for file

DP&L
The Service People

Dayton Power and Light Company
P.O. Box 8825, Dayton, Ohio 45401

February 1, 2000

Ms. Kim Wissman
Siting Officer
Ohio Power Siting Board
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215-3793

00-232-EL-BLN

0001

Re: Letter of Notification for the Foster-Bath 345 kV Transmission Line Project

Dear Ms. Wissman:

The Dayton Power and Light Company (DP&L) proposes to establish a new 345 kV circuit between Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio to reduce the loading on the existing Foster-Sugarcreek 345 kV Circuit, and thereby ensure the continued reliability of the transmission system.

The proposed project provides the advantage of using existing right-of-way on the Foster-Sugarcreek-Greene-Bath 345 kV corridor by converting existing single circuit 345 kV to double circuit, or using open positions on existing double circuit towers, in order to minimize the environmental impact.

The following Letter of Notification is submitted for your review pursuant to Rule 4906-1-01 of the Administrative Code, as determined by the "Application Requirement Matrix for Electric Transmission Lines" in Appendix A of the rule. Please note that I have forwarded a copy of the Phase I Cultural Resources Survey to Dr. David Snyder of the Ohio Historic Preservation Office, and I have filed two copies with the Letter of Notification.

DP&L appreciates your review of this Letter of Notification and we would be happy to provide any additional information which you may require. If you have any questions regarding this project, please contact me at (937) 259-7174.

Sincerely,

H. Shamash

Hertzel Shamash
Manager, Resource Planning

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
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LETTER OF NOTIFICATION TO THE OHIO POWER SITING BOARD

THE DAYTON POWER AND LIGHT COMPANY

FOSTER TO BATH 345 KV TRANSMISSION LINE PROJECT

FEBRUARY 2000

This project involves the development of a 345 kV transmission circuit by The Dayton Power and Light Company. The Dayton Power and Light Company is submitting this Letter of Notification to the Ohio Power Siting Board for review and approval to proceed with the project.

Dayton Power and Light retained BHE Environmental, Inc., 11711 Chesterdale Road, Cincinnati, Ohio, to research land usage, agricultural district land, archeological and cultural resources, and other socioeconomic considerations associated with the development of the Foster-Bath transmission circuit. Additionally, BHE performed research into the presence or absence of animal and plant life species, the presence of absence of areas of ecological concern, and other environmental considerations associated with the development of the project. BHE performed the field study for this project, made agency contacts and completed other investigations and studies during August through November of 1999. The results of their work and investigations as well as their methodology, literature sited, and agencies and individuals contacted are included in the appropriate sections of this Letter of Notification.

The format of this Letter of Notification follows the requirements of Rule 4906-15-08 of the Administrative Code.

4906-15-08 Letter of Notification Requirements:

A. Need Statement

1. PROJECT NAME AND DESCRIPTION

Name of the project and reference number:

The name of this transmission line project is the "Foster to Bath 345 kV Transmission Line Project." A new 345 kV circuit is to be established between Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. The general location of this project is shown in Figure A-1.1. This new circuit will be called Foster-Bath and designated by Circuit Number 34522.

Description of the project:

The Foster to Bath 345 kV transmission circuit will be developed by rebuilding certain sections of existing 345 kV transmission circuits to form a double circuit (and in one section a triple circuit) transmission line between Foster and Bath Substations. Existing transmission line right of ways and substation properties will be used for the entire project, so no new right of way, property or access roads will be required to build this project. The total length of the new circuit will be 40.21 miles. Essentially 0.81 miles of the total will be single circuit steel poles (with future double circuit capability), 2.40 miles will be triple circuit steel H-frames that replace double circuit towers, 30.96 miles will be double circuit steel poles that replace single circuit steel towers, and 6.04 miles will be existing double circuit steel towers where a second circuit is added.

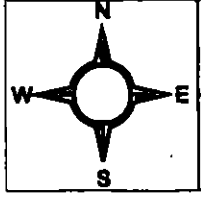


FIGURE A-1.1. Location of the Foster to Bath 345 kV project.

Project No. 173.05	BHE ENVIRONMENTAL, INC.

For clarity in understanding the locations and rebuild requirements of the project, the resulting Foster-Bath circuit has been separated into sections based on different characteristics. These sections are shown on the Project Map, Figure A-1.2, and are described as follows:

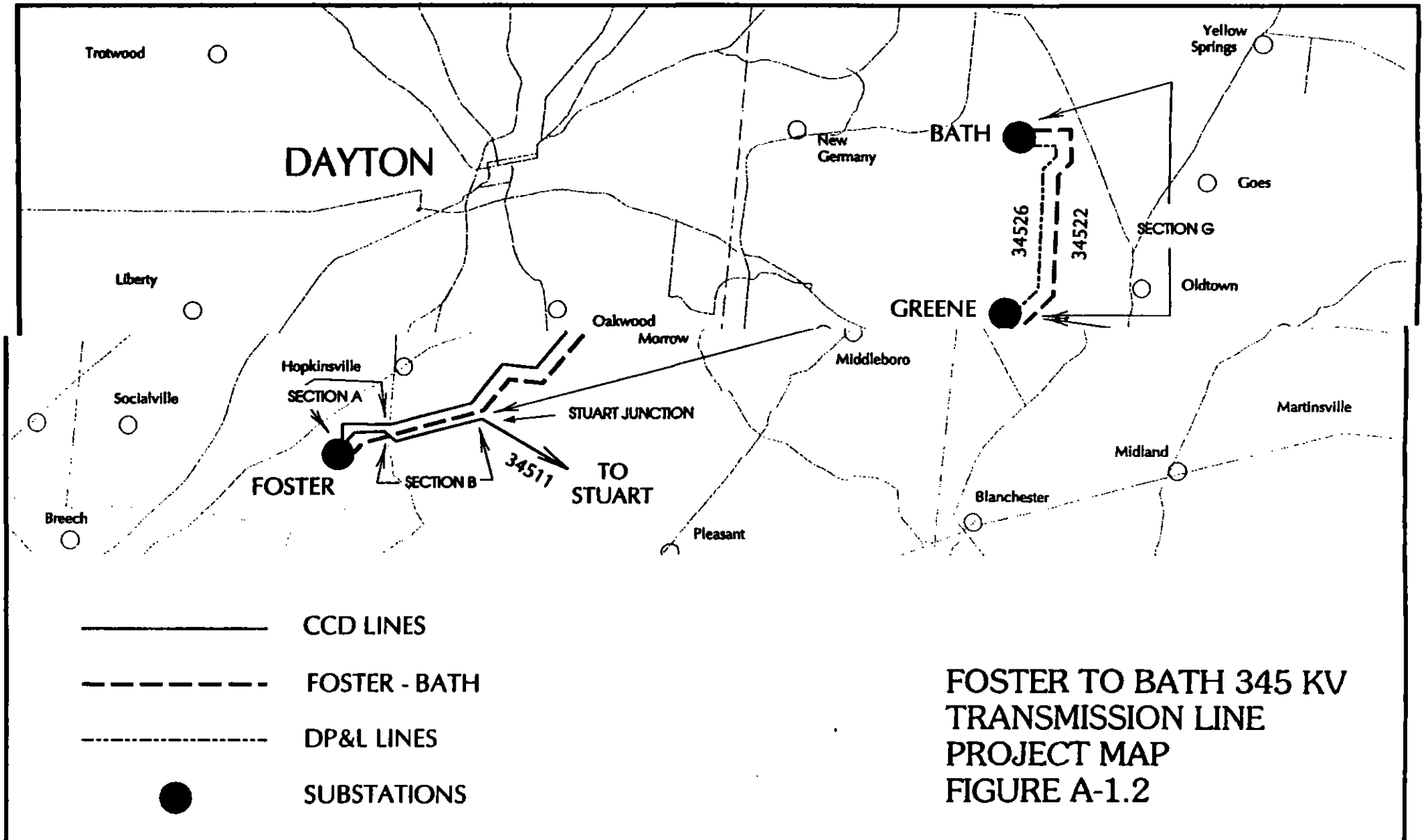
Section A: This 4259 feet long section (0.81 miles) begins at Foster Substation and proceeds generally east to the vicinity of Sibcy Road. In this area, Dayton Power and Light (DP&L) in conjunction with Cincinnati Gas and Electric (CG&E/Cinergy) and Columbus Southern Power (CSP/AEP) own a transmission right of way that totals 300 feet in width. Along the northern 150 feet of this right of way the three companies jointly own a double circuit transmission line on steel towers with circuits running from Foster Substation to Stuart Generating Station (Circuit 34511) near Aberdeen, Ohio and from Foster Substation to Sugarcreek Substation (Circuit 34524) near Dayton. The new circuit will be built along the southern 150 feet of this right of way on a new set of steel pole structures. Immediately north of the 300-foot wide right of way CG&E/CINergy has constructed a single circuit 138 kV transmission line on wood poles.

In order to position circuits coming out of Foster Substation correctly, and to keep from crossing circuits further north requiring very tall and expensive structures, the Foster to Stuart circuit will be reconnected to follow the new steel pole structures in this section. The Foster-Bath circuit (Circuit 34522) will be connected to occupy the original Foster-Stuart position on the steel tower line.

Section B: This section begins at Section A near Sibcy Road and continues generally east for 12,650 feet (2.40 miles) to the "Stuart Junction" point. A 150-foot wide right of way contains the double circuit Foster-Stuart and Foster-Sugarcreek transmission line in this area. The existing double circuit steel tower structures will be replaced with new triple circuit steel pole H-frame structures to accept the new Foster-Bath circuit. The Foster-Bath circuit will be located in the middle position of these new structures.

Section C: This section begins at the Stuart Junction and proceeds generally north for 127,313 feet (24.11 miles) to the "Sugarcreek Tap" point. A 150-foot right of way contains single circuit steel towers that carry the Foster-Sugarcreek circuit. The towers will be replaced on a structure for structure basis with double circuit steel poles with the Sugarcreek-Foster circuit on the west side of the poles and the new Foster-Bath circuit on the east side. At the Sugarcreek Tap point the existing tower will be retained to connect to the double circuit line to Sugarcreek Substation and the Foster-Bath circuit will pass the tap point on a single steel pole adjacent to the Sugarcreek Tap.

Section D: This section begins at the Sugarcreek Tap and proceeds north for 29,412 feet (5.57 miles) to the "Clinton Junction" point. A 150-foot right of way contains single circuit steel towers that carry the Sugarcreek-Greene line (Circuit 34503) except for two steel poles used as replacement structures following the 1974 Xenia tornado. The towers will also be replaced on a one for one basis with double circuit


Trotwood
DAYTON
Yellow Springs
New Germany
BATH
Goes
34526
34522
SECTION G
Liberty
Oldtown
GREENE
Oakwood
Morrow
Middleboro
Hopkinsville
SECTION A
Socialville
STUART JUNCTION
Martinsville
Midland
FOSTER
SECTION B
34511
TO STUART
Blanchester
Breech
Pleasant
CCD LINES
FOSTER - BATH
DP&L LINES
SUBSTATIONS
FOSTER TO BATH 345 KV
TRANSMISSION LINE
PROJECT MAP
FIGURE A-1.2

steel poles and the two existing steel poles will be converted to double circuit poles. The Sugarcreek-Greene circuit will be located on the west side of the poles and the Foster-Bath circuit will be on the east side.

Section E: This section runs north from the Clinton Junction to the "Glady Run Junction" point and is 6767 feet (1.28 miles) long. The transmission right of way in this section totals 300 feet in width with the existing Sugarcreek-Greene circuit along the centerline of the western 150 feet of right of way and the Clinton-Greene 345 kV circuit (Circuit 34508) along the centerline of the eastern 150 feet of right of way. The new Foster-Bath circuit will enter this section from the east side of the poles containing the Sugarcreek-Greene circuit in Section D and cross over the Clinton-Greene circuit to a steel pole at the Clinton Junction point on the east side of that circuit. The line will then continue north in Section E on the east side of new double circuit steel poles that will replace the original Clinton-Greene single circuit steel towers. The Clinton-Greene circuit will occupy the west side of the double circuit poles. The existing Sugarcreek-Greene circuit will remain on its original single circuit steel towers throughout Section E.

Section F: This section will run north from the Glady Run Junction to Greene Substation, a distance of 7808 feet (1.48 miles). The right of way here continues at 300 feet in width and the Sugarcreek-Greene circuit will remain on its single circuit towers on the western 150 feet of right of way. On the eastern 150 feet of right of way, existing double circuit 345 kV design steel towers will continue to carry the Clinton-Greene circuit on the west side of the towers as at present. The new Foster-Bath circuit will be added to the east side of these towers. The present 69 kV circuit that occupies the east side of the towers will be relocated to a 69 kV design wood pole line in the area. Rather than terminating on substation takeoff structures inside Greene Substation, this section of the Foster-Bath circuit will continue north on two steel poles at the east side of the substation so it can bypass Greene Substation and be connected to Section G.

Section G: This section heads north out of the Greene Substation property for 24056 feet (4.56 miles) to the Bath Substation, the terminal point for the Foster-Bath circuit. The existing 150-foot right of way in this section contains double circuit steel towers with the west position open. New conductors will be strung on the west side of the towers, and the existing Greene-Bath circuit (Circuit 34526) presently on the east side of the towers will be reconnected to these new conductors on the west side. The original east side conductors will be connected to complete this final section of the Foster-Bath circuit.

Need for the Project:

Due to a combination of load growth and increased power transfers within ECAR (East Central Area Reliability Coordination Agreement), the loading on the existing CCD

(Cincinnati-CG&E, Columbus-CSP, Dayton-DP&L) Foster-Sugarcreek 345 kV Circuit has reached a point where additional 345 kV capacity is needed to reduce the loading on this Circuit, as well as the rest of the CCD transmission system. CG&E, CSP and DP&L all experienced significant load growth during the 1999 summer, as was the case throughout the ECAR region, and power transfers, which increase the loading on the Foster-Sugarcreek 345 kV Circuit, have also increased significantly. During the 1999 summer peak periods, as well as the spring and fall off-peak periods, the Foster-Sugarcreek 345 kV Circuit was subject to Transmission Loading Relief (TLR) requests, an example of which is shown on the following page as Figure A-1.3.

Based on these current load levels, should an outage of the Stuart-Clinton 345 kV Circuit or the Miami Fort-West Milton 345 kV Circuit occur, the Foster-Sugarcreek 345 kV Circuit would exceed its emergency rating. This is in violation of DP&L, CCD, ECAR, and NERC (North American Electric Reliability Council) reliability guidelines, which require that no transmission facility should exceed its normal rating during normal operating conditions, and no transmission facility should exceed its emergency rating during contingency conditions.

The proposed Foster-Bath 345 kV Circuit is the most effective option for expanding the CCD 345 kV transmission system to eliminate the above overload conditions, thus ensuring the continued reliability of the transmission system.

A single line electrical diagram of the proposed transmission project is included following as Figure A-1.4.

Transmission Loading Relief - Inquiry

AEP AMERICAN ELECTRIC POWER
AEP: America's Energy Partner™

Main Menu | Inquiry | TLR History | Active TLR's | Composite Paths | Transmi:

- The End Date/Time Is Not Invalid!

Flowgate:

Company: DPL Level: Security Coordinator: Active: NO

Start Time: May / 01 / 1999 00 :00 ES Stop Time: Jul / 21 / 1999

Click on a TLR Below to View Detail Information

Transmission Element	Requestor	Sec Coordinator	Level	Start Time
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	1	07-16-1999 05
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	2a	07-16-1999 05
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	1	07-16-1999 05
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	2a	07-06-1999 10
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	1	07-06-1999 10
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	2a	07-06-1999 10
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	AEP-SC	1	07-05-1999 11
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	AEP-SC	2c	07-05-1999 11
08FOSTER 345 09SUGRCK 345 1	DPL	AEP-SC	1	06-29-1999 11
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	1	06-10-1999 13
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	1	06-09-1999 05
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	2c	06-08-1999 07
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	3	06-08-1999 07
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	1	06-08-1999 07

cn=William Joseph Thacker, ou=DPL, l=ECAR, o=TradeWave, c=US
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JTSIN OASIS Map | AEP Map | AEP Home Page | Logout

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FIGURE A-1.3

Foster-Bath 345 kV

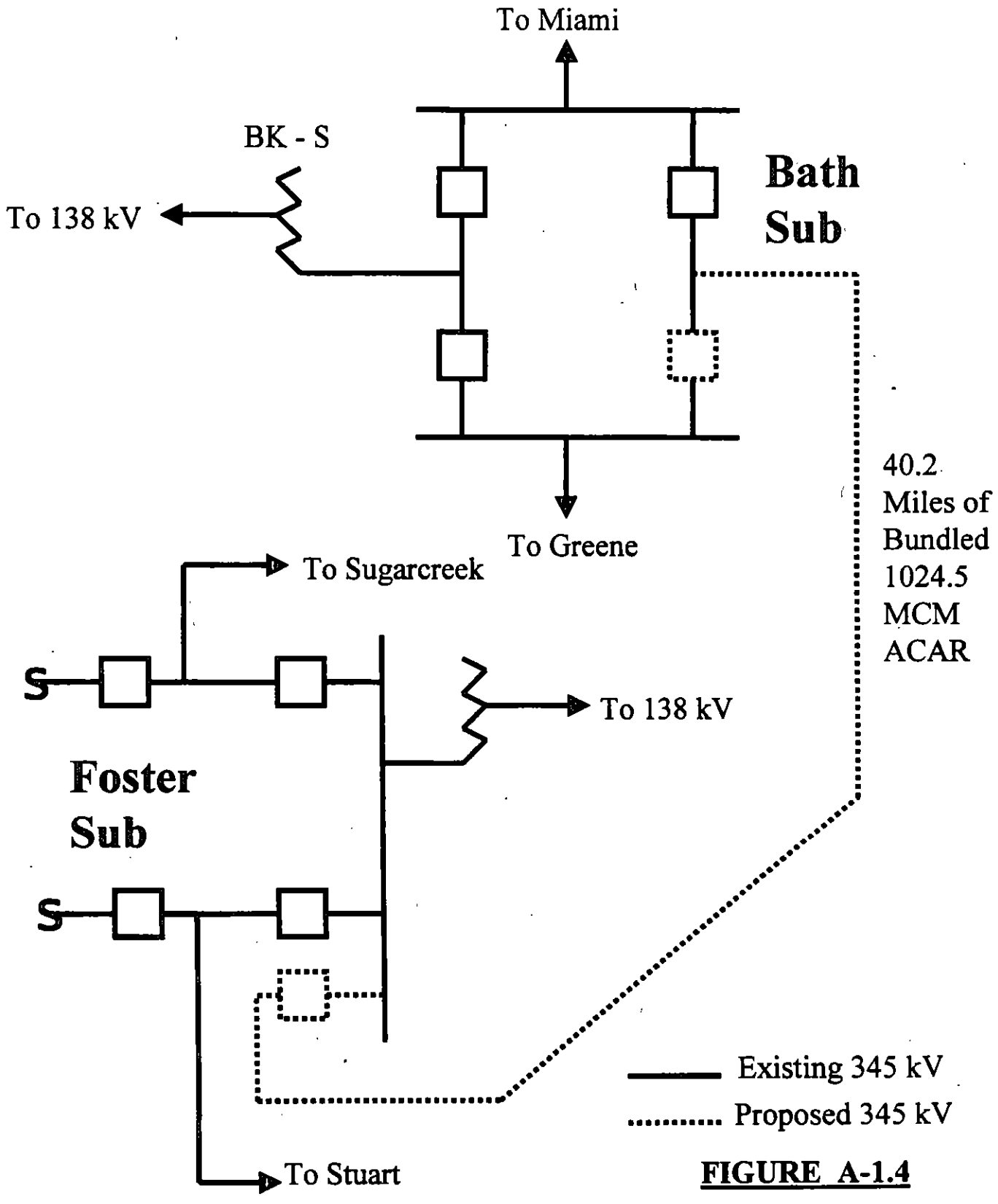


FIGURE A-1.4

Compliance with Letter of Notification Requirements:

The project meets the requirements for a Letter of Notification based on the scope of work required being consistent with the descriptions defined in the "Transmission Line Matrix", Appendix A, Rule 4906-1-01 of the Administrative Code. The specific Items identified in the Matrix that apply to each of the above defined line sections are as follows:

Section A meets the requirements of Item (1) (a), rerouting or extension or new construction of single or multiple circuit electric transmission line above 300 kV and not greater than one mile in length.

Sections B, C, D and E all meet the requirements of Item (4) (a), replacing transmission line structures with a different type of structures with less than two miles of new right of way required.

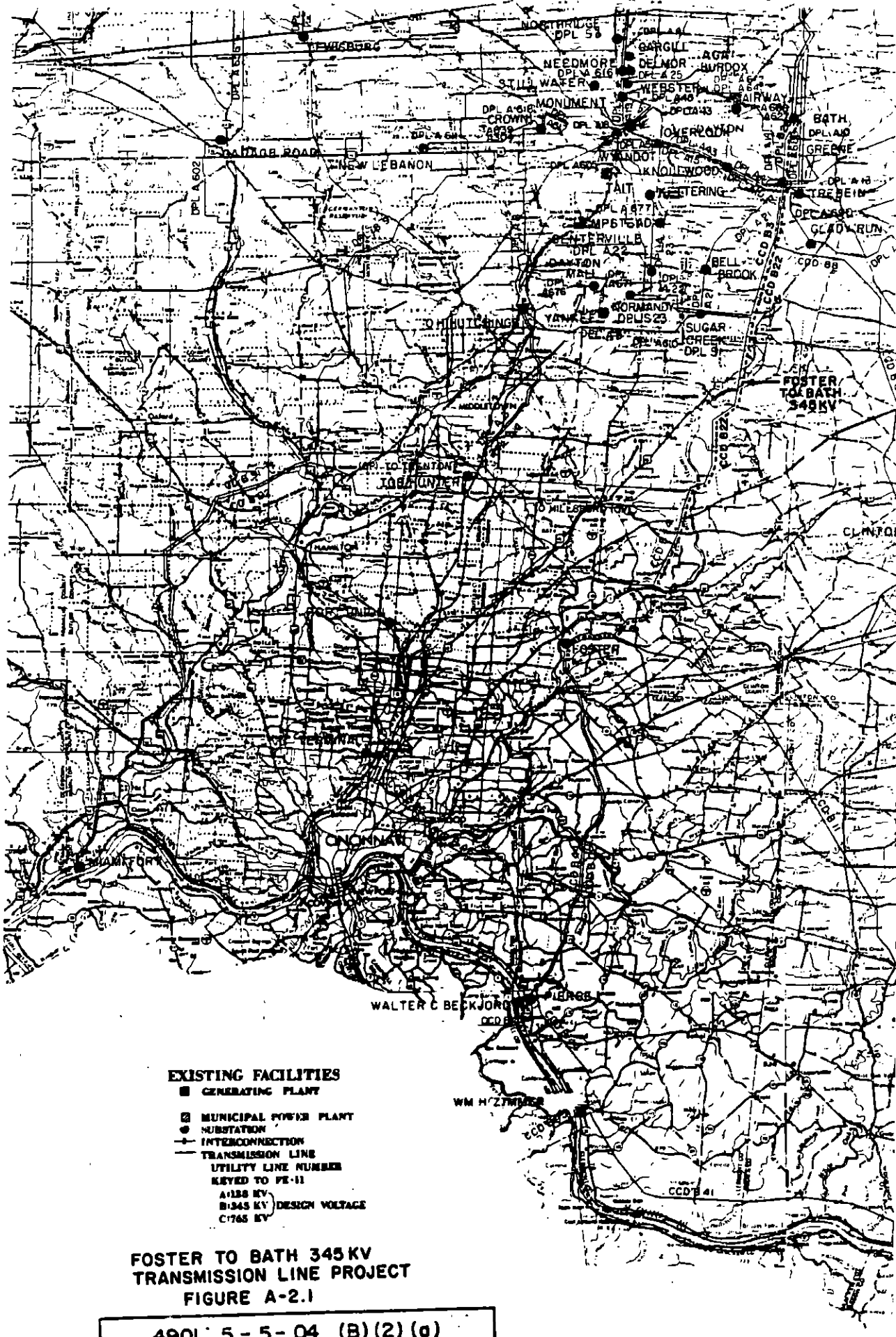
Sections F and G meet the requirements of Item (2) (b), adding additional circuits on existing structures designed for multiple circuit use with no new permanent access roads or widened right of way but with replacement of a few structures required.

2. PROJECT LOCATION IN RELATION TO EXISTING OR PROPOSED LINES AND STATIONS

The new Foster-Bath transmission circuit will be located along existing lines and substations as listed below. For each section of the new line, the adjacent transmission facility is given with its name, circuit number and designation as noted on the long-term forecast report. A portion of the long-term forecast report map (MAP II – The Dayton Power & Light Company Existing Transmission System 125 kV and Above) is included as Figure A-2.1 with the Foster-Bath circuit indicated on it. Foster-Bath circuit sections are as shown on Figure A-1.2.

Section A begins at Foster Substation and is built along the route of the Foster-Sugarcreek Circuit 34524 (Map No. CCD B 24) and Foster-Stuart Circuit 34511 (Map No. CCD B 11).

Section B will be built on joint structures with the Foster-Sugarcreek Circuit 34524 (Map No. CCD B 24) and Foster-Stuart Circuit 34511 (Map No. CCD B 11).



FOSTER TO BATH 345 KV
TRANSMISSION LINE PROJECT
FIGURE A-2.1

4901 : 5 - 5 - 04 (B)(2)(a)
MAP II
THE DAYTON POWER & LIGHT CO.
EXISTING TRANSMISSION SYSTEM
125 KV AND ABOVE

Section C will be built jointly with the Foster-Sugarcreek Circuit 34524 (Map No. CCD B 24) to the Sugarcreek Tap point which is approximately 3.2 miles east of the Sugarcreek Substation.

Section D will be built jointly with the Sugarcreek-Greene Circuit 34503 (Map No. CCD B 3).

Sections E and F will be built jointly with the Clinton-Greene Circuit 34508 (Map No. CCD B 8) and alongside the Sugarcreek-Greene Circuit 34503 (Map No. CCD B 3) to the east side of Greene Substation.

Section G will be built between Greene Substation and Bath Substation on the same structures with Greene-Bath Circuit 34526 (Map No. DPL B 26).

3. ALTERNATIVES CONSIDERED

A wide range of 345 kV options were considered to reduce the loading on the Foster-Sugarcreek 345 kV Circuit for an outage of the Stuart-Clinton 345 kV Circuit or the Miami Fort-West Milton 345 kV Circuit, as outlined below.

345 kV OPTIONS

	Distance (miles)	Cost ($M)
Foster (CIN)-Bath (DPL)	42	30
Foster (CIN)-W. Milton (DPL)	49	36
Killen (DPL)-Bath (DPL)	88	64
Batesville (CIN)-W. Milton (DPL)	93	67

Unlike the other 345 kV alternatives, which would all require new right-of-way and clearing thereof, the Foster-Bath 345 kV option offers the advantage of using existing right-of-way on the Foster-Sugarcreek-Greene-Bath 345 kV corridor by converting existing single circuit 345 kV to double circuit, or using open positions on existing double circuit towers. Therefore, the Foster-Bath 345 kV option would have the least environmental impact. And, in terms of performance, the Foster-Bath 345 kV option is the most effective option for reducing the loading on the Foster-Sugarcreek 345 kV Circuit, since it provides additional 345 kV capacity directly where it is needed. Finally, from an economic standpoint, the Foster-Bath 345 kV option is the least-cost, viable option.

Several alternate methods of connecting Foster and Bath Substations with a 345 kV line were considered in the progression of this project. One method included securing a parallel right of way to the existing right of way where new structures would be used for the new circuit and the existing parallel circuits left in place. However, an additional adjacent right of way is not readily available along much of the line. This is because the original right of way occupies the best or only realistic location for a line in several areas, and because development adjacent to the right of way has taken place in many locations since the original construction of the line.

A separate right of way along several alternate routes was also considered that could use all new structures. Finding suitable alternate routes was difficult in a number of locations. Additionally, detrimental impacts of using a new alignment were determined to be greater in all aspects compared to rebuilding along the existing line segments and rights of way available between Foster and Bath. Consequently, the construction to be used is to rebuild structures and add conductors as required to form the new circuit along existing facilities. Impacts expected to occur by adopting this method of construction compared to establishing and building along a new alignment include:

- No new right of way or property purchases are required.
- No new or additional tree clearing is required beyond that presently done for routine maintenance.
- Having only one transmission line corridor compared to two separate corridors with a new alignment minimizes visual impact.
- Overall socioeconomic and environmental impacts are minimized by disturbing essentially half the land compared to what a new separate line/corridor would require.
- The new circuit can be brought in service sooner since the procurement of right of way is not required and tree clearing of that new right of way does not need to be done.

4. CONSTRUCTION SCHEDULE AND IN-SERVICE DATE

The scheduled in-service date for the Foster-Bath Transmission Project is June 1, 2002.

To meet this scheduled in-service date, the milestones and time frames listed below need to be followed. Also of significant consideration to working the schedule for this project is the restriction that the existing circuits along the route for the Foster-Bath circuit are all important to the operation of the DP&L, CCD and ECAR transmission systems. As such, they are difficult to take out of service to do the upgrade work for this Foster-Bath project. This is especially difficult during times of high electrical system loading in the summer and winter, and consequently little construction activity may occur in these periods.

(a) Submission of Letter of Notification to the Ohio Power Siting Board...January 2000.

(b) Complete design engineering and secure materials for transmission work...April through September 2000.

(b) Perform routine maintenance and tree trimming on the right of way to facilitate access and construction...April through August 2000.

(c) Install steel pole foundations in Sections A through E...July 2000 through September 2001.

(d) Install conductors in Sections F and G...September 2000 through June 2001.

(e) Install steel pole structures, transfer existing conductors and remove existing towers as required in Sections A through E...April 2001 through April 2002.

(f) Install conductors for Foster-Bath Circuit in Sections A through E...September 2001 through May 2002.

(g) Engineering and secure materials for Foster and Bath Substations...May through September 2001

(h) Install Foster and Bath Substation structures and equipment...October 2001 through May 2002.

5. AREA MAP DEPICTING FACILITY LOCATION

An area map, Figures A-5.1 through A-5.14, following, has been assembled from USGS quadrangle maps at a 1:24,000 scale to show the alignment of the Foster-Bath transmission circuit. This map includes the other transmission facilities in the area that have some relationship to the Foster-Bath circuit. The junction points of the various sections of the Foster-Bath circuit as discussed in this Letter of Notification are also shown on the map.

Directions to Facilities:

Due to the length of this line project, directions are given to the Bath Substation at the north end of the circuit and to Foster Substation at the south end. Other areas along the line may be found by following the map provided as Figure A-5.1 through A-5.14.

Bath Substation is located in Greene County, Ohio, east of Fairborn. It may be reached from Exit 20 of Interstate Route I-675. From the interchange proceed east on Dayton-Yellow Springs Road for 1.7 miles to Linebaugh Road. Turn right on Linebaugh Road and proceed south 1.5 miles to Bath Substation on the west side of Linebaugh Road.

Foster Substation is located in Warren County, Ohio, west of Maineville. It may be reached from Exit 28 of Interstate Route I-71. From the interchange proceed 4.9 miles south on State Route 48 to the center of Maineville. Turn right at the traffic signal onto Maineville Road and proceed west 0.6 miles to Sibcy Road. Turn left onto Sibcy Road and follow it 1.6 miles to Loveland-Foster Road (also called Butterworth Road). Turn right on Loveland-Foster Road and proceed 0.2 miles to Foster Substation on the left.

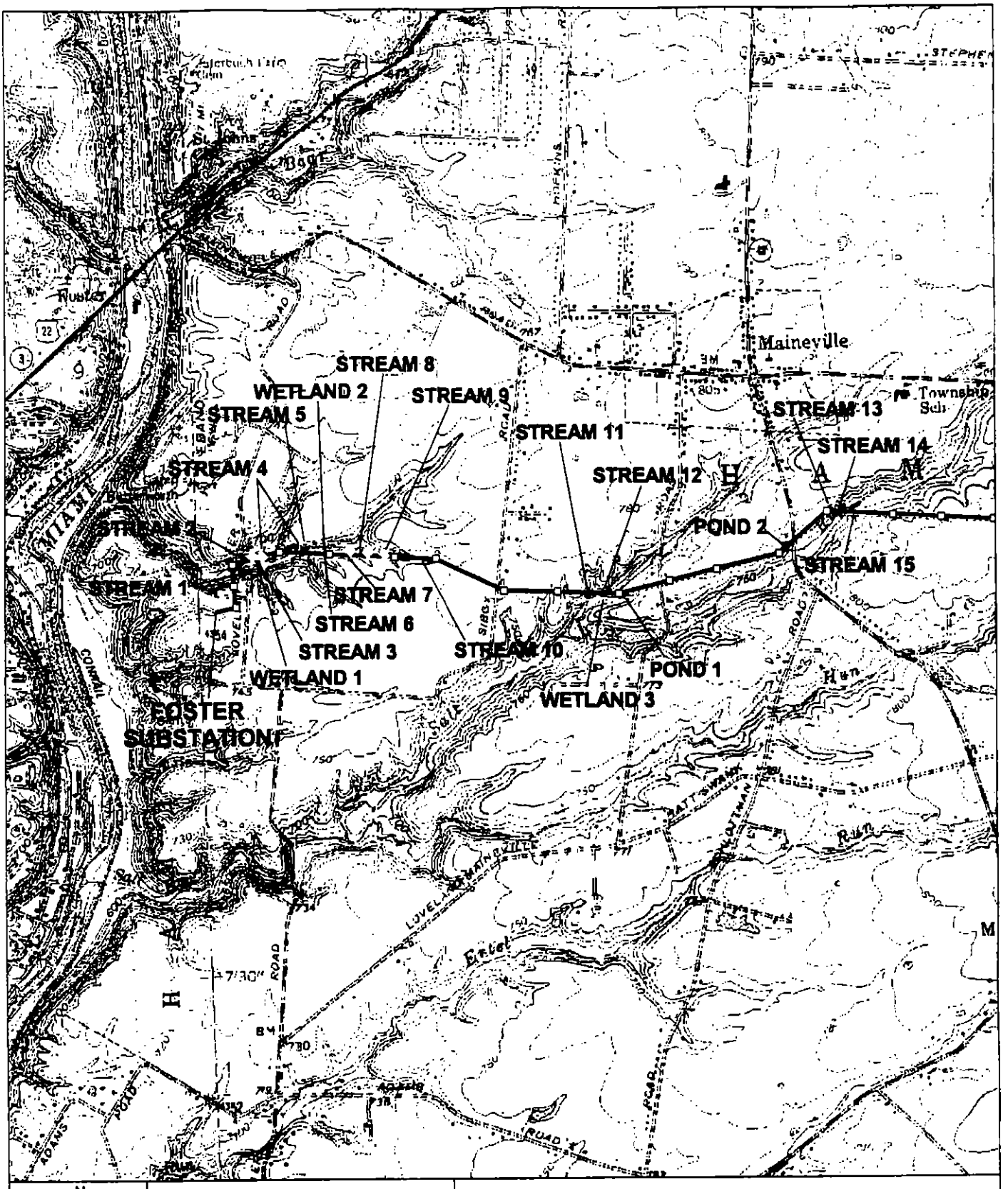


FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05

Base Map: USGS 7.5 Minute Topographic Maps - Mason, OH and South Lebanon, OH

BHE ENVIRONMENTAL, INC.

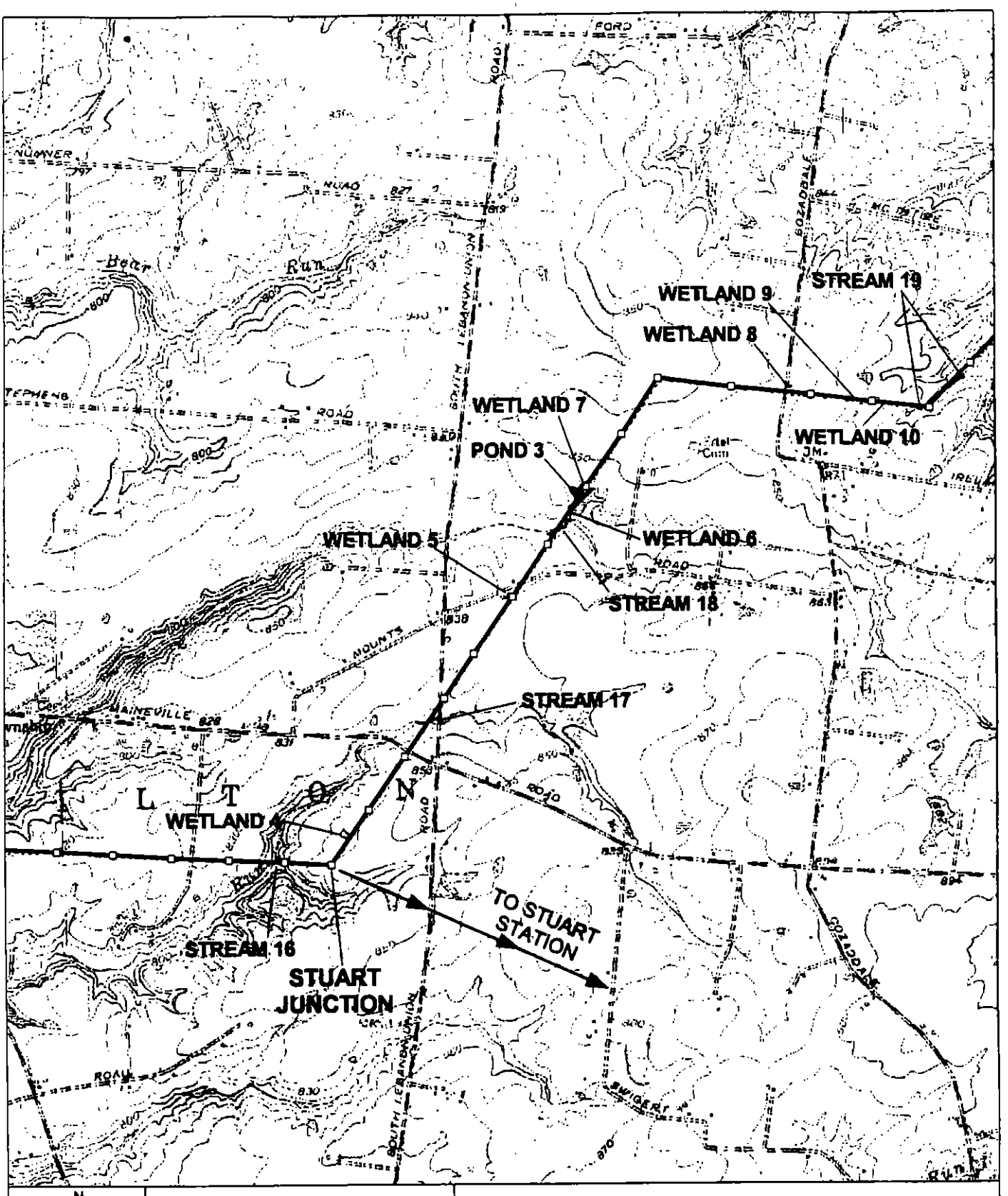


FIGURE A-5.2. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - South Lebanon, OH	BHE ENVIRONMENTAL, INC.

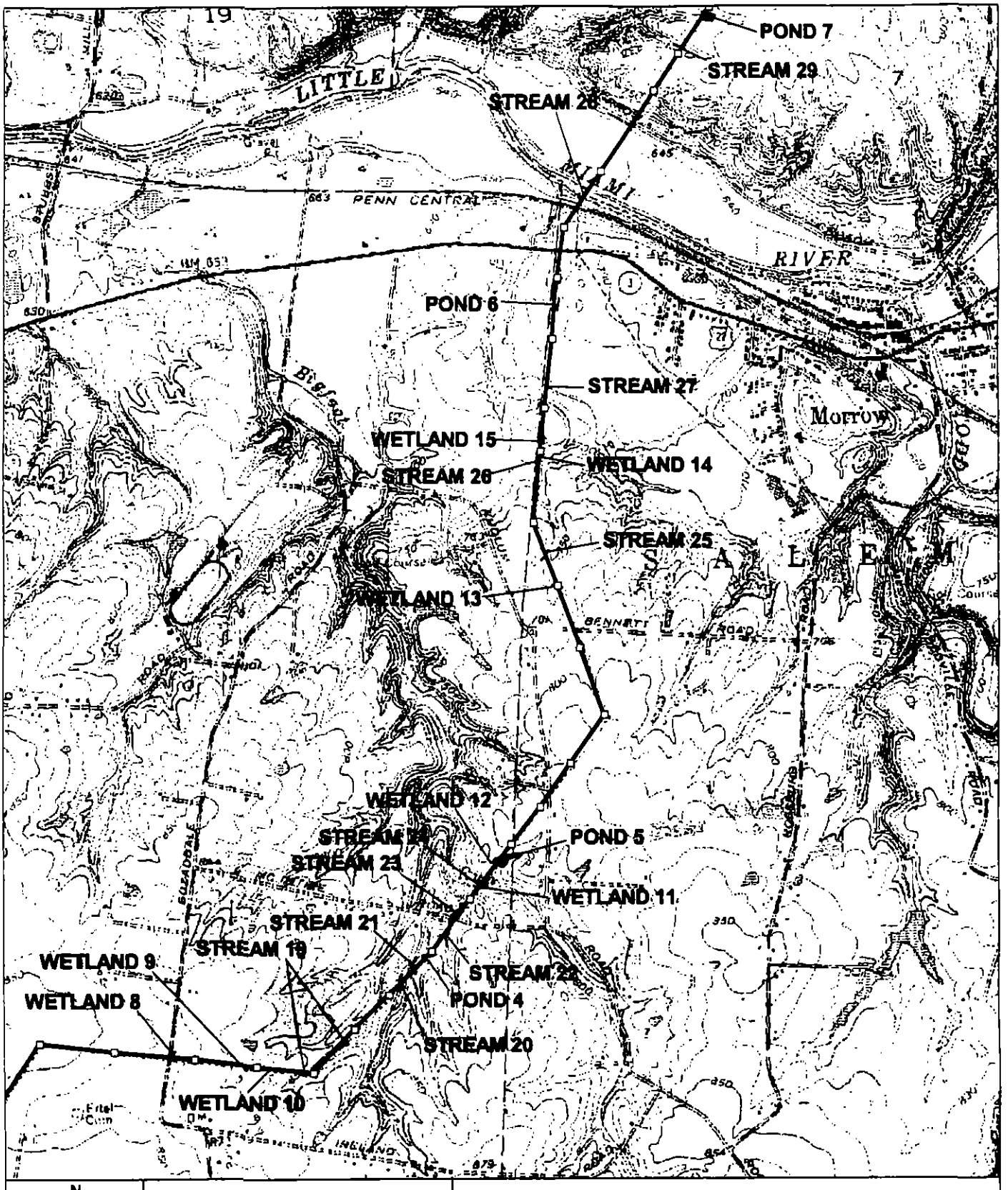


FIGURE A-5.3. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - South Lebanon, OH	BHE ENVIRONMENTAL, INC.

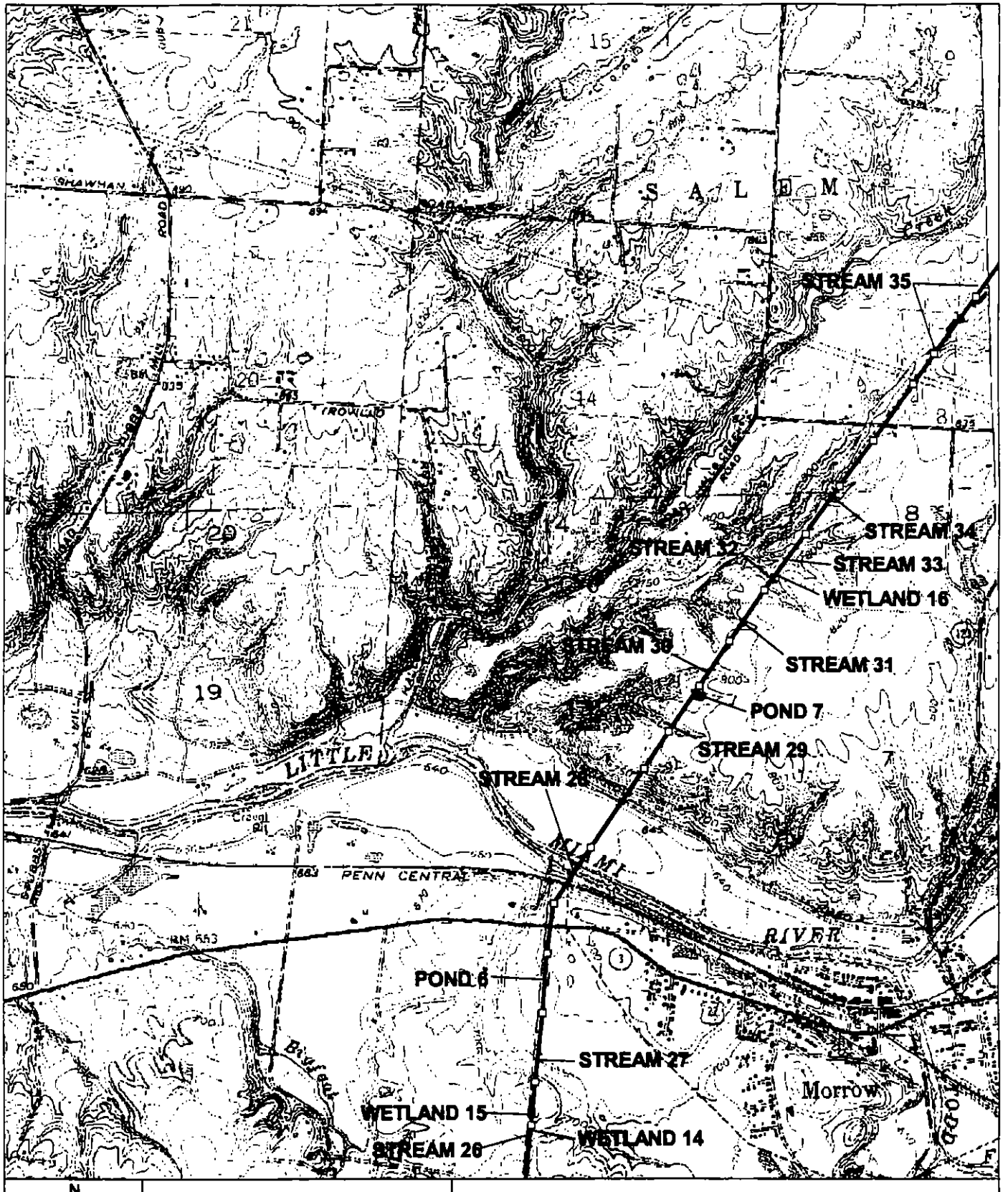


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FIGURE A-5.4. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line Structure Locations Suitable Bat Habitat

Project No. 173.05

Base Map: USGS 7.5 Minute Topographic Maps - South Lebanon, OH and Lebanon, OH

BHE ENVIRONMENTAL, INC.

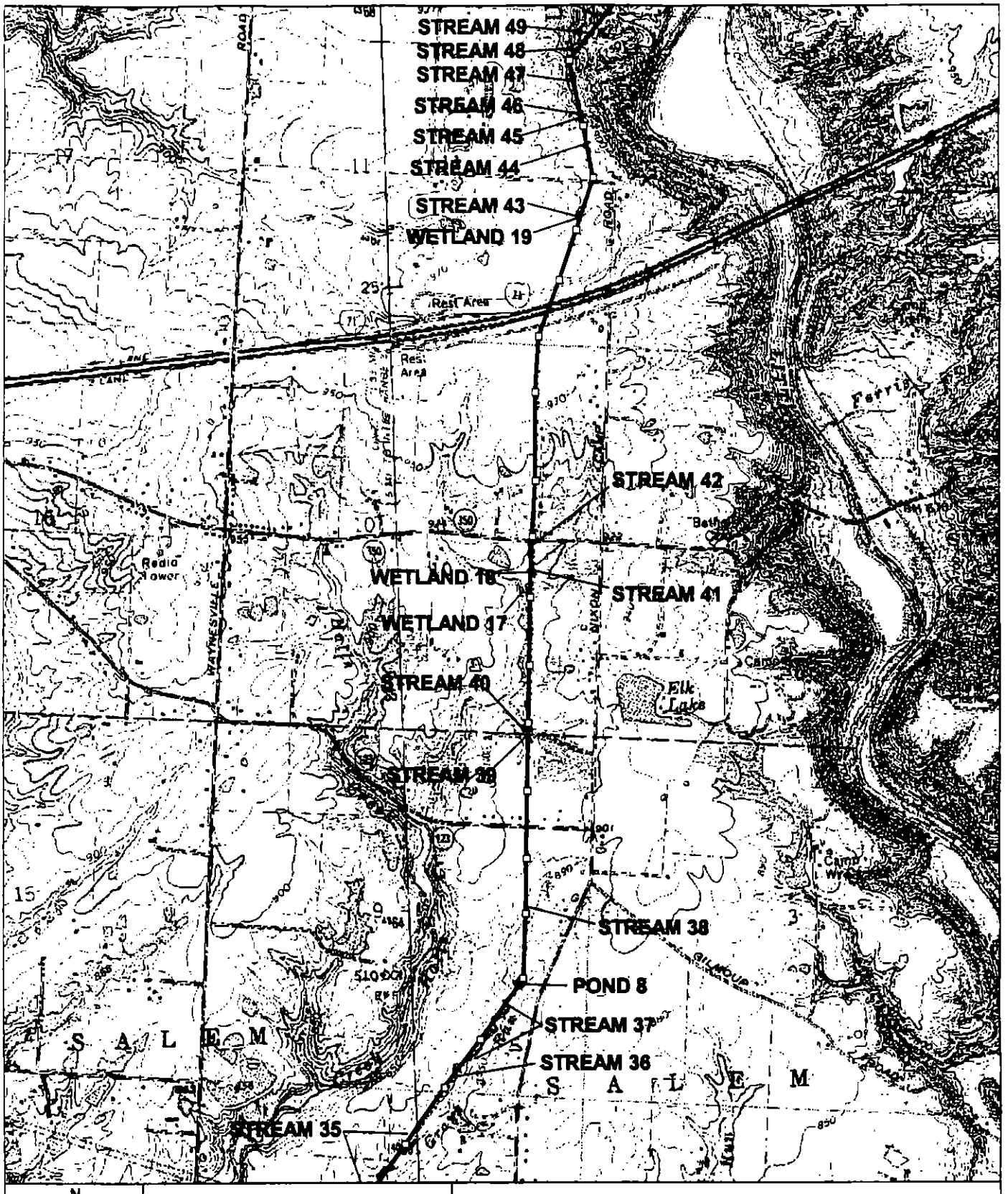


FIGURE A-5.5. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Maps - Lebanon, OH and Oregonia, OH	BHE ENVIRONMENTAL, INC.

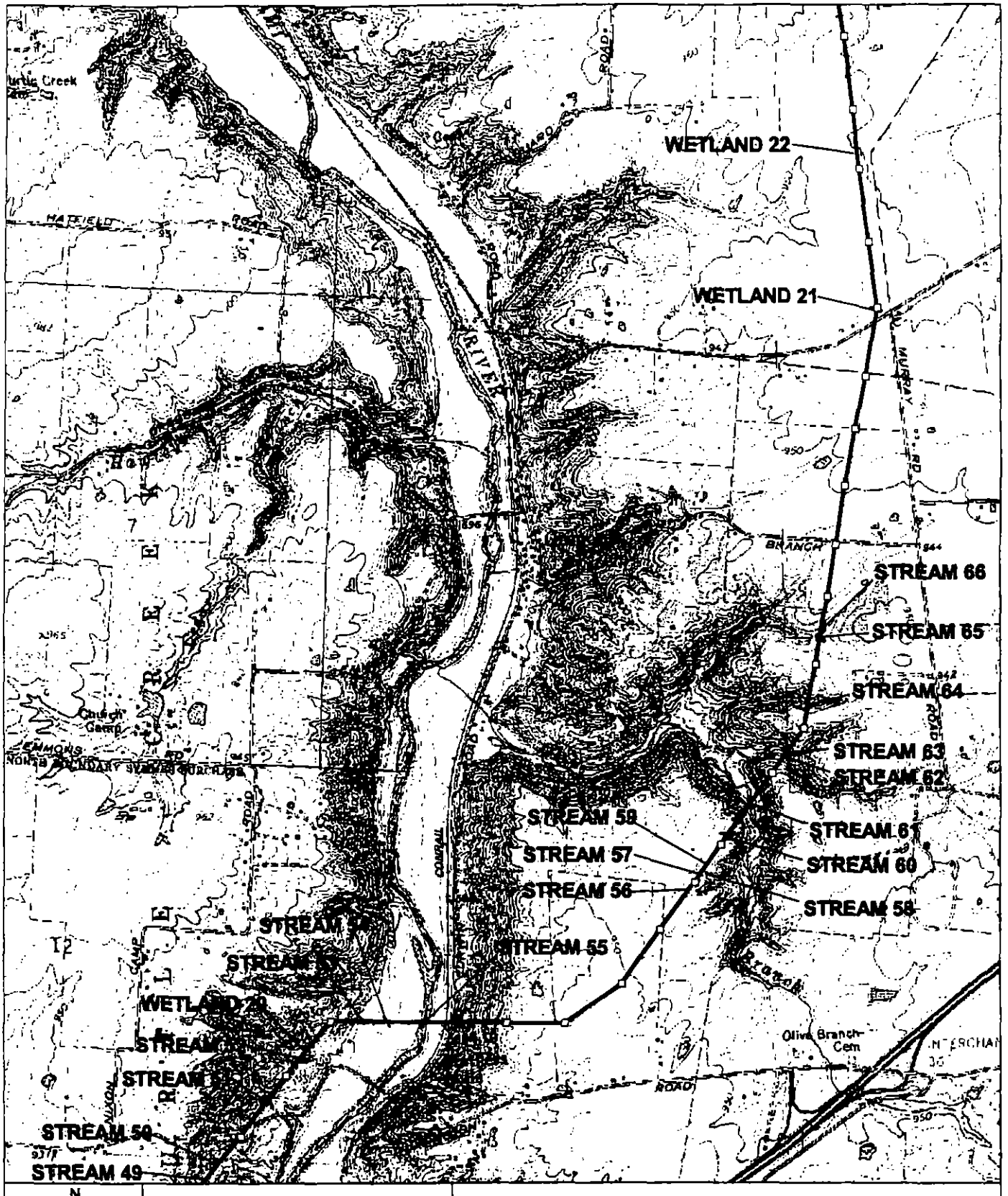


FIGURE A-5.6. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Oregonia, OH	BHE ENVIRONMENTAL, INC.

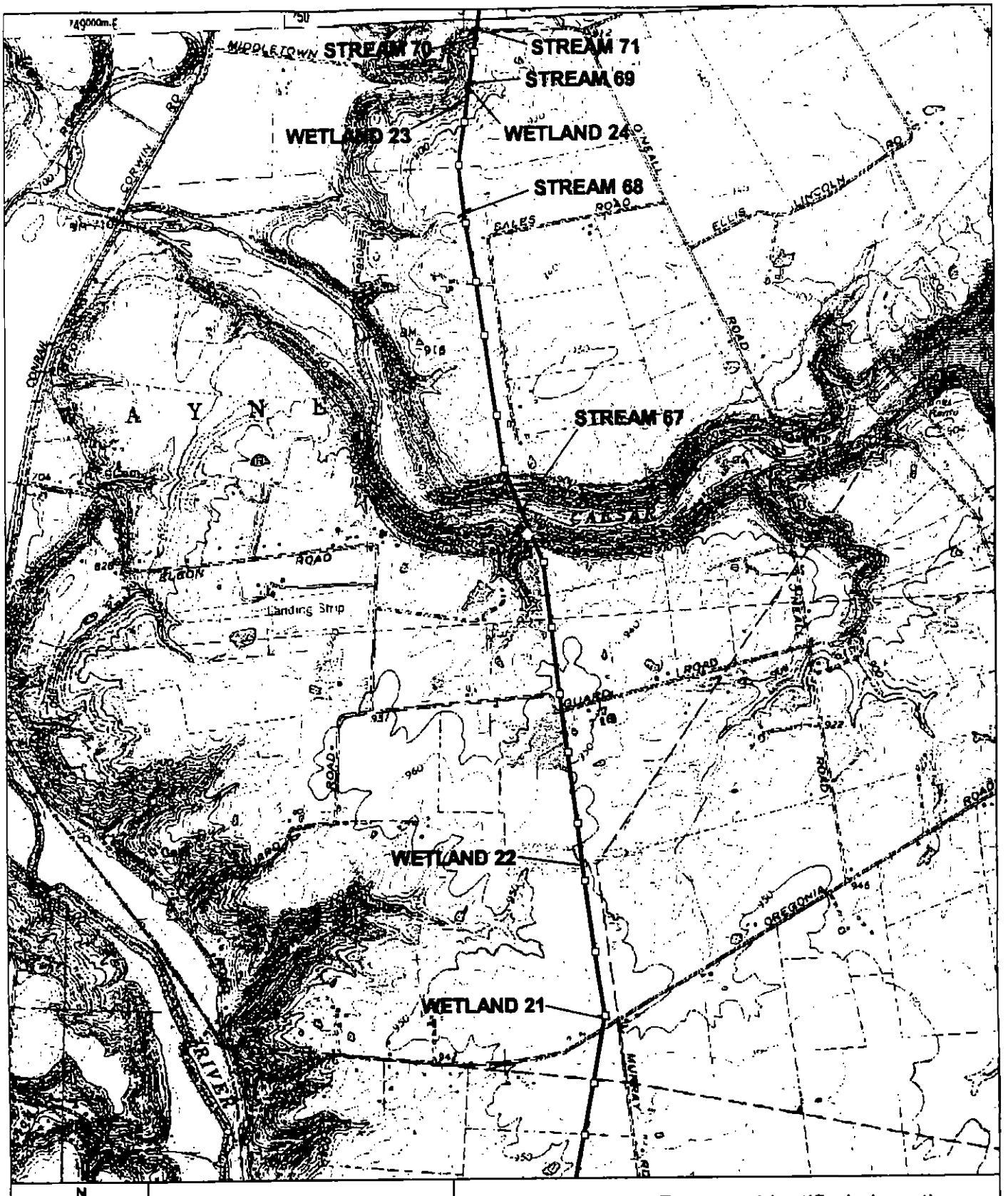
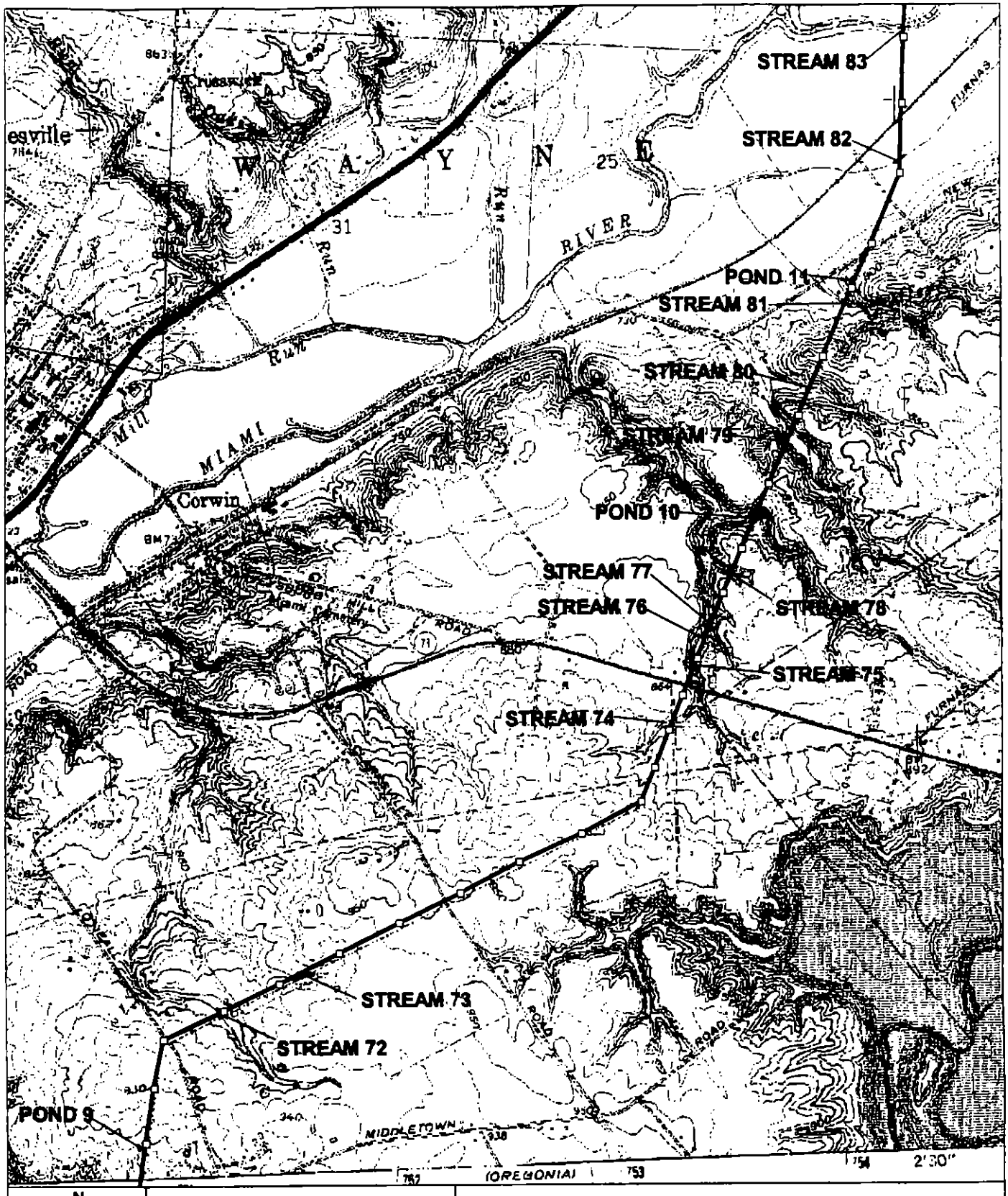


FIGURE A-5.7. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Oregonia, OH	BHE ENVIRONMENTAL, INC.



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S

Feet
1000 0 1000 2000

FIGURE A-5.8. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line Structure Locations Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

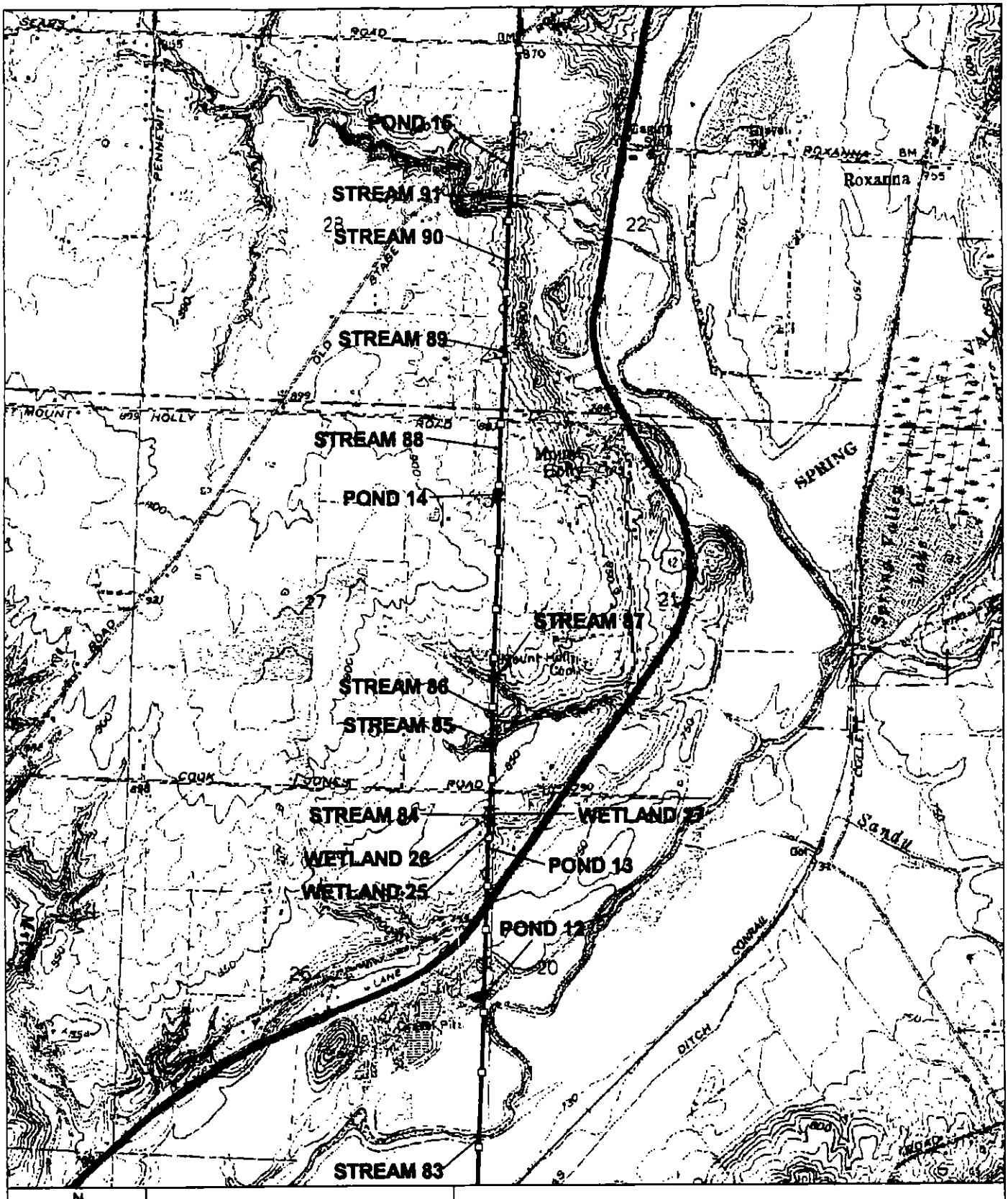


FIGURE A-5.9. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

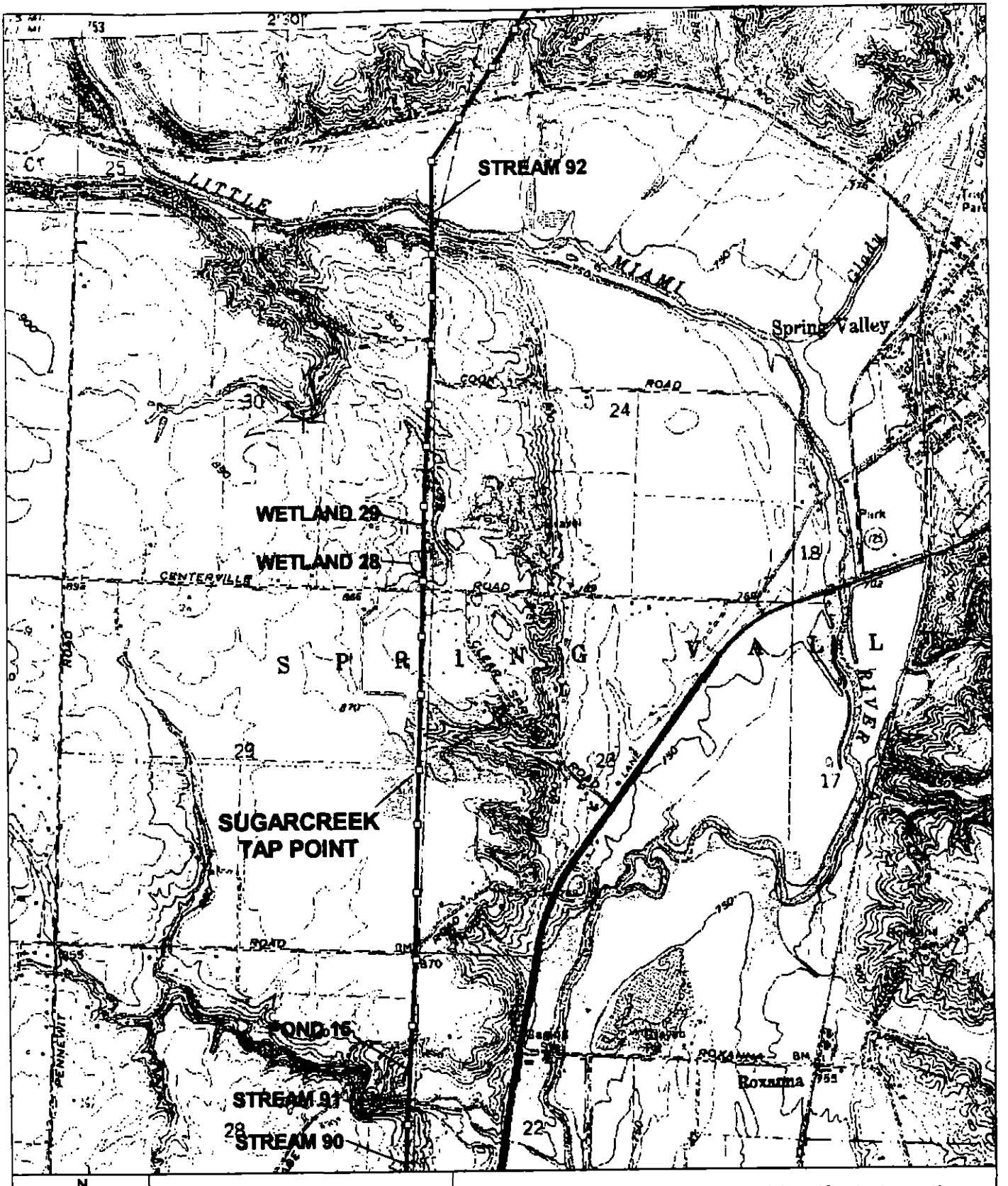


FIGURE A-5.10. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

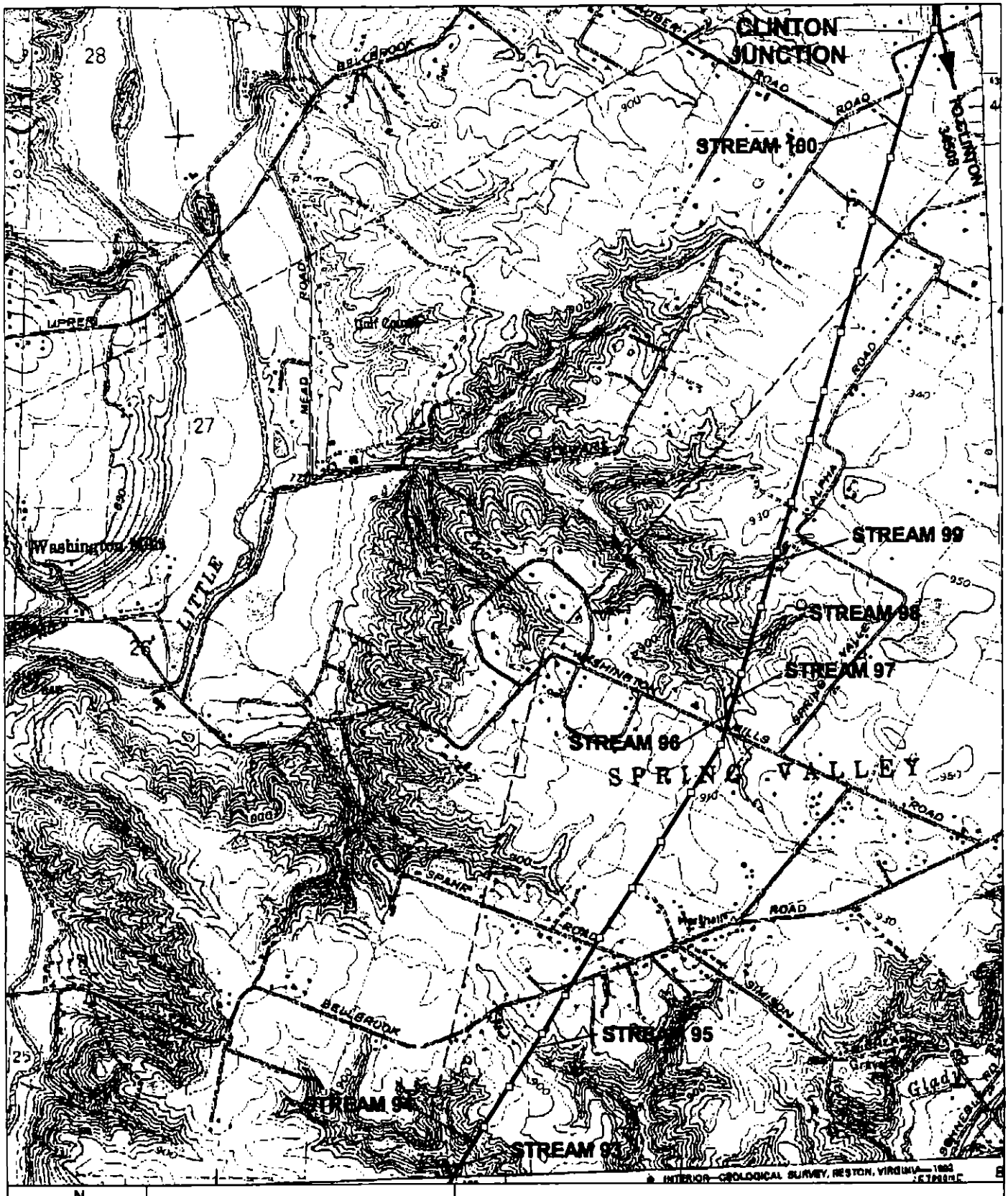


FIGURE A-5.11. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

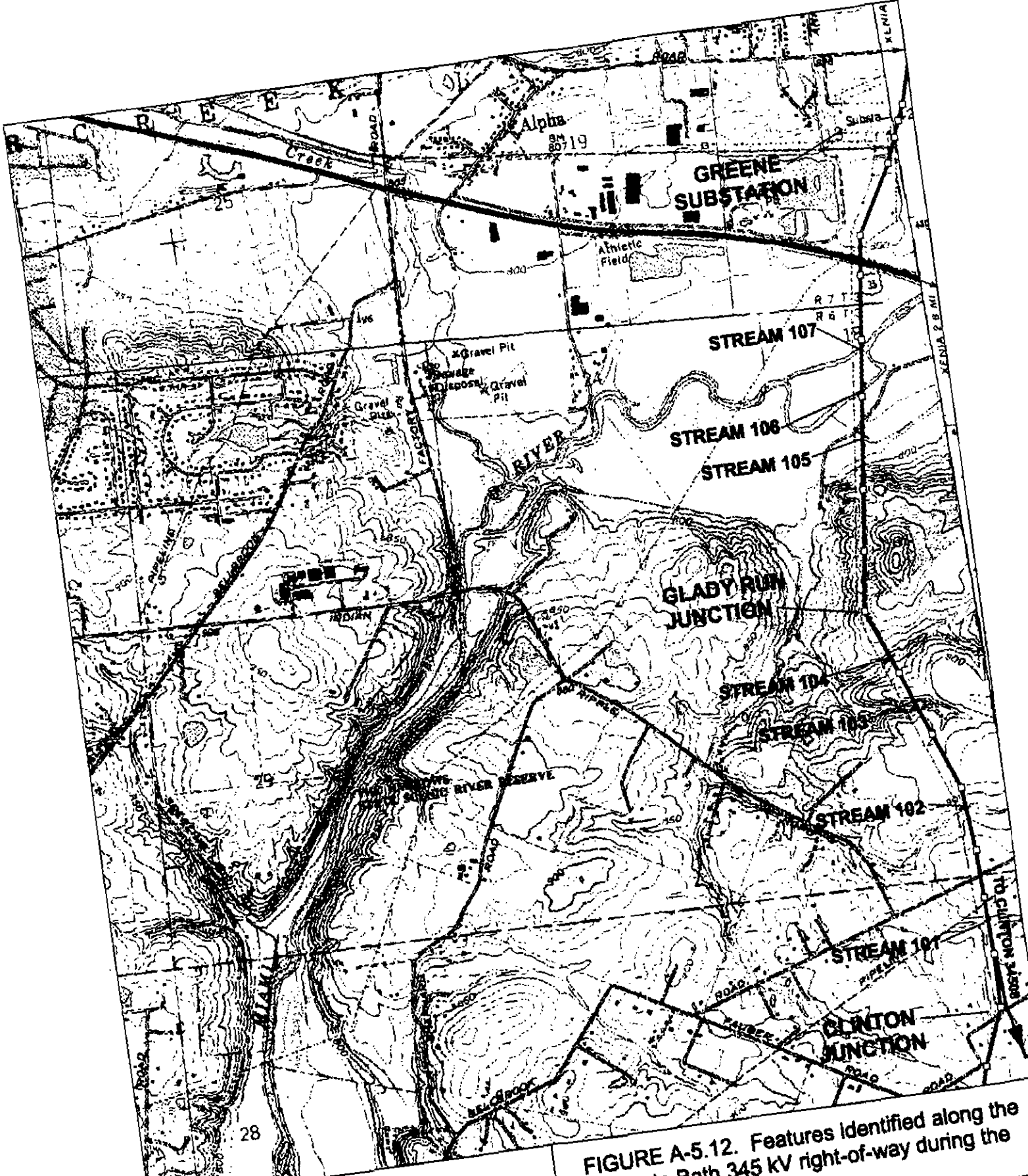


FIGURE A-5.12. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

N
W E
S

Feet
1000 0 1000 2000

Proposed Transmission Line
Structure Locations
Suitable Bat Habitat

Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH

BHE ENVIRONMENTAL, I

Project No. 173.05

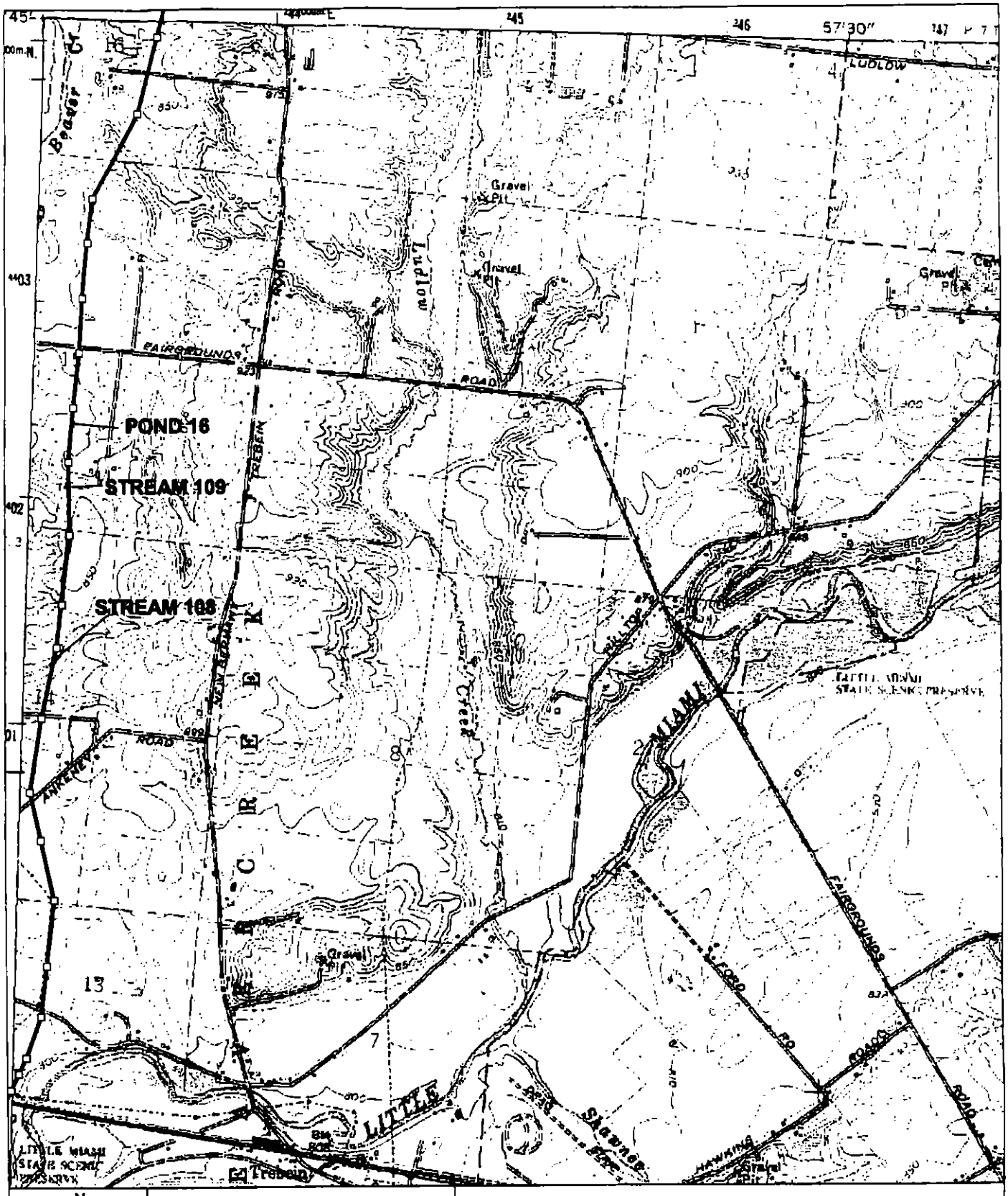


FIGURE A-5.13. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Xenia, OH	BHE ENVIRONMENTAL, INC.

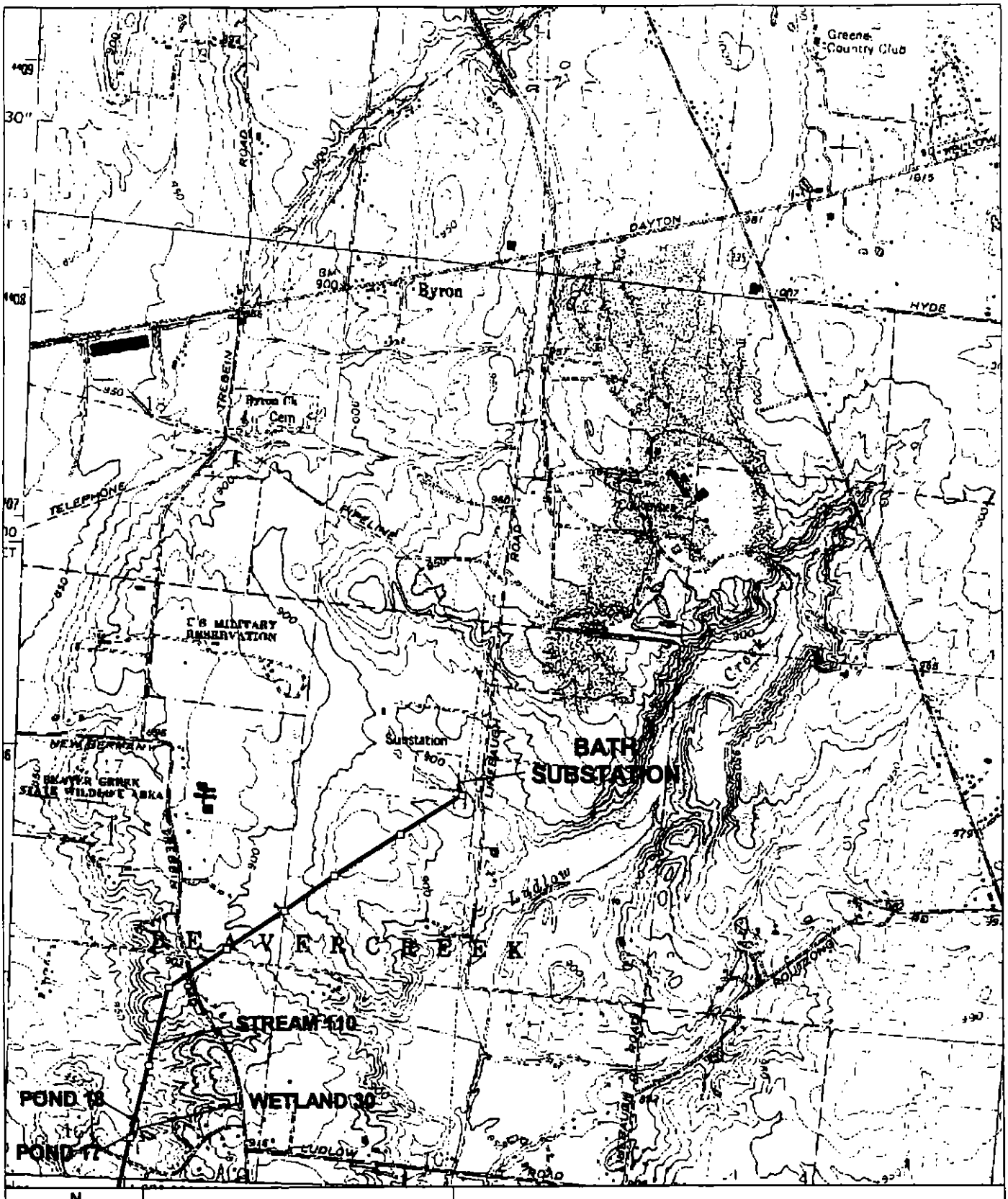


FIGURE A-5.14. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Yellow Springs, OH	BHE ENVIRONMENTAL, INC.

