hilliard.

The City of Columbus has no current plans for this portion of Brown Township beyond establishment of standards for development under the Environmentally Sensitive Development Area External Advisory Group (ESDA/EAG) process. Columbus is expected to develop in the area south of Roberts Road and east of Walker Road once these criteria are in place.

## COLUMBUS COMPREHENSIVE PLAN

The City of Columbus adopted a comprehensive plan in 1992. The plan identifies an Environmental Conservation District bounded by Clover Groff Ditch to the east, Hayden Run Road to the north and Broad Street to the south. This designation recognizes the area's proximity to the environmentally sensitive Big Darby Creek watershed and the significant development limitations existing in hydric soils. Over time, this conservation district concept evolved into the Environmentally Sensitive Development Area (ESDA). The ESDA was introduced in the Ohio Environmental Protection Agency's Scioto Basin Water Quality, or the 208 Plan in 2003. The ESDA, addressed throughout this document, covers all of Brown Township except the far northeast corner.

Within the Environmental Conservation District, the Columbus Comprehensive Plan recommends protecting land from inappropriate uses, discouraging development, and refusing to provide city utilities. Furthermore, the Columbus Plan addresses the efforts of Brown and Prairie Townships to preserve open space and discourage high-density development. The Columbus Comprehensive Plan further recommends the City of Columbus support present and future efforts that preserve the environmental quality of the district and the establishment of a metropolitan park along the Big Darby Creek.

## THE HILLIARD COMMUNITY PLAN

The Hilliard Community Plan identifies an expansion area in

Brown Township. This area is located in the northeastern portion of the Township, bounded by Roberts Road on the south and Walker Road, Davis Road, and a line moving overland straddling the Langton Road / Elliott Road area on the west. The plan designates most of the area south of Scioto-Darby Creek Road and west of Elliott Road as "Rural Residential." This area is to be developed at gross densities of no more than one gross unit per acre with 50% open space. If annexed, this development would be served by municipal sewer service via extension of the Scioto West / Hayden Run Tributary of the Columbus regional sewer system. Development in this expansion area would be tied to criteria identified in the Environmentally Sensitive Development Area criteria discussed above. Finally, Hilliard's plan states the need to encourage economic development as housing units are added in order to ensure a balanced tax base. The plan therefore recommends that a developer must consider Hilliard's economic health when building new homes in the city of Hilliard.

Brown Township supports Hilliard's initiative to balance the services required by residential land uses with job creation. It is recommended that Hilliard consider conservation developments using net density calculations and conservation design that is respectful of the physical limitations of the area and the environmental sensitivity of the Big Darby Watershed.

## EXISTING CONDITIONS IN BROWN TOWNSHIP

### GEOLOGY

The geological history of the Township has influenced soil types, specifically the presence of glacial till in the region. Glacial till is related to hydric soils present in this area of the county.

### SOILS

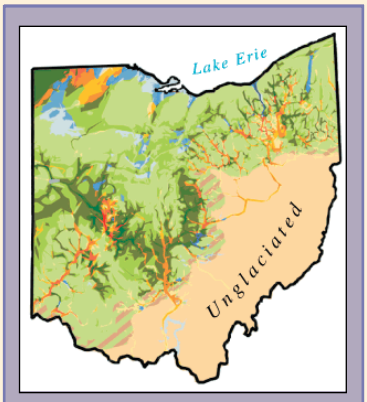
The soils in the western portion of Brown Township tend to fall into the Crosby-Kokomo Association. These soils tend to be located in nearly level areas and on gentle slopes, as well as on broad flats with slight rises, knolls and depressions. Within these asso-

Surrounding Plans

- The Hilliard Comprehensive Plan

Existing Conditions In Brown Township

- Geology
- Soils




The geology of Brown Township is a result of the glacier movement through Ohio.

# SLOPES

Legend

Percent slopes

- 2
- 3 - 6
- 7 - 18
- 19 - 25
- 26 - 50
- Brown Township

Franklin County
Where Government Works

N
W E
S

Franklin County Development Department
May 23, 2003

Data Source: FEMA, Franklin County Auditor

Disclaimer: Franklin County Development Department assumes no liability either for any error, omission or inaccuracies in the information provided on this map.

Saved as: j:/special projects/brownlownship/browncomp.apr (Slopes)

ciations, about 60% of the soils tend to be Crosby, 20% tend to be Kokomo and 20% other types. Crosby soils tend to be located on slightly higher ground, are somewhat poorly drained, and have slow permeability. These soils have moderate water availability and a seasonal high water table of 12 to 36 inches. Kokomo soils are found in nearly level areas and are poorly drained and have moderate to slow permeability. Kokomo soils have high water availability and seasonal high water tables near the surface. Soils in this association display seasonal wetness, which limits use as development sites. Limitations for placement of on-site wastewater treatment and low strength limitations also challenge development on these soils.

Soils in the eastern portion of Brown Township fall under the Kokomo-Crosby-Lewisburg Association. This combination of soil types tends to occur in terrain similar to the Crosby-Kokomo association, with the difference that these areas also include discontinuous ridges and knolls, where Lewisburg soils are found. These Lewisburg soils are better drained and tend to display better permeability than other predominant soils in this association. These traits, along with a seasonal high water table of 24 to 48 inches make these soils better sites for building and in-soil wastewater treatment. Overall, this association can be expected to consist of about 35% Kokomo soils, 30% Crosby soils, 20% Lewisburg soils and 15% other soil types.

Soils along the Big Darby Creek in the extreme southwest portion of the Township feature the Miamian-Celina Association. Unlike soils in the remainder of the township, these areas tend to be well drained to moderately-well drained. Miamian soils occupy gentle to steep slopes, are well drained, have moderately slow permeability and moderate water capacity. Celina soils occupy level ground and gentle slopes and are moderately well drained. Additionally, Celina soil has slow permeability, moderate water capacity, and a seasonal high water table of 18 to 36 inches. Soils in this association have high to medium capacity as building sites and for on-lot sanitary sewer. Incursions of other soils include Kokomo and Crosby on level areas and near small waterways. Erosion is a primary concern, though wastewater treatment is an issue.

**Existing Conditions In Brown Township**

- Soils
- Topography
- Prime Agricultural Soils

Existing Conditions in Brown Township

- Groundwater
- Tributary System
- Woodlands
- Wildlife

## TOPOGRAPHY

There are zero to two (0% - 2%) percent slopes in 79 percent of the Township. Slopes of this type are subject to drainage problems such as ponding.

## PRIME AGRICULTURAL SOILS

There is a predominance of prime agricultural soils in the Township. Soil limitations related to erosion and wetness do not prevent Brown Township soil from being classified as prime agricultural soil.

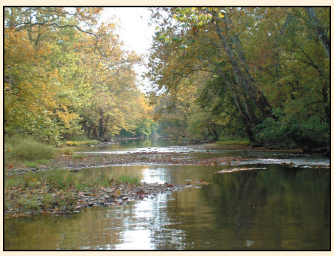
## GROUNDWATER

Groundwater and the related aquifer levels can present constraints on development. A high water table will affect placement of on-site septic and well systems.

In Brown Township 93% of the soil has a seasonally high aquifer level ranging from the surface to 3 feet below the surface.

## TRIBUTARY SYSTEM

The main watershed system of the Township is the Big Darby Creek and its associated creeks and ditches. The Hamilton Ditch, which drains approximately one-third of the Township, is the main stormwater drainage facility for the eastern portion of the Township and eventually drains into the Big Darby Creek. The western portion of the Township is drained by the various tributaries directly into the Big Darby Creek.



Nearly 78% of the Township suffers from poor drainage, due mainly to the level topography and high water tables. Various stormwater assessment plans including those of the Ohio Department of Natural Resources, and Franklin Soil & Water Conservation District to provide further analysis of these drainage issues.

## WOODLANDS

The Township has a scattered range of woodlots and vegetative cover along the Big Darby Creek and its tributaries.

## WILDLIFE

The presence of the OEPA designated Exceptional Warm Water Habitat of the Big Darby Creek and the Little Darby Creek provides a wealth of wildlife in Brown Township. The Big Darby Creek and its extensive tributary system creates the opportunity for a prominent wildlife habitat within Brown Township housing fish, and mussels including rare species.

## HISTORICAL AND ARCHEOLOGICAL RESOURCES

The following is a list of historical and archeological resources known in Brown Township:

Yost Peter House – Located at 8215 Morris Road, the home was built around 1850. It is Ohio Farmhouse architectural style.

J. Trakavich Root Cellar – Located at 1866 Jones Rd, the root cellar was built around the 1870s. The structure is vernacular in style, was used originally as a root cellar and is also know as the John Hillburn Family Farm.

Harold Bishop Residence – located at 710 Amity Rd, it was built in 1860 and the style of this residence is unknown.

Emmelainz Home – Located at 2800 Walker Rd, the home was built in the 1870s. Romanesque in style, it was used as a residence and is also known as the "Jones" property.