B. Technical Features

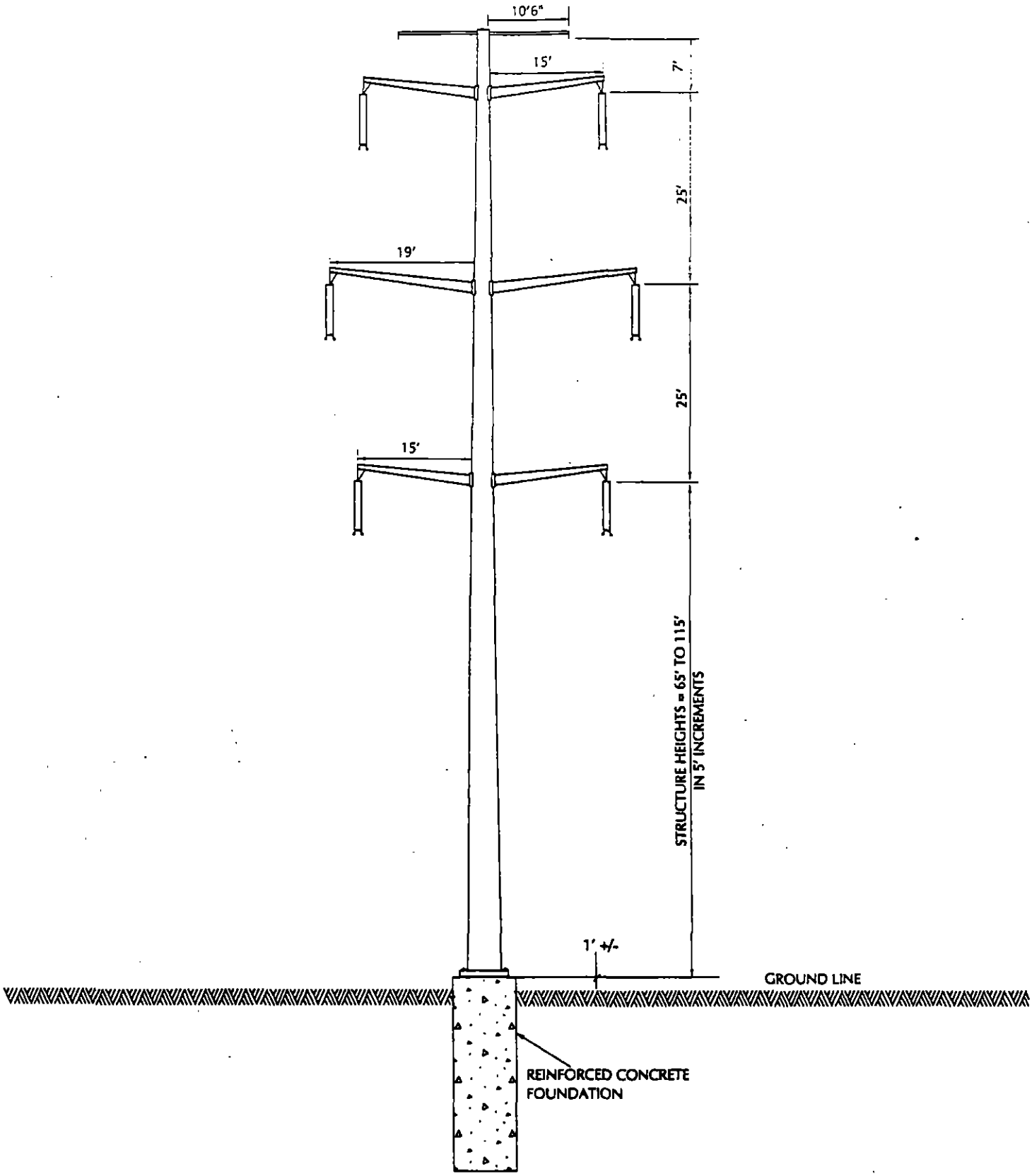
1. OPERATING CHARACTERISTICS, STRUCTURES, AND LAND REQUIREMENTS

Operating Characteristics:

The Foster-Bath transmission line is expected to be in service at all times except when it needs to be de-energized for maintenance or emergency conditions. The line is designed to operate at a nominal voltage of 345 kV (345,000 volts). Due to changing conditions within the transmission system, the voltage level may be expected to fluctuate between 5% above and 5% below this nominal voltage level. Current levels on the Foster-Bath line will also vary depending on system conditions and the demand for electrical energy present at any given time. Typically, electrical load levels, and therefor the current levels in the line, vary based on time of day, day of the week and weather conditions. Typical average load levels will result in typical current flows in this circuit of approximately 940 amperes per phase. Weather extremes will cause increased loading and currents; lower levels of load and currents occur at late night hours and on weekends when most industries are shut down, for example. Under high (peak) loading conditions, the line might be expected to carry 1180 amperes per phase. Under emergency conditions with some other major transmission facility in the transmission system out of service, the line could experience currents of 1408 amperes. The maximum rated current carrying capacity of the line under emergency conditions is 2604 amperes per phase in the summer and 3362 amperes per phase in the winter, but these load levels are not expected under present day system conditions. Such levels are remotely possible with continued system growth and expansion, extreme weather conditions, and other outage situations.

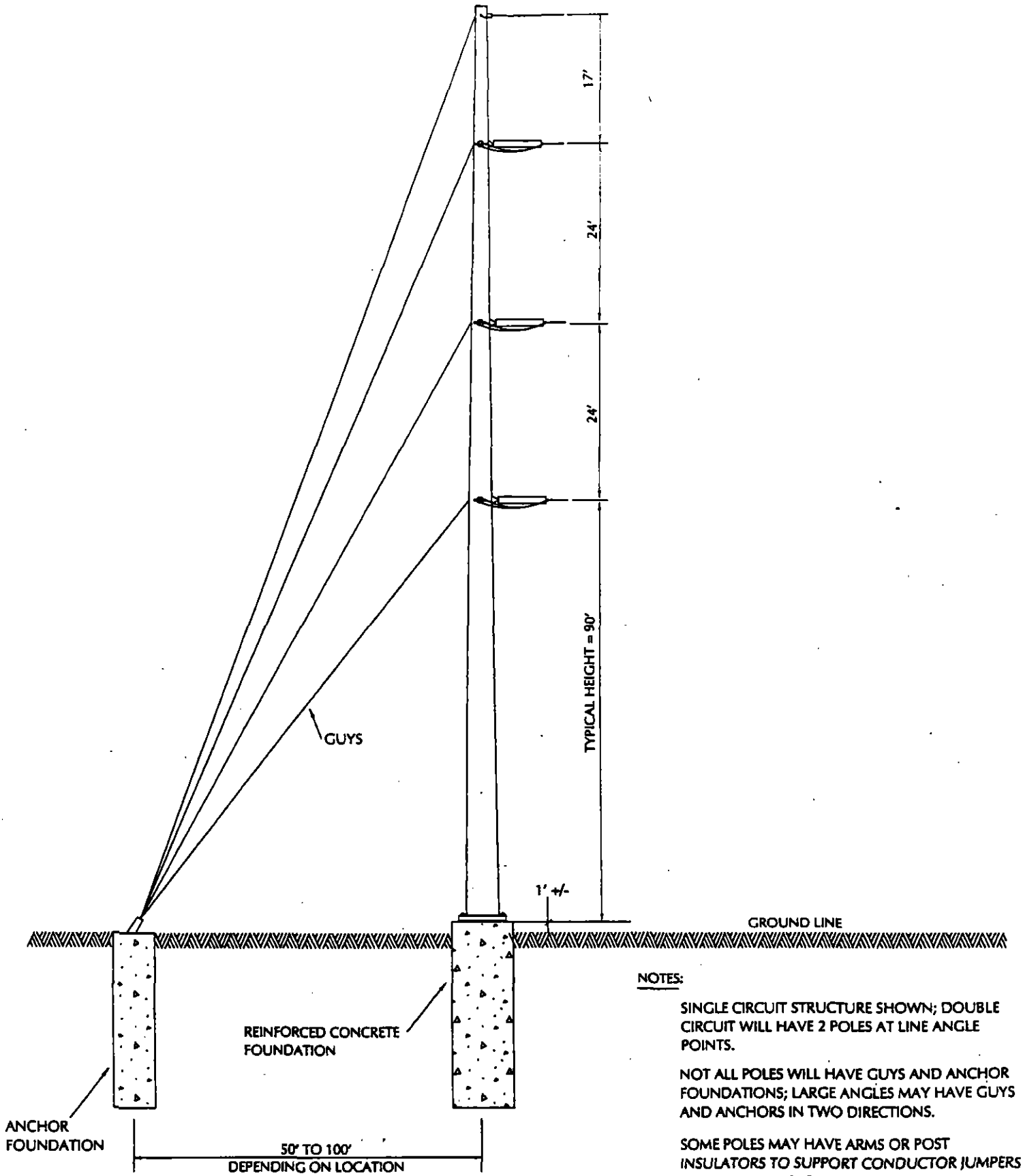
Number and Types of Structures:

Sketches of both the existing steel towers and the proposed structures to be used to rebuild the Foster-Bath line are included following as Figures B-1.1 through B-1.8. The number and types of structures required for the Foster-Bath circuit construction are identified following the sketches for each of the various line sections identified in Part A. "Need Statement," and again as shown on Figure A-1.2, the "Project Map."



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE

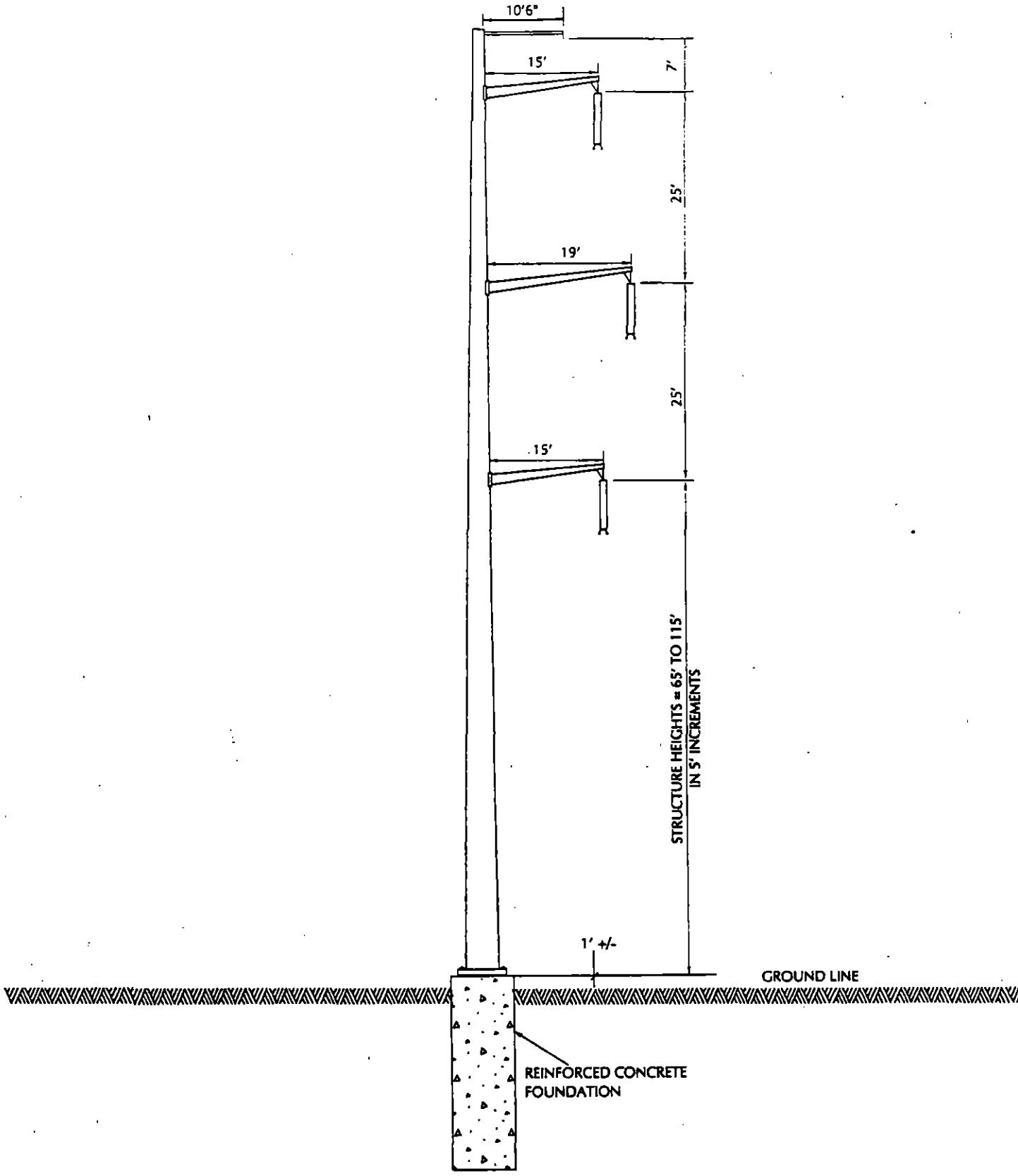


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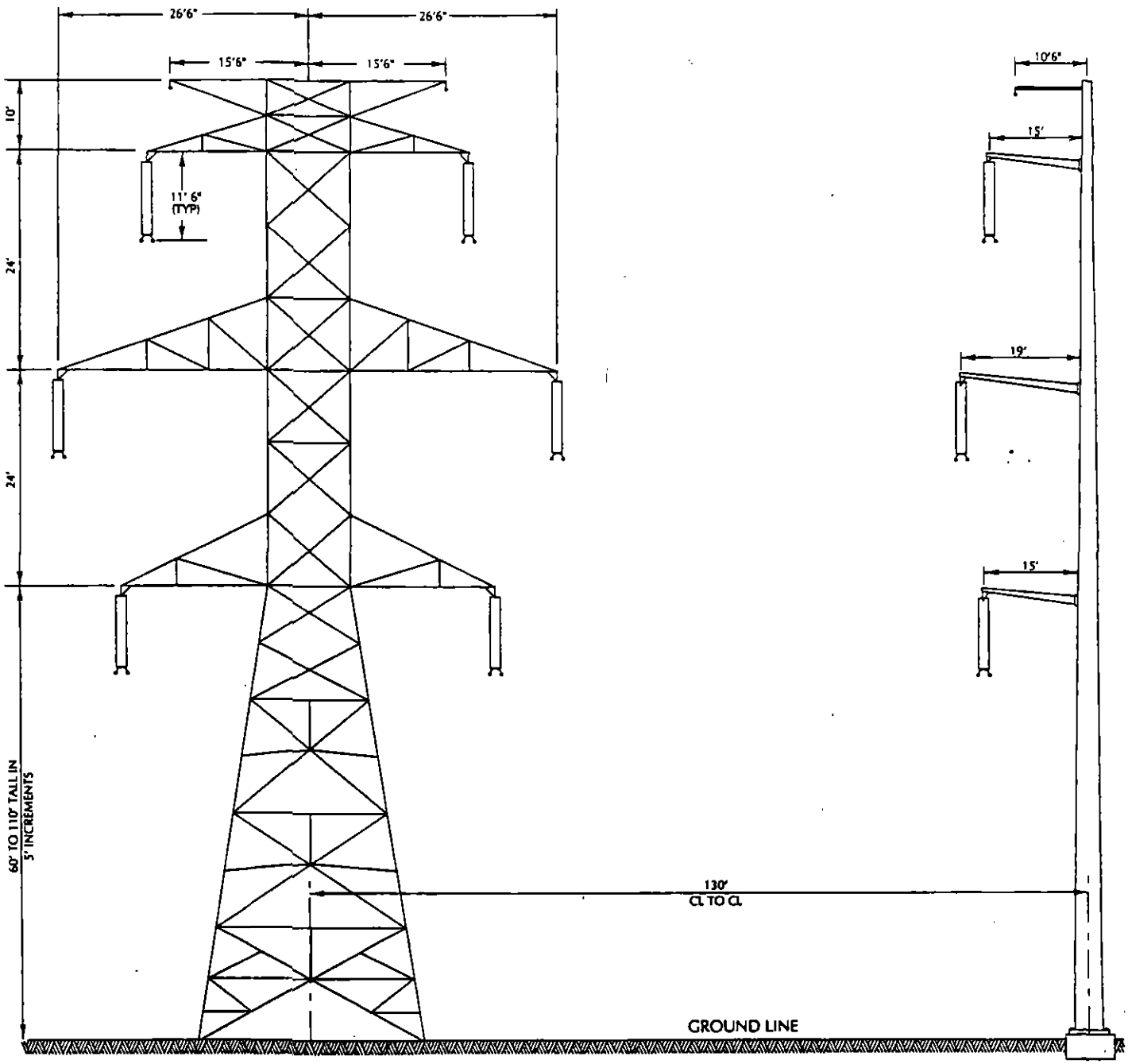
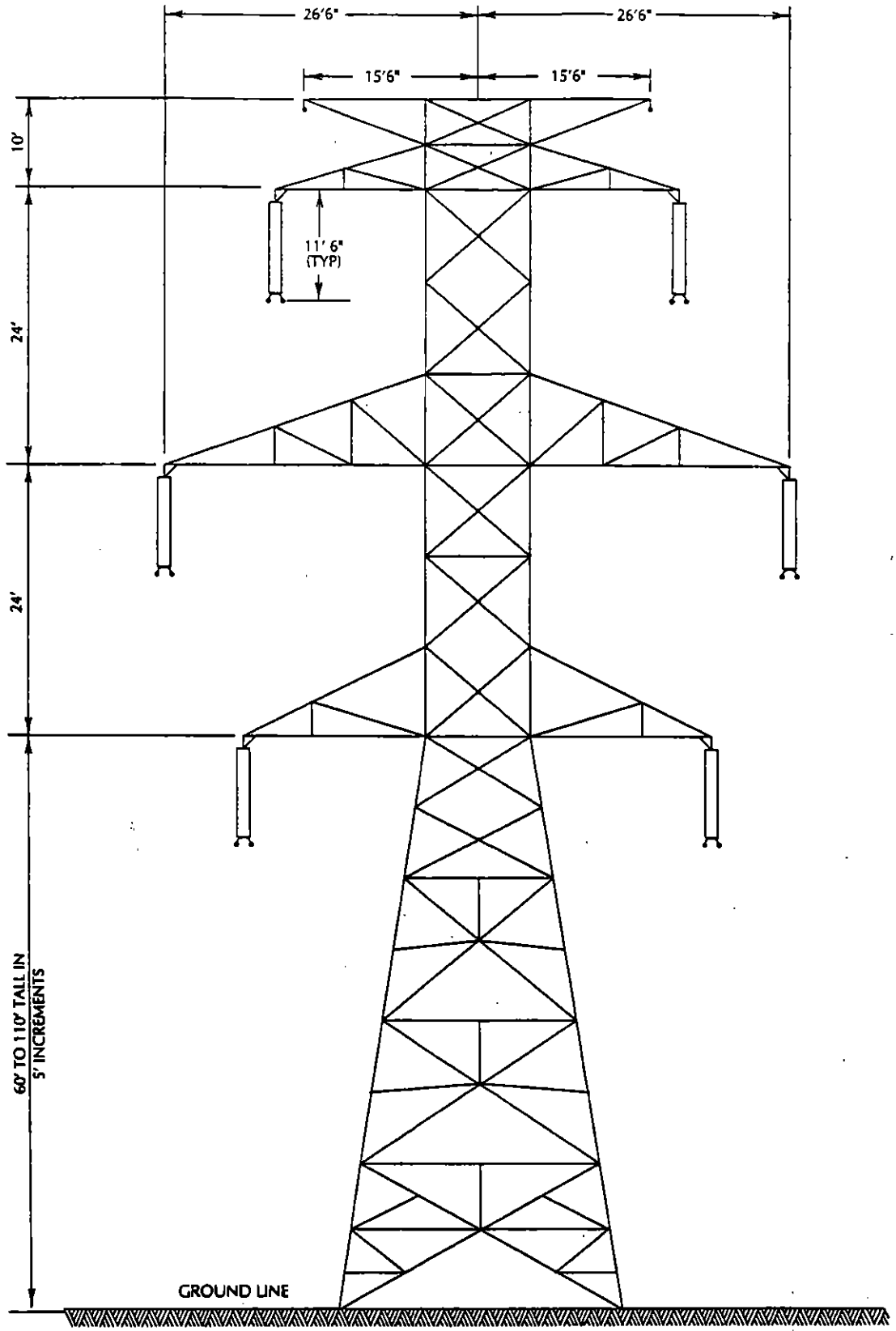
FIGURE B-1.3
SINGLE CIRCUIT
STEEL POLE (TANGENT)



LOOKING EAST

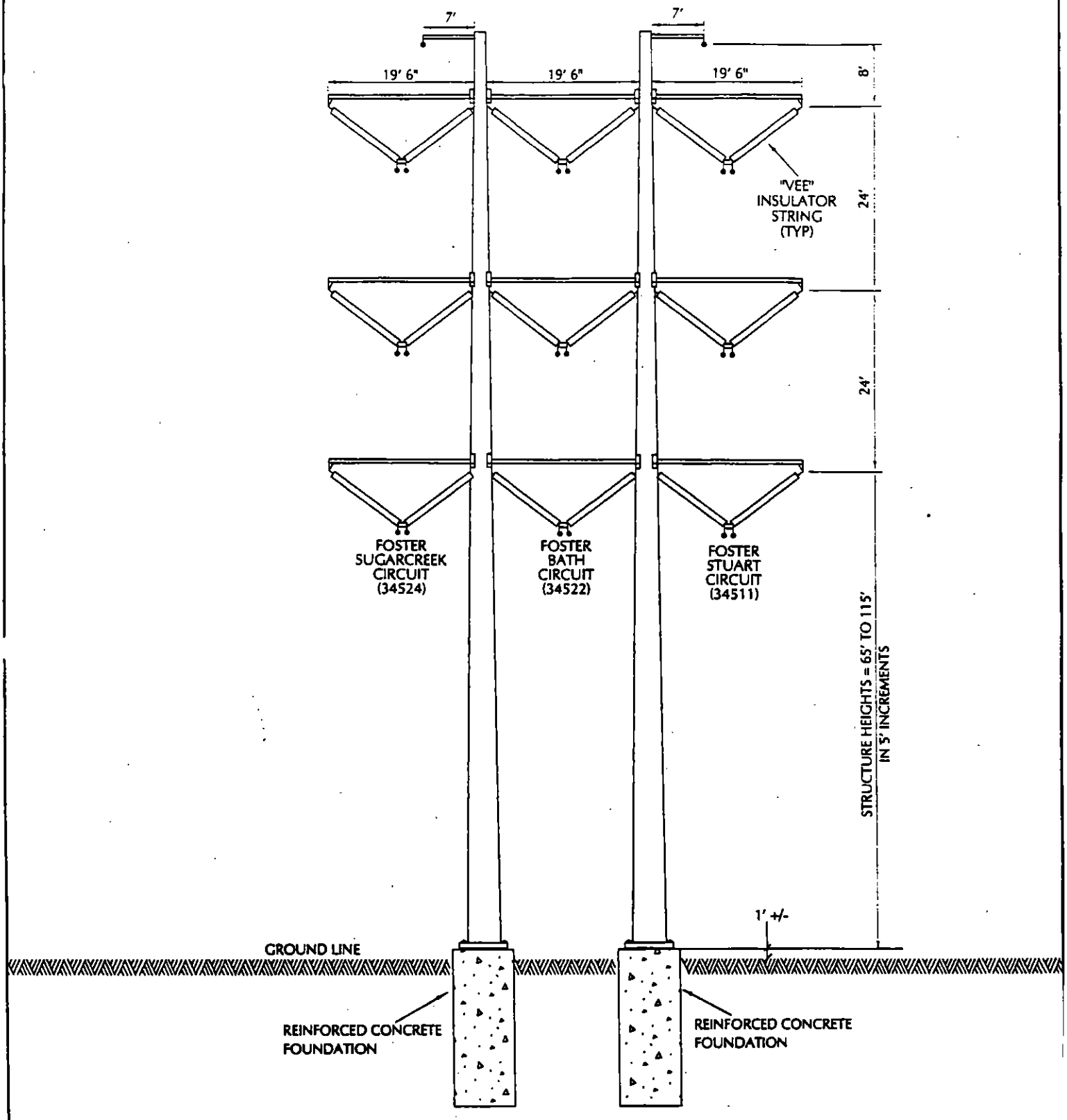
DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.4
EXISTING DOUBLE CIRCUIT
STEEL TOWER WITH PLANNED
SINGLE CIRCUIT STEEL POLE (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

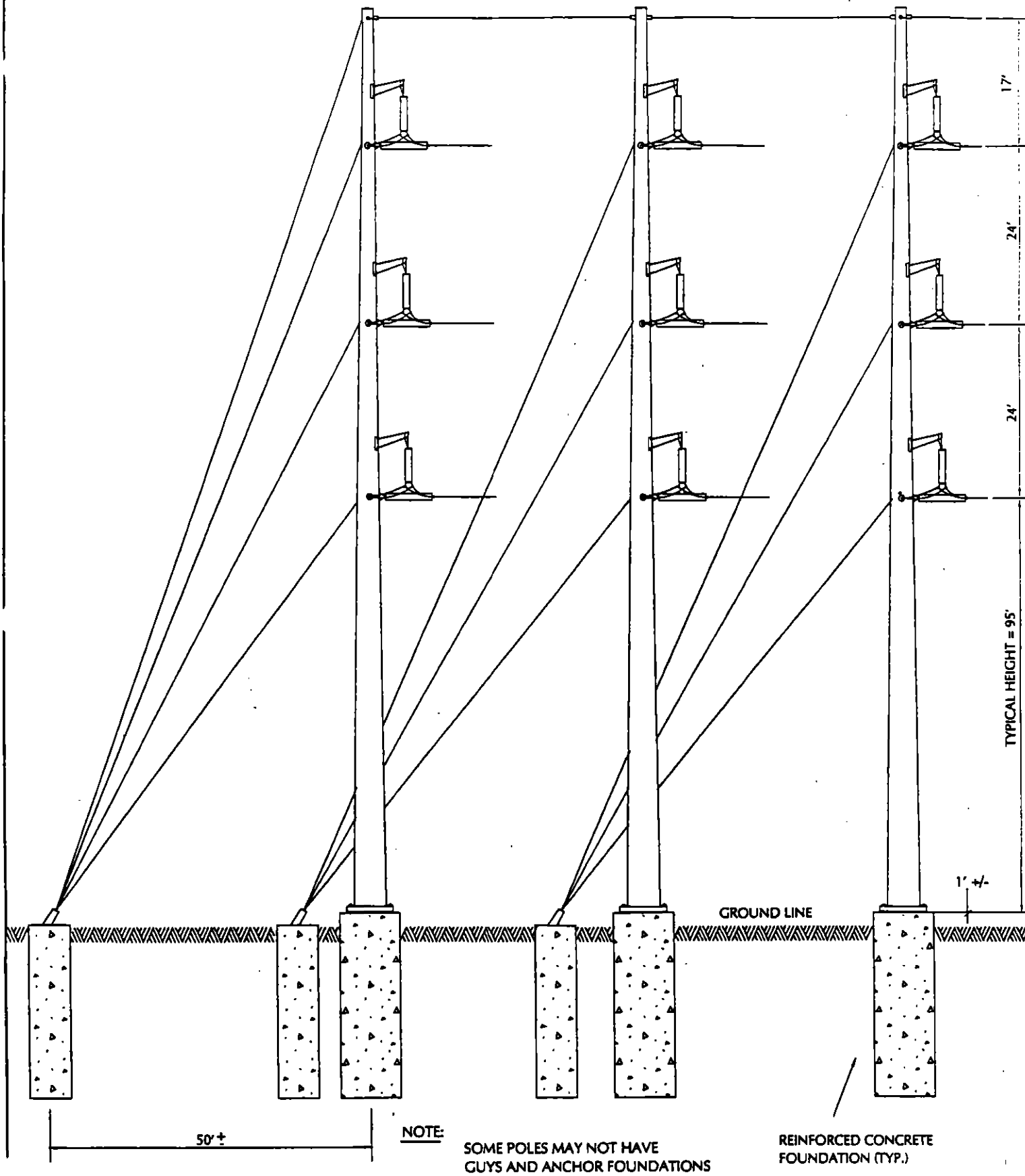
FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)



LOOKING EAST

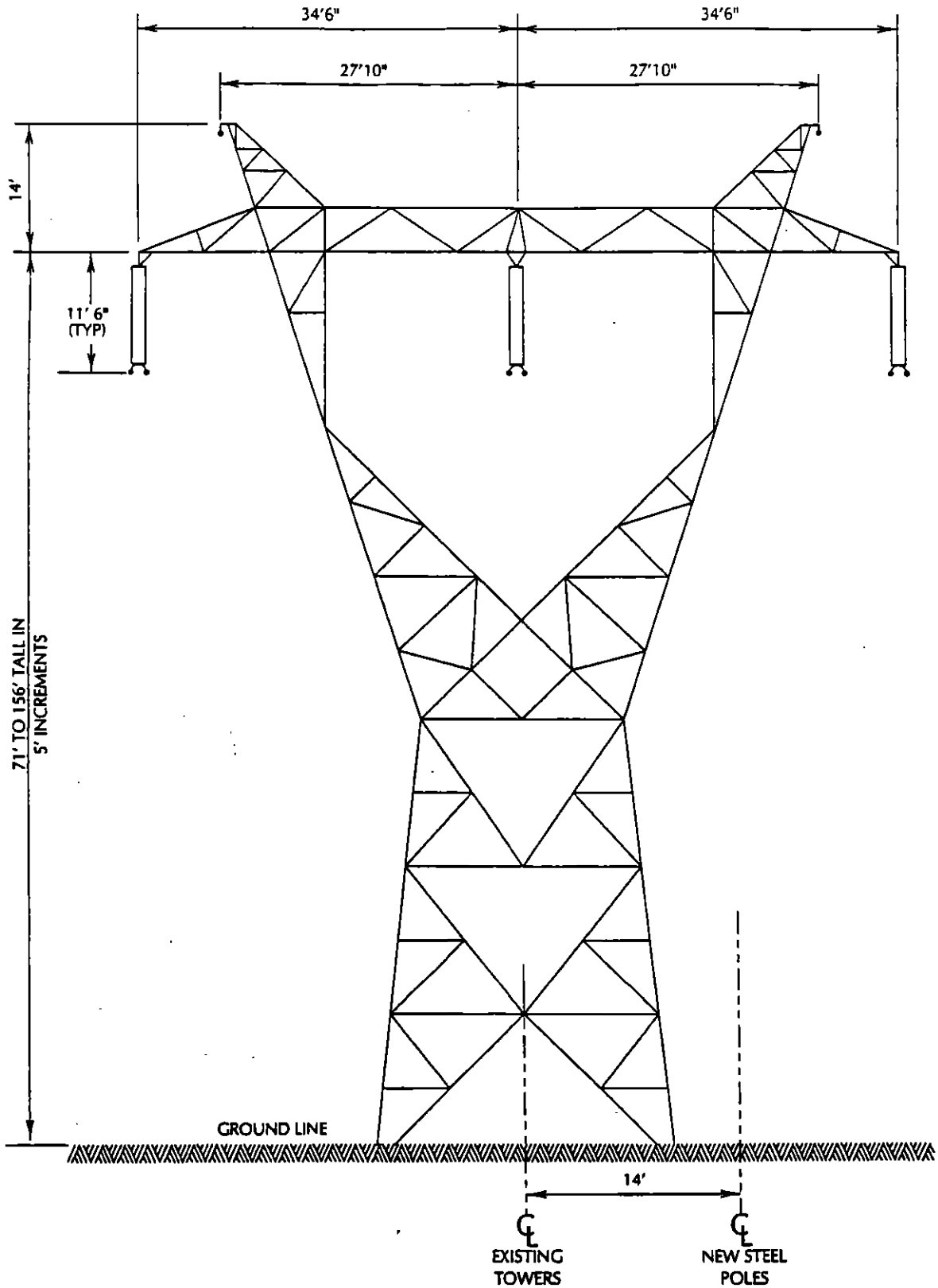
DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.6
TRIPLE CIRCUIT STEEL POLE
H-FRAME STRUCTURE (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.7
TRIPLE CIRCUIT STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

Section A: This section will include installation of a new substation bay takeoff structure at Foster Substation. This addition to the existing substation structure will continue the same lattice steel construction used for the previously installed sections of the takeoff structure. This new bay is to be added to the south end of the existing east takeoff structure; i.e., the structure toward Butterworth Road.

In Section A, an existing double circuit steel tower line with structures as sketched in Figure B-1.5 is located along the northern portion of a 300 foot wide right-of-way, with the towers approximately 75 feet south of the north right-of-way boundary. The planned construction will add a single steel pole configuration as shown in Figures B-1.2 or B-1.3 adjacent to each tower. Seven new steel pole structures will be located in this section; three will be tangent structures per Figure B-1.3 and four will be large angle/dead end type structures per Figure B-1.2. The tangent poles will be a two-circuit design with arms installed only on the north or west side of the poles for the present construction. The large angle poles will be single circuit poles with the conductors dead ended on two of the poles and a swing-out type construction used on the other two poles. These structures will be of the same basic design as those to be used in Sections C, D and E further north, except only one circuit will be installed in Section A as part of this project. The double circuit towers presently located in this section will remain. The centerline of the new steel poles will be approximately 130 feet to the south or east of the existing towers with the poles to be set generally adjacent to the towers. The resulting typical layout of structures will look like the sketch of Figure B-1.4.

Section B: This section of line presently contains double circuit steel tower structures, as sketched in Figure B-1.5, located along the centerline of a 150 foot wide right-of-way. Following the upgrade of the transmission line, this section will contain 15 three-circuit steel pole structures; ten will be tangent structures and five will be large angle/dead end type structures. The tangent structures will be made up of two steel poles in an H-Frame configuration with three horizontal arms supporting three conductor positions each. A sketch of the typical tangent structure is shown in Figure B-1.6. The five large angle/dead end structures will each consist of three steel poles, each carrying a vertically configured circuit. This type structure is shown in Figure B-1.7. The existing steel towers will be removed once the two existing circuits have been transferred to their positions on the new triple circuit pole structures.

Section C: In Section C of this project, an existing single circuit steel tower line with structures as sketched on Figure B-1.8 is located along a 150 foot wide right-of-way. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each tower. Once the existing circuit (Sugarcreek to Greene) is transferred to the new steel pole structures, the existing steel towers will be removed and the second circuit (Foster to Bath) will be added to the steel poles. A total of 136 steel towers will be replaced with steel poles in this manner in Section C. The exception to this procedure is at the "Sugarcreek Tap" point at the north end of Section C and approximately one half mile south of Centerville Road. Here a tap line runs to the west to Sugarcreek Substation. The steel tower tap point structure at this location will be modified by placing a single steel pole as shown in Figure B-1.3 just east of the tap tower to carry the Foster-Bath circuit by the tap tower which will remain as it is.

Section D: Section D of the Foster-Bath line will be of the same basic design as Section C discussed above and the same construction procedures will be used to upgrade the line. Here the existing Sugarcreek to Greene 345 kV circuit will be located on the west side of the poles and the Foster to Bath circuit will be on the east side. A total of 31 steel towers will be replaced with steel poles in this manner in Section D. This particular section of line presently has two steel pole structures located just north of Washington Mill Road. These poles replaced two steel towers that were damaged in the "Xenia Tornado" of 1974. These two steel poles will be converted from their present single circuit design to a double circuit design and look similar to the poles sketched in Figure B-1.1.

Section E: In Section E of this project, two existing single circuit steel tower lines with structures as sketched on Figure B-1.8 are located along a 300 foot wide right-of-way. The existing single circuit steel tower line (Sugarcreek to Greene) along the western portion of this 300 foot right-of-way will remain as it is. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each of the single circuit towers that carry the Clinton to Greene 345 kV circuit along the eastern portion of the right-of-way in this section. One additional steel pole structure may be required near the projected runway of the Greene County airport to accommodate the airport glide paths. Once the existing east circuit (Clinton to Greene) is transferred to the west side of the new double circuit steel pole structures, the existing Clinton to Greene steel towers will be removed, except at the first tower north of Stewart Road. Here the existing Clinton to Greene circuit will remain low on the existing tower so the new Foster to Bath circuit may cross over it on a single circuit steel pole at this location. The new second circuit (Foster to Bath) will be added to the east side of the new double circuit steel poles. A total of 7 new double circuit steel pole structures (or 8 if an additional structure is needed to provide adequate clearances for the airport) will replace existing towers in Section E.

Section F: In Section F of this project, an existing 300-foot wide right-of-way contains two steel tower transmission lines. On the western portion of the right of way the existing single circuit tower line (Sugarcreek to Greene), as sketched on Figure B-1.8, is to remain as at present. On the eastern portion of the right of way there is a double circuit steel tower line with structures as sketched on Figure B-1.5, except the existing east circuit has only one conductor per position instead of two as shown. These towers at present carry the Clinton to Greene 345 kV circuit on the west side and a 69 kV circuit on the east side of the towers. The planned construction upgrade will add a second conductor to each of the three conductor positions on the east side of the towers to form the Foster-Bath 345 kV circuit with bundled conductor phases. The 69 kV line presently on the east side of the towers will be relocated to a new wood pole construction between the two tower lines. A total of 7 existing steel towers will be modified in this manner in Section F to accommodate the Foster to Bath circuit. At the north end of this section, the Foster to Bath circuit will not terminate on a takeoff structure at the Greene Substation but will be located to a single circuit steel pole, similar to what is sketched in Figure B-1.3, just east of the substation fence on substation property. This pole will connect the Foster to Bath circuit to the next section of the line to the north.

Section G: In Section G of this project, an existing 150-foot wide right-of-way contains double circuit steel transmission line towers. These towers are as sketched on Figure B-1.5, except no circuit has yet been installed on the west side of the towers. This project will install a new set of conductors on the west side of the towers so the towers will look like those shown in Figure B-1.5. For the circuits to connect correctly in the substations, the existing Greene to Bath 345 kV circuit, now located on the east side of the towers, will be reconnected to be located on the west side of the towers. The new Foster to Bath circuit will be connected such that it is located on the east side of the towers. In Section G, a total of 26 double circuit steel towers will be upgraded in this manner. At the south end of this section, the new Foster to Bath circuit will not terminate on a takeoff structure at Greene Substation, but instead will be located on a single circuit steel pole, similar to what is sketched in Figure B-1.3, just east of the substation fence on substation property. This pole will connect the Foster to Bath circuit to the south, bypassing Greene Substation. At the Bath Substation end of the line, the newly installed west circuit will be located on a single circuit steel pole set just east of the substation fence on substation property so the circuit may drop into the substation takeoff structure. The new substation takeoff structure required will be a steel pole A-frame type structure of the same design as the existing takeoff structures at Bath Substation. The new takeoff structure will be located between the two existing eastern takeoffs at Bath.

The steel pole structures described above will be supported on steel-reinforced concrete drilled caisson foundations. Depending on structure designs and local soil conditions, the diameter of the caissons will range from 6 ft.-6 in. to 10 ft.-6 in., and the depths will range from 22 ft. to 56 ft.-6 in. At some locations the angle structures may be guyed with galvanized steel guy wire to steel reinforced concrete drilled caisson type anchor foundations.

All new steel pole structures to be used will be either galvanized or have a painted finish that will look about the same color as galvanizing. Steel towers to be retained as they presently exist are galvanized steel, or in some areas are galvanized steel that has been painted.

Right of Way and Land Requirements:

The entire Foster-Bath transmission line project is to be built on existing right of ways or lands owned by Dayton Power and Light and/or members of the CCD (CG&E/Cinergy, CSP/AEP, and DP&L) group. The existing rights of way are 300 feet in width for the first section north and east out of Foster Substation and the sections directly south of Greene Substation for approximately 2.7 miles. All the other right of ways are 150 feet in width. The Foster and Greene substation properties are owned in common by the CCD group (Cincinnati, Columbus and Dayton), and the Bath Substation property is owned by DP&L.

2. ELECTRIC AND MAGNETIC FIELDS

Electric and magnetic fields are produced by the presence of voltage and current associated with any electrical device including the operation of the proposed Foster-Bath 345 kV transmission line. Electric fields are produced by voltage and magnetic fields by current. In both cases, the field strength is related to the source, the geometry of the source, the distance from the source, and the interaction of any other sources of electric and magnetic fields in the area.

The electric field produced by a 345 kV transmission line is predictable and may be calculated for a specific wire geometry. The threshold of sensation for a person standing in an electric field is approximately 15kV/meter which is approximately three times greater than the maximum field expected directly under the 345 kV line configuration proposed for the Foster-Bath 345 kV transmission line.

Electric fields can induce a voltage on metallic objects, such as sheds, fences, and farm equipment, which may be located close to the transmission line. This is usually not a problem with 3454 kV transmission lines because of the relatively high ground clearances used for this voltage level. The induced voltage can be eliminated by properly grounding the metallic objects. DP&L will work to resolve any such problem voltage conditions in an expeditious manner. Electric fields can be reduced or eliminated by the shielding provided by buildings, trees, mounds of earth and other conducting materials. Specific values of electric fields based on the proposed design configurations and the line loading conditions specified for the Foster-Bath 345 kV transmission line are summarized in Tables B-2.1 through B-2.6.

Magnetic fields can be calculated for transmission lines, but it is more difficult to predict the actual fields at a given time and place because the field is dependent on the total load current for each phase, the current of the shield wire or neutral, other magnetic fields in the area including the earth's background fields, other grounding systems in the area, and other conditions. As electric load conditions and the currents in the wires change, so do the magnetic fields. Magnetic fields are not perceived by humans at levels generated by transmission lines. Unlike electric fields, ordinary materials do not provide a shield from magnetic fields. The line design characteristics provide for low levels of calculated magnetic field strengths. Consequently, magnetic fields are estimated to have insignificant impacts. Specific values of calculated magnetic fields based on the different proposed design configurations and the line loading conditions specified for the Foster-Bath 345 kV transmission line are also summarized in Tables B-2.1 through B-2.6.

(a) Calculated electric and magnetic field levels at one meter above ground under the lowest conductors and at the edge of the ROW for: (I) normal maximum loading; (ii) emergency line loading; and (iii) winter normal conductor rating.

The proposed typical tangent structure configurations for the Foster-Bath 345 kV transmission line have been evaluated for electric and magnetic fields. As discussed above, the basic structure configurations to be used on this project are different for the different line sections. There are five different basic configurations that will be utilized in these sections. The different sections will have different loading conditions applied based on which specific circuits are in each section.

Section A will have a new circuit installed on new steel poles essentially parallel to the existing double circuit towers. The new tangent poles will be as shown in Figure B-1.1 with only one circuit (north and west) installed. The tangent towers will be as shown in Figure B-1.5. These towers will be north and west of the steel poles with a centerline to centerline distance between adjacent structures of approximately 130 feet as shown in Figure B-1.4. Field strengths for this section are given in Table B-2.1.

Section B will have the structure configuration as shown in Figure B-1.6. The field strengths for this section are as given in table B-2.2.

Sections C and D will have the structure configuration as shown in Figure B-1.1. The field strengths for these sections are as given in tables B-2.3 and B-2.4, respectively.

Sections E and F will be built along a 300-foot wide right-of-way with the new Foster-Bath circuit located on the east side of the right-of-way. The existing Sugarcreek-Greene circuit is on single circuit towers as shown in Figure B-1.8, and is located on the western half of the right-of-way. The structure configuration on the east half of the right-of-way is steel pole structures in Section E as shown in Figure B-1.1 and double circuit towers in Section F as shown in Figure B-1.5. In both sections the Foster-Bath circuit is on the east side of the structures and the Clinton-Greene circuit is on the west. Since the basic geometry of both these structure types is so similar and the circuit loads are the same, only one set of field calculations has been made to cover both sections. These field strengths are as given in table B-2.5.

Section G will have the structure configuration as shown in Figure B-1.5. The field strengths for this section are as given in table B-2.6.

TABLE B-2.1
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION A OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Foster-Sugarcreek = 848MVA, Foster-Bath = 705MVA, Foster-Stuart = -550MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	5.227	0.592	0.580	0.145
Magnetic (mG)	100.600	18.078	20.655	8.918

Emergency Line Loading
Conductor Temperature 176 F
Foster-Sugarcreek = 0MVA, Foster-Bath =60MVA, Foster-Stuart = -34MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	6.955	2.860	0.320	0.555
Magnetic (mG)	14.863	9.704	5.135	2.397

Winter Normal Conductor Rating
Conductor Temperature 176 F
Foster-Sugarcreek = 1747MVA, Foster-Bath = 1747MVA, Foster-Stuart = -1747MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	6.318	0.572	0.592	0.133
Magnetic (mG)	263.425	55.886	40.810	30.097

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Foster-Sugarcreek = 669MVA, Foster-Bath = 562MVA, Foster-Stuart = -581MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	4.380	0.415	0.579	0.115
Magnetic (mG)	67.993	19.730	15.162	9.055

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.

TABLE B-2.2
ELECTRIC AND MAGNETIC FIELDS FOR SECTION B OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Foster-Sugarcreek = 848MVA, Foster-Bath = 705MVA, Foster-Stuart = -550MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	4.035	3.6	0.355	0.355
Magnetic (mG)	99.395	99.310	12.087	25.472

Emergency Line Loading
Conductor Temperature 176 F
Foster-Sugarcreek = 87MVA, Foster-Bath = 0MVA, Foster-Stuart = -36MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	6.402	5.419	0.303	0.303
Magnetic (mG)	10.325	9.131	2.965	0.737

Winter Normal Conductor Rating
Conductor Temperature 176 F
Foster-Sugarcreek = 1747MVA, Foster-Bath = 1747MVA, Foster-Stuart = -1747MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	4.681	3.988	0.312	0.312
Magnetic (mG)	312.080	312.080	31.526	87.926

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Foster-Sugarcreek = 669MVA, Foster-Bath = 562MVA, Foster-Stuart = -581MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	3.432	3.213	0.410	0.410
Magnetic (mG)	74.487	74.269	9.730	24.337

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

TABLE B-2.3
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION C OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Foster-Sugarcreek = 848MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.148	2.494	0.420	0.420
Magnetic (mG)	86.002	85.156	18.165	11.151

Emergency Line Loading
Conductor Temperature 176 F
Foster-Sugarcreek = 1144MVA, Foster-Bath = 0MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.886	4.112	0.384	0.620
Magnetic (mG)	135.950	113.620	43.657	24.108

Winter Normal Conductor Rating
Conductor Temperature 176 F
Foster-Sugarcreek = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.944	2.751	0.415	0.415
Magnetic (mG)	227.074	227.074	34.365	34.364

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Foster-Sugarcreek = 669MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	3.335	3.105	0.433	0.433
Magnetic (mG)	54.454	53.997	13.256	8.384

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

TABLE B-2.4
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION D OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Sugarcreek-Greene = 275MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.146	2.493	0.420	0.420
Magnetic (mG)	67.959	61.694	7.240	20.586

Emergency Line Loading
Conductor Temperature 176 F
Sugarcreek-Greene = 421MVA, Foster-Bath =789MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.944	2.751	0.415	0.415
Magnetic (mG)	105.225	90.061	32.002	38.425

Winter Normal Conductor Rating
Conductor Temperature 176 F
Sugarcreek-Greene = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.944	2.751	0.415	0.415
Magnetic (mG)	227.074	227.074	34.365	34.364

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Sugarcreek-Greene = 191MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	3.333	2.180	0.433	0.433
Magnetic (mG)	44.606	40.513	6.101	15.852

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

TABLE B-2.5
ELECTRIC AND MAGNETIC FIELDS FOR SECTION E&F OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Sugarcreek-Greene = 275MVA, Clinton-Greene = 621MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.502	1.618	2.071	0.437
Magnetic (mG)	67.858	20.718	15.787	15.434

Emergency Line Loading
Conductor Temperature 176 F
Sugarcreek-Greene = 447MVA, Clinton-Greene = 0MVA, Foster-Bath =842MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	6.438	1.981	2.123	0.421
Magnetic (mG)	102.279	11.280	28.408	34.030

Winter Normal Conductor Rating
Conductor Temperature 176 F
Sugarcreek-Greene = 1747MVA, Clinton-Greene = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	6.398	1.656	2.071	0.440
Magnetic (mG)	326.485	123.267	104.699	43.290

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Sugarcreek-Greene = 191MVA, Clinton-Greene = 598MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.617	1.551	2.041	0.440
Magnetic (mG)	47.592	15.953	10.182	10.947

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.

TABLE B-2.6
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION G OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Greene-Bath = 143MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.436	2.187	0.612	0.612
Magnetic (mG)	70.474	59.369	9.195	24.696

Emergency Line Loading
Conductor Temperature 176 F
Greene-Bath = -22MVA, Foster-Bath =60MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.285	2.353	0.616	0.616
Magnetic (mG)	7.0256	6.081	0.643	2.045

Winter Normal Conductor Rating
Conductor Temperature 176 F
Greene-Bath = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.285	2.353	0.616	0.616
Magnetic (mG)	242.999	242.999	43.031	43.031

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Greene-Bath = 143MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	3.569	1.962	0.613	0.613
Magnetic (mG)	46.328	40.588	6.630	17.947

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

The structure types/line configurations were evaluated at the line loading conditions specified in the Letter of Notification requirements. A phase-to-phase voltage of 345 kV and balanced phase currents were assumed for the bundled 1024.5 MCM 30/7 ACAR phase conductors. For the winter normal conductor rating loading, an ambient winter temperature of 0 degrees Celsius, wind of 2 mph, emissivity factor for solar absorption of 0.8, altitude of 1,000 feet, and conductor temperature rise of 80 degrees Celsius were assumed to determine wire sag conditions. Similarly, line loading conditions and conductor temperatures were determined for a "Normal Maximum Loading" with all transmission elements in operation with the transmission system at peak load, and for an "Emergency Line Loading" condition with a contingency in place. All calculations for the electric and magnetic fields were determined at the low point of the phase conductors. Based on the calculations for fields 3 feet above the earth, the values summarized in Tables B-2.1 through B-2.6 were determined for the loading conditions specified and the basic tangent structure types.

The winter normal conductor rating capacity of the conductor and the maximum emergency line loading conditions noted above are conditions that will very seldom, if ever, be reached. The normal maximum loading condition might be expected to occur at most a few times per year. More realistic values of the electric and magnetic field strengths that may be expected to occur over more typical or average conditions have also been calculated for the alternative structure types and configurations under consideration. Electrical loading on the transmission lines is expected to vary continually throughout any given day and also throughout the year, dependent on time, weather conditions, customer usage, transmission system loading, and transmission facilities in-service conditions. On average, Circuit 34522,The Foster-Bath Circuit, expected to normally carry about 562 MVA from Foster to Bath. Electrical loading on the other circuits built jointly with Foster-Bath will also vary throughout any given day, etc., dependent on similar factors but not necessarily the same conditions. A typical conductor temperature of 60 degrees Fahrenheit has been used to determine wire sag conditions and the resulting clearances above ground for all conductors. The calculations for the electric and magnetic fields were again determined at the low point of the phase conductors. Based on the calculations for fields 3 feet above the earth, the values noted in the last loading condition in Tables B-2.1 through B-2.6 represent average everyday electric and magnetic field conditions.

For each of the configurations and loading conditions discussed above, the electric and magnetic field values have been noted in Tables B-2.1 through B-2.6. Also noted in these tables for each situation is the electrical current in amperes used for each circuit under consideration and the conductor temperature assumed. The height above ground of the lowest phase conductor of each circuit involved is as noted and is the same for all circuits.

(b) Design alternatives with respect to electric and magnetic fields.

It is DP&L's position that the present research has not established a relationship between electric and magnetic fields and any health effects. DP&L has proposed to construct this Foster-Bath 345 kV Transmission Line Project with full consideration of the current EMF research. As such, DP&L feels the construction of the line will provide the needed electrical facilities in the most cost effective, environmentally sound and aesthetically pleasing way possible.

DP&L, through its standard design practices, has evaluated possible alternative conductor configurations and phasing arrangements to provide the lowest values of electric and magnetic fields at ground level. All sections of the line will use dissimilar phasing on the different circuits to provide for lower magnetic fields associated with cancellation effects. The structure heights to be used have been designed to provide clearances over the ground and other objects to permit an emergency operation level of conductor temperature at 212 degrees F with conductors at 28 feet above ground. This is the National Electrical Safety Code (NESC) requirement plus 3 feet. The conductors will seldom, if ever, operate this close to the ground. These heights above ground provide low values of electric and magnetic fields.

The corridor location and right-of-way width for the Foster-Bath line are already existing and have been "pre-determined." Based on present day design considerations and methodology, the locations and width of right-of-way being used would be considered to meet or exceed the requirements for a new right-of-way to be secured for such a project.

3. ESTIMATED PROJECT COST

The estimated costs of the Foster-Bath Transmission Line Project by FERC account are as follows:

COST ELEMENT	TRANSMISSION LINE	FOSTER SUB	BATH SUB
(1) Land and Land Rights	800,000	0	0
(2) Structures	0	200,000	180,000
(3) Substation Equipment	0	800,000	820,000
(4) Poles and Fixtures	19,500,000	0	0
(5) Towers and Fixtures	0	0	0
(6) Overhead Conductors	7,700,000	0	0
(7) Underground Conductors	0	0	0
(8) Underground to Overhead Equip.	0	0	0
(9) Roads, Trails & Access	0	0	0
Totals	**28,000,000**	**1,000,000**	**1,000,000**

Total Cost of the Foster-Bath Transmission Project: $ 30,000,000

C. Socioeconomic Data

1. LAND USE

a. Existing Land Uses

Two counties and several townships are crossed by the right-of-way. The project area does not cross a municipality. In Warren County, the transmission line corridor crosses six townships: Hamilton, Salem, Turtle Creek, Washington, Mason, and Wayne townships. In Greene County, the line crosses three townships: Spring Valley, Sugarcreek, and Beavercreek townships.

Warren and Greene counties are characterized by generally level surface topography with major changes in relief occurring along streams as a result of relatively recent glacial advances and retreats. The route is predominantly flat with an elevation range between 640 and 950 feet above msl. Slopes are greatest leading to the Little Miami River and Caesar Creek. The entire project area is located within the Little Miami River drainage basin and weaves back and forth across the river channel.

Land use within and along DP&L's existing transmission line corridor is a combination of agricultural, forest, industrial, institutional, commercial, recreational and residential uses. Most of the existing right-of-way is currently in agricultural cultivation, or has been left fallow and vegetated with old-field and scrub-shrub communities. Generally, agriculture (i. e., rowcrop, pasture, and fallow old-field) comprises 60 percent of land use; forests comprise 25 percent; residential comprises 10 percent; and the remainder of uses collectively comprise less than five percent.

Residences are concentrated adjacent to county routes and comprise single dwelling homes. Noise sensitive areas are distributed intermittently throughout the proposed transmission line corridor. Sensitive areas include residential homes, churches, and commercial businesses.

Recreational areas comprise the Little Miami River (crossed six times), Little Miami River bike and recreation trail, the North County National Scenic Trail (NCNST) (crossed three times), Halls Creek Woods Scenic River Preserve, and Caesar Creek Gorge State Nature Preserve. The Little Miami is a state-administered component of the National Wild and Scenic River system. The NCNST winds its way through seven northern tier states, beginning in upstate New York and ending in North Dakota. The project would cross the NCNST near reference points STM020, STM036, and STM050 (Appendix A).

The socioeconomic status of the project area is predominantly rural residential and agricultural-based. In both Warren and Greene counties, population densities have been steadily increasing. Past and future population densities for Warren and Greene counties are summarized in Table C-1.1. Warren County experienced a 15 percent increase in population between 1990 and 1995. Greene County had a 3.3 percent increase. Population per square mile in Warren County is 156.1. Population per square mile in Greene County is 336.2 (O'Bryant 1997).

Mason is the largest city in Warren County with a population of 13,284. Of the townships crossed, Turtle Creek and Hamilton had the fourth and fifth highest population densities of 11,247 and 6,771, respectively.

Beavercreek is the largest city in Greene County with a population of 37,739. Xenia had a population of 24,085 in 1990. Beavercreek Township is the largest township in the county, with a 1990 population of 39,704 (O'Bryant 1997).

Per capita income for Warren County was $17,228 in 1990. Per capita income for Greene County was $18,161 (O'Bryant 1997).

b. Impacts

No impact in existing land uses is anticipated as a result of the proposed project. Minimal amounts of noise and dust created from construction and heavy equipment on surrounding roads may cause occasional minor traffic delays. The effect of new tower construction will be a comparable visual impact at each location. DP&L will replace the existing four-leg steel lattice transmission towers with one or two new single pole steel towers at the same location.

Where vegetative clearing is required, DP&L will retain the maximum vegetative screening possible in riparian areas immediately adjacent to the Little Miami River in order to preserve the visual quality of the Little Miami River corridor. Protection of the scenic qualities of the river valley will also preserve the experiences of persons using the NCNST. DP&L will make provisions to allow hikers safe access through the area during times when construction temporarily blocks the trail.

The operation of the proposed transmission line will not create additional burdens on community resources or services such as police, fire or public utilities. Maintenance activities will occur occasionally, but will not affect or inconvenience any surrounding land use.

Construction of the transmission line is not expected to adversely impact the socioeconomic status of the project area. The availability of additional electric power with the stringing of a third circuit on the line, is expected to provide future benefits to the region by encouraging economic growth through increased business, industry, and residential communities and thereby increasing the existing tax base.

TABLE C-1.1. Population densities for Warren and Greene counties.

County	Year	Population
Warren	1980	99,276
	1990	113,909
	1998	144,604
	2003	162,967
Greene	1980	129,769
	1990	136,731
	1998	139,705
	2003	141,007

From The Sourcebook, County Demographics. 11th Edition, CACI 1998.

2. AGRICULTURAL DISTRICTS

a. Agricultural District Properties

Warren County

The Warren County Auditor's office was contacted regarding the presence of agricultural districts within the county. They reported that there are currently 277 agricultural district accounts in Warren County, representing 15,397 acres of land. BHE searched Warren County Auditor records for agricultural districts crossed by the existing right-of-way. They are listed in Table C-2.1 (Warren County Auditor's Office 1999).

Greene County

The Greene County Auditor's Office was also contacted regarding agricultural district properties. Those properties in Greene County crossed by the project right-of-way that participate in the Agricultural District Program are also included in Table C-2.1. (Greene County Auditor's Office 1999).

For reference, a complete listing of the agricultural district lands in both Greene and Warren Counties is included in Appendix A.

TABLE C-2.1. Agricultural Districts crossed in Warren County and Greene County by the Foster to Bath 345 kV right-of-way (located by existing Circuit Numbers for identification).

Greene to Sugarcreek, Circuit Number 34503

Landowner	Parcel #	Acres	Tower	Parcel ID
Thomas, Dennis P. and Barbara B.	27	81.468	One	K28 0001 0001 0002000
Hershner, Marion	33	61.796	Two	K28 0001 0010 0000100
Graham, Ralph	56	25.25	One	K28 0001 0008 0001400
Graham, Ralph	57	71.50	One	K28 0001 0008 0001500
McClain, John et al.	77	82.71	—	B04 0002 0050 0000 200
Lickliter, Robert C., Trustee	79		One	B04 0002 0050 0000 100

Greene to Bath, Circuit Number 34526

Landowner	Parcel #	Acres	Tower	Parcel ID
Allen Land Ltd.	36	92.5	One	B03 0002 0038 0000 800

Sugarcreek to Foster, Circuit Number 34524

Landowner	Parcel #	Acres	Towers	Parcel ID
Lutz, Clarence T. and Linda	13C	51.22	—	K28 0001 0004 0000 500
Walkhom, Jilas and Sana D.	14	129.73 total	3	K28 0001 0008 0003 000 K28 0001 0008 0002 900
Lebanon Citizens National Bank	21A	14.62	1	06-20-100-001
Rich, James E. and John B.	30	99.32	3	10-30-200-001
Rice, Gene and Etta	30A	5.00	—	10-30-400-007
Rich, James E. and John B.	31	72.5	4	10-29-100-003
Frye, Richard	33	194.227	1	10-38-400-007
Frye, Richard	33A	45.36	1	10-29-100-001
Frye, Gilbert N.	34	102.672	2	10-35-200-006
Shinkle, William P. and Pat	35	108.166	1	10-35-100-006
DeClarke, Candice	68.1	109.45	—	13-11-200-002
Cayot, Dale and Jane E.	78A	16.70	1	13-09-201-003
Sharpe, Jene and Casa	82	43.187	1	13-09-400-003
ZFC Inc.	133	90.7073	—	17-28-226-004
ZFC Inc.	134	1.276	1	17-28-276-001

b. Impacts

Impacts to agricultural district land will comprise the loss of 0.003 acre of tillable farmland at each proposed tower location (with the exception of tower location 1065 where two poles will be constructed on 0.006 acre). DP&L will compensate farmers for economic losses associated with these permanent structures. No net change in visual impacts will occur in agricultural district lands because existing towers will be dismantled and removed when the new steel towers are erected. No additional impacts are anticipated during construction because construction will occur prior to the growing season.

3. ARCHAEOLOGICAL OR CULTURAL RESOURCES

a. Existing Cultural Resources

Introduction

This section discusses the background research, field methods, and results of a Phase I cultural resources survey of DP&L's proposed Foster to Bath 345 kV project. A Phase I cultural resources survey was conducted by BHE at the request of DP&L. The survey was performed in order to locate any cultural resources within the proposed zone of impact and, wherever possible, assess their eligibility for the National Register of Historic Places (NRHP) in accordance with the requirements of Section 106 of the National Historic Preservation Act.

Literature Review

Prior to field investigations, a literature search was conducted at the Ohio Historic Preservation Office (OHPO) to locate any previously recorded cultural resources within the project area, to identify any archaeological investigations that had previously taken place, and to provide information on the expected types and location parameters of sites in the region. This background research had identified a number of sites in close proximity to existing tower locations listed in Table C-3.1.

The research indicated a strong likelihood for the presence of cultural resources within the area of potential effect. The larger stream valleys crossed by the proposed undertaking (e.g., the Little Miami River) represent the areas with the highest potential for prehistoric materials, while the remainder of the project area generally exhibits a moderate probability. Conversely, the probability for historic-period resources is probably lowest on the low floodplains and terraces of the project area. The lack of desirability of these landforms for historic settlement is probably due to the combined effects of the value of such landforms for agriculture, and the frequent flooding of stream valleys when considered with the planned permanence of residences during the historic period.

TABLE C-3.1. Previously recorded cultural resources within the Foster to Bath 345 kV project area.

Site Number	Location
33WA306–WA307	Located west of Morrow, a possible component of Stubbs cluster
33WA490	Located 100 m north of previously recorded site 33WA444
33WA139	50 to 100 m southeast of Tower 1136
33WA136	Located on the Little Miami River floodplain
33WA144, 33WA145, WA146, WA158	Located on the Little Miami River floodplain; only WA158 and WA 146 are located near an existing tower (1138)
33WA85	Located 100 m south of Tower 1140, north of the Little Miami River
33GR98	Early Archaic site covering 80 (sic) acres of upland slopes near corridor
33GR96	Located near the corridor, but not close to any towers
33GR99	Located near Tower 1026
33Gr1083	Located due south of Green Substation

Field Methods

Two general methods of archaeological field investigation, surface survey and shovel testing, were used during the Phase I cultural resources survey of DP&L's proposed Foster to Bath corridor. BHE implements these methods in compliance with the guidelines of the Secretary of Interior and the OHPO. For the Foster to Bath project, discussions with Dr. David Snyder of the OHPO (July 1999) devised a field strategy based upon stratifying the corridor into high, medium, and low probability areas. The demarcation of these areas was based upon the proximity of previously recorded sites, landform type, proximity to water and degree of slope. Only the tower replacement locations in high and medium probability areas were to be subjected to Phase I investigation. At these locations, sample loci were recorded between a minimum of 1 m and a maximum of 15 m intervals from the four corners of the existing tower.

Surface survey involved the visual scrutiny of exposed ground surface during controlled pedestrian coverage of the tower replacement area. An interval of 1 m to 5 m (3.3 to 16.4 feet) was maintained between linear transects walked during surface survey. Surface survey was conducted in areas offering 50 percent or greater surface visibility as well as areas of wet ground cover or steep slope. Shovel testing was used when surface visibility dropped below 50 percent, or when cultural material was identified on the surface. Individual shovel tests measured approximately 30 - 40 cm in depth and 50 cm in diameter. All excavated sediments were screened through a 1/4-inch mesh hardware cloth to ensure the recovery of relatively small artifacts. In the event that cultural material was recovered during this process, four additional shovel tests were placed at a reduced 7.5 m interval in a cruciform pattern around the positive unit in order to assess intrasite characteristics and artifact densities. Drawings, maps, photographs, and verbal descriptions were used, as necessary, to complement and document the survey conditions and locations of cultural resources.

Table C-3.2 illustrates the results of the Phase I survey and provides recommendations as to the treatment of any cultural resources discovered.

TABLE C-3.2. Cultural resources sites discovered within the Foster to Bath 345 kV right-of-way during the Phase I field survey.

Site Number	Tower Number	Description
33WA730	1047	Single biface thinning flake recovered in shovel test (ST) 2A, 0-30 cm. This site is located on the edge of a high, level glacial terrace approximately 200 m south of the Stubbs cluster sites. Due to this proximity, testing was initiated as a block of 16 shovel tests at a 5 m interval. Surface visibility in this cut soybean field was minimal. All soil profiles beneath the wires were heavily compacted; only the eastern-most transect revealed deep, friable soils. One of these, ST2A, yielded the isolated flake. Due to the close 5 m interval, no additional intrasite testing was conducted. This isolated find is not significant.
33WA731	1050	Surface scatter of debitage and fire-cracked rock approximately 30 m southeast of Tower 1050. The tower was located on a northwest-facing slope. Site area is located immediately north of US 22, across from the Stubbs sites. This location is totally disturbed by recent grading. Material was not quantified or collected.
33WA732	1051	Six flakes and fire cracked rock recovered from two shovel tests on the Little Miami River floodplain. Shovel test 3, located 10 m northwest of the tower, yielded two flakes of an unidentified reduction sequence and one biface thinning flake from the upper 30 cm. Shovel test 4, 10 m northeast of the tower, yielded one flake of an unidentified reduction sequence from the upper 30 cm. One biface thinning flake, one biface finishing flake, and a piece of burned limestone were recovered from 30 to 55 cm, in a zone of 10YR3/3 blocky silt loam (buried A horizon). No material was recovered from STs 1 and 2 to the south, and the stratigraphy was less clear in that area. No basal deposits were encountered. Additional shovel testing and deep testing were recommended for this location based on a conversation with Dr. David Snyder (Appendix B).
33WA733	1091	Two flakes of an unidentified reduction sequence and one pitted stone were recovered from the surface of a cornfield in an area 5 to 10 m north of existing Tower 1091. Visibility in the cornfield was 80 % and the setting is a narrow ridgetop in a highly dissected portion of uplands east of the Little Miami River. Despite intensified surface inspection, no additional cultural material was recovered and the site is considered insignificant.
33WA444	1101	A single flake was recovered from the plowzone of a shovel test in vicinity of previously recorded site 33WA444. Due to the presence of a known site, a block of shovel tests was placed around the tower at a 5 m interval. Two intrasite units were placed outside of the positive test, but no additional material was recovered. This site is an isolated find and further testing is not recommended.

33WA159	1137	A single burned biface fragment was found on the surface at 7 m northeast of the existing tower, in the vicinity of previously recorded site 33WA159. The site is on an undulating floodplain of the Little Miami River with gravel on the surface. Surface visibility was good, but no additional material was recovered. Shovel tests revealed no basal deposits within 60 cm of surface. The site was an isolated find, but given the floodplain location deep testing was recommended.
33GR1116	1154	Shovel test 4, located to the northeast of the existing tower, yielded one biface thinning flake from the plowzone. This site is on a high bluff over an unnamed tributary of the Little Miami River. Despite intensified surface inspection in the soybean field with over 50% visibility, no additional material was recovered. This site is not significant.

Phase I Survey in Areas of Previously Recorded Sites

The literature review discussed above identified a number of sites in close proximity to existing tower locations. All sites were subjected to heightened levels of scrutiny, but no materials were recovered. They are summarized in Table C-3.3.

TABLE C-3.3. Cultural resource sites identified in the literature search in close proximity to existing tower locations.

Site Number	Description
33WA306-WA307	Power line in this area is located on 10 to 15 m wide, 2 to 4 m high, berm of quarry spoil and the area is completely disturbed.
33WA490	No tower in vicinity, but previously recorded site is near or under wires. Area inspected had 50 to 60% surface visibility, but nothing was found.
33WA139	Shovel testing and surface inspection (50% visibility) recovered no material.
33WA136	No tower in vicinity, but site area was given a surface inspection (50% visibility). No material was collected.
33WA144, 33WA145, WA146, WA158	Only WA158 and WA146 are located near Tower 1138. The area provided 80-90% surface visibility, but it was also shovel tested due to the number of nearby archaeological sites. No material was collected and shovel tests revealed channel gravels within 1 m of surface.
33WA85	Located 100 m south of Tower 1140. The tower area was surface inspected, but no materials were recovered.
33GR98	Tower located on steep slopes subjected to surface inspection.
33GR96	No towers are in the vicinity and this site was not inspected.
33GR99	Tower 1026 in the immediate vicinity. About 100% surface visibility on the old glacial terrace. Large area intensively inspected with no cultural resources recovered.
33GR1083	Area thoroughly destroyed by grading and reshaping of landform.

Recommendations Concerning Deep Testing

Five tower replacement locations coincide with floodplain settings that required deep testing to examine buried deposits. One of these locations (Tower 1051) yielded cultural materials in shovel tests excavated during the initial Phase I survey. The following is a list of floodplain settings that had deposits that could not be examined using ordinary shovel tests and were therefore subjected to deep testing.

- Tower 1051: north side of Little Miami River crossing west of Morrow.
- Tower 1136: south side of Little Miami River crossing south of US 42.
- Tower 1137: south side of Little Miami River crossing south of US 42.
- Tower 1139: north side of Little Miami River crossing south of US 42.
- Tower 1168: north side of Little Miami River crossing west of Spring Valley.

At the suggestion of Dr. David Snyder (14 October 1999) (Appendix B), deep testing consisted of the excavation of 150 cm by 50 cm test units to examine the stratigraphy. The units were to be excavated by hand to a minimal depth of 100 cm, and a 0.25 m^2 quadrant of soil was to be screened by hand. The aim of the deep testing was to examine the profile for artifacts and features, as well as to determine the presence of any buried landforms.

The results of the deep testing indicated that only the area around Tower 1051 contained prehistoric or historic cultural materials. Five additional deep shovel tests and a 150 cm by 50 cm deep test trench revealed a buried A horizon at depths of 30 to 55 cm in depth. A total of 10 artifacts were recovered from shovel tests including four biface thinning or finishing flakes, two flakes from unspecified reduction sequences, two ceramic sherdlets, one whiteware sherd, and one burned bone fragment. In discussion with Dr. David Snyder (2 November 1999) it was pointed out that the site was low density, contained no diagnostic materials, and contained no evidence of features. Therefore, he suggested that the site was insignificant within the project boundaries and required no further investigation (Appendix B).

b. Impacts

Phase I surface reconnaissance, shovel testing and deep testing identified seven sites within the project corridor. Each of these locations is an isolated find or low-density prehistoric site that is not regarded as significant. No further investigations or other procedures are required for these locations.

4. NOTIFICATIONS

The chief executive officers of Greene and Warren counties, through the County Administrators, and the head of the township governmental agencies in the area where any part of this project is located, have been contacted with personal contacts by DP&L and Cinergy management personnel. At these contact meetings, the county and township people were given brochures and a verbal explanation briefly describing the Foster-Bath Transmission Project. They were also asked for their comments, concerns and questions regarding the project. A copy of the brochure given the officials is included in Appendix E. Additionally, all these officials will be provided a copy of this Letter of Notification at the time of filing. The project does not require work on any land owned or within the boundaries of any municipal corporation.

In addition to the county and township administration people identified above, county, state and federal agencies involved in preservation and protection of the environment, and natural, cultural and ecological resources, have also been contacted by letter and/or personal contact as noted by the documents included in Appendices. Further, these agencies will be provided a copy of this Letter of Notification.

DP&L has provided information to the public concerning this project by contacting public officials as described above with letters and/or personal contacts generally describing the project. As noted, additional detailed information will be provided them in this Letter of Notification. Further public notification has been accomplished by sending information to each property owner who owns land on which any part of the transmission facility will be located, and to those properties immediately adjacent to the right-of-way that are directly affected by tree trimming or some other activity associated with the project. This information recently sent to the owners included a map showing the line route (Figure A-1.2), a brief description of the project and work to be done, and sketches of the structures to be removed and installed on or near their property. Each owner has been sent that information pertinent to the location of that owner's property and based on the appropriate line section(s) detailed in this Letter of Notification. Owners are encouraged to contact DP&L for further information or to have their questions answered. A copy of the mailing list of property owners in each section of the line to be upgraded (as detailed ion Sections A and B of this LON) is included in Appendix E. Immediately following the mailing list for each section is a copy of a representative letter sent to each owner in that section along with the specific sketches included with their letter.

Since sending the letters and information packets the week of January 10, 2000, seven letters have been "returned to sender" with no forwarding address known. The original mailing lists were developed from county tax and ownership records. The seven letters returned have all been resent based on additional and more up-to-date information obtained from review of other directories and field trips to identify addresses.

Responses and questions have been received from a few of the property owners who were sent letters. One owner, Carlo McGinnis of Valley Springs Farm, asked that his letter response, dated January 17, 2000, be forwarded to regulatory/oversight agencies. This response letter is included in Appendix E.

Another property owner inquired about EMF effects (questions addressed) and the specific design and placement of the new replacement structure located on his property. Due to the specific manner in which he uses his property, DP&L will investigate an alternate structure arrangement to accommodate the use and topography of the property, and the owner's access lane to the rear of the property.

A third inquiry expressed concern for effects of the line-upgrading project on use of, and clearances associated with, the Greene County Airport. DP&L is in the process of designing the line upgrade in this area west of the airport to meet all FAA requirements and comply with the requirements of the Ohio Department of Transportation Aviation Administration, as further discussed in this Letter of Notification.

A couple other inquires were received concerning details of the project not specifically addressed in the property owner letters. One of these contacts was interested in a possible relocation of a structure to accommodate parking at his shop on his property. Another was concerned with soil rutting and compaction caused by construction equipment. Another was concerned about four-wheelers getting on the property during construction. All of these questions have been addressed to the satisfaction of the property owners.

Additionally, several property owners called to state they were pleased with the efforts we were making to contact them and that they thought the pole structures were a preferred alternative to the present towers.

TABLE C-4.1. Persons and agencies notified about the Foster to Bath 345 kV project.

Contact	Agency
Warren County Administrator	Robert Price 320 East Silver Street Lebanon, OH 45036
Greene County Administrator	Steve Stapleton 35 Greene Street Xenia, OH 45385
Hamilton Township Trustee	Jacqueline Terwilleger 10609 Rochester-Cozaddale Pleasant Plaines, OH 45122
Salem Township Clerk	Debbie Harper 7373 Ludlum Rd. Morrow, OH45152
Turtle Creek Township Clerk	Lois Freeze Stovall 536 North Waynesville Rd. Lebanon, OH 45036
Washington Township Clerk	Diane Owens 6427 Woodward-Claypool Rd. Morrow, OH 45152
Massie Township Clerk	Mary Wilkie 10555 E. State Route 73 Waynesville, OH 45068
Wayne Township Clerk	Darrell C. Coffman 5515 South Cincinnati-Columbus Rd. Box 1142 Waynesville, OH 45068
Deerfield Township Clerk	Benjamin Dotson 9142 Columbia Road Loveland, OH 45140
Spring Valley Township Trustees	John DeWine, Wendell Johnson, Paul Ferguson 2547 U.S. 42 S. Spring Valley OH 45370
Sugarcreek Township Trustees	Jeanne Nydegger, Carl Grubb, Dick King 26 E. Franklin St. Bellbrook, OH 45305
Beavercreek Township Trustees	John Deal, Carol Graff, Richard Little 1981 Dayton-Xenia Road Beavercreek, OH 45434
Ohio Environmental Protection Agency	Rick Queen Ohio Environmental Protection Agency Division of Surface Water P.O. Box 1049 Columbus, Ohio 43216

TABLE C-4.1 (Cont.). Persons and agencies notified about the Foster to Bath 345 kV project.

Ohio Department of Natural Resources	Kim Baker Real Estate Management Division 1952 Belcher Drive Columbus, OH 43224-1336
Ohio Department of Transportation	District 8 Office 505 South SR 741 Lebanon, Ohio 45036
Ohio Historic Preservation Office	Dr. David Snyder 1982 Velma Avenue Columbus, OH 43211
U.S. Fish and Wildlife Service	Kent Kroonemeyer Ecological Services 6950 Americana Parkway, Suite H Reynoldsburg, Ohio 43068-4132
Greene County Parks and Recreation	James A Schneider Greene County Recreation, Parks and Cultural Arts 651 Dayton-Xenia Road Xenia, Ohio 45385
Warren County Parks and Recreation	Onlie M Gully, Park Director Warren County Parks 300 East Silver Street Lebanon, Ohio

5. CURRENT OR PENDING LITIGATION

There is no current or pending litigation associated with this project at the time of filing the Letter of Notification.

6. LOCAL, STATE AND FEDERAL AGENCY GOVERNMENTAL REQUIREMENTS

Local, State and Federal permits, clearances, and approvals required for the project have been identified (Table C-6.1). DP&L is currently working with local agencies to determine the need for additional permits. DP&L has requested comments from appropriate federal and state environmental agencies having jurisdiction over the proposed project. Responses received are included in Appendix A. Certain permits require that specific design details and schedule information be supplied with the permit. This is the case for permits to cross highways, provide airspace clearance at airports, define how runoff and stormwater discharge is to be handled at certain locations, etc. The final engineering details are presently being developed so that permit applications may be finalized. DP&L will not construct any facilities until all applicable environmental permits, clearances, and/or approvals have been obtained.

TABLE C-6.1. Local, state, and federal permits and clearances required for the Foster to Bath 345 kV project.

Agency	Regulated Activity	Permit/Clearance	Date Submitted / Received
U.S. Army Corps of Engineers Louisville District	Crossing jurisdictional waters of the United States	Nationwide permit 12 (Utility crossings) for crossing waters of the United States	
U.S. Fish and Wildlife Service	Protection of federally-listed species	Clearance for federally-listed T&E species	9 September 1999/ 16 September 1999
National Park Service	Crossing of National Scenic River	Comment from Scenic Rivers Coordinator	27 September 1999 5 November 1999
Public Utilities Commission of Ohio	Project construction	Certificate to construct project	
Ohio Environmental Protection Agency	Crossing jurisdictional waters of the state	401 Water Quality Certification for crossing state-jurisdictional waters	9 September 1999
Ohio Environmental Protection Agency	Construction disturbances of greater than 5 acres	Stormwater Discharge Permit	
Ohio Department of Natural Resources (ODNR), Division of Natural Heritage	Protect species	Review and comment for state listed species	9 September 1999 13 September 1999
ODNR, Division of Natural Areas and Preserves	Crossing of State Scenic River	Comment from Scenic Rivers Coordinator	27 September 1999 5 November 1999
ODNR, Division of Natural Areas and Preserves, Department of Real Estate Management	Crossing of state-owned lands (Hails Creek Nature Preserve, Caesar Creek Nature Preserve)	License Agreement	
ODNR, Division of Wildlife	Threatened and endangered species	Review and comment for state-listed species	9 September 1999
Ohio Historic Preservation Office (OHPO)	Cultural resources	Review project and provide recommendations and clearance	Phase 1 report submitted January 28, 2000
County Floodplain Administrators	Flood hazard area crossing	Flood Hazard Area Development Permit	

TABLE C-6.1. Local, state, and federal permits and clearances required for the Foster to Bath 345 kV project, Continued.

Ohio Department of Transportation (ODOT)	Highway crossings and airport airspace	Construction and crossing permits and clearances	
Federal Aviation Administration (FAA)	Airport and airspace clearance requirements and structure markings	Permit to construct in airspace	

D. Environmental Data

1. FEDERAL AND STATE DESIGNATED SPECIES

a. Existing Conditions

Federal Species

The United States Fish and Wildlife Service (FWS) Reynoldsburg District was contacted on 9 September 1999 for information on the occurrence of federally-listed plant and animal species within and along the project corridor to assess potential ecological impacts of the project. FWS responded that they do not have site specific information on fish and wildlife habitats for the project area. They also stated that the Little Miami River is a Federally- and state-designated scenic and recreational river and that special conditions may be placed on the construction of the transmission line crossings of the Little Miami River. They have no record of any federal wildlife, forest, or park area that would be impacted by the proposed project (Appendix A). However, their records show that the following federally listed species may be present in the project area: Indiana bat (*Myostis sodalis*) (endangered), clubshell mussel (*Pleurobema clava*) (endangered), running buffalo clover (*Trifolium stoloniferum*) (endangered), and eastern massasauga (*Sistrurus catenatus catenatus*) (candidate). Each is briefly described below.

Indiana Bat

The Federally endangered Indiana bat has a range that stretches east from Oklahoma, Iowa and Wisconsin to Vermont, and south to northwestern Florida (Barbour and Davis 1969). The Indiana bat is a migratory species that roosts in trees during the summer and hibernates in caves and mines in the winter. Because no caves or mines are located within the project area, suitable summer habitat for Indiana bats is the only concern for the proposed project.

During summer, female Indiana bats migrate from winter hibernacula to summer roosting areas, where they establish maternity colonies in trees (Gardner et al. 1991, Humphrey et al. 1977, Cope et al. 1974). Certain criteria have been identified as important components of the Indiana bat summer habitat [3D Environmental (3D/E) 1995]. Summering Indiana bats typically roost beneath exfoliating bark of trees, but are also known to roost within the cavities of trees (Brack 1983). Potentially important roost tree characteristics are tree diameter, canopy cover at roost sites, tree species, roost tree density, and location of potential roost trees relative to other habitat features (e.g., foraging areas).

Maternity roost trees discovered to date have generally been trees with greater than 12 inches diameter at breast height (dbh). Smaller trees may also be used as alternate roosts as micro-climatic conditions of the primary roost tree vary throughout summer. Many tree species are utilized by Indiana bats, but species which have greater amounts of exfoliating bark [e.g., shagbark hickory (*Carya ovata*), silver maple (*Acer saccharinum*)] are generally more likely to be used. Trees with greater than 25 percent exfoliating bark are considered to have high potential as roost sites, trees with 10 to 25 percent are considered to have moderate potential. Large, dead trees often provide the greatest potential habitat, although they may serve as suitable roost sites for only a few years before bark exfoliation is complete.

Size and density of potential roost trees are important characteristics in determining habitat suitability. In optimal habitats, dbh exceeds 9 inches and tree density is greater than 27 trees per acre in upland areas, or 17 trees per acre in lowland areas (3D/E 1995).

Optimal foraging habitat for Indiana bats consists of mature forests with canopy closure of 50 to 70 percent and open subcanopy. Additionally, proximity to water also affects the suitability of habitat. Standing water should be within a 0.6 mile of the habitat under consideration for an area to be considered optimal foraging habitat.

During the field investigation conducted 6-30 September 1999, suitable habitat areas were defined by BHE biologists as areas containing potential roost trees and/or potential foraging habitat. In the proposed right-of-way, noted roost trees comprised a combination of shagbark hickories, white oaks (*Quercus alba*), and a variety or dead and dying trees, all of which may provide summer roosting habitat for the Indiana bat. Potential foraging areas included areas that provided openings or corridors that were in close proximity to the above mentioned trees. During the field investigation, seven suitable habitat areas were identified within the right-of-way. These areas were mapped using GPS and are depicted in Figure A-1.5. Six areas were located within the second growth forested habitat within the first mile of the project area. The forest covers the yet uncleared eastern 150-foot portion of the 300-ft right-of-way. These six areas contained medium-sized shagbark hickories (20-30 cm dbh) and medium to large white oaks (30-50 cm dbh). Each area contained two to six potential roost trees. This first mile did not provide large open areas or corridors; however, the area could still be utilized by the Indiana bat.

The seventh area of suitable habitat was situated in the small gorge surrounding Caesar Creek. Four small to medium-sized (15-20 cm dbh) shagbark hickories and three medium (20-30 cm) white oaks were noted in the gorge within the right-of-way. Although only seven potential roost trees were noted, this area provided a potential foraging area, Caesar Creek, which crossed the entire right-of-way.

Running Buffalo Clover

Running buffalo clover is a federally-listed endangered legume which flowers in May and early June and had an original range that included Illinois, Indiana, Kansas, Kentucky, Missouri, Ohio, and West Virginia (Brooks 1983; USFWS 1989). The greatest number of populations of running buffalo clover are presently found in southwestern Ohio and northern Kentucky. Historic records indicate this species was widespread on moist, fertile soils in the Bluegrass Region, and the species grew in open woodlands and grasslands disturbed by Indians and large herbivores like buffalo, elk, and deer (Campbell et al. 1988).

Early accounts suggest running buffalo clover inhabited woodlands dominated by sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), green ash (*Fraxinus pennsylvanica*), blue ash (*Fraxinus quadrangulata*), American elm (*Ulmus americana*), red elm (*Ulmus rubra*), black walnut (*Juglans nigra*), honey locust (*Gymnocladus dioica*), black locust (*Robinia psuedoacacia*), red mulberry (*Morus rubra*), hackberry (*Celtis occidentalis*), and scattered oaks (*Quercus* spp.) and hickories (*Carya* spp.). The ground vegetation appears to have been dominated by species including wild ryes (*Elymus* spp.), bluegrasses (*Poa* spp.), giant cane (*Arundinaria gigantea*), hog peanut (*Amphicarpa bracteata*), wood nettle (*Laportea canadensis*), and clearweed (*Pilea pumila*).

During the field investigation, while the entire project area was surveyed for running buffalo clover, no individual of this species was identified.

Clubshell Mussel

The clubshell mussel is a species typical of medium-sized and large rivers, where it occurs in gravel or mixed gravel and sand (Parmalee and Bogan 1998, Cummings and Mayer 1992). Historically this species occurred in big river habitats that are now impounded. Most current populations of this species are reduced to an occasional relict individual (Parmalee and Bogan 1998).

The clubshell once was widespread throughout most of the Ohio and Maumee River drainages. It is recorded from most Ohio River tributaries in Kentucky, Illinois, and Ohio, as well as from more isolated systems in Michigan, Pennsylvania, and West Virginia. The largest remaining population of the clubshell is in the Tippecanoe River of Indiana (USFWS 1993). It is a federally-listed endangered species and is also listed as endangered by the state of Ohio (Ohio Law 1531.25).

No in-stream survey for this species was completed during the field investigation. However, this species was not identified in the ODNR Division of Wildlife and Division of Natural Areas and Preserves database search as being located within 0.5 mile of the crossing of any project area stream.

Eastern Massasauga

The eastern massasauga rattlesnake occurs in the Great Lakes region including much of glaciated (northern) Ohio. It has been documented from Greene County (Conant 1951, Duellman 1951). The species is listed as endangered in the State of Ohio.

In Ohio, eastern massasaugas inhabit a variety of habitats including wet grasslands and undergrowth surrounding lakes or marshes, hay or grain fields, second-growth swamp forest, dry woodlands, and nearby buildings (Minton 1972). They may hide in crayfish burrows or other underground cavities (Conant and Collins 1991). This species feeds on rodents, small birds, frogs, and other snakes. Eastern massasaugas are active from April to late October or early November. During spring and fall they are diurnal and can be seen basking or searching for food. In the heat of mid-summer they are largely inactive during the day (Ernst and Barbour 1989).

During the field investigation, while the entire project area was surveyed for eastern massasauga, no individual of this species was identified.

State Species

ODNR Divisions of Wildlife and Natural Areas and Preserves were contacted on 9 September 1999 regarding information on the occurrence of state-listed plant and animal species within and along the project corridor, to assess potential ecological impacts of the project. ODNR Division of Natural Areas and Preserves reported that there are four state-listed species (few-flowered tick-trefoil (*Desmodium pauciflorum*) (potentially threatened); mooneye (*Hiodon tergisus*) (special interest); prickly pear (*Opuntia humifusa*) (potentially threatened); and Carolina willow (*Salix caroliniana*) (threatened)] known to occur within 1,300 feet of the right-of-way; however, none were mapped within or adjacent to the project area (Appendix A).

b. Impacts

A field survey for protected species within the project corridor was conducted 6-30 September 1999. No federally-listed plants or animals were found during the field survey. One osprey (*Pandion haliaetus*) (state endangered) was observed flying across the right-of-way at the beginning of the project area. However, while this individual is a state-listed bird it was believed to be migrating through the area. There are no records of this species nesting in southwestern Ohio (Peterjohn and Rice 1991). In addition, one marsh wren (*Cistothorus palustris*) (state special interest) was observed along Furnas Ditch.

No impact to state- or federally listed species is anticipated as a result of proposed project activities. DP&L is anticipating FWS' approval to remove suitable Indiana bat habitat prior to 15 April deadline in order to avoid effects to this species. No osprey nest was observed in the project area. To avoid any potential impact to this species, DP&L will avoid disturbance to reed canary grass and other vegetation along the ditch during construction if construction occurs during this species' nesting season, mid-May to mid-August (Peterjohn and Rice 1991).

2. AREAS OF ECOLOGICAL CONCERN

The right-of-way occurs near several ecological areas of concern. Each are discussed below.

a. Natural Areas and Preserves

Existing Natural Areas and Preserves

ODNR Divisions of Natural Areas and Preserves and Real Estate were contacted on 9 and 10 September 1999, respectively, for information on the project's potential to impact ecological resources including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas wildlife refuges, wildlife management areas, and wildlife sanctuaries.

ODNR Division of Natural Areas and Preserves identified several ecological areas near DP&L's right-of-way. They are listed below.

- Little Miami River
- Hall Creek Woods Scenic River Preserve
- Floodplain Forest Plant Community
- Mathers Mill Scenic River Access
- Caesar Creek Gorge State Nature Preserve
- Fossil deposit and stream gorge within Caesar Creek
- Roxanna Road Scenic River Access
- Glenn Thompson Scenic River Access
- Beaver Valley State Wildlife Area

ODNR also stated that they are unaware of breeding or non-breeding animal concentrations or state parks or forests in the project's vicinity. ODNR's response letter is provided in Appendix A.

The project crosses the Little Miami River, a State and National Scenic River, six times. Immediately after the first crossing of the Little Miami River near the Village of Morrow, the project area enters ODNR-managed Halls Creek Woods Scenic River Preserve for approximately 1,700 feet. This nature preserve is located in Warren County, 3 miles east of South Lebanon on Mason-Morrow Road. It is known for its displays of spring and summer wildflowers. Within this Preserve, the powerline crosses about 250 feet of Floodplain Forest Plant Community. DP&L will apply for a License Agreement for the crossing of the Nature Preserve.

The project area also lies within 1,300 feet west and north of Mathers Mill Scenic River Access, managed by ODNR Division of Wildlife and Preserves. The right-of-way also crosses 1,160 feet of Caesar Creek Gorge State Nature Preserve in Wayne Township on either side of the Caesar Creek crossing. This area is characterized by a limestone gorge with Ordovician fossils, and spring wildflowers. It is located in Warren County 3 miles north of the Village of Oregonia. DP&L will apply for a License Agreement for the crossing of the Nature Preserve. Near this crossing, the project area is located about 500 feet upstream from a fossil deposit and stream gorge within Caesar Creek.

Just north of Mount Holly, the right-of-way comes within 1,000 feet west of ODNR's Roxanna Road Scenic River Access. Farther north, the right-of-way comes within 1,700 feet west of ODNR's Glenn Thompson Scenic River Access in Beavercreek Township. Finally, the right-of-way comes within 2,000 feet west of ODNR's Beaver Valley State Wildlife Area in Beavercreek Township.

ODNR Scenic Rivers Program Coordinator and the Regional Environmental Coordinator with the National Park Service were contacted for comment regarding the crossing of the Little Miami River. Their responses are provided in Appendix A.

Impacts

One tower location (Tower 1052) is situated within Halls Creek Woods Scenic River Preserve. A second tower (Tower 1106) is located adjacent to Caesar Creek Nature Preserve. Construction impacts will comprise temporary soil disturbances around each tower location, and the pouring of new permanent concrete foundations. In addition, the existing transmission towers at these sites will be removed. The movement of construction equipment will temporarily disrupt existing vegetation and may disturb the underlying topsoil layer at both the old and new tower sites. To control runoff and erosion at each tower location, DP&L will implement best management practices described in their *Soil and Erosion Control Plan*.

DP&L will coordinate with Mr. Frank Shocks, ODNR' SW Ohio Preserve Manager regarding clearing and implementation of their Riparian Corridor Reforestation Management Plan (FCRMP) within the Caesars Creek Gorge and Hall's Creek Nature Preserves prior to construction.

b. Streams

Existing Conditions

The project area is located within the drainage basin of the Little Miami River, a State and National Scenic River. The Little Miami River is a major tributary of the Ohio River and it originates near Clifton Gorge in Clark County, Ohio, and flows south to the Ohio River, draining an area of 1,755 mi^2. The river supports more than 87 species of fish, 36 species of mussels (including five state-listed endangered species) and numerous species of breeding birds (ODNR 1999).

The Little Miami River is designated by OEPA as a state resource water and exceptional warm water aquatic habitat. State Scenic Rivers are the highest quality rivers in Ohio. To be classified as scenic, rivers must exhibit a high degree of natural integrity; possess good, intact native fish, macroinvertebrate, and mussel populations; possess a good quality riparian corridor; and must have little human disturbance. Any construction within 1,000 feet of a scenic river must be coordinated with ODNR. The river's use classification includes agricultural and industrial water supplies. It is also designated for primary contact recreation (OEPA 1998).

BHE completed a field survey of streams within the proposed corridor from 6-30 September 1999. All project area streams were characterized, and mapped using GPS. One hundred ten (110) streams were identified during the field survey, including 22 characterized as permanently flowing. Streams identified and named on USGS topographic maps included Salt Run (crossed twice), Hen Run (crossed twice), Bigfoot Run, Little Miami River (crossed six times), Grays Run (crossed twice), Olive Branch, Caesar Creek, Shaffers Run, and Furnas Ditch.

Streams crossed by the powerline are summarized in Table D-2.1 and illustrated on USGS topographic maps (Figure A-5.1). Stream datasheets and select photographs of permanent streams are provided in Appendix C.

Most streams crossed by the right-of-way were characterized by steep banks with typical bank heights of 10 to 20 feet. Due to bank steepness, considerable erosion was evident in some of the streams crossed. Most streams had undercut banks, and some of the larger streams exhibited evidence of exposed calcareous limestone bedrock. Typical stream substrates were composed of cobble, gravel, sand, and varying amounts of silt. No obvious signs of contamination were noted during the field survey.

TABLE D-2.1. Streams crossed by the Foster to Bath 345 kV electric transmission corridor.

Stream No.	Stream Name	Water Width (feet)	Stream Flow
1	Unnamed tributary	3	E
2	Unnamed tributary	10	P
3	Unnamed tributary	3	E
4	Unnamed tributary	10	E
5	Unnamed tributary	10	E
6	Unnamed tributary	3	E
7	Unnamed tributary	5	E
8	Unnamed tributary	3	E
9	Unnamed tributary	10	E
10	Unnamed tributary	10	E
11	Unnamed tributary	3	E
12	Unnamed tributary	8	E
13	Unnamed tributary	4	E
14	Salt Run	15	P
15	Unnamed tributary	4	E
16	Hen Run	10	P
17	Hen Run	10	P
18	Salt Run	8	P
19	Unnamed tributary	3	E
20	Unnamed tributary	5	E
21	Unnamed tributary	4	E
22	Unnamed tributary	5	E
23	Unnamed tributary	6	E
24	Bigfoot Run	7	P
25	Unnamed tributary	3	E
26	Unnamed tributary	3	E
27	Unnamed tributary	3	E
28	Little Miami River	100	P
29	Unnamed tributary	5	E
30	Unnamed tributary	3	E
31	Unnamed tributary	3	E
32	Unnamed tributary	3	E
33	Unnamed tributary	3	E
34	Unnamed tributary	3	E
35	Grays Run	5	P
36	Unnamed tributary	5	E
37	Grays Run	7	E
38	Unnamed tributary	3	E
39	Unnamed tributary	6	E
40	Unnamed tributary	5	E
41	Unnamed tributary	4	E
42	Unnamed tributary	3	E

TABLE D-2.1 (Cont.). Streams crossed by the Foster to Bath 345 kV electric transmission corridor.

43	Unnamed tributary	3	E
44	Unnamed tributary	15	E
45	Unnamed tributary	6	E
46	Unnamed tributary	8	E
47	Unnamed tributary	3	E
48	Unnamed tributary	8	E
49	Unnamed tributary	8	E
50	Unnamed tributary	4	E
51	Unnamed tributary	3	E
52	Unnamed tributary	5	E
53	Unnamed tributary	5	E
54	Unnamed tributary	5	E
55	Little Miami River	130	P
56	Unnamed tributary	3	E
57	Unnamed tributary	4	E
58	Unnamed tributary	5	E
59	Unnamed tributary	6	E
60	Unnamed tributary	5	E
61	Olive Branch	30	P
62	Unnamed tributary	30	E
63	Unnamed tributary	4	E
64	Unnamed tributary	3	E
65	Unnamed tributary	3	E
66	Unnamed tributary	7	E
67	Caesar Creek	50	P
68	Unnamed tributary	4	E
69	Unnamed tributary	3	E
70	Unnamed tributary	3	E
71	Unnamed tributary	5	E
72	Unnamed tributary	3	E
73	Unnamed tributary	3	E
74	Unnamed tributary	12	E
75	Unnamed tributary	5	E
76	Unnamed tributary	5	E
77	Unnamed tributary	3	E
78	Unnamed tributary	6	E
79	Unnamed tributary	12	P
80	Unnamed tributary	4	E
81	Shaffers Run	20	P
82	Furnas Ditch	12	P
83	Little Miami River	90	P
84	Unnamed tributary	7	P

TABLE D-2.1 (Cont.). Streams crossed by the Foster to Bath 345 kV electric transmission corridor.

85	Unnamed tributary	5	E
86	Unnamed tributary	10	E
87	Unnamed tributary	7	E
88	Unnamed tributary	3	E
89	Unnamed tributary	5	E
90	Unnamed tributary	6	E
91	Unnamed tributary	15	P
92	Little Miami River	60	P
93	Unnamed tributary	6	P
94	Unnamed tributary	3	E
95	Unnamed tributary	6	E
96	Unnamed tributary	4	E
97	Unnamed tributary	8	E
98	Unnamed tributary	4	E
99	Unnamed tributary	4	E
100	Unnamed tributary	4	E
101	Unnamed tributary	3	E
102	Unnamed tributary	3	E
103	Unnamed tributary	5	E
104	Unnamed tributary	3	E
105	Unnamed tributary	12	P
106	Little Miami River	5	P
107	Little Miami River	75	P
108	Unnamed tributary	3	E
109	Unnamed tributary	3	E
110	Unnamed tributary	3	E

P: Perennial
E: Ephemeral

Impacts

No impact to the Little Miami River will occur as a result of construction and operation activities. DP&L will implement recommendations of the National Park Service and ODNR Scenic Rivers Program (Appendix A) at these crossings. No in-stream work will be conducted in the Little Miami River or in any drainage way (storm sewer inlet, swales, ditch or tributary streams) within 1,000 feet of the Little Miami River. In addition, DP&L will not cross Bigfoot Run, Grays Run, and an unnamed tributary or oxbow (Stream 106) located just south of SR-35. All areas within 1,000 feet of the Little Miami River will be returned to pre-construction elevations and contours using the natural substrates.

No work will be conducted within the ordinary high-water mark of the Little Miami River. No riparian vegetation will be removed within 120 feet of the Little Miami River except within pre-determined areas, per ODNR, of the defined easement. No trees over 4 inches DBH will be removed until a determination has been made by ODNR during a site visit, that these trees require removal. In coordination with ODNR, DP&L will complete and implement a Riparian Corridor Reforestation Management Plan (RCRMP) to increase the riparian buffer along the Little Miami River.

If dewatering is necessary at the pole construction locations, all wastewater will be pumped onto vegetated areas away from the Little Miami River. All equipment maintenance activities and storage of hazardous materials will not be conducted within the 100-year floodplain of the Little Miami River.

Temporary disturbance to other project area streams will result from vehicle crossings during construction. Potential impacts could include stream bank and channel disturbance. However, impact to streams is expected to be short term and minimal. The crossing of streams that are characterized by steep banks or have evidence of substantial erosion potential will be avoided. Where this is not possible, DP&L will locate stream crossings where they will cause the least amount of disturbance to the channel and surrounding vegetation. Stream crossings by equipment will be made perpendicular to the channel to minimize the length of channel disturbed. Where stream banks and channels cannot support heavy equipment without damage, DP&L will construct a temporary equipment bridge crossing using equipment pads and/or clean rockfill. No equipment bridge will be constructed or stabilized with soil.

All equipment crossing material will be removed as soon as the crossing is no longer needed, except where removing stone or rock will cause additional disturbance to the stream. Stone and rock left in the channel will be formed so that it does not impede fish passage.

No impact to streams from stormwater runoff or sedimentation is anticipated from construction activities. DP&L will implement best management practices during construction to minimize stormwater runoff and stream sedimentation from disturbed tower sites. Sedimentation will be controlled across the right-of-way by directing flow from erosion control structures and sheet flow into naturally occurring, well-vegetated areas. These areas serve to reduce the velocity of water flow and act as filter traps for sediment.

Disturbed portions of the right-of-way that are characterized by steep slopes have a greater erosion potential due to greater velocities of storm water runoff along the right-of-way. DP&L will initiate clean up and restoration as soon as practical following construction to minimize erosion. This includes re-contouring, applying lime, fertilizer and seed, and mulching disturbed areas where necessary and as required. Temporary erosion controls will be properly maintained throughout construction. A variety of temporary erosion control measures may be used to limit sedimentation. They will mostly be limited to sediment barriers and mulch. Sediment barriers include, but are not limited to, jute matting, curlex, silt fence, straw or hay bales, crushed stone, and vegetative filter strips.

c. Wetlands

BHE completed a field reconnaissance within the entire project corridor during 6-30 September 1999 in order to determine the presence of wetland communities. Prior to visiting the sites, BHE obtained and reviewed all available resource information for the area. This information included USGS topographic maps, USFWS National Wetland Inventory (NWI) maps and the U.S. Natural Resources Conservation Service (NRCS) *Soil Survey of Warren County, Ohio* (USDA-NRCS 1973) and *Soil Survey of Greene County, Ohio* (USDA-NRCS 1978).

Wetlands were identified and surveyed using the "Routine Onsite Determination Method" as described in the U.S. Army Corps of Engineers Wetland Manual (1987). Dominant vegetation was determined by estimating percent aerial coverage for the most prevalent species. Dominant species include taxa which cumulatively total 50 percent of the aerial coverage and any other single species accounting for at least 20 percent aerial coverage within the plot. The wetland indicator status of each species was determined using *The National List of Plant Species That Occur in Wetlands: Northeast (Region 1)* (Reed 1988). Munsell Soil Color Charts (1994) were used to identify the hue and chroma of soil samples. Wetlands were classified in accordance with the USFWS' classification system (Cowardin et. al. 1979). All data were recorded on Wetland Delineation Data Sheets (Appendix D) and wetland boundaries were mapped using GPS.

Thirty wetlands were identified within the right-of-way. They range in size from 0.01 acre to 1.04 acres. Twenty-seven wetlands were classified as palustrine emergent (PEM) while three were a combination PEM/ palustrine scrub-shrub (PSS) wetland. PEM wetlands were dominated by reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), boneset (*Eupatorium perfoliatum*), jewelweed (*Impatiens* sp.), grass-leaved goldenrod (*Euthamia graminifolia*), clearweed (*Pilea pumila*), tickseed (*Bidens* sp.), common cattail (*Typha latifolia*), New England aster (*Aster novae angliae*), and black bulrush (*Scirpus atrovirens*). PSS wetlands had similar herbaceous layers to the PEM wetlands but also were characterized by sandbar willow (*Salix exigua*) and black willow (*Salix nigra* spp.) species scattered throughout the wetland. Wetland acreage within the right-of-way totals 3.4 acres. Project area wetlands and their acreage are summarized in Table D-2.2.

Impacts

DP&L will attempt to avoid crossing wetland areas with construction equipment where feasible during the string of cable. Maximum temporary impacts to wetlands would comprise 3.4 acres along the entire right-of-way and would consist of temporary disturbance to the upper 1 foot of soil. No vegetation will be removed except where proposed tower locations are situated in wetlands.

Two existing and proposed new transmission towers (towers 1044 and 1143) are located in wetlands 13 and 25, respectively. Two other towers (towers 1026 and 1098) are located adjacent to Wetlands 5 and 21, respectively. Impact to wetlands 13 and 25 will comprise the filling of 0.003 acre with a concrete foundation and the regrading of an area approximately 40 foot by 40-foot area (0.04 acre) each foundation. At existing tower sites, the steel lattice

above ground will be disassembled and a backhoe will dig around each leg location to a depth of 3 to 4 feet so the top part of each leg may be taken apart and removed. Once completed, the excavated soil will be replaced where each leg top section was removed.

At tower locations 1026 and 1098, impact to adjacent wetlands 5 and 12 will likely comprise soil disturbance from construction equipment during old tower removal and new tower construction activities.

Where standing water or saturated soils are present in wetlands, DP&L's contractor will use low-ground weight, or wide-track or balloon-tire construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats; or geotextile fabric overlain with gravel. Geotextile fabric used for this purpose must be strong enough to allow removal of all gravel and fabric from the wetland. DP&L will attempt to use no more than two layers of timber riprap to stabilize the right-of-way. All timber riprap, prefabricated equipment mats, geotextile fabric, and overlying gravel will be removed upon completion of construction.

Immediately after construction, all disturbed wetlands will be reseeded and stabilized following procedures outlined in the *Soil and Erosion Control Plan* (Appendix E).

TABLE D-2.2. Wetlands crossed by the Foster to Bath 345 kV electric transmission corridor.

Wetland No.	Wetland Type	Acres
1	PEM	0.08
2	PEM	0.02
3	PEM	0.01
4	PEM	0.24
5	PEM	0.08
6	PEM	0.06
7	PEM	0.03
8	PEM	0.03
9	PEM	0.01
10	PEM	0.02
11	PEM	0.01
12	PSS	0.03
13	PSS	0.10
14	PEM	0.11
15	PEM/PSS	0.12
16	PEM/PSS	0.12
17	PEM/PSS	0.08
18	PEM	0.16
19	PEM	0.10
20	PEM	0.01
21	PEM	0.03
22	PEM	0.14
23	PEM	0.10
24	PEM	0.01
25	PEM	1.04
26	PEM	0.03
27	PEM	0.30
28	PSS	0.16
29	PEM	0.17
30	PEM	0.04
TOTAL		3.44

d. Ponds

Existing Ponds

Eighteen ponds were observed within the right-of-way. The majority of ponds were located in agricultural fields or pastures - six were residential ponds. Most of the ponds were small, measuring less than 1 acre. All but two appeared to be man-made and most were used as watering holes for livestock. Pond acreage in the right-of-way totals 6.4 acres.

Impacts

DP&L will avoid impact to ponds in the right-of-way by routing their construction equipment around these areas. No proposed tower locations are designed to be located within ponds

e. Vegetation

Existing Conditions

During the field investigation, BHE characterized vegetative communities within the corridor. Most of the project area is characterized by old-field communities and agricultural row crops. Old-field vegetation was the dominant plant community in the right-of-way. Old-fields are habitats that were once cleared, but have been left to re-vegetate. Dominant herbs observed in these areas included meadow fescue (*Festuca pratensis*), brome grass (*brome* sp.), Canada goldenrod (*Solidago canadensis*), common ragweed (*Ambrosia artemisiifolia*), giant ragweed (*Ambrosia trifida*), blackberry (*Rubus* sp.), black raspberry (*Rubus occidentalis*), New England aster, and chicory (*Cichorium intybus*). Dominant shrubs or small trees scattered in the right-of-way included multiflora rose (*Rosa multiflora*), black locust (*Robinia pseudoacacia*), and white ash (*Fraxinus americana*).

Early successional forest was identified across the right-of-way on either side of Caeser Creek. Dominant trees observed in this forested area include black locust, white ash, sugar maple, black cherry (*Prunus serotina*), red maple (*Acer rubrum*), northern red oak (*Quercus rubra*), and blue beech (*Carpinus caroliniana*). Dominant plants in the shrub layer included multiflora rose, gray dogwood, amur honeysuckle (*Lonicera maackii*), and black locust. Herbs observed included Canada goldenrod, meadow fescue, blackberry, black raspberry, and white avens (*Geum canadense*).

Second-growth forest occurred within the right-of-way along the first mile. Dominant trees observed included American beech (*Fagus grandifolia*), sugar maple, red oak, yellow oak (*Quercus muehlenbergii*), sycamore (*Platanus occidentalis*), black cherry, and blue beech. Shrubs included multiflora rose, amur honeysuckle, spicebush (*Lindera benzoin*), and maple-leaved viburnum (*Viburnum acerifolium*). Herbs included white avens, wood reed (*cinna arundinacea*), common violet (*Viola sororia*), jewelweed, and horse balm (*Collinsonia canadensis*).

Impacts

Construction impacts to vegetation will consist of both temporary and permanent impacts. Temporary impacts consist of disturbance to vegetation and soil (potentially the upper 1 foot) at existing tower locations, proposed new tower locations, and within the right-of-way caused by the movement of construction equipment along it. A temporary disturbance to vegetation and soil will occur within a 40 foot by 40-foot area (0.04 acre) at each new tower location during installation. At existing tower sites, the steel lattice above ground will be disassembled and a backhoe will dig around each leg location to a depth of 3 to 4 feet so the top part of each leg may be taken apart and removed. Once completed, the excavated soil will be replaced where each leg top section was removed and the areas will be regraded and reseeded.

Old-field vegetation will naturally re-establish in these areas after construction. DP&L does not anticipate impact to existing crops because construction is planned for a time window outside of the growing season.

At tower locations there will be a permanent loss (0.003-acre) of existing vegetation due to the erection of new steel towers and the placing of concrete foundations. In agricultural lands, DP&L will compensate farmers for permanent economic losses associated with the loss of tillable land associated with these permanent structures. Temporary disturbance to old-field vegetation will also occur along the right-of-way from the movement of construction equipment during the stringing of the transmission lines and during periodic right-of-way maintenance.

There will be a permanent removal of second-growth forest within the first mile of right-of-way. It will comprise approximately 8 acres. The loss of early successional forest community along Caeser Creek will comprise approximately 4 acres.

After construction, there will be required periodic maintenance of the right-of-way that will result in brush removal across the entire width of right-of-way with the exception of agricultural areas. This has been an on-going activity in an already existing right-of-way. Old-field communities will revegetate with early successional old-field species shortly after construction.

f. Wildlife

During the field survey conducted in the right-of-way during 6-30 September 1999, BHE recorded observed wildlife species. Mammals observed included eastern cottontail (*Sylvilagus floridanus*), groundhog (*Marmota monax*), white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), eastern mole (*Scalopus aquaticus*), and white-footed mouse (*Peromyscus leucopus*).

Reptiles observed in the corridor included the blackrat snake (*Elaphe obsoleta*), northern water snake (*Nerodia sipedon sipedon*), and eastern box turtle (*Terrapene carolina carolina*). Amphibians observed in the project area included the bullfrog (*Rana catesbeiana*), green frog (*Rana clamitans melanota*), and northern spring peeper (*Hyla crucifer crucifer*). No toads were found during the survey but Fowler's toad (*Bufo woodhousii fowleri*) and American toad (*Bufo americanus*) are likely in the area. Some salamanders such as the tiger salamander (Ambystoma tigrinum tigrinum) and spotted salamander (Ambystoma maculatum) may also be found in the ponds in the spring where they breed. However, due to the time of the year and the drought conditions they were not observed during the present survey.

Bird species observed in and along the right-of-way are listed in Table D-2.3.

Impacts

The adults of birds, mammals, and some reptiles are mobile enough to avoid mortality as a direct result of construction. Younger animals and less mobile species, such as small mammals and amphibians could suffer direct losses during construction. In general, there probably will be a complete loss of reproduction within the project areas during construction. If construction activities occurred during the autumn or winter no loss of reproduction would occur.

The adults of birds, mammals and some reptiles are mobile enough to avoid mortality as a direct result of construction. Younger animals and less mobile species, such as small mammals, amphibians and birds, could suffer direct losses during construction activities. Both ground- and tree-nesting birds are particularly vulnerable if construction activities occur between April and early September.

TABLE D-2.3. Birds observed in and along the Foster to Bath right-of-way.

Common Name	Scientific Name
goldfinch	*Carduelis tristis*
northern cardinal	*Cardinalis cardinalis*
field sparrow	*Spizella pusilla*
song sparrow	*Melospiza melodia*
chimney swift	*Chaefura pelagica*
white throated sparrow	*Zonotrichia albicollis*
robin	*Turdus migratorius*
Indigo bunting	*Passerina cyanea*
mourning dove	*Zenaida macroura*
bluejay	*Cyanocitta cristata*
ruby-throated humingbird	Archilochus colubris
northern mocking bird	*Mimus polyglottos*
brown thrasher	*Toxostoma rufum*
bluebird	*Sialia sialis*
bobwhite	*Dolichonyx oryzivorus*
eastern kingbird	*Tyrannus dominicensis*
rufous-sided towhee	*Pipilo erythrophthalmus*
eastern meadowlark	*Sturnela magna*
red-winged blackbird	*Agelaius phoeniceus*
gray catbird	*Dumetella carolinensis*
downy woodpecker	*Picoides pubescens*
red-bellied woodpecker	*Melanerpes carolinus*
eastern phoebe	*Sayornis phoebe*
pileated woodpecker	*Cryocopus pileatus*
common flicker	*Colaptes auratus*
white-breasted nuthatch	*Sita canadensis*
eastern phoebe	*Sayornis phoebe*
white-eyed vireo	*Vireo griseus*
Carolina chickadee	*Parus carolinensis*
tufted titmouse	*Parus bicolor*
scarlet tanager	*Piranga olivacea*
cedar waxwing	*Bombycilla cedrorum*
Carolina chickadee	*Thryothorus ludovicianus*
yellow-rumped warbler	*Dendroica coronata*
house finch	*Carpodacus mexicanus*
common crow	*Corvus brachyrhynchos*
turkey vulture	*Cathartes aura*
red-tailed hawk	*Buteo jamaicensis*
Cooper's hawk	*Accipiter cooperii*
osprey	*Pandion haliaetus*
marsh wren	*Cistothorus palustris*
great blue heron	*Ardea herodias*
green-backed heron	*Butorides striatus*
Canada geese	*Branta* candensis
belted kingfisher	*Ceryle alcyon*
killdeer	*Charadrius vociferus*
house sparrow	*Passer domesticus*
Starling	*Sturnus vulgaris*

The permanent conversion of forested communities and temporary conversion of old-field communities in the right-of-way will displace wildlife species currently inhabiting these areas. However, no impact to these species is anticipated because they are likely to relocate into similar adjacent habitats. Old-field communities in the right-of-way will revegetate shortly after periodic right-of-way maintenance. The loss of forested community is minimal with respect to availability of similar habitat in the vicinity of the project area.

No long-term impact to project area wildlife is anticipated.

g. Flood Hazard Areas

Flood Hazard Areas Crossed

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were reviewed for Warren and Greene Counties, Ohio to identify flood hazard areas crossed by the proposed project (FEMA 1987, 1998). Flood hazard areas are designated as Zone A and Zone B. Zone A areas are those areas of the 100-year flood, base flood elevations and flood hazard factors not determined. Zone A1-A30 and AE are areas of 100-year flood; base elevations and flood hazard factors determined. Zone B areas are areas between 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. Areas in Zone X are areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

In review of FIRM maps, BHE identified several flood hazard areas crossed by the project area. They are summarized in Tables D-2.4 and D-2.5. Proposed tower locations that are situated in flood hazard areas are also identified.

Impacts

Permanent impacts to flood hazard areas will comprise the fill of an approximate 0.003 acre area at each proposed new single tower location and approximate 0.006 acre at each proposed double tower location. DP&L will obtain required Flood Hazard Area Development Permits from the respective counties prior to construction activities.

TABLE D-2.4. Flood hazard areas crossed in Warren County by the Foster to Bath 345 kV project area.

Stream Name	Proposed Tower Number	Stream Number	Approximate Length of Flood Hazard Area Crossed by right-of-way (feet)	Flood Hazard Area designation
Salt Run	1027	14	500	Zone A
Hen Run	N/A	16	250	Zone A
Hen Run	N/A	17	375	Zone A
Salt Run	N/A	18	450	Zone A
Bigfoot Run	N/A	24	175	Zone A
Little Miami River tributary	N/A	27	325	Zone B
Little Miami River	1051	28	1375	Zone A10
Grays Run	1061 (edge)	35, 37	350	Zone A
Halls Creek	1070, 1071	41, 42	300	Zone B
Little Miami River	N/A	55	950	Zone A10
Olive Branch	N/A	61	250	Zone A
Olive Branch trib	N/A	63	125	Zone A
Caesars Creek	N/A	67	250	Zone A
Little Miami River tributary	1117	72	175	Zone B
Little Miami River tributary	N/A	79	150	Zone B
Shaffers Run	N/A	81	175	Zone B
Little Miami River	1136, 1137, 1138, 1139, 1140	83	5,450	Zone A8

TABLE D-2.5. Flood hazard areas crossed in Greene County by the Foster to Bath 345 kV project area.

Stream Name	Proposed Tower Number	Stream Number	Approximate Length of Flood Hazard Area Crossed by Right-of-way (feet)	Flood Hazard Area designation
Little Miami River	1168	92	1,575	Zone AE
Little Miami River	N/A	92	75	Zone X500
Little Miami River oxbow	N/A	95	125	Zone A
Little Miami River	Use 3 existing towers	107	3,275	Zone AE
Little Miami River	Use 3 existing towers	107	850	Zone X500

3. ENVIRONMENTAL, SOCIAL, HEALTH, OR SAFETY IMPACTS

a. Ground Water and Aquifers

Existing Resources

Several segments of the project area overlie the Little Miami River System Buried Valley Aquifer along the Little Miami River. This aquifer system is an USEPA-designated sole source aquifer (1999). Approximately 15.5 miles of the proposed right-of-way overlies the Little Miami River Valley Aquifer System. The depth to bedrock over this major aquifer is generally greater than 60 feet below ground surface and in some areas exceeds 200 feet below the surface. Subsurface material within this aquifer consists of consolidated and semi-consolidated sand and gravel of alluvial and glacial origin. Groundwater yields within this system range from as little as 5 gallons per minute (gpm) in the glacial material to as much as 1,000 gpm in the saturated subsurface material found within the floodplains of the Little Miami River.

Areas outside of the Little Miami River Valley Aquifer that are traversed by the proposed corridor are underlain by shallow bedrock consisting of thin beds of limestone and shale. Bedrock in these areas can be encountered at depths of less than 3 feet below surface in some locales. Minor amounts of groundwater are available from bedrock but yields seldom exceed 3 gpm in most areas.

Public Water Systems

Much of Warren and Greene counties is serviced by public water supply systems. There are several public water systems located within both counties (Appendix A). BHE searched OEPA's public water supply database (OEPA 1999a) to identify public water supplies within 0.25 mile of the proposed transmission tower centerline. Four water supplies were identified. In Warren County is Paramount Kings Island's non-transient water supply system that contains five water wells and serves a population of 175. It is plotted as being located about 650 feet east of centerline along Bennett Road in Salem Township. A second public water supply in Warren County is a community water supply of three wells, Plant 2, owned by the City of Lebanon in Salem Township. It is plotted as situated along project centerline at a location in Salem Township.

In Greene County, the project crosses the Valley Springs Well-field located between the Little Miami River (Stream 107) and US-35. The wellfield is owned and operated by the Greene County Water District. There are three water wells in this wellfield. PW-08 is located approximately 10 feet east of DP&L's eastern powerline centerline. PW-10 is under construction approximately 160 feet west of the western electric powerline centerline (just outside of the 300-ft construction right-of-way). PW-09 is located approximately 320 west of DP&L's western powerline centerline (outside of the 300-foot construction right-of-way) (Greene County Water District 1999).

At Ankeney Road, the right-of-way also lies within 1,000 feet east of the Beavercreek North Wellfield in the vicinity of Beaver Valley Road. This public water system is also operated by Greene County Water District, and supports three water wells (NWN7, NWN1, and NWN6) (Greene County Water District 1999) (Appendix A).

Wellhead Protection Areas

Several well head protection areas (WHPA) have been designated for public drinking water supplies utilizing the Little Miami Buried Aquifer System. The OEPA Division of Drinking and Ground Water, Wellhead Protection Area group was contacted regarding locations of approved WHPAs in the vicinity of the project area. The project area crosses the Village of Morrow's WHPA and the eastern edge of the Village of Waynesville's WHPA in Warren County.

In Greene County, the right-of-way lies within the 1-year time of travel (TOT) of the Valley Springs Wellfield WHPA (plan in progress), and lies adjacent (east) to the 15-year TOT for the Beavercreek North Wellfield (OEPA 1999b, Greene County Water District 1999) (Appendix A).

Private Water Wells

Some local residences in Warren and Greene counties still receive their water supply through private water wells. However, a survey for locations of private water wells was not completed with the study discussed herein.

Impacts

Project impacts to groundwater resources and local water supplies are expected to be negligible due to the nature of proposed construction activities. Significant subsurface incursions during this project are expected to be limited to augering of foundation holes to be used for the foundations required to support the steel pole structures that carry the electrical power lines. These foundations will consist of 6 to 10 foot diameter holes drilled to depths ranging from 15 feet to 50 feet below ground surface. The holes will be filled with reinforced concrete. This material will prevent future inflow of potential contaminants into the aquifer. Holes for wood poles along the 1.5-mile segment of right-of-way immediately south of DP&L's Greene substation will be 30 inches in diameter and typically nine feet deep. These holes will be backfilled with "crushed limestone, chips and dust" except for the top one-foot that will be backfilled with the original excavated earthen material. Due to the well graded backfill material and the high compaction used when it is installed, no porous conduit to the underlying aquifer is expected and no direct impact on aquifer water quality is anticipated from these construction or operation activities.

The aquifers underlying the project area are recharged in part through infiltration of surface water and precipitation. Hazardous fluids may similarly enter the aquifer, as a result of an accidental spill during construction, and potentially contaminate ground water resources. To minimize the potential for impact, all fueling and equipment maintenance activities will be performed off the right-of-way.

In the Valley Spring Wellfield, DP&L will avoid impact to wellheads by limiting all activity within a 150-ft radius of the wellheads. In addition, DP&L will perform all refueling and equipment maintenance activities outside of the 15-year TOT of both the Valley Spring and Beavercreek North Wellfields.

Blasting is not anticipated for this project, thus, fracturing or alterations to grain sorting within the aquifer will not occur due to activities associated with this project.

b. Herbicides

No impact from pesticide application is anticipated during routine right-of-way maintenance. DP&L will maintain their right-of-way by mowing and occasional herbicide application. Herbicides may be applied on plants that if left untreated, could interfere with the operation and safety of the transmission line. Herbicide application will be consistent with DP&L's current herbicide policy and the herbicide and application protocol will be in accord with USEPA's and state of Ohio standards. Any herbicide application to vegetation within 120 feet of the Little Miami River will be applied manually to stumps with a paint brush so as to avoid any adverse impact to the Little Miami River, watershed, or adjacent properties.

c. Safety

The design of the Foster-Bath Transmission Line and all related electric facilities is being done to comply with all provisions of the National Electrical Safety Code (NESC), Standard C2-1997, as adapted by the state of Ohio. This code has been established to assure that all clearances and strength requirements are met and adhered to for the safe construction, maintenance and operation of the facilities for both the utility workers who work on the facilities and the public in general. All work to be performed will be done in a manner to conform to the rules and regulations of OHSA and established DP&L policies and procedures.

d. Public Water and Sewer Lines

The right-of-way crosses Warren and Greene County water and sewer lines at near several pole replacement locations. DP&L will note these areas on their construction plans and ensure that their construction contractor implement necessary measures to avoid impact to these systems.

e. Additional Environmental Information

There is no known additional information or unusual conditions, situations or concerns resulting in significant environmental, social, health or safety impacts created by building this transmission line project.

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Warren County Auditor's Office. 1999. Personal communication with Jim Bove, County Auditor. 513-925-1237.

Appendix A

Environmental Agency Correspondence

Project 173.05

9 September 1999

Kent Kroonemeyer
U.S. Fish and Wildlife Service
Ecological Services
6950 Americana parkway, Suite H
Reynoldsburg, Ohio 43068-4132

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Kroonemeyer:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

I am requesting comment from your agency regarding the presence or absence of federal and state designated species including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest that may be located within the area likely to be disturbed by the project. In addition, please comment on the presence or absence of areas of ecological concern including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries that may be located within the areas likely to be disturbed by the project.

We have also contacted the ODNR's Division of Natural Areas and Preserves and Division of Wildlife for comment.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

11733 CHESTERDALE ROAD • CINCINNATI, OH 45246 • PHONE (513) 326-1500 • FAX (513) 326-1550 • www.bheenv.com
Branch Offices: Columbus, OH • Cleveland, OH • Knoxville, TN • Houston, TX • Rolla, MO • Carlisle, PA

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, Ohio 43068-4132

(614) 469-6923/FAX (614) 469-6919
September 16, 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246

RE: Foster to Bath Transmission Line Project, Warren and Green Counties, Ohio

Dear Ms. Hoeting :

This responds to your September 9, 1999 letter requesting our comments on the proposal referenced above.

Dayton Power and Light (DP&L) is proposing to replace existing transmission towers with new steel towers and to construct a new 345kV transmission line from the exiting Bath substation in Green County to their Foster substation in Warren County, a distance of approximately 45 miles. All work will be completed within DP&L's existing 150-foot right-of-way (ROW), with the exception of the first mile of ROW to Sibcy Road and the portion of the ROW beginning approximately one mile south of the Green substation and ending at the substation. These areas comprise a 300-foot ROW. Construction, however will only require the eastern-most 150 feet.

This technical assistance letter is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act, of 1973, as amended, and is consistent with the intent of the National Environmental Policy Act of 1969, and the U. S. Fish and Wildlife Service's Mitigation Policy. It does not, however, constitute the report of the Secretary of the Interior under Section 2(b) of the Fish and Wildlife Coordination Act, nor does it represent the review comments of the Department of the Interior on any forthcoming environmental document.

We do not have sites specific information on fish and wildlife habitats but it appears wetlands and streams will be crossed. The ROW crosses the Little Miami River three times. The Little Miami River is a Federal and state designate scenic and recreational river, which is administered by the Ohio Division of Natural Areas and Preserves, Scenic River Section. Special conditions may be placed on the construction of the transmission line crossings of the Little Miami River. Also, if any wetlands will be impacted, a permit from the Louisville Corps of Engineers may be required. We do not know of any Federal wildlife, forest, or park area that would be impacted by the proposed project..

ENDANGERED SPECIES COMMENTS: To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, we are providing you the following list of endangered (E), threatened (T), or candidate (C) species which may be present in the project area:

Indiana bat (E)
clubshell mussel (E)
running buffalo clover (E)
eastern massasauga (C)

Sincerely,

Ken Mullen

for Kent Kroonemeyer
Supervisor

Project 173.05

9 September 1999

Ohio Department of Natural Resources
Division of Natural Areas and Preserves
Heritage Data Services 5533 Fair Lane
1889 Fountain Square Court, Building F-1
Columbus, Ohio 43224

Re: Foster to Bath Electric Transmission Line Project

To Whom It May Concern:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

I am requesting that a database search for threatened, endangered and rare plant and animal species, and other natural features be conducted for the entire pipeline right-of-way. Attached are topographic maps depicting the pipeline centerline along the entire route, and a Database Search Request form. I would like you to search within a ½-mile radius either side of the proposed centerline. We have also contacted the U.S. Fish and Wildlife Service and ODNR's Division of Wildlife.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

DIVISION OF NATURAL AREAS & PRESERVES
1889 Fountain Square, Columbus, OH 43224
(614) 265-6453; (614) 267-3096 FAX
Bob Taft • *Governor*
Samuel W. Speck • *Director*

September 13, 1999

Diane Hoeting
BHE Environmental, Inc.
11711 Chesterdale Rd.
Cincinnati, OH 45246

Dear Ms. Hoeting:

I have reviewed our Natural Heritage maps and files for the Foster to Bath Electric Transmission Line project area on the Mason, South Lebanon, Lebanon, Oregonia, Waynesville, Bellbrook, Xenia and Yellow Springs Quads. The numbers on the accompanying list correspond to the areas marked in red on the accompanying maps. A dot represents an exact location, a triangle a general location within a square mile, and a square a general location withingreater than a square mile. Exactness is determined by the accuracy and detail of information provided by the surveyor. Common name, scientific name and status are given for each species.

We are unaware of any breeding or non-breeding animal concentrations or state parks or forests in the project vicinity.

Since this project is located within 1000 feet of a state designated scenic river, theapproval of the Director of ODNR may be required in accordancewith Ohio Revised Code section 1517.16. Please contact the Scenic River Coordinator in your area for further information. Don Rostofer may be contacted at 4675 N. Diamond Mill, Trotwood, OH, 45426; phone 937-854-0350; fax 937-854-9407.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Please note that although we inventory all types of plant communities, we only maintain records on the highest quality areas. Also, we do not have data for all Ohio wetlands. For additional information on wetlands and National Wetlands Inventory maps, please contact Jim Given in the Division of Real Estate and Land Management at 614-265-6770.

- Little Miami River
- Halk Creek Woods Scenic River Preserve
- Floodplain Forest Plant Community
- Mathers Mill Scenic River Access
- Caesar Creek Gorge State Nature Preserve
- Fossil deposit and stream gorge within Caesar Creek
- Roxanna Road Scenic River Access
- Glenn Thompson Scenic River Access
- Beaver Valley State Wildlife Area

plant communities.
– floodplain L. Miami R.

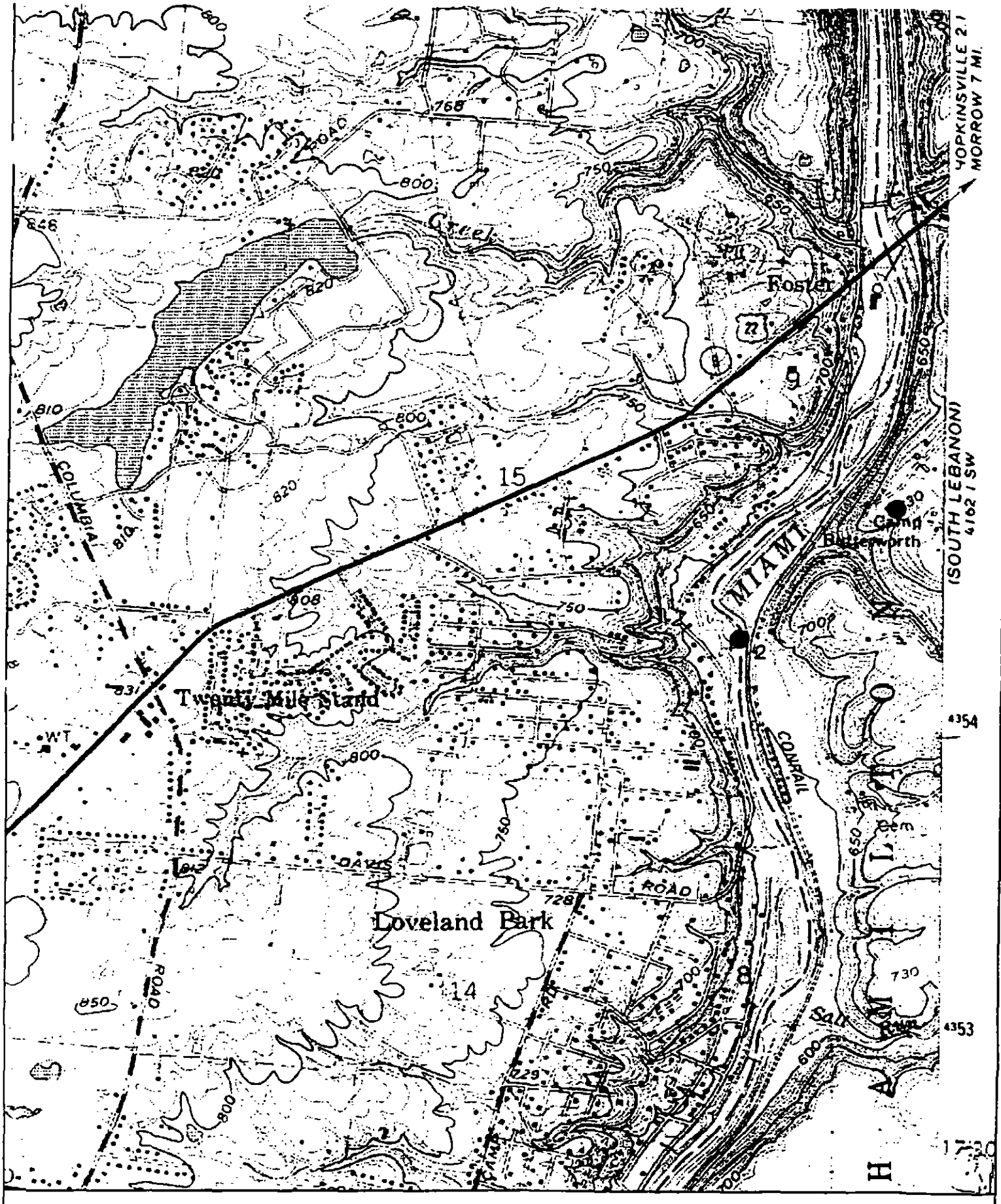
Owned by ODNR
120' ft buffer of trees + natural vegetation
WQ runoff.
canoe access.
not protected for rare

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Debbie Woischke, Data Specialist
Division of Natural Areas & Preserves

cc: Don Rostofer, ODNR, Division of Natural Areas and Preserves, Southwest Ohio Scenic River Coordinator



Name: MASON
Date: 9/10/99
Scale: 1 inch equals 1333 feet

Location: 039° 18' 32.5" N 084° 15' 59.2" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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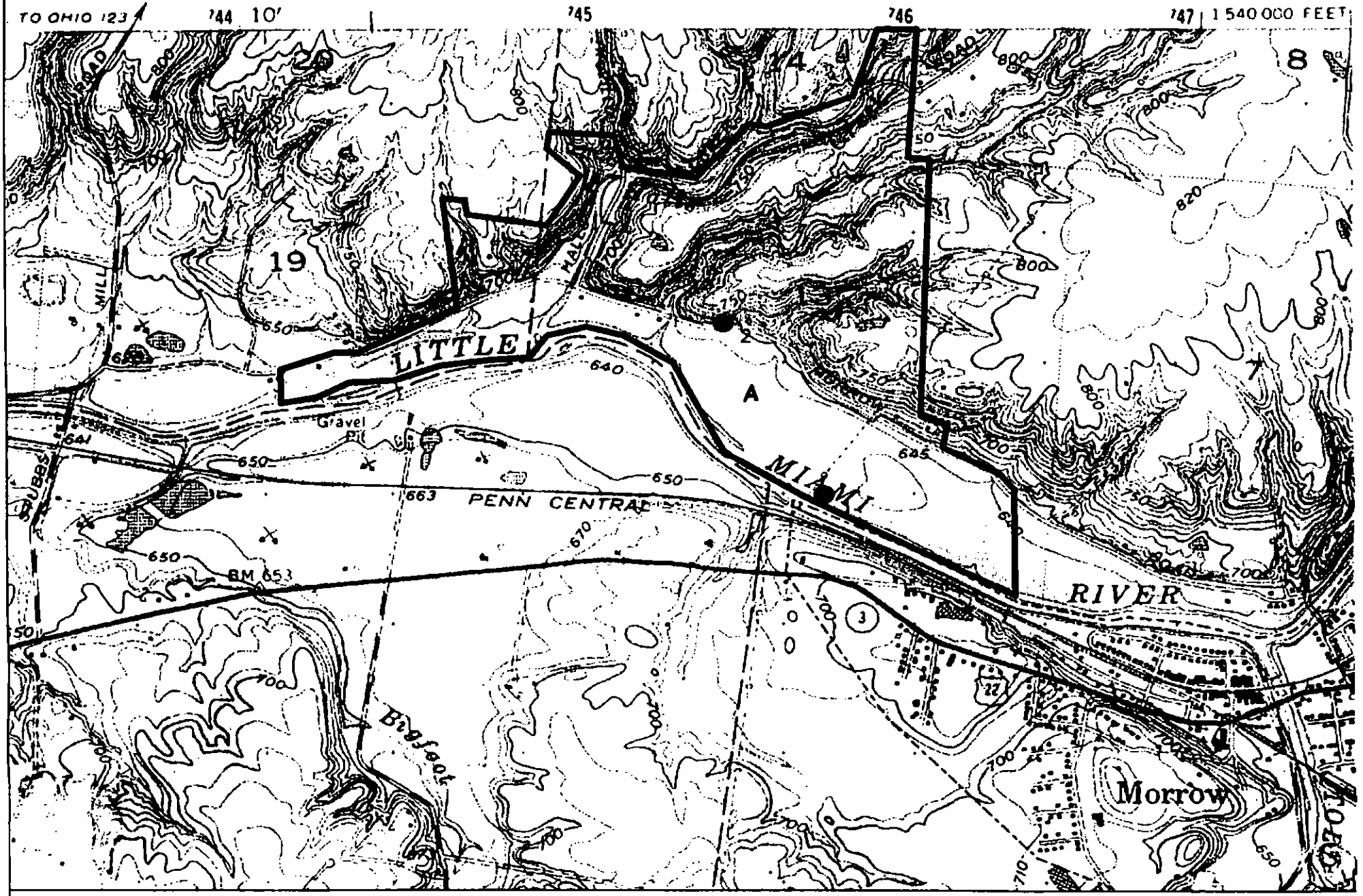

Name: SOUTH LEBANON
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 21' 44.7" N 084° 09' 06.2" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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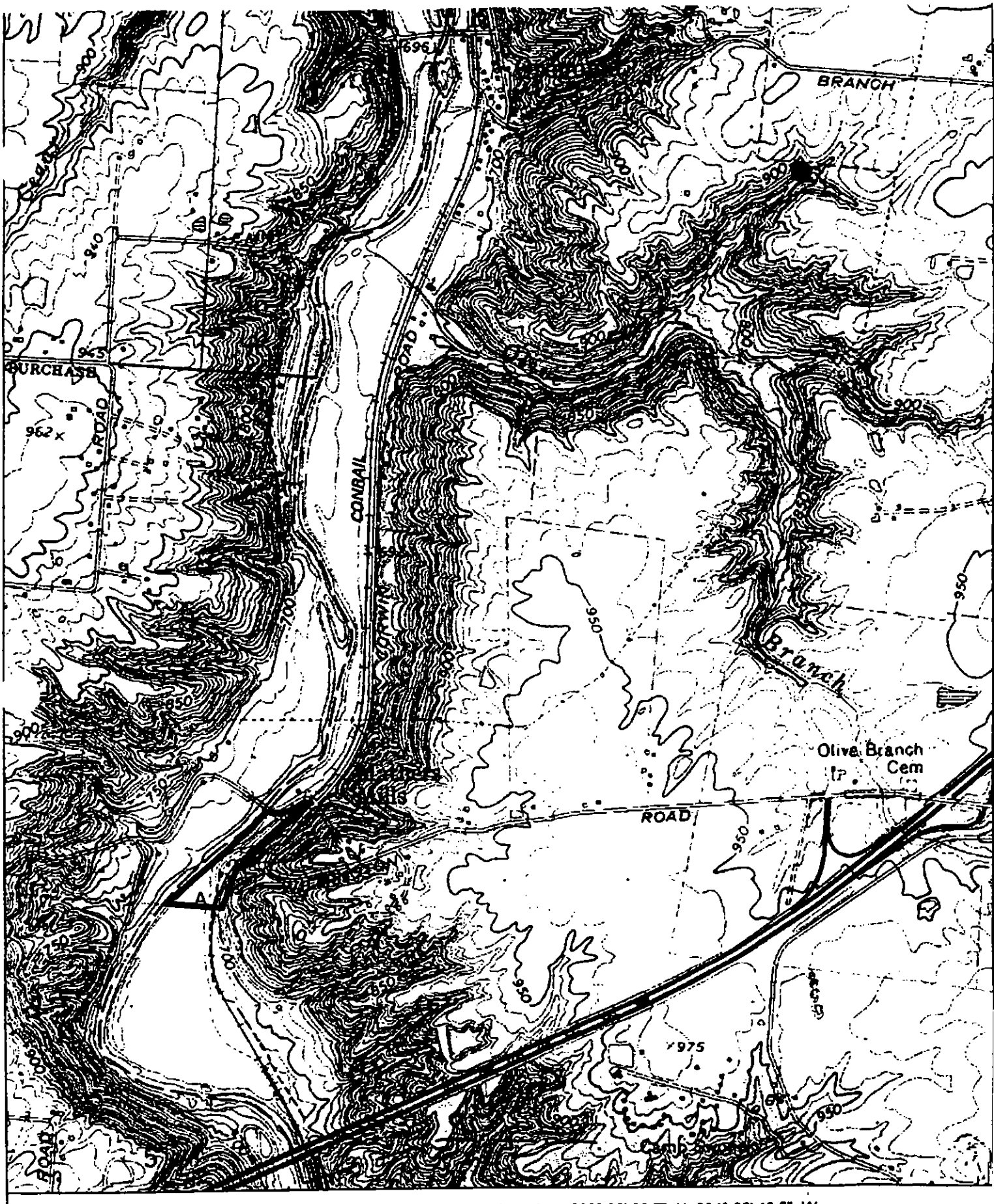

Name: OREGONIA
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 26' 08.7" N 084° 05' 46.5" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

Copyright (C) 1997, Maptech, Inc.

Name: OREGONIA
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 29' 12.3" N 084° 05' 05.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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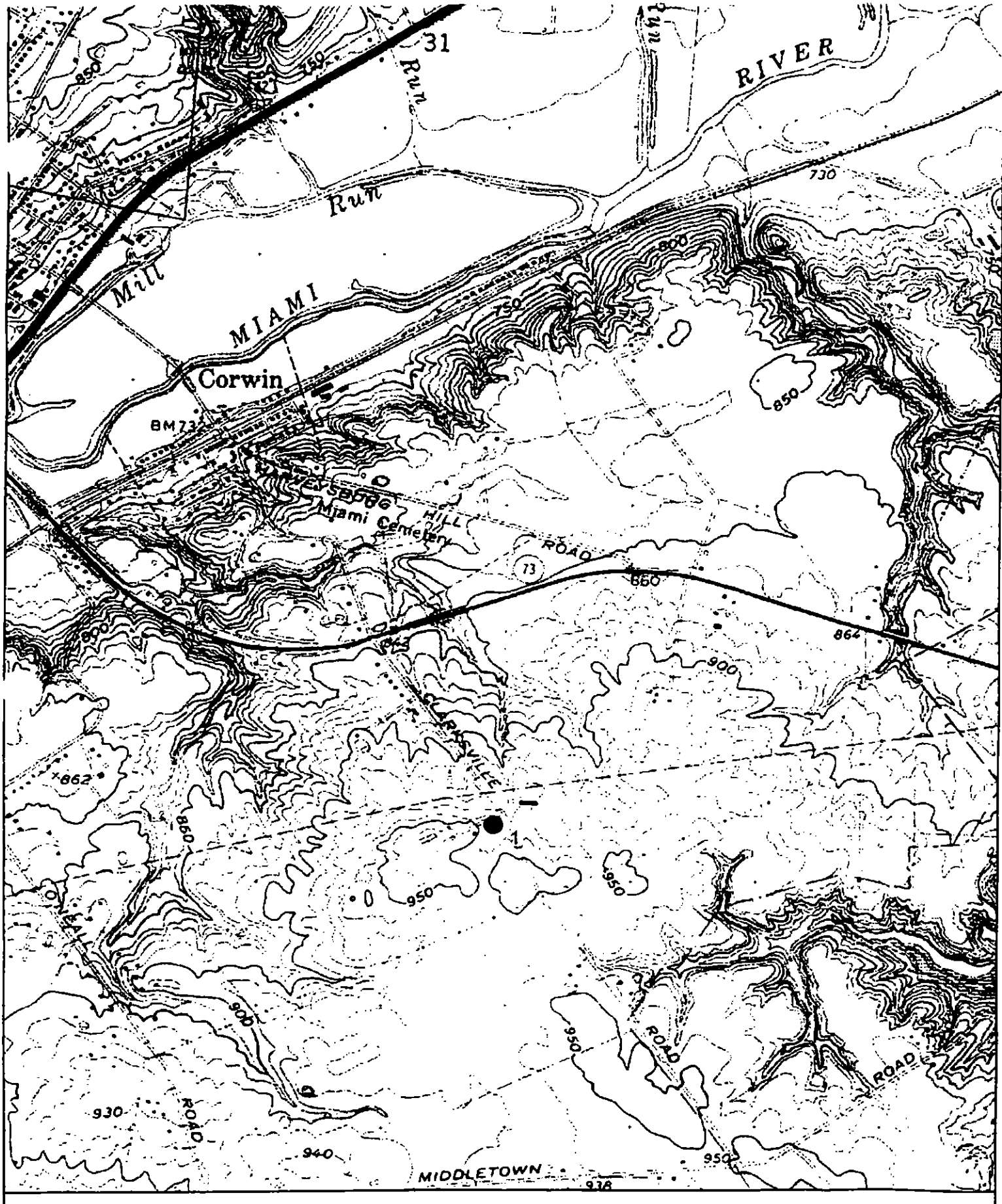

Name: WAYNESVILLE
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 31' 11.7" N 084° 04' 04.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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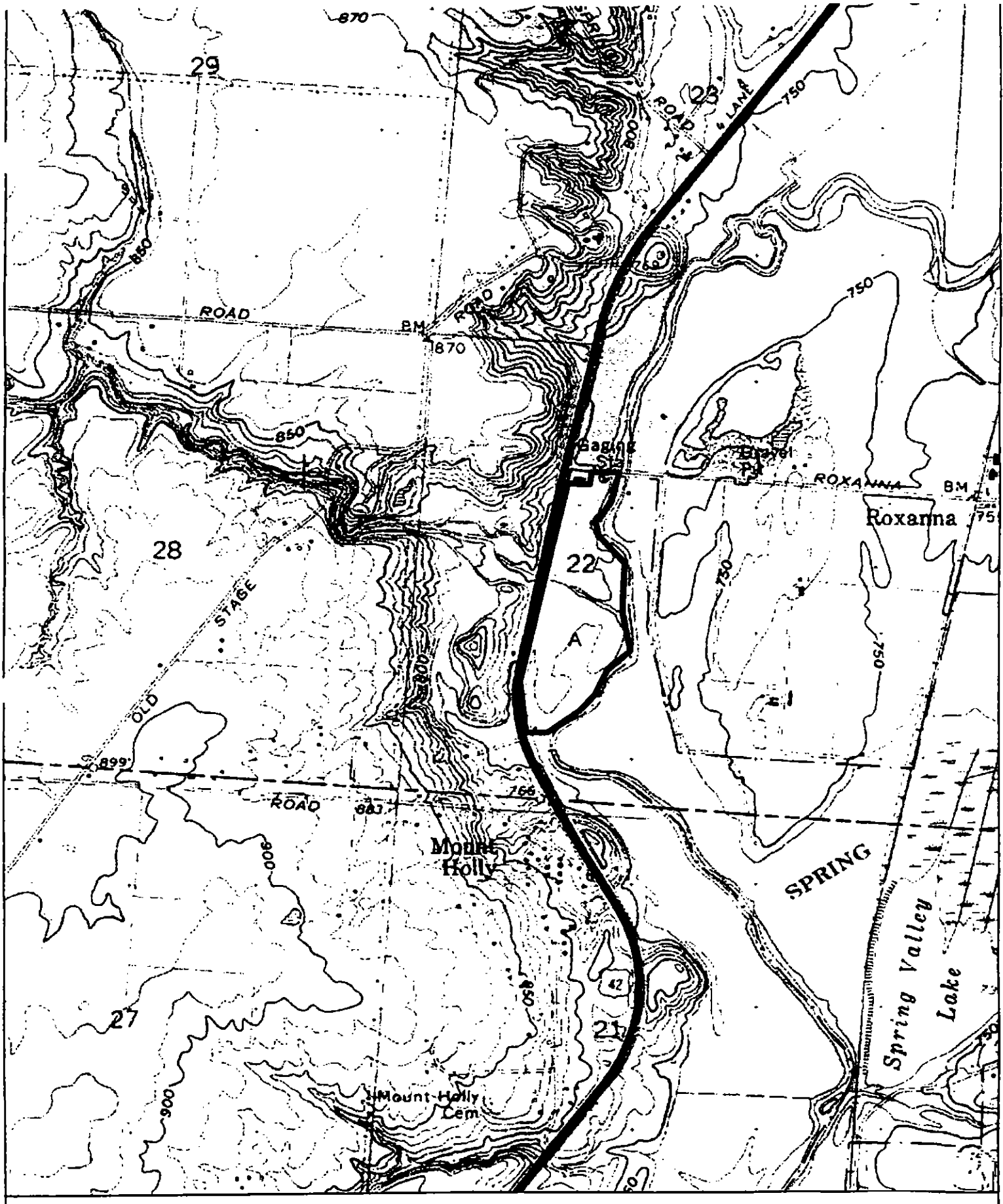

Name: WAYNESVILLE
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 34' 45.1" N 084° 02' 03.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmisson Line project

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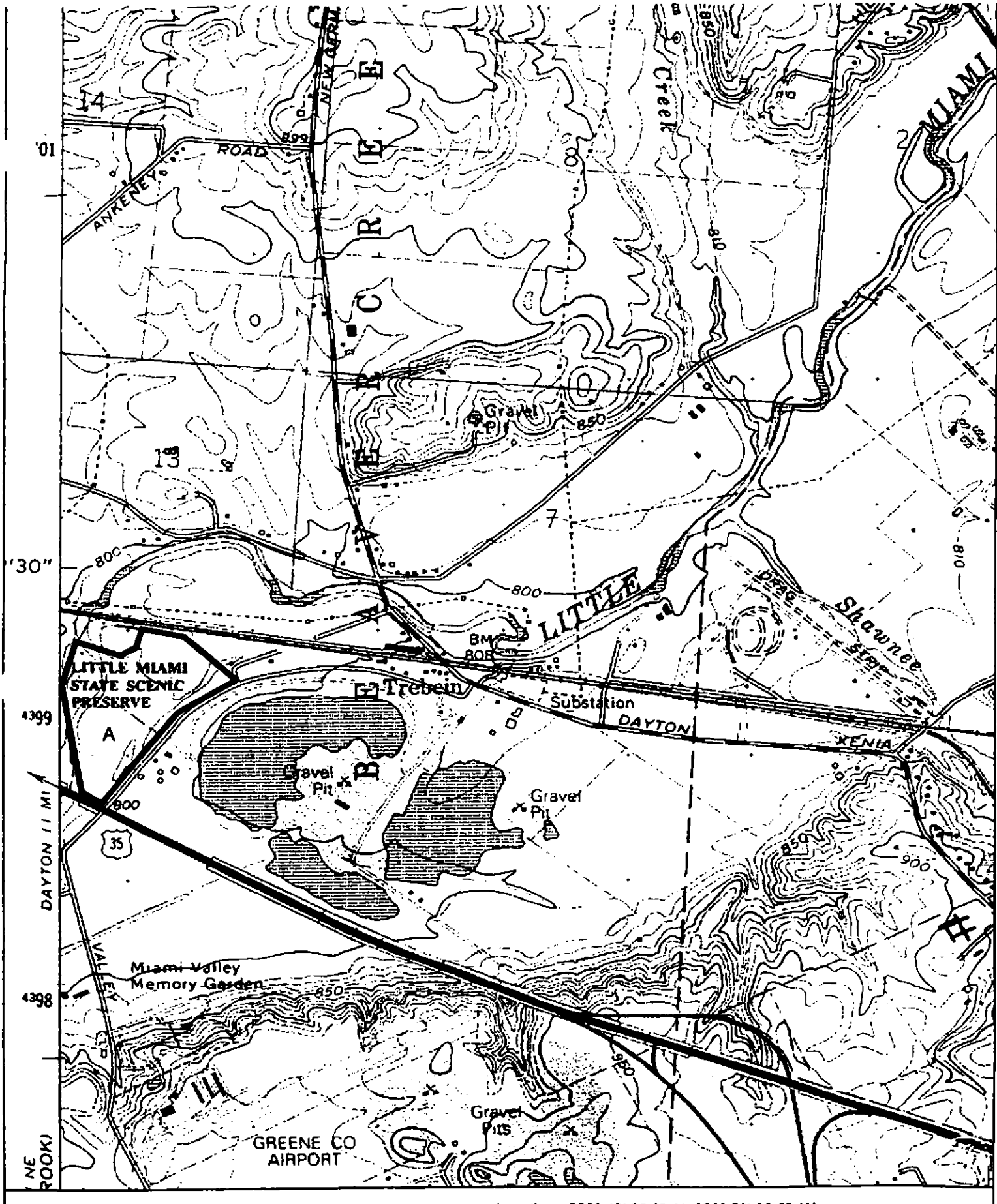

Name: XENIA
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 42' 26.6" N 083° 59' 00.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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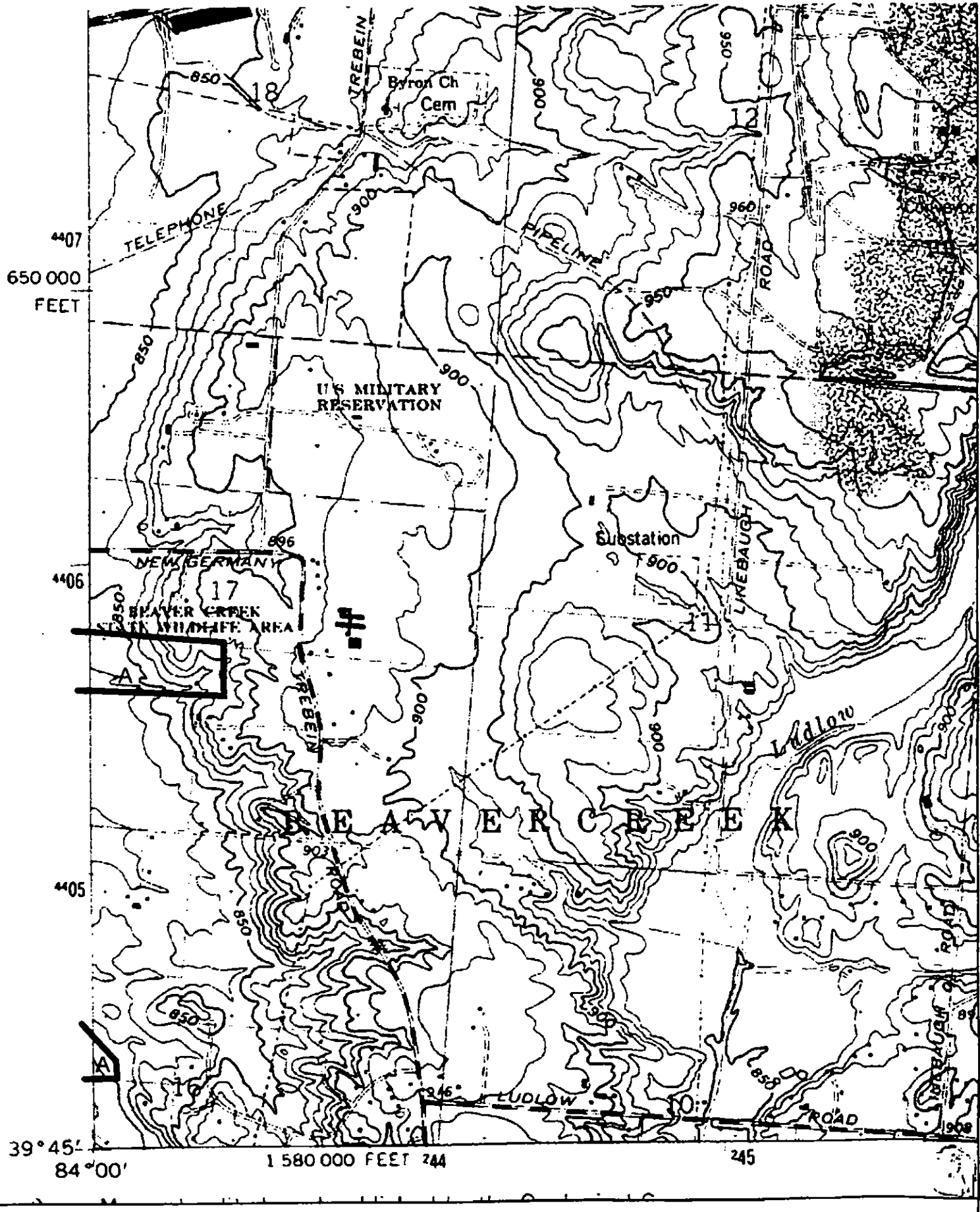

Name: YELLOW SPRINGS
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 45' 56.9" N 083° 59' 07.4" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF NATURAL AREAS AND PRESERVES

September 13, 1999

Foster to Bath Electric Transmission Line Project

MASON QUAD
Little Miami State and National Scenic River
1. *Desmodium pauciflorum* - Few-flowered Tick-trefoil, P
2. *Hiodon tergisus* - Mooneye, S

SOUTH LEBANON QUAD
Little Miami State and National Scenic River
A. Halls Creek Woods Scenic River Preserve - ODNR, Division of Natural Areas and Preserves (boundaries in blue)
1. Floodplain Forest Plant Community
2. *Opuntia humifusa* - Prickly Pear, P

LEBANON QUAD
No data

OREGONIA QUAD
Little Miami State and National Scenic River
A. Mathers Mill Scenic River Access - ODNR, Division of Natural Areas and Preserves
B. Caesar Creek Gorge State Nature Preserve - ODNR, Division of Natural Areas and Preserves
1. Erratic (geologic feature)
2. Oak-Maple Forest Plant Community
3. *Salix caroliniana* - Carolina Willow, T
4. Fossil Deposit (geologic feature)
   Stream Gorge (geologic feature)
5. *Salix caroliniana* - Carolina Willow, T

WAYNESVILLE QUAD
Little Miami State and National Scenic River
1. Green Ash Ohio Champion Big Tree
A. Roxanna Road Scenic River Access - ODNR, Division of Natural Areas and Preserves

BELLBROOK QUAD
Little Miami State and National Scenic River

XENIA QUAD
Little Miami State and National Scenic River
A. Glenn Thompson Scenic River Access - ODNR, Division of Natural Areas and Preserves

YELLOW SPRINGS QUAD
A. Beaver Valley Wildlife Area - ODNR, Division of Wildlife (2 parcels)

STATUS CODES:

T = threatened
P = potentially threatened
S = special interest

Project 173.05

9 September 1999

John Marshall
Ohio Department of Natural Resources
Division of Wildlife
1840 Belcher Dr.
Columbus, OH 43224

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Marshall:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

I am requesting comment from your agency regarding potential impacts to wildlife resources known to occur in the vicinity of the project area. Please include as well, information regarding the presence or absence of areas of ecological concern including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries that may be located within the areas likely to be disturbed by the project.

We have also contacted the U.S. Fish and Wildlife Service and ODNR's Division of Natural Areas and Preserves.

Attached are project area topographic maps. If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

Project 173.05

30 September 1999

Mr. Mike Madell
National Park Service
700 Rayovac Dr.
Suite 100
Madison WI 53711

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Madell:

The Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet. DP&L will submit a Letter of Notification to the Ohio Power Siting Board for the proposed project.

I am requesting comment from your agency on proposed project-related construction activities. The project area is situated within the drainage basin of the Little Miami River, a State and National Scenic River, which is crossed six times by the project corridor. I am including topographic maps of the transmission right-of-way, as well as alignment drawings for your review.

I have also included a general description of construction procedures used by DP&L on similar projects. Such construction methods will also be implemented on this project. Steel towers will be constructed to a minimum depth of 15 feet in rock, or to as deep as 50 feet in some areas. The auger hole diameter will measure between 6 and 10 feet, with an average diameter of roughly 7 feet.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

11733 CHESTERDALE ROAD • CINCINNATI, OH 45246 • PHONE (513) 326-1500 • FAX (513) 326-1550 • www.bheenv.com
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United States Department of the Interior
NATIONAL PARK SERVICE
MIDWEST REGION
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

IN REPLY REFER TO:

Stationed At:
700 Rayovac Drive, Suite 100
Madison, Wisconsin 53711
(608) 264-5257

RECEIVED
NOV 8 1999
BHE, INC.

L7619(MWR-PC/C)

November 4, 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, Ohio 45246

Dear Ms. Hoeting:

This is in response to your letter of September 30, 1999 requesting National Park Service (NPS) comment on the proposed Foster to Bath Electric Transmission Line Project. We understand Dayton Power and Light Company (DP&L) is proposing to replace existing towers with new steel towers, and to construct a new 345 kV transmission line between their Bath substation in Greene County, Ohio and their Foster substation in Warren County, Ohio. About 43 miles of the 45-mile long project would be within existing right-of-way.

Your letter correctly notes that the route of the proposed project crosses the Little Miami River at six locations. The Little Miami is a state-administered component of the National Wild and Scenic River system.

You also should be aware the route crosses the North County National Scenic Trail (NCNST) at three locations. This trail winds its way through seven northern tier states, beginning in upstate New York and ending in North Dakota. When complete, the length of the trail is likely to exceed 4,000 miles. Using the topographic drawings provided by your office, the project would cross the NCNST near reference points STM020, STM036, and STM050.

One concern related to the project is preservation of the visual quality of the river corridor. We are encouraged that DP&L is proposing to replace existing towers, as opposed to erecting additional towers in the valley. It is not clear from the information you submitted how much, if any, additional clearing will be required within the existing right-of-way. If additional clearing is required, we encourage DP&L to retain the maximum vegetative screening possible in riparian areas immediately adjacent to the Little Miami. If plantings are required to replace vegetation disturbed during construction, only species native to the area should be used. Appropriate erosion control measures also should be implemented to prevent runoff to the river. Construction equipment should be kept well away from the river when not in use.

Information you provided suggests that no work would be required within the river itself. Please keep in mind, however, that if the project requires movement of earth or construction below the ordinary high-water mark of the

river, it would be considered a water-resources project subject to requirements of Section 7(a) of the Wild and Scenic Rivers Act (Public Law 90-542). Section 7(a) states, "No department or agency of the United States shall assist by loan, grant, license or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration." If work in the river is necessary, a Section 7 evaluation should be prepared and submitted to the Ohio Department of Natural Resources for review and to the NPS for a Section 7 determination.

Protection of the scenic qualities of the river valley also is important for preserving the experiences of persons using the NCNST. Because the trail intersects the project corridor at locations near the Little Miami, the recommendations for maintenance and restoration of vegetation cited above should help avoid degradation of trail environs. Provisions also should be made to allow hikers safe access through the area during times when construction temporarily blocks the trail. Please contact Mr. Bill Menke, Trail Manager, at 608-264-5610 if you have additional specific questions related to the NCNST.

These comments have been provided as early technical assistance, and do not necessarily indicate the NPS' or the Department of the Interior's response to future environmental documents prepared in association with the project. Please contact me at 608-264-5257 if I can be of further assistance.