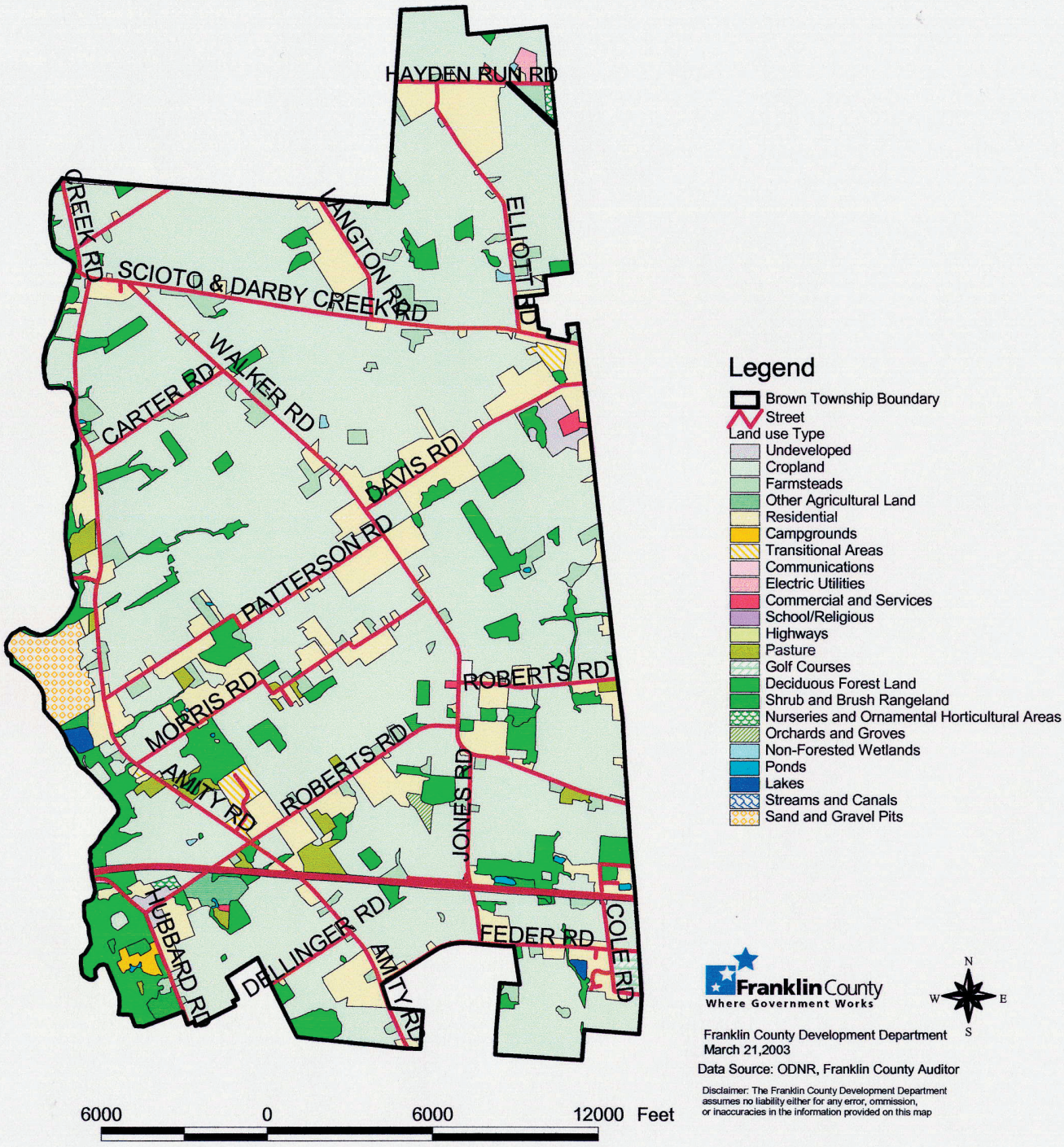
Barrett Home – Located at 2948 Walker Rd, the home was built around 1880. This Victorian-Italianate styled residence was also known as Herbert Farm in reference to the original owner.

Schoolhouse – a former schoolhouse located at 2263

Existing Conditions In Brown Township

- Historical & Archeological Resources

# EXISTING LAND USE BASED ON 1998 ODNR DATA



Amity Rd is now a residence

Distlehorst Home – located on Morris Rd has been restored and is now the Baumgartner home. The current home was built around 1880. Frazier Morris gave 50 acres to his daughter Angeline as a wedding gift when she married Robert Patterson in 1867. Robert Patterson was a township trustee in 1901. His name appears in cement in the summer kitchen.

Earth sided home – located on Alton Darby Creek Rd

Archeological Sites - The Ohio Historical Society has indicated three main sites with archeological value in Brown Township.

- General vicinity of Walker Road and Carter Road Intersection
- Intersection of Davis Rd and Alton Darby Creek Roads
- Alton Darby Creek Rd, Paleo-archaic material was reported found in February of 1980
- Amity Road - across from the Francis homestead. A mound is on the Metroparks property. There is evidence of a burial mound.

## EXISTING LAND USE

Brown Township's land use mix is agriculture, open space and large lot single family residential uses. With the exception of small scale, scattered rural residential development, this mix has not changed significantly since 1992. An existing land use map based on the Ohio Department of Natural Resources land use and land cover database for the Township shows this rural residential pattern.

# ANALYSIS

ENVIRONMENTAL ANALYSIS
LAND USE ANALYSIS
PUBLIC FACILITIES ANALYSIS

Environmental Analysis

- Stream Corridors

PRIORITY ENVIRONMENTAL ISSUES

Protection of Stream Buffers

Protection of Open Space and Natural Areas

Management of Stormwater Quantity and Quality

Support for the policies recommended in this plan is contained in this chapter. Analysis of the three policy areas - environment, land use and public facilities - provides the reasoning for the recommendations and the guidance to the decision makers on the priorities of Brown Township.

# ENVIRONMENTAL ANALYSIS

The following are priority environmental issues in Brown Township:

1st Stream Corridors - delineation and protection of stream buffers for all waterways.
2nd Protection of open space and natural areas.
3rd Management of stormwater quality and quantity.

## STREAM CORRIDORS

Resident surveys conducted by the Agricultural Preservation Committee indicate the need for stream buffers along all waterways. Currently, the Franklin County Zoning Resolution provides only the Big Darby Creek with a 120-foot protective buffer. The qualitative environmental relationship between a sensitive waterway like the Big Darby Creek and the tributaries that feed it, is critical. In order to sufficiently protect the Big Darby Creek the water quality of the tributaries must also be protected.

The highly variable characteristics of drainage topography in area waterways suggests that a 'one size fits all' stream setback policy is inappropriate in Brown Township.

The two primary factors related to water quality within stream corridors are:

1. Physical morphology of the corridors.
2. Biological features, primarily flora, within the corridors.

The concentration of the morphologic and biologic elements within stream corridors have a substantial impact on the protection of water quality.

Environmental Analysis

- Stream Corridors

Development within these areas will:

1. Channelize a stream,
2. Infringe on the floodplain,
3. Remove stream corridor buffers where filtering occurs,
4. And/or remove tree cover or other vegetation central to a healthy habitat along a stream.

Critical stream corridor resources must be identified and protected by conservation efforts which utilize Best Management Practices (BMP), environmentally responsible site design and responsible construction techniques.

## DEFINING THE STREAM CORRIDOR

Stream corridors shall be defined as land including and adjacent to perennial, intermittent & ephemeral streams, excluding roadside

### DEVELOPMENT IMPACTS ON WATER QUALITY AND QUANTITY

Stream Channelization

Floodplain Infringement

Removal of Filters

Removal of Tree Cover and Vegetation

Environmental Analysis

- Defining the Stream Corridor
- Protection of Natural Areas & Open Spaces

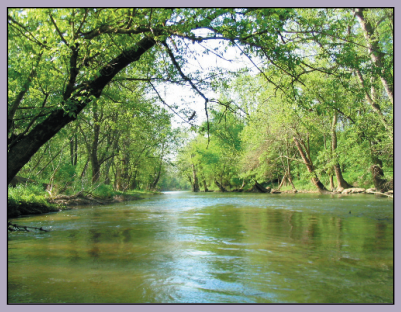
ditches. These streams are not only the waterways permanently present in Brown Township but also those that assist with drainage during periods of heavy rains. All waterways draining stormwater would be subject to the buffers.

Stream corridors in Brown Township shall include the physical morphology of the waterway and the surrounding biological features of the waterway. Delineating stream corridors for protection and not simply the streams will enable a comprehensive preservation effort directed at protecting water quality and quantity.

The integrity and health of the waterway cannot be protected without protecting the corridor along the stream.

STREAM CORRIDOR FEATURES RELATED TO WATER QUALITY

Biological Features, Especially Flora



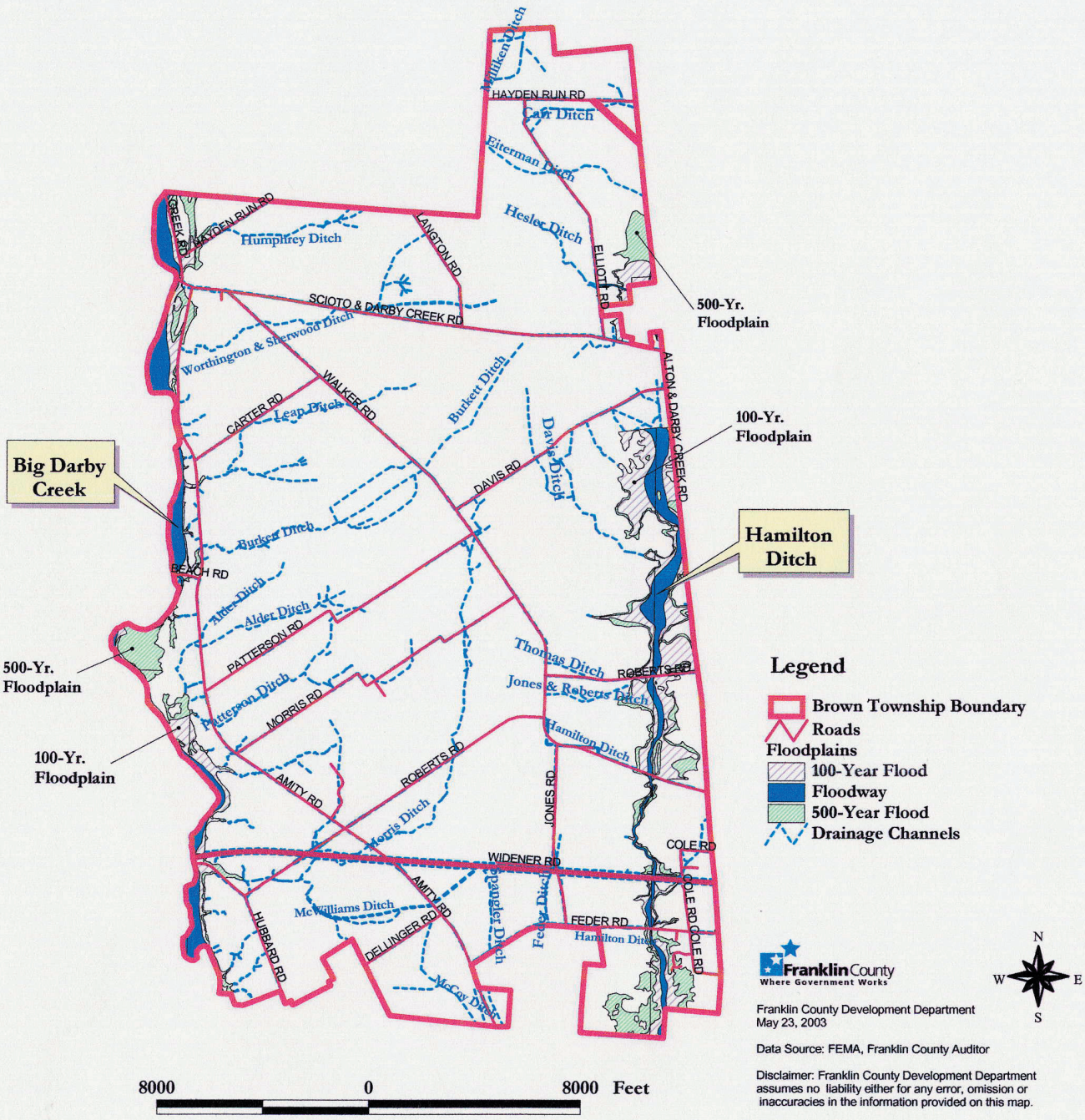
Physical Morphology

## PROTECTION OF NATURAL AREAS & OPEN SPACES

MORPHOLOGY: a branch of biology that deals with the form and structure of animals and plants; the form and structure of an organism or any of its parts.

When planning for an area that faces development pressure, it is essential to identify areas that the community most values as natural areas for preservation. Brown Township considers these areas based upon a concern for water quality, as well as a desire to protect wildlife habitat, scenic views, groundwater recharge areas and other areas. The areas recommended for protection are classified into two types, tier one and tier two conservation areas. Tier one areas are those primary resource areas, which must be protected.

# Waterways and Designated Floodways and Floodplains



Environmental Analysis

- Protection of Natural Areas & Open Spaces

TIER ONE CONSERVATION AREAS

- Stream corridors
- Wooded areas
- Wetlands

TIER TWO CONSERVATION AREAS

- Steep slopes
- Hydric soils
- Farmsteads
- Other historical or archeological sites

Brown Township discourages the fill and mitigation of wetlands in the township.

Tier two areas are those secondary resource areas, which should be protected whenever possible. The resources recommended for tier one and tier two conservation areas are shown in the table to the left.

## STREAM CORRIDORS

Stream corridors are the biological and morphological components within and adjacent to perennial, intermittent and ephemeral streams. The corridor is comprised of primary resources for water quality protection including floodplain, stream channel, wildlife habitat, vegetation, and other functions that serve stream ecosystems. Stream corridors should be designated to protect all of the features needed to allow for the stormwater runoff to be filtered and slowed through suitable vegetation. Adequate buffers also allow for the stream to maintain a natural meander pattern that contributes to the water quality. The protection of contiguous natural features, such as the wooded areas for temperature control and steep slopes to prevent erosion, is also necessary.

## WOODED AREAS

The Township's woodlots provide wildlife habitat and are attractive elements to the landscape. These areas, combined with hydric soils, often identify areas where groundwater areas recharge occurs with little human interference. The importance and relative sparseness of wooded areas in Brown Township make these areas one of the most important resources for conservation.

## WETLANDS

Wetlands are transition zones between land and streams in a watershed, which acts to improve water quality, floodwater storage, varied habitat of flora & fauna, biological productivity and general aesthetics. Wetlands act as natural areas which store water from surrounding areas and release it slowly to the adjoining streams. This function helps to prevent bank erosion, allows for groundwater recharge and helps in base flow of water systems during dry seasons. Also wetlands act as natural water filters which help in suspended solids to drop out to the wetland floor. This kind of

nutrient rich environment encourages aquatic plant life, which in turn helps to enrich the fish and wildlife habitat thus maintaining the ecological balance and overall health of a watershed area.

## STEEP SLOPES

Steep slopes are a stimulus as well as an impediment to development. These features enhance the scenic nature of the Township along the Big Darby Creek and are habitat areas for plants and animals, often because these areas are not ideal development areas. Degrees of slope steepness are a relative quality. While a 15% grade, a 1 1\2' rise over a 10' run, is considered a minimum threshold for defining steep slopes in many places, in some hilly areas this threshold increases to a 25% grade or steeper. A community located on a level to rolling landscape, as is Brown Township, should focus on slopes beginning at the lower end, or 15%, threshold. Attention to slopes at this level is desirable both because they represent a more obvious break in the scenic landscape and more importantly because they pose a higher risk of soil erosion and instability.

## HYDRIC SOILS

Hydric soils are a particular challenge to development. These soils present drainage problems, strength limitations and difficulties for on-lot wastewater treatment placement.

Hydric soils are:

- Soils that formed under conditions of saturation, flooding or ponding during the growing season and developed anaerobic conditions in their upper part as a result;
- Soils that are sufficiently wet as a result of artificial measures; and
- Soils that are no longer wet because of artificial measures, but were hydric under original conditions.

### Environmental Analysis

- Protection of Natural Areas & Open Spaces

Indication of Hydric Soil in Brown Township: Flooding Along Patterson Road

A Farmstead Along Walker Road

Environmental Analysis

- Protection of Natural Areas
- Stormwater Management

SOURCES OF STORMWATER RUNOFF

Agricultural Erosion Increases the Sediment Load of Rural Runoff

Rural Residential Development Increases Pollutants in Runoff

## FARMSTEADS, HISTORICAL AND ARCHEOLOGICAL SITES

While these are not features of the natural environment, they are nonetheless important features of Brown Township's historic built environment. Farmsteads with 19th and 20th century houses, barns and other out-buildings represent Brown Township's architectural history and contribute to the rural character of the landscape.

## STORMWATER MANAGEMENT

Development at urban and suburban densities often pollutes surface water supply through increase in sediment, nutrients, pathogens, toxins, thermal pollutants and debris. Residential, commercial and industrial land uses increase imperviousness and roadside erosion while lawn and garden activities increase the pollutant and sediment load in runoff to the surface water supply. These land uses also result in removal of streamside vegetation and aquatic ecosystem degradation plus promote heated runoff from pavement and other sources, which lead to increased water temperatures that diminish water and habitat quality. Additionally, toxins and debris from suburban and urban areas include auto and industrial pollutants, as well as litter and illegal dumping.

While the area of impervious surfaces and intensity of land use is lower in rural areas, rural development does contribute to lower surface water quality through pollutants in runoff. Agricultural tilling and erosion increase the sediment load of rural runoff. Animal waste and failed on-lot wastewater treatment systems are also sources of pollutants.

Development and increased human activity also leads to increased fill and impervious surface coverage, stripping and soil compaction, and other obstacles to proper storm water absorption and/or drainage. These factors produce faster rates and higher volumes of surface water runoff that must be managed. Stormwater management practices traditionally focused almost exclusively on these problems. Use of broad policy and site design standards that promote stormwater management through reduction of development impacts can reduce or eliminate ponding or flooding of developed areas.

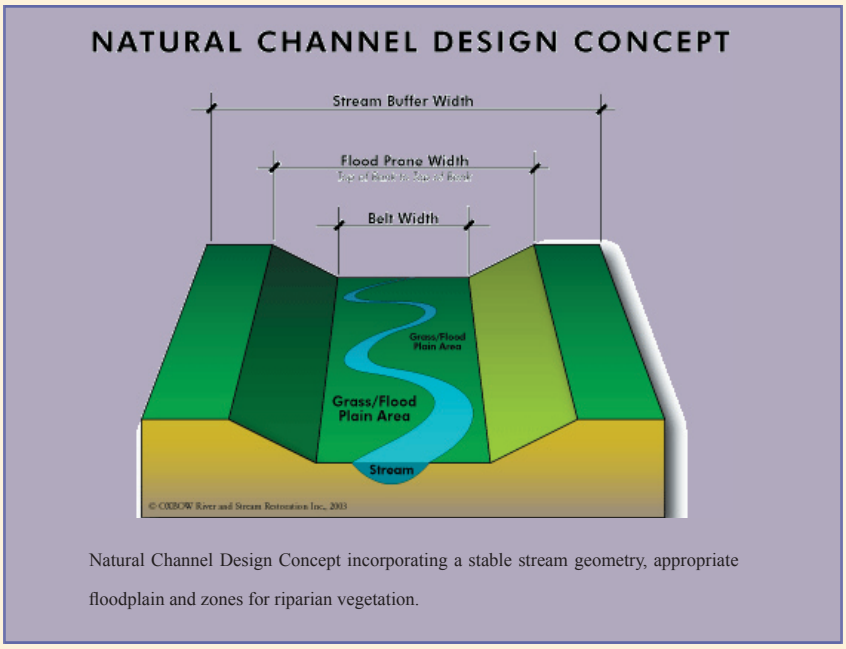
## NATURAL CHANNEL DESIGN

Many of the ditches in Brown Township were originally streams and were channelized and are now treated at ditches. It is possible to restore these ditches to streams through natural channel design. This restoration process uses undisturbed streams as models and recommends necessary changes to the ditch to return to its natural state.

'Natural Channel Design Concept' uses a stable stream geometry based on undisturbed streams and restores the floodplain and necessary areas for riparian vegetation. If ditches within Brown Township are recommended for improvements they should be done with natural channel design. This improves the function of the ditch and protects water quality.

### Environmental Analysis

- Stormwater Management
- Natural Channel Design



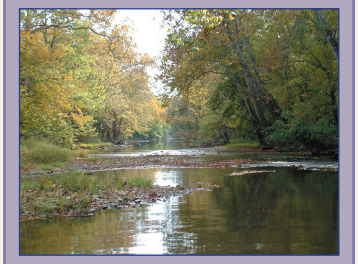

Natural Channel Design Concept incorporating a stable stream geometry, appropriate floodplain and zones for riparian vegetation.