Sincerely,

R. Michael Madell
Regional Environmental Coordinator

cc: Mr. Don Rostofer
Ohio Department of Natural Resources
4675 North Diamond Mill Road
Troutwood, Ohio 45426

Superintendent, Midwest Trails Office
Manager, North Country NST

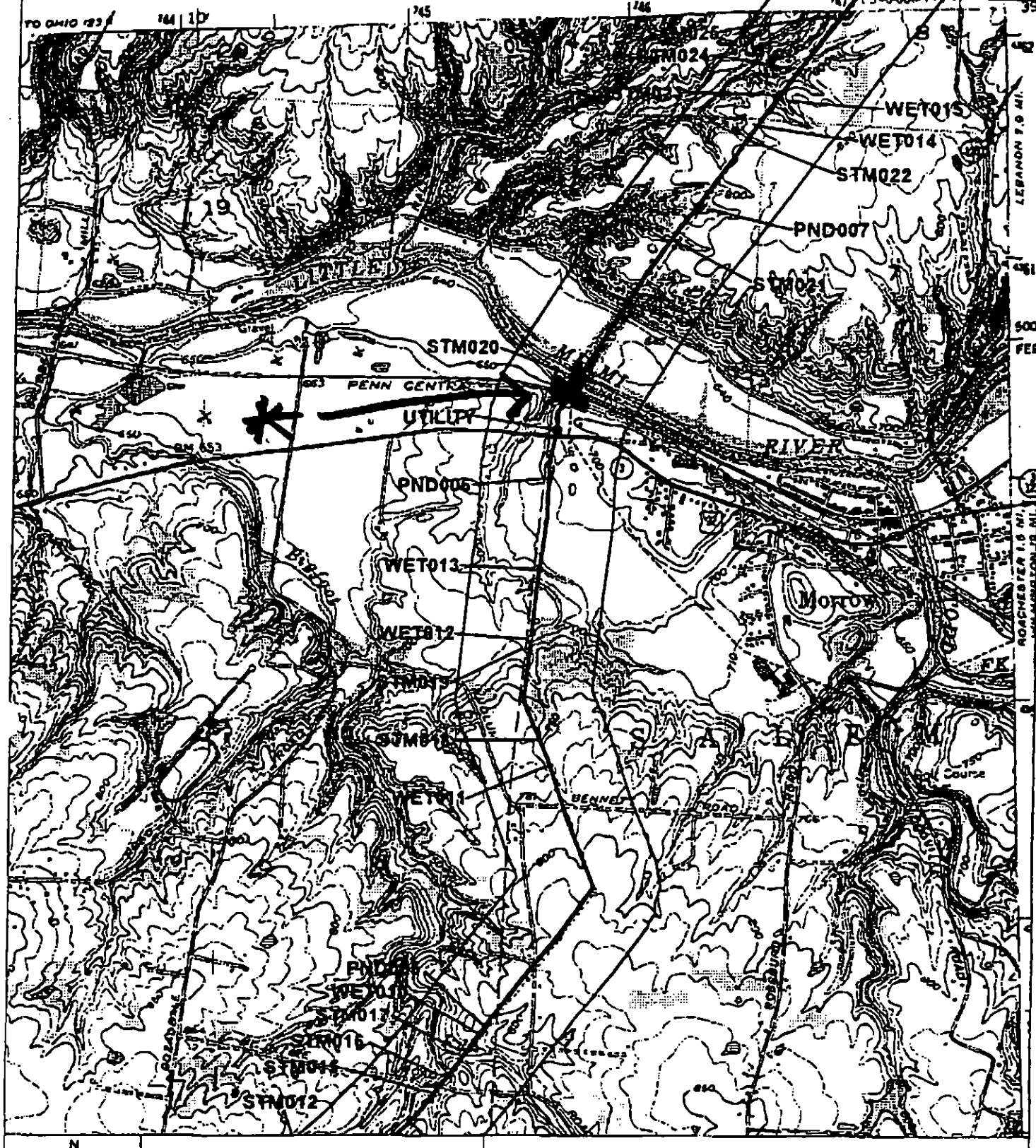
Midwest Region
Madison Field Office
700 Rayovac Drive, Suite 100
Madison, Wisconsin 53711
Phone 608-264-5257
Fax 608-264-5615

Fax

To:	Diane Hoeting, BHE Environmental	**From:**	Mike Madell
Fax:		**Pages:**	4, including cover
Phone:		**Date:**	11/08/99
Re:	Foster to Bath Project, Xings of NCNST	**CC:**	[Click here and type name]

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

• **Comments:** The following sheets are photocopies of maps you provided to us. The approximate locations where the proposed line crosses the North Country National Scenic Trail are noted by an asterisk and an arrow. If the fax is not legible, please let me know & I will mail a hard copy.



N
W E
S

Feet

1000 0 1000 2000

Proposed 345 kV transmission route and environmental features identified during the field survey.

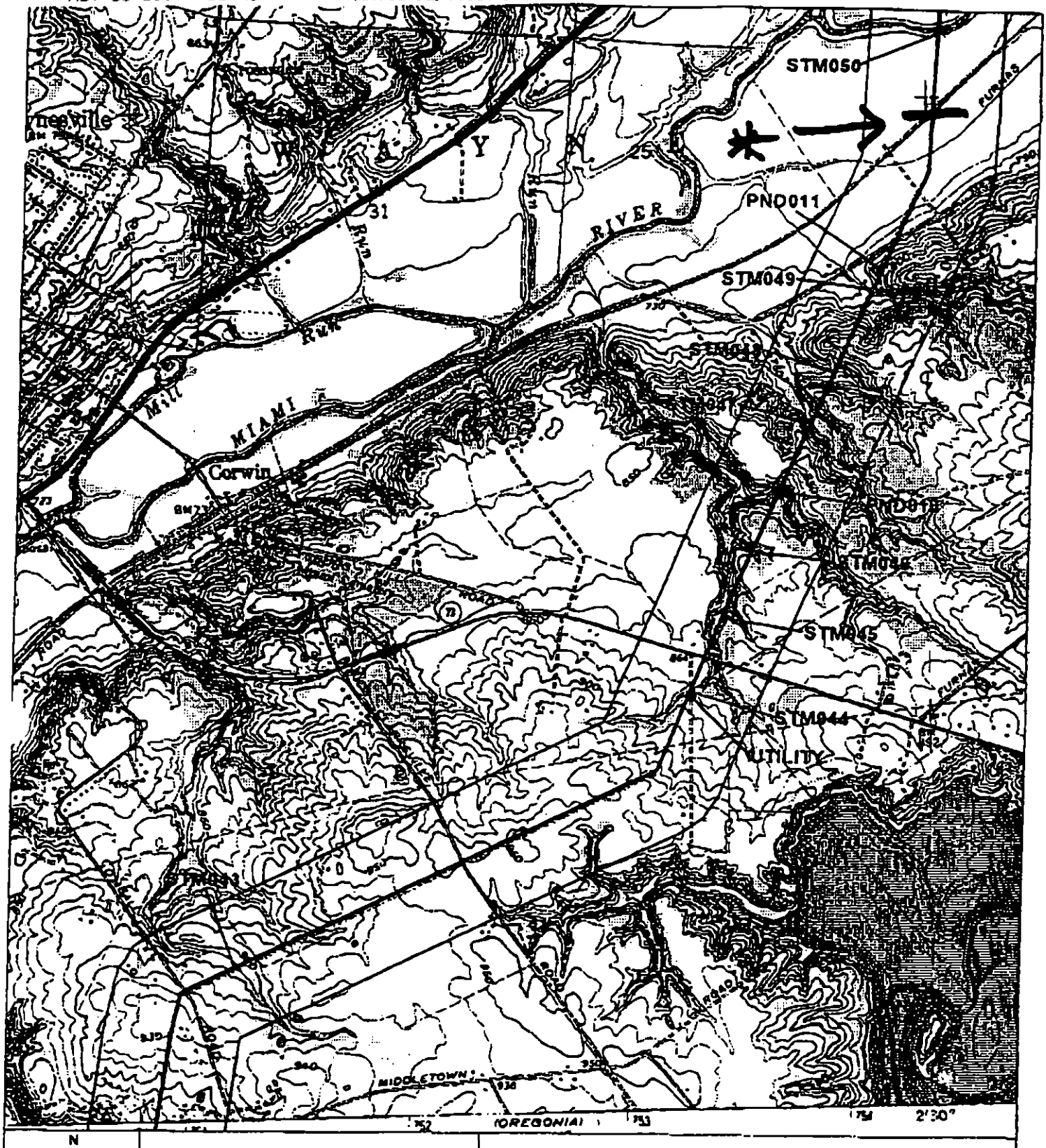
Base Map: USGS 7.5 Minute Topographic Map - South Lebanon, OH

3D/INTERNATIONAL
ENVIRONMENTAL GROUP

Proposed 345 kV transmission route and environmental features identified during the field survey.

Base Map: USGS 7.5 Minute Topographic Map - Oregonia, OH

3D/INTERNATIONAL
ENVIRONMENTAL GROUP



N
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Feet
1000 0 1000 2000

Proposed 345 kV transmission route and environmental features identified during the field survey.

Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH

3D/INTERNATIONAL
ENVIRONMENTAL GROUP

Project 173.05

27 September 1999

Mr. Don Rostofer
Scenic Rivers Coordinator
Ohio Department of Natural Resources
Division of Natural Areas and Preserves
4675 North Diamond Mill Road
Trotwood, OH 45426

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Rostofer:

The Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet. DP&L will submit a Letter of Notification to the Ohio Power Siting Board for the proposed project.

I am requesting comment from your agency on proposed project-related construction activities. The project area is situated within the drainage basin of the Little Miami River, a State and National Scenic River, which is crossed six times by the project corridor. I am including topographic maps of the transmission right-of-way, as well as alignment drawings for your review.

I have also included a general description of construction procedures used by DP&L on similar projects. Such construction methods will also be implemented on this project. Steel towers will be constructed to a minimum depth of 15 feet in rock, or to as deep as 50 feet in some areas. The auger hole diameter will measure between 6 and 10 feet, with an average diameter of roughly 7 feet.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting

11733 CHESTERDALE ROAD ♦ CINCINNATI, OH 45246 ♦ PHONE (513) 326-1500 ♦ FAX (513) 326-1550 ♦ www.bheenv.com
Branch Offices: Columbus, OH ♦ Cleveland, OH ♦ Knoxville, TN ♦ Houston, TX ♦ Rolla, MO ♦ Carlisle, PA

Bob Taft • *Governor*

Samuel W. Speck • *Directo*

Division of Natural Areas and Preserves

Stuart Lewis • Acting Chief

October 26, 1999

Ms. Diane Hoeting
Environmental Scientist
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246

Dear Ms. Hoeting:

I have completed a review of documentation dated 27 September 1999 and 19 October 1999 concerning the proposed replacement of existing DP&L transmission towers with new steel towers from Foster Station to the Bath Station located adjacent to the Little Miami State and National Scenic River in Greene and Warren counties.

Because this project has the potential to negatively impact the Little Miami River and tributary streams, State of Ohio scenic conservation easement properties and nature preserves, I would like to provide the following comments on behalf of the Ohio Department of Natural Resources, Division of Natural Areas & Preserves, Scenic Rivers Program.

1. In-stream work should not be conducted on this project. Drainage ways (storm sewer inlets, swales, ditches or tributary streams) should not be crossed. All areas within 1000-feet of the Little Miami River should be returned to pre-construction elevations and contours using the natural substrates. All riverbanks within the project area shall be left undisturbed to the maximum extent possible. Areas where riverbanks are disturbed shall be returned to natural contours and elevations and revegetated with native tree species.

2. No riparian vegetation should be removed within one-hundred twenty (120) feet of the Little Miami River except within pre-determined easement areas of the project. No trees over four inches in diameter at breast height should be removed until the site has been reviewed and a determination has been made for the removal of trees. Scenic Rivers staff recommend that a Riparian Corridor Reforestation Management Plan (FCRMP) be developed and implemented to increase the riparian buffer along the Little Miami River. Planting of low growing, native trees or shrub species and cutting and hand treating invasive taller tree species with Accord herbicide would be recommended. In addition, we would recommend that any herbicide be applied manually to stumps with a paint brush. Don Rostofer, SW Scenic Rivers Coordinator, is available to assist with the review and development of the FCRMP.

3. A sediment and erosion control management plan should be developed for the site and implemented before earthwork commences. Particular attention should be given to all drainage ways (storm sewer inlets, swales, ditches or tributary streams) that could convey sediment laden water directly to the Little Miami River. Properly installed (framed and entrenched) sediment fencing should be utilized and maintained until final site stabilization is achieved. All denuded areas should be seeded and mulched immediately upon completion of earthwork or within seven days if the area is to remain idle for more than forty-five days.

4. If dewatering is necessary to facilitate work, all wastewater should be pumped onto vegetated areas away from the Little Miami River. No wastewater of any kind should be discharged directly to the Little Miami River or any tributary water sources. No storage of any idle equipment , fuels, lubricants, or other potentially toxic or hazardous materials should be permitted within the one-hundred year flood plain of the Little Miami River.

5. **Work limits shall be physically defined with orange snow fencing to establish the outer boundaries for which earthwork and denuding may commence on the project on or near State of Ohio property.**

6. Don Rostofer, the SW Ohio Scenic Rivers Coordinator, should be invited to all pre-planning meetings to facilitate the development of final plans. Mr. Rostofer shall be invited to all pre-construction meetings and notified prior to the commencement of the project. Please give Mr. Rostofer sufficient advance notice to allow for conflicts in his schedule. All permits and conditions stated herein shall be incorporated into final plan set and available to all construction personnel on site throughout the duration of the project. Please forward a final set of plans to the SW Ohio Scenic Rivers Coordinator at the following address, 4675 North Diamond Mill Road, Trotwood, OH 45426-4254.

3. A sediment and erosion control management plan should be developed for the site and implemented before earthwork commences. Particular attention should be given to all drainage ways (storm sewer inlets, swales, ditches or tributary streams) that could convey sediment laden water directly to the Little Miami River. Properly installed (framed and entrenched) sediment fencing should be utilized and maintained until final site stabilization is achieved. All denuded areas should be seeded and mulched immediately upon completion of earthwork or within seven days if the area is to remain idle for more than forty-five days.

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If you have any further questions or concerns with the above comments please contact me at 937/854-0350.

Sincerely,

Donald E. Rostofer
SW Ohio Scenic Rivers Coordinator
Division of Natural Areas & Preserves

DER

CC: Michael Madell, National Park Service
Greene County Park District
Tim Synder, Preserves Manager, DNAP
Frank Skalski, Preserves Manager, DNAP
Stuart Lewis, Acting Chief, DNAP

Project 173.05

9 September 1999

Rick Queen
Ohio Environmental Protection Agency
Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Queen:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

Please comment on any potential environmental concerns associated with the construction and operation of the proposed project. DP&L welcomes your agency's comments in order to properly address any concerns that you may have. Please indicate if this project has the potential to impact sensitive resources or other issues of concerns. Where possible, please identify specific areas where concerns are present and include any required or suggested measures to avoid or minimize impacts.

We have also contacted the ODNR's Division of Natural Areas and Preserves and Division of Wildlife for comment.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

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Branch Offices: Columbus, OH • Cleveland, OH • Knoxville, TN • Houston, TX • Rolla, MO • Carlisle, PA

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 South Front St.
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
Lazarus Government Center
P. O. Box 1049
Columbus, OH 43216-1049

October 3, 1999

Diane Hoeting

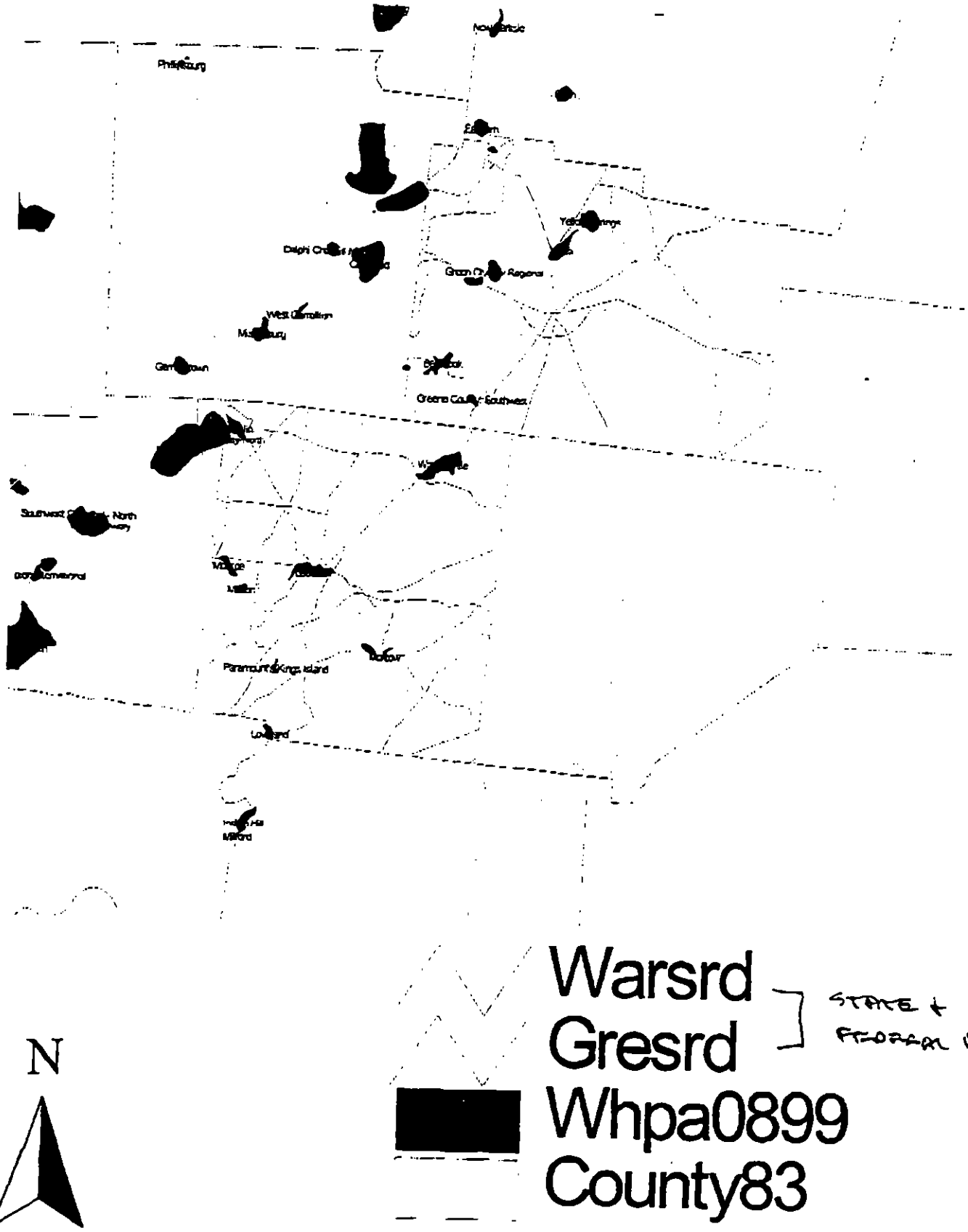
I only received two pages of your six page fax, unfortunately, I did not realize this until I started responding. I have provided information for both Greene and Warren counties so I believe I have covered the proper areas. The map illustrates the area of the WHP areas in both counties along with state and federal roads. If you need more detailed information I can copy the submitted WHP area maps and send you copies.

The county maps the locations of public water supplies (PWS) in Greene and Warren counties. Maps are provide for community surface water systems, community ground water systems, non-community/non-transient water systems, and non-community transient water systems. The locations of these PWS are approximate- the agency is in the process of locating the PWS using GPS. We have little to no information about private wells. The Ohio Department of Health and local health departments has authority over private wells and I refer you to them for information.

If you have additional questions, I would be glad to try to answer them.

Chris Kenah, Geologist.

WHP Areas Around Greene & Warren CO.



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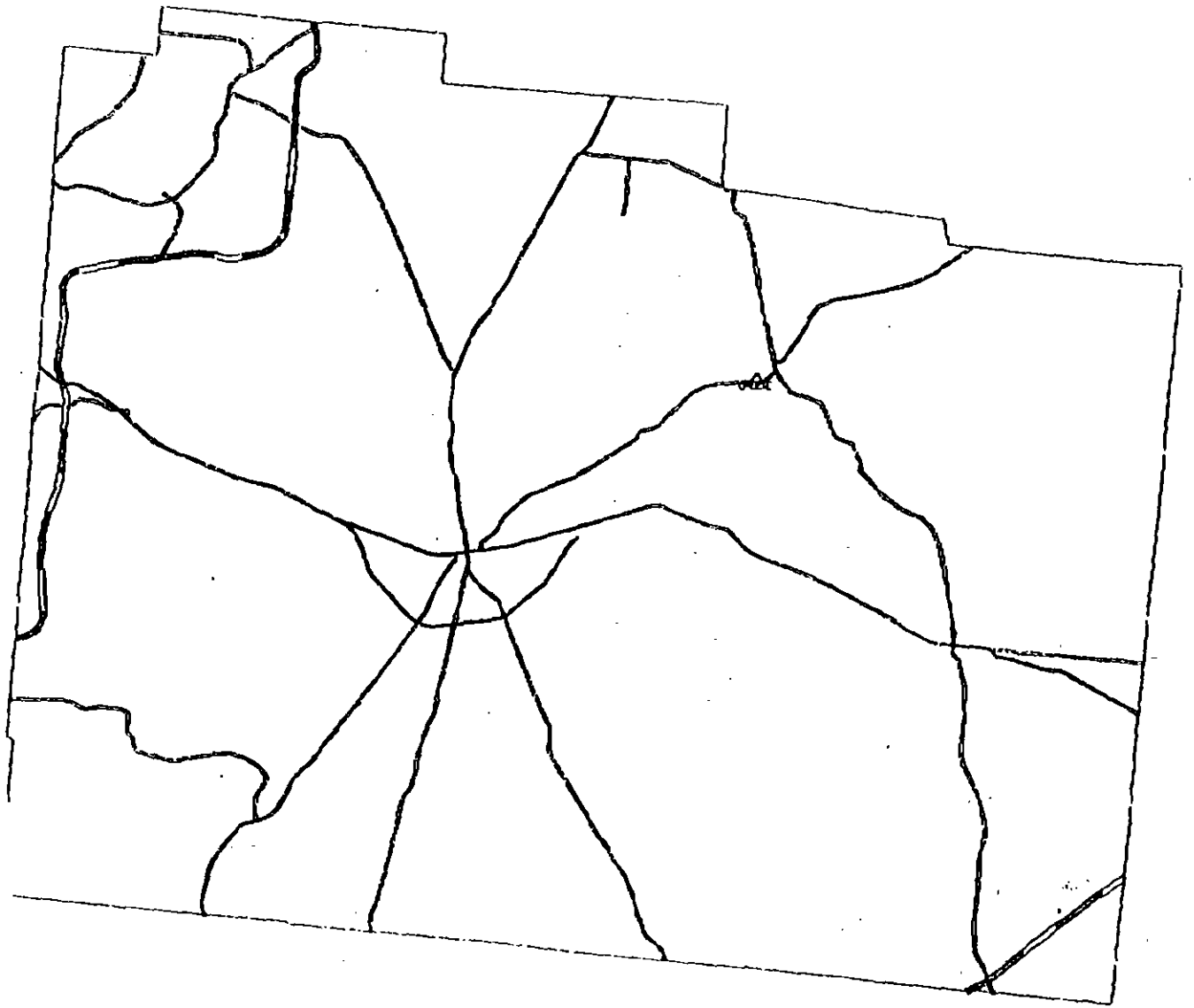
Greene County

Community Water Supplies Using Surface Water



Ohio EPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
Central Office
1800 Watermark Drive
P.O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" = 3.6 Miles

Page SW-80

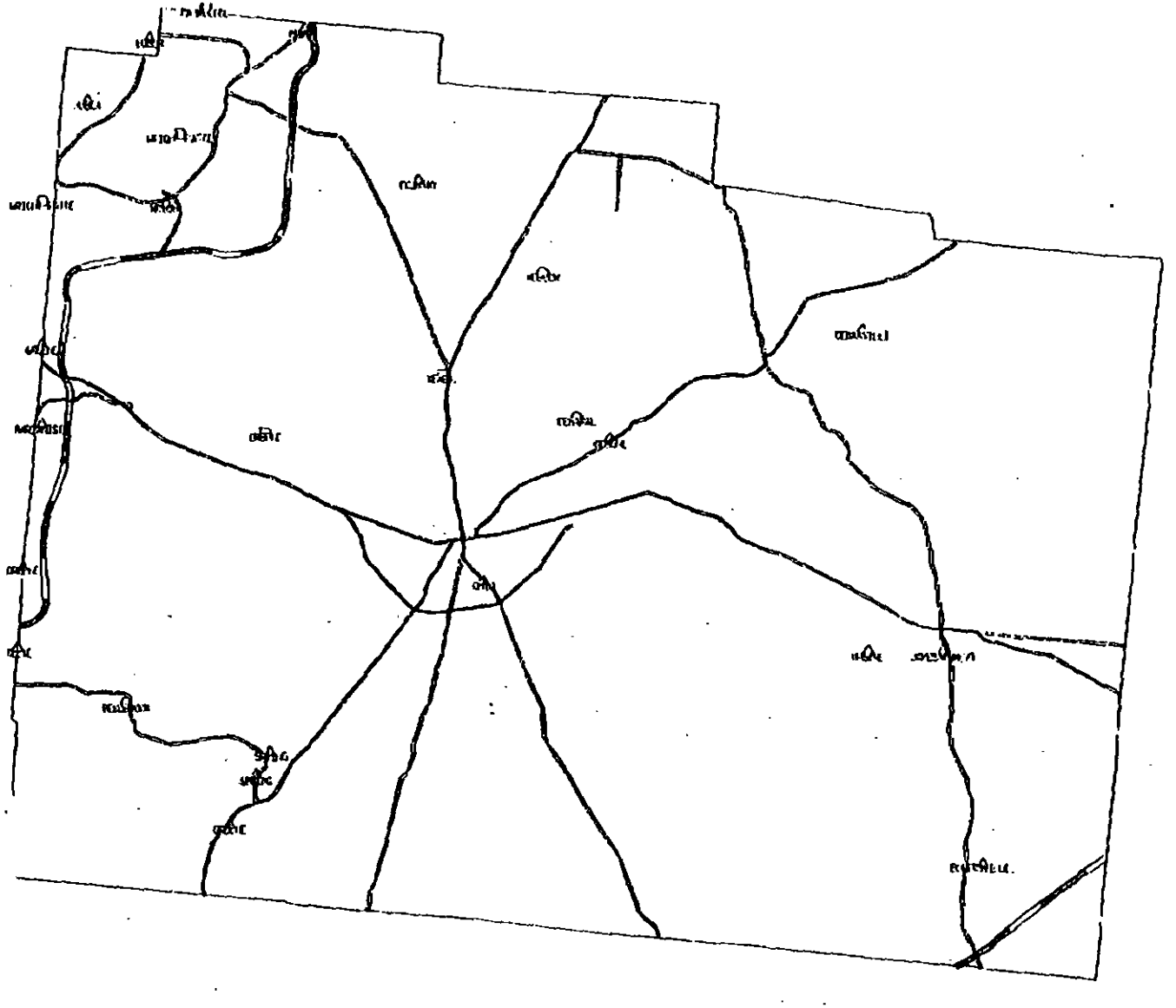
Public Water System Data is from MSIS as of January 1998

Geographic Information System Group
David Williams & Dick McCloch

- △ Population < 500
- ◇ 501 < Population < 3300
- ○ 3301 < Population < 10000
- □ 10001 < Population < 50000
- ☆ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Greene County

Community Water Supplies Using Ground Water



OhioEPA

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P.O Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southeast District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" 3.6 Miles

Page C1.80

Public Water System Data is from PSIS as of January 1998

Geographic Information System Group
David Williams & Dick McElrath

- △ Population < 500
- ◊ 501 < Population < 3300
- ○ 3301 < Population < 10000
- □ 10001 < Population < 50000
- ☆ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

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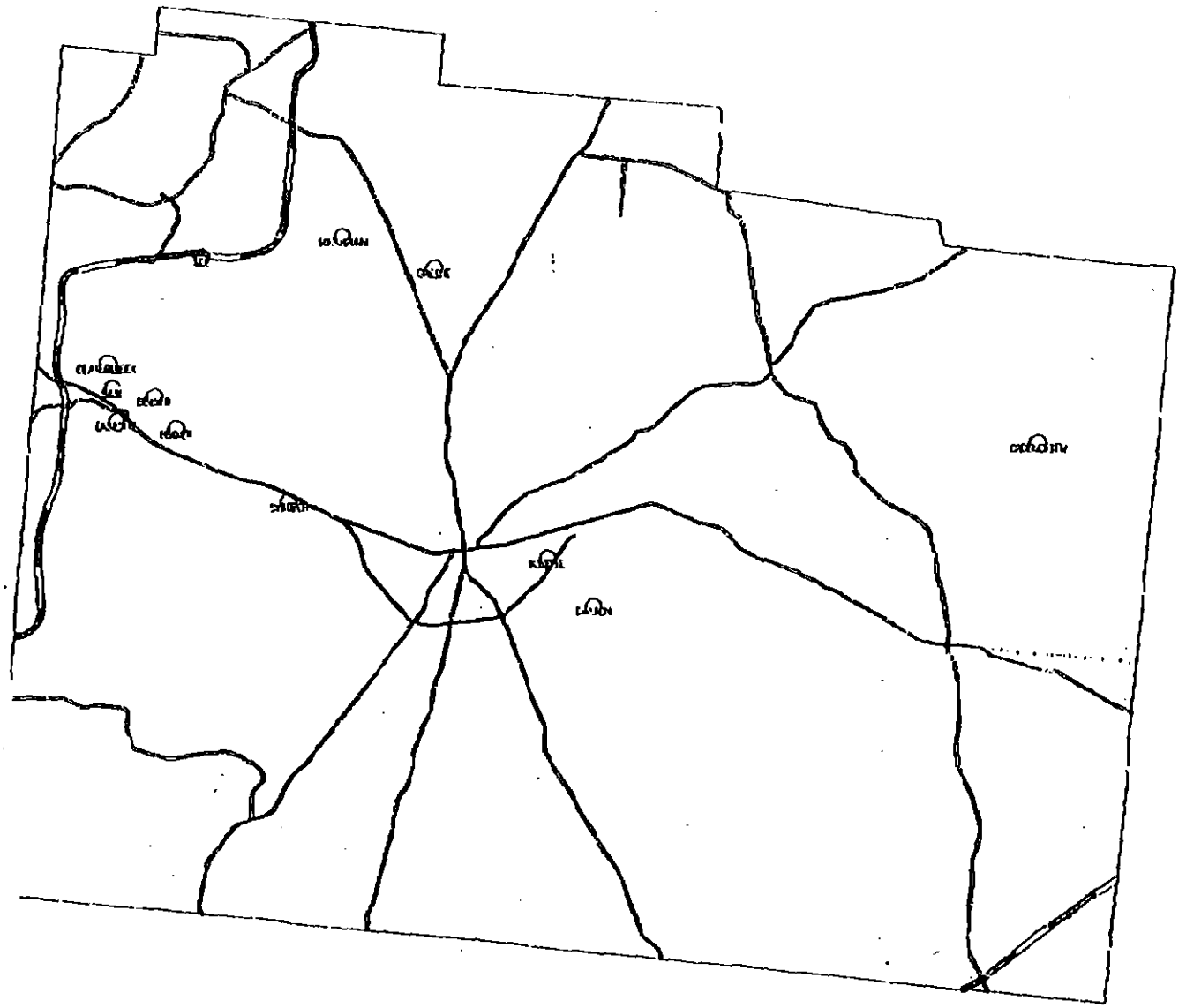
P. 05

Greene County

Non-Community/Non-Transient Water Supplies



Ohio EPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
Central Office
1800 Watermark Drive
P O Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" 3.6 Miles

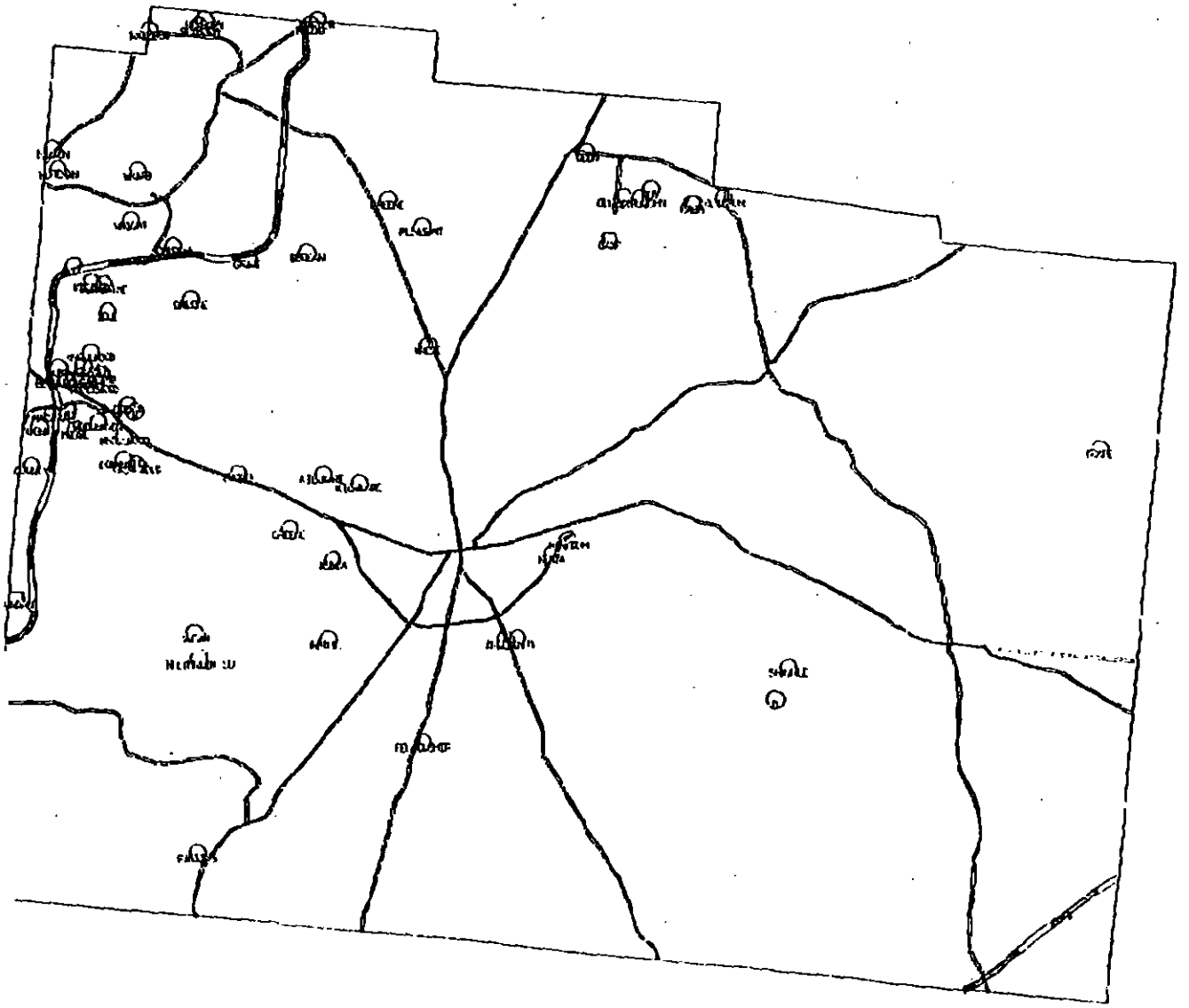
Public Water System Data is from MSIS as of January 1998

Geographic Information System Group
David Wilburn & Dick McClish

- O Ground Water Resources
- □ Surface Water Resources
- Interstate
- Turnpike
- U S Highway
- State Highway

Greene County

on-Community/Transient Water Supplies



Ohio EPA

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P O Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
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Dayton, OH 45402-2911
513-285-6357

Scale = 1" 3.6 Miles

Page
ACT. 80

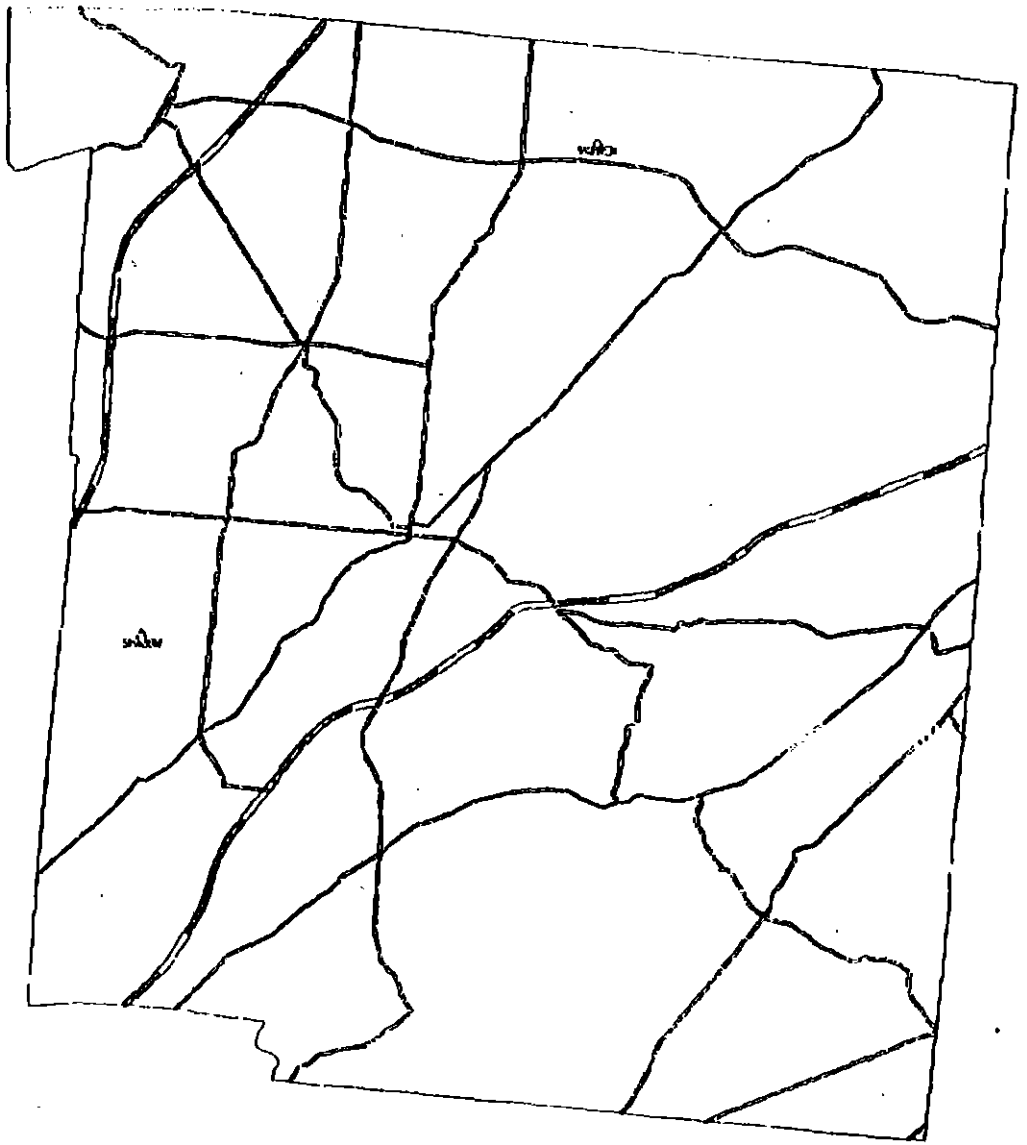
Public Water System Data is
from MSIS as of January 1998

Geographic Information System Group
David Wilson & Dick McClish

- O Ground Water Resources
- □ Surface Water Resources
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Warren County

Community Water Supplies Using Surface Water



Ohio EPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
Central Office
1800 Watermark Drive
P. O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
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Dayton, OH 45402-2911
513-285-6357

Scale = 1" 4 Miles

Page SW 88

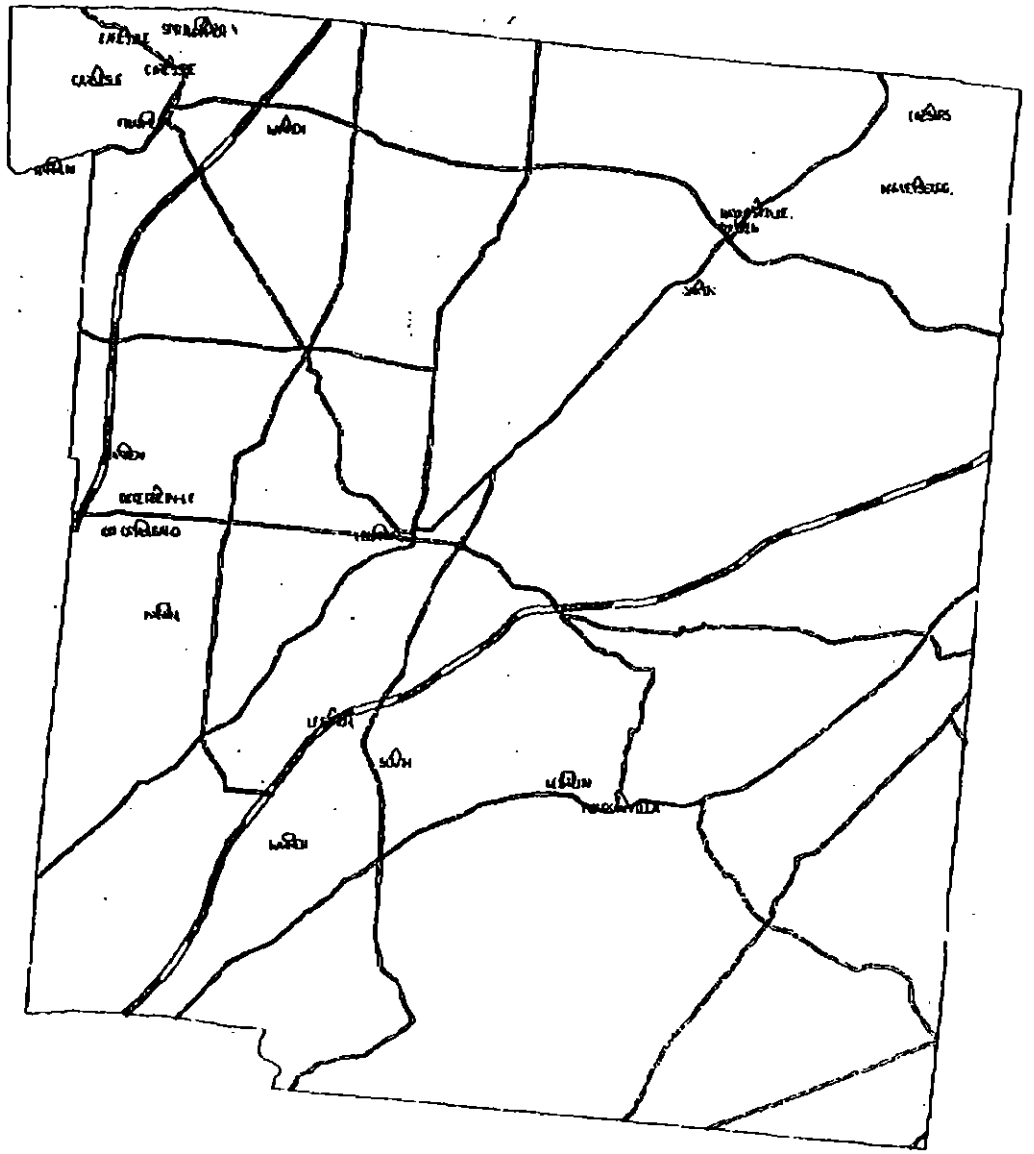
Public Water System Data is from MSIS as of January 1998

Geographic Information System Group
David Hofburn & Dick McLeish

- Δ Population < 500
- ◊ 501 < Population < 3300
- O 3301 < Population < 10000
- □ 10001 < Population < 50000
- ☆ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Warren County

Community Water Supplies Using Ground Water



Ohio EPA

Division of Drinking and Ground Waters

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Central Office
1800 Watermark Drive
P.O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" 4 Miles

Page
GT: 88

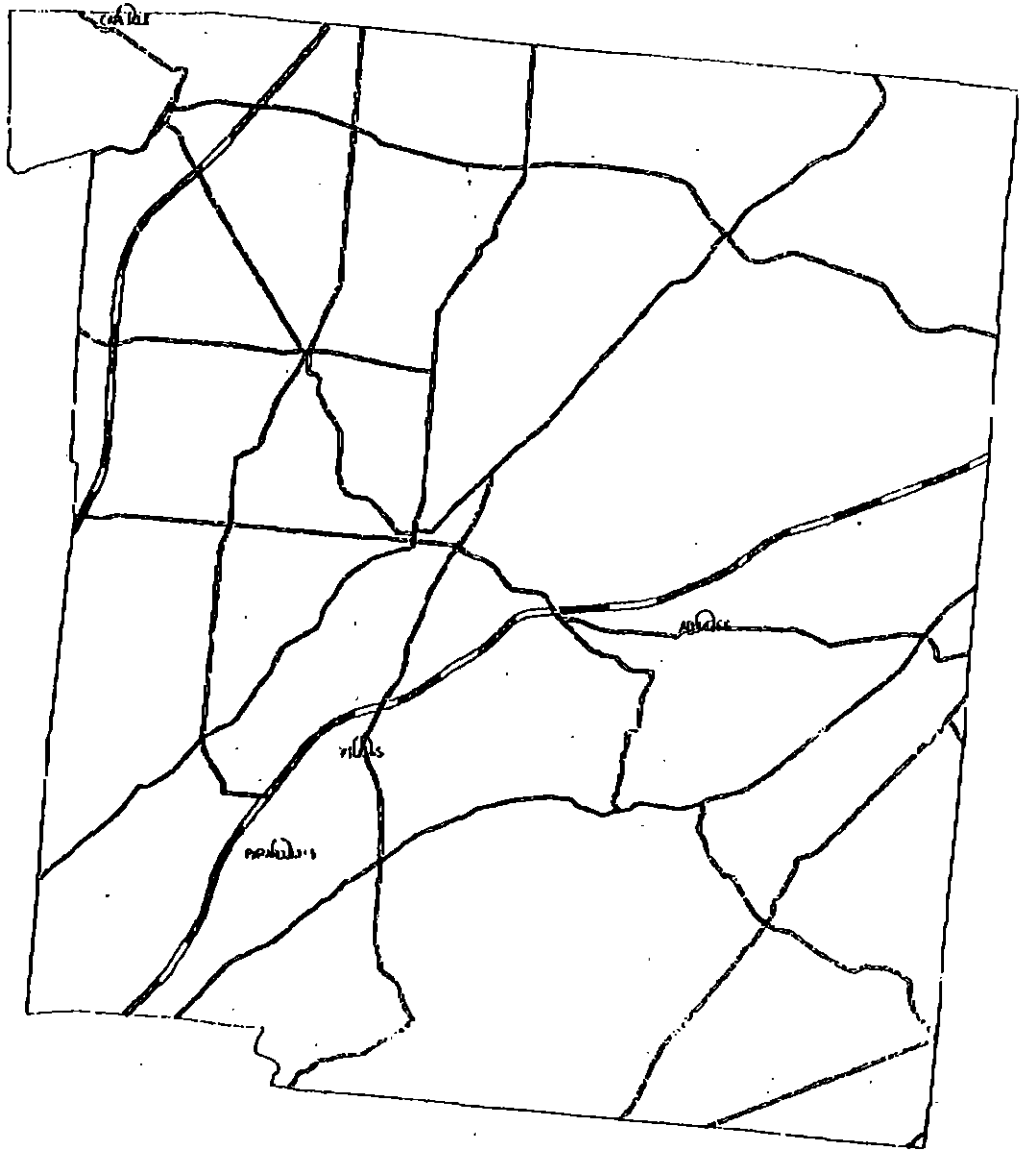
Public Water System Data is
from MSIS as of January 1998

Geographic Information System Group
David Wilburn & Dick McCleish

- Δ Population < 500
- ◊ 501 < Population < 3300
- O 3301 < Population < 10000
- ◻ 10001 < Population < 50000
- ◇ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Warren County

Non-Community/Non-Transient Water Supplies



OhioEPA

division of Drinking and Ground Waters

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614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
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513-285-6357

Scale = 1" 4 Miles

Page
NOT: 88

Public Water System Data as
from MSIS as of January 1998

Geographic Information System Group
David Welborn & Dick McClish

- Ground Water Resources
- Surface Water Resources
- Interstate
- Interstate
- U S. Highway
- State Highway

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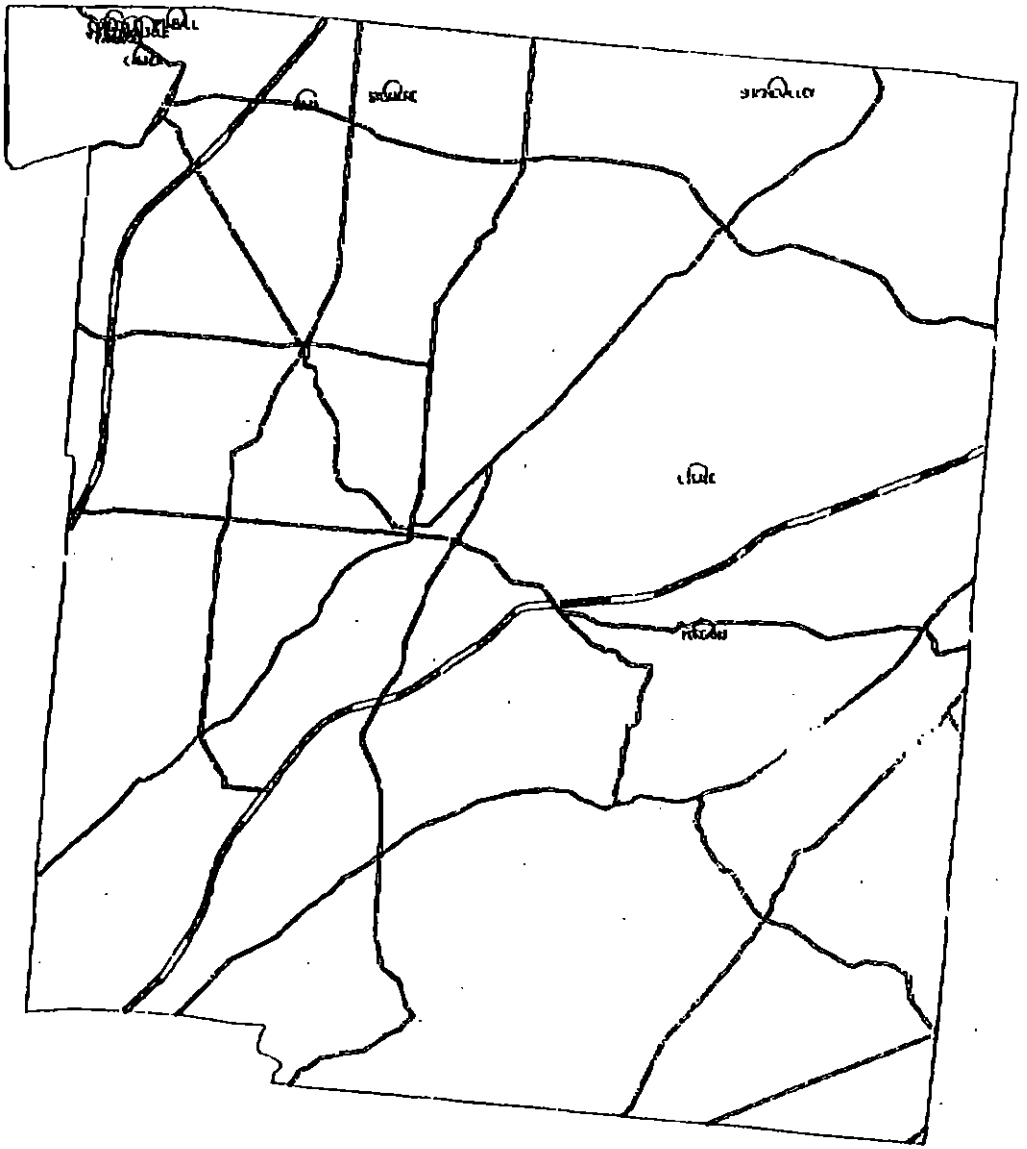
Warren County

Non-Community/Transient Water Supplies



OhioEPA

Division of Drinking and Ground Waters

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P.O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" = 4 Miles

Page NOT 88

Public Water System Data is from VSIS as of January 1998

Geographic Information System Group
David Wallace & Dick McClish

- O Ground Water Resources
- O Surface Water Resources
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Board of Commissioners

Department of Public Works

OFFICE OF SANITARY ENGINEERING

667 Dayton-Xenia Road
Xenia, Ohio 45385-2665

.one: (937) 376-7450
Fax: (937) 376-7465

Enhancing the quality of life and the environment by providing excellent water, wastewater and solid waste services

3 November 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246

Re: Dayton Power & Light Right-of-Way
Greene County, Ohio

Dear Ms. Hoeting:

Pursuant to your fax dated 2 November 1999, please find enclosed a marked up copy of the maps showing Greene County Sanitary Engineering's water mains in blue and the sanitary sewer lines in green.

Should you have any additional questions, please do not hesitate to call either Mr. Mark Muterspaw (Project Manager) or myself at 937-376-7450. Thank you for your cooperation.

Very truly yours,

Jeffrey A. Hissong, P.E.
Director
Office of Sanitary Engineering

lc
Enclosure
c: Tim Denger
Mark Muterspaw

BHE ENVIRONMENTAL, INC.

People Dedicated to Solving Environmental Problems

Facsimile Transmittal

Today's Date: 11-2-99 BHE PN: _____

Total Number of Pages, including cover: 7

TO:		FROM:	
Name:	Jeff Hissong	Name:	Diane Hoeting
Company:		Company:	BHE Environmental, Inc.
Phone:		Phone:	(513) 326-1500
Fax:	937-376-7465	Fax:	(513) 326-1178

Special Instructions:

Jeff - I just spoke with Tim Denzer, who asked me to fax this information to you to address. I'm working on behalf of Dayton Power & Light Co. who is proposing to do construction on their existing right-of-way. I need to determine if Greene County has any sewer line that comes within 150 ft. of their right-of-way. Please review the maps I am sending to you with our ROW on it. Thank you in advance.

PRIVATE AND CONFIDENTIAL: The sender intends to communicate the contents of this transmission only to the person to whom it is addressed. This transmission may contain information that is privileged, confidential or otherwise exempt from disclosure under applicable law. If the recipient of this transmission is not the designated recipient or the employee or agent responsible for delivering this transmission to the designated recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this transmission in error, please notify us immediately by telephone (collect at 513-326-1500) and promptly return the original transmission to us at the above address by mail. We will reimburse you for any costs you may incur.

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Branch Offices: Columbus, OH • Cleveland, OH • Knoxville, TN • Houston, TX • Rolla, MO • Carlisle, PA

[redacted] - DP&L proposed route

[redacted] - GCSE water lines

[redacted] - GCSE sewer lines

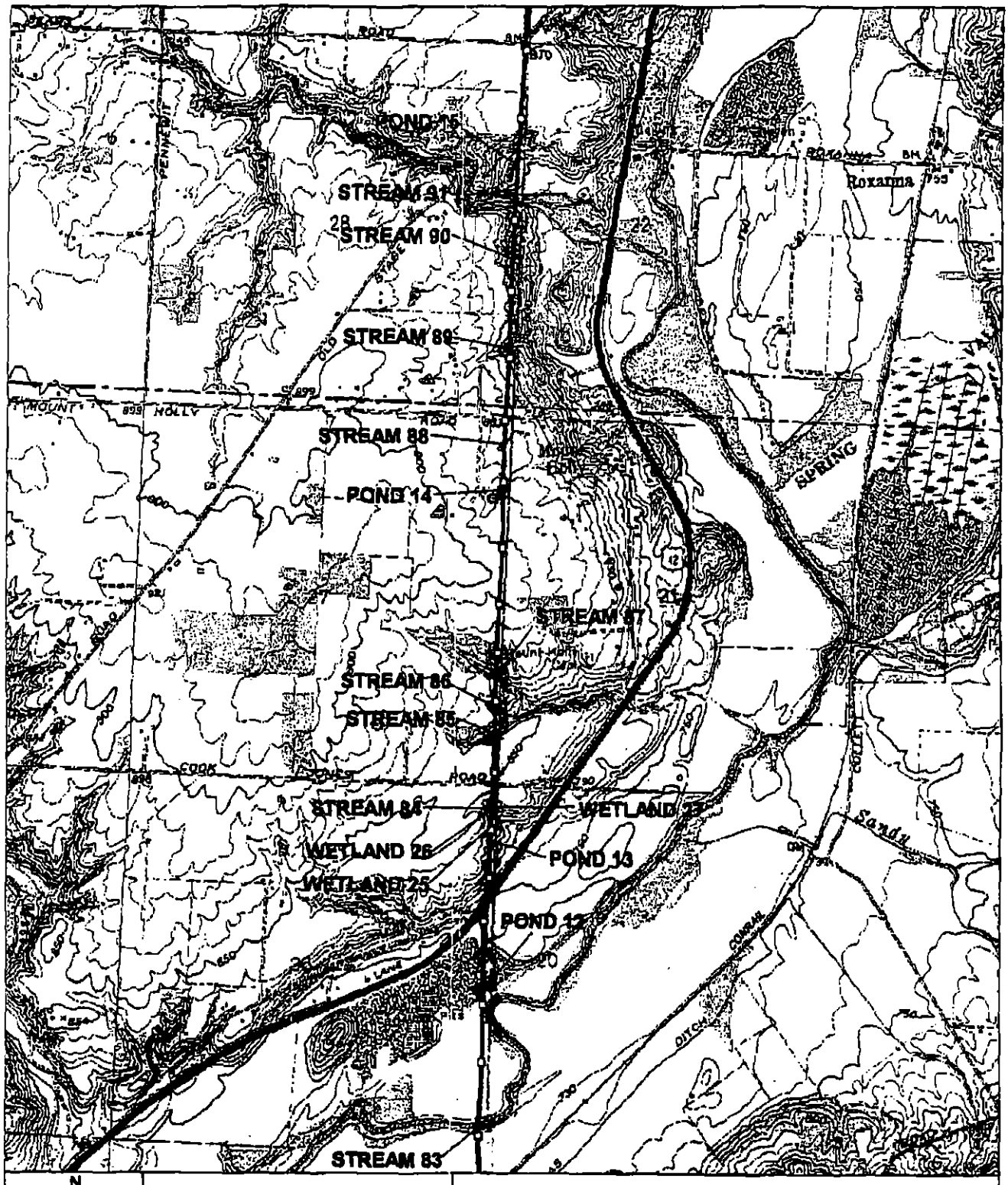

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

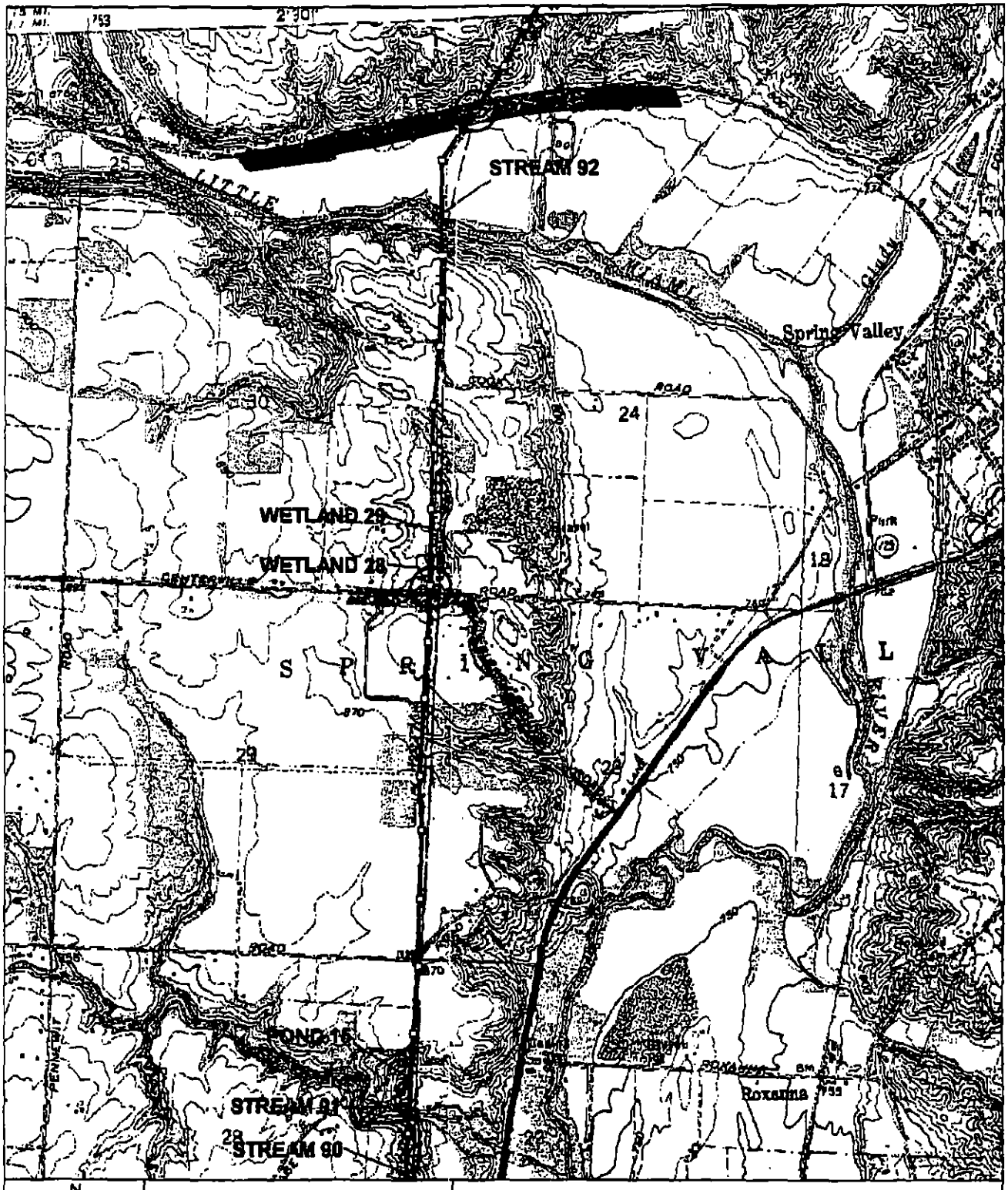

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

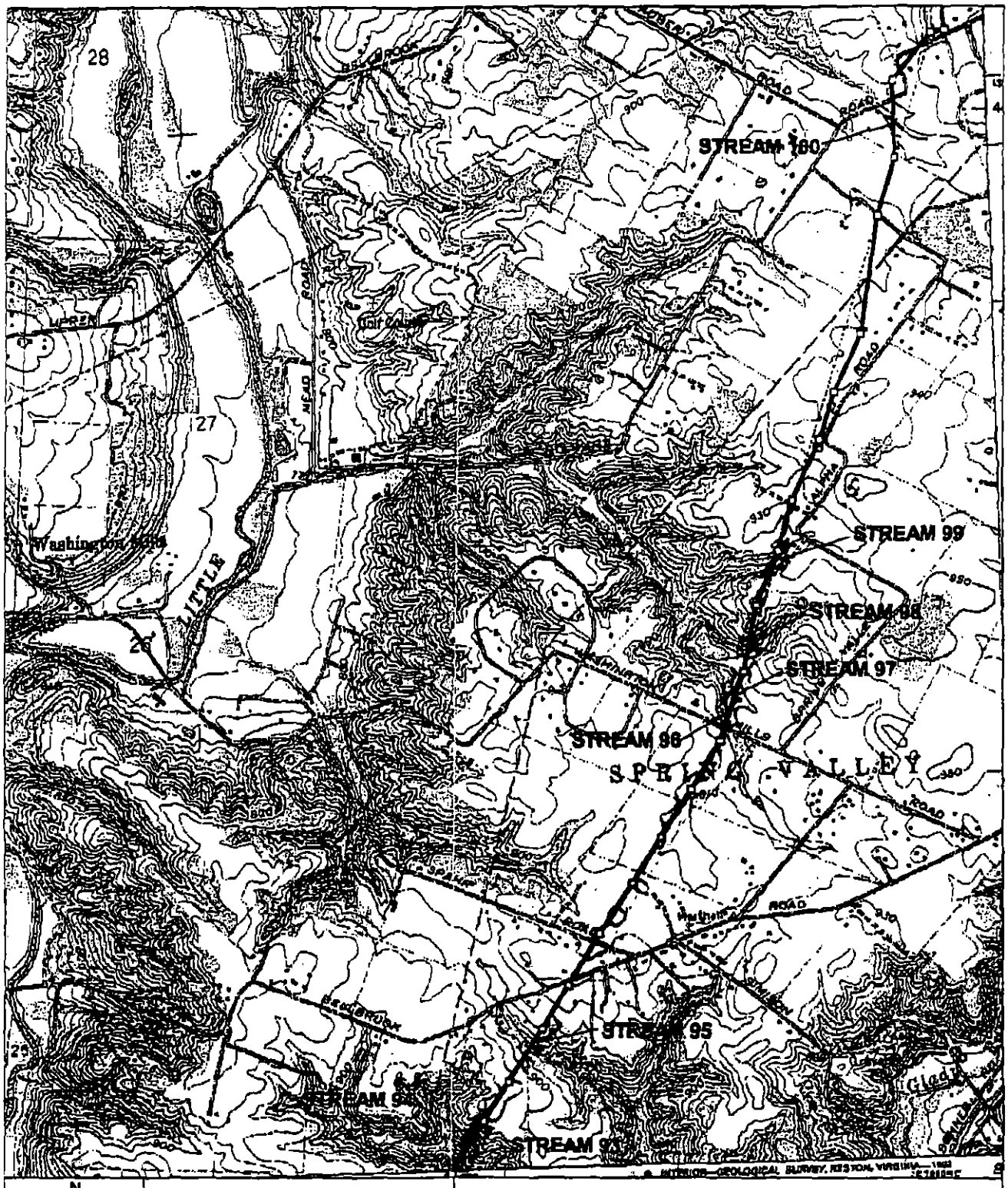

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

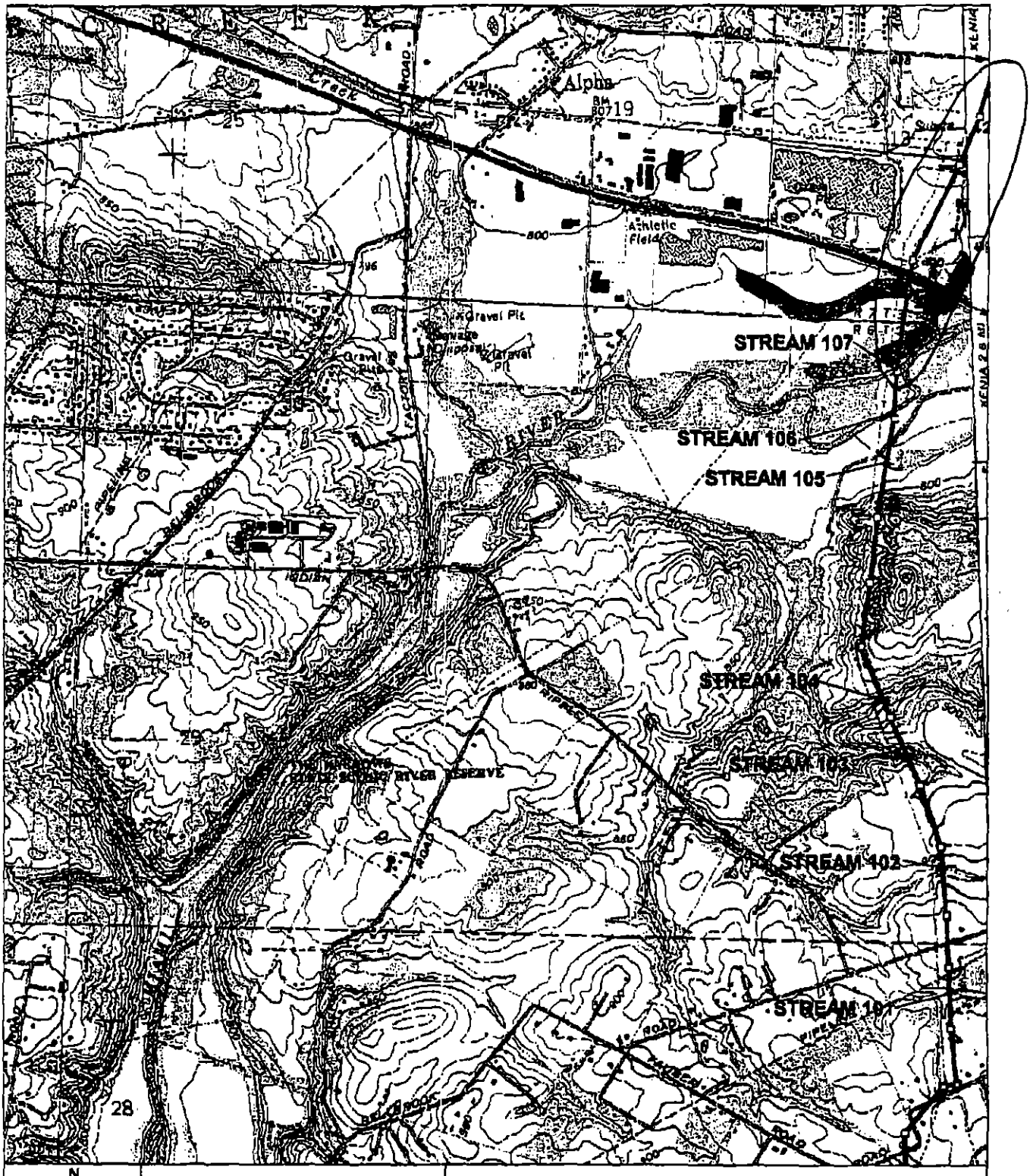

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

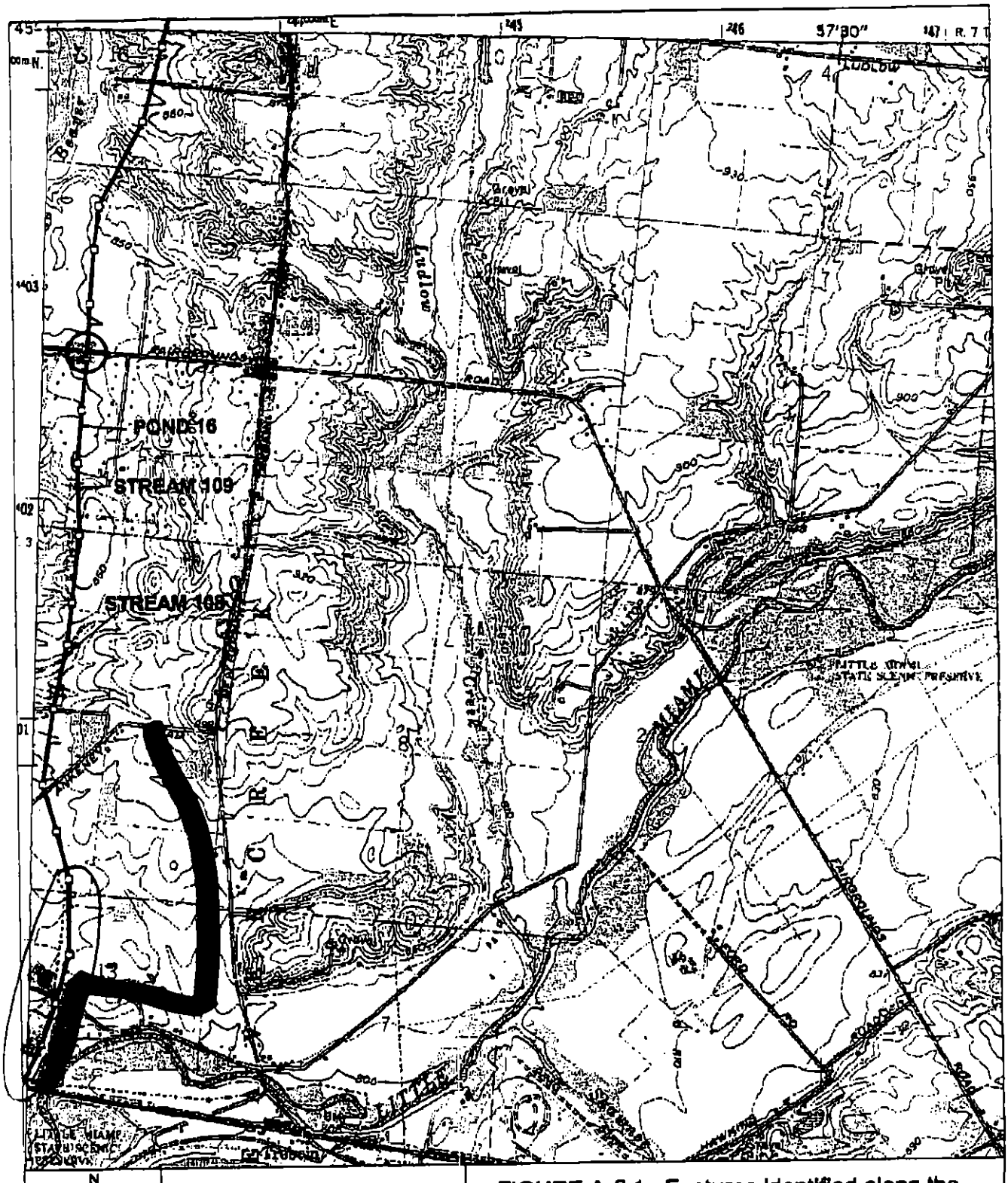

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

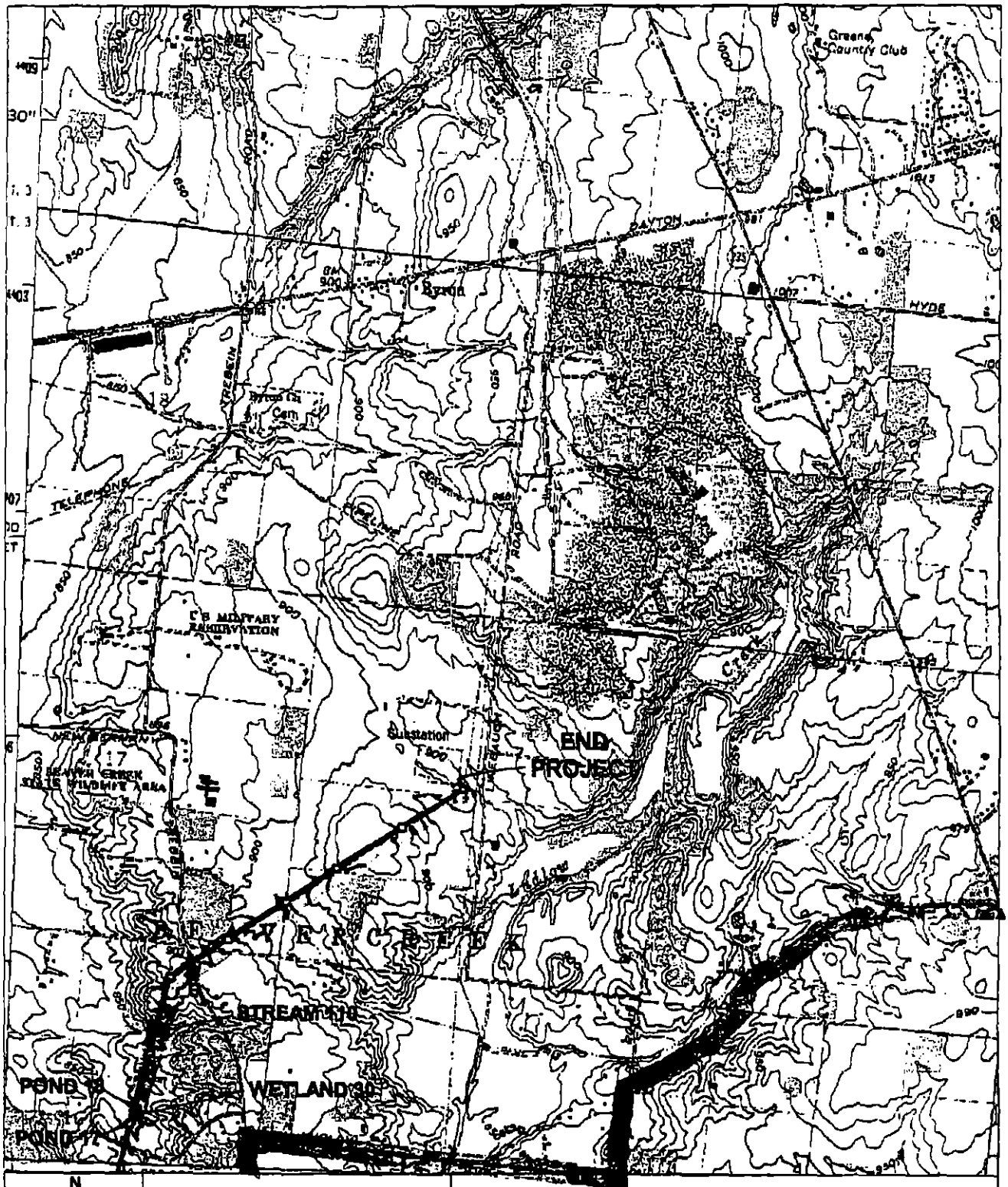

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Yellow Springs, OH	BHE ENVIRONMENTAL, INC.

BHE ENVIRONMENTAL, INC.

People Dedicated to Solving Environmental Problems

Facsimile Transmittal

Today's Date: 11/2/99 BHE PN: _____

Total Number of Pages, including cover: 7

TO:		FROM:	
Name:	Jim Schneider	Name:	Diane Hoeting
Company:	Greene Cty Park Dist	Company:	BHE Environmental, Inc.
Phone:		Phone:	(513) 326-1500
Fax:	937-374-5900	Fax:	(513) 326-1178

Special Instructions:

Please indicate Greene Cty Parklands on or adjacent to DP&L's ROW. Please indicate any lands that are being proposed for purchase. Thanks in advance.

PRIVATE AND CONFIDENTIAL: The sender intends to communicate the contents of this transmission only to the person to whom it is addressed. This transmission may contain information that is privileged, confidential or otherwise exempt from disclosure under applicable law. If the recipient of this transmission is not the designated recipient or the employee or agent responsible for delivering this transmission to the designated recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this transmission in error, please notify us immediately by telephone (collect at 513-326-1500) and promptly return the original transmission to us at the above address by mail. We will reimburse you for any costs you may incur.

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Greene County

Board of County Commissioners

T. Shawn Campbell
Kathryn K. Hagler
W. Reed Madden

Greene County Recreation and Parks Department

Timothy D. Leiwig, CLP
Executive Director

GREENE COUNTY PARK DISTRICT

Board of Park District Commissioners

Vivian F. Lewis
J. Timothy Campbell
John A. Finlay

Administrative Offices
651 Dayton-Xenia Road
Xenia, Ohio 45385-2699

Phone: (937) 376-7440
or: (937) 427-2883
Ext. 7440
Fax: (937) 374-5900
TDD: (937) 376-7577

Narrows Reserve
Phone: (937) 429-9590

November 5, 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati OH 45246

Dear Ms. Hoeting:

We have reviewed the topographic maps with the subject transmission lines located thereon. In review, we found four properties owned and/or managed by Greene County Parks. Three of these properties are wetlands and the fourth is a shared-use path corridor. I have enclosed information on these sites.

We see no major concerns with the crossing of the shared-use path so long as construction does not require closure. The wetland areas, however, are a major concern, especially if there is a need to bring construction vehicles into the area. Just this summer, the Ankeney site (#2) was developed as a wetland mitigation bank. This area is now substantially wetter than it was previously. We know there is at least one transmission tower in this area.

Should DP&L desire to upgrade these towers, we would prefer to meet with their representatives to look at the scope of the work and determine how we might mitigate impacts to these areas. We will oppose any upgrade that will degrade the quality of the wetlands that we are charged to preserve and protect.

We look forward to the opportunity to discuss this project further with yourselves and DP&L.

Sincerely,

James A. Schneider, Assistant Director
Greene County Recreation, Parks and Cultural Arts

JAS/cab
Enc.

ltrjs115

NOTE TO APPENDIX A DOCUMENT

FROM GREENE COUNTY RECREATION, PARKS AND CULTURAL ARTS

The letter received from the Greene County Recreation, Parks and Cultural Arts, dated November 5, 1999, expressed concern over certain towers on the Foster to Bath Transmission Line Project that are potentially detrimental to wetlands in the area of line between Ankeney and Fairground Roads. Close inspection of the documents submitted indicate the referenced wetlands are in fact along another transmission line corridor (for DP&L's 138 kV circuit between Greene and Airway Substations). Since no work or activity is to take place on this 138 kV circuit, no further consideration needs to be made as part of this LON other to discuss the situation with the Greene County people, which will be done.