Information and graphic on natural channel design from OxBow River and Stream Restoration, Inc., Delaware, Ohio

Land Use Analysis

- Density
- Alternative Wastewater Treatment Systems

LIMITATIONS TO HIGHER DENSITIES



Desire to Protect the Big Darby Creek

Poor Soils and Drainage Conditions

Desire for Low-Density Rural Community with Agricultural Preservation

# LAND USE ANALYSIS

## DENSITY

Rural areas are characterized by lower density developments as is the case in Brown Township. Densities are generally 2.5 to 5 acre lots in terms of residential development. Lower density is often associated with a lack of centralized sewer service and less developed road networks. As densities increase, demands for community facilities and services cross a threshold where communities must plan for significant investment in public improvements. These improvements include sewers, roads, storm drainage, parks, fire protection and other facilities and services. Limitations to higher densities in Brown Township are:

- The desire to protect the Big Darby Creek.
- Poor soils and drainage conditions.
- Community desires for a low-density rural community with natural resource and agricultural preservation.

The eastern edge of Brown Township faces significant development pressure from neighboring municipalities. Currently municipalities use development incentives to encourage annexation, most notably the extension of centralized sewer and water lines to newly annexed land. Centralized sewer and water service allows for higher densities than are currently available in the Townships, which must rely on on-site systems.

Improving technologies may allow for increased densities should technology improve or annexation policies change to allow centralized services without annexation. Even if future technologies would allow for higher densities in Brown Township, the township's priorities for environmentally protective development and maintaining the rural landscape shall remain.

## ALTERNATIVE WASTEWATER TREATMENT SYSTEMS

Alternative wastewater treatment systems are a burgeoning technology that can allow for cluster development without central-

ized sewer and water service. A larger number of design options are possible with alternative wastewater treatment systems.

As government agencies modify approval mechanisms, assign jurisdictional responsibilities and improve technologies, these systems can provide well-designed conservation developments in Brown Township.

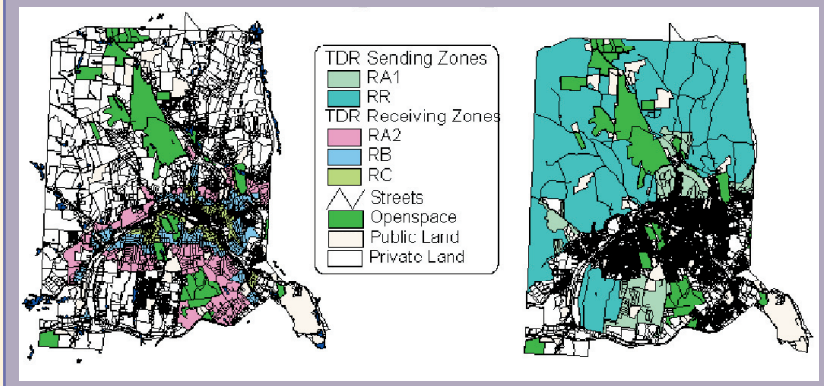
Land Use Analysis

- Alternative Wastewater Treatment
- Transfer of Development Rights

## TRANSFER OF DEVELOPMENT RIGHTS (TDR)

Transfer of development rights refers to a method for protecting land by transferring the "rights to develop" from one area and giving them to another. Under a TDR program, a community or regulatory agency regulates site densities by allowing higher densities on some parcels in exchange for lower densities on other parcels. TDR have been used in other areas of the country for the preservation and protection of open space, natural resources, and farmland. At this time, the Ohio Revised Code does not give Township's the authority to utilize the TDR.

### A TRANSFER OF DEVELOPMENT RIGHTS PROGRAM IN FITCHBURG, WISCONSIN




Should the opportunity arise to utilize TDR, Brown Township should be considered a "sending" area not a "receiving" area based on the Brown Township's strategic location relative to the Big Darby Creek and many tributaries as well as its significant development limitations.

Land Use Analysis

- Development Pattern

DEVELOPMENT PATTERN

Conventional Development

Large Lot Zoning

## DEVELOPMENT PATTERN

Historically, suburban development consisted of lots lining curvilinear streets within a site. All the land in these conventional developments is in either private ownership or public right-of-way. All land outside of the right of way, is divided into lots according to the allowable density. Conventional development design provides no designated open space, no resource protection and does not reduce the environmental impact of development.

To combat the more intense density of these types of developments and the subsequent loss of open space, rural communities have traditionally responded with zoning restrictions. Communities mandate large minimum lot sizes as the primary tool to achieve protection of open space and maintenance of rural character. These conventional patterns, both suburban and rural, maximize the size of the individual lots within given density limits.

This conventional rural style large lot development does not contribute to the quality of life for the residents of these communities. It results in large amounts of infrastructure in terms of roadways, removes the ability to provide networked public open space for the community and results in a landscape scattered with homes reducing the rural character and removing open vistas.

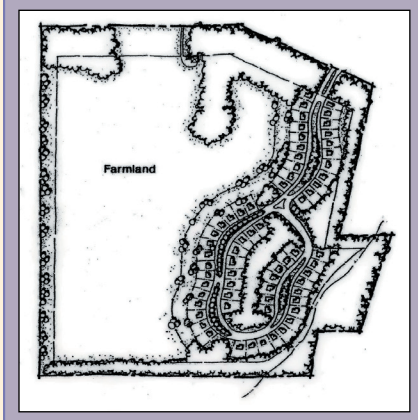
Alternatively, conservation style site design is done in such a way that the developments are more environmentally responsible and have a greater efficacy of achieving rural character and improving quality of life for Brown Township residents. Proper arrangement of a conservation subdivision provides a more open, rural feel than conventional development with the same number of units.

## DEVELOPMENT TYPE

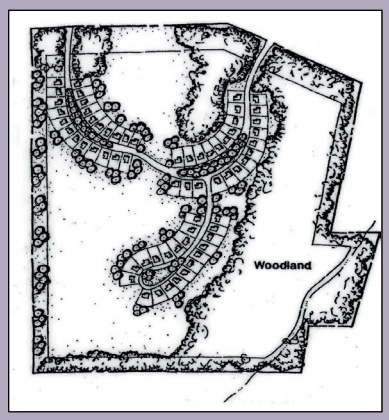
Restricting non-residential uses within the Township help maintain the rural character of the community, avoid land use conflicts and reduce the risk of congested roads.

Some Township residents and officials are concerned that this limited land use mix does not provide a healthy property tax base for

CONSERVATION STYLE DEVELOPMENT




Designed to save farmland.




Designed to save wooded areas and conservation land.

Land Use Analysis

- Development Pattern

Public Facilities Analysis

- Wastewater Treatment

Brown Township. Residential development often requires more public expenditures than it generates in tax revenue. A mix of residential and non-residential uses helps to avoid financial imbalance and resulting tax increases. Committee members have discussed designating limited employment uses (specifically local office) in the plan update, which have shown a better ratio of revenue to expenses than residential and retail property.

However, while congestion, land use conflicts and community character are important concerns, the impacts of well-done, small-scale non-residential development can be limited. Site design can minimize the visual impact by requiring development that complements the rural character of the community, while buffers can be required to prevent land use conflicts.

## PUBLIC FACILITIES ANALYSIS

### WASTEWATER TREATMENT

Plans and studies discussed in this report suggest that centralized wastewater treatment may be extended to parts of Brown Township within the next twenty years. If this does not occur, other

Public Facilities Analysis

- Wastewater Treatment

wastewater treatment options will need to be considered. Both approaches must be done responsibly to protect water quality in the Darby Watershed.

Small community wastewater treatment systems are a tool for providing safe wastewater treatment to rural communities of around 20 to 40 homes. In cases where more than 40 homes are developed, a combination of a small community system and individual systems or more than one small community system used in concert may be considered.

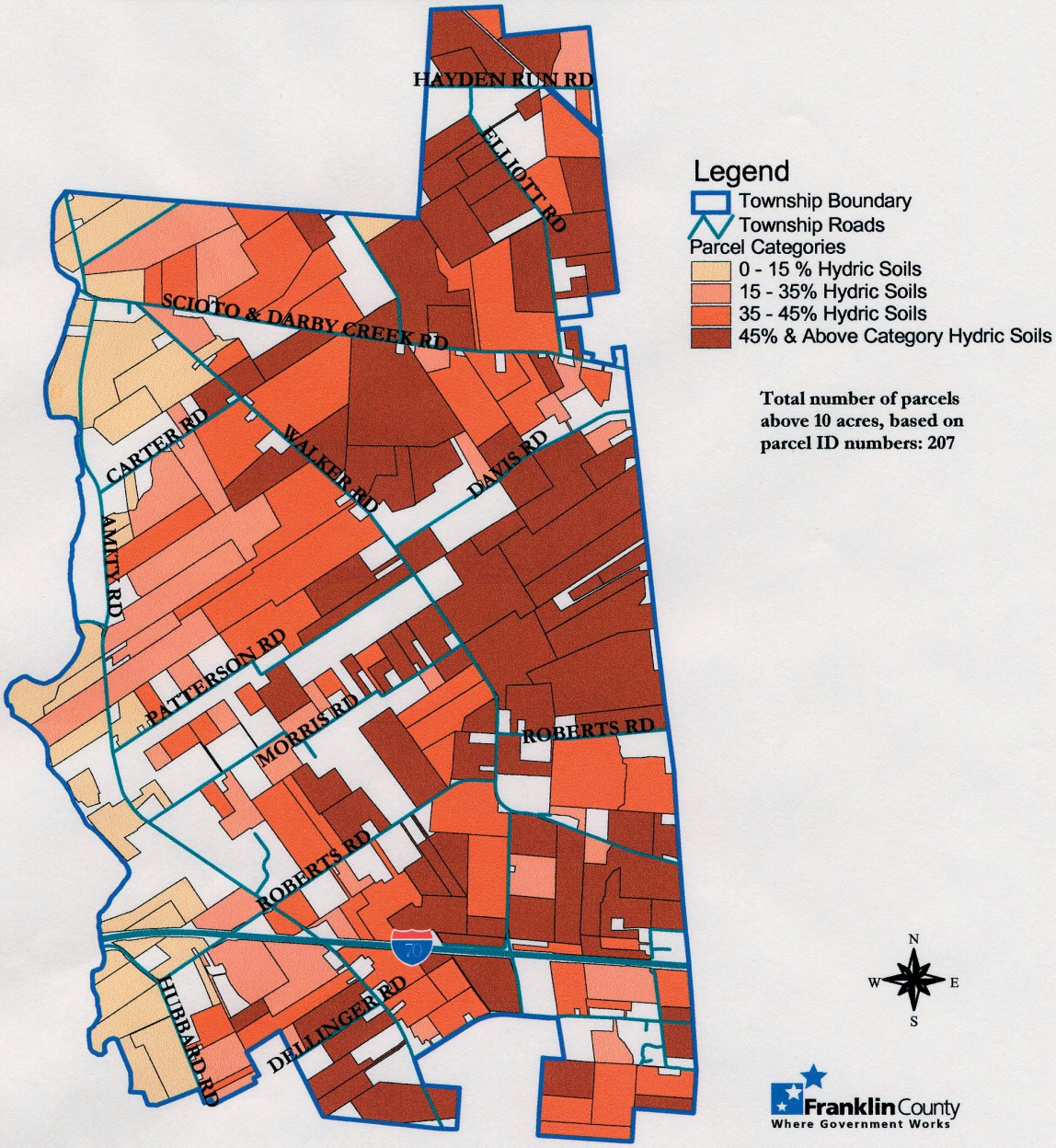
The use of these systems would allow developers to be less constrained by the location of soils needed for effluent absorption. In addition to freeing subdivision designers from the restrictions of soil type distribution, such systems also accommodate relatively small lots used in conservation developments.

Implementing the use of such systems in Brown Township will involve determining the technologies that are most appropriate and responsible to use as treatment for wastewater, establishing a system for managing these systems and addressing policies contained in the County's water quality management (208) plan.

Current facilities planning from the surrounding jurisdictions shows that the heavily hydric soil-laced eastern tier of the Township is to be developed with centralized sewer service over the next twenty years at low to moderate suburban densities. While this area must be developed with sensitivity toward limitations raised by the presence of hydric soils, floodplains, poor drainage, and water quality protection efforts, centralized sewer service may be used to develop this area so as to minimize the limitations presented by this soil. The middle portion of the Township becomes less of a challenge in terms of finding soils that can accommodate non-discharge (non-centralized) wastewater treatment systems. Soils that may be suitable for non-discharge wastewater treatment systems are much more common in the western tier of the Township. This area is also more conducive to accommodate on-lot or other forms of individual systems.

Analysis of soils on parcels of ten (10) acres or more in Brown

# Percentage of hydric soils on lots greater than 10 acres




Franklin County
Where Government Works

Franklin County Development Department
May 23, 2003

Disclaimer: Franklin County Development Department assumes no liability either for any error, omission or inaccuracies in the information provided on this map.

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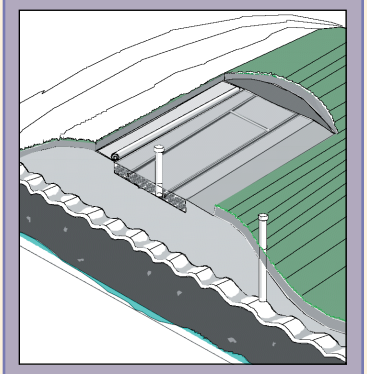
***Accompanying Text on Page 74

Public Facilities Analysis

- Wastewater Treatment



Mound Wastewater Treatment System

Township shows the following general pattern (Please see map on page 75):

- There is a very heavy presence of soils that are not at all suited to rural wastewater treatment in the eastern portion of the Township. (a predominance of parcels that consist of at least 45% or more of these soils)
- There is a moderate presence of "no use" soils in the center of the Township. (a mix of parcels with over 45% "no use" soils and parcels with 35-45% "no use" soils)
- There is a relatively light presence of "no use" soils in the Township's western tier. (dominated by a mix of parcels with 15-35% "no use" soils and parcels with less than 15% "no use" soils)

In summary, this analysis identifies three generalized bands running from south to north defining the wastewater treatment potential of soils. These bands define areas where wastewater treatment strategies may generally change from more centralized to less centralized. The middle and western part of the township may potentially accommodate non-discharge wastewater treatment solutions, although the treatment areas may sometimes have to be clustered. These areas, or bands, may be recognized in the accompanying map showing the percentage of large parcels, which are covered by soils that are not suitable for providing on-site wastewater treatment.

In recent years, new wastewater treatment technology has blurred the line between central sewer service and on-lot systems. There are emerging technologies that provide a level of treatment beyond variations of the traditional septic and leach field systems. This allows for placement of wastewater treatment systems in a wider variety of conditions, including in areas with difficult soils and high water tables. As a result, landowners have more flexibility in the placement and resulting density of rural house sites. The ability to place these systems in traditionally more challenging locations suggest that they may be used to help accommodate conservation development.

In one way, these systems lessen the concern that a community would have about rural wastewater treatment, but in another way these concerns may increase. These systems are more complicated than conventional on-lot wastewater disposal systems, which can lead to maintenance concerns such as those experienced with the package wastewater treatment systems and aeration systems that have been popular in Ohio in recent decades. Long term maintenance and oversight by local, county or state government entities are essential.

Public Facilities Analysis

- Wastewater Treatment
- Stormwater Management

## STORMWATER MANAGEMENT

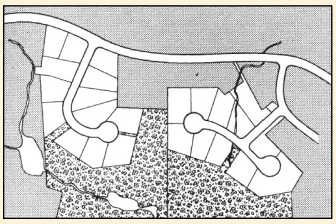
Soils and related topography influence surface water runoff quantity for many of the same reasons they affect runoff quality. Soil compaction, impervious surfaces and other soil disturbances exacerbate this issue. Impervious surfaces associated with development contribute to the cause of excessive runoff quantities. This issue is best addressed through proper education, management of storm water and community design. Communities should be configured to accommodate existing drainage patterns' form and capacity, while minimizing additional quantities. Site design standards can also help achieve this end. Finally, the Franklin County Engineer's Office has been working on county-wide storm water management strategies under new enabling legislation adopted by the State of Ohio which allows it to form stormwater utility districts.

There is strong evidence that conservation development reduces impervious surfaces and allows for more sensitive site design when it comes to runoff quantity and quality.

Also, techniques and designs considered in the "Darby Creek Watershed Stormwater Management Strategies and Standards", "Rainwater and Land Development Handbook" and the "ESDA External Advisory Recommendations" provide techniques to manage stormwater effectively. These techniques and designs stress the need to address the quality of stormwater runoff as well as a reduction in the quantity of stormwater runoff. The External Advisory Group report submitted to Ohio EPA in November of 2004

Public Facilities Analysis

- Stormwater Management
- Transportation



HOW CONSERVATION STYLE DEVELOPMENT CAN DECREASE IMPERVIOUS SURFACE COVERAGE

- Reduced road length
- Single loaded roads reduce road width and eliminate sidewalks on one side of the street

recommends that agency assess the above resource documents and that they establish overall performance indicators for stormwater management to ensure adequate environmental protection levels.

## TRANSPORTATION

### IMPERVIOUS SURFACE COVERAGE

The Darby Task Force Strategies and Standards for Development include this topic as one of three areas where stormwater runoff issues can be addressed during the development design and review process. That document points out that most impervious surfaces resulting from urban development are associated with transportation uses, such as streets, sidewalks and parking lots.

Conservation or open space style development can increase opportunities for reduced standards. More compact lots, can in many cases, be arranged so that road length within a subdivision is significantly reduced. In addition, this style of subdivision can incorporate the use of single loaded roads, which may allow for less road width and elimination of sidewalks and curbs on one side of the road. Among other sources the Darby Task Force endorses conservation or open space-style development as a means of minimizing the impervious coverage of these facilities.

The Franklin County Subdivision Regulations administrative process has allowed some exceptions for road widths on single loaded public roads, although reduced road width standards are more commonly associated with private roads. The Franklin County Zoning Resolution currently allows up to eight lots to be accessed on a reduced width private road. This section of the code should be revisited for cases when conservation development is used, giving credit for design features such as single loaded roads. Finally, it should be noted that Brown Township Board of Trustees currently favor private roads associated with new subdivision development.

### Pedestrian and Bicycle Routes

The 2025 Transportation Plan calls for increased opportunities for pedestrian and bicycle traffic in the future. Toward this end, the plan includes a recommendation that a system of nine bicycle trails be provided throughout Franklin County. The primary partners in implementing this recommendation are to be Columbus and Franklin County Metro Parks and the City of Columbus. One of the areas to be served by these trails is the Big Darby Creek corridor. In the event that this trail extends into or near Brown Township, local trails should attempt to connect to this facility.

## OTHER FACILITIES ANALYSIS

### POLICE PROTECTION

Police protection is currently provided by the Franklin County Sheriff's Office. Although the sheriff's office is mandated under Ohio law to provide coverage countywide, the type or quantity of coverage to be provided is not specified. The sheriff has assigned one cruiser to District 10, which encompasses northern section of Prairie Township and unincorporated areas of Brown, Norwich and Washington Township. During emergencies, however, the cruiser may be called out to provide assistance elsewhere.

Some townships have contracted with the sheriff's office for additional police protection as development has continued in their communities. For example, Prairie Township has contracted to have an additional cruiser assigned exclusively to that jurisdiction during specified times. The additional cruiser can only be called out of the Township for specified emergencies such as an officer in trouble.