PDR:1/28/00

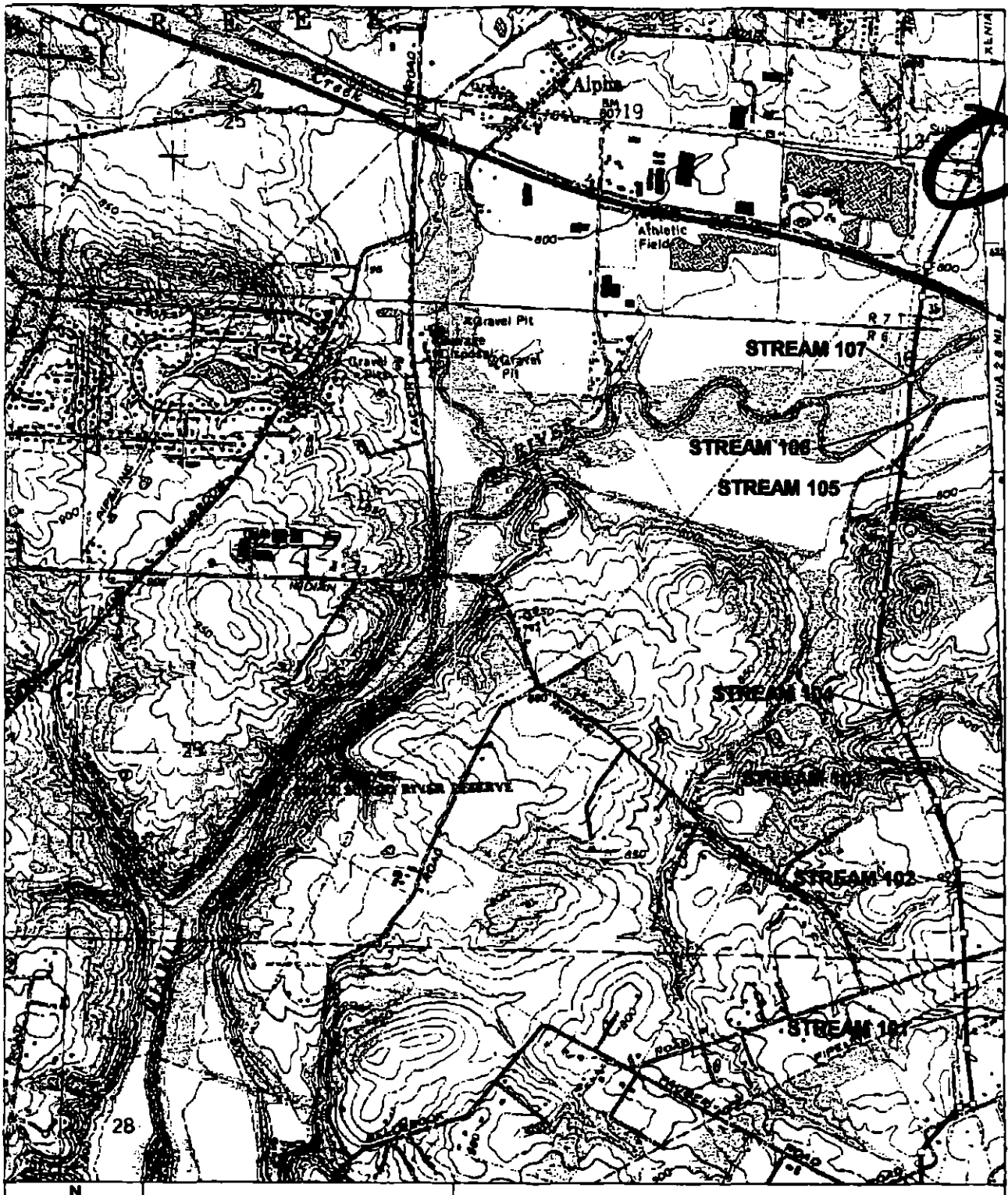


FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

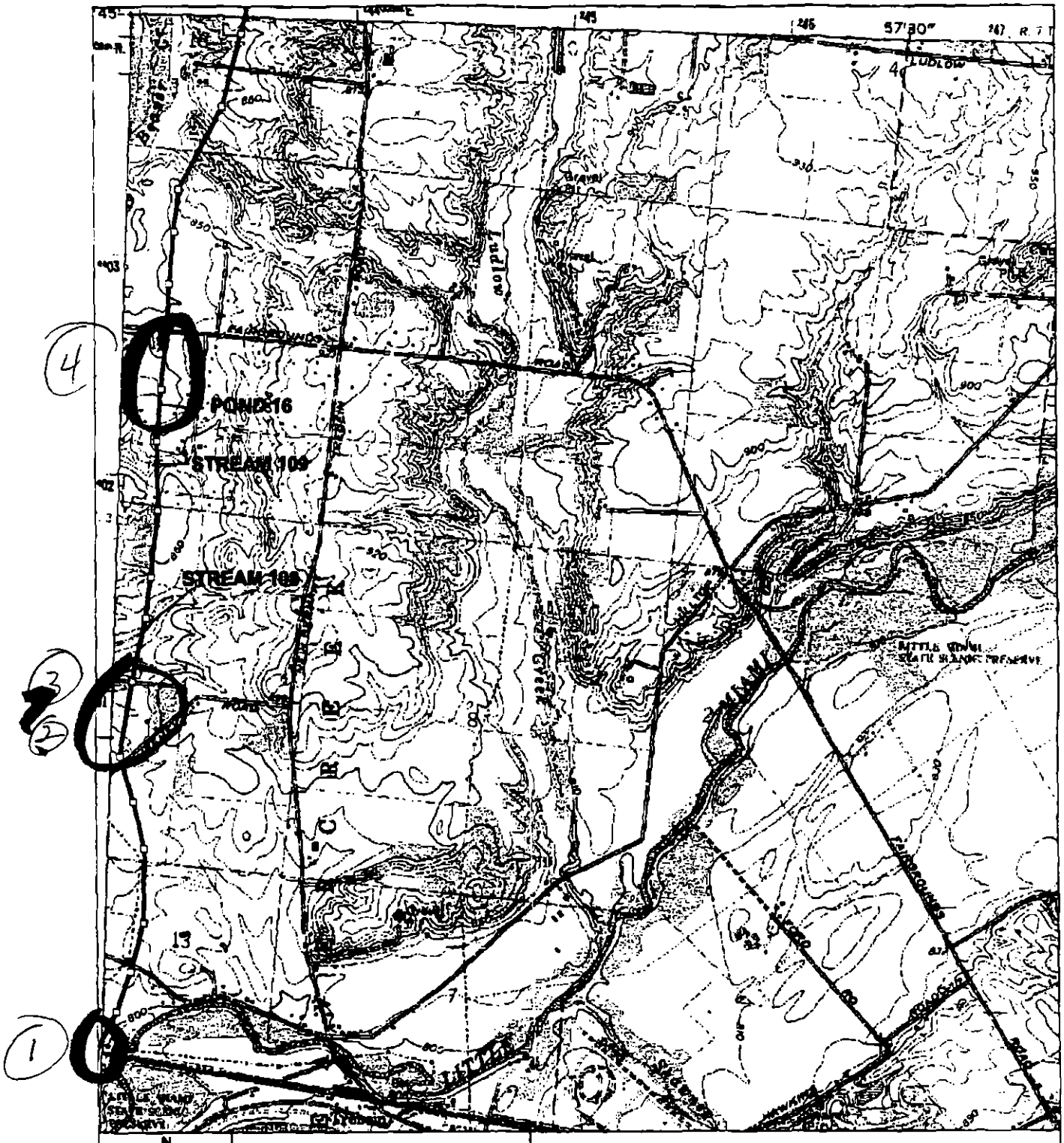


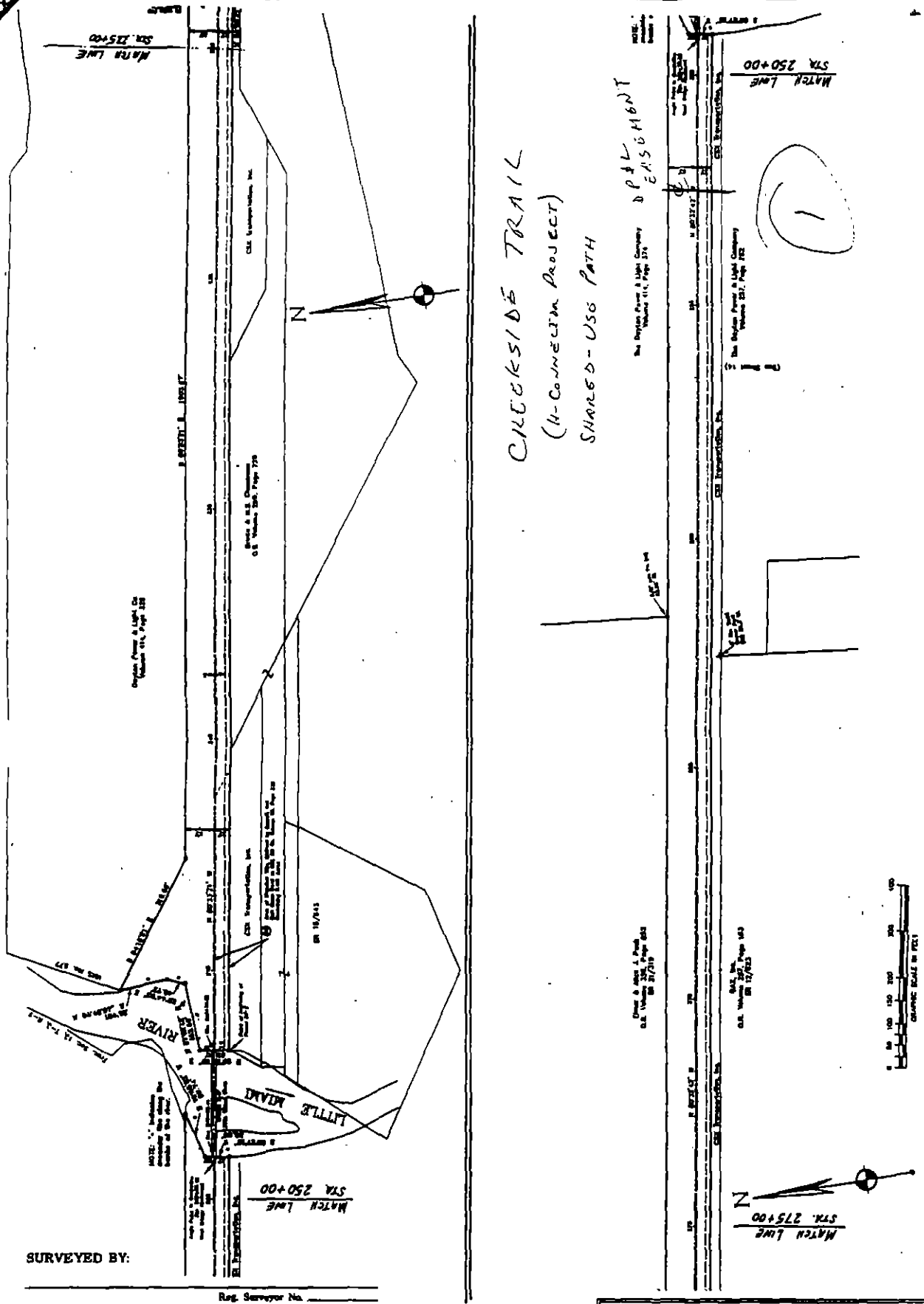
FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Xenia, OH	BHE ENVIRONMENTAL, INC.

BEAVERCREEK TOWNSHIP TRUSTEES

OUR CODE	LESSEE (OCCUPATION)	LOCATION BY STATION NUMBER	JURISDICTION	DOCUMENT NUMBER	ANNUAL RENT	BACK RENT
I	KIL-KARE/CHRYSLER	182+HAWKINS RD	GREENE COUNTY/ BEAVERCREEK TWN	71-02749	$ SEE I (GC)	
E	VOLKENHAND	201+	BEAVERCREEK TWN	71-00730	$ 30.00	
N	OBT	191+90(SEE CC) (SEE 186-369)	BEAVERCREEK TWN	176199	$ -0-	
Q	SIDING	206+32	BEAVERCREEK TWN	176-959	$ -0-	
Y	KIL-KARE/CHRYSLER	192+01	BEAVERCREEK TWN	161-071	$ 100.00	
Z	DP&L	268+27	BEAVERCREEK TWN	?	$?	
CC	OBT	191+90(SEE N)	BEAVERCREEK TWN	186-639	$ 15.00	
DD	DP&L	267+27	BEAVERCREEK TWN	189-614	$ NEEDS VERIFIED	
FF	OBT	210+70	BEAVERCREEK TWN	196-377	$ -0-	
YY	WATERLINE			439-59-582		
	MID-STATE DEV.	284+47	BEAVERCREEK TWN	230-689	$ 100.00	
BBB	GREENE CO. SEWER	288+95	BEAVERCREEK TWN	236-200	$ -0-	
GGG	SIDE TRACK	262+12	BEAVERCREEK TWN	267-259	$ -0-	
KKK	AMERITECH FIBER	306+	BEAVERCREEK TWN	WITHIN ORCHARD LN RIGHT OF WAY	$ -0-	
OOO	DP&L FIBER	296+50	BEAVERCREEK TWN	44709902	$ 500.00	
RRR	DP&L	201+	BEAVERCREEK TWN	71700512	$ 24.00	
SSS	DP&L	183+50	BEAVERCREEK TWN	71700522	$ 15.00	
TTT	DP&L	184+	BEAVERCREEK TWN	71700702	$ 100.00	
VVV	DP&L	296+	BEAVERCREEK TWN	71701202	$ 100.00	
WWW	DP&L	252+50	BEAVERCREEK TWN	71700832	$ 21.00	
XXX	DP&L	202+20	BEAVERCREEK TWN	71700852	$ 19.00	
BBBB	DP&L	280+10	BEAVERCREEK TWN	71701232	$ 100.00	
CCCC	DP&L	280+50	BEAVERCREEK TWN	71701242	$ 100.00	

GREENE COUNTY SURVEYOR'S RECORD No. 24, PAGE 115



SURVEYED BY:

Reg. Surveyor No. _____

APPROVED
eene County Engineer

By _____ Date _____

ZONING _____

APPROVED BY:

COSLER ENGINEERING
1979 FAIRBROOKE ROAD
BEAVERCREEK, OHIO 45385

GRANTOR Consolidated Rail Corp.

GRANTEE _____

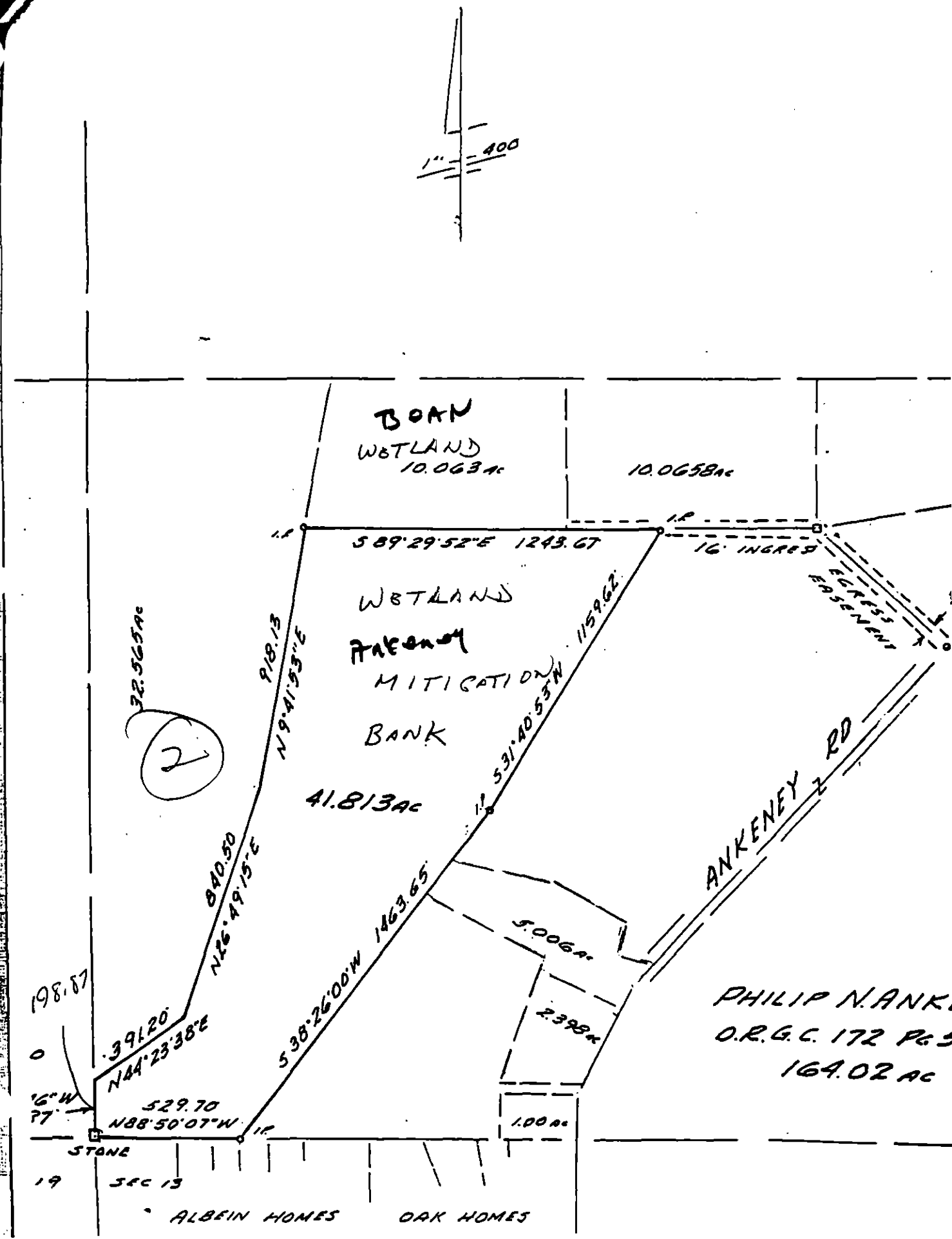
LOCATION:

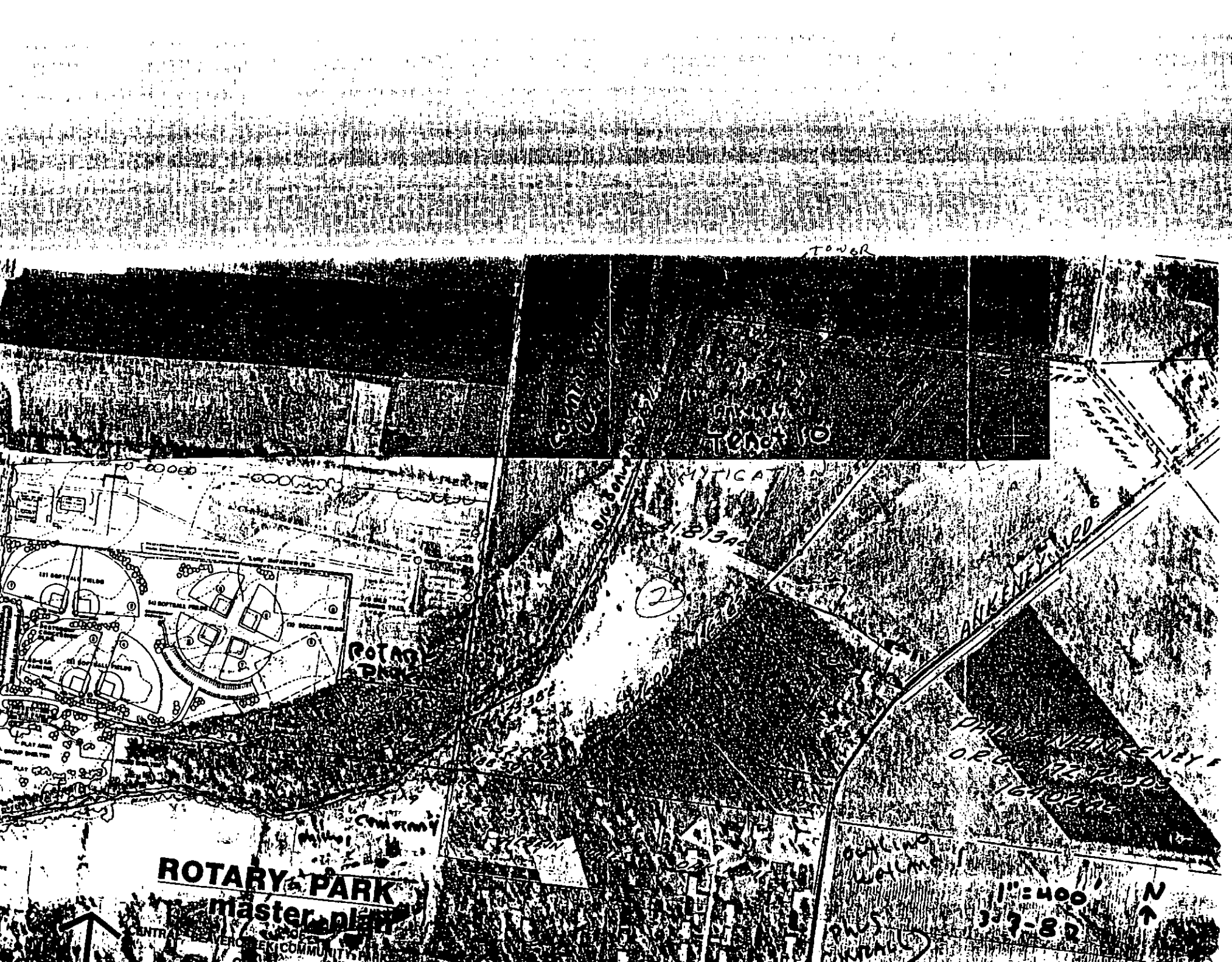
Section _____, Town _____, Range _____

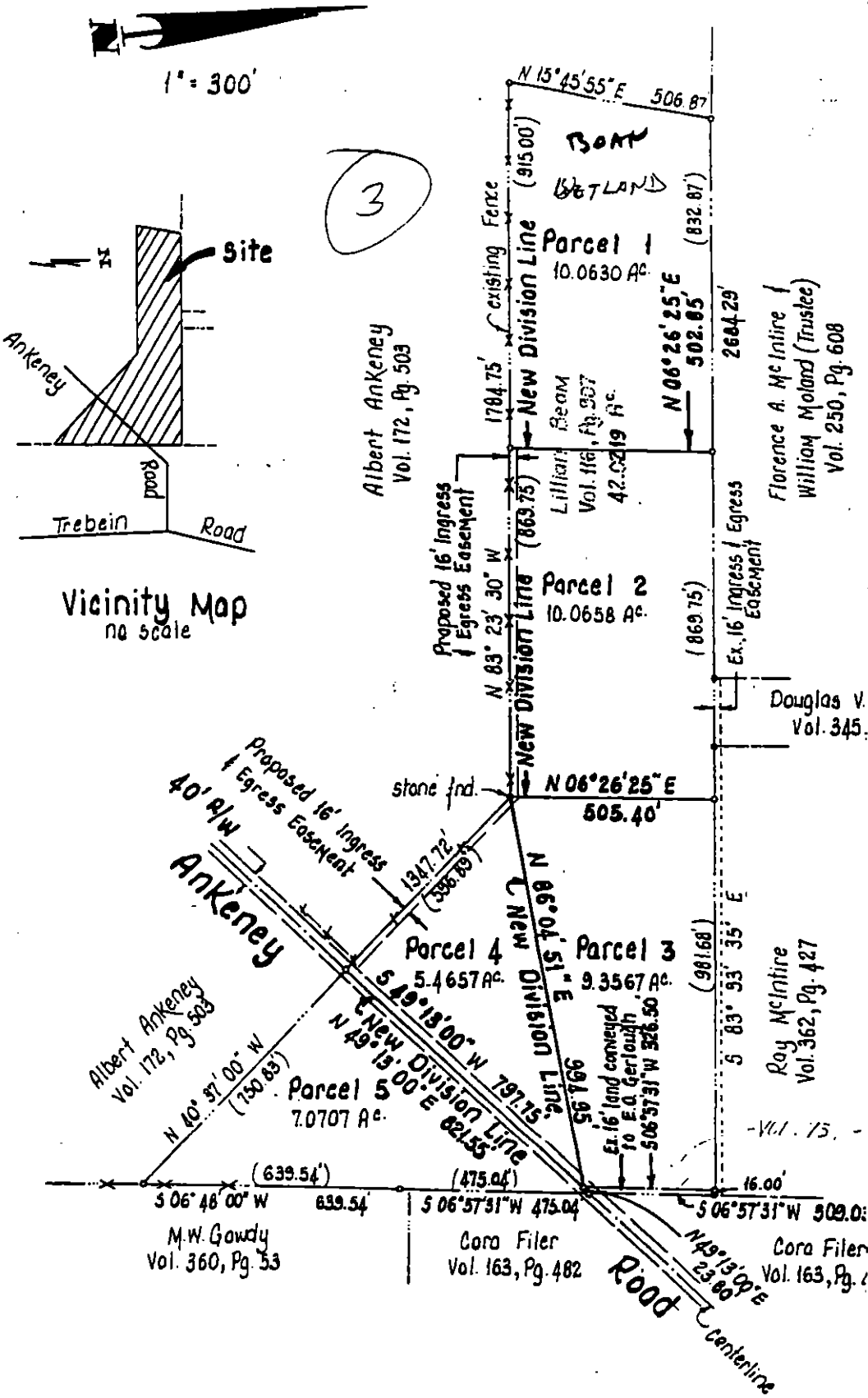
or Survey No. _____

_____ TOWNSHIP

GREENE COUNTY, OHIO


1" = 400
BOAN
WETLAND
10.063 AC
10.0658 AC
S 89°29'52"E 1243.67
16' INGRESS
EGRESS EASEMENT
WETLAND
Ankeney
MITIGATION
BANK
32.565 AC
918.13
N 9°41'53"E
1159.62
S 31°40'53"W
41.813 AC
ANKENEY RD
840.50
N 26°49'15"E
1463.65
S 38°26'00"W
5.006 AC
2.398 AC
1.00 AC
PHILIP N. ANK
O.R.G.C. 172 PG 5
164.02 AC
198.87
391.20
N 44°23'38"E
529.70
N 88°50'07"W
STONE
SEC 13
ALBEIN HOMES
OAK HOMES


ROTARY PARK
master plan
1" = 400'
N



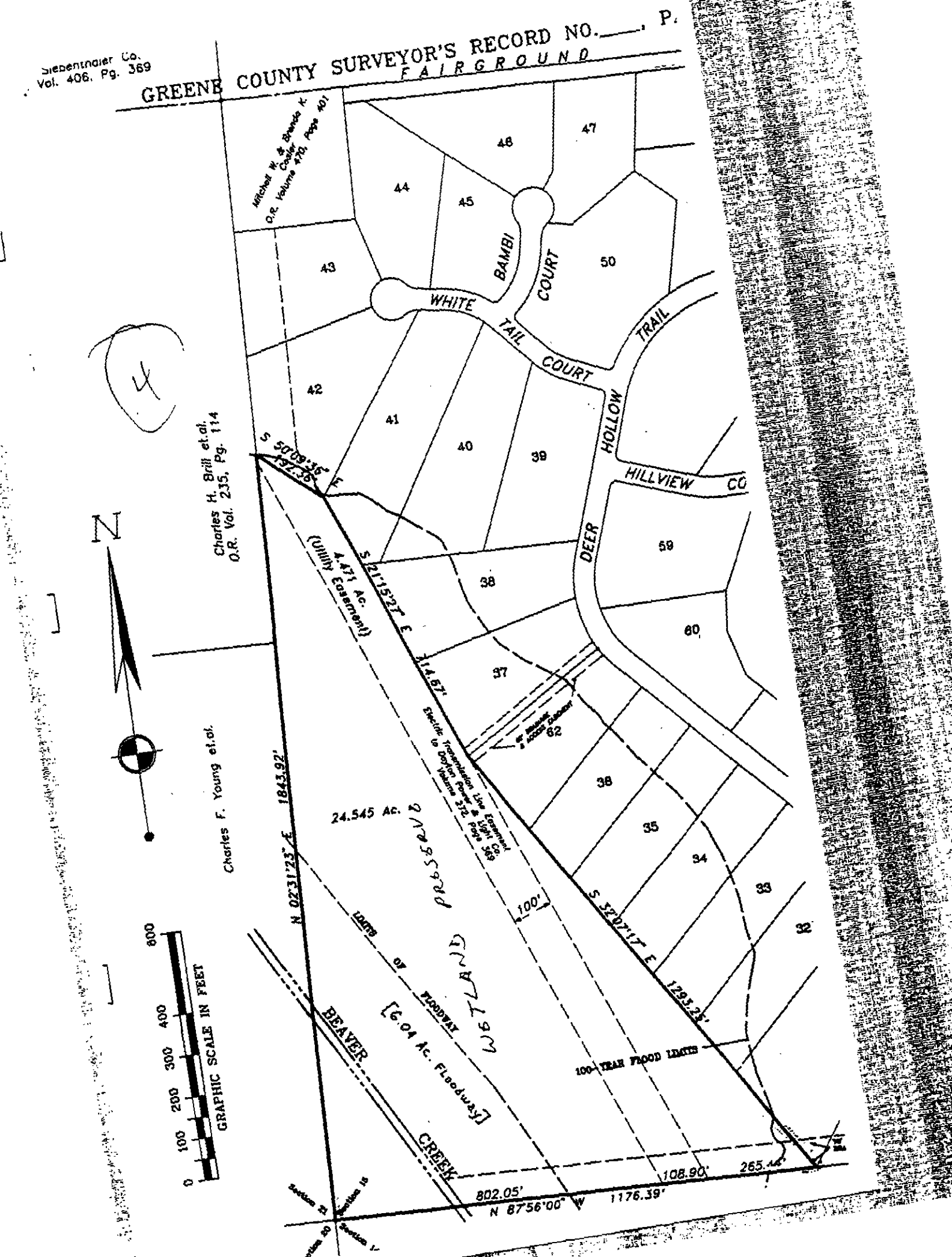
ZONING A-1 [illegible] according to BZA Variance appeal [illegible] 414 on 7/20/88.

APPROVED
Greene County Engineer
By [signature] Date 7/26/88

SURVEYED BY: [signature]

STATE OF OHIO
GEORGE EDWARD REINKE

GRANTOR
GRANTEE
LOCATION:
Section 14



Siebenthaler Co.
Vol. 406, Pg. 369
GREENE COUNTY SURVEYOR'S RECORD NO.____, P.
FAIRGROUND
Mitchell W. & Brenda K. Coster
O.R. Volume 470, Page 401
Charles H. Brill et.al.
O.R. Vol. 235, Pg. 114
Charles F. Young et.al.
N
GRAPHIC SCALE IN FEET
0
100
200
300
400
600
WHITE TAIL COURT
BAMBI COURT
DEER HOLLOW TRAIL
HILLVIEW CO
S 50°09'36" E
192.36'
S 21°15'27" E
114.67'
4.471 Ac.
(Utility Easement)
Electric Transmission Line Easement to Dayton Power & Light Co. Volume 272, Page 369
24.545 Ac.
PRESERVE
WETLAND
100'
S 32°07'17" E
1293.25'
N 02°31'23" E
1843.92'
LIMITS OF FLOODWAY
[6.04 Ac. Floodway]
BEAVER CREEK
100-YEAR FLOOD LIMITS
802.05'
N 87°56'00" W
1176.39'
108.90'
265.44'
Section 21
Section 15
Section 20
Section 16

panterra
CORP
Earth and Water Resource Solutions

CORPORATE OFFICE
4752 FISHBURG RD. DAYTON, OH 45424
(937) 237-7050, (937)237-0162 FAX

410 WEST OAK ST. ZIONSVILLE, IN 46077
(317) 733-8385, (317) 733-8387 FAX

fax transmittal

date: November 2, 1999

to: Ms. Diane Hoeting

at: BHE Environmental, Inc.

fax: (513) 326 - 1178

project:

subject: Map of Greene County Wells and Wellhead Protection Area
for your: Information

copies	date	description

notes: Ms. Hoeting –

I hope the attached map meets your needs. I have darkened the Little Miami River for your reference. I believe the wellfield you are interested in is the Valley Springs Wellfield. Wells PW-08 and PW-09 are existing wells; well PW-10 is planned for the near future.

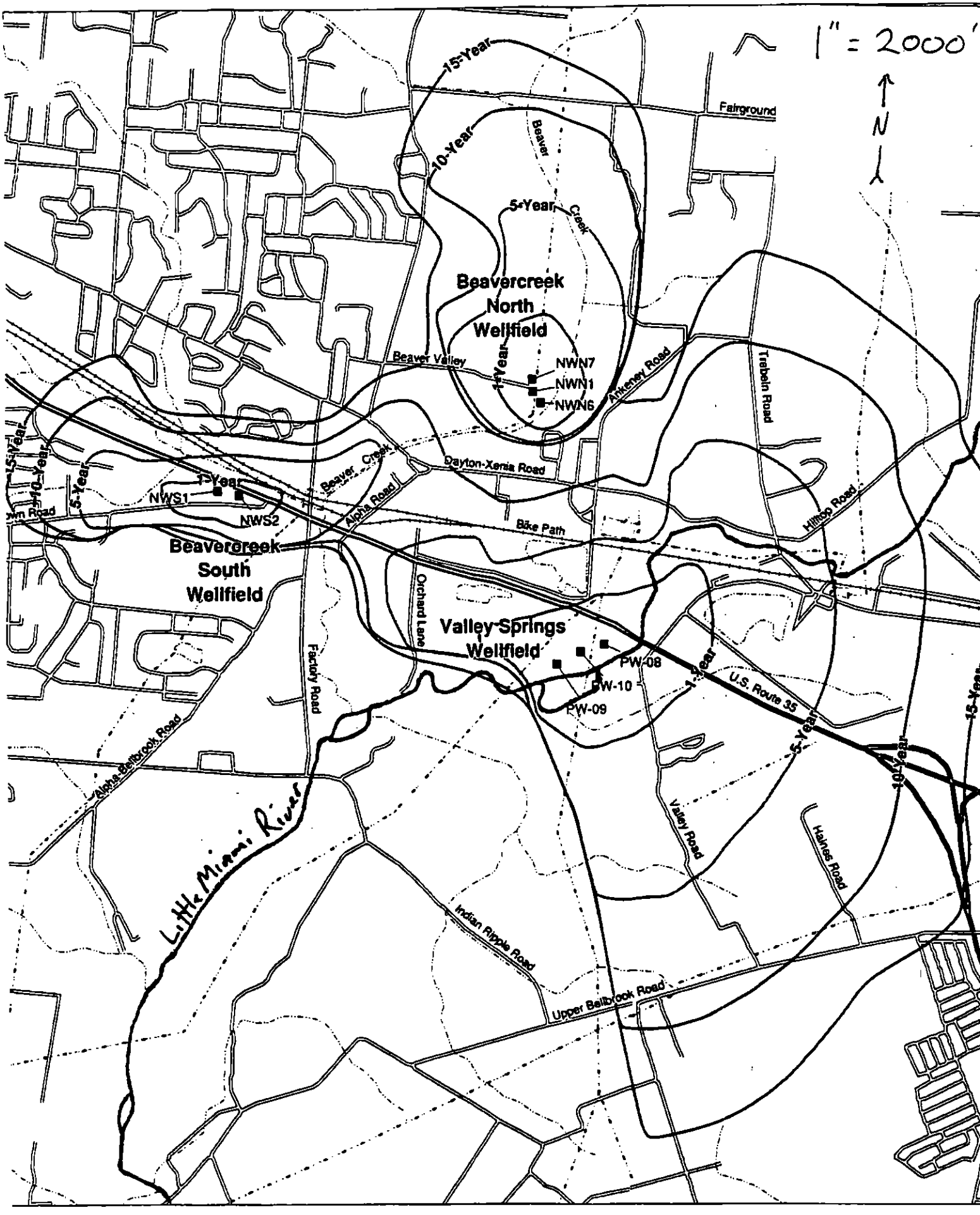
Concerning the wellhead protection area, I believe the County has expressed an interest in defining their wellhead protection area based on the 15-year time-of-travel boundary.

Please feel free to call me if you have any questions or comments.

from: Bob Curley cc:

pages including this one: 2

Transmitted from (937) 237-0162. If any portion of this fax is unreadable, please call (937) 237-7050


1" = 2000'
N
15-Year
10-Year
5-Year
1-Year
Fairground
Beaver Creek
Beavercreek North Wellfield
NWN7
NWN1
NWN6
Beaver Valley
Ankeney Road
Trebein Road
Dayton-Xenia Road
NWS1
NWS2
Alpha Road
Bike Path
Hilltop Road
Beavercreek South Wellfield
Orchard Lane
Valley Springs Wellfield
PW-08
PW-10
PW-09
Factory Road
U.S. Route 35
Alpha-Bellbrook Road
Little Miami River
Valley Road
Harnes Road
Indian Ripple Road
Upper Bellbrook Road

Warren County Parks
Onlie Gulley, Director - 300 East Silver Street - Lebanon, Ohio - 513-933-1109
Franklin-Middletown Exch. 422-9191 Cincinnati Exch. 677-6109 Dayton Exch. 885-4041

11/23/99

BHE Environmental, Inc.
Diane Hoeting
11733 Chesterdale Road
Cincinnati, Ohio 45246

Dear Diane Hoeting,

In reviewing the Foster to Bath Electric Transmission line project, as of this date 11/23/99 the project does not cross or impact existing or planned Warren County Parks that we own or manage.

Sincerely,

Onlie M. Gulley
Park Director

OMG/mg

BOARD OF PARK COMMISSIONERS
Carl E. Oeder - William P. Schroeder - Richard Jones

Table of

Agricultural District Lands

Greene County

Greene Cty Ag. District Lands.

table1

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table1

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K28000100230002300,JONES C REX,102.395000
K28000100210000900,SMITH MARSHA C ET AL,259.436000
K28000100200000100,LUNDY CATHERINE WOLF,31.909000
K28000100100000800,HURLEY JOHN H JR,65.781000
K28000100110008300,HARTMAN PHILIP J TRUSTEE,42.921000
L32000100090000100,HENDERSON ROBERT C,105.030000
L32000100130000600,TISCHER RAYMOND L,74.994000
K28000100110002300,HARTMAN PHILIP J TRUSTEE,2.035000
K28000100110002500,HARTMAN PHILIP J TRUSTEE,17.040000
K28000100110002200,HARTMAN PHILIP J TRUSTEE,6.760000
B42000600070000200,DURNBAUGH JOHN W,140.643000
L32000100140000300,KARRAS JAMES, PETER, ANDREA,74.710000
K28000100180001100,PETERSON RAY E,38.390000
K28000100140000300,PETERSON RAY E,163.130000
K28000100220003000,KRAMER EDWARD A,40.000000
K28000100220000600,KRAMER EDWARD A,59.500000
L32000200250000500,CONNOR FAMILY LIMITED,45.220000
B42000100030000400,GERLAUGH EDWARD C,29.534000
B42000100030000200,GERLAUGH EDWARD C,38.260000
B42000100030000300,GERLAUGH EDWARD C,5.165000
B03000200410005200,DURNBAUGH JOHN W,28.266000
L32000100130000700,TISCHER MARY E,32.670000
K28000100090006600,ROHLER KENNETH,0.938000
K28000100090002100,COLBERT DONALD L,0.000000
K28000100090006500,ROHLER KENNETH,239.759000
L32000100060002600,RHOADS ROBERT A,0.000000
K28000100130001300,MILLER MORRIS E,46.036000
K28000100080001800,HARROD DANA L,14.635000
K28000100100000100,HERSHNER MARION,61.796000
L32000100020000100,DILLE CHARLES A JR,70.529000
K29000100260001100,MC KAY WILBUR E,43.990000
K28000100080003400,COLBERT DONALD,0.000000
K28000100080003500,COLBERT DONALD L,0.000000
B03000200491003800,SAUNDERS ALICE R,60.384000
B03000200380001100,HOFFMAN ROGER J,15.000000
B03000200420002500,ZINK ANTON S JR,13.891000
B03000200420000100,LEIBOLD ANNA R,34.336000
L32000100140001800,BLACK SAUNDRA J,46.361000
L32000200250000600,CONNOR FAMILY LIMITED,22.550000
L32000100020000300,DILLE LABORATORIES CORP,117.794000

Table of

Agricultural District Lands

Warren County

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ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
6301894	37.4890	ABERLIN, BARBARA	2/27/97	SPURLING	7/15/82
7100027	5.0100	ABSHER, DANIEL R. & GARY	3/17/97	ABSHER	7/25/82
3600122	107.5000	ANDREWS, DONALD G & DEBO	1/21/99	ANDREWS	2/10/94
3600874	20.5300	ANDREWS, DONALD G. & DEBO		ANDREWS	3/28/96
0100692	95.5480	ANELLO, FRANK M., TRUSTEE	2/19/97	ANELLO	7/08/82
0900397	37.1790	BAILEY, WM. L. & AUDREY B		BAILEY	1/05/98
0800341	23.0030	BALL, ANGELINA MARY (AKA)	2/26/96	BALL	12/09/91
2600846	64.5300	BARNETT, ROBT. ET AL	3/19/97	BARNETT ET AL	7/14/82
3513564	6.0040	BEAMER, JIM A. & BARBARA		BEAMER	10/01/96
3514374	10.7400	BEAMER, JIM A. & BARBARA		BEAMER	10/01/96
3514536	30.7570	BEAMER, JIM A. & BARBARA		BEAMER	10/01/96
3512223	10.0000	BEAMER, JIM A.& BARBARA J		BEAMER	10/01/96
4800541	55.6000	BERGER, DANIEL J. & SUSAN	4/30/97	CLARK	7/19/82
6500064	97.1000	BIEHLE, CHRIS HENRY & BRE	1/16/98	BIEHLE	7/21/83
2700077	12.6100	BIGGS. GARY EUGENE & PHYL	2/20/97	BIGGS	7/23/82
2606968	207.8690	BIGGS, GARY & PHYLLIS A	2/01/96	BIGGS	10/31/91
2601338	24.0000	BIGGS, GARY & PHYLLIS ANN	2/01/96	BIGGS	7/23/82
2608961	59.3710	BIGGS, GARY E.& PHYLLIS A	2/01/96	BIGGS	10/31/91
2700069	2.0000	BIGGS, GARY EUGENE & PHYL	2/20/97	BIGGS	7/23/92
1617206	33.0100	BISHOP, DONALD & JOYCE	1/12/98	REED	5/25/83
7606125	33.4220	BOWMAN, ALAN DALE & PAMEL	7/11/97	GRILL	7/13/82
0102155	116.9699	BRADSTREET FAMILY LTD.PAR	4/21/97	BRADSTREET, NEMA (ESTATE)	7/19/82
7200498	53.7600	BRANSTRATOR, JON V. & DOL		BRANSTRATOR	11/25/96
4805682	30.0000	BUERGERMEIER, DANIEL J. &	2/19/97	BUERGERMEIER	8/04/82
3514994	68.0480	BURWINKEL, ANTHONY L. &	2/19/99	BURWINKEL	8/23/94
4800354	16.7000	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82
4800362	.9800	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
4800371	.9990	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82
4800389	1.5700	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82
0300055	1.0440	CLARK, MICHAEL A.& PEGGY	3/13/97	CLARK	4/14/92
0300063	25.4710	CLARK, MICHAEL A.& PEGGY	3/13/97	CLARK	4/14/92
0113182	91.4150	CLOVER HILL FARM, LTD	4/07/97	NIXON	7/21/82
0202738	29.2030	CLOVER HILL FARM, LTD		CLOVER HILL	10/28/98
0300471	50.0000	CLOVER HILL FARM, LTD	4/07/97	NIXON	7/21/82
5303516	92.7800	CLOVER HILL FARM, LTD	1/11/99	SCHIFF	9/21/94
5307121	21.4170	CLOVER HILL FARM, LTD	1/11/99	SCHIFF	9/21/94
5314364	41.0000	CONLEY, CHARLES M.	2/05/96	MEYER/ARMSTRONG	6/30/86
0103403	5.0000	CRAIG, PHILIP W.	1/31/96	CRAIG	4/22/91
0103411	5.0000	CRAIG, PHILIP W.	1/31/96	CRAIG	4/22/91
2614324	29.2000	CREEDON, MARY JO	4/16/97	ROSS	7/20/82
1407198	60.3328	DARRAGH, PHYLLIS M.	1/14/98	DARRAGH	8/24/88
7203586	105.3900	DAWKINS, BEATRICE M. &		SOWDER	4/25/96
1617133	69.5780	DAY, DEXTER & SHIRLEY		DAY	4/05/96
5302919	109.4500	DE CLARK, CANDICE R., TRU	4/07/97	TEPE	8/15/82
1407767	67.2190	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2125315	41.8010	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2125331	35.0130	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2125358	93.2280	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2109662	6.2990	DE HART, EUGENE &LINDA LO	1/12/98	DE HART	1/13/83
0104604	30.6380	DIGIROLAMO, PASQUALE &	3/04/97	DIGIROLAMO	8/10/82
4300599	21.7700	ELLINGTON, CAROLYN L., TR	3/05/97	ELLINGTON	8/17/82
0902667	100.8890	ELLIOTT, VIRGIE & NOLIN O	1/12/98	ELLIOTT	3/14/88
7604947	28.0800	FINLEY, ROBERT KENT, JR.	3/19/97	FINLEY	8/20/82
7604956	130.8780	FINLEY, ROBERT KENT, JR.	3/19/97	FINLEY	8/20/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
0105686	9.5410	FISHMAN, JACQUELINE	2/18/97	FISHMAN	7/15/82
0105694	24.7030	FISHMAN, JACQUELINE	2/18/97	FISHMAN	7/15/82
3507106	80.3800	FLANNERY, VERNON H., TRUS	3/04/97	PLUMMER ET AL	8/18/82
2623234	42.0000	FOSTER, THOMAS B. JR. & A	2/19/97	FOSTER	8/04/82
4301331	132.7500	FRYE, DON R. & RICHARD B.	2/05/97	FRYE	7/12/82
4301323	109.0000	FRYE, DON R.+RICHARD B.	2/05/97	FRYE	7/12/82
7201427	100.0000	FRYE, GILBERT S. ET AL	2/05/97	FRYE ET AL	7/12/82
7201435	114.7200	FRYE, GILBERT S. ET AL	2/05/97	FRYE ET AL	7/12/82
7605323	42.9400	FRYE, RICHARD B. & DON R.	2/05/97	FRYE	6/29/82
7605331	194.2270	FRYE, RICHARD B. & DON R.	2/05/97	FRYE	6/29/82
7203276	71.6100	GEORGE, PHILIP J & NELLIE		GEORGE	4/25/96
0802743	100.0440	GILBERT, WM L & FRANCES H		GILBERT	7/02/98
7621175	23.7380	GOBRAIL, MAKRAM & BARBARA	3/24/97	GOBRAIL	12/29/87
3506797	4.5850	GOODWIN, BRUCE D. & CAROL	2/28/97	MUELLER	7/09/82
3506801	65.5508	GOODWIN, BRUCE D. & CAROL	2/28/97	MUELLER	7/09/82
5313694	381.1361	GROH, GEORGE A. & BARBARA		GROH	2/05/97
1604414	60.8710	HAMLIN, RAY D. ET AL	4/07/97	HAMLIN	8/04/82
1604422	13.6960	HAMLIN, RAY DICKEY ET AL:	4/07/97	HAMLIN	8/11/82
7101376	18.0000	HANAGHAN, DENNIS M. & PAT	2/21/97	LAUTERBACH ET AL	7/13/82
7202261	234.5800	HANAGHAN, DENNIS M. & PAT	2/21/97	LAUTERBACH ET AL	7/13/82
3504085	31.5080	HARPER, DOLORES F.	2/19/97	HARPER	8/04/82
5308241	10.7590	HENRY, STEVEN G. & KATHLE	1/09/98	HENRY	9/03/93
6135714	1.0220	HENRY, STEVEN G. & KATHLE	1/09/98	HENRY	9/14/93
6602291	49.8800	HILL, VERNON K. & CLARINE	2/18/97	HILL	7/12/82
1413139	40.7600	HORST, MARY DINUS ET AL:	4/11/97	HORST	11/05/87
1700448	12.0000	HORST, MARY DINUS ET AL:	4/11/97	HORST	11/05/87
0803341	16.5820	HOWARD, DOWELL JENNINGS &		HOWARD	2/25/98

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
3502783	32.9910	J & D CO.	1/12/98	EL JIROTO	1/14/83
3502791	42.0000	J & D CO.	1/12/98	EL JIROTO	1/14/83
3502805	43.0000	J & D CO.	1/12/98	EL JIROTO	1/14/83
3502813	100.0000	J & D CO.	1/12/98	EL JIROTO	1/14/83
3504867	262.5650	JACKSON, HARRIETTE L.	2/19/97	JACKSON	8/24/82
5319871	21.4350	JAMESON, WILLIAM C. & REE	1/13/98	JAMESON	2/02/83
5319889	106.6600	JAMESON, WILLIAM C. & REE	1/13/98	JAMESON	2/02/83
5319897	1.3900	JAMESON, WILLIAM C. & REE	1/13/98	JAMESON	2/02/83
5314046	36.4600	JONES, JAMES A. & CAROLYN	2/19/97	CLARK (TRUSTEE)	7/13/82
7618662	18.0440	JONES, RODNEY B. & DEBRA		JONES	5/30/95
5305799	30.0000	KERSEY, DAWN B.	3/12/97	KERSEY	7/15/82
5305811	45.3600	KERSEY, DAWN B.	3/12/97	KERSEY	7/15/82
0724734	13.6300	KLEATHER, ROBERT J. ET AL	3/16/97	SNIDER	7/20/82
0724742	30.3200	KLEATHER, ROBERT J. ET AL	3/16/97	SNIDER	7/20/82
0109771	50.0330	LAING, ROBERT S.JR. ET AL	2/27/97	LAING ET AL	9/12/82
7605307	102.6720	LEBANON CITIZENS NAT'L BA	2/05/97	FRYE, GILBERT	6/29/82
7605315	80.1420	LEBANON CITIZENS NAT'L BA	2/05/97	FRYE, GILBERT	6/29/82
7601808	78.0120	LEBANON CITIZENS NATIONAL	2/05/97	FRYE, BETTY	7/12/82
0110434	1.3920	LEISZ, CHARLES E., TRUSTE	4/11/97	LEISZ	7/23/82
0110442	109.5970	LEISZ, CHARLES E., TRUSTE	4/11/97	LEISZ	7/23/82
2610191	59.2500	LEWIS, DORIS EMILIE	2/18/97	LEWIS	7/19/82
2610698	18.8520	LEWIS, DORIS M. & PROV.	2/18/97	LEWIS	7/19/82
2610701	139.4200	LEWIS, DORIS M. & PROV.	2/18/97	LEWIS	7/19/82
2630035	4.1391	LEWIS, DORIS M. & PROV.	2/18/97	LEWIS	7/19/82
2610221	86.5000	LEWIS, MARK	2/25/97	LEWIS	2/19/92
2610213	99.1510	LEWIS, ROBERT T.	2/25/97	LEWIS	2/13/92
2615667	21.8260	LEWIS, ROBERT TIMOTHY ET	2/25/97	LEWIS	

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
1608398	38.5100	LIBECAP, JORITA	1/12/98	REED	5/25/83
3505677	45.2690	LIGHT, CLAUDE M. & LAVON	3/11/97	LIGHT	9/27/82
3505685	73.7880	LIGHT, CLAUDE M. & LAVON	3/11/97	LIGHT	9/27/82
2601796	146.0000	LITTLE BIG FOOT FARMS *	2/19/97	BOWLING	8/04/82
2601826	100.0000	LITTLE BIG FOOT FARMS *	2/19/97	BOWLING	8/04/82
3506282	122.0300	LOGAN, FRANCIS M. & DOLOR	4/08/97	MEINEKE	7/21/82
3700968	72.0004	LONG, PAUL BURDETTE & **	2/20/97	LONG	7/08/82
3700941	33.3240	LONG, PAUL BURDETTE ET AL	2/20/97	LONG	7/03/82
3703215	5.4330	LONG, PAUL BURDETTE ET AL	2/20/97	LONG	7/08/82
0804908	41.2059	LOSH FAMILY LIMITED PARTN		LOSH FAMILY	2/23/99
0820211	12.4490	LOSH, GRACE M. TRUSTEE		LOSH	2/23/99
5306281	10.3500	LUTNER, JAMES & SHIRLEY	3/08/99	LUTNER	11/30/94
5330337	2.1390	LUTNER, JAMES A & SHIRLEY	3/08/99	LUTNER	11/30/94
5307015	20.7000	LUTNER, THOMAS A. TRUSTEE	2/09/99	LUTNER	9/23/94
5307023	50.0000	LUTNER, THOMAS A. TRUSTEE	2/09/99	LUTNER	9/23/94
0806412	6.4870	MASON MISSION PRESBYTERIA	2/19/97	ROGERS	7/13/82
3506274	121.6300	MAULL, CHARLES C. III & *	2/18/97	MAULL	7/27/82
3505987	40.3300	MC GHEE, LILLIAN J. TRUST	2/24/97	MC GHEE	7/19/82
3505995	25.2500	MC GHEE, LILLIAN J., TRUS	2/24/97	MC GHEE	7/19/82
3506002	5.7300	MC GHEE, LILLIAN J., TRUS	2/24/97	MC GHEE	7/19/82
5307538	139.6200	MC KINNEY, RAYMOND F.& GE	2/24/97	MC KINNEY	8/17/82
2611031	79.4345	MEGIE-ROOKS, HELEN JO, TR	3/19/97	MEGIE	10/29/82
7900082	21.3060	METZ, BERNICE L.	2/19/97	METZ	8/11/82
5308062	45.0000	MEYER, BRUCE E. & JANE	2/05/96	MEYER	5/30/96
7610408	101.0700	MICHENER, DWIGHT M. TRUST		MICHENER	9/19/96
0300071	.5410	MIKE FARM ENTERPRISES INC	3/13/97	MIKE FARM ENT.	4/14/92
0300101	28.8990	MIKE FARM ENTERPRISES INC	3/13/97	MIKE FARM ENT.	4/14/92

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
0300837	70.9440	MIKE FARM ENTERPRISES INC	3/13/97	MIKE FARM ENT.	4/14/32
0117579	.5000	MIKE FARM ENTERPRISES, IN		MIKE FARM ENTERPRISES	5/19/98
0300764	70.8180	MIKE FARM ENTERPRISES, IN		MIKE FARM ENTERPRISES	5/19/98
0310751	48.4910	MIKE FARM ENTERPRISES, IN		MIKE FARM ENTER.	3/13/97
0300756	49.4600	MIKE FARM ENTERPRISES,INC	3/13/97	HOAK	2/13/84
0104868	50.0000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111902	.9900	MILLER, RUTH I. & MILLER,	3/30/92	MILLER	12/14/82
0111911	7.8810	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/32
0111945	54.6000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111953	55.9500	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/32
0111961	93.1300	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111988	103.2800	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/32
0111996	106.6000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0129364	6.8430	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/32
0201138	43.0000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/32
0201146	59.9370	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/32
7621248	233.8330	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/92
0112119	11.0000	MILLS, RALPH R. & GUILDA	4/10/97	MILLS	7/23/32
0112127	29.2500	MILLS, RALPH R. & GUILDA	4/10/97	MILLS	7/23/92
0112135	99.1300	MILLS, RALPH R. & GUILDA	4/10/97	MILLS	7/23/92
1423118	121.2590	MONTGOMERY, HAROLD E.,TRU	2/05/97	ROBISON	7/15/32
1423088	58.7890	MONTGOMERY, RICHARD H., T	2/20/97	MONTGOMERY	7/15/82
1423096	22.1100	MONTGOMERY, RICHARD H., T	2/20/97	MONTGOMERY	7/15/32
0113271	.5000	MONTGOMERY, ROBERT E. &	3/03/97	MONTGOMERY	7/15/32
0113298	13.4070	MONTGOMERY, ROBERT E. &	3/03/97	MONTGOMERY	7/15/32
0113301	60.1900	MONTGOMERY, ROBERT E. &	3/03/97	MONTGOMERY	7/15/32

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
5308704	38.4220	MULFORD, HEWETT P. JR. ET	1/13/98	MULFORD ET AL	9/30/88
5308658	24.7500	MULFORD, MARION R ET AL	1/13/98	MULFORD	9/30/88
5308666	57.9300	MULFORD, MARION R ET AL	1/13/98	MULFORD	9/30/88
3700682	4.3530	NATIONAL BANK & TRUST CON	2/20/97	LONG	7/08/82
3700976	62.9300	NATIONAL BANK & TRUST CON	2/20/97	LONG	7/08/82
3700984	105.9140	NATIONAL BANK & TRUST CON	2/20/97	LONG	7/08/82
3703053	1.0000	NATIONAL BANK & TRUST CON	2/20/97	LONG	7/08/82
3703614	29.6880	NATIONAL BANK & TRUST CON	2/20/97	LONG	7/08/82
4807499	37.6450	OREN, HERBERT & JUNE	2/21/97	OREN	9/13/82
4301455	116.0000	OSBORN, NELLIE D.	3/04/97	OSBORN	9/30/82
5301343	51.4200	PAIGE,DONALD LEE & MARTHA	2/19/97	SHRODER	7/15/82
0310469	31.9140	PETERS, KENNETH & JEANNIN	1/23/98	PETERS	2/12/93
0310760	17.6230	PETERS, KENNETH D. & JEAN	1/23/98	PETERS	2/12/93
1421743	98.6900	PURSLEY, HATTIE J.	2/21/97	PURSLEY	8/27/82
1421735	74.7100	PURSLEY, HATTIE JANE AKA	2/21/97	PURSLEY	8/27/82
1421875	116.2574	RALSTON, BETTY		RALSTON	5/24/96
5310288	84.0960	RALSTON, BETTY B.		RALSTON	3/05/96
1406876	51.3760	RAYMOND, MARY ANN		RAYMOND	3/05/96
5310261	47.7510	RAYMOND, RANDALL GRANT &		RAYMOND	3/05/96
0105198	67.0850	RHODEHAMEL, DONALD E. & H	2/20/97	EMLEY	12/23/82
0129399	47.7490	RHODEHAMEL, DONALD E. & H	2/20/97	EMLEY	12/23/82
0203726	56.9040	RHUDE, V. ELOISE	2/24/97	RHUDE	10/08/82
0210331	40.4220	RHUDE, V. ELOISE	2/24/97	RHUDE	10/08/82
7612184	53.9070	RICH, JAMES E.& JOHN B.(P	2/21/97	RICH ET AL	7/07/82
7612192	72.5000	RICH, JAMES E.& JOHN B.(P	2/21/97	RICH ET AL	7/07/82
7612206	99.3200	RICH, JAMES E.& JOHN B.(P	2/21/97	RICH ET AL	7/07/82
4301617	88.0520	RICH, JOHANNA L.	2/18/97	CIRCLE "R" INC.	

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
4300254	163.6700	RICH, RAYMOND L. & NELLIE	2/20/97	RICH	8/05/82
4303962	5.0010	RITTINGER, PAMELA L.	2/18/97	CIRCLE "R" INC.	9/02/82
0806323	145.4100	ROBERTS, RUFUS & MARY M.	9/18/98	ROBERTS	9/18/98
4808673	141.5300	ROHRER, RICHARD S.	2/21/97	ROHRER	8/13/82
1608863	34.2960	ROWLAND, JAMES F. & SUSIE	3/31/97	ROWLAND	7/25/82
7612583	25.0000	RYE, CHARLES L. & DOROTHE		RYE	2/03/97
7612591	90.0000	RYE, CHARLES L. & DOROTHE		RYE	2/03/97
7612605	20.4910	RYE, CHARLES L. & DOROTHE		RYE	2/03/97
0300021	102.5370	SANTAROMITA, GREGORY & AN	2/19/98	BACK	4/13/98
7600917	1.7070	SANTAROMITA, GREGORY & AN	2/19/98	BACK	4/13/98
1608983	97.1600	SAUTER, HENRY W.	1/20/99	SAUTER	2/15/34
1608941	105.3720	SAUTER, WILLIAM & JANET M	1/12/99	SAUTER	2/15/34
7207220	100.3410	SCHAEFER, PAUL R. ET AL	1/11/99	SCHAEFER ET AL	3/25/34
3504417	14.8200	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/82
3506088	17.7000	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/82
3507149	64.1850	SCHOELLMAN, STEPHEN WAYNE		SCHOELLMAN	2/20/97
3507858	5.0200	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/82
3507866	85.5940	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/82
3507874	131.7100	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/82
3513696	32.8220	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/82
3509354	42.3380	SCHOELLMAN'S DAIRY FARM		WALTER/SCHOELLMAN	2/20/97
4301749	67.8450	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
4301757	98.2000	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
4301765	31.7000	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
7203373	.6300	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
7203411	77.2700	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
7203438	144.1300	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
7102429	81.1100	SEXTON, PAUL AKA: SHELBY	3/12/97	SEXTON	7/22/32
4801822	5.0000	SHARPE, JENE & CASA LOMA	2/19/97	SHARPE	8/05/82
4808576	5.0000	SHARPE, JENE & CASA LOMA	2/19/97	SHARPE	8/05/82
4808584	43.1870	SHARPE, JENE & CASA LOMA	2/19/97	SHARPE	8/05/82
2900149	48.0000	SHAVER, RICHARD H. & WILH	1/11/99	SHAVER	7/19/84
2900157	1.0580	SHAVER, RICHARD H. & WILH	1/11/99	SHAVER	7/19/84
7613253	108.1660	SHINKLE, WILLIAM P. & PAT	2/18/97	SHINKLE	7/13/32
0804894	73.4697	SHULL-SCRUGGS FAMILY LIMI		SHULL-SCRUGGS	2/23/99
4300165	9.9730	SILVERBROOK FARMS (PARTN)	1/11/99	SILVERBROOK FARMS	3/25/94
7203446	.8600	SILVERBROOK FARMS PTN*P	1/11/99	SILVERBROOK FARMS	3/25/94
7203454	102.5000	SILVERBROOK FARMS PTN*P	1/11/99	SILVERBROOK FARMS	3/25/94
5301777	43.0300	SMITH, THOMAS G. & JOSEPH	4/04/97	SMITH	7/13/32
0910317	1.2620	SPEIDEL, JANE B. TRUSTEE	2/25/97	SPEIDEL	5/29/82
0910325	68.7960	SPEIDEL, JANE B. TRUSTEE	2/25/97	SPEIDEL	5/29/82
0930083	1.3154	SPEIDEL, JANE B. TRUSTEE*	2/25/97	SPEIDEL	5/29/82
3508587	18.4970	STEGEMOLLER, WILLIAM H. &	2/25/97	STEGEMOLLER	11/23/32
3508595	64.8100	STEGEMOLLER, WILLIAM H. &	2/25/97	STEGEMOLLER	11/23/32
3701638	110.8540	STEGEMOLLER, WILLIAM H. &	2/25/97	STEGEMOLLER	11/23/32
5302218	181.1300	STEINER, PAUL A. & ROSEMA		STEINER	2/04/97
2138285	48.7250	STEWART, JAMES A. ET AL:		STEWART	2/13/95
2138289	5.9320	STEWART, JAMES A. ET AL:		STEWART	2/13/95
7614268	30.0717	STILES, LARRY A. & SANDRA	2/24/97	STILES	7/13/32
3701689	25.9200	STILES, ROGER & LOUISE F.	1/14/98	STILES	3/15/33
3701697	27.8000	STILES, ROGER & LOUISE F.	1/14/98	STILES	3/15/33
4301251	14.9480	STINGLEY, CHARLES P.	3/04/97	LUKENS	7/15/32
4301269	34.2550	STINGLEY, CHARLES P.	3/04/97	LUKENS	7/15/32
4302265	12.0510	STINGLEY, CHARLES P.	3/04/97	W.C.B.P.C./LUKENS	7/15/32

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
4302273	23.4640	STINGLEY, CHARLES P.	3/04/97	W.C.B.P.C./LUKENS	7/15/82
2616319	22.6990	STOLL, ROBERT E. & SHIRLE	1/19/99	STOLL	4/13/94
5302676	57.5000	STRATTON, DAVID G. & NORM	1/15/98	STRATTON	1/14/83
5322421	9.0000	STRATTON, DAVID G. & NORM	1/15/98	STRATTON	1/14/83
1608975	79.4800	THACKER, VERNON CLAY & TW	1/11/99	SAUTER	2/15/94
0117757	124.7700	THOMA, DONALD C. & MARY M	3/05/97	THOMA	7/13/82
0139050	173.4980	THOMAS, MARY K.		THOMAS	12/31/38
3502767	4.8800	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502775	19.3360	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502821	68.6500	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502848	85.7400	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502872	109.1800	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
5317746	100.7400	TRIPLE CREEK FARMS	2/03/98	TRIPLE CREEK FARMS	2/13/83
5303427	98.3800	ULRICH, MARILYN LEE & **	3/04/97	ULRICH	7/22/82
5303583	113.5000	VERBRYKE, HAZEL		VERBRYKE	9/25/95
7613229	129.7500	WAIKHOM, LTD.	2/28/97	WILSON	9/31/32
6300758	3.0800	WARNECK, MARJORIE A. & RO	2/21/97	BUSHELMAN	8/20/32
6300731	1.2900	WARNECKE, MARJORIE A. & R	2/21/97	BUSHELMAN	8/20/32
6300766	43.9000	WARNECKE, MARJORIE A. & R	2/21/97	BUSHELMAN	8/20/32
0110116	25.7190	WENTWORTH, JEFFREY R. ET	2/16/95	WENTWORTH	9/05/30
0137006	12.0000	WENTWORTH, JEFFREY R., TR	1/15/99	WENTWORTH	5/23/94
5315191	15.6130	WHITE, WANDA D		WHITE	2/15/96
5315204	45.9000	WHITE, WANDA D		WHITE	2/15/96
0119156	57.5710	WIGHT, ALLAN C.	1/22/98	WIGHT	10/11/38
7204213	119.0000	WILLIAMS, DENVER L. + VIR		WILLIAMS	7/23/96
7204205	77.0000	WILLIAMS, DENVER L. & VIR		WILLIAMS	7/23/96
7615965	45.0000	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/32

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIA_ DATE
7615973	28.1000	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/32
7615981	15.4400	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/32
7616007	36.5500	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/32
7616023	53.0000	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/32
7616015	18.0900	WILSON FRIENDLY MAPLE*	2/28/97	WILSON, ROBT.	7/13/32
2618893	44.1700	WOODLEY, LESTER A. & CHRI	2/19/97	WOODLEY	9/05/32
0105279	43.0000	WOOLLARD, WILBUR L JR &	4/04/97	WOOLLARD	9/27/32
2622157	49.6000	YERIAN, CAROL BURGESS	2/26/97	YERIAN & BURGESS	9/27/92
2612151	69.9300	ZFC, INC.	2/02/98	OEDER, ELVA	5/13/93
2612178	44.5067	ZFC, INC.	2/02/98	OEDER, ELVA	5/13/93
2612186	90.7073	ZFC, INC.	2/02/98	OEDER	5/13/93
TOTAL ACCOUNTS	281	TOTAL ACRES:	15878.5487		

Appendix B

Cultural Resource Agency Correspondence

Dr. David Snyder
Ohio Historic Preservation Office
567 East Hudson Street
Columbus, Ohio 43211-1030

January 28, 1999

Dear Dr. Snyder,

Enclosed is a copy of a Phase I Cultural Resource Management report by BHE Environmental, Inc. (BHE) of Cincinnati, for Dayton Power & Light (DP&L) of Dayton, Ohio. BHE's report covers areas potentially affected by DP&L's proposed construction work on replacement support structures for its new 345-KV transmission circuit, which will be located in DP&L's existing utilities corridor in Warren and Greene counties, Ohio.. The report consists of explanations and recommendations concerning BHE's Phase I background research, initial fieldwork survey, and subsequent deep test excavations along DP&L's transmission line corridor.

Copies of the report have been submitted to DP&L, who will submit the report to the Ohio Power Siting Board.

Enclosed also are completed site forms for new sites found by BHE during its cultural resources survey of DP&L's transmission line, including four in Warren County (33WA730, 33WA731, 33WA732 and 33WA733) and one in Greene County (33GR1116).

Should you have any questions, please contact me (mail, e-mail, and phone provided below).

Yours Sincerely,

Mr. Jim Wilson
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246
jwilson@bheenv.com
(513) 326-1500

cc: Mr. Philip Robertson, DP&L Engineering

From: Chris Bergman
To: Diane Hoeting, Eric Riekert, Ken Duerksen, Phil...
Date: Mon, Oct 4, 1999 11:50 AM
Subject: Conversations with P. Robertson and D. Snyder (OHPO)

10/04

Today I talked to Philip Robertson about the comments that Dave Snyder had on 09/27 2:45 pm about the CRM on DPL Foster-Bath. We covered the following points:

1) Dave Snyder said that he was concerned about cultural resource sites on these kinds of projects. He also stated that the OPSB appreciated close consultation with the OHPO.

2) Dave stated that BHE needed to find a way to report the results of the project scientifically given the small area examined at each location in the Phase I survey.

3) Dave stated that we needed to avoid equivocal statements about eligibility for any potentially significant sites we located. BHE needs to be careful how they describe the site vis a vis the limited area investigated. (This was in response to my comments that per previous discussion we were testing high probability locations only within the boundaries of the new pylon emplacements as specified by our client.)

4) Dave stated that our client will need to provide reasons as to why they must locate the pylon in a particular location. This was especially important if an archaeological site was involved.

5) The pros and cons of testing (particularly deep testing) must be considered. Will they be more damaging than simply emplacing the pylon? (DPL will provide BHE with an exact description of impact to potentially significant areas or site locations.)

6) Finally, Dave stated that a modified Phase II testing plan could be coordinated with the OHPO (given the small area of impact) if needed.

In my conversation with Phil I stated that only one (1) potentially significant cultural resource site was located during the survey.

Robertson, Philip

From: Robertson, Philip
Sent: Tuesday, October 12, 1999 4:09 PM
To: 'cbergman@bheenv.com'
Cc: 'DHoeting@bheenv.com'
Subject: FOSTER-BATH CULTURAL RESOURCE CONCERNS

October 12,1999

Chris,

The attached document is intended to address our recent discussions about the cultural resources concerns on the Foster-Bath Transmission Line Project. If you have any further questions or issues to discuss, please call.

Thanks,
Phil

FB Cultural Resources Concerns...

FOSTER-BATH 345KV TRANSMISSION LINE

CULTURAL RESOURCE CONCERNS

Five sites along the Foster-Bath line have been identified as areas with cultural resources concerns. Of primary interest is determining how much disturbance to the ground, and potentially to cultural resources, will occur during installation and operation of the line.

The new pole structures to be installed at these sites (identified by pole number) are described as follows:

Pole 1051: Single, 191 ft. pole
1 degree angle
8 ft. diameter by 37 ft. deep foundation
70 cubic yd. excavation/concrete
New pole 25 ft. north of existing tower

Pole 1136: Two, 140 ft. poles
19 degree angle
Two, 9.5 ft. diameter by 56.5 ft. deep foundations
150 cubic yd. excavation/concrete each, 300 cubic yd. total
New poles beside existing tower

Pole 1137: Single, 142 ft. pole
1 degree angle
7.5 ft. diameter by 41 ft. deep foundation
68 cubic yd. excavation/concrete
New pole 25 ft. north of existing tower

Pole 1139 Single, 150 ft. pole
Tangent
7 ft. diameter by 41 ft. deep foundation
60 cubic yd. excavation/concrete
New pole 30 ft. north of existing tower

Pole 1168: Two, 156 ft. poles
32 degree angle
One, 9.5 ft. diameter by 41 ft. deep foundation
One, 9.5 ft. diameter by 41.5 ft. deep foundation
225 cubic yd. total excavation/concrete
New poles beside existing tower

For each site, the surface area for about 40 feet around each pole/foundation location will be disturbed by construction equipment. The equipment used will include a drilling rig, a rubber wheeled crane, a track crawler crane, concrete trucks, a bulldozer, a backhoe, and

several material and pick-up trucks. Use of this equipment in general can be expected to disturb the topsoil down to perhaps 9 inches to a foot deep at each site and along the right of way to each site. Since all the noted sites and access locations are in present or past farm cultivation areas, the construction equipment is not expected to disturb the area more than typical farming operations already have.

At each pole/foundation location a circular shaft will be augured into the ground with the drilling rig. The foundations will be of the diameter and depths shown above for each site, and the amount of material excavated (in cubic yards) will be approximately as noted. The excavated material will be replaced by placing steel reinforcing and pouring concrete (of approximately the same volume as the excavated material) in the augured hole to form a foundation. Later the steel pole will be set on this foundation. The excavated soil/rock material will either be spread around the site or hauled off, whichever is determined to be in the best interest of the property owner and/or is most environmentally appropriate at each site. The final step in foundation installation will be to drive one or more ground rods ($5/8^{ths}$ inch diameter) into the soil adjacent to the concrete foundation. These ground rods will be connected to the steel poles by a copper wire placed in a narrow, two-foot deep trench between the ground rod and the pole foundation.

Also at each site, the existing tower will be removed. To remove a tower, the steel lattice above ground will be disassembled, and then a backhoe will dig around each leg location to a depth of three or four feet so the top part of each leg may be taken apart and removed. Once that is done the excavated soil will be replaced where each leg top section was removed.

All other work required at each site will be above grade and the only disturbance to the earth will be the equipment and people working on the surface as noted previously.

The steel poles and their reinforced concrete caisson foundations need to be located where they are identified to be on the drawings to achieve a sound engineering design and an economical line installation. The new poles have been located as close as reasonably possible (within safe construction and operating parameters) to existing towers to minimize new impacts to the area. Some minor variation (along the right of way up to 100-200 feet) of tangent and one-degree angle pole locations (#1051, #1137, #1139) can be made without major cost or design impacts to the line. Any such minor change in location of these structures would readily be done if this reduced the environmental impacts of the line. Relocation of angle structures (#1136, #1168) however, cannot be accomplished without adding greatly to the costs of construction, and this would also require obtaining new right of way that may or may not be available.

Elimination of poles from the identified flood plain areas does not appear practical due to the apparent extent of these flood plains. To remove #1051 from the flood plain could be done by redesigning structures for present pole locations #1050 and #1052 to be tall enough to span the line across the river valley. Resulting pole heights would be approximately 210 to 230 feet which makes them very expensive and also tall enough

that aircraft lighting would probably be required to comply with FAA regulations. Poles adjacent to #1050 and #1052 would also need to increase in height. The resulting modifications required to eliminate #1051 are roughly estimated to cost between $100,000 and $200,000.

To remove the other poles noted from the flood plain areas would require some type of relocation of the line to a new right of way and alignment. To do so would require a new design, obtaining new right of way if available, increased construction costs, and impacting the environment with the line in a new location where there presently is no line like exists on the present route. Additionally, the line must still cross the Little Miami River somewhere in the vicinity of the existing crossings, and finding a location where the structures could be located to span the flood plain at a new location poses the same problems noted above for structure #1051. Overall, removal of any or all of structures #1136, #1137, #1139 or #1168 from flood plains could result in additional costs of $200,000 to $3,000,000 which does not appear like a prudent or reasonable thing to do.

P. D. Robertson
10/12/99

From: Chris Bergman
To: Diane Hoeting
Date: Thu, Oct 14, 1999 3:29 PM
Subject: Contact report with Dave Snyder, OHPO, 10/14 1:50 pm

At the request of Phil Robertson of DP&L, Chris Bergman called Dave Snyder of the OHPO to discuss the problem of deep testing and potential Phase II testing at five pole replacement locations: 1051, 1136, 1137, 1139, and 1168. The locations all coincide with floodplain settings; in addition, a potentially significant prehistoric lithic scatter site was identified at location 1051.

Dave was informed of the project impacts using the narrative provided by Phil Robertson. After considering the impacts, Dave stated the following:

1) That the impacts were generally more than he expected, but his office wanted to facilitate the work of electric utility companies by not demanding too much in terms of a project's scope-of-work.

2) Dave further stated that he was concerned about the potential presence of buried landforms and prehistoric occupations on floodplains.

3) To address both of the above issues he suggested the following strategy:

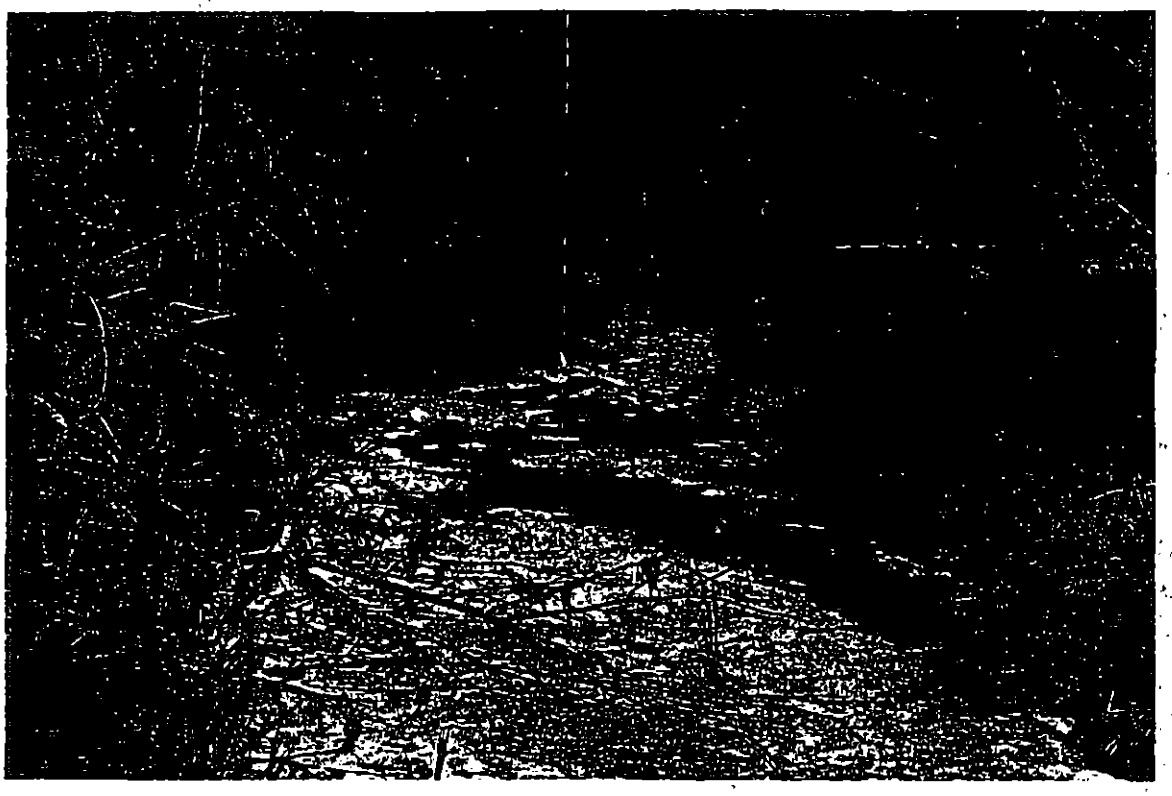
a) excavate a 1m x 1m unit to a depth of 2-3ft alongisde the tower and another at the pole replacement hole (or holes) location;
b) hand-screen a quadrant of sediment at each unit (0.25m2);
c) profile the walls and check for buried soil horizons; and
d) for pole replacement area 1051, Dave stated that additional intensive shovel testing would be needed to demonstrate that no
surface deposits would be impacted by vehicular traffic.

Christopher Bergman, Ph.D., RPA
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, Ohio 45246

phone 513-326-1167 fax 513-326-1178
email: cbergman@bheenv.com

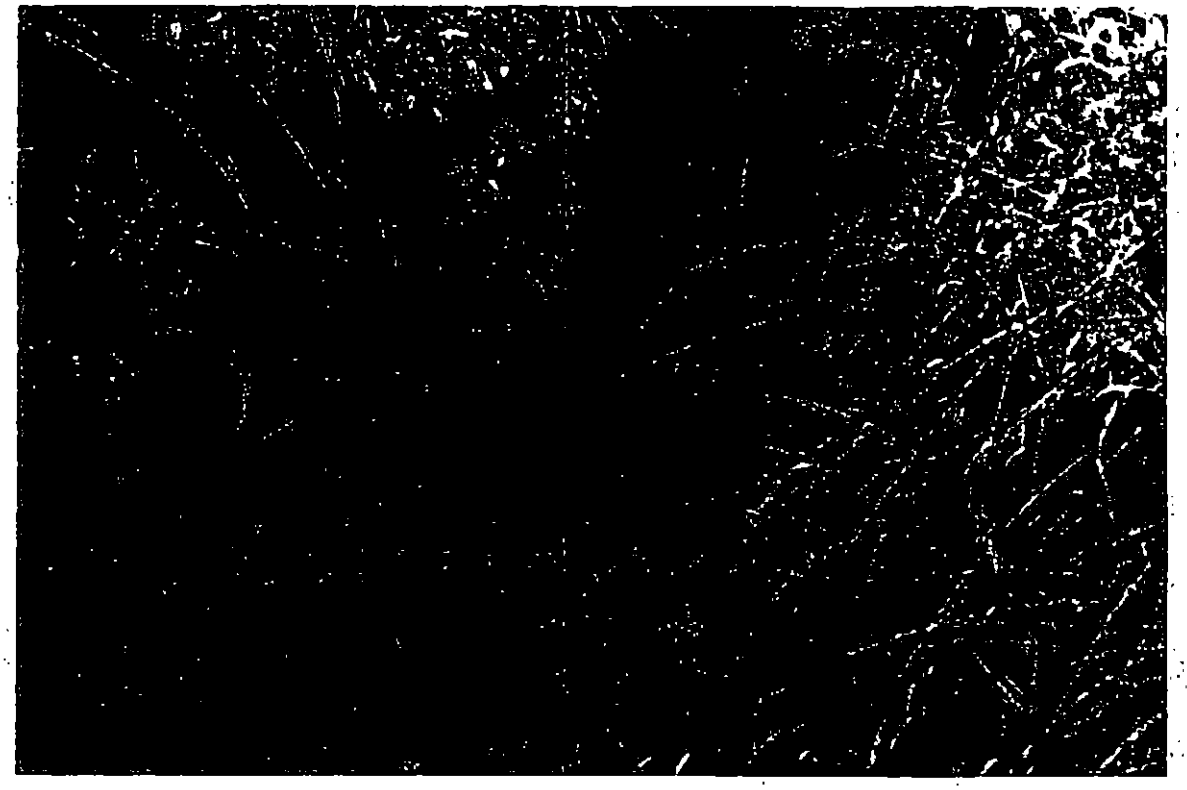
Appendix C

Stream Datasheets and Photographs



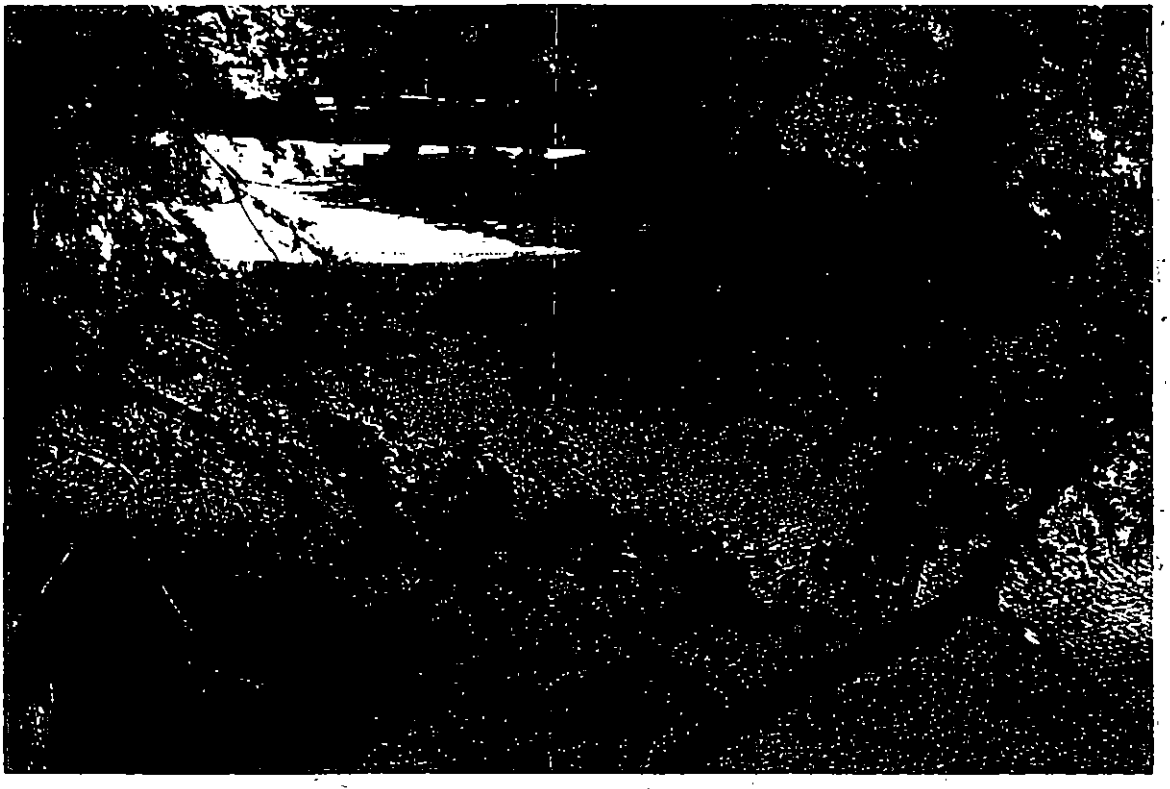
Photograph 1: Salt Run.

Photograph 2: Hen Run.