### PARKS

In the early 1990s, the Metropolitan Park District of Columbus and Franklin County developed plans for establishing a major regional park along both sides of the Big Darby Creek in Brown Township and Canaan Township in Madison County. Prairie Oaks Metropark is now a reality in Brown Township on what was once

**Public Facilities Analysis**

- Transportation
- Other Facilities Analysis

Efforts should be made to connect future bicycle trails to the Big Darby Creek corridor per the 2025 Transportation Plan.

Future development may necessitate that the Township consider planning for a small system of local parks in a future plan update

property owned by the City of Columbus condemned for a proposed dam on Big Darby Creek. Today, Metro Parks' plans emphasize creek and riparian corridor preservation through fee simple acquisition, conservation easements and cooperative efforts with other agencies. Future development may necessitate that the Township consider planning for a small system of local parks in a future plan update.

## FIRE AND EMERGENCY MEDICAL SERVICES

Fire and emergency medical services must be continually monitored in order to assure that continued development does not stress the current system. Brown Township currently contracts with neighboring Norwich Township for fire and EMS services. The Township has 24 hour fire and EMS service available for the Brown Township Fire Station located at the intersection of Roberts Road and Walker Road as well as coverage from the Norwich Township Stations.

Any annexations that proceed call attention to the fact that it is more likely that the Township will remain in place after annexation occurs.

# POLICIES

ENVIRONMENTAL POLICIES
LAND USE POLICIES
PUBLIC FACILITIES POLICIES

Environmental Policies

- Establishment of a Stream Corridor

Stream Corridors will be protected in Brown Township

An Example of a Stream Buffer along the Bear Creek in Iowa

# ENVIRONMENTAL POLICIES

In an effort to protect Brown Township's natural resources, especially the Big Darby Creek, the Brown Township 2005 Comprehensive Plan recommends utilizing the most environmentally protective strategies presented including the Hellbranch Overlay, Darby Creek Stormwater Management Strategies and Standards and the Environmentally Sensitive Development Area External Advisory Group recommendations and a commitment to review the TMDL report from the OEPA.

## ESTABLISHMENT OF A STREAM CORRIDOR

The area comprising the Brown Township Stream Corridor shall include ALL of the following features of the waterway (perennial, intermittent & ephemeral streams excluding roadside ditches):

a. All areas within a 100-foot vegetative filter buffer, 120 feet along Hamilton Ditch and Big Darby Creek, on each side of a waterway as measured from the normal high water mark, and

b. All areas identified by Federal Emergency Management Agency (FEMA) as floodways and 100-year floodplains, and

c. A variable stream buffer established according to the following formula:

Drainage Area < 16.44 sq miles: $129 \times \text{Drainage Area}^{.43} = \text{Variable Buffer}$, and
Drainage Area > 16.44 sq miles: $87 \times \text{Drainage Area}^{.43} = \text{Variable Buffer}$
(see environmental analysis for more information)

d. Slopes in excess of 15% and wooded areas that are contiguous to these areas.

All of these components applied together establishes an appropriate stream corridor that will protect the key biological and morphological features of a stream.

Rather than relying on a standard buffer that applies to all waterways the plan applies a variable buffer which allows a stream to self-adjust its meandering pattern, another important component of stream protection. This formula was calculated in "Sizing Stream Setbacks to Help Maintain Stream Stability" (Ward, Mecklenburg, Mathews, Farver) ASAE Paper #022239

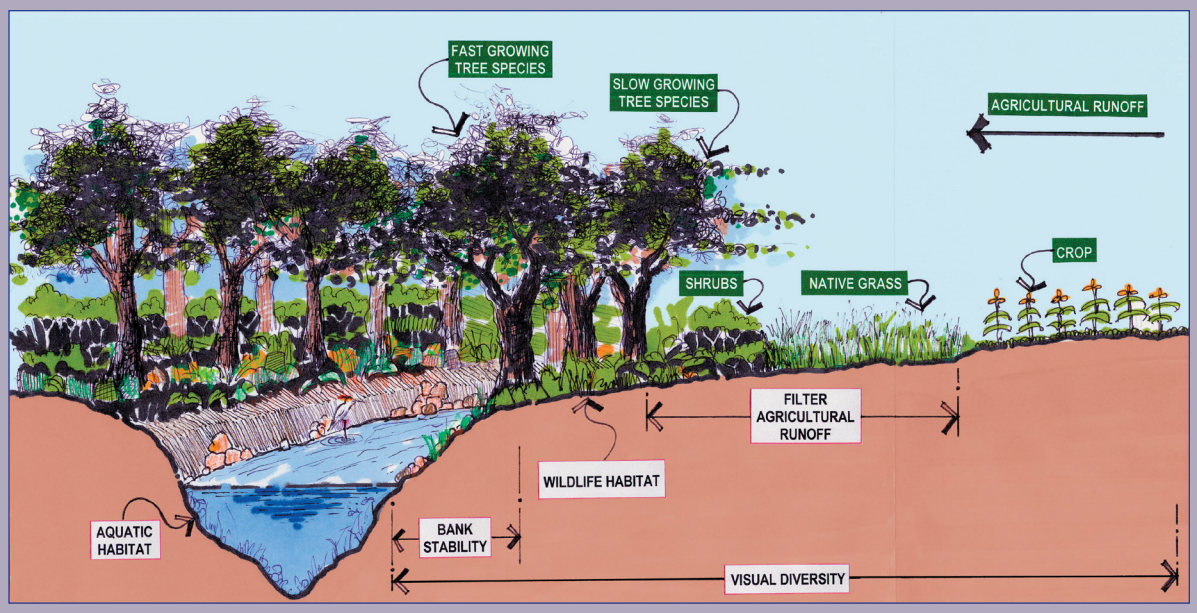
### Environmental Policies

- Establishment of a Stream Corridor
- Stream Corridors Shall be Primary Resources for Conservation

## STREAM CORRIDORS SHALL BE PRIMARY RESOURCES FOR CONSERVATION

Stream corridors are the primary resource targeted for protection in Brown Township and shall be the first areas identified for protection in the development process.

In a conservation development, these corridors are the first places identified as conservation areas. In cases of conventional devel-




Components of the Stream Corridor and their functions

**Environmental Policies**

- Stream Corridors Shall be Primary Resources for Conservation
- Stream Corridor Protection Mechanisms
- Protection of Natural Areas

opment, these areas will be protected to the degree possible with reserves or easements. This will be especially true in the conventional subdivision review process, but also to a lesser degree, through the site design process in conjunction with NPDES Phase II compliance efforts, the public facilities design and review process and any other review or initiative that involves the Township or other involved government agency or jurisdiction.

The protections described above will primarily apply to new major development and small-scale development on minor lot splits and existing lots. They will not apply to existing structures or extensions of existing structures. However, in no case shall direct discharge into waterways be permitted without a NPDES permit.

## STREAM CORRIDOR PROTECTION MECHANISMS

The established stream corridors that protect the waterway from encroaching development will be applied in conjunction the Franklin County Subdivision and Zoning Regulations' setback requirements and, in the case of Big Darby Creek, the Big and Little Darby Creeks Critical Resource Protection District in the Franklin County Zoning Resolution as applicable.

1. Stream corridors shall be preserved as open space and protected within conservation developments.
2. Stream corridors shall be protected to the degree possible with easements and reserves during the conventional subdivision process.
3. Continued recommendation of Darby Creek Corridor Overlay.

## PROTECTION OF NATURAL AREAS

This plan establishes first and second tier conservation areas intended to be protected through the subdivision and zoning review processes. These areas will be protected through the conservation development process and conventional subdivision review.

First Tier Conservation Resources: stream corridors, wooded areas, and wetlands

Second Tier Conservation Resources: steep slopes, hydric soils, farmsteads, and other historical and archeological sites

First tier conservation areas shall be preserved under any legal circumstances possible. Second tier conservation areas shall be protected by any means possible.

Brown Township will collaborate with appropriate authorities to see that new and existing sections of the Franklin County Zoning Resolution, Franklin County Subdivision Regulations will be changed and administered with the first and second tier conservtion areas being protected.

## STORMWATER MANAGEMENT STANDARDS

It is recommended that all jurisdictions incorporate into their land use regulations improved and adequate practices for stormwater management focused on water quality.

The Township considers the following appropriate examples of current and best management practices for stormwater management available, the most restrictive shall apply always seeking improved and adequate practices:

1. Rainwater and Land Development; Ohio's Standards for Stormwater Management, Land Development and Urban Stream Protection
2. Darby Creek Watershed Stormwater Management Strategies and Standards
3. Environmentally Sensitive Development Area External Advisory Group Recommendations

As new BMPs are developed, it is the Township's policy that the best and most restrictive practices be implemented. This effort shall be coordinated with Franklin County's NPDES Phase II compliance plan implementation efforts.

### Environmental Policies

- Protection of Natural Areas
- Stormwater Management Standards

The Township will incorporate improved and adequate stormwater management practices, emphasizing protecting water quality.

# Conservation Areas

## Legend

### First Tier Conservation Areas

- Hamilton Ditch Buffer Area (calculated)
- Big Darby Creek Buffer Area (calculated)
- 100 Year Floodplain
- Wooded Areas & Steep Slopes
- Streams
- Wooded Areas

### Second Tier Conservation Areas

- Steep Slopes (Slope>15)
- Hydric Soils

- Brown Township Boundary
- Roads
- Drainage Channels

7000 0 7000 Feet

Franklin County
Where Government Works

N W E S

Franklin County Development Department
May 23, 2003
Data Source: ODNR, Franklin County Auditor, Franklin County Soil and Water

Disclaimer: Franklin County Development Department assumes no liability either for any error, omission or inaccuracies in the information provided on this map.

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This policy shall be enforced in a way that emphasizes protecting water quality. The site development standards included in the Darby Creek Watershed Stormwater Management Strategies and Standards are more sensitive to water quality concerns that are critical in the Darby watershed.

### STORMWATER MANAGEMENT EDUCATION

The Township shall cooperate with the Franklin Soil and Water Conservation District and surrounding jurisdictions in order to further education about issues related to stormwater quality and quantity. This effort shall be coordinated with Franklin County's NPDES Phase II compliance plan implementation efforts.