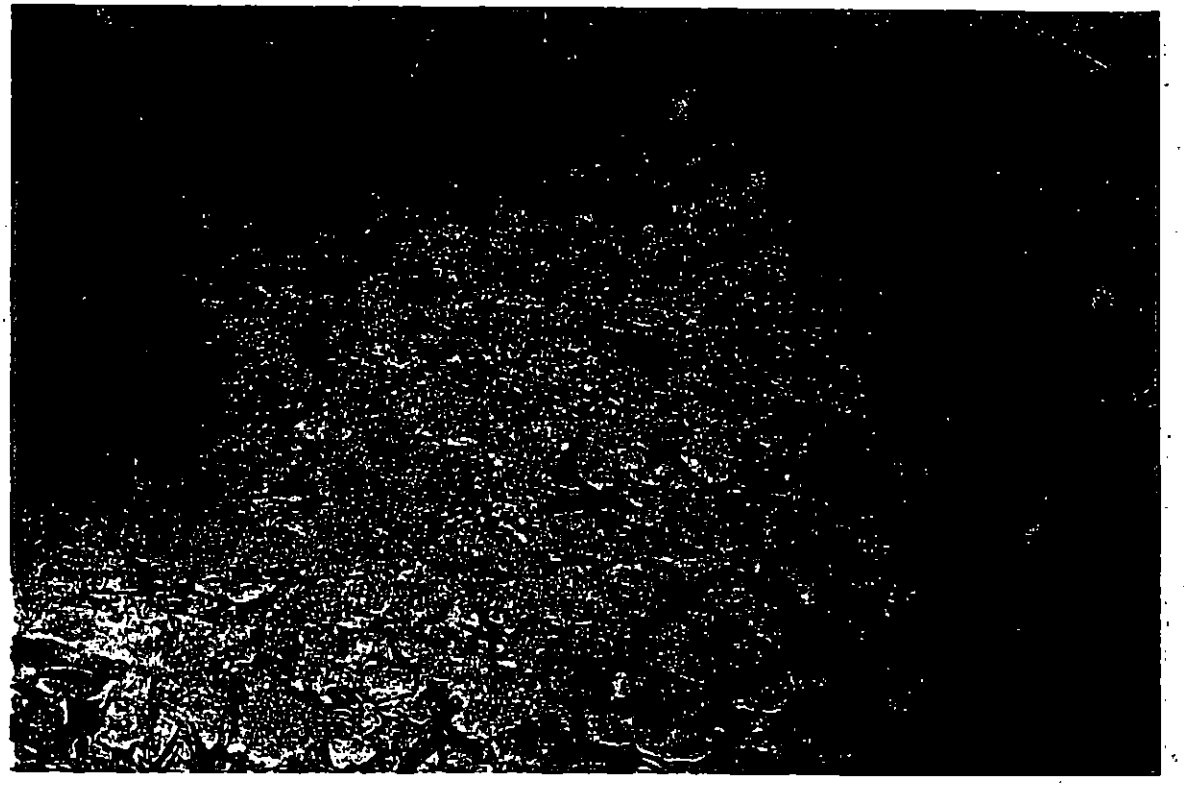


Photograph 3: Bigfoot Run.

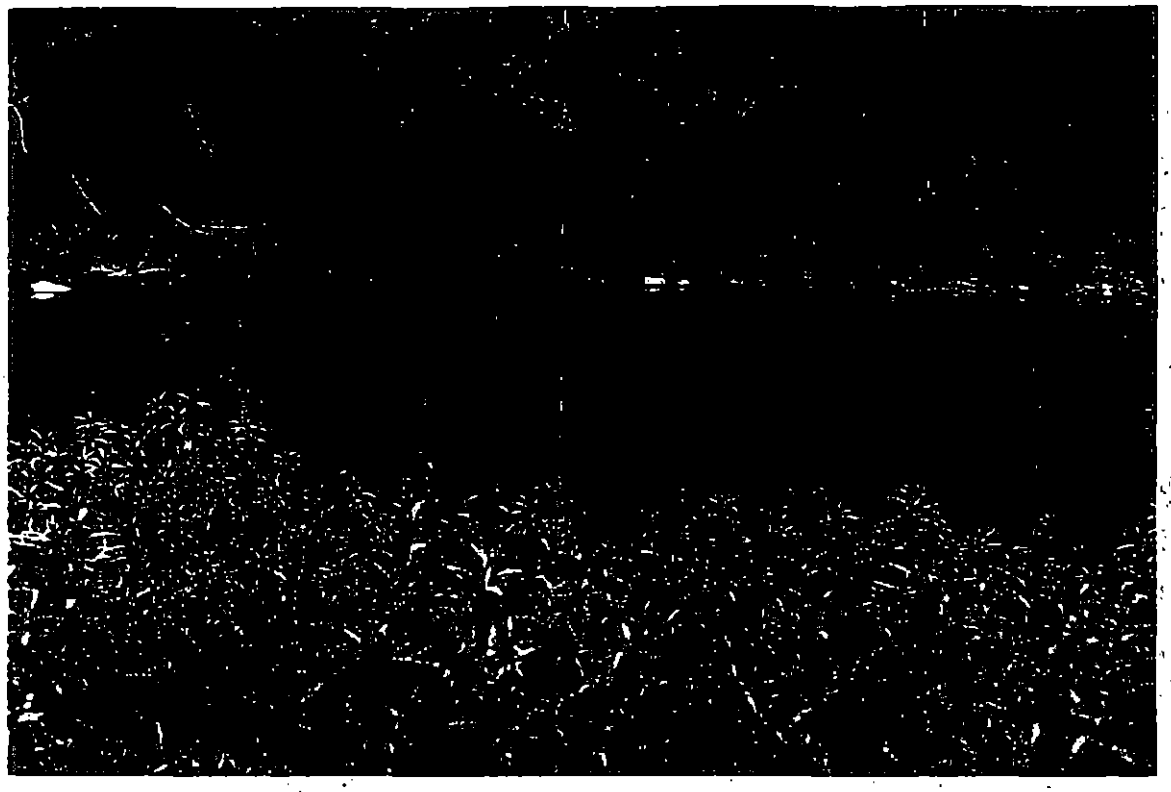
Photograph 4: Grays Run.



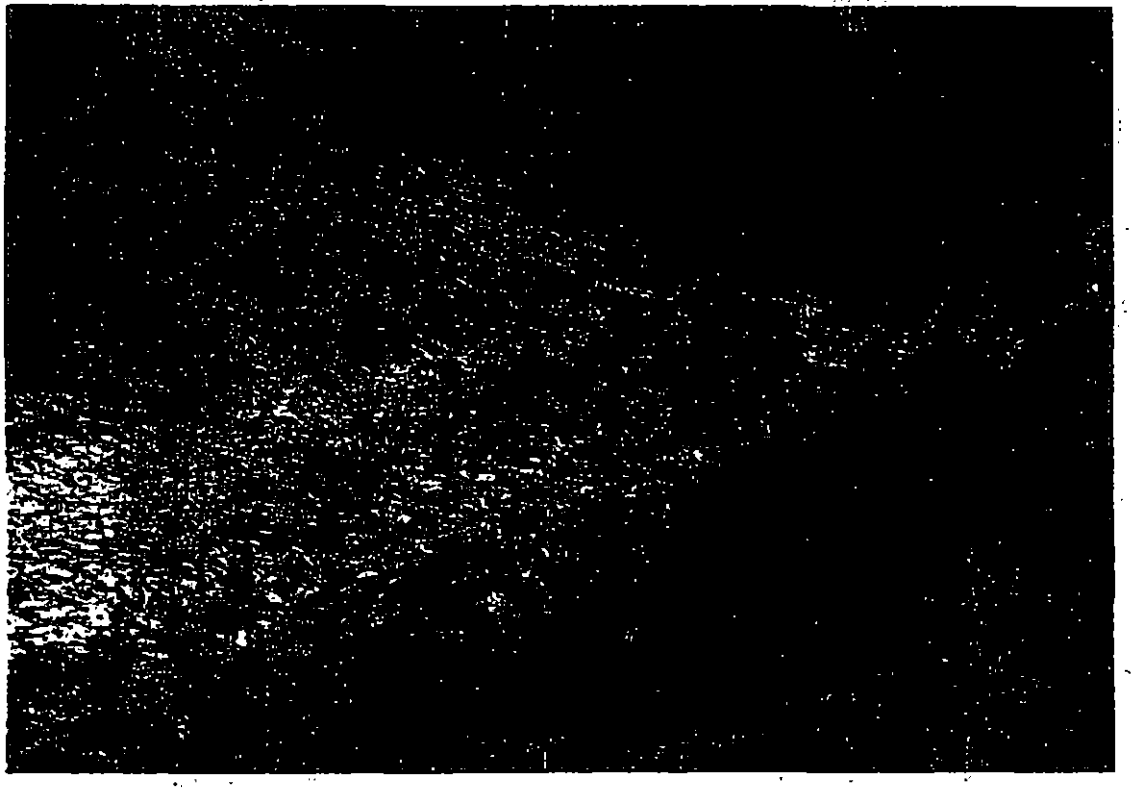
Photograph 5: Little Miami River (second crossing).



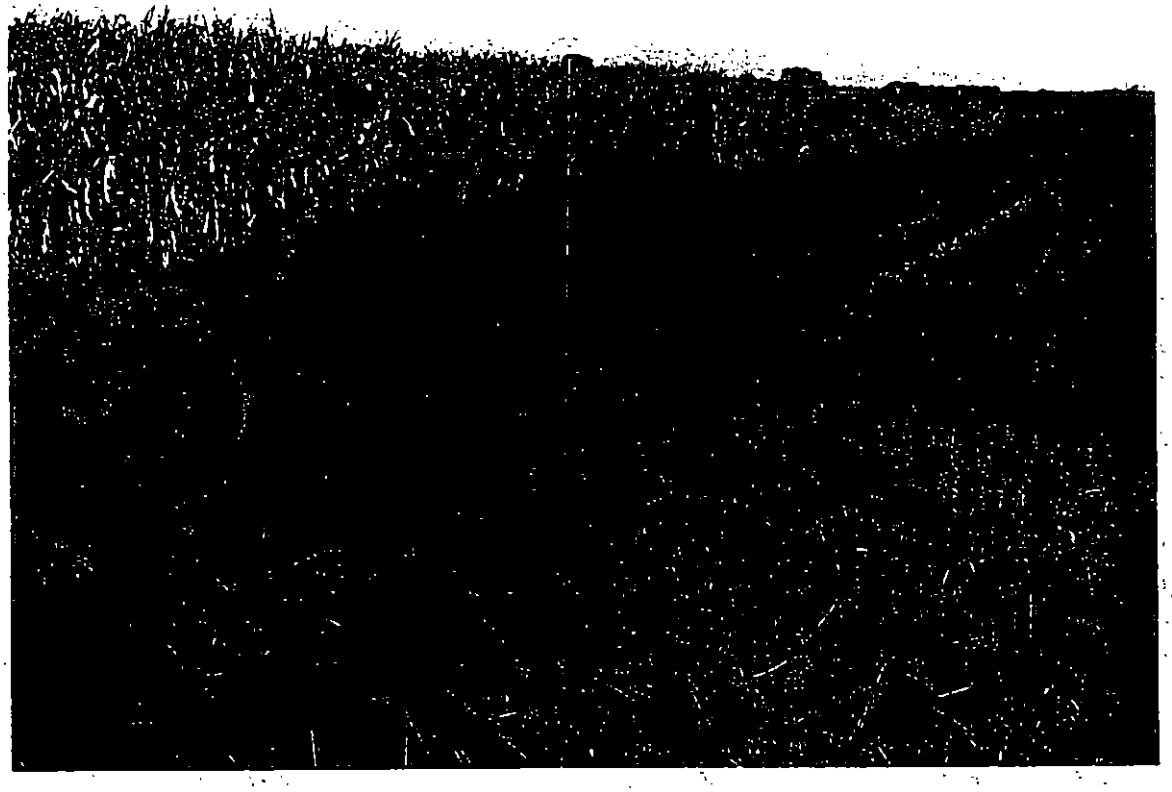
Photograph 6: Olive Branch.



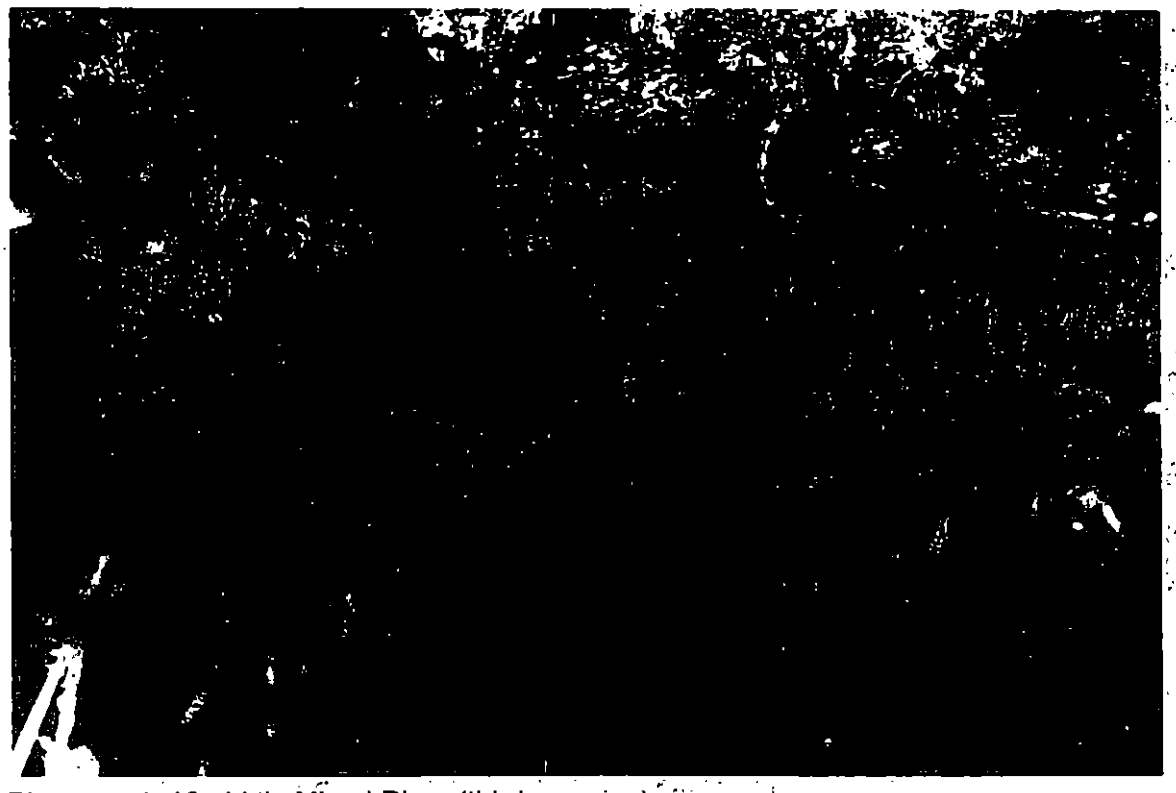
Photograph 7: Caesar Creek.



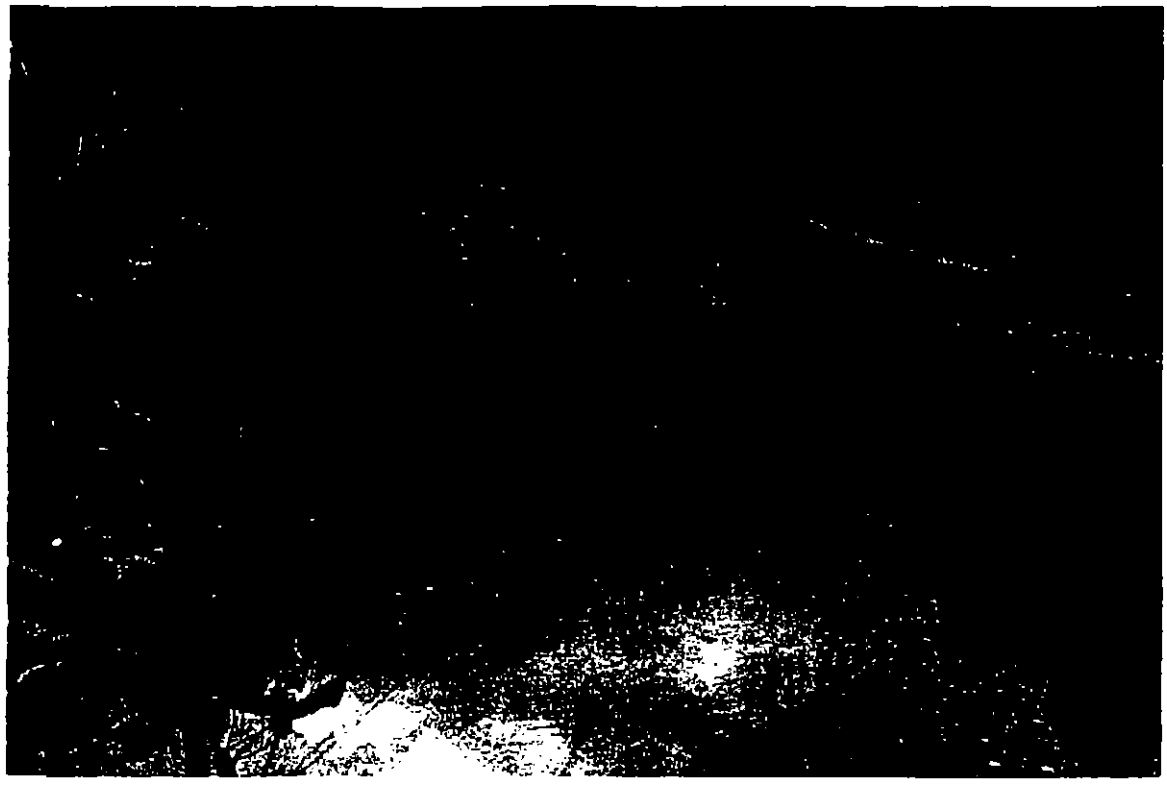
Photograph 8: Shaffers Run.



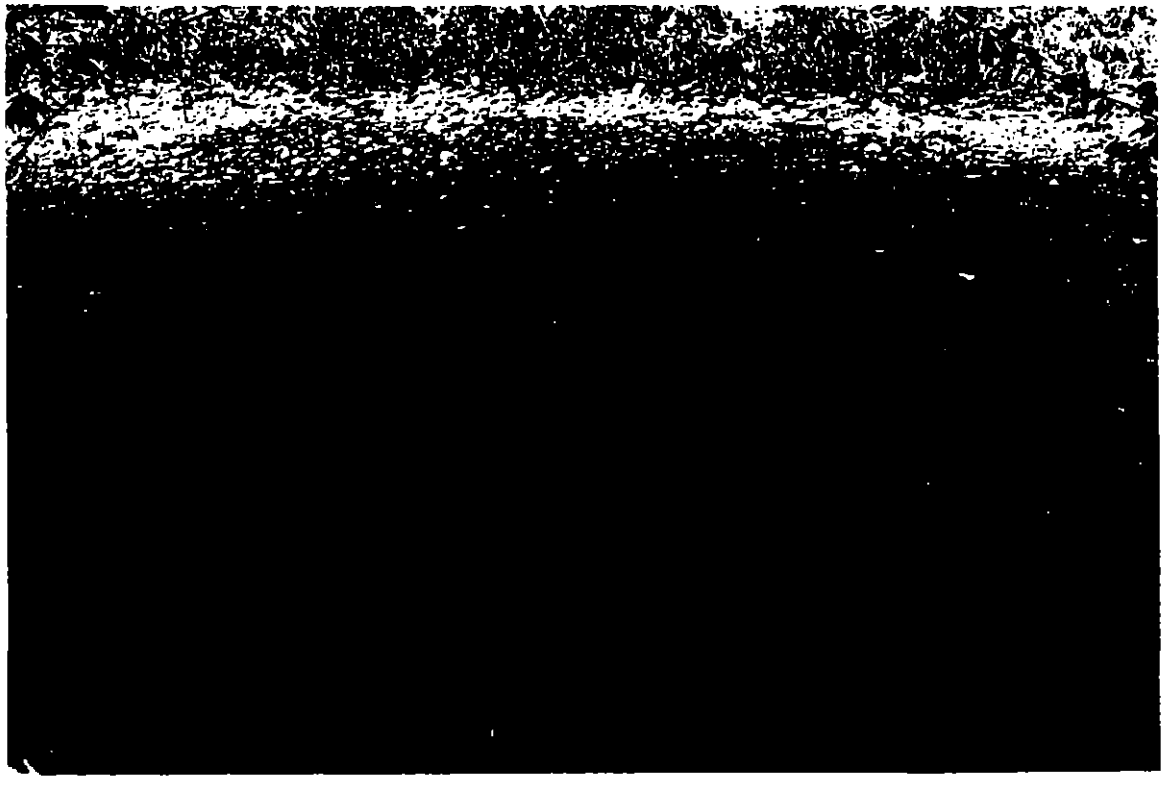
Photograph 9: Furnas Ditch.



Photograph 10: Little Miami River (third crossing).



Photograph 11: Little Miami River (third crossing).



Photograph 12: Little Miami River (fourth crossing).

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 1 Project #: 173.05 Date: 9-8-99

Project Name: DPL Foster-Bath Location: Warren Co.

~~Stream Name and~~/or (Tributary of:) Little Miami River

Field Crew: L. Brewer / M. Little Photograph (Roll / #): 1-1

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 Ft

Width of Riparian Zone N/A Left Bank _____ Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ✓ No ___ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) Dry Run

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe Bank

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to ~~Riparian Zone~~ stream

Forest

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 2 Project #: 173.05 Date: 09-08-19

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ Tributary of: Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 1-2

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 15 Width of Water 10

Depth of Water 3" Range 0-6 Average

Depth of Channel 3ft

Width of Riparian Zone 20 South Left Bank 50 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles, _____ Glides, _____ Runs (ALMOST DRY RUN)

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

FOREST ALONG ONE SIDE / RIGHT OF WAY ALONG OTHER

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 3 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 40 ft Width of Water 3ft - DRY RUN

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone 20 Left Bank 20 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, _____ Limestone, ___✓___ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone FOREST

Describe Land Use Adjacent to Riparian Zone FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 4 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER - BATH Location: WARREN CO.

~~Stream Name and~~/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-5

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft - DRY RUN

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 200 Left Bank 200 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, _____ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs ✓ DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

oldfield

Describe Land Use Adjacent to Riparian Zone

Forest to South, old field to north

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 5 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER - BATH Location: WARREN CO.

~~Stream Name~~ and/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-7

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Width of Water 8

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? _____Yes _____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

NONE (DEEPLY CUT BANK)

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 6 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___✓___ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST ; SECONDARY GROWTH - MATURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

DRAINING NORTH DOWN MTS

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 7 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-13

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST; SECONDARY GROWTH - MATURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 8 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-14

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3 ft

Depth of Water 1" Range 0 - 1" Average

Depth of Channel 20

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

_____ Gravel, _____ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs

DRY RUN EXCE
FOR PUDDLE

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

NONE - STEEP BANK

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

FOREST

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 9 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-15

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe STEEP BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 10 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-16

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 10 ft

Depth of Water 0 Range 0 Average

Depth of Channel 15

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 11 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN

~~Stream Name and~~/or Tributary of: Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-17

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 12 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Salt Run

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 1-18

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 Width of Water 8 ft

Depth of Water 2" Range 0-2" Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank 50 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, _____ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ___✓___ Pools, _____ Riffles, (ALMOST DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / MEADOW

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 13 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-22

I. Stream Flow:

____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 6

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock ____ Sandstone, ✓ Limestone, ____ Shale,

____ Other ____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ____ No ✓ Don't Know

Additional Substrate Components ____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ____ Pools, ____ Riffles, ____ Glides, ____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes ____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

POWER LINE RIGHT OF WAY

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 14 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name ~~and/or Tributary~~ of: SALT RUN

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-23

I. Stream Flow:

__✓__ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 15 ft

Depth of Water 1" Range 0-1" Average

Depth of Channel 6 ft

Width of Riparian Zone 25 Left Bank 50 Right bank

III. Substrate:

Type of Bedrock _____Sandstone, __✓__ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No ___Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____Gravel, _____Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone
POWERLINE RIGHT OF WAY

Describe Land Use Adjacent to Riparian Zone
POWERLINE RIGHT OF WAY

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 15 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN

~~Stream Name and/or~~ (Tributary of) Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-24

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 4 ft

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST AND POWERLINE RIGHT OF WAY

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 16 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Hen Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-1

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 10 ft

Depth of Water 3" Range 0-6" Average

Depth of Channel 3 ft

Width of Riparian Zone 100 Left Bank 100 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / PIPELINE RIGHT OF WAY

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 17 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name~~ and/or (Tributary of): Hen Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-3

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft. Width of Water 8 ft

Depth of Water 3" Range 0-6" Average

Depth of Channel 2 ft

Width of Riparian Zone 20 ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 18 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover _____ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 19 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-11

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3ft - 10ft

Depth of Water 0 Range 0 Average

Depth of Channel 1ft - 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___✓ Overhanging Vegetation, ____ Rootwads,

___✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 20 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of): Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-12

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft

Depth of Water 0 Range 0 Average

Depth of Channel 1.5 ft

Width of Riparian Zone 30 ft Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs

DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / PASTURE

Describe Land Use Adjacent to Riparian Zone

PASTURE IN PIPELINE RIGHT OF WAY / FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 21 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-13

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 5 ft

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 0 Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / PASTURE

Describe Land Use Adjacent to Riparian Zone

OLD FIELD SURROUNDED BY FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 22 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-16

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 4 ft

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - VERY ERODED

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 23 Project #: 173.05 Date: 09-13-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-17

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft

Depth of Water 0 Range 0 Average

Depth of Channel 2.5 ft

Width of Riparian Zone 40 ft Left Bank 50 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD / RESIDENTIAL

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 24 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

Stream Name ~~and/or Tributary of:~~ Bigfoot Run

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 2-18

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft. Width of Water 6 ft

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 26 Project #: 173.05 Date: 10/7/99

Project Name: DPL Foster-Bath Location: Warren County

~~Stream Name and/or~~ (Tributary of: Little Miami River

Field Crew: L. Brewer / M. Little Photograph (Roll / #): no photo taken

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Width of Water 8 Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone 25 ft Left Bank 25 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ___ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, Dry Run

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe _____

Has the Stream been Channelized ? _____Yes ___✓___ No

Which of these Characters Apply ?

___ No sinuousity, ___✓___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___✓___ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

Dense

Describe Land Use Adjacent to Riparian Zone

old field

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 27 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-2

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 28 Project #: 173.05 Date: 09-14-97

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: LITTLE MIAMI RIVER

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): no photo

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 300 ft Width of Water 200 ft

Depth of Water 2 ft Range 0-2ft Average

Depth of Channel 15

Width of Riparian Zone 50 (south) Left Bank 300 (north) Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ✓ No ___ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ✓ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? _____Yes _____ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone old field

Describe Land Use Adjacent to Riparian Zone

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 29 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 3-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 10 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone 0 Left Bank 0 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 30 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1.5 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD / FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 31 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-5

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 32 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-6

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 33 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-8

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 34 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-9

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 25 ft Left Bank 25 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 35 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

Stream Name ~~and/or Tributary of~~: Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-12

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft

Depth of Water 6" Range 0-12" Average

Depth of Channel 2.5 ft

Width of Riparian Zone 25 Left Bank 25 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 36 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 5 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

PHOTO #7

STREAM DATA SHEET
(fill in blanks or circle all appropriate respo

Stream #: 37 Project #: 173.05 Date:

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name ~~and/or Tributary of~~: Grays Run

Field Crew: L.BREWER / M.LITTLE Photograph (Roll / #): 3-14

I. **Stream Flow:**

_____ perennial ✓ ephemeral

II. **Measurable Characteristics:**

Width of Channel 15 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. **Substrate:**

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. **Stream Morphology:**

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs

DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 38 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Grays Run

Field Crew: L.BREWER / M. LITTLE Photograph (Roll / #): 3-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 25 ft Left Bank 25 ft Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 39 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Halls Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-17

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 40 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Halls Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-18

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 41 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of): Halls Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-19

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 3 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 42 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Halls Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-22

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2

Width of Riparian Zone 100 ft Left Bank 0 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? _____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

WETLAND - PEM

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 43 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-25

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 0 Left Bank 0 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 44 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4 - 1

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft+ Width of Water 10 ft+ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel ~1 ft+

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, _____Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? _____Yes ___✓___ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 45 Project #: 173.05 Date: 05-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-2

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 46 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-3

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 47 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Ft Width of Water 6 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 Ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 48 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-5

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 49 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-6

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 50 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-7

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft DryRun

Depth of Water 0 Range 0 Average

Depth of Channel 8 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 51 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-7

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 5 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 52 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-8

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 54 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft DryRun

Depth of Water 0 Range 0 Average

Depth of Channel 5 ft

Width of Riparian Zone NONE Left Bank.. NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 53 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): no photo

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 8 ft DryRun

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 55 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

(Stream Name) ~~and/or Tributary of~~: LITTLE MIAMI RIVER

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-11

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 150 ft Width of Water 130 ft

Depth of Water 3 ft Range 2ft - 4ft Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 56 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 5 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 57 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-14

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 58 Project #: 173.05 Date: 09-18-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs

DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 59 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-16

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 0 Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 60 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of:) Ollie Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-17

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft+ Width of Water 3 ft+ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 25 ft+

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 61 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-18

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 12 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs (DRY RUN)

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 62 Project #: 193.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or (Tributary of) Olive Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-20

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 40 ft Width of Water 20 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? _____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 63 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of) Olive Branch

Field Crew: L.BREWER/M.LITTLE Photograph (Roll / #): 4-21

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Ft Width of Water 4Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components ___✓___ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST / OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 64 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of:) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-22

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 65 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-23

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 5 Ft Width of Water 2 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ✓ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 6.6 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 4-24

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___✓ Yes _____ No ___Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs (DRY RUN)

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 67 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

(Stream Name ~~and/or Tributary of~~: CAESAR CREEK

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-3

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 100 ft Width of Water 50 ft

Depth of Water 2 ft Range 1ft - 3ft Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ✓ Aquatic Macrophytes

Describe Riparian Zone FLOOD PLAIN

Describe Land Use Adjacent to Riparian Zone FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 68 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): CAESAR Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-8

I. **Stream Flow:**

_____ perennial ___✓___ ephemeral

II. **Measurable Characteristics:**

Width of Channel 10 ft Width of Water 6ft DryRun

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. **Substrate:**

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, ___✓___Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. **Stream Morphology:**

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 69 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Ceasar Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ___✓___ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 70 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Ceaser Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-12

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 FT Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 71 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Ceaser Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5 - 13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

CHANNEL DEPTH?

STREAM DATA SHEET

(fill in blanks or circle all appropriate resp

Stream #: 72 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 Ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel _____

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, _____ Limestone, ✓ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover _____ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 73 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph PHOTO?

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD / PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 74 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-16

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 12 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 7 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components ✓ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 75 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-17

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 9 ft Width of Water 5 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 20 ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 76 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-18

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2ft

Width of Riparian Zone 20ft Left Bank 20 FT Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? _____Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone OLD FIELD

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 77 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER Photograph (Roll / #): 5-19

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 4 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 78 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-20

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 79 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-22

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 15 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 80 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-23

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 81 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Shaffers Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-24

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 40 ft Width of Water 20 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 8 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ✓ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? _____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 82 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Furnas Ditch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-2

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft

Depth of Water 10" Range 6"-12" Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

AGRICULTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

CHANNEL DEPTH

STREAM DATA SHEET

(Fill in blanks or circle all appropriate responses)

Stream #: 83 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN

Stream Name ~~and/or Tributary of~~: LITTLE MIAMI River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-3

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 125 ft Width of Water 80 ft

Depth of Water 2 ft Range 1-3 ft Average

Depth of Channel _____

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

AGRICULTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 84 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L.BREWER/M.LITTLE Photograph (Roll / #): 6-8

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Ft Width of Water 4 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 Ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____Gravel, ___✓___Sand, ___✓___Silt, ___✓___Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs — DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 85 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name~~ and/or (Tributary of) Little Miami River

Field Crew: L.BREWER / M.LITTLE Photograph (Roll / #): 6-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft+ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 86 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

Stream Name and/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-11

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 87 Project #: 173.05 Date: 09/23/99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-12

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 7 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ____✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 88 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-14

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 8 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 99 Project #: 173.05 Date: 09-24-99

Project Name: DPL FOSTER-BATH Location: GREENE

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 90 Project #: 173.05 Date: 09/26/99

Project Name: DPL FOSTER-BATH Location: GREENE

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-16

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 8 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

WATER DEPTH ?
CHANNEL DEPTH ?

STREAM DATA SHEET

(Fill in blanks or circle all appropriate responses)

Stream #: 91 Project #: 173.05 Date: 09-24-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

Stream Name and/or (Tributary of): Little Miami River

Field Crew: L.BREWER / M.LITTLE Photograph (Roll / #): 6-17, 6-18

I. **Stream Flow:**

✓ perennial _____ ephemeral

II. **Measurable Characteristics:**

Width of Channel 25 ft. Width of Water 15 ft

Depth of Water 8 in Range 6-10 in. Average

Depth of Channel 7 ft

Width of Riparian Zone 25ft Left Bank NONE Right bank

III. **Substrate:**

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. **Stream Morphology:**

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 92 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

Stream Name and/or Tributary of: LITTLE MIAMI

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-1

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 100 ft Width of Water 60 ft

Depth of Water 3 ft Range 2 ft - 4 ft Average

Depth of Channel 6 ft

Width of Riparian Zone 50 ft+ Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - ESPECIALLY NORTH SIDE

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 93 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-2

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 94 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L.BREWER / M. LITTLE Photograph (Roll / #): 7-3

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 95 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name~~ and/or (Tributary of:) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7 - 4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10ft Width of Water 6ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ✓ Yes _____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 96 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-5

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft+ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft+

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs (DRY RUN)

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD / SHRUB

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 97 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-6

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD/SHRUB

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 98 Project #: 173.05 Date: 09-29-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-7

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 12 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 99 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-8

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 0 Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 5 ft

Width of Riparian Zone 10 ft Left Bank 10 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 100 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-9

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Width of Water _____ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 101 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 8 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ___✓___ Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 102 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-11

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 20 ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 103 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-12

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3+ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs } DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 104 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 Ft Width of Water 2 Ft Dry Run

Depth of Water 12" Range 8" Average

Depth of Channel 2+t

Width of Riparian Zone 10Ft Left Bank 20Ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, ___✓___ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 105 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO.

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-14

I. **Stream Flow:**

____ perennial ✓ ephemeral

II. **Measurable Characteristics:**

Width of Channel 17 ft Width of Water 12 ft

Depth of Water 6" Range 3" - 11" Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. **Substrate:**

Type of Bedrock ____ Sandstone, ✓ Limestone, ____ Shale,

____ Other ____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ____ No ✓ Don't Know

Additional Substrate Components ____ Boulder, ____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ____ Organic

IV. **Stream Morphology:**

Which of these Characters Occur ? ____ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes ____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

CORN FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 102 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of:) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-15

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 10 ft

Depth of Water 3" Range 1" - 3" Average

Depth of Channel 5 ft

Width of Riparian Zone 200 ft Left Bank 200 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 107 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

Stream Name ~~and/or Tributary of:~~ LITTLE MIAMI River

Field Crew: L.BREWER / M.LITTLE Photograph (Roll / #): 7-16

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 50 ft Width of Water 20 ft

Depth of Water 1 ft Range 2ft - 6ft Average

Depth of Channel 6ft

Width of Riparian Zone 200ft Left Bank 200ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 108 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of): Beaver Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7 - 17

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 2 ft Dry run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 109 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Beaver Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-18

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft dry run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___Gravel, ___✓___Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 110 Project #: 173.05 Date: 10-01-99

Project Name: DPL FOSTER BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of): Beaver Creek

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 7-23

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

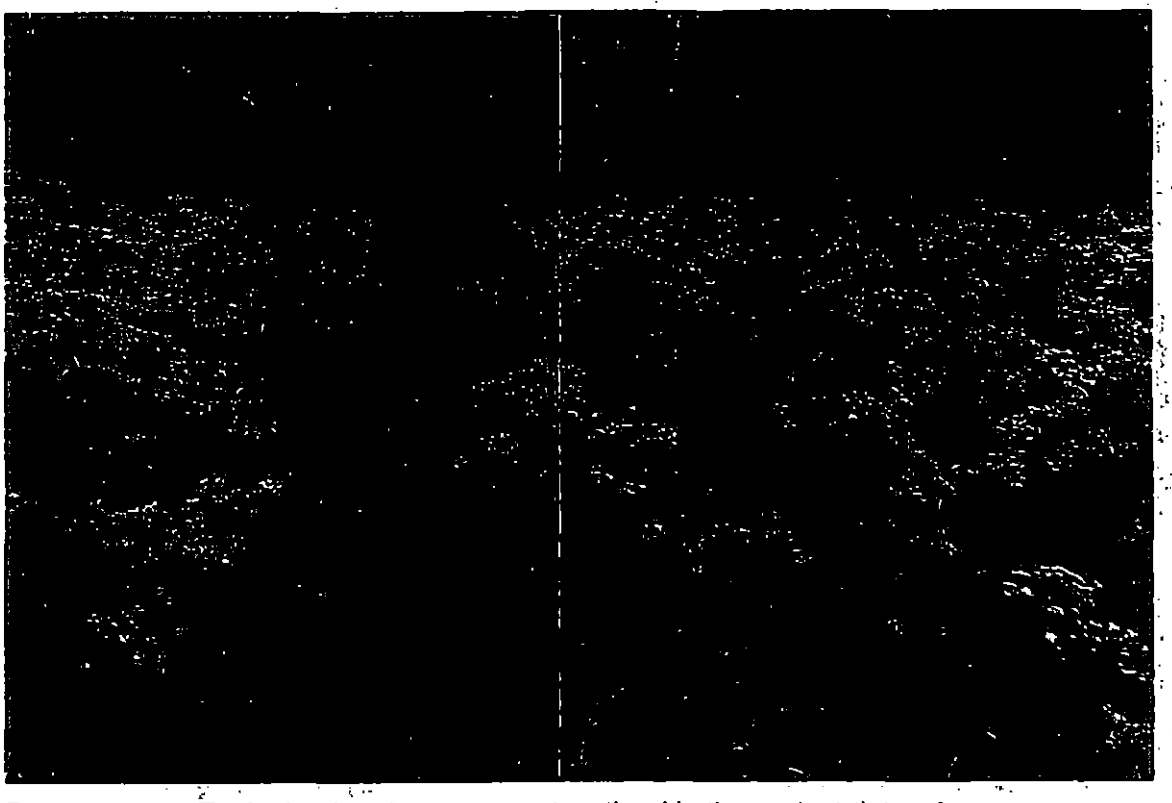
Describe Land Use Adjacent to Riparian Zone RESIDENTIAL

Describe any Observable Noteworthy Conditions Upstream or Downstream

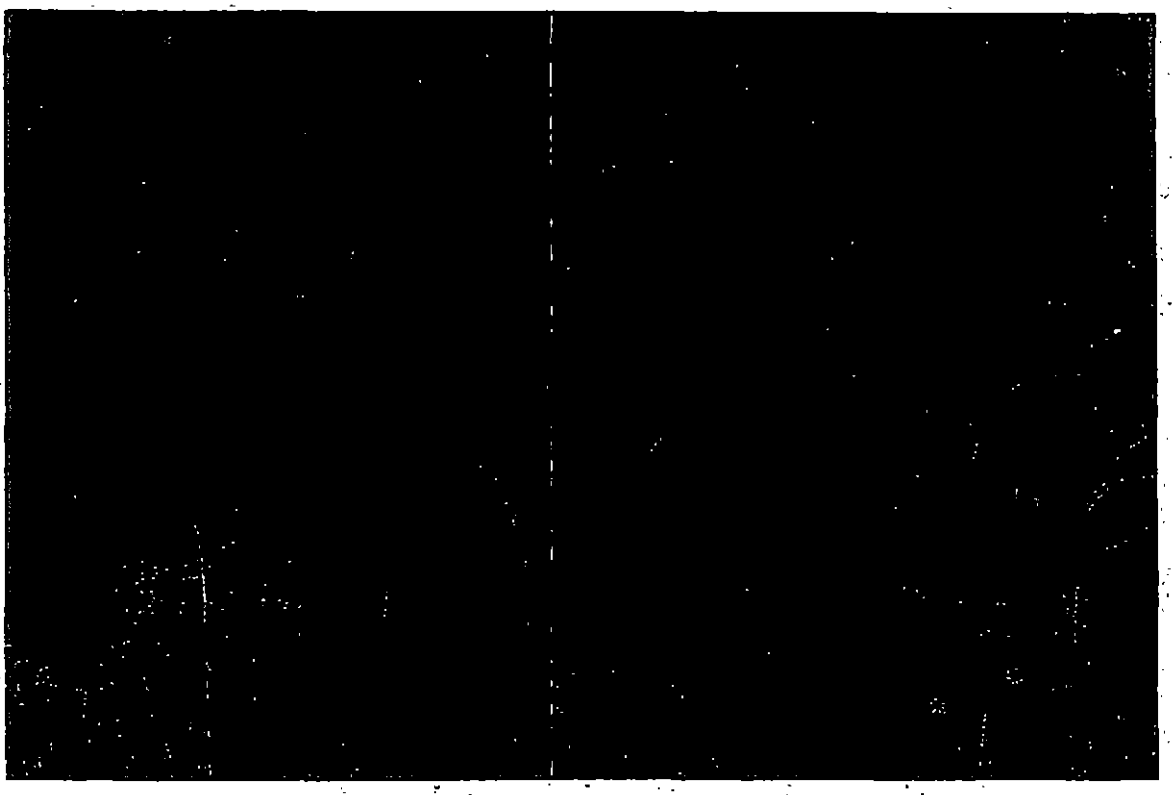
Photograph and/or Drawing

Appendix D

Wetland Data Sheets and Typical Photographs



Photograph1: Typical palustrine emergent wetland in the project right-of-way.



Photograph 2: Typical palustrine scrub-shrub wetland in the project right-of-way.

Plot #: 1

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Cinnia arundinacea	Herb	FACW+	6		
3. Euthamia graminifolia	Herb	FAC	7		
4. Equisetum hyemale	Herb	FACW	8		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-6	A	10YR 5/4	-	-	silt-loam
7-12	B	5YR 4/1	7.5 YR 4/6		silt-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 2

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Eupatorium rugosum	Herb	FACU+	6.		
3. Laportea canadensis	Herb	FACW	7.		
4. Pilea pumila	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 75%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	1%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	7.5 YR 5/8	10%	clay-loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low Chroma
- ___ Concretions
- ___ High Organic Content in Surface Layer of Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 3

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Lysmachia nummularia	Herb	FACW+	6.		
3. Leersia orysoides	Herb	OBL	7.		
4. Pilea pumila	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks	X	Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silt-loam (some organic)

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low Chroma
- ___ Concretions
- ___ High Organic Content in Surface Layer of Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 3

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Lysmachia nummularia	Herb	FACW+	6.		
3. Leersia orysoides	Herb	OBL	7.		
4. Pilea pumila	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks	X	Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silt-loam (some organic)

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 4

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/9/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Junus effusus	Herb	FACW+	5		
2. Typha latifolia	Herb	OBL	6.		
3. Panicum sp.	Herb	-	7.		
4. Sagittaria latifolia	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks	X	Local Soil Survey Data	
Drift Lines	X	FAC-Neutral Test	
Sediment Deposits	X	*Other (explain on back of form)*	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	5G 4/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 5

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/9/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. *Phalaris arundinacia*	Herb	FACW+	5		
2. Typha latifolia	Herb	OBL	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	2.5YR	7.5Y 3/4	10%	clay loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 6

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Euthamia graminifolia	Herb	FAC	6.		
3. Agrimonia parviflora	Herb	FAC	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1		-	clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 7

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Bidens sp.	Herb	-	7.		
4. Asclepias incarnata	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits	X	Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	2 inches	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 8

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Agrostis alba	Herb	FACW	6.		
3. Bidens sp	Herb		7.		
4. Juncus tenuis	Herb	FAC-	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inch
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silt-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present?	Yes	**Hydric Soils Present?**	Yes
Wetland Hydrology Present?	Yes		
Is this Sampling Point Within a Wetland?		Yes	

Plot #: 9

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Carex sp.	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland			
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silty-clay

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low Chroma
- ___ Concretions
- ___ High Organic Content in Surface Layer of Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 10

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Agrostis alba	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY *(use back of form for remarks)*

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 11

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/13/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Polygonum sagittatum	Herb	OBL	7.		
4. Eupatorium perforatum	Herb	FACW+	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated	x	Oxidized Root Channels in Upper 12"	x
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland			
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 12

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/13/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Salix exigua	Herb	OBL	6.		
3.		-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	3%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 13

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/13/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Salix exigua	Herb	OBL	6.		
3. Impatiens capensis	Herb	FACW	7.		
4. Scirpus atrovirens	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	3%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydnc Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 14

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/14/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5 Eupatorium perforatum	Herb	FACW+
2. Salix exigua	Herb	OBL	6. Typha latifolia	Herb	OBL
3. Phalaris arundinacia	Herb	FACW+	7.		
4. Bidens sp.	Herb	-	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		*FAC-Neutral Test*	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 15

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/14/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM/PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Leersia orzoides	Herb	OBL	5		
2. Salix nigra	Herb	OBL	6.		
3. Alisma subcordatum	Herb	OBL	7.		
4. Lemna minor.	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	X
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 16

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/14/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM/PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Carex frankii	Herb	OBL	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Salix nigra	Herb	OBL	7.		
4. Bidens sp.	Herb	-	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY *(use back of form for remarks)*

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 17

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/15/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2.	Herb	FACW+	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	7.5 YR 5/8	10%	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 18

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/15/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5. Agrostis alba	Herb	FACW
2. Eupatorium perforatum	Herb	FACW+	6. Festuca pratensis	Herb	FACU
3. Agrostis alba	Herb	FACW	7.		
4. Impatiens capensis	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 83%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits	X	Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	2.5YR 5/2	7.5 YR 5/8	10%	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 19

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/116/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		
2. Echinochloa crusgalli	Herb	FACU	6.		
3. Bidens frondosa	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 67 %

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/2	5 YR 5/8	-	clay-

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 20

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/16/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perforatum	Herb	FACW+	5. Bidens sp.	Herb	-
2. Asternovae-angliae	Herb	FACW-	6.		
3. Scirpus atrovirens	Herb	OBL	7.		
4. Salix exigua	Shrub	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/2	5 YR 5/8	-	clay-

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low Chroma
- ___ Concretions
- ___ High Organic Content in Surface Layer of Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 20

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/16/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION *(use back of form for remarks)* PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		-
2. Echinochloa crusgalli	Herb	FACU	6.		
3. Bidens frondosa	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 67%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/2	5 YR 5/8	-	clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ *Other (explain in remarks)*

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 21

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) *PEM*

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Phalaris arundinacia	Herb	FACW+	5.		-
2.		-	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	8
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 22

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Agrostis alba	Herb	FACW+	5 Onoclea sensibilis	herb	OBL
2. Eupatorium perforatum	Herb	FACW+-	6.		
3. Euthamia graminifolia	Herb	FAC	7.		
4. Scirpus atrovirens	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY *(use back of form for remarks)*

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	8 inches
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 23

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Agrostis alba	Herb	FACW	5		
2. Scirpus atrovirens	Herb	OBL	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 24

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perforatum	Herb	FACW+	5		
2. Scirpus atrovirens	Herb	OBL	6.		
3. Impatiens capensis	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	8 inches
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	silty loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 26

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM WETLAND RESULTING FROM SPRING

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Acorus calamus	Herb	OBL	5		
2. Impatiens capensis	Herb	FACW+	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	x		
Springs Present			

Field Observations

Depth of Surface Water:	3 inches	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 25

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perforatum	Herb	FACW+	5		
2. Eleocharis sp.	Herb	FACW+	6.		
3. Bidens sp.	Herb	-	7.		
4. Mimulus alatus	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY *(use back of form for remarks)*

Primary Hydrology Indicators

		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland			
Springs Present			

Field Observations

Depth of Surface Water:	3 inches	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 27

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM WETLAND RESULTING FROM Seep

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perporatum	Herb	FACW+	5		
2. Carex sp.	Herb	-	6.		
3. Bidens sp	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	x		
Springs Present			

Field Observations

Depth of Surface Water:	1inches	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 28

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Salix exigua	Herb	OBL	5.		
2. Carex sp.	Herb	-	6.		
3. Aster sp	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	9
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 29

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/24/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Cyperus strigosus	Herb	FACW	5		
2. Bidens sp.	Herb	-	6.		
3. Carex sp.	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (Inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR3/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 30

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 10/1/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		
2. Acorus calamus	Herb	OBL	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	- X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR3/1	-	-	organic/silt

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Appendix E

Public Notification Documents

Additional Information

DP&L will be responsible for the layout, design, Ohio Power Siting Board filing, construction and all property owner contacts associated with this line project. For further information and answers to your questions concerning the upgrade project, you may call or write to:

Mr. Bruce Taylor, Manager
DP&L Real Estate Services Department
1900 Dryden Road
Dayton, Ohio 45439
(937) 331-4497

Foster-Bath Transmission Upgrade

DP&L

Maintaining Reliability For The Region

Overview: Upgrading An Existing Transmission Line

- The planned Foster-Bath Transmission Upgrade project entails upgrading sections of existing 345,000 volt transmission lines between the existing Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio.
- The upgrade will be constructed on existing right-of-way and no new access roads will be required.
- Upgrade work is scheduled to begin in the spring of 2000 and be completed by June 2002.
- The upgraded transmission line will be 40.2 miles long and the estimated total cost of the project is $30 million.

Goal: Maintaining Service Reliability

The existing 345,000 volt transmission line to be upgraded is jointly owned by Cinergy, which serves the Cincinnati area, American Electric Power, which serves the Columbus area, and DP&L, which serves the Dayton area. This project is being undertaken to improve the quality and reliability of service to the customers in the Cincinnati, Columbus, and Dayton areas. The upgraded transmission line will strengthen the transmission system, allowing service reliability to keep pace with the growing economy and increasing demand for electricity.

Project Implementation: Minimal Landowner Impact

Over the entire length of the project, existing transmission line right-of-way and substation properties will be used. No new right-of-way, properties or access roads will be required. Prior to the start of construction, the existing right-of-way will receive a routine maintenance tree trimming and clearing similar to what has been done there many times in the past.

Despite our best efforts, minor impacts and some possible damage to grounds and crops may occur as the clearing and construction proceeds. We will repair or appropriately compensate landowners for all such damages we create.

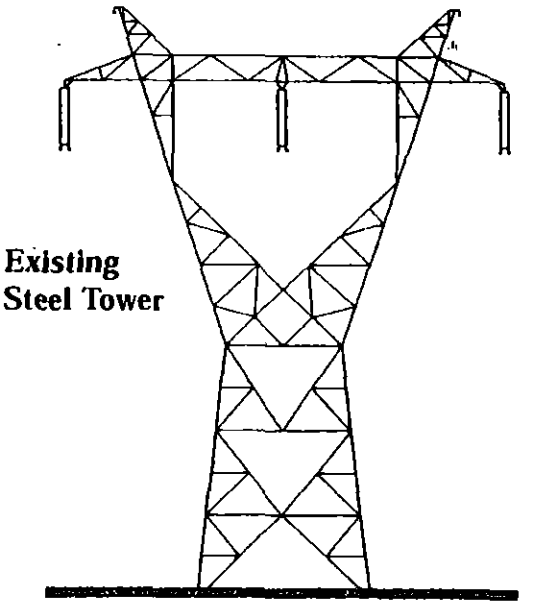
Physical Characteristics: Less Land Use

The existing single circuit line sections to be upgraded are all constructed with lattice steel tower structures. They will be replaced with new double circuit steel poles installed on concrete foundations.

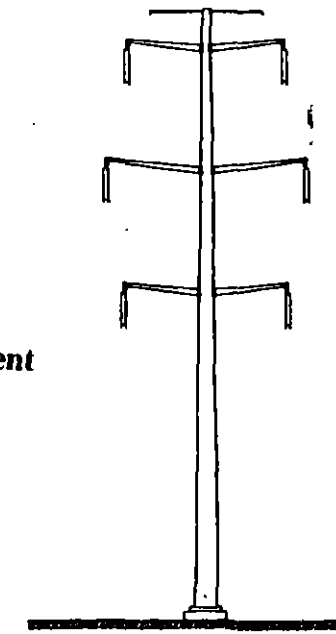
The typical existing steel towers and planned steel pole replacements are shown in the drawings to the right. The planned pole structures will use less land at the base of the poles.

Property Taxes: $1,800,000 Annually

The utility companies will pay an additional $1,800,000 in annual property taxes to Warren and Greene Counties as a result of the upgrade project.



Existing Steel Tower



Planned Steel Pole Replacement

FOSTER-BATH SECTION A PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Wesreal Inc.		10776 Montgomery Rd.	Cincinnati	OH	45242
Rippe	Elaine B.	1071 Celestial St., Ste. 1401	Cincinnati	OH	45202
Rippe	Mark A.	3445 Arnold	Cincinnati	OH	45208
Rippe, Trustee	Joseph F.	1071 Celestial St., Ste. 1401	Cincinnati	OH	45202
Dobbs	John G.& Vicki L.	8630 Celso Dr.	Maineville	OH	45039
Rippe	Joseph L. & Melissa	8378 Butterworth Rd.	Maineville	OH	45039
Biehle	Carl Edward	8609 Butterworth Rd.	Maineville	OH	45039

DP&L

Working For You Today and Tomorrow

January 7, 2000

Wesreal Inc.
10776 Montgomery Rd.
Cincinnati, OH 45242

Dear Wesreal Inc.:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section A on the enclosed map, Figure A-1.2. In Section A of this project, an existing double circuit steel tower line with structures as sketched on Figure B-1.5, enclosed, is located along the northern portion of a 300 foot wide right-of-way. The planned construction will add a single steel pole configuration as shown in Figure B-1.2 or B-1.3 adjacent to each tower. The steel poles will be located along the southern portion of the 300 foot right-of-way resulting in a typical layout as sketched in Figure B-1.4.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

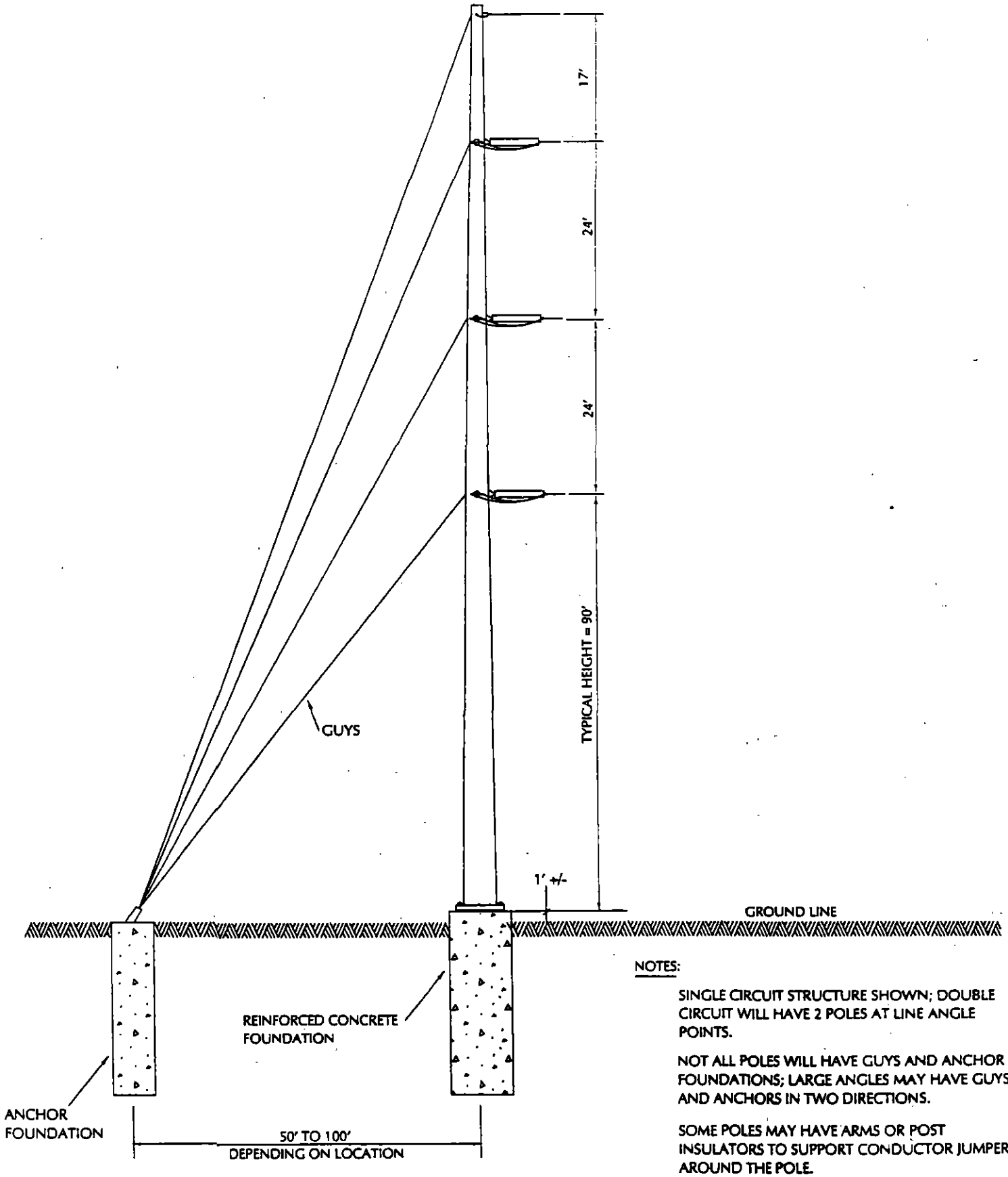
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



NOTES:

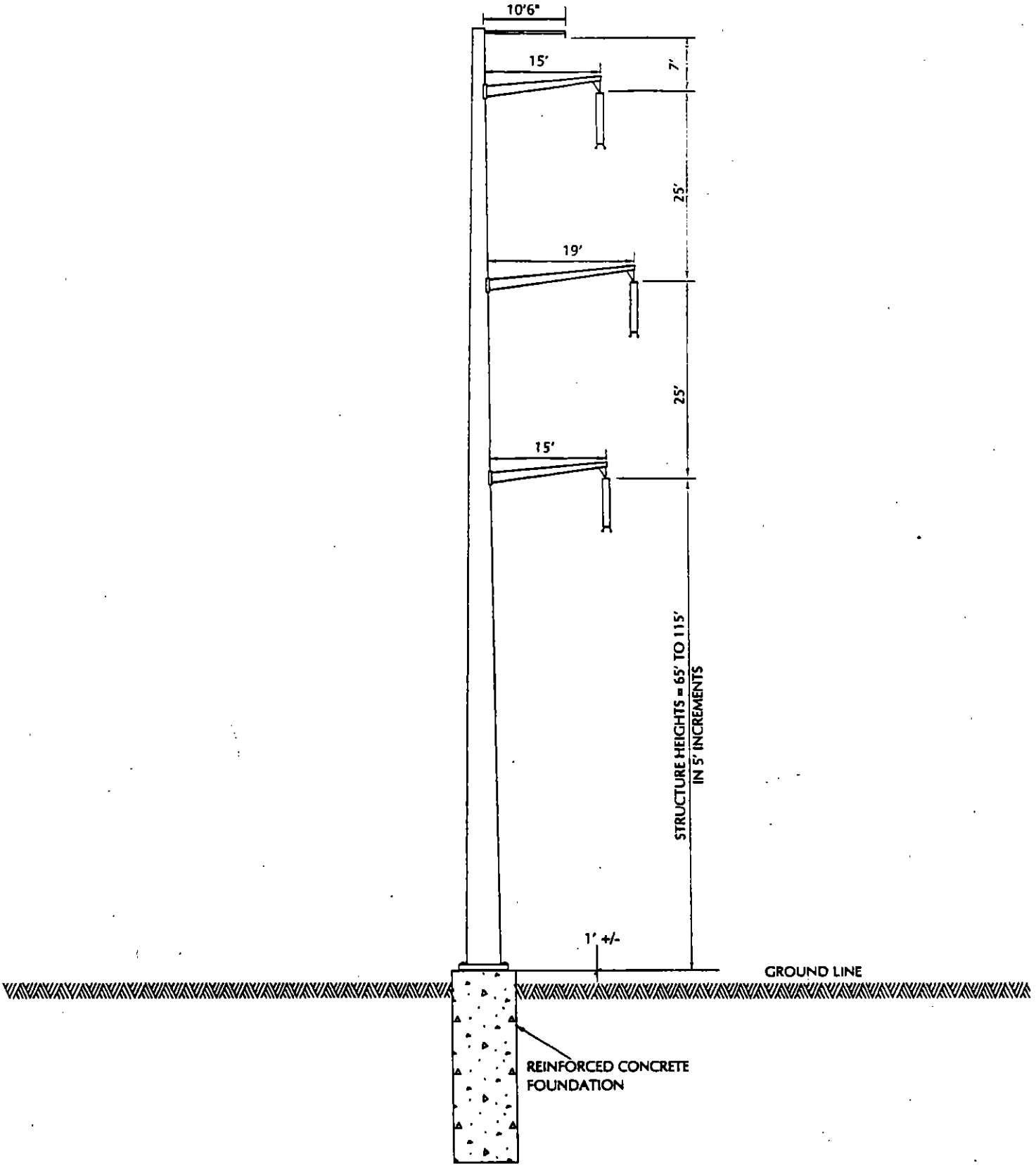
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

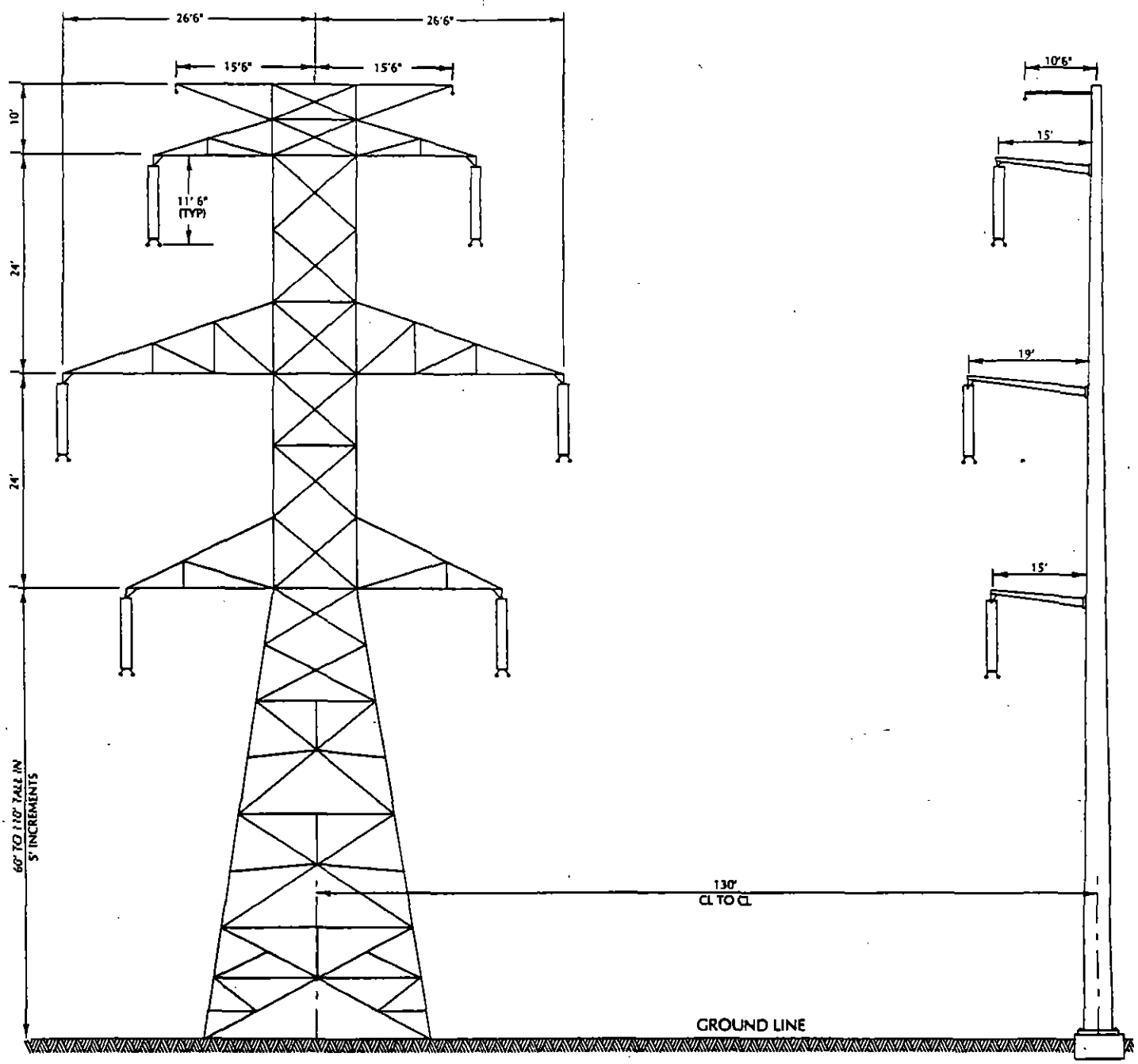
DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

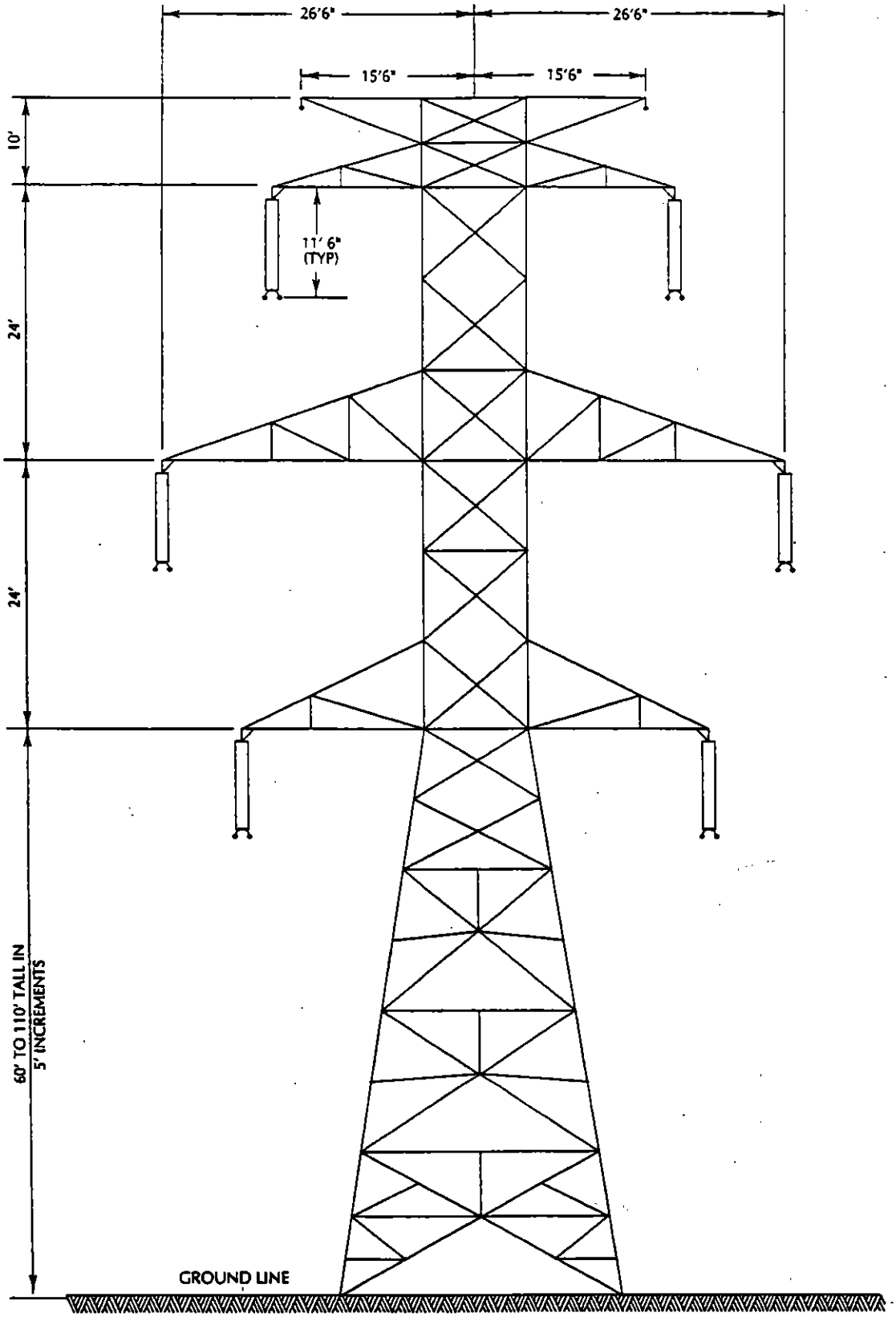
FIGURE B-1.3
SINGLE CIRCUIT
STEEL POLE (TANGENT)



LOOKING EAST

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.4
EXISTING DOUBLE CIRCUIT
STEEL TOWER WITH PLANNED
SINGLE CIRCUIT STEEL POLE (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION B PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Coors, Etal.	Clifford H.	5100 Gray Rd.	Cincinnati	OH	45232
Marr	Lawrence E & Kathryn	912 Nunner Rd.	Maineville	OH	45039
Maineville Properties		141 E. Foster-Maineville Rd.	Maineville	OH	45039
Fields	Joyce J.	8298 S. R. 48	Maineville	OH	45039
Perkins	Gary N. & Mary	8473 S. R. 48	Maineville	OH	45039
Mann	Marilyn R. & Paul	7942 Cooper Rd.	Cincinnati	OH	45242
Miller, Jr.	Kenneth & Edward E.	5854 Countrydale Ct.	Fairfield	OH	45014
Kingery	Douglas M.	8655 Maineville Rd.	Maineville	OH	45039
Hensey	Melville D. & Carol	8220 Riversedge Circle	Maineville	OH	45039
Rumsey	Philip J. & Jacqueline	8573 Maineville Rd.	Maineville	OH	45039
Wynne	Walter J. & Louis Z.	1937 Stockton Dr.	Loveland	OH	45140

DP&L

Working For You Today and Tomorrow

January 7, 2000

Clifford H. Coors, Etal.
5100 Gray Rd.
Cincinnati, OH 45232

Dear Clifford H. Coors, Etal.:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section B on the enclosed map, Figure A-1.2. In Section B of this project, an existing double circuit steel tower line with structures as sketched on Figure B-1.5, enclosed, is located along a 150 foot wide right-of-way. The planned construction will install a double steel pole "H-frame" configuration shown in Figure B-1.6 or B-1.7 adjacent to each tower. Once the two existing circuits are transferred to the new steel pole structures, the existing steel towers will be removed and the third circuit added to the steel pole structures. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

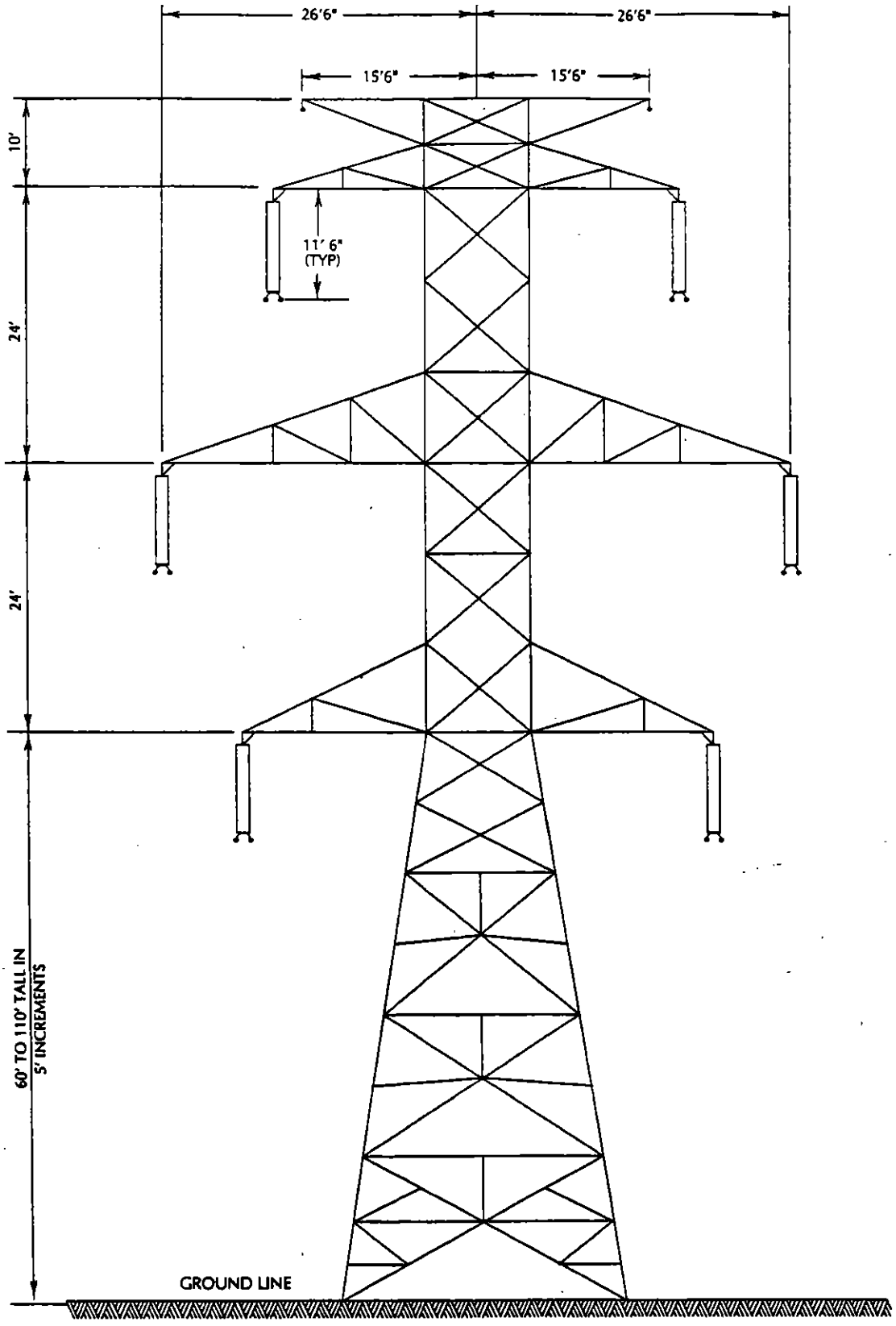
If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

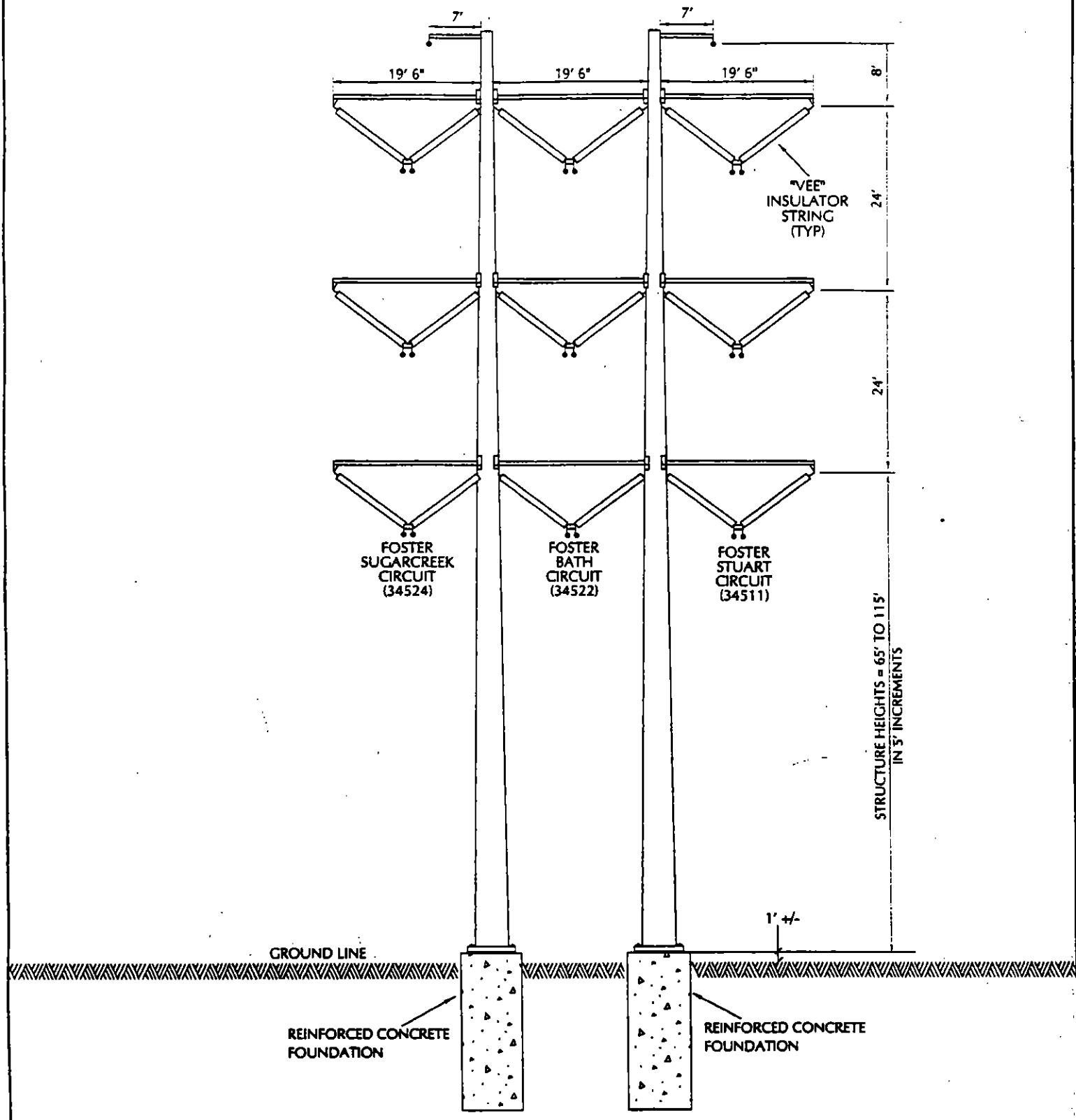
Sincerely,

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

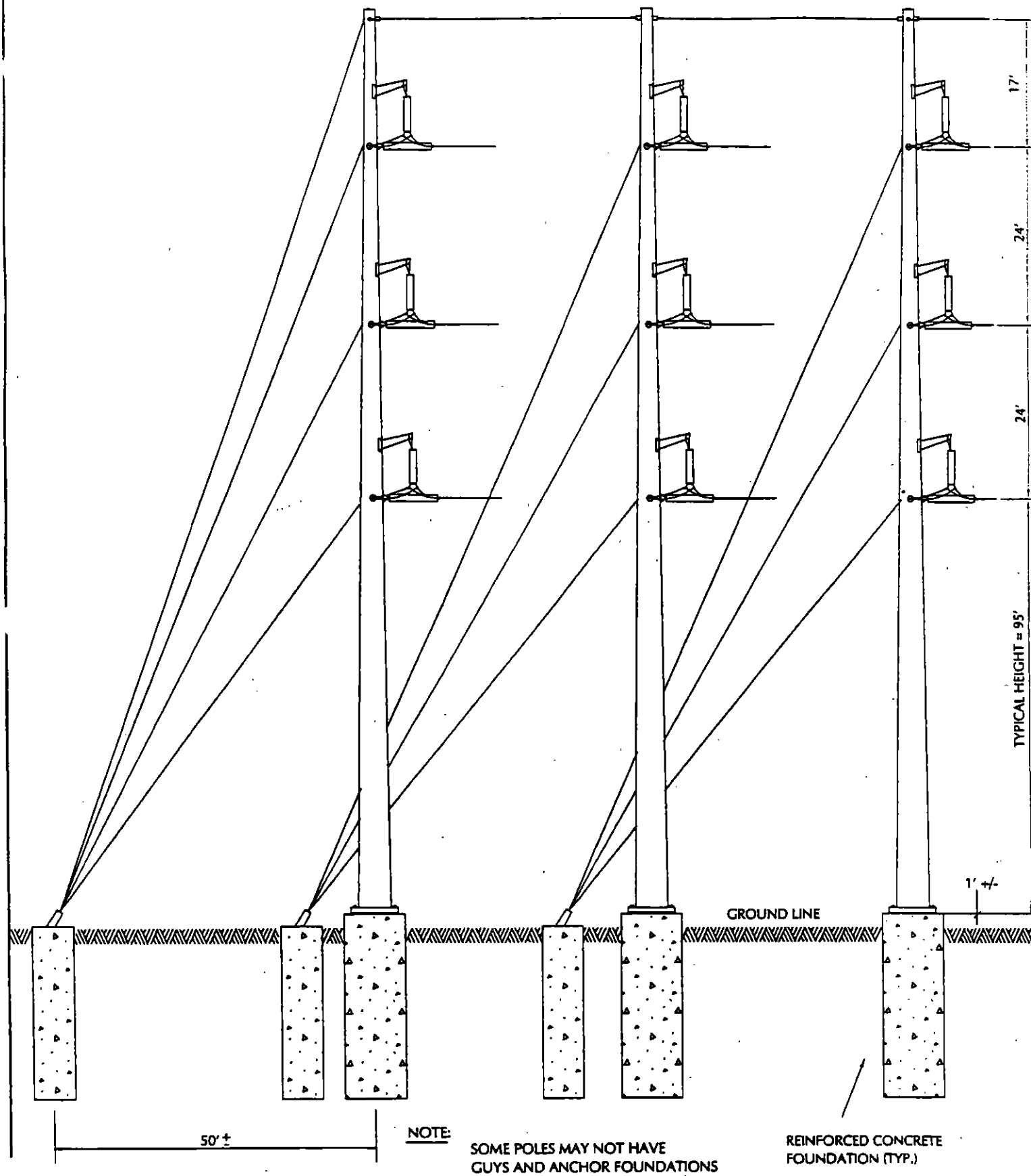
FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)



LOOKING EAST

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.6
TRIPLE CIRCUIT STEEL POLE H-FRAME STRUCTURE (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.7
TRIPLE CIRCUIT STEEL POLE
ANGLE STRUCTURE

FOSTER-BATH SECTION C PROPERTY OWNER LIST

L Name	F Name	F&L Name	Address	City	State	Zip
Brown	Odis W.		P. O. Box 59	Lebanon	OH	45036
Madden	W. Reed & Judith A.		3151 Clear Springs Rd.	Spring Valley	OH	45370
Smallwood, Trustee	Oliver C.		8989 Escalante Rd., # 137	Tucson	AZ	85730
Wenzel	John T.	Janet M. Simon	3391 Old Stage Rd.	Spring Valley	OH	45370
Brockman	Henry F. & Carol L.		3402 Old Stage Rd.	Spring Valley	OH	45370
Shafer, Trustee	Carol H.		3626 Old Stage Rd.	Spring Valley	OH	45370
Tinnerman	David E. & Catherine M.		3836 Old Stage Rd.	Spring Valley	OH	45370
Rizo-Patron	Alfredo		7860 Mt. Holly Rd.	Waynesville	OH	45068
Albers	David L. & Cheryl L.		7964 Mt. Holly Rd.	Waynesville	OH	45068
Shafer	Thomas H. & John D.		3626 Old Stage Rd.	Spring Valley	OH	45370
Shafer, Trustee	Carol J.		3626 Old Stage Rd.	Spring Valley	OH	45370
Lutz, Jr.	Clarence T. & Linda D.		3925 U.S. 42 S.	Waynesville	OH	45068
Walkhom	Jilas & Sana D.		P. O. Box 368	Xenia	OH	45385
Cammerer	Robert & Linda		8128 Cook Jones Rd.	Waynesville	OH	45068
Strickler	Steven A.		1931 Alda Ct.	Dayton	OH	45459
Miller	William E. & Linda L.		578 Wards Corner Rd.	Loveland	OH	45140
Rommes	Bobby D. & Claudia		8203 Middle St.	Waynesville	OH	45068
Miller	James Edward & R. I.		8201 Middle St.	Waynesville	OH	45068
Hignite	Terry E. & Cathy		9753 Old Main St.	Waynesville	OH	45068
Ferguson	James C. & Jean		9463 Cincinnati-Columbus Rd.	Waynesville	OH	45068
Blake	Jennifer A. M.		8072 Mt. Holly Rd.	Waynesville	OH	45068
Clark	Charlene A.		7959 Cook Jones Rd. - P.O. Box 612	Waynesville	OH	45068
Fink	Eugene William		2207 Jenkins Rd.	Wilmington	OH	45177
O'Banion	Wilma & David		8059 N. U.S. Rt. 42	Waynesville	OH	45068
Cornett Enterprises		c/o Michael Cornett	732 S. Ludlow St.	Dayton	OH	45402
Lindamood	Bruce A.		8642 N. U.S. RT. 42	Waynesville	OH	45068
Lebanon Citizens National Bank		Trust Dep.-Sanford	P. O. Box 59	Lebanon	OH	45036
Hartman Farms			P. O. Box 1	Spring Valley	OH	45370
Frye	Betty E.		9900 New Burlington Rd.	Waynesville	OH	45068
Rogers	Diana & Braddock		8025 New Burlington Rd.	Waynesville	OH	45068
Shaffer	Lester E. & Dori		7683 New Burlington Rd.	Waynesville	OH	45068
Bailey Brothers Trust		c/o Sammie Bailey, Etal.	8774 Wilson Rd.	Waynesville	OH	45068
Shick	Robert D. & Paula K.		39 Gerlaugh Ave.	Dayton	OH	45403

Rich	James E. & John B.		19177 Tamara Lane	Jupiter	FL	33458
Rice	Gene & Etta		7550 E. S.R. 73	Waynesville	OH	45068
Furnas	Richard		7143 E. S.R. 73	Waynesville	OH	45068
Frye	Richard B. & Don R.		9900 New Burlington Rd.	Waynesville	OH	45068
Frye, Etal.	Richard B.		5349 N. Clarksville Rd.	Waynesville	OH	45068
Frye	Gilbert		9900 New Burlington Rd.	Waynesville	OH	45068
Shinkle	William P. & Pat		5760 O'Neall Rd.	Waynesville	OH	45068
Harris	Thomas L.& Paula		2662 Cross Country Rd.	Beavercreek	OH	45324
Hayes	Janet & Michael J.		5087 O'Neall Rd.	Waynesville	OH	45068
Frye	Walter L.		5043 O'Neall Rd.	Waynesville	OH	45068
Thompson	Loyd G. & Mari		4991 O'Neall Rd.	Waynesville	OH	45068
Manley	Martha A. & Roy E.		4967 O'Neall Rd.	Waynesville	OH	45068
Fultz	Marilyn Jean & Clint		119 Ellis Dr.	Waynesville	OH	45068
Elam	Susan D.		5988 Middletown Rd.	Waynesville	OH	45068
Tirey	Thomas L. & Connie	c/o Option One Mtg.	Dept. 7821	Los Angeles	CA	90084
Tirey	Thomas L. & Connie		6097 Middletown Rd.	Waynesville	OH	45068
Hibbs, Trustee	William G.		1221 Rose Bower Ave.	Dayton	OH	45429
Hisey, Etal.	Benjamin H.		3453 S.R. 138	Greenfield	OH	45123
Lewis	Roger & Sherry		4876 Pennyroyal Rd.	Franklin	OH	45005
Begley	Archie & Betty		6390 Sales Rd.	Waynesville	OH	45068
Strausburg	Larry D. & Pat		P.O. Box 704	Waynesville	OH	45068
Coffman	Dale E.& Judith		6270 Sales Rd.	Waynesville	OH	45068
Coffman	James Eric & Kimberly		6216 Sales Rd.	Waynesville	OH	45068
Williams	Lori O.		6079 Sales Rd.	Waynesville	OH	45068
Pierce	Carl A. & Louise		6106 Sales Rd.	Waynesville	OH	45068
Sholski	Frank	ODNR-Caesar Creek Area	P. O. Box 186	Oregonia	OH	45054
Mead	Whitaker W.		5702 Elbon Rd.	Waynesville	OH	45068
Greer	Jan Gary & Joyce Ann		6478 Gard Rd.	Waynesville	OH	45068
Stolle, Company	Ralph J.		6954 Cornell Rd.	Cincinnati	OH	45242
Pennington	Lucille		5510 Harveysburg Rd.	Waynesville	OH	45068
Ullum	Eleanor C.		41-B Springhouse Court	Lebanon	OH	45036
Ferrau	Joseph & Valerie		6218 Olive Branch Rd.	Oregonia	OH	45054
Stephens	Vivian M.		50-B Shaker Run Rd.	Lebanon	OH	45036
Amburgy	Bob C. & Mona M.		6545 Olive Branch Rd.	Oregonia	OH	45054
Miami Highlands			6565 Olive Branch Rd.	Oregonia	OH	45054
Miami Highlands		c/o Tom Noe	133 W. 4th St. - 4th Floor	Cincinnati	OH	45202
Bryant	Yorkie		6373 E. U.S. Rt. 22 & 3	Morrow	OH	45152

Parker	Bonnie J. & Troy		5868 Wilmington Rd.	Oregonia	OH	45054
Wurzelbacher	G. Michael		4164 Hutchison Rd.	Cincinnati	OH	45248
Powell	Kenneth E. & Nora		232 Corwin Rd.	Oregonia	OH	45054
Clark	Paul & Judy		156 Corwin Rd.	Oregonia	OH	45054
Ritz	Ronald W.		7845 Elizabeth St.	Cincinnati	OH	45231
Herres	Michael D.		5242 Wilmington Rd.	Oregonia	OH	45054
McCall	Jack L. & Betty		6115 KY Hwy. 78	Stanford	KY	40484
Shaw	Elizabeth J.	c/o Edward C. Shaw	310 S. Mechanic St.	Lebanon	OH	45036
Cincinnati Gas & Electric Co.			P. O. Box 960 - Room 260A	Cincinnati	OH	45201
Caum	William & Bonnie Lou		674 S. Nixon Camp Rd.	Oregonia	OH	45054
Declark	Candice		200 S. Nixon Camp Rd.D109	Oregonia	OH	45054
Johnson	Ronald H.		1038 Redford Ct.	Fairfield	OH	45014
Taylor	Keith A.		945 S. Nixon Camp Rd.	Oregonia	OH	45054
Bednar	Robert E. & Chris		1029 S. Nixon Camp Rd.	Oregonia	OH	45054
Leasure	Mary Alice		141 W. Concord Dr.	Lebanon	OH	45036
Updyke	Paul S. & Carol		5017 Green Tree Rd.	Lebanon	OH	45036
Updyke	Charles V.		4563 S.R. 350	Lebanon	OH	45036
Tkatschenko	John A.		1747 S. Nixon Camp Rd.	Lebanon	OH	45036
Geiser	Thomas I. & Kari E.		1811 S. Nixon Camp Rd.	Lebanon	OH	45036
Davidson	John & Mary		1849 S. Nixon Camp Rd.	Lebanon	OH	45036
Rowe	Boyd W.		P. O. Box 526	Lebanon	OH	45036
Sizemore	Sherry & Gary D.		2426 S. S.R. 123	Lebanon	OH	45036
Cayot	Dale L. & Jane E.		2400 S. S.R. 123	Lebanon	OH	45036
Cunningham	Lonnie M.		2478 S. S.R. 123	Lebanon	OH	45036
Clark	Paul E. & Brad		95 N. Hill St.	Brookville	OH	45309
Powell	Charles B. & Edna		1018 Shawhan Rd.	Morrow	OH	45152
Brunty	Tom J. & Lois A.		2715 S. S.R. 123	Morrow	OH	45152
Sharpe	Jene & Casa		2841 S. S.R. 123	Morrow	OH	45152
Simmerman	Thomas V.		2905 S. S.R. 123	Morrow	OH	45152
Lamb, Etal.	Emery		2949 S. S.R. 123	Morrow	OH	45152
Davis	Pam Frank & Mark E.		8412 West Ohio State	Lancaster	OH	43130
Alderson	Ruth Ann		3095 S. S.R. 123	Morrow	OH	45152
Singleton	Lee M. & Ann S.		3701 S. Waynesville Rd.	Morrow	OH	45152
Watkins	Hilda B.		3479 S. Waynesville Rd. - Apt. 1	Morrow	OH	45152
Harrington	John E.		3553 S. Waynesville Rd.	Morrow	OH	45152
Philpot	James T. & Sharo		3576 Bramble Bush Dr.	Morrow	OH	45152
Warren	Brent A. & Bernae		3568 Bramble Bush Dr.	Morrow	OH	45152

Naylor	Jeffrey A. & Linda		3530 Bramble Bush Dr.	Morrow	OH	45152
Kilburn	Charles W.		P.O. Box 31	Morrow	OH	45152
Kilburn	Wayne & Joy		3286 S. Waynesville Rd.	Morrow	OH	45152
Wall	Harold D.	TBL Investments	8778 Roachester-Cozzadale Rd.	Pleasant Plain	OH	45162
Anderson	Shawn D. & Kare		2358 Tumble Weed Lane	Lebanon	OH	45036
Cook	Steve & Becky		3764 Mason-Morrow-Millgrove Rd.	Morrow	OH	45152
Isacs	Floyd T. & Kathryn		3534 E. U.S. Rt. 22	Morrow	OH	45152
Sholski	Frank	ODNR- Morrow Area	P. O. Box 186	Oregonia	OH	45054
Morrow Gravel Co.			11641 Mosteller Rd.	Cincinnati	OH	45241
Morrow Church of Christ			P.O. Box 174	Morrow	OH	45152
Western Water Company			3577 Bennett Rd.	Morrow	OH	45152-0964
Brandenburg, Etal.	Gary		3929 Bennett Rd.	Morrow	OH	45152
Peel	Steven B. & Eileen		7427 Hamilton Ave.	Maineville	OH	45039
Netherly, Etal.	Mark		6320 Ludlum Rd.	Morrow	OH	45152
Johnson	Randy & Deborah		6406 Ludlum Rd.	Morrow	OH	45152
Johnson	Earl G. & Marilyn		6458 Ludlum Rd.	Morrow	OH	45152
Crow	David & Theresa		6520 Ludlum Rd.	Morrow	OH	45152
Elliott	Rick		9541 Rich Rd.	Loveland	OH	45140
Lukens	Joseph T.		6565 Ludlum Rd.	Morrow	OH	45152
Nicholson	J. Morton & B. A.		6675 Ludlum Rd.	Morrow	OH	45152
Norman	Gary B. & Eva		P.O. Box 211	Morrow	OH	45152
Allison	Greg & Angie		3266 McIntire Rd.	Morrow	OH	45152
Maxfield	Thomas S. & Son		3301 McIntire Rd.	Morrow	OH	45152
Evans	Elvis W.		3191 McIntire Rd.	Morrow	OH	45152
Church	Chandler		6972 Morrow Cozaddale Rd.	Morrow	OH	45152
Lymangrover	John R.		12909 Turkey Branch Parkway	Rockville	MD	20853
Casselman	Kenneth J. & P.		2644 Ireland Rd.	Morrow	OH	45152
Todia	Judith R.		2594 Ireland Rd.	Morrow	OH	45152
Ertel	Earl C. & Marilyn		2698 Ireland Rd.	Morrow	OH	45152
Crawford	Jeffrey W. & K. A.		7284 Morrow Cozaddale Rd.	Morrow	OH	45152
Wilson	Dorothy		7063 Morrow Cozaddale Rd.	Morrow	OH	45152
Hildebrant Family Farm			2098 Mounts Rd.	Morrow	OH	45152
Hildebrant Family Partner			2098 Mounts Rd.	Morrow	OH	45152
ZFC, Inc.			7370 Zoar Rd.	Maineville	OH	45039
Sandy Cove Corp.			2098 Mounts Rd.	Morrow	OH	45152
Smith	Eleanor C.		1552 E. Foster-Maineville Rd.	Morrow	OH	45152

DP&L

Working For You Today and Tomorrow

January 7, 2000

Odis W. Brown
P. O. Box 59
Lebanon, OH 45036

Dear Odis W. Brown:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section C on the enclosed map, Figure A-1.2. In Section C of this project, an existing single circuit steel tower line with structures as sketched on Figure B-1.8, enclosed, is located along a 150 foot wide right-of-way. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each tower. Once the existing circuit is transferred to the new steel pole structures, the existing steel towers will be removed and the second circuit added to the steel poles. The exception to this procedure is at the "Sugarcreek Tap" point at the north end of Section C and approximately one half mile south of Centerville Road. Here a tap line runs to the west to Sugarcreek Substation. The steel tower tap point structure at this location will be modified by placing a single steel pole just east of the tap tower to carry the Foster-Bath circuit by the tap tower which will remain as it is. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

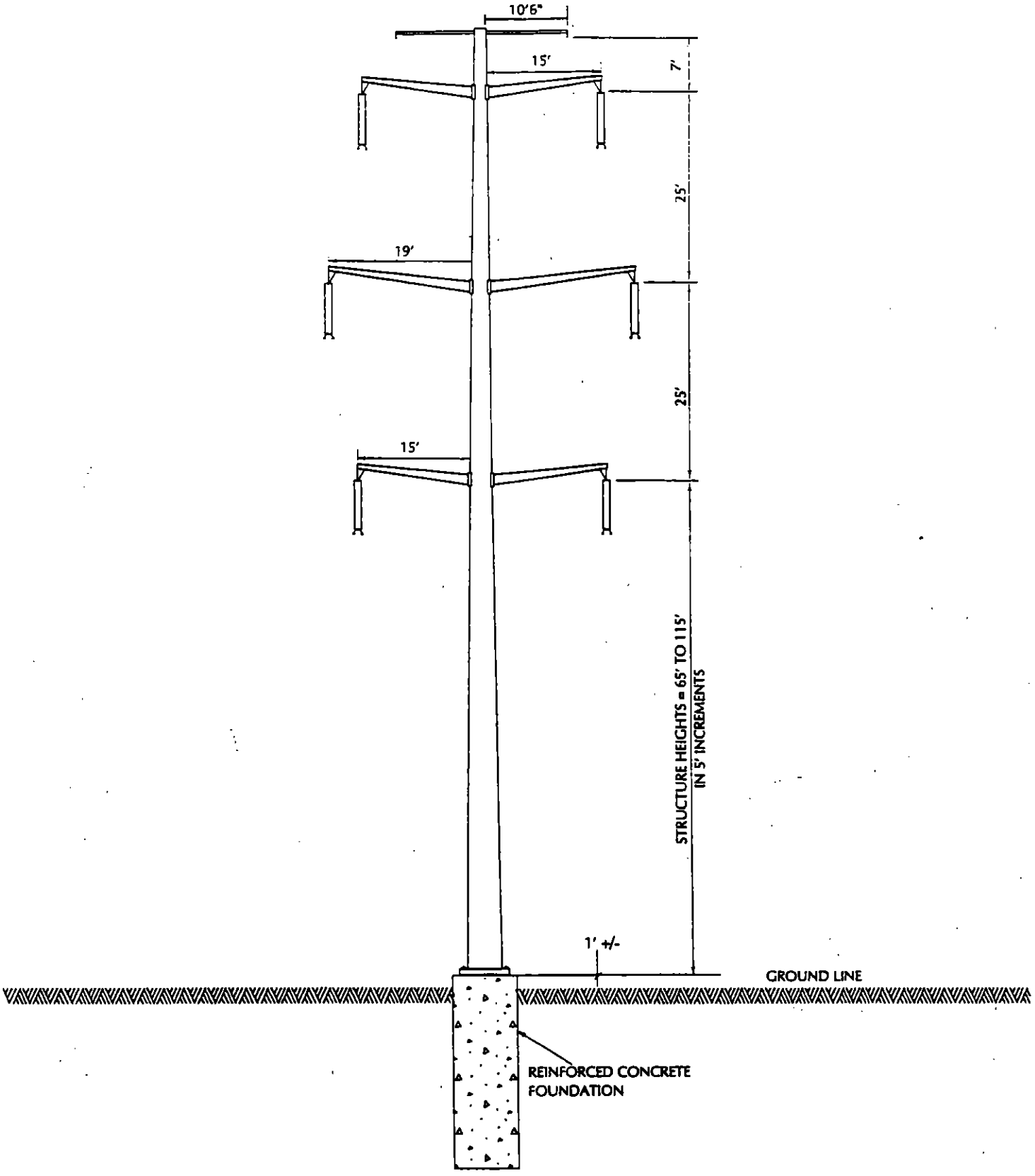
If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

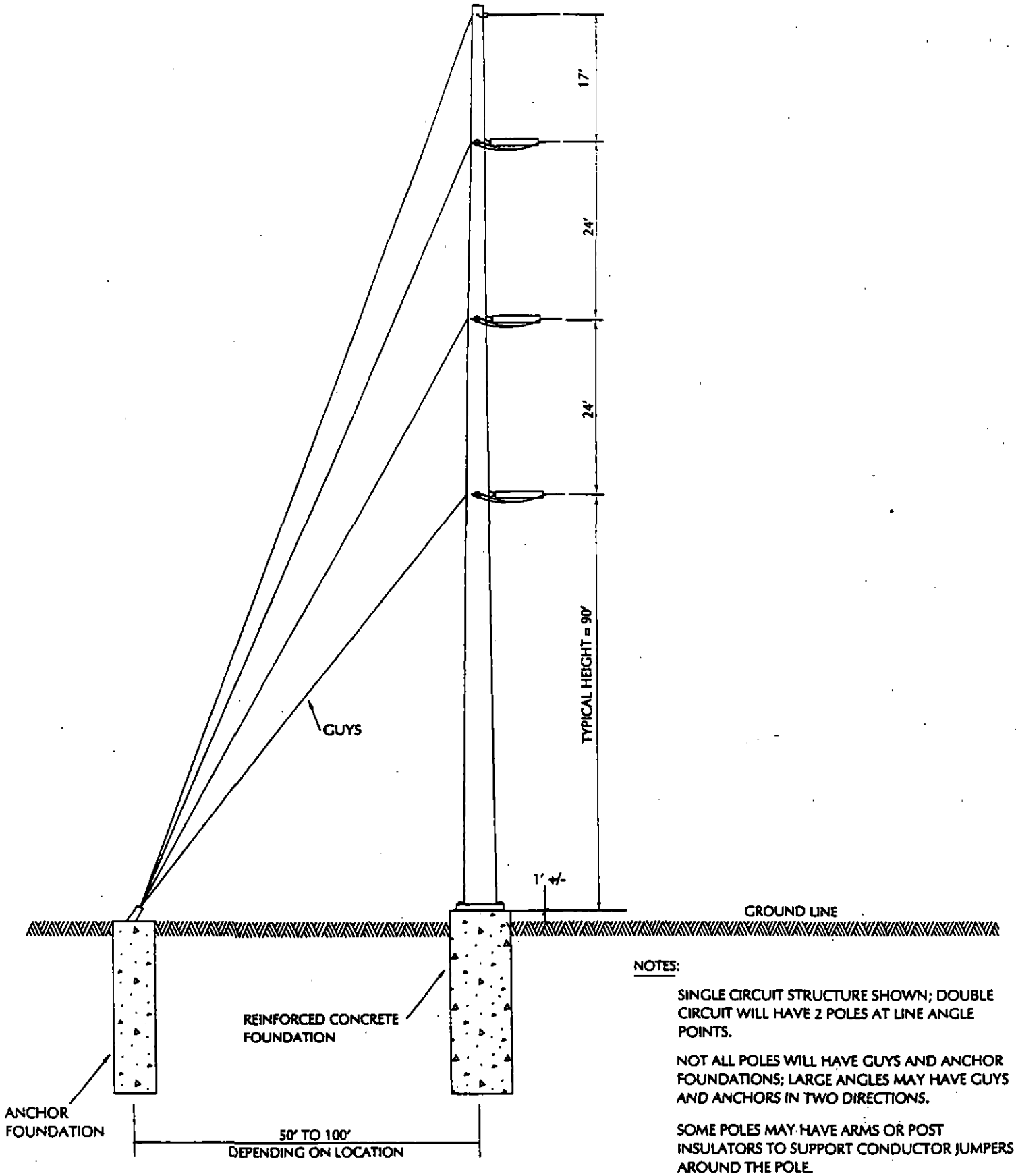
Sincerely,

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

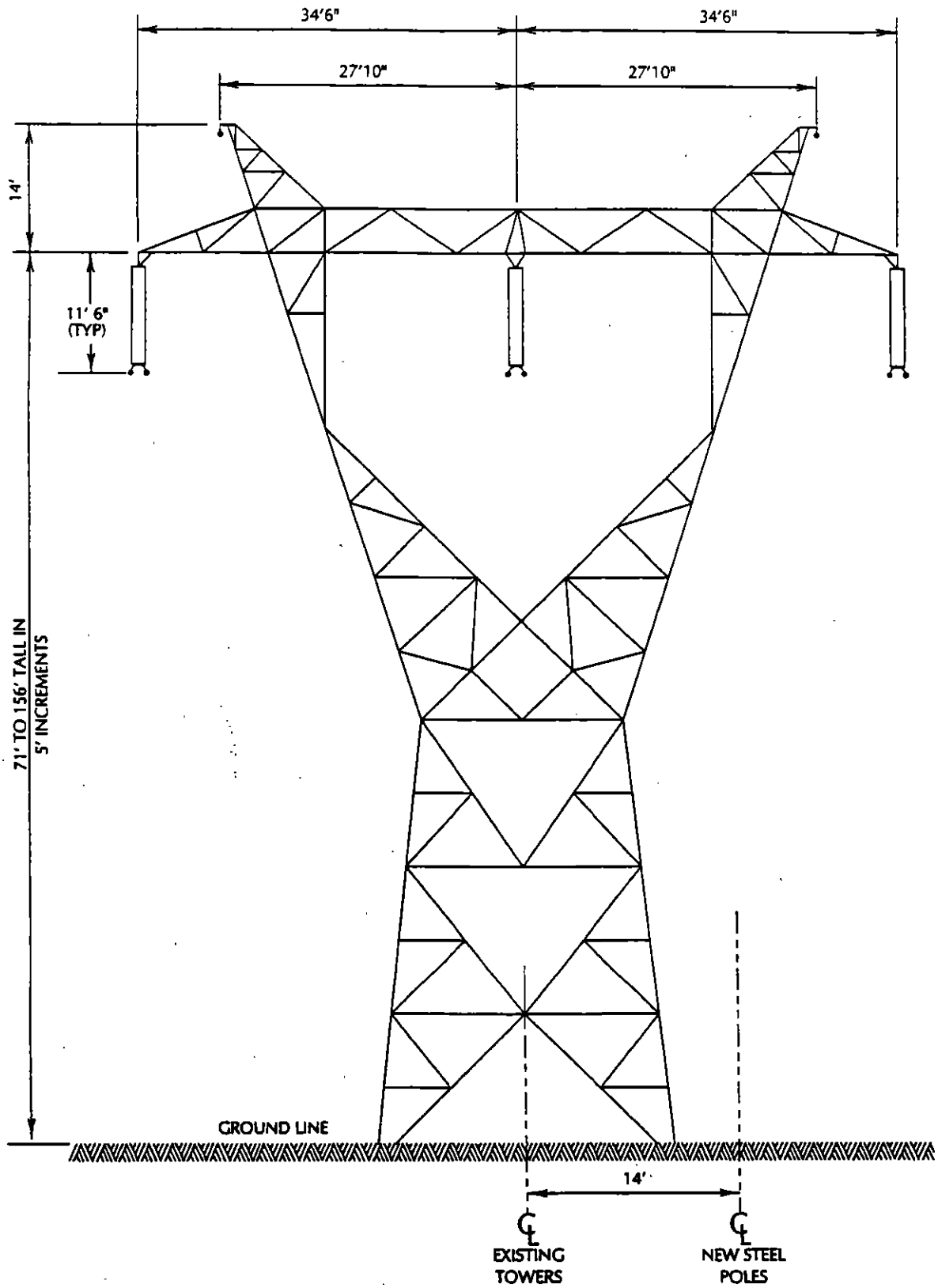
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION D PROPERTY OWNER LIST

L Name	F Name	F&L Name	Address	City	State	Zip
Kyne, Trustees	James B. & Marjorie J.		2577 Centerville Rd.	Spring Valley	OH	45370
Kyne	Christopher B. & Kristi L.		2575 Centerville Rd.	Spring Valley	OH	45370
Cimino	James J. & Terry		3107 Clear Springs Rd.	Spring Valley	OH	45370
Francis	Edward J. & Hannah H.		3101 Clear Springs Rd.	Spring Valley	OH	45370
Stahl	Richard D. & Linda K.		3081 Clear Springs Rd.	Spring Valley	OH	45370
Sonnycalb	Cindy		3061 Clear Springs Rd.	Spring Valley	OH	45370
Chong	Salley A.		3041 Clear Springs Rd.	Spring Valley	OH	45370
Thomas	Dennis P. & Barbara B.		2567 Cook Rd.	Spring Valley	OH	45370
Hidden Springs Farm			2567 Cook Rd.	Spring Valley	OH	45370
Kyne	Helen		2324 Centerville Rd.	Spring Valley	OH	45370
Key Trust Company of Ohio, NA			34 N. Main St.	Dayton	OH	45401
Mongin	Matthew Ross & Jane Kaye		3006 Blue Green Dr.	Dayton	OH	45431
Metzler	Mark T. & Wendy J.		2470 Cook Rd.	Spring Valley	OH	45370
Hershner	Marion		865 Spring Valley Paintersville Rd.	Spring Valley	OH	45370
Soin	Rajesh K. & Indu		4032 Linden Ave.	Dayton	OH	45432
Salerno, Trustee	Francesco M.		665 Evans Ln.	Dayton	OH	45459
Bensman	Thomas E.	Christine A. Hammer	P.O. Box 751021	Dayton	OH	45475
Ables	Jimmy		2355 Lower Bellbrook	Spring Valley	OH	45370
Meyer	George R.	Calleen M. Moloney	2149 Lower Bellbrook	Spring Valley	OH	45370
Gouge, Jr.	Horace E. & Ada L.		2325 Lower Bellbrook	Spring Valley	OH	45370
Loeffelman	Joseph W. & Shirley A.		2303 Lower Bellbrook	Spring Valley	OH	45370
Ingram	Carley Jean		2155 Lower Bellbrook	Spring Valley	OH	45370
Dulin	David L. & Loreen O.		2266 Lower Bellbrook	Spring Valley	OH	45370
Bingman	Mark A. & Linda G.		2241 Spahr Rd.	Xenia	OH	45385
Thomeczek	Thomas A. & Betty A.		2217 Spahr Rd.	Xenia	OH	45385
Bledsoe	Christopher L. & Pamela M.		2230 Spahr Rd.	Xenia	OH	45385
Crowe	Ralph & Elsie Eileen		2200 Spahr Rd.	Xenia	OH	45385
Covey	Robert Eric & Rebekah R.		2302 Schnebly Rd.	Spring Valley	OH	45370
Lorenzo	Loren L.		1988 Lower Bellbrook	Xenia	OH	45385
Torrence	Barbara L.	Evette A. White	1682 Sutts Trail	Xenia	OH	45385
Dabbelt	Michael S. & Tammy M.		1688 Sutts Trail	Xenia	OH	45385
Leiter	Robert E. & Charity A.		1666 Suman Ave.	Dayton	OH	45403
Greene Tree Development Inc.			7245 Far Hills Ave.	Dayton	OH	45459

Vincent, Jr.	Norman K. & Barbara L.		2063 Washington Mill Rd.	Xenia	OH	45385
Caron	Stephen M. & Diane L.		2025 Washington Mill Rd.	Xenia	OH	45385
Fear	Norman D. & Yvonne		2140 Washington Mill Rd.	Xenia	OH	45385
Graham	Ralph A. & F. J.		1445 Spring Valley Alpha Rd.	Xenia	OH	45385
Parsons	Elmer & L. V.		1315 Spring Valley Alpha Rd.	Xenia	OH	45385
Gerspacher	Paul & Mary K.		1238 Spring Valley Alpha Rd.	Xenia	OH	45385
Gerspacher	Mary K.		1238 Spring Valley Alpha Rd.	Xenia	OH	45385
Mitchell	Gerald L. & Diana L.		1161 Spring Valley Alpha Rd.	Xenia	OH	45385
Chandler	Donald L. & Janice L.		1055 Spring Valley Alpha Rd.	Xenia	OH	45385
Rizki	Mateen M. & Pamela S.		1045 Spring Valley Alpha Rd.	Xenia	OH	45385
Studer	Richard E. & Alison E.		2077 Stewart Rd.	Xenia	OH	45385
Frederick	Richard L. & W. Jeanne		895 Spring Valley Alpha Rd.	Xenia	OH	45385
Schaaf	Kathleen		1929 Stewart Rd.	Xenia	OH	45385
Davis	Timothy R. & Ann L.		1887 Stewart Rd.	Xenia	OH	45385
Bockhorn	David A.		1869 Stewart Rd.	Xenia	OH	45385
Nayles	Rodney L. & Gina M.		1725 Bambi Ct.	Xenia	OH	45385
Knick	David E.	Cheryl K. Finney	1847 Stewart Rd.	Xenia	OH	45385
Laudermilk	Kenneth J. & Ruth		1811 Stewart Rd.	Xenia	OH	45385

DP&L

Working For You Today and Tomorrow

January 7, 2000

James B. & Marjorie J. Kyne, Trustees
2577 Centerville Rd.
Spring Valley, OH 45370

Dear James B. & Marjorie J. Kyne, Trustees:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section D on the enclosed map, Figure A-1.2. In Section D of this project, an existing single circuit steel tower line with structures as sketched on Figure B-1.8, enclosed, is located along a 150 foot wide right-of-way. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each tower. Once the existing circuit is transferred to the new steel pole structures, the existing steel towers will be removed and the second circuit added to the steel poles. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace. The exception to this procedure is that there are presently two steel poles in the line just north of Washington Mill Road. These will be converted from a single circuit to a double circuit configuration, the resulting poles looking similar to Figure B-1.1.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

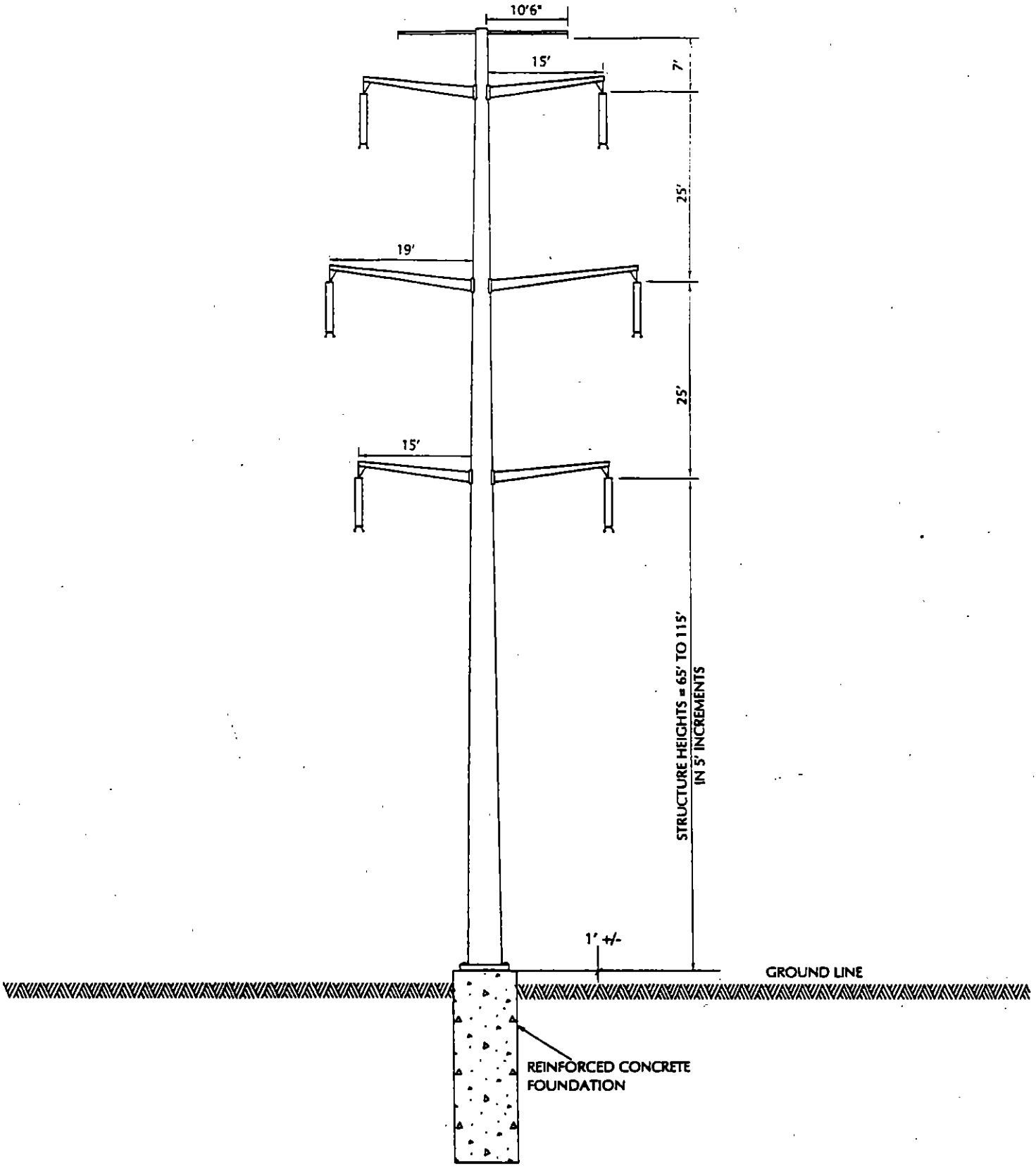
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

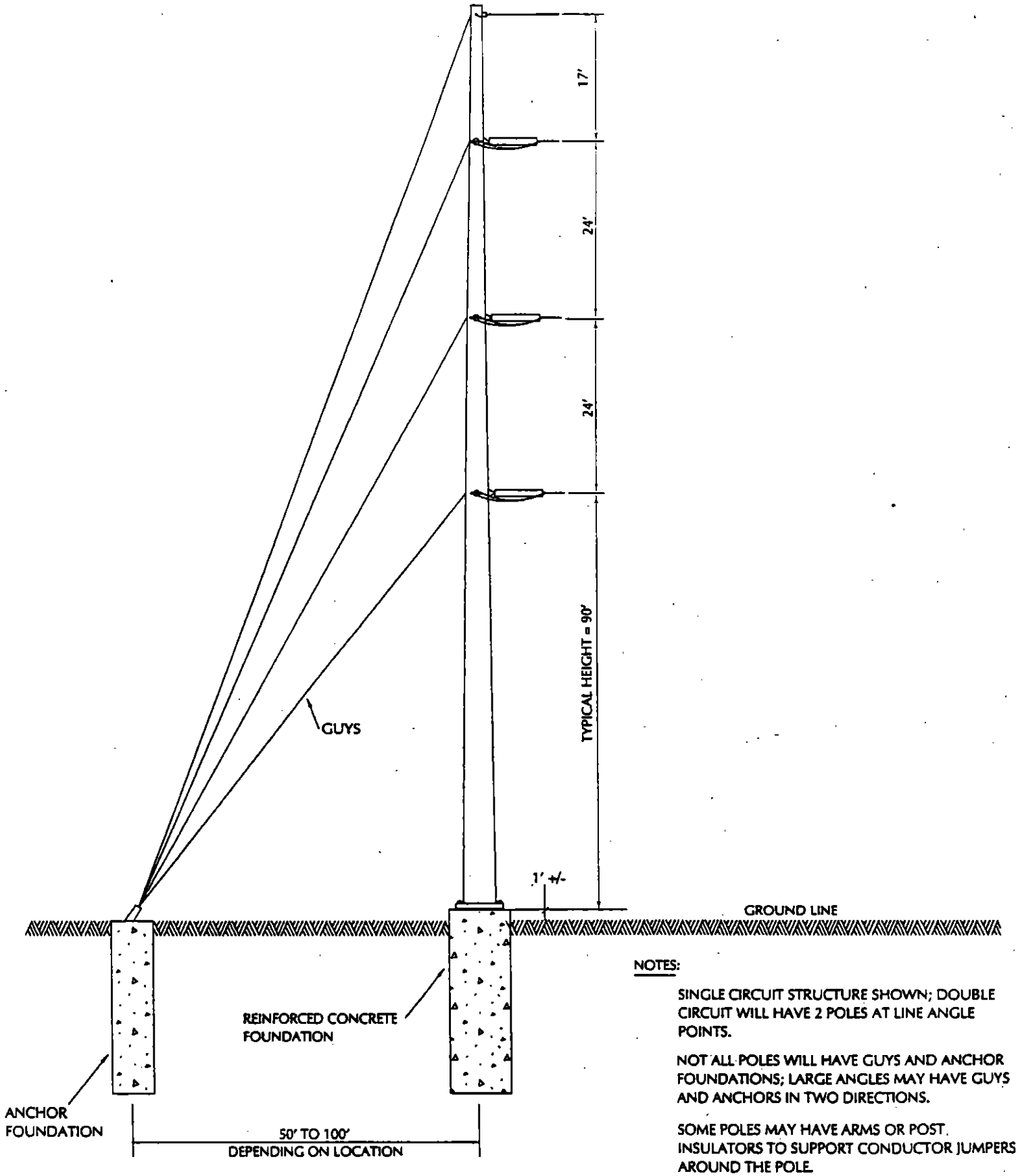
Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

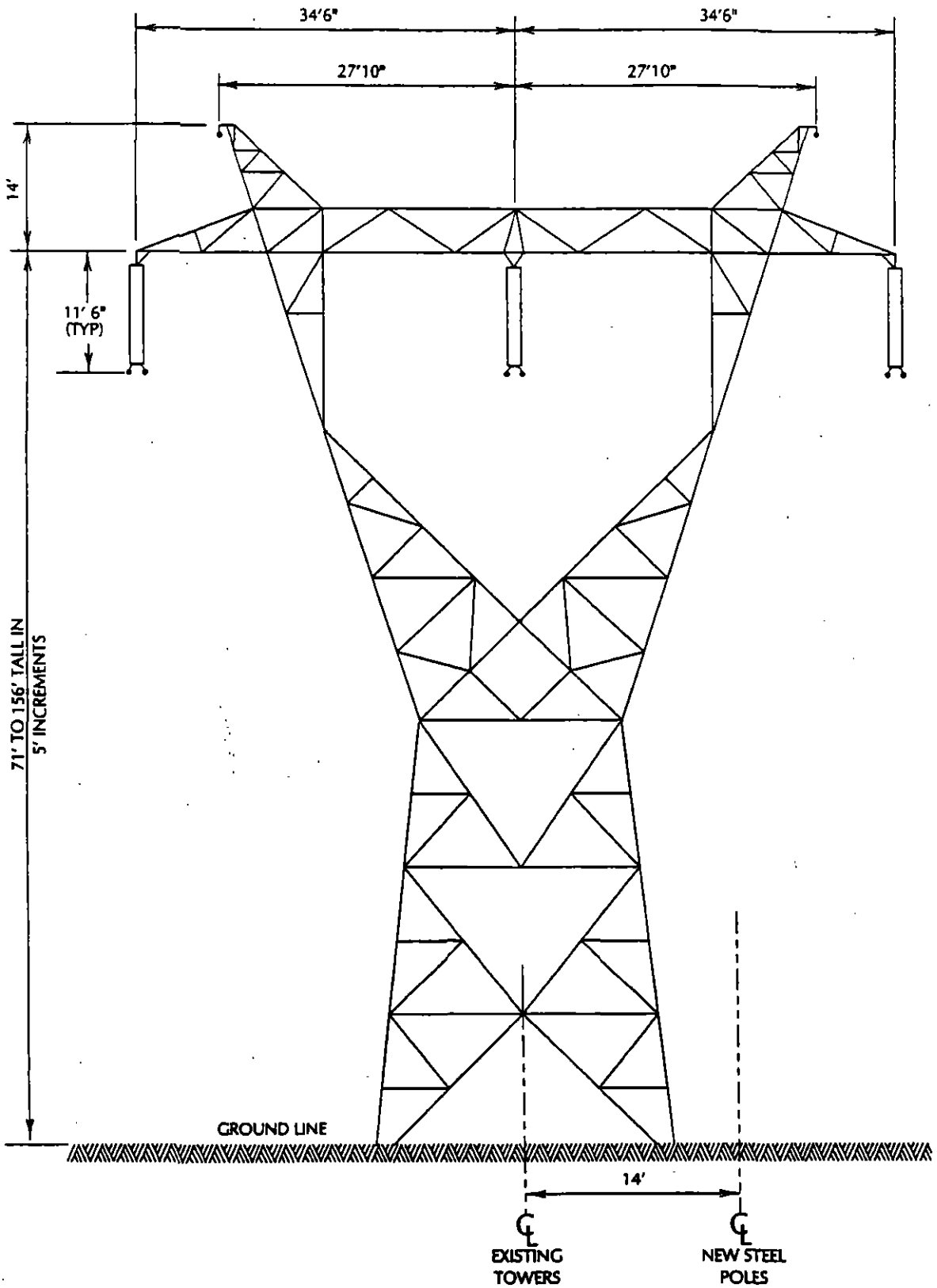
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION E PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Knapp	Timothy M.	1770 Stewart Rd.	Xenia	OH	45385
Hislope	Cecil W. & Mattie L.	1754 Stewart Rd.	Xenia	OH	45385
McWilliams	Howard H. & Patricia T.	1806 Stewart Rd.	Xenia	OH	45385
Jones	Steven P. & Frances A.	521 Van Eaton	Xenia	OH	45385
Sultzbach, Trustee	Richard E.	1331 Tall Timber Trail	Dayton	OH	45409
McClain, Etal., Trustees	John	1630 Upper Bellbrook Rd.	Xenia	OH	45385
Lickliter, Trustee	Robert C.	15 S. Valley Rd.	Xenia	OH	45385
Russ	Fritz J.	2380 Kemp Rd.	Dayton	OH	45431

DP&L

Working For You Today and Tomorrow

January 7, 2000

Timothy M. Knapp
1770 Stewart Road
Xenia, OH 45385

Dear Timothy M. Knapp:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section E on the enclosed map, Figure A-1.2. In Section E of this project, two existing single circuit steel tower lines with structures as sketched on Figure B-1.8, enclosed, are located along a 300 foot wide right-of-way. The existing single circuit steel tower line along the western portion of the 300 foot right-of-way will remain as it is. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each of the single circuit towers along the eastern portion of the right-of-way. One additional steel pole structure may be required near the projected runway of the Greene County airport to accommodate the airport glide paths. Once the existing east circuit is transferred to the new steel pole structures, the existing east steel towers will be removed, except at the first tower north of Stewart Road where the existing circuit will remain on the existing tower. The new second circuit (Foster-Bath) will then be added to the new steel poles. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

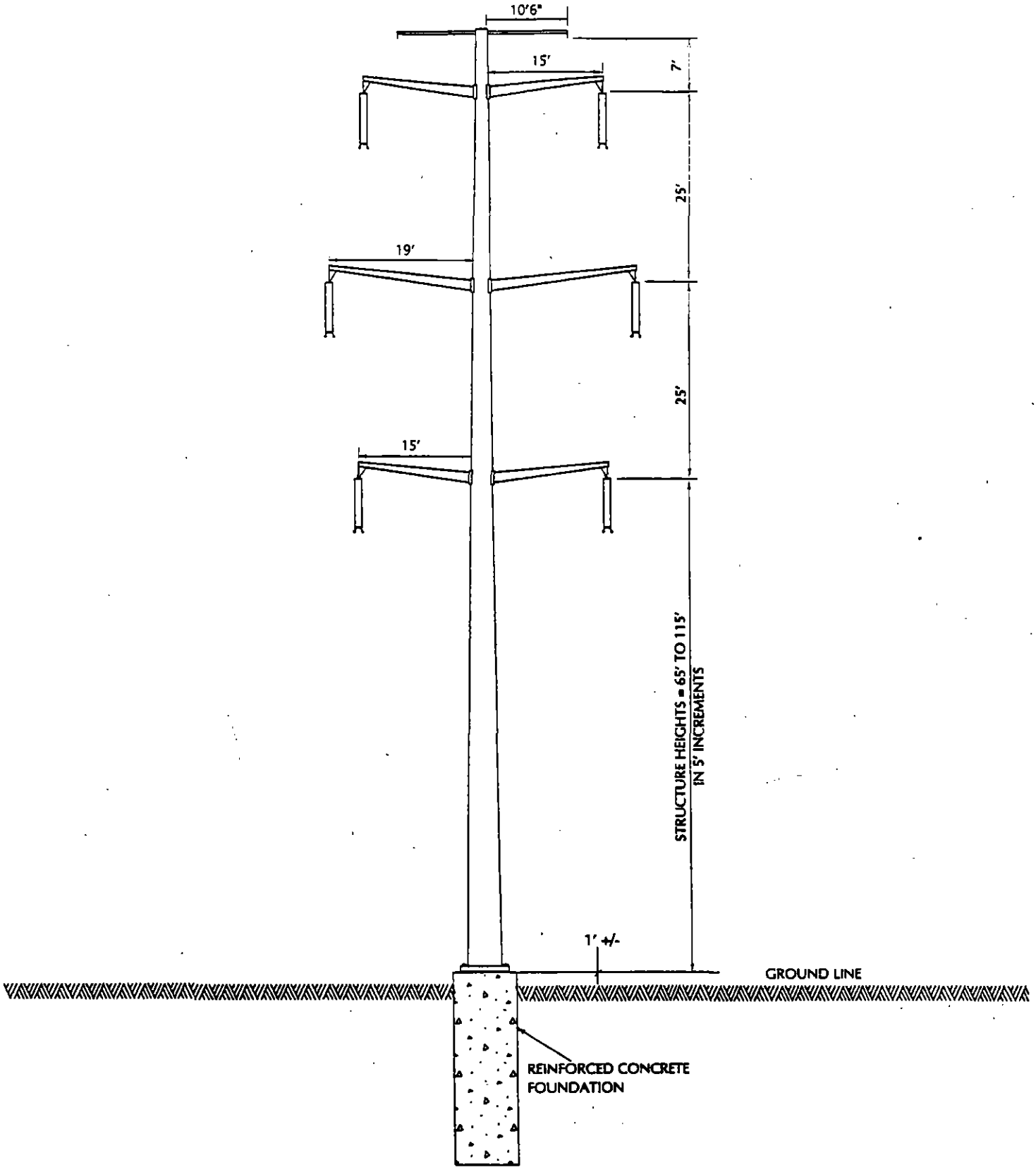
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

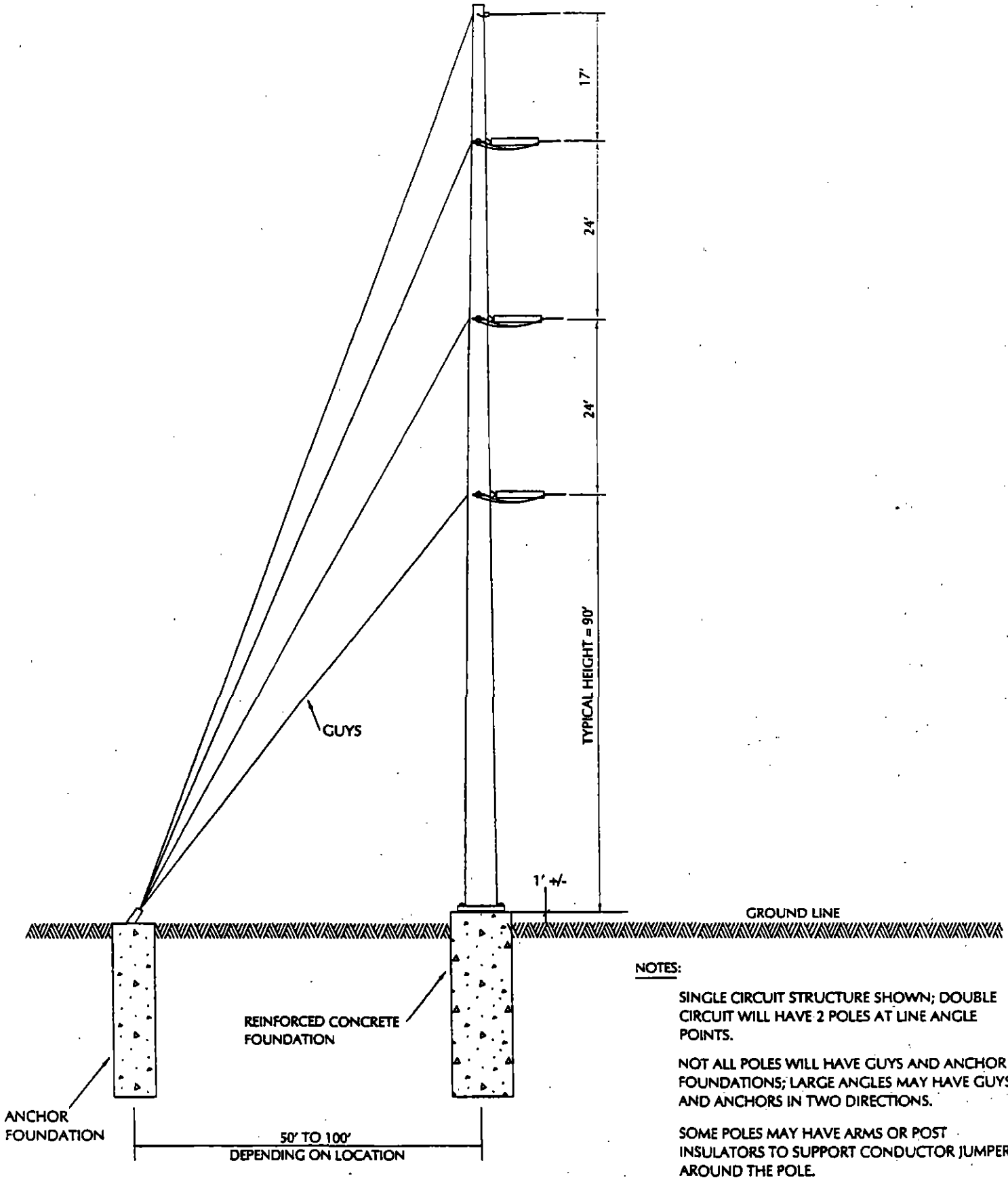
Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

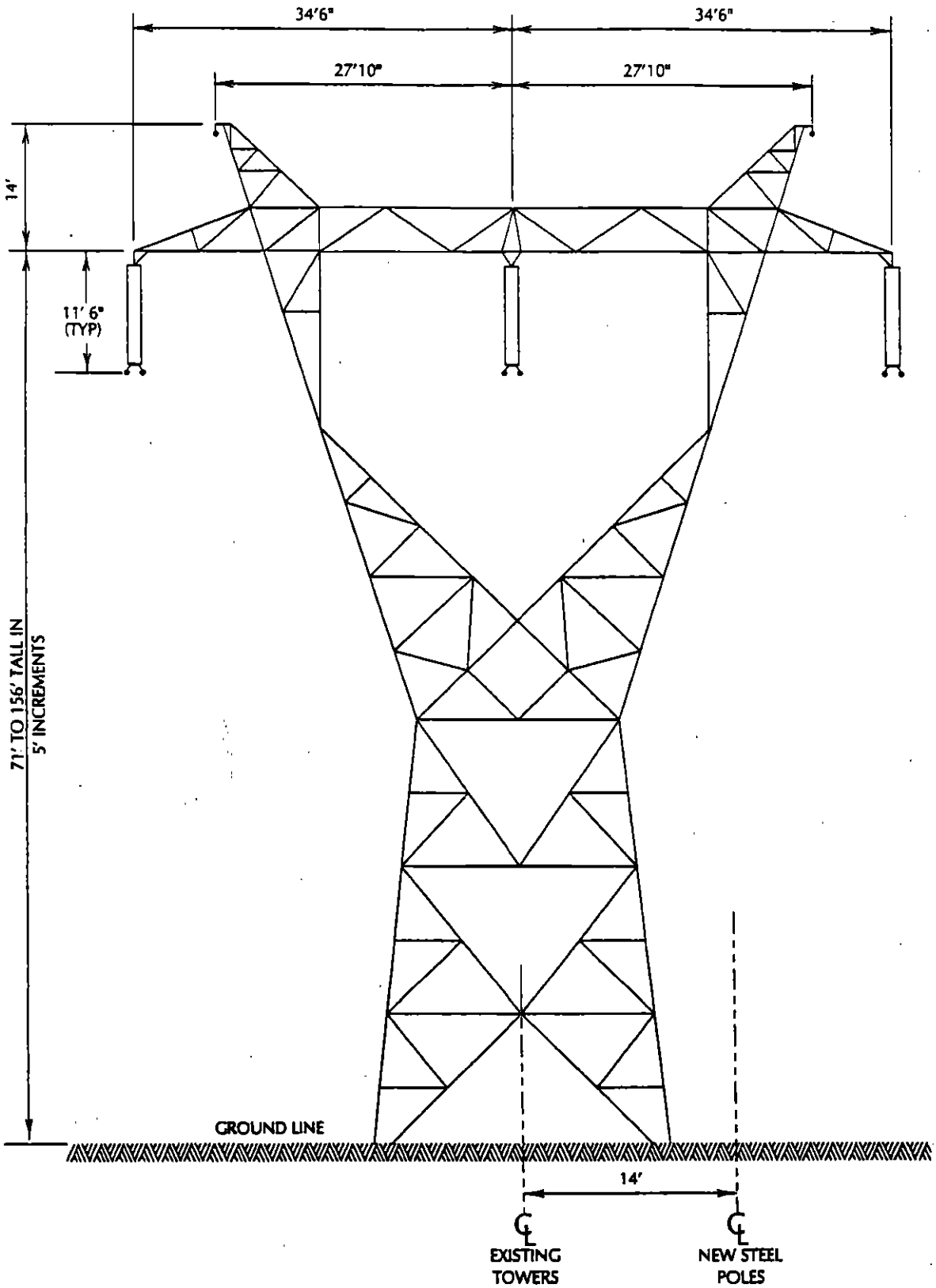
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION F PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Valley Springs Farm - McGinnis Property		130 W. Second St., Ste. 800	Dayton	OH	45402
Bd. of Trustees Beavercreek Twp.		1981 Dayton-Xenia Rd.	Beavercreek	OH	45434

DP&L

Working For You Today and Tomorrow

January 7, 2000

Valley Springs Farm-McGinnis Property
130 W. Second St. Ste. 800
Dayton, OH 45402

Dear Valley Springs Farm-McGinnis Property

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section F on the enclosed map, Figure A-1.2. In Section F of this project, an existing 300 foot wide right-of-way contains two steel tower transmission lines. On the western portion of the right of way the existing single circuit tower line, as sketched on Figure B-1.8, enclosed, is to remain as at present. On the eastern portion of the right of way there is a double circuit steel tower line with structures as sketched on Figure B-1.5, except the existing east circuit has only one conductor per position instead of two as shown. The towers at present carry a 345 kV circuit on the west side and a 69 kV circuit on the east side of the towers. The planned construction will add a second conductor to each of the three conductor positions on the east side of the towers to form the Foster-Bath 345 kV circuit. The 69 kV line presently on the east side of the towers will be relocated to a new wood pole construction between the two tower lines.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

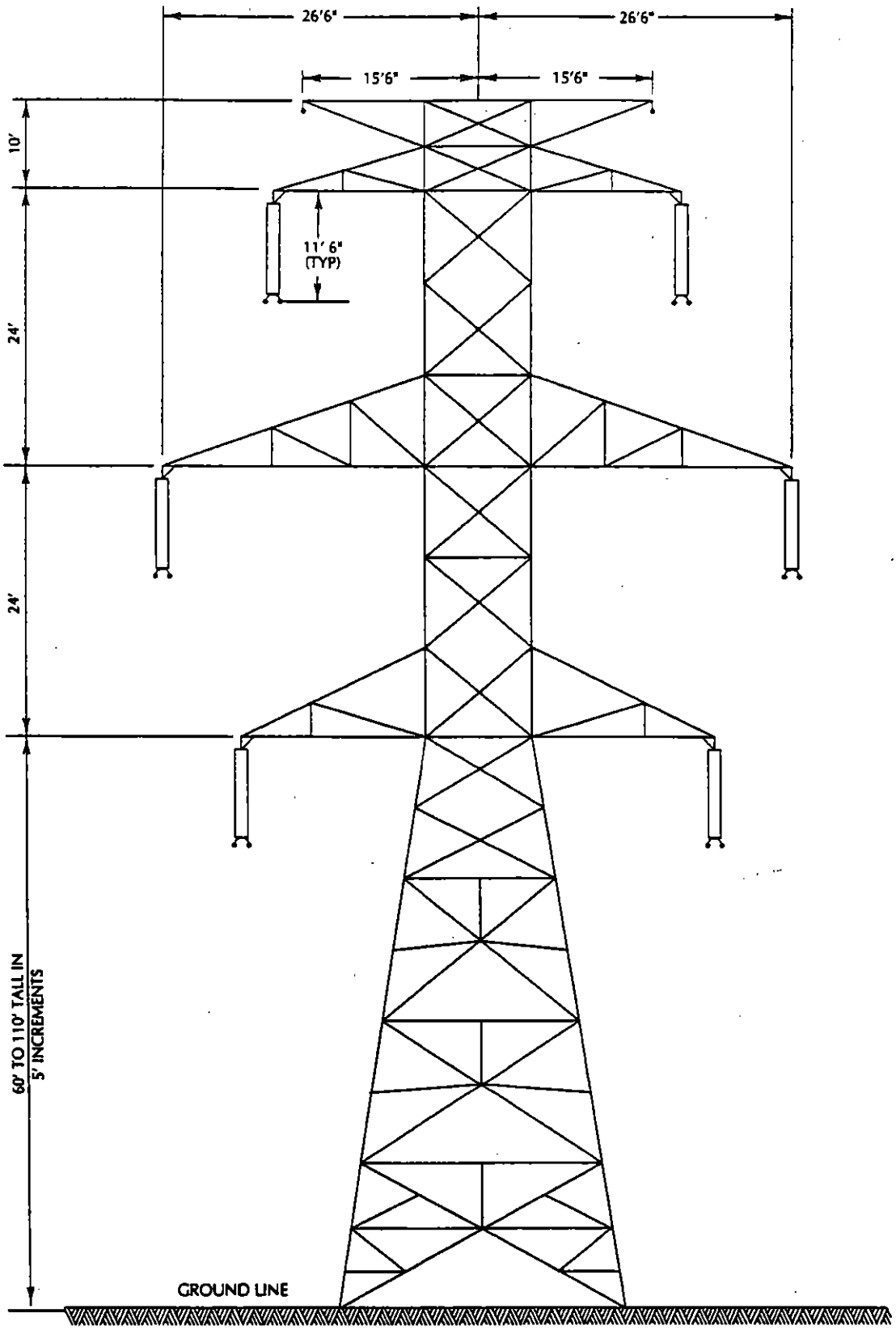
If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

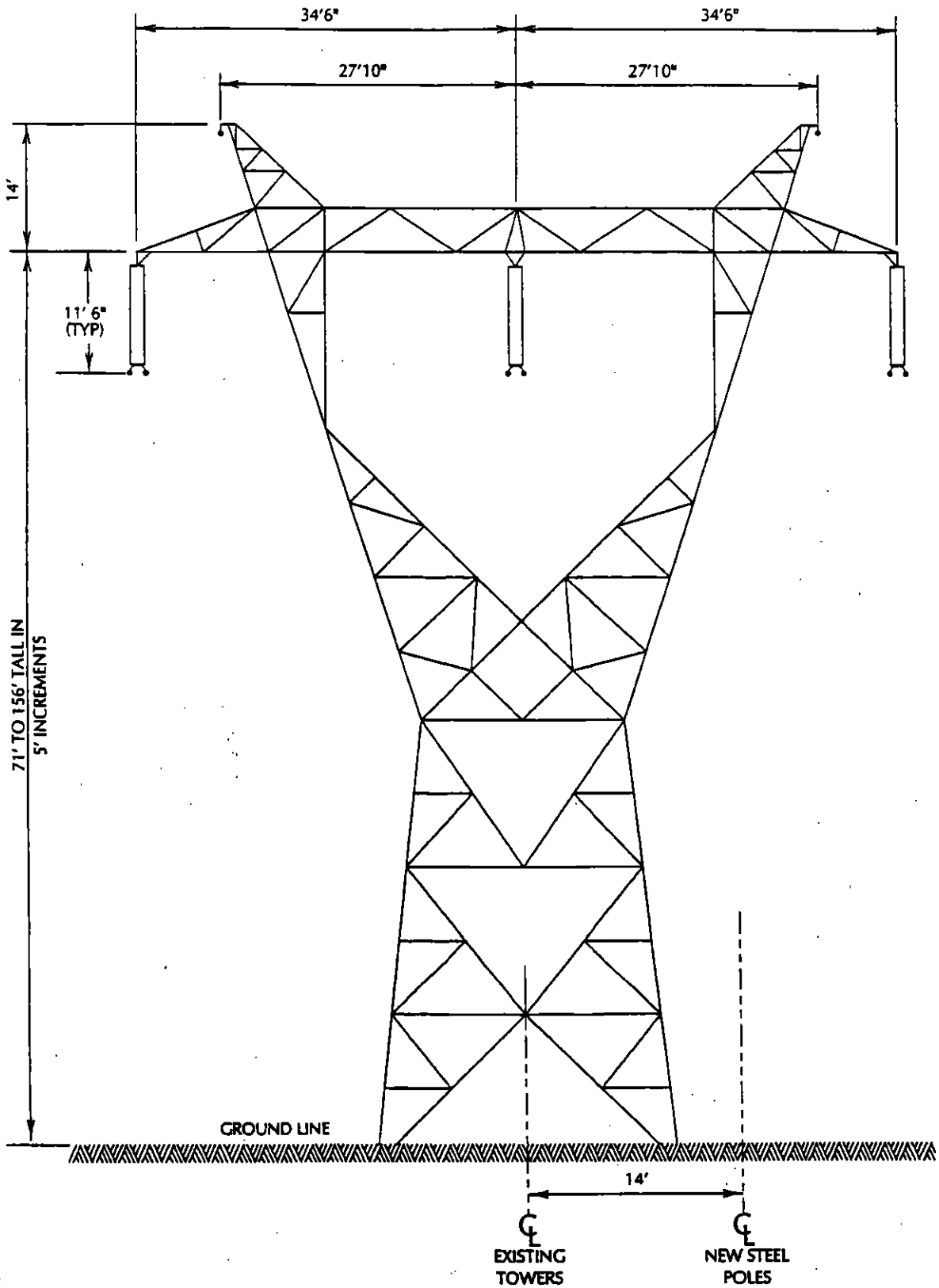
Sincerely,

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION G PROPERTY OWNER LIST

L Name	F Name	F&L Name	Address	City	State	Zip
Nutter Enterprises LTD.			P.O. Box 80	Alpha	OH	45301
Peed	James E. & Harriet M.		1076 Ankeney Rd.	Xenia	OH	45385
Sneed	Warner R., Jr. & Kimberley M.		2347 Haines Rd.	Dayton	OH	45431
Soward	Steven K.		1110 Ankeney Rd.	Xenia	OH	45385
Trame	Joseph A. & Terri L.		1122 Ankeney Rd.	Xenia	OH	45385
Piatka	John & Brenda L.		1140 Ankeney Road	Xenia	OH	45385
Downey	Deborah Ann		P.O. Box 21	Alpha	OH	45301
Hickey	Christopher J.	Janine S. Frank	1167 Ankeney Rd.	Xenia	OH	45385
Pitzer	Vaughn & Goldie		1189 Ankeney Rd.	Xenia	OH	45385
Siwecki	Ronald E. & Denise I.		1219 Ankeney Rd.	Xenia	OH	45385
Moland, Trustee	William W.		5005 Rhine Way	Dayton	OH	45458
McIntire	Ray G.		P.O. Box 34	Xenia	OH	45385
Clay	Bruce A. & Jean A.		1725 W. Slater Ct.	Xenia	OH	45385
Bader	Robert M. & Laura		1613 Kingsway Dr.	Xenia	OH	45385
Lavilla	Eduardo T. & Cheryl M.		1635 Kingsway Dr.	Xenia	OH	45385
Turner, III	Elijah W. & Alaire B.		1655 Kingsway Dr.	Xenia	OH	45385
Dressler	Frank E. & Carol J.		1675 Kingsway Dr.	Xenia	OH	45385
Finkbeiner	Jon R. & Barbara J.		1695 Kingsway Dr.	Xenia	OH	45385
Becker	Frederick H. & Margaret S.		1715 Kingsway Dr.	Xenia	OH	45385
Spurgeon	Roger L.		1735 Kingsway Dr.	Xenia	OH	45385
McClure	Robert A. & Arvetta		1755 Kingsway Dr.	Xenia	OH	45385
Heiney	Thomas I. & Wilma J.		1590 Cosler Ct.	Xenia	OH	45385
Dagett	Thomas R. & Patti L.		1610 Cosler Ct.	Xenia	OH	45385
Strickland	Marlyn F. & Linda R.		1628 Cosler Ct.	Xenia	OH	45385
Henry	Michael & Anita L.		1680 Heatherwood Trl.	Xenia	OH	45385
Zindorf	John M. & Susan K.		1700 Heatherwood Trl.	Xenia	OH	45385
Herting	Carl A. & Judy W.		1718 Heatherwood Trl.	Xenia	OH	45385
Bennett	Richard W.	Shirley G. Leyes	1734 Heatherwood Trl.	Xenia	OH	45385
Sultzbach, Trustee	Catharine Nelle		1331 Tall Timber Trl.	Dayton	OH	45409
Ankeney	Dale F.	Joan Ellen Fuller	1828 Fairground Rd.	Xenia	OH	45385
Allen Land LTD.			P.O. Box 357	Beavercreek	OH	45434
Branham	Randy & Ronna		1649 Oakwood Trl.	Xenia	OH	45385
Moran	Timothy J.	Rebecca L. Westlake	PCS 3 Box 4616	APO AP		96266

Maurer	Janet L.	1034 Sundance Dr.	Miamisburg	OH	45342
Haines	Charles R. & Peggy E.	1670 Woodland Trl.	Xenia	OH	45385
Rodenfels	Jerome F. & Ann T.	1694 Woodland Trl.	Xenia	OH	45385
Epperson, Trustee	William E. & Joan G.	2271 Walnut Ct.	Xenia	OH	45385
Phillips	Dennis K. & Susan L.	2289 Walnut Ct.	Xenia	OH	45385
Moore	Allen K. & Norma Jean	2294 Walnut Ct.	Xenia	OH	45385
Ali	Frank F. & Viola P.	1619 Grand Portage Trl.	Xenia	OH	45385
Ali	Jeannie R.	1671 Grand Portage Trl.	Xenia	OH	45385
Nutter Enterprises		2458 Dayton Xenia Rd., #200	Beavercreek	OH	45434
Croom	Christopher S.	2377 Passage Key Trl.	Xenia	OH	45385
Gilbert Homes, Inc.		6810 Brigantine Way	Dayton	OH	45414
Wingate	Leo K. & Katherine H.	2393 Passage Key Trl.	Xenia	OH	45385
STS Investments		3300 Suburban Dr.	Dayton	OH	45432
Willis	Woodrow D. & Lynn C.	2542 Rolling Meadows Dr.	Xenia	OH	45385
Eldridge	Michael G.	2548 Rolling Meadows Dr.	Xenia	OH	45385
Taylor	Roger L. & Linda S.	25 S. Central Ave.	Fairborn	OH	45324
Conley	Gary L. & Nancy M.	3942 Darden Dr.	Dayton	OH	45431
Derrick	Martha J.	198 Brush Row Rd.	Xenia	OH	45385
Southdown Inc.		3250 Linebaugh Rd.	Xenia	OH	45385
Barker	Juanita D.	2482 Trebein Rd.	Xenia	OH	45385
Rolling Meadows Business Trust		25 S. Central Ave.	Fairborn	OH	45324

DP&L

Working For You Today and Tomorrow

January 7, 2000

Nutter Enterprises LTD.
P.O. Box 80
Alpha, OH 45301

Dear Nutter Enterprises LTD.:

The Dayton Power and Light Company (DP&L) owns and operates a 345,000 volt transmission line in your area. This line connects with other transmission facilities in the area that DP&L owns jointly with the Cincinnati Gas & Electric Company (CG&E/Cinergy) and Columbus Southern Power/American Electric Power (CSP/AEP). A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section G on the enclosed map, Figure A-1.2. In Section G of this project, an existing 150 foot wide right-of-way contains double circuit steel transmission line towers. These towers are as sketched on Figure B-1.5, enclosed, except no circuit has yet been installed on the west side of the towers. This project will install a circuit on the west side of the towers such that they will look like those shown in Figure B-1.5.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

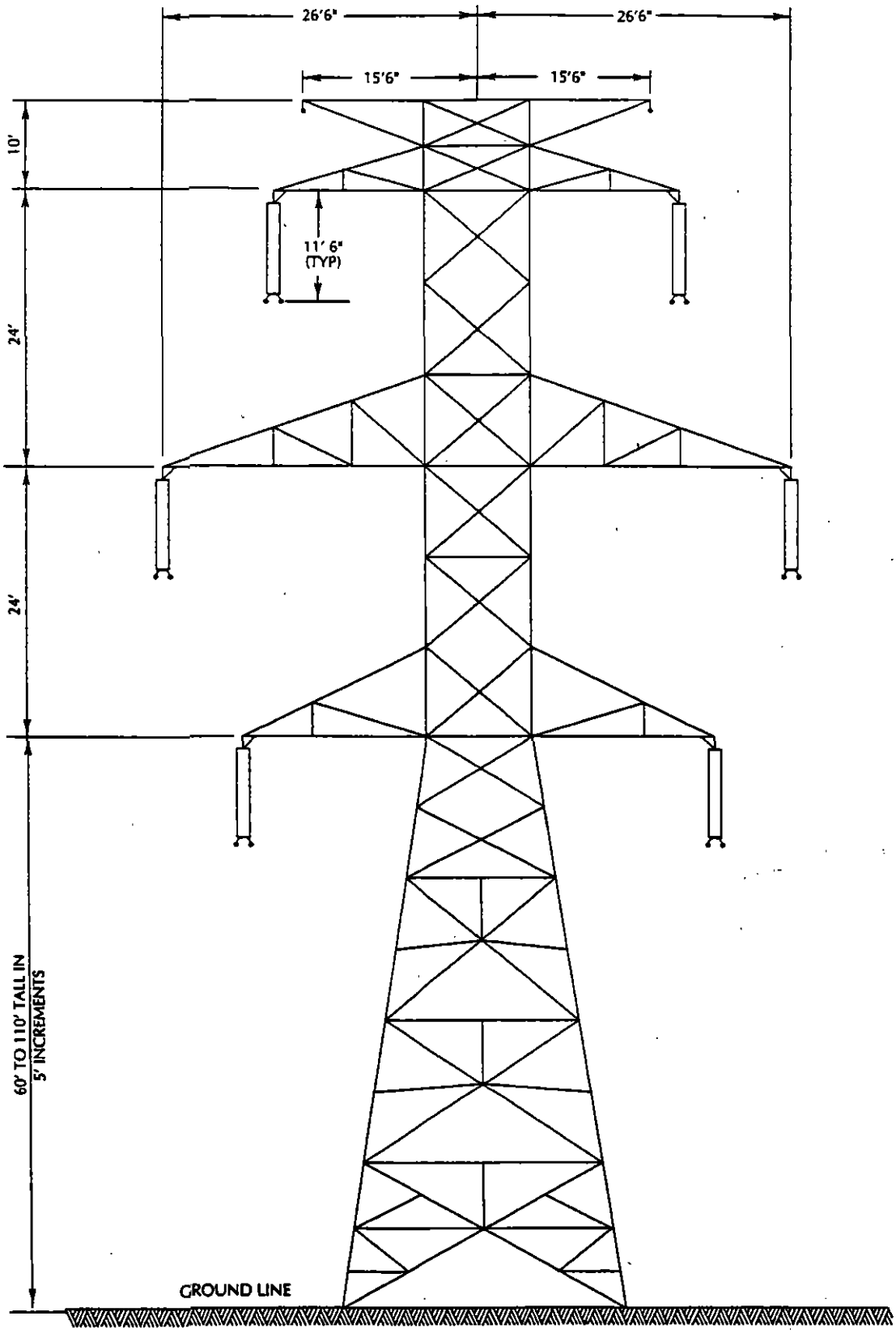
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)

LAW OFFICES

YOUNG, PRYOR, LYNN & JERARDI

FIRST NATIONAL PLAZA, SUITE 800

130 WEST SECOND STREET

DAYTON, OHIO 45402-1501

(937) 224-1981

FAX #(937) 224-5649

MICHAEL J. BURDGE
ROBERT B. COUGHLIN*
PETER J. JERARDI, JR.
CARLO C. McGINNIS**
LARRY A. SMITH

*ALSO ADMITTED IN INDIANA
**ALSO ADMITTED IN CALIFORNIA

OF COUNSEL
RICHARD E. PRYOR
JAMES T. LYNN, JR.

CHARLES F. YOUNG 1921-1993

January 17, 2000

Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
PO Box 1807
Dayton, Ohio 45401-1807

RE: Valley Springs Farm Company – McGinnis Property

Dear Mr. Taylor:

Thank you for your correspondence dated January 7, 2000 (see copy enclosed). My client appreciates your company's efforts to keep us apprised of your proposed improvements to the subject right of way over its property. However, I have been asked to communicate to you my client's objection to the said proposed improvements on account of the known and unknown negative effects that such transmission lines have upon adjacent property. In other words, the proposed expansion appears to also expand the geographic area subject to the negative impacts of the subject transmission lines. Given this state of affairs, and given that nothing in your January 7, 2000 letter addresses this issue, it is hereby respectfully requested that you make note of our objection and pass same along to all regulatory and/or oversight agencies.

I would like to take this opportunity to thank you in advance for your attention to this matter.

Very truly yours,

Carlo C. McGinnis

CCM/slv
cc: F. McGinnis

DP&L

Working For You Today and Tomorrow

January 7, 2000

Valley Springs Farm-McGinnis Property
130 W. Second St. Ste. 800
Dayton, OH 45402

Dear Valley Springs Farm-McGinnis Property

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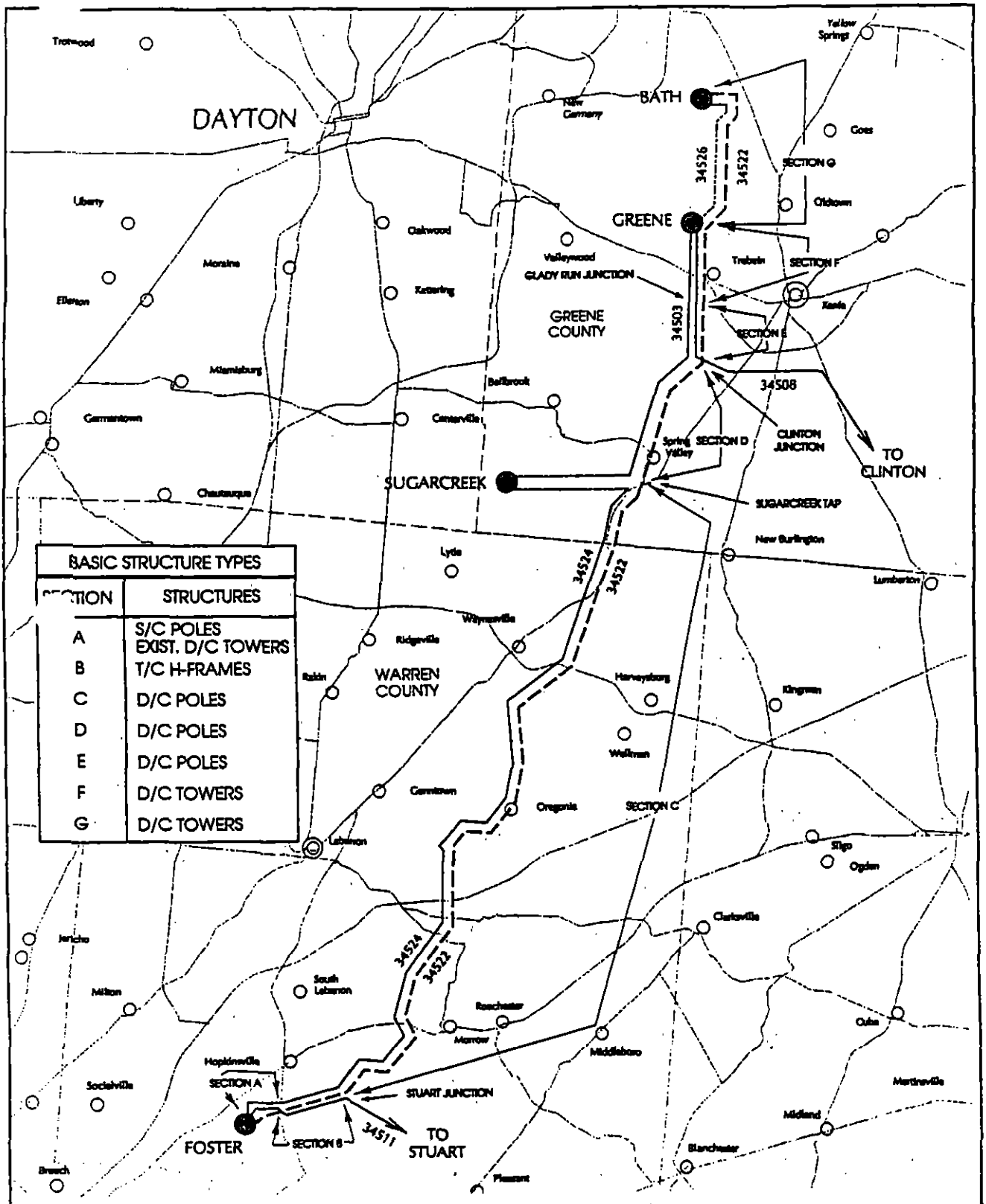
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

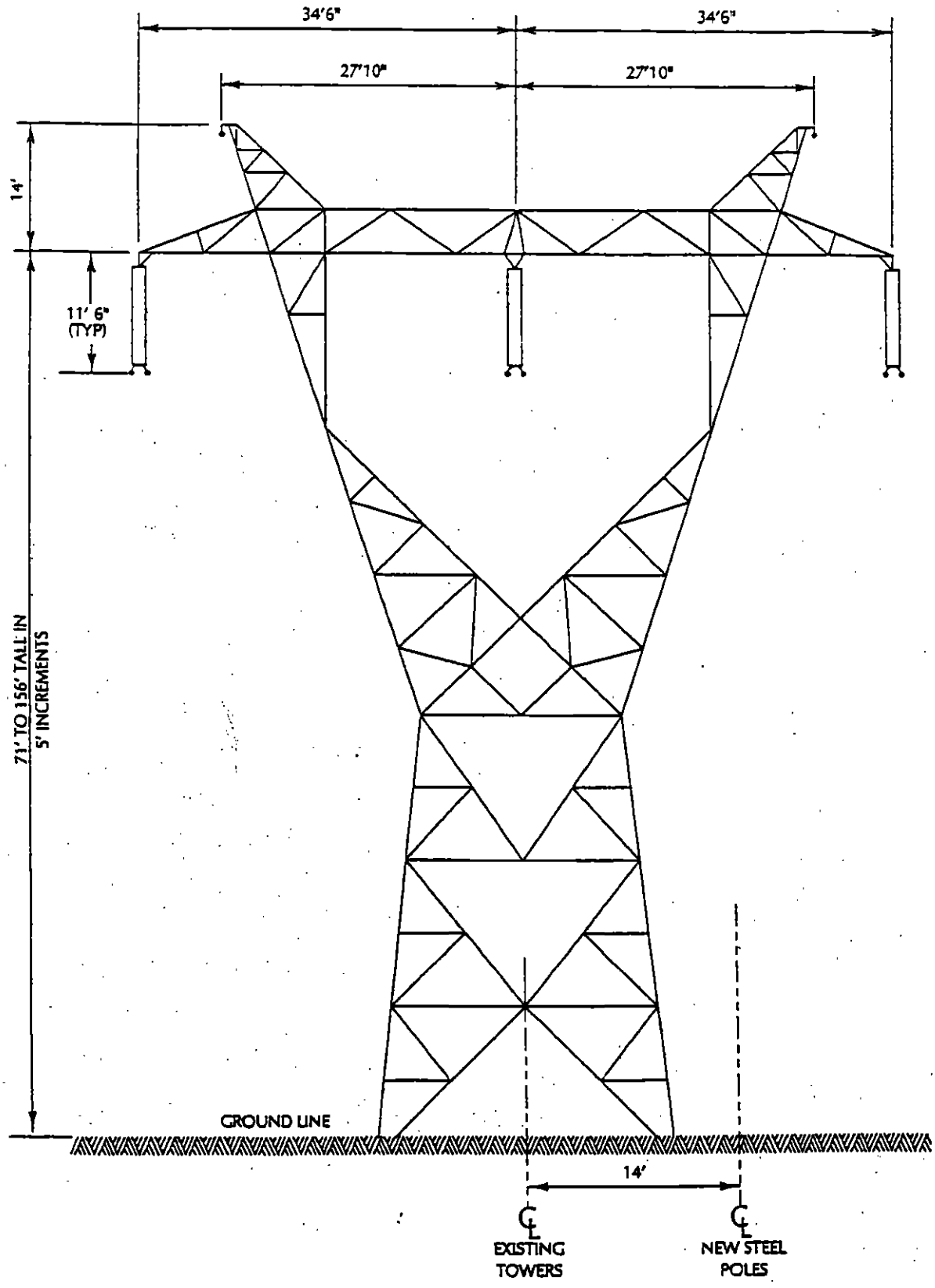
We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor
Manager, Real Estate Services

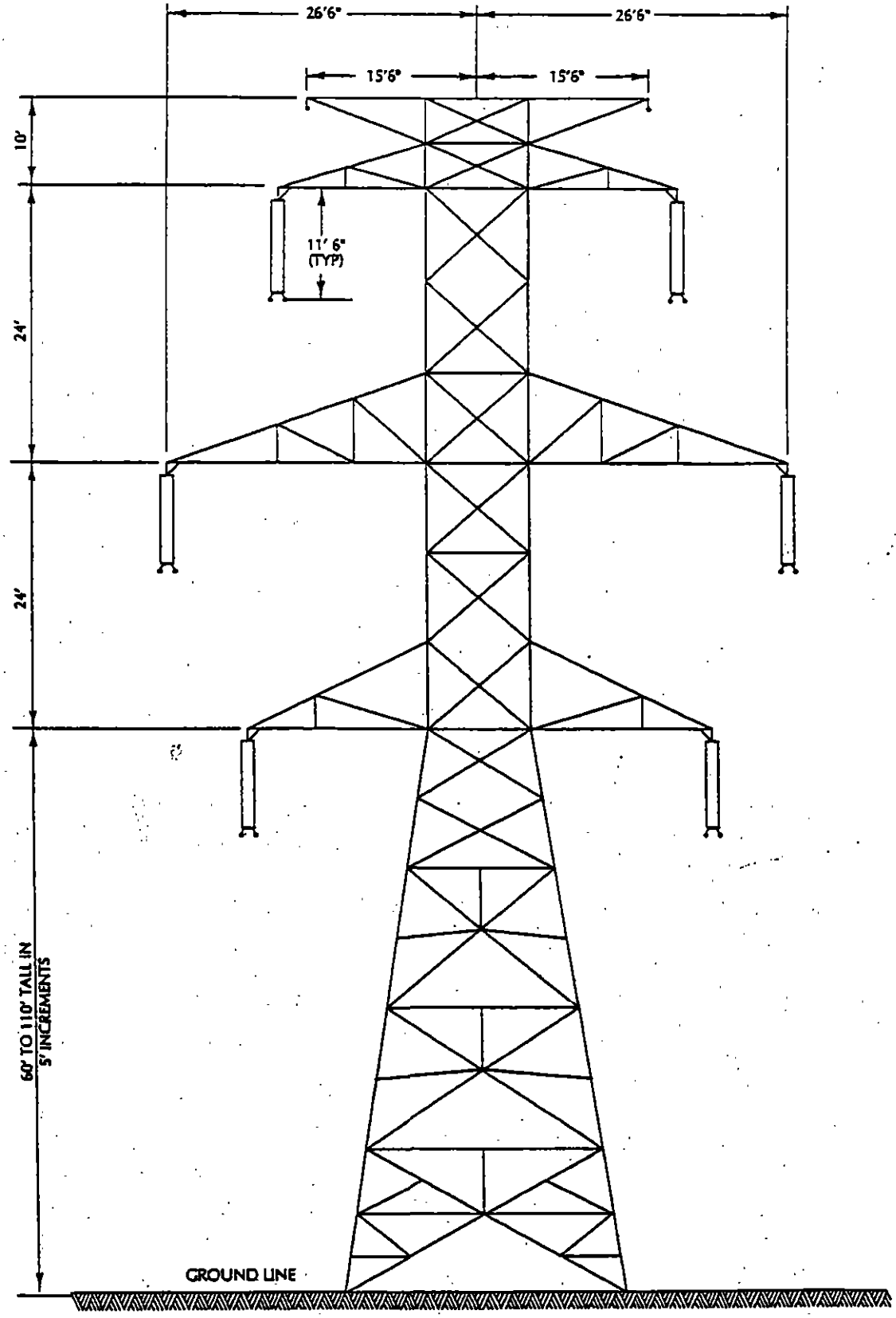


FOSTER TO BATH 345 KV
TRANSMISSION LINE
PROJECT MAP
FIGURE A-1.2



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)

for file

DP&L
The Service People

Dayton Power and Light Company
P.O. Box 8825, Dayton, Ohio 45401

RECEIVED DOCKETING DIV
00 FEB -1 PM 1:30
PUCO

February 1, 2000

Ms. Kim Wissman
Siting Officer
Ohio Power Siting Board
The Public Utilities Commission of Ohio
180 East Broad Street
Columbus, Ohio 43215-3793

00-232-EL-BLN
0001

Re: Letter of Notification for the Foster-Bath 345 kV Transmission Line Project

Dear Ms. Wissman:

The Dayton Power and Light Company (DP&L) proposes to establish a new 345 kV circuit between Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio to reduce the loading on the existing Foster-Sugarcreek 345 kV Circuit, and thereby ensure the continued reliability of the transmission system.