### DRAINAGE TILES

The Township will work with County agencies to ensure that drainage tiles that are broken as a result of development will be re-routed and repaired so as to prevent interruption of the existing drainage system and resulting damage to new and existing homes and other property.

## LAND USE POLICIES

### RESIDENTIAL DENSITIES

Residential densities in Brown Township shall be organized in conservation development design to protect environmental features of the township, especially the first and second tier conservation areas, and to preserve the rural character of the area.

There are natural impediments to development in Brown Township. One of the most prominent is the protection of the Big Darby Creek and its tributaries. As such, all development in Brown Township must respect the ecological limitations. Furthermore, features such as poorly-draining hydric soils in the eastern portion of the Township, the high water table and flat topography impose restrictions on development.

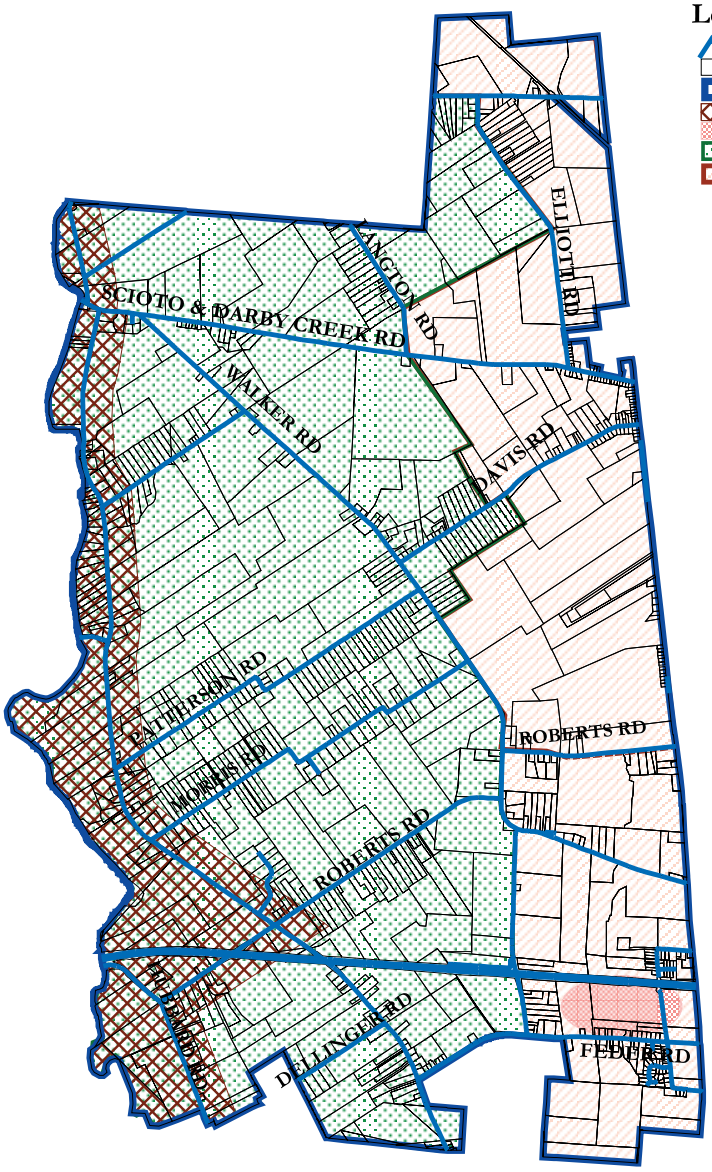
Environmental Policies

- Stormwater Management Standards
- Stormwater Management Education
- Drainage Tiles

Land Use Policies

- Residential Densities

# Proposed Densities of Development




## Legend

- Roadways
- Brown Parcel Boundaries
- Brown Township Boundary
- Darby Creek Corridor Overlay District
- Office/Professional Uses
- Low Density Rural Residential LDRR : 0.2-0.4 Net Units/Ac.
- Residential Transitional Density RTD : 1.0 Net Unit/Ac.

Note: RTD reflects the maximum allowable density with due consideration to first and second tier conservation areas, access, wastewater treatment and other site considerations cited in the plan.

The area surrounding the Big Darby Creek would in an overlay district requiring 5 acre lots with a minimum 300' feet of road frontage. Conservation development not permitted.

6000 0 6000 12000 Feet

N W E S

Franklin County
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Franklin County Development Department
May 23, 2005
Data Source: Franklin County Auditor

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Proposed Brown Township residential densities acknowledge and respect the environmental and physical constraints of the area. The densities are also meant to promote the rural residential community character that the residents of Brown Township desire.

The future land use map associated with this plan shows the location of these residential densities in the Township:

> **Low Density Rural Residential** (LDRR): 0.2-0.4 net units per acre (2-4 units per 10 net developable acres)
>
> **Residential Transitional Density** (RTD): maximum of 1.0 net unit per acre (10 units per 10 net developable acres)

Density in Brown Township, whether LDRR or RTD, is calculated as 'net density'. Developers shall calculate allowable densities after floodplain and right-of-way have been removed from the site's acreage calculations. Density shall not be calculated based on the gross acreage of a site.

Conservation style development patterns are expected in the Township except within the Darby Creek Conservation Overlay District. The development patterns prescribed by the Township allow for the residences to be clustered on the site to preserve open space and protect a site's environmental features.

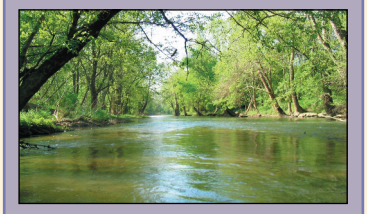
These density categories define the maximum densities allowable in these areas. Actual development densities, however, may be restricted by the wastewater treatment options and the presence of tier one or tier two conservation areas

Brown Township would allow these densities if they are done in a conservation style development. Specifically, the design of the development must set aside open space and abide by restrictions of the first and second tier conservation areas outlined in the environmental chapter.

## Land Use Policies

- Residential Densities

## LAND USE PROTECTION GOALS



Protect first and second tier conservation areas, including the Big Darby Creek and its tributaries

Preserve rural character

Acknowledge hydric soils and flat topography restrictions

Land Use Policies

- Residential Densities
- Open Space Requirements

CONSERVATION DEVELOPMENT OPEN SPACE REQUIREMENTS

| | |
|---|---|
| LDRR | 60% |
| RTD | 50% |

While the eastern portion of the Township faces the greatest development pressure, it is also the location of a high ecologically sensitive environment. Specifically, the headwaters to the Hellbranch Watershed and its extensive accompanying floodplain. The Hellbranch Watershed is ecologically significant since it is a major tributary draining into the Big Darby Creek. Any development in this area shall protect this resource from degradation.

Areas designated for Residential Transitional Density may be developed at those intensities only if high-density development issues are addressed, such as centralized sanitary sewer and water availability, roads, traffic impact and storm water runoff. Additionally, development in the Township must meet all water quality management requirements set forth by the various initiatives in the Big Darby & Hellbranch watersheds.

If these conditions are not met, in particular conservation development design with resource protection, development must occur at low-density rural residential (LDRR) levels.

## OPEN SPACE REQUIREMENTS

Conservation development guidelines determine the appropriate percentage of a proposed subdivision that must be retained as protected open space. Since the eastern edge of the Township is a transitional area from the higher densities of neighboring municipalities to the lower densities of the western portion of the Township, developments in the east will have lower ratios of open space to developed areas. In the western portion of the Township, preservation of rural character and agricultural uses are priorities, and therefore open space percentages will be greater.

The open space requirements are:

Low Density Rural Residential (LDRR).....60%
Residential Transitional Density (RTD)..... 50%

Open space design shall be done to protect tier one and tier two conservation areas and to promote rural character.

Depending on site constraints, the wastewater treatment facilities for community systems can be located in open space reserves contingent upon approval by the Franklin County Board of Health.

Land Use Policies

- Timing
- Encouraging Conservation Development

## TIMING

Throughout the Township, roads, sewers, drainage and other public facilities must be considered as part of the zoning and subdivision review process. Timing of infrastructure to accommodate land use changes has regional implications, as the Central Scioto and Blacklick Creek Water Quality Management Plan Update calls for a regional planning effort to address how open space, transportation, stream protection and stormwater issues are addressed in developing areas of western Franklin County. Therefore, proposed development, must meet both local and regional tests before proceeding.

## ENCOURAGING CONSERVATION DEVELOPMENT

Brown Township shall encourage conservation style development for subdivisions throughout the Township outside of the Darby Creek Conservation Overlay District. The Township shall encourage education about conservation development to its residents.

Brown Township shall encourage amendments to the Franklin County Zoning resolution to include conservation development.

Conservation style developments shall focus on three design goals:

1. Resource protection of tier one and tier two priority conservation areas.
2. Lessen the environmental impact of development.
3. Maintain rural character of Brown Township.

In order to achieve the design goals, the Township shall recommend that allowable densities are calculated using a net development area, which is determined by subtracting road rights-of-way and designated floodway and 100-year floodplain from the total site acreage.

### Land Use Policies

- Encouraging Conservation Development
- Encourage Open Space
- Conservation Development PUD Overlay
- Flexibility in Density and Open Space

The Township recommends contiguous networked open space preserved within a conservation development.

First tier conservation areas such as stream corridors, woodlands and wetlands, must be preserved within the open space under all legal circumstances possible. Second tier conservation areas, which include presence of hydric soils and steep slopes, should be included in the preserved open space by any means possible.

The Township will work with Franklin County to increase the review of minor subdivisions as recently allowed by changes to the Ohio Revised Code that increases review of lots up to 20 acres. These efforts will encourage and increase the viability of conservation development design in Brown Township.

Individual lot development can impact the environmental health of Brown Township and its natural resources therefore lots created as minor subdivisions shall be required to meet the environmental policies of this plan as well.

## ENCOURAGE OPEN SPACE

The Township will work with Franklin County and surrounding municipalities to encourage open space development patterns that protect first and second tier conservation areas as outlined in the Environmental Chapter. Prime farmland as identified in this report is also considered a conservation area for protection.

## CONSERVATION DEVELOPMENT PUD OVERLAY

Brown Township will work with Franklin County to establish a Planned Unit Development (PUD) overlay that allows conservation development for applicants once a development plan is submitted and approved and in compliance with the 2005 Brown Township Comprehensive Plan.

## FLEXIBLE DENSITY ALLOWANCE

Allowing a bonus system as described below balances flexibility for the developer with the needs and objectives of the community.
The use of net acreage is the best tool for the Township to ensure good open space preservation and quality conservation development design.

However, the Township can achieve the goals of good design while providing options for the developers by allowing them to use 50% of the Right-of-Way and floodplain acreage toward their calculations for density and allow the developer to use 50% of the floodplain towards their open space requirements provided they adhere to the following design tenets of conservation design.

1. Open space is designed as part of a network with existing or potential (based upon conservation area designations) open space on neighboring parcels; and
2. Water quality-focused stormwater measures that cause runoff to infiltrate into the ground on-site are instituted to the degree possible, while ensuring that pollutants are filtered out of the remaining runoff using the most suitable vegetation. The Franklin Soil and Water Conservation District shall certify these as exceeding minimum requirements for meeting Darby watershed water quality goals; or
3. Stormwater management tools including retention\detention ponds are not to be located within any floodplain counted as open space.
4. Measures and amenities determined to meet township planning objectives in a similar fashion, and to a similar degree, as those listed in items 1 and 2.
5. The required open space and maintenance plan includes a funding mechanism with a sufficient reserve, such as an endowment, provided by the applicant; and
6. Development of the property includes an approved stream reclamation project and/or provision of properly designed bicycle or pedestrian paths; or
7. Measures and amenities determined to meet township planning objectives in a similar fashion, and to a similar degree, as those listed in items 4 and 5.

### Land Use Policies

- Flexibility in Density And Open Space
- Darby Creek Conservation Overlay

Example of Bonus is on Page 18

### Land Use Policies

- Darby Creek Conservation Overlay
- Small Scale Development
- Lot Split Review
- Commercial\Office Development

### COMMERCIAL OFFICE DEVELOPMENT CONSIDERATIONS

- Compact nodes
- Minimize impervious surfaces
- 20,000 to 50,000 sq ft. of leasable space
- Appropriate scale and design
- Screening from road
- Alludes to Midwestern heritage

## DARBY CREEK CONSERVATION OVERLAY

The Township will work with the Franklin County Development Department to amend the Franklin County Zoning Resolution to include a Darby Creek Conservation Overlay (DCCO). Land use in this area will be limited to single family homes on lots of five acres or more with at least 300 feet of road frontage and Conservation Development will not be permitted.

## SMALL SCALE DEVELOPMENT

Small-scale development, fewer than five lots and not involving a new street or other easements, and conventional subdivisions shall continue to be developed under existing Rural district standards as prescribed by Franklin County Zoning Resolution and existing minor subdivision requirements in the Franklin County Subdivision Regulations.

## LOT SPLIT REVIEW

The Township will work with the Franklin County Development Department to amend the Franklin County Subdivision Regulations to allow the review of minor subdivisions that create lots up to twenty (20) acres. The current regulations allow review up to five (5) acres per the former Ohio Revised Code enabling language. Recent legislation has enabled Franklin County to amend the Subdivision Regulations to review splits up to twenty (20) acres. This improvement in regulation will ensure that residential land divisions involving hydric soils and arterial road access shall be cleared through the County technical review committee. It allows the Franklin County Development Department and other County technical agencies to impede the creation of lots that are not buildable according to county requirements. Brown Township also encourages Franklin County to reviewed in light of the environmental policies included in this plan.

## COMMERCIAL\OFFICE DEVELOPMENT

The Township will consider planned commercial office development, or an employment use of similar character and intensity, in

the vicinity of the locations designated on the development density map. Each location shall include about 20,000 to 50,000 square feet of gross leasable space.

The scale and design of the building or buildings should be appropriate for the setting. Such buildings should typically be single story. Square footage bonuses will be permitted for design features in excess of these guidelines.

Such design features will include screening from the road and architecture that reflects the rural Midwestern heritage of the Township. This development shall be designed to minimize impervious surfaces and to create compact nodes, as opposed to auto-oriented strip development. All commercial and office development shall meet the same tests for environmental protection as residential development options in the Township.

Public Facilities Policies

- Identify Appropriate Wastewater Treatment
- Encourage Emerging Wastewater Treatment Technologies

## PUBLIC FACILITIES POLICIES

### IDENTIFY APPROPRIATE WASTEWATER TREATMENT

Brown Township will work with state and county agencies to identify appropriate wastewater treatment strategies for rural development. In the areas designated for conservation developments these strategies will include community, or clustered systems to facilitate conservation developments. These small scale community systems are more complex because of the need to collect and convey sewage, but provide maximum flexibility in lot size and placement of lots and disposal areas.

### ENCOURAGE EMERGING WASTEWATER TREATMENT TECHNOLOGIES

The Township shall work with appropriate state and county agencies to encourage use of appropriate emerging rural wastewater treatment technologies. Appropriate systems would include those that provide a level of treatment and disposal over and above traditional on-lot systems without discharging effluent into public ditches or natural waterways. The more complex nature of these

**Public Facilities Policies**

- Utilize Best Practices For Stormwater Management
- Support Thoroughfare Plans
- Minimize Impervious Services

technologies, especially when they are configured into small community systems, requires that Brown Township continue to work on improved systems for monitoring and maintaining these systems. Finally, spray irrigation systems are not recommended for use in Brown Township due to aesthetics and the desire of Township residents.

## UTILIZE BEST PRACTICES FOR STORMWATER MANAGEMENT

Techniques and designs described in the Darby Creek Watershed Stormwater Management Strategies and Standards and Ohio Department Natural Resources' Rainwater and Land Development Handbook should be applied to all development that is within the scope of Franklin County's NPDES Phase II compliance plan. These techniques and designs should stress the need to address the quantity and quality of stormwater runoff.

Brown Township shall encourage the Franklin County Zoning Resolution and Subdivision Regulations to be updated to ensure that the most effective strategies be implemented to manage stormwater.

Finally, efforts on the part of the Franklin County Engineer's Office to implement a comprehensive stormwater management entity in Franklin County should be tied into the Phase II compliance effort as well as a means to address existing stormwater runoff problems in Brown Township.

## SUPPORT THOROUGHFARE PLANS

Brown Township supports road improvement projects listed in the 2030 MORPC Transportation Plan and the 2020 Franklin County Thoroughfare Plan. Brown Township recommends considering all environmental impacts of a proposed roadway improvements, specifically water quality considerations.

## MINIMIZE IMPERVIOUS SURFACES

Brown Township recommends that the County minimize impervi-

ous surfaces in new developments through appropriate revisions to the Franklin County Subdivision Regulations for narrower streets and revised sidewalk requirements. Single access subdivisions may be permitted to include 25 lots on streets of up to 2,800 feet in length or any number of lots on streets of up to 1,600 feet in length. Narrower streets should be permitted when smaller numbers of lots are being served and where single-loaded streets are used. Finally, sidewalks shall be required on only one side of the street where appropriate and not at all in low density developments. Conservation development layouts can facilitate these efforts.

## SUPPORT COMMON ACCESS DRIVES

Brown Township will continue to work with the Franklin County Technical Review Committee to investigate the possibility of permitting common access drives for limited numbers of lots in order to facilitate small scale development in a way that minimizes access points on existing roads. These facilities would be a private road built to less stringent standards (though able to support fire trucks) than public streets and the corresponding developments would be reviewed according to an abbreviated platting process.

## NETWORK OPEN SPACE FOR PEDESTRIAN & BIKE ROUTES

Open space to be provided through innovative development techniques should be networked using stream corridors, networks of hydric soils and other natural features that help to define open space corridors. These areas are potential locations for bicycle and walking trails that can function within a development and can be linked between developments. These facilities should be located so that they do not present short-term conflicts with changes in the waterway's channel. They should also be constructed with a permeable surface in order to reduce runoff and runoff pollutants.

Networked open space included in conservation developments should be considered as the location for appropriately designed and located pedestrian and bicycle paths. These paths should in-

### Public Facilities Policies

- Minimize Impervious Services
- Support Common Access Drives
- Network Open Space For Pedestrian & Bike Routes
- Roadways as Bikeways

Networked open spaces serve as ideal locations for bicycle paths

Public Facilities Policies

- Roadways as Bikeways
- Designation of Roadways
- Traffic Studies
- Service Agreements

terconnect and, when possible, connect to the regional path systems, including facilities developed as part of the rails to trails system.

## ROADWAYS AS BIKEWAYS

The Township continues (as stated in the 1992 Comprehensive Plan and the 1998 Update) to object to any roads within Brown Township being designated as bicycle routes in the Regional Bicycle Transportation Facilities Plan or similar planning document.

No existing road in the Township shall be designated for bicycle usage until such roads can be modified to accommodate bicycles, two abreast, without infringing upon the existing driving lanes.

Recognizing that the area roads are not currently suitably designed to accommodate both bicycle and automobile traffic, the Township has taken this position out of concern for the safety of bicyclist and motorist.

## DESIGNATION OF A SCENIC BYWAY

The Township shall pursue designation of Amity Road, in Brown Township north of Roberts Road, as a State Scenic Byway under the Ohio Department of Transportation.

## TRAFFIC STUDIES

The Township will continue to work with the Franklin County Engineer's Office to ensure that the Engineer is informed and the Township is consulted when any traffic studies are to be conducted, or improvements are to be made, for roads in or near the Township.

## SERVICE AGREEMENTS

The Township shall pursue agreements with other townships and municipalities regarding service arrangements in areas to be annexed in the future. The Township shall seek, evaluate and implement mechanisms to reduce the impact of annexations and increased property developments on the performance of these ser-

vices through creative and responsible financial methods.

These arrangements shall reflect land use and environmental policies outlined in the Township's comprehensive plan.

Public Facilities Policies

- Service Agreements