The proposed project provides the advantage of using existing right-of-way on the Foster-Sugarcreek-Greene-Bath 345 kV corridor by converting existing single circuit 345 kV to double circuit, or using open positions on existing double circuit towers, in order to minimize the environmental impact.

The following Letter of Notification is submitted for your review pursuant to Rule 4906-1-01 of the Administrative Code, as determined by the "Application Requirement Matrix for Electric Transmission Lines" in Appendix A of the rule. Please note that I have forwarded a copy of the Phase I Cultural Resources Survey to Dr. David Snyder of the Ohio Historic Preservation Office, and I have filed two copies with the Letter of Notification.

DP&L appreciates your review of this Letter of Notification and we would be happy to provide any additional information which you may require. If you have any questions regarding this project, please contact me at (937) 259-7174.

Sincerely,

H. Shamash

Hertzel Shamash
Manager, Resource Planning

This is to certify that the images appearing are an accurate and complete reproduction of a case file document delivered in the regular course of business.
Technician Joan Scheffler Date Processed 2-2-00

LETTER OF NOTIFICATION TO THE OHIO POWER SITING BOARD

THE DAYTON POWER AND LIGHT COMPANY

FOSTER TO BATH 345 KV TRANSMISSION LINE PROJECT

FEBRUARY 2000

This project involves the development of a 345 kV transmission circuit by The Dayton Power and Light Company. The Dayton Power and Light Company is submitting this Letter of Notification to the Ohio Power Siting Board for review and approval to proceed with the project.

Dayton Power and Light retained BHE Environmental, Inc., 11711 Chesterdale Road, Cincinnati, Ohio, to research land usage, agricultural district land, archeological and cultural resources, and other socioeconomic considerations associated with the development of the Foster-Bath transmission circuit. Additionally, BHE performed research into the presence or absence of animal and plant life species, the presence of absence of areas of ecological concern, and other environmental considerations associated with the development of the project. BHE performed the field study for this project, made agency contacts and completed other investigations and studies during August through November of 1999. The results of their work and investigations as well as their methodology, literature sited, and agencies and individuals contacted are included in the appropriate sections of this Letter of Notification.

The format of this Letter of Notification follows the requirements of Rule 4906-15-08 of the Administrative Code.

4906-15-08 Letter of Notification Requirements:

A. Need Statement

1. PROJECT NAME AND DESCRIPTION

Name of the project and reference number:

The name of this transmission line project is the "Foster to Bath 345 kV Transmission Line Project." A new 345 kV circuit is to be established between Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. The general location of this project is shown in Figure A-1.1. This new circuit will be called Foster-Bath and designated by Circuit Number 34522.

Description of the project:

The Foster to Bath 345 kV transmission circuit will be developed by rebuilding certain sections of existing 345 kV transmission circuits to form a double circuit (and in one section a triple circuit) transmission line between Foster and Bath Substations. Existing transmission line right of ways and substation properties will be used for the entire project, so no new right of way, property or access roads will be required to build this project. The total length of the new circuit will be 40.21 miles. Essentially 0.81 miles of the total will be single circuit steel poles (with future double circuit capability), 2.40 miles will be triple circuit steel H-frames that replace double circuit towers, 30.96 miles will be double circuit steel poles that replace single circuit steel towers, and 6.04 miles will be existing double circuit steel towers where a second circuit is added.

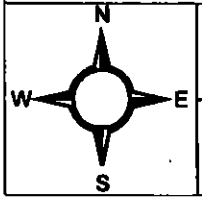


FIGURE A-1.1. Location of the Foster to Bath 345 kV project.

Project No. 173.05	BHE ENVIRONMENTAL, INC.

For clarity in understanding the locations and rebuild requirements of the project, the resulting Foster-Bath circuit has been separated into sections based on different characteristics. These sections are shown on the Project Map, Figure A-1.2, and are described as follows:

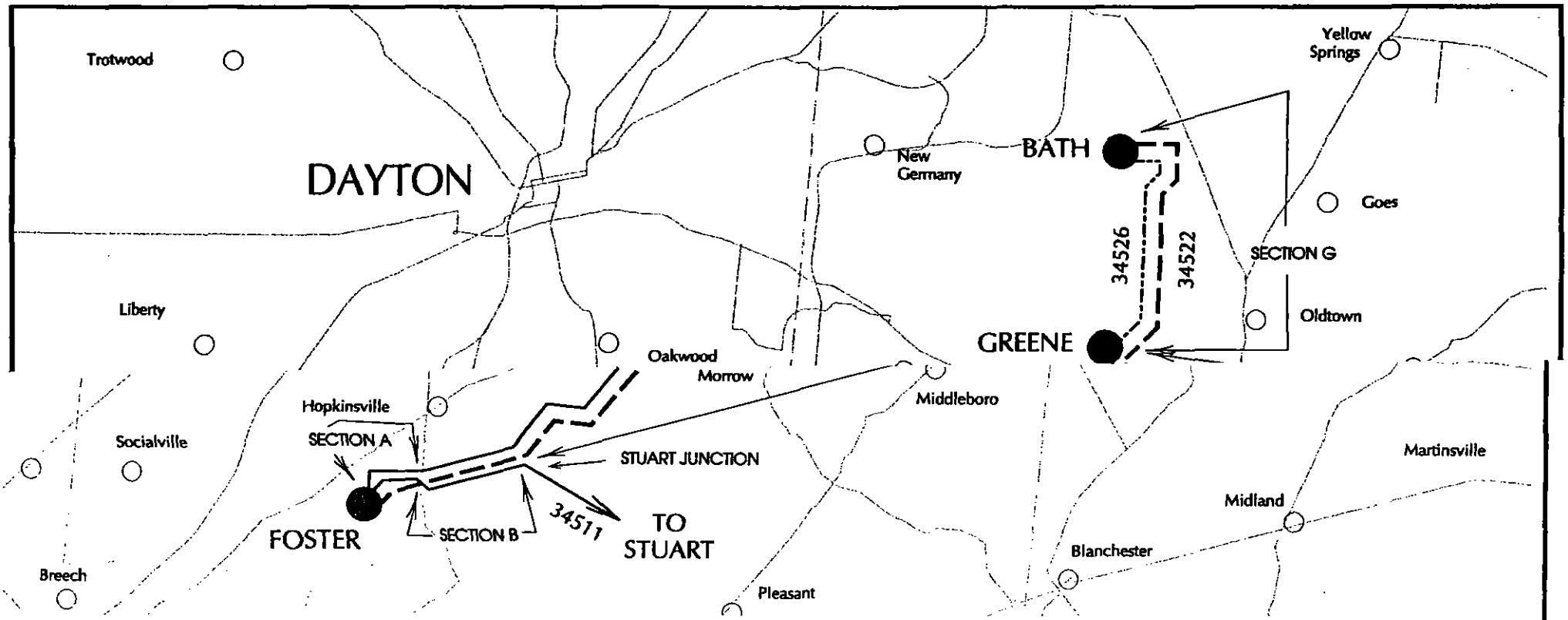
Section A: This 4259 feet long section (0.81 miles) begins at Foster Substation and proceeds generally east to the vicinity of Sibcy Road. In this area, Dayton Power and Light (DP&L) in conjunction with Cincinnati Gas and Electric (CG&E/Cinergy) and Columbus Southern Power (CSP/AEP) own a transmission right of way that totals 300 feet in width. Along the northern 150 feet of this right of way the three companies jointly own a double circuit transmission line on steel towers with circuits running from Foster Substation to Stuart Generating Station (Circuit 34511) near Aberdeen, Ohio and from Foster Substation to Sugarcreek Substation (Circuit 34524) near Dayton. The new circuit will be built along the southern 150 feet of this right of way on a new set of steel pole structures. Immediately north of the 300-foot wide right of way CG&E/CINergy has constructed a single circuit 138 kV transmission line on wood poles.

In order to position circuits coming out of Foster Substation correctly, and to keep from crossing circuits further north requiring very tall and expensive structures, the Foster to Stuart circuit will be reconnected to follow the new steel pole structures in this section. The Foster-Bath circuit (Circuit 34522) will be connected to occupy the original Foster-Stuart position on the steel tower line.

Section B: This section begins at Section A near Sibcy Road and continues generally east for 12,650 feet (2.40 miles) to the "Stuart Junction" point. A 150-foot wide right of way contains the double circuit Foster-Stuart and Foster-Sugarcreek transmission line in this area. The existing double circuit steel tower structures will be replaced with new triple circuit steel pole H-frame structures to accept the new Foster-Bath circuit. The Foster-Bath circuit will be located in the middle position of these new structures.

Section C: This section begins at the Stuart Junction and proceeds generally north for 127,313 feet (24.11 miles) to the "Sugarcreek Tap" point. A 150-foot right of way contains single circuit steel towers that carry the Foster-Sugarcreek circuit. The towers will be replaced on a structure for structure basis with double circuit steel poles with the Sugarcreek-Foster circuit on the west side of the poles and the new Foster-Bath circuit on the east side. At the Sugarcreek Tap point the existing tower will be retained to connect to the double circuit line to Sugarcreek Substation and the Foster-Bath circuit will pass the tap point on a single steel pole adjacent to the Sugarcreek Tap.

Section D: This section begins at the Sugarcreek Tap and proceeds north for 29,412 feet (5.57 miles) to the "Clinton Junction" point. A 150-foot right of way contains single circuit steel towers that carry the Sugarcreek-Greene line (Circuit 34503) except for two steel poles used as replacement structures following the 1974 Xenia tornado. The towers will also be replaced on a one for one basis with double circuit



CCD LINES

FOSTER - BATH

DP&L LINES

SUBSTATIONS

FOSTER TO BATH 345 KV TRANSMISSION LINE PROJECT MAP FIGURE A-1.2

steel poles and the two existing steel poles will be converted to double circuit poles. The Sugarcreek-Greene circuit will be located on the west side of the poles and the Foster-Bath circuit will be on the east side.

Section E: This section runs north from the Clinton Junction to the "Glady Run Junction" point and is 6767 feet (1.28 miles) long. The transmission right of way in this section totals 300 feet in width with the existing Sugarcreek-Greene circuit along the centerline of the western 150 feet of right of way and the Clinton-Greene 345 kV circuit (Circuit 34508) along the centerline of the eastern 150 feet of right of way. The new Foster-Bath circuit will enter this section from the east side of the poles containing the Sugarcreek-Greene circuit in Section D and cross over the Clinton-Greene circuit to a steel pole at the Clinton Junction point on the east side of that circuit. The line will then continue north in Section E on the east side of new double circuit steel poles that will replace the original Clinton-Greene single circuit steel towers. The Clinton-Greene circuit will occupy the west side of the double circuit poles. The existing Sugarcreek-Greene circuit will remain on its original single circuit steel towers throughout Section E.

Section F: This section will run north from the Glady Run Junction to Greene Substation, a distance of 7808 feet (1.48 miles). The right of way here continues at 300 feet in width and the Sugarcreek-Greene circuit will remain on its single circuit towers on the western 150 feet of right of way. On the eastern 150 feet of right of way, existing double circuit 345 kV design steel towers will continue to carry the Clinton-Greene circuit on the west side of the towers as at present. The new Foster-Bath circuit will be added to the east side of these towers. The present 69 kV circuit that occupies the east side of the towers will be relocated to a 69 kV design wood pole line in the area. Rather than terminating on substation takeoff structures inside Greene Substation, this section of the Foster-Bath circuit will continue north on two steel poles at the east side of the substation so it can bypass Greene Substation and be connected to Section G.

Section G: This section heads north out of the Greene Substation property for 24056 feet (4.56 miles) to the Bath Substation, the terminal point for the Foster-Bath circuit. The existing 150-foot right of way in this section contains double circuit steel towers with the west position open. New conductors will be strung on the west side of the towers, and the existing Greene-Bath circuit (Circuit 34526) presently on the east side of the towers will be reconnected to these new conductors on the west side. The original east side conductors will be connected to complete this final section of the Foster-Bath circuit.

Need for the Project:

Due to a combination of load growth and increased power transfers within ECAR (East Central Area Reliability Coordination Agreement), the loading on the existing CCD

(Cincinnati-CG&E, Columbus-CSP, Dayton-DP&L) Foster-Sugarcreek 345 kV Circuit has reached a point where additional 345 kV capacity is needed to reduce the loading on this Circuit, as well as the rest of the CCD transmission system. CG&E, CSP and DP&L all experienced significant load growth during the 1999 summer, as was the case throughout the ECAR region, and power transfers, which increase the loading on the Foster-Sugarcreek 345 kV Circuit, have also increased significantly. During the 1999 summer peak periods, as well as the spring and fall off-peak periods, the Foster-Sugarcreek 345 kV Circuit was subject to Transmission Loading Relief (TLR) requests, an example of which is shown on the following page as Figure A-1.3.

Based on these current load levels, should an outage of the Stuart-Clinton 345 kV Circuit or the Miami Fort-West Milton 345 kV Circuit occur, the Foster-Sugarcreek 345 kV Circuit would exceed its emergency rating. This is in violation of DP&L, CCD, ECAR, and NERC (North American Electric Reliability Council) reliability guidelines, which require that no transmission facility should exceed its normal rating during normal operating conditions, and no transmission facility should exceed its emergency rating during contingency conditions.

The proposed Foster-Bath 345 kV Circuit is the most effective option for expanding the CCD 345 kV transmission system to eliminate the above overload conditions, thus ensuring the continued reliability of the transmission system.

A single line electrical diagram of the proposed transmission project is included following as Figure A-1.4.

Transmission Loading Relief - Inquiry

AMERICAN ELECTRIC POWER
AEP: America's Energy Partner

Main Menu | Inquiry | TLR History | Active TLR's | Composite Paths | Transmi

- The End Date/Time Is Not Invalid!

Flowgate:

Company: DPL Level: Security Coordinator: Active: NO

Start Time: May / 01 / 1999 00 :00 ES Stop Time: Jul / 21 / 1999

Click on a TLR Below to View Detail Information

Transmission Element	Requestor	Sec Coordinator	Level	Start Time
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	1	07-16-1999 09
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	2a	07-16-1999 09
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	1	07-16-1999 09
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	2a	07-06-1999 10
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	1	07-06-1999 10
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	ECAR/MET-SC	2a	07-06-1999 10
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	AEP-SC	1	07-05-1999 11
OTDF_FOSTER_SUGERCREEK 345-STUART CLINTON 345	DPL	AEP-SC	2c	07-05-1999 11
08FOSTER 345 09SUGRCK 345 1	DPL	AEP-SC	1	06-29-1999 11
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	1	06-10-1999 13
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	1	06-09-1999 05
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	2c	06-08-1999 07
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	3	06-08-1999 07
08FOSTER 345 09SUGRCK 345 1	DPL	ECAR/MET-SC	1	06-08-1999 07

cn=William Joseph Thacker, ou=DPL, l=ECAR, o=TradeWave, c=US
Preferences

JTSIN OASIS Map | AEP Map | AEP Home Page | Logout

(c)Copyright 1999 - American Electric Power - This page generated on 07/21/1999 at 19:07:08 GMT

FIGURE A-1.3

Foster-Bath 345 kV

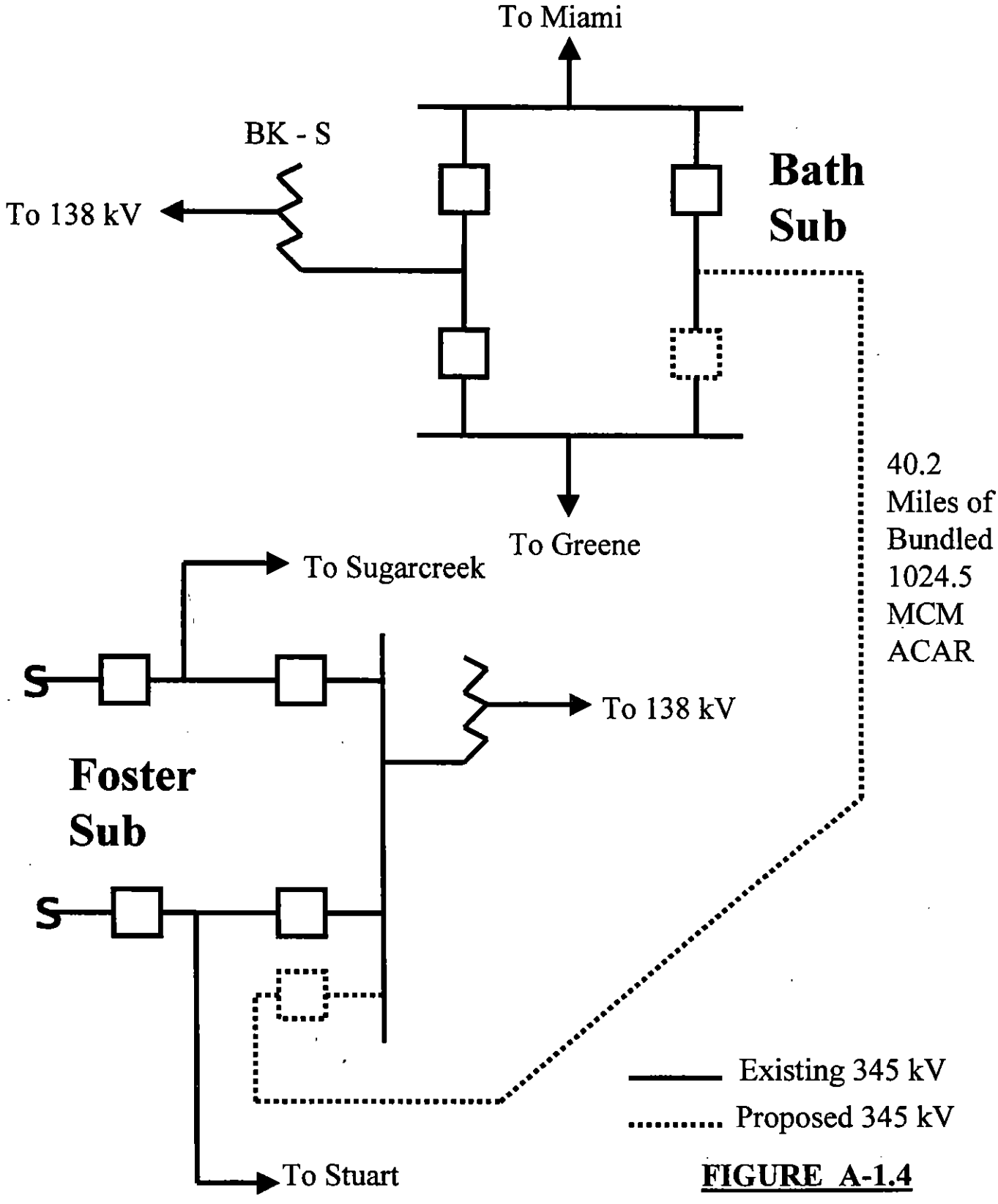


FIGURE A-1.4

Compliance with Letter of Notification Requirements:

The project meets the requirements for a Letter of Notification based on the scope of work required being consistent with the descriptions defined in the "Transmission Line Matrix", Appendix A, Rule 4906-1-01 of the Administrative Code. The specific Items identified in the Matrix that apply to each of the above defined line sections are as follows:

Section A meets the requirements of Item (1) (a), rerouting or extension or new construction of single or multiple circuit electric transmission line above 300 kV and not greater than one mile in length.

Sections B, C, D and E all meet the requirements of Item (4) (a), replacing transmission line structures with a different type of structures with less than two miles of new right of way required.

Sections F and G meet the requirements of Item (2) (b), adding additional circuits on existing structures designed for multiple circuit use with no new permanent access roads or widened right of way but with replacement of a few structures required.

2. PROJECT LOCATION IN RELATION TO EXISTING OR PROPOSED LINES AND STATIONS

The new Foster-Bath transmission circuit will be located along existing lines and substations as listed below. For each section of the new line, the adjacent transmission facility is given with its name, circuit number and designation as noted on the long-term forecast report. A portion of the long-term forecast report map (MAP II – The Dayton Power & Light Company Existing Transmission System 125 kV and Above) is included as Figure A-2.1 with the Foster-Bath circuit indicated on it. Foster-Bath circuit sections are as shown on Figure A-1.2.

Section A begins at Foster Substation and is built along the route of the Foster-Sugarcreek Circuit 34524 (Map No. CCD B 24) and Foster-Stuart Circuit 34511 (Map No. CCD B 11).

Section B will be built on joint structures with the Foster-Sugarcreek Circuit 34524 (Map No. CCD B 24) and Foster-Stuart Circuit 34511 (Map No. CCD B 11).

Section C will be built jointly with the Foster-Sugarcreek Circuit 34524 (Map No. CCD B 24) to the Sugarcreek Tap point which is approximately 3.2 miles east of the Sugarcreek Substation.

Section D will be built jointly with the Sugarcreek-Greene Circuit 34503 (Map No. CCD B 3).

Sections E and F will be built jointly with the Clinton-Greene Circuit 34508 (Map No. CCD B 8) and alongside the Sugarcreek-Greene Circuit 34503 (Map No. CCD B 3) to the east side of Greene Substation.

Section G will be built between Greene Substation and Bath Substation on the same structures with Greene-Bath Circuit 34526 (Map No. DPL B 26).

3. ALTERNATIVES CONSIDERED

A wide range of 345 kV options were considered to reduce the loading on the Foster-Sugarcreek 345 kV Circuit for an outage of the Stuart-Clinton 345 kV Circuit or the Miami Fort-West Milton 345 kV Circuit, as outlined below.

345 kV OPTIONS

	Distance (miles)	Cost ($M)
Foster (CIN)-Bath (DPL)	42	30
Foster (CIN)-W. Milton (DPL)	49	36
Killen (DPL)-Bath (DPL)	88	64
Batesville (CIN)-W. Milton (DPL)	93	67

Unlike the other 345 kV alternatives, which would all require new right-of-way and clearing thereof, the Foster-Bath 345 kV option offers the advantage of using existing right-of-way on the Foster-Sugarcreek-Greene-Bath 345 kV corridor by converting existing single circuit 345 kV to double circuit, or using open positions on existing double circuit towers. Therefore, the Foster-Bath 345 kV option would have the least environmental impact. And, in terms of performance, the Foster-Bath 345 kV option is the most effective option for reducing the loading on the Foster-Sugarcreek 345 kV Circuit, since it provides additional 345 kV capacity directly where it is needed. Finally, from an economic standpoint, the Foster-Bath 345 kV option is the least-cost, viable option.

Several alternate methods of connecting Foster and Bath Substations with a 345 kV line were considered in the progression of this project. One method included securing a parallel right of way to the existing right of way where new structures would be used for the new circuit and the existing parallel circuits left in place. However, an additional adjacent right of way is not readily available along much of the line. This is because the original right of way occupies the best or only realistic location for a line in several areas, and because development adjacent to the right of way has taken place in many locations since the original construction of the line.

A separate right of way along several alternate routes was also considered that could use all new structures. Finding suitable alternate routes was difficult in a number of locations. Additionally, detrimental impacts of using a new alignment were determined to be greater in all aspects compared to rebuilding along the existing line segments and rights of way available between Foster and Bath. Consequently, the construction to be used is to rebuild structures and add conductors as required to form the new circuit along existing facilities. Impacts expected to occur by adopting this method of construction compared to establishing and building along a new alignment include:

- No new right of way or property purchases are required.
- No new or additional tree clearing is required beyond that presently done for routine maintenance.
- Having only one transmission line corridor compared to two separate corridors with a new alignment minimizes visual impact.
- Overall socioeconomic and environmental impacts are minimized by disturbing essentially half the land compared to what a new separate line/corridor would require.
- The new circuit can be brought in service sooner since the procurement of right of way is not required and tree clearing of that new right of way does not need to be done.

4. CONSTRUCTION SCHEDULE AND IN-SERVICE DATE

The scheduled in-service date for the Foster-Bath Transmission Project is June 1, 2002.

To meet this scheduled in-service date, the milestones and time frames listed below need to be followed. Also of significant consideration to working the schedule for this project is the restriction that the existing circuits along the route for the Foster-Bath circuit are all important to the operation of the DP&L, CCD and ECAR transmission systems. As such, they are difficult to take out of service to do the upgrade work for this Foster-Bath project. This is especially difficult during times of high electrical system loading in the summer and winter, and consequently little construction activity may occur in these periods.

(a) Submission of Letter of Notification to the Ohio Power Siting Board...January 2000.

(b) Complete design engineering and secure materials for transmission work...April through September 2000.

(b) Perform routine maintenance and tree trimming on the right of way to facilitate access and construction...April through August 2000.

(c) Install steel pole foundations in Sections A through E...July 2000 through September 2001.

(d) Install conductors in Sections F and G...September 2000 through June 2001.

(e) Install steel pole structures, transfer existing conductors and remove existing towers as required in Sections A through E...April 2001 through April 2002.

(f) Install conductors for Foster-Bath Circuit in Sections A through E...September 2001 through May 2002.

(g) Engineering and secure materials for Foster and Bath Substations...May through September 2001

(h) Install Foster and Bath Substation structures and equipment...October 2001 through May 2002.

5. AREA MAP DEPICTING FACILITY LOCATION

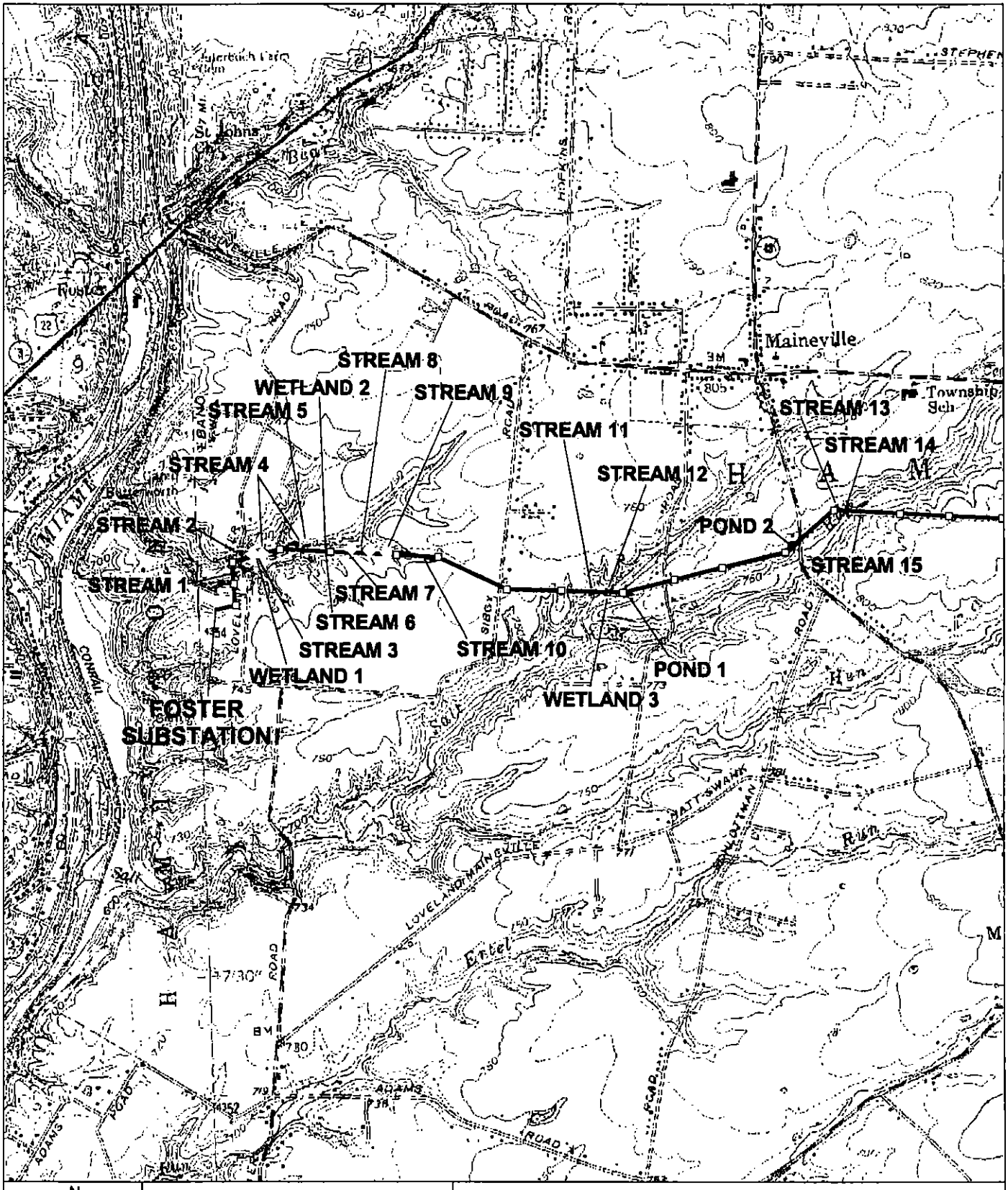
An area map, Figures A-5.1 through A-5.14, following, has been assembled from USGS quadrangle maps at a 1:24,000 scale to show the alignment of the Foster-Bath transmission circuit. This map includes the other transmission facilities in the area that have some relationship to the Foster-Bath circuit. The junction points of the various sections of the Foster-Bath circuit as discussed in this Letter of Notification are also shown on the map.

Directions to Facilities:

Due to the length of this line project, directions are given to the Bath Substation at the north end of the circuit and to Foster Substation at the south end. Other areas along the line may be found by following the map provided as Figure A-5.1 through A-5.14.

Bath Substation is located in Greene County, Ohio, east of Fairborn. It may be reached from Exit 20 of Interstate Route I-675. From the interchange proceed east on Dayton-Yellow Springs Road for 1.7 miles to Linebaugh Road. Turn right on Linebaugh Road and proceed south 1.5 miles to Bath Substation on the west side of Linebaugh Road.

Foster Substation is located in Warren County, Ohio, west of Maineville. It may be reached from Exit 28 of Interstate Route I-71. From the interchange proceed 4.9 miles south on State Route 48 to the center of Maineville. Turn right at the traffic signal onto Maineville Road and proceed west 0.6 miles to Sibcy Road. Turn left onto Sibcy Road and follow it 1.6 miles to Loveland-Foster Road (also called Butterworth Road). Turn right on Loveland-Foster Road and proceed 0.2 miles to Foster Substation on the left.


STREAM 8
WETLAND 2
STREAM 9
STREAM 5
STREAM 11
STREAM 13
STREAM 14
STREAM 4
STREAM 12
STREAM 2
POND 2
STREAM 15
STREAM 1
STREAM 7
STREAM 6
STREAM 3
STREAM 10
POND 1
WETLAND 1
WETLAND 3
FOSTER SUBSTATION
Maineville
St Johns
Bust
Rustic
Township
Sch
Bantam
Loveland-Maineville
Foster
Adams
Miami
Conrail
Sibgy
Hopkins
Hatt-Swamp
Ruth
Ettel
Salt
Creek
Adams
Road
Loveland-Maineville Road
Sibgy Road
Hopkins Road
Hatt-Swamp Road
Ruth Road
Foster Road
Adams Road
Adams Road
Bantam Road
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Ruth Road

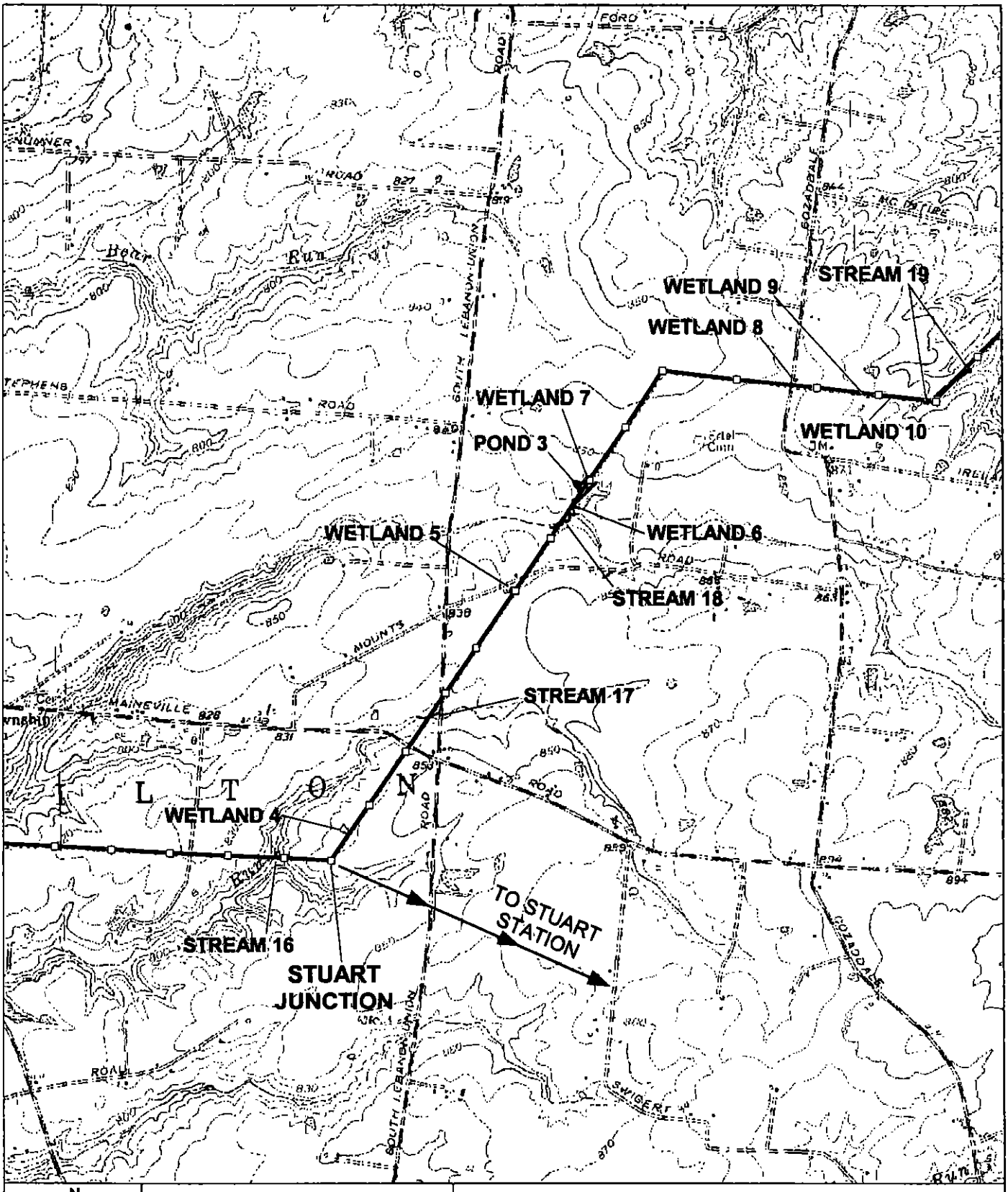

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FIGURE A-5.2. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - South Lebanon, OH	BHE ENVIRONMENTAL, INC.

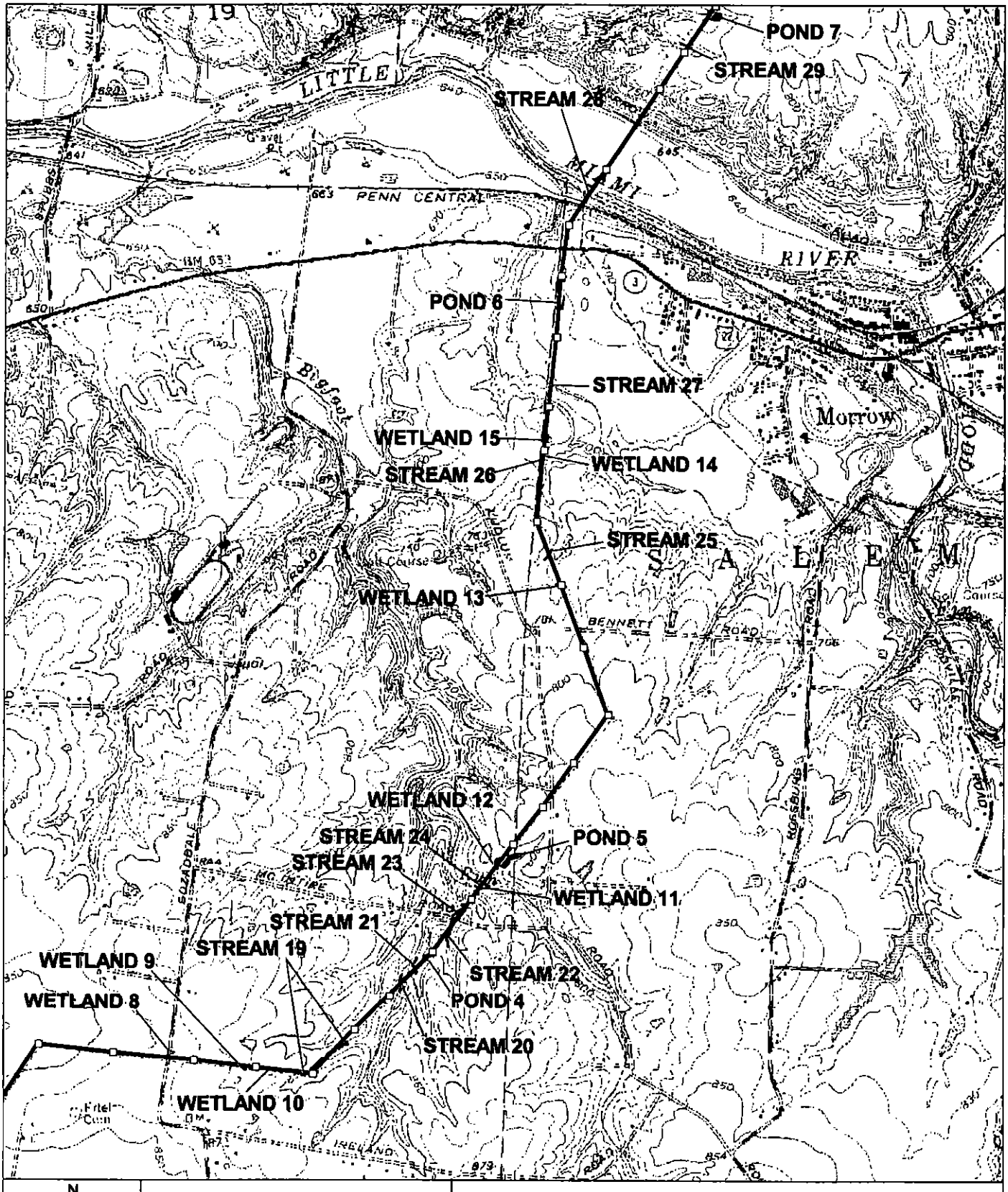

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FIGURE A-5.3. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - South Lebanon, OH	BHE ENVIRONMENTAL, INC.

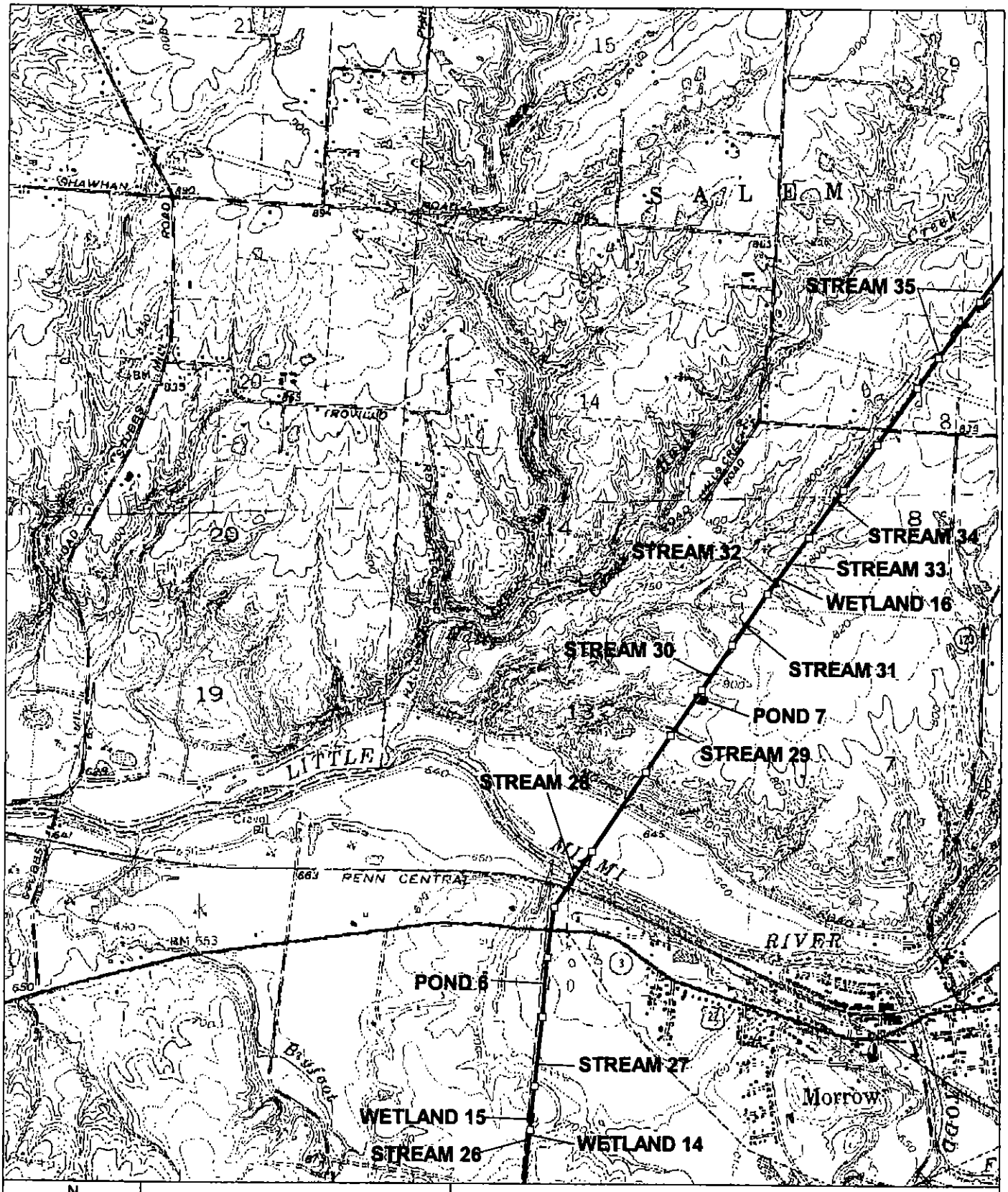

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FIGURE A-5.4. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05

Base Map: USGS 7.5 Minute Topographic Maps - South Lebanon, OH and Lebanon, OH

BHE ENVIRONMENTAL, INC.

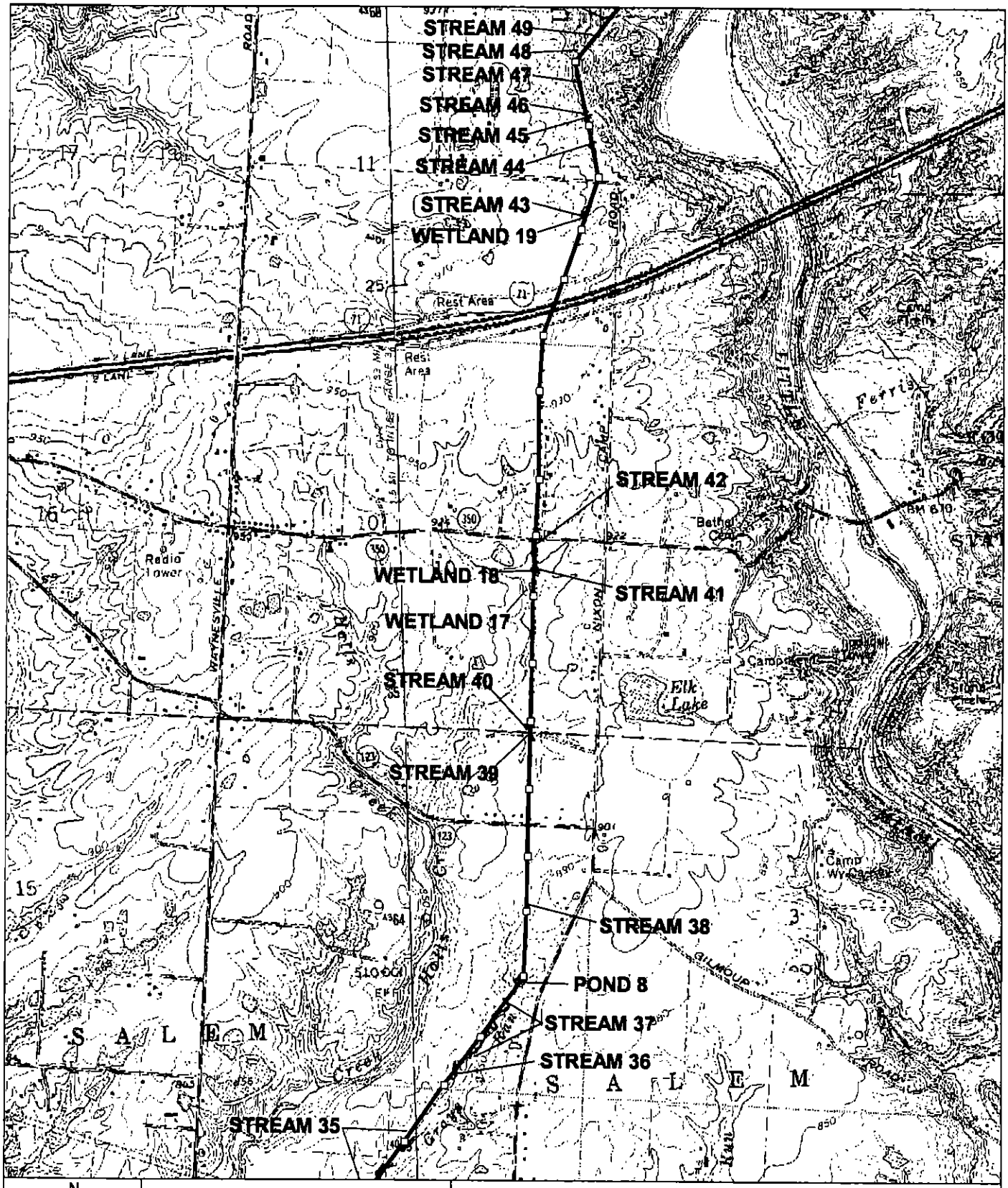

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FIGURE A-5.5. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05

Base Map: USGS 7.5 Minute Topographic Maps - Lebanon, OH and Oregonia, OH

BHE ENVIRONMENTAL, INC.

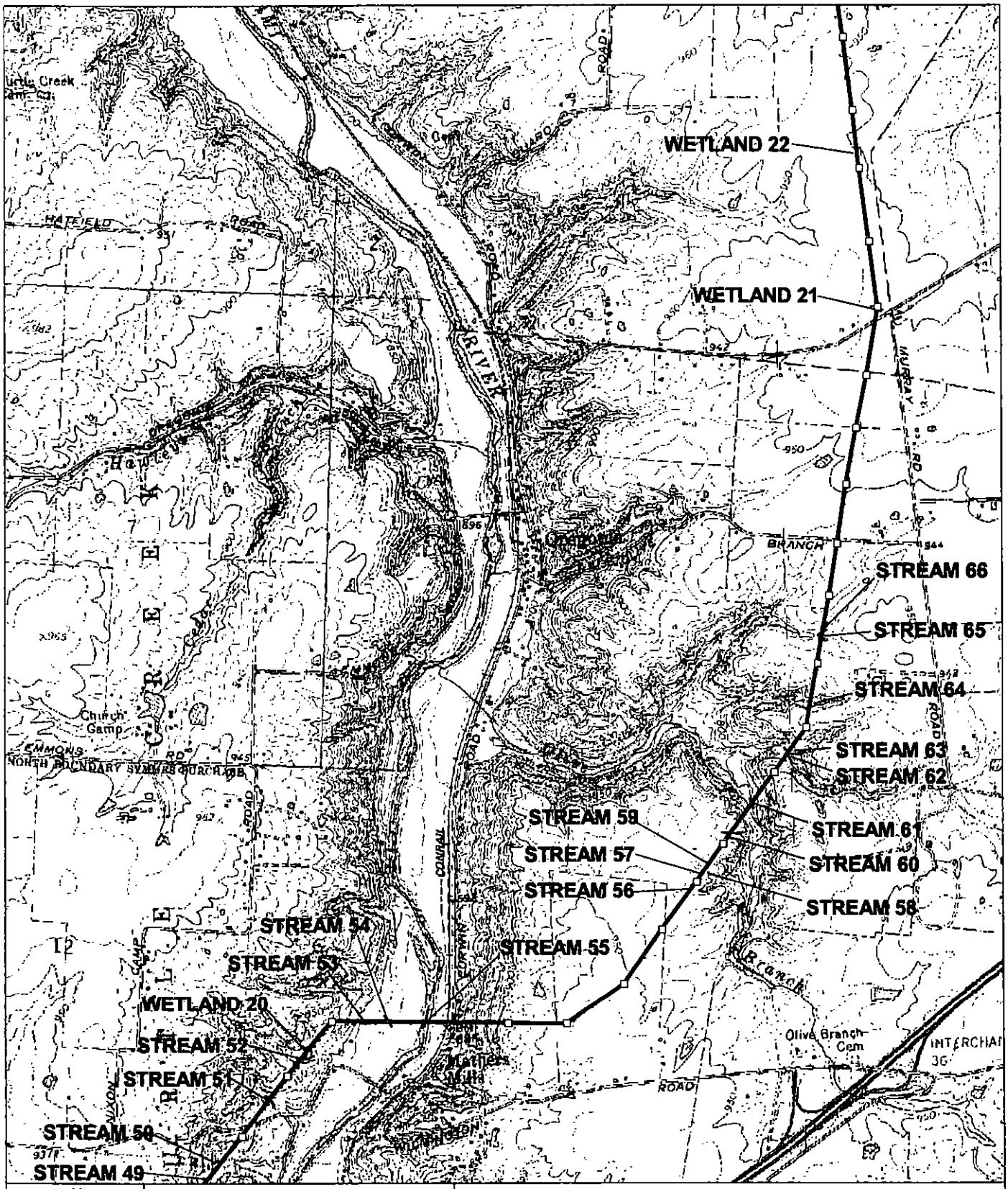

FIGURE A-5.6. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Oregonia, OH	BHE ENVIRONMENTAL, INC.

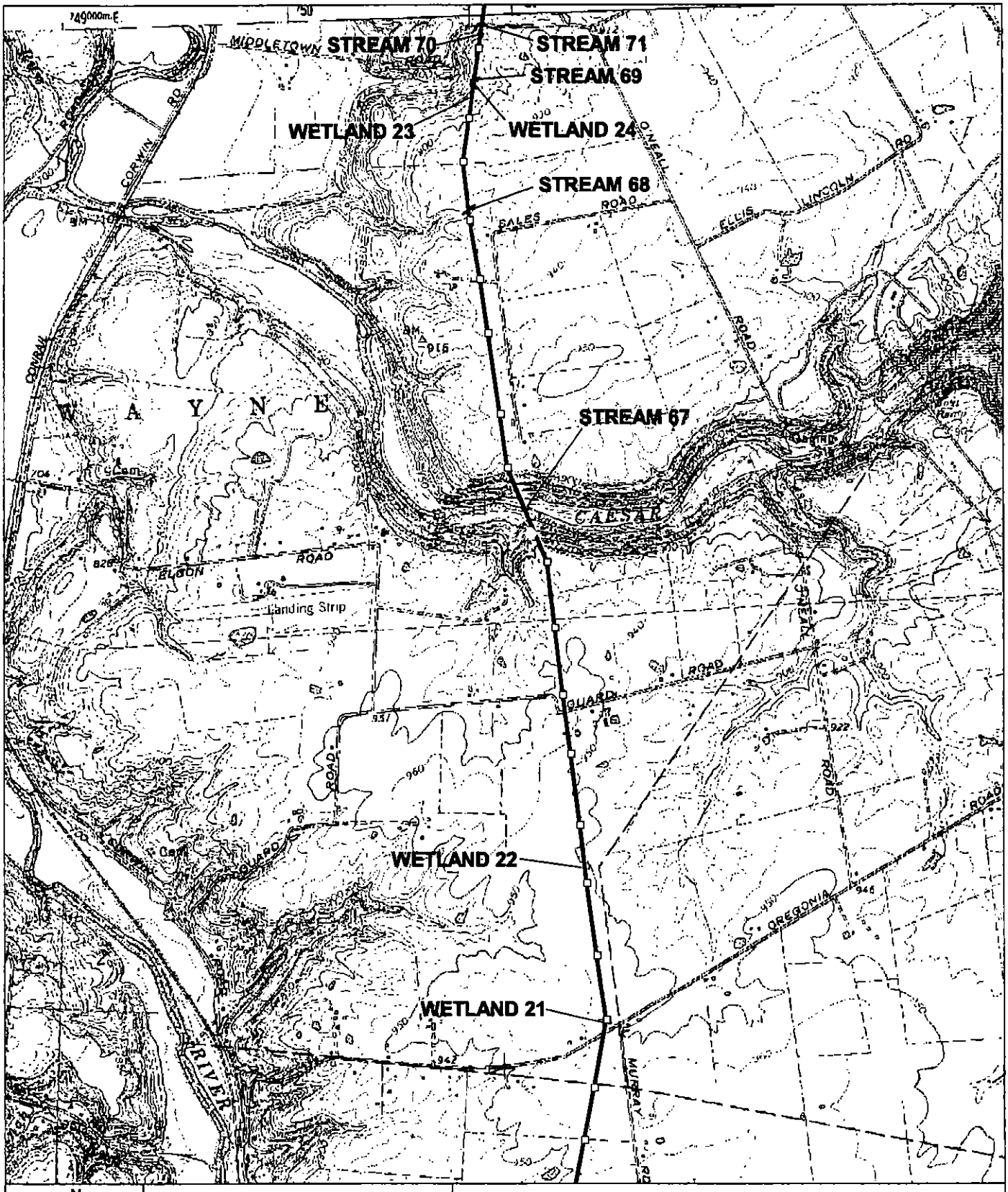

FIGURE A-5.7. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Oregonia, OH	BHE ENVIRONMENTAL, INC.

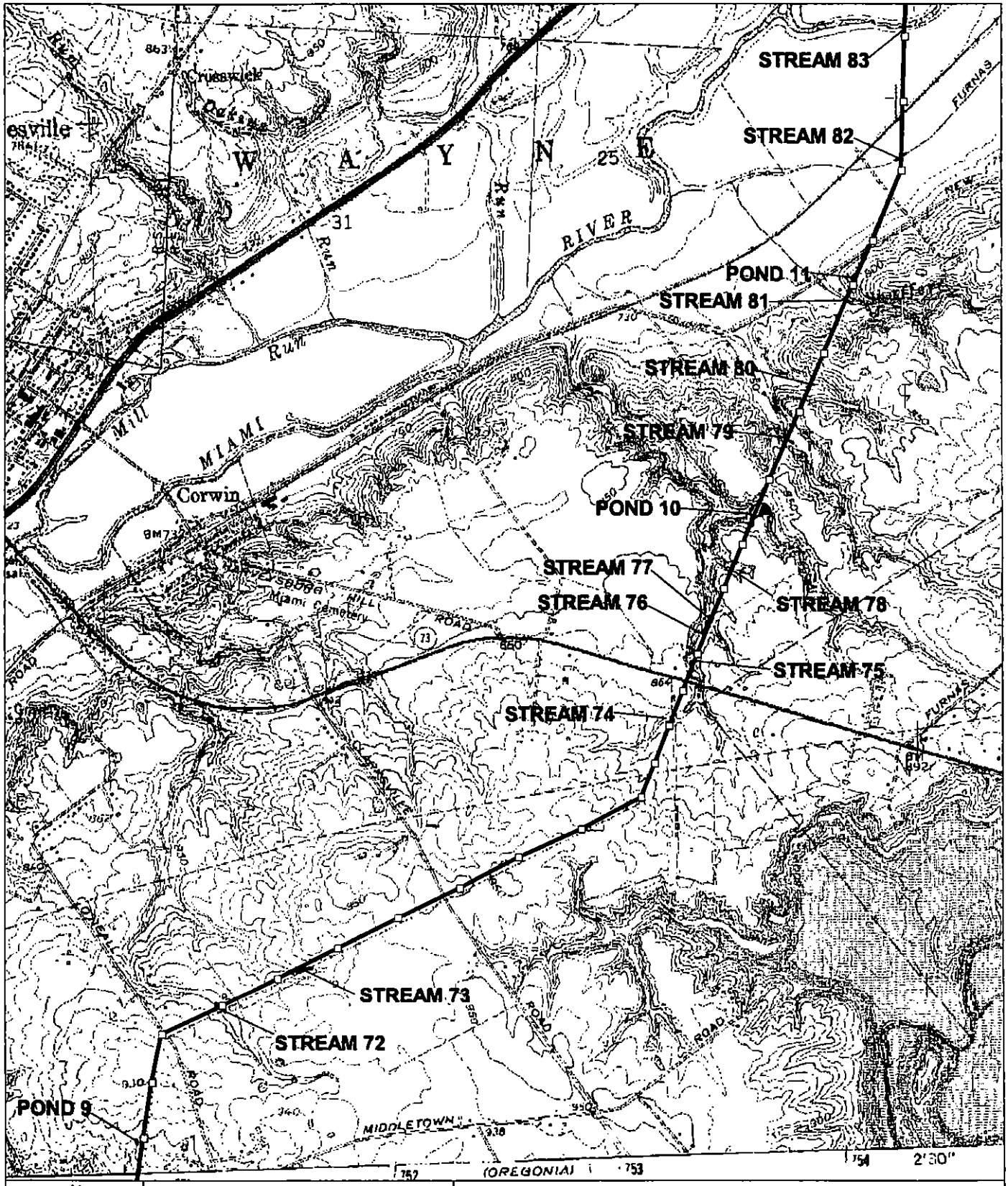

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FIGURE A-5.8. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line Structure Locations Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

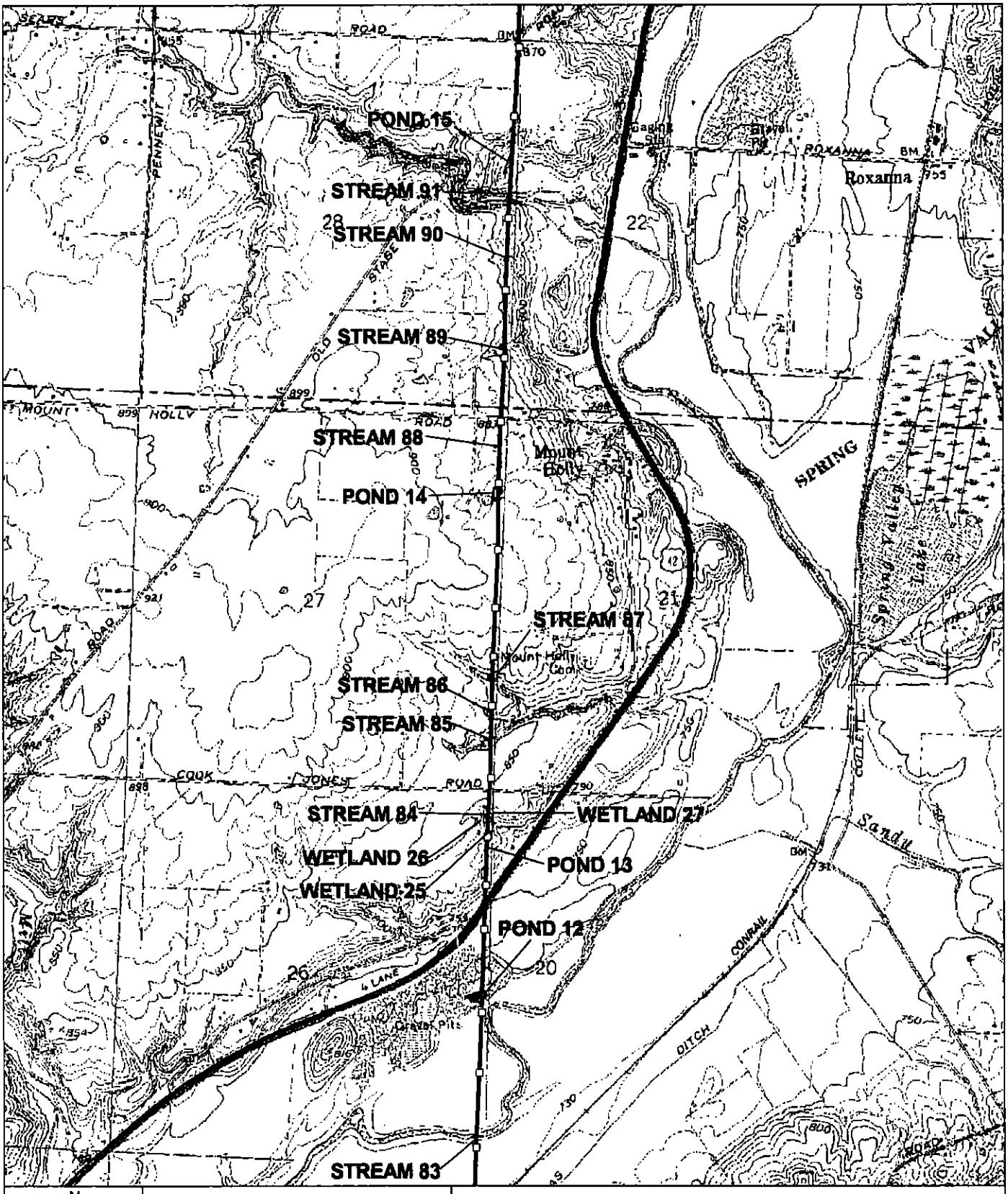

FIGURE A-5.9. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

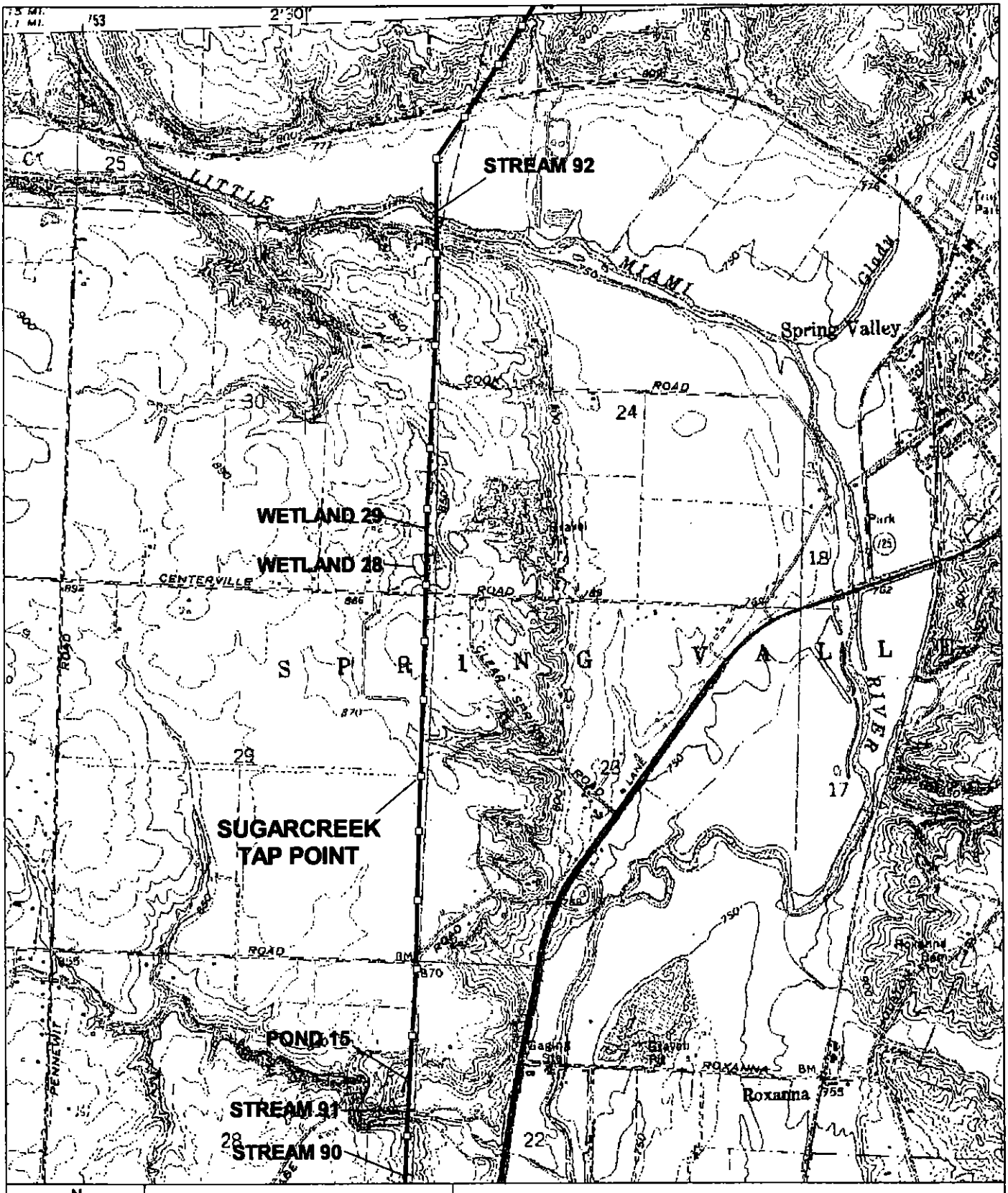

FIGURE A-5.10. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

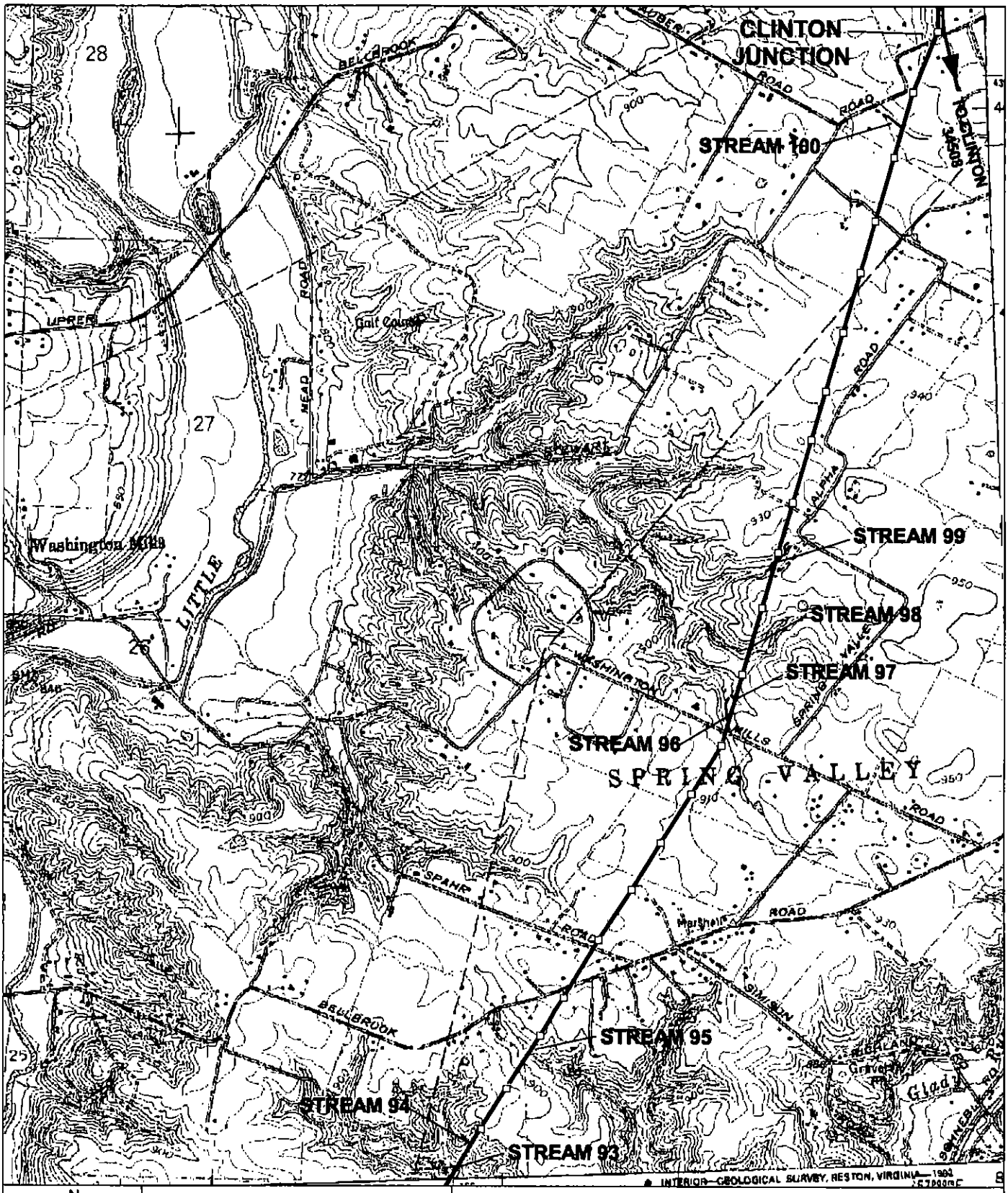

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FIGURE A-5.11. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line Structure Locations Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

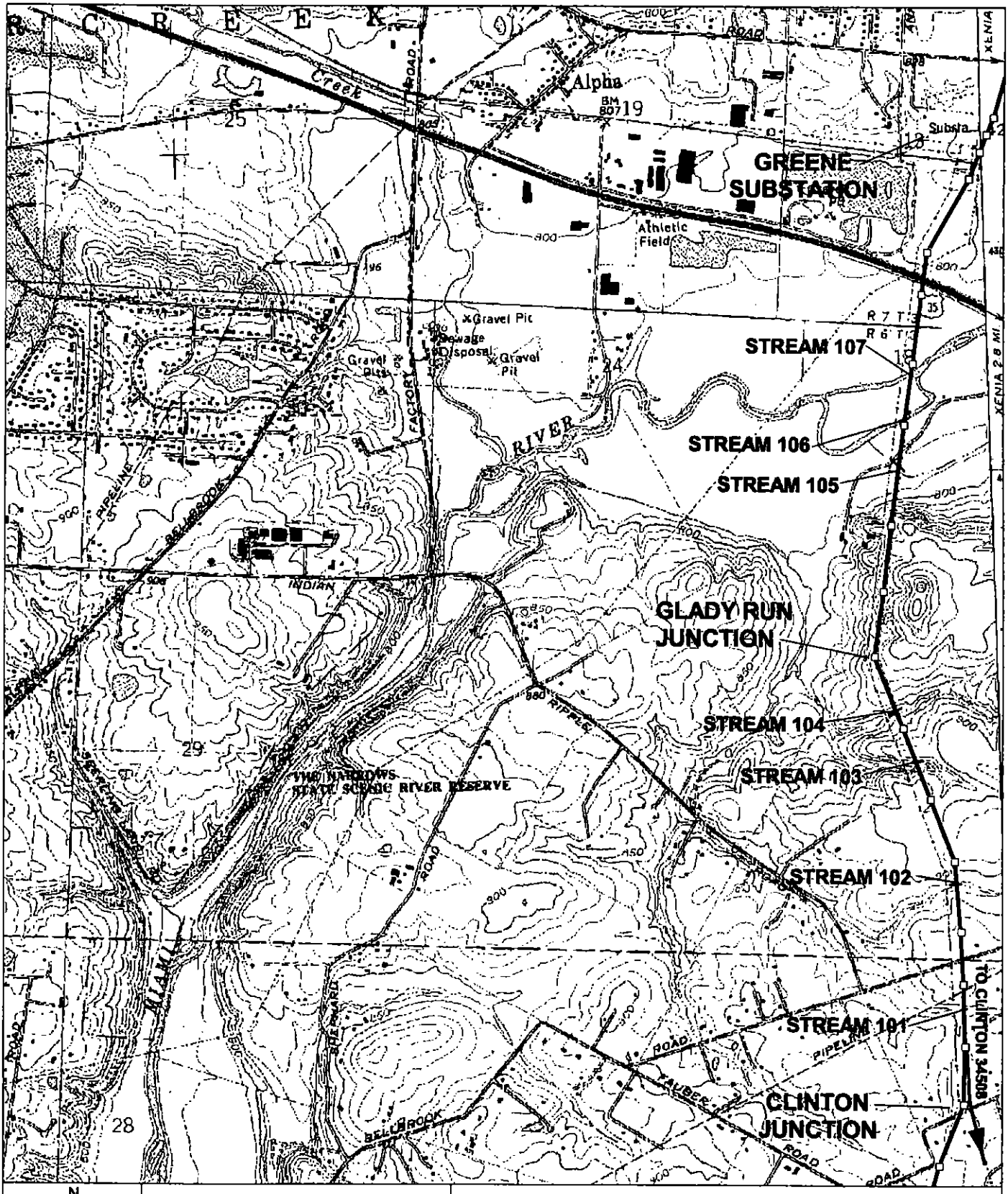

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FIGURE A-5.12. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Structure Locations | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

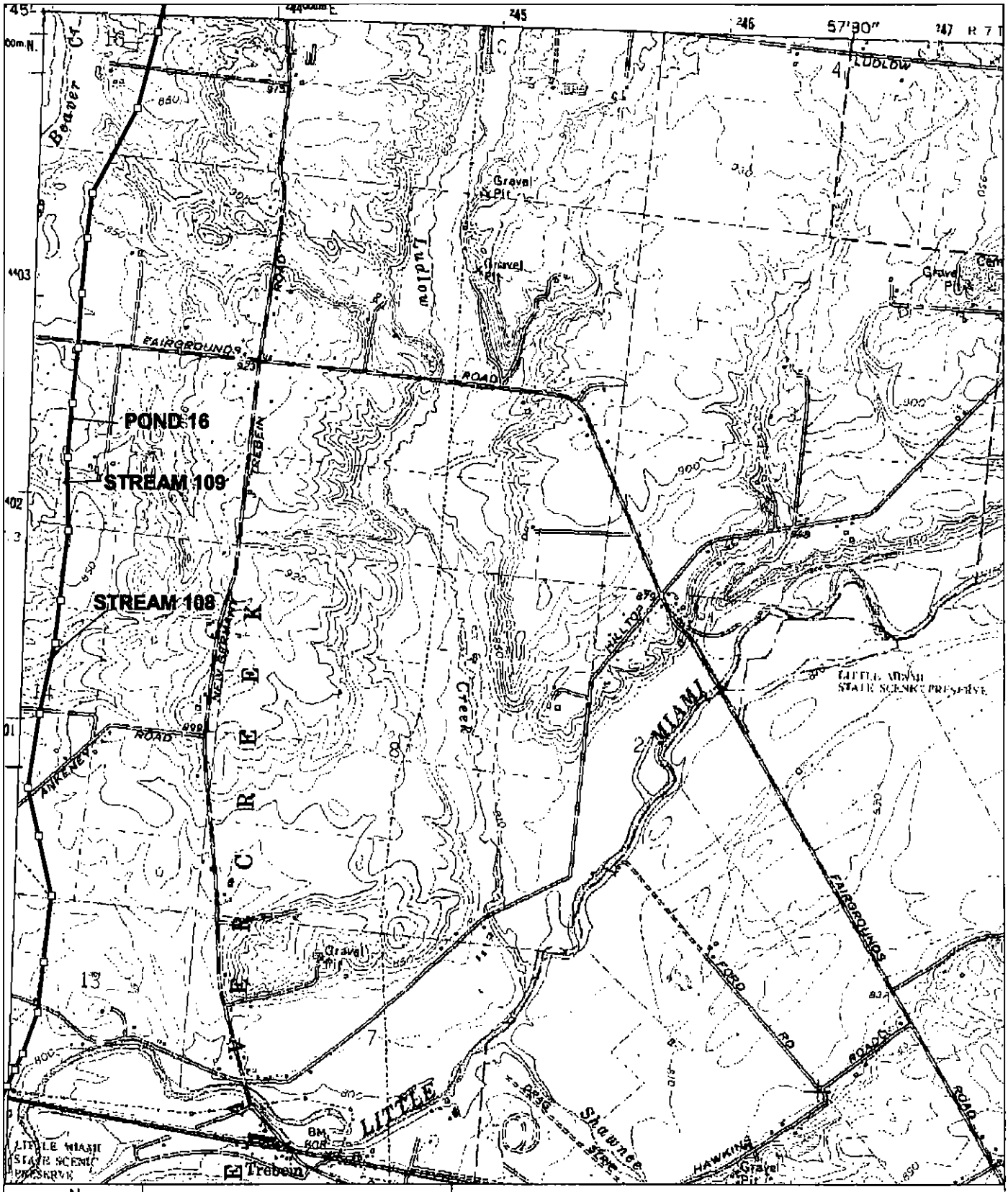


FIGURE A-5.13. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Xenia, OH	BHE ENVIRONMENTAL, INC.

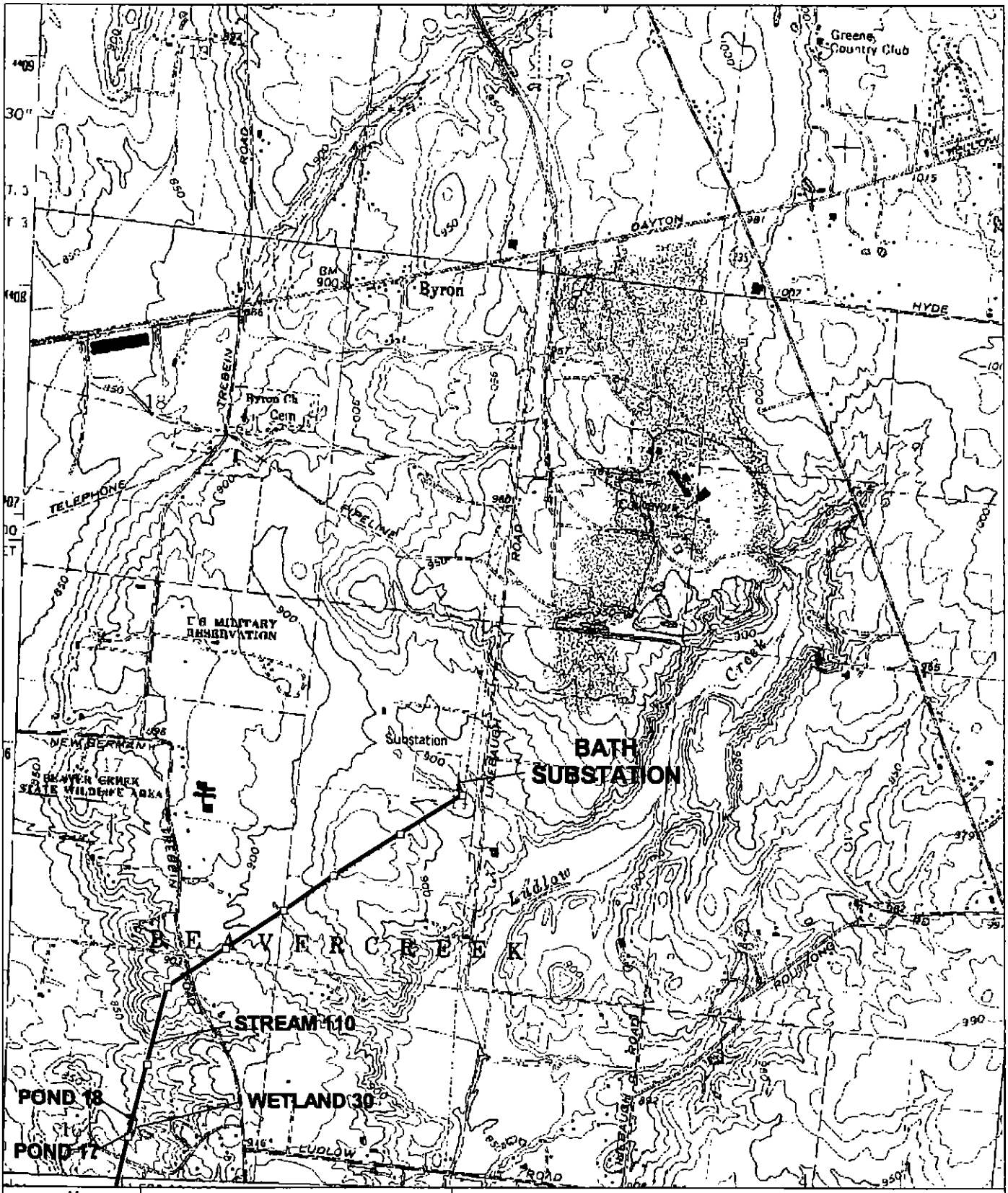


FIGURE A-5.14. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Yellow Springs, OH	BHE ENVIRONMENTAL, INC.

B. Technical Features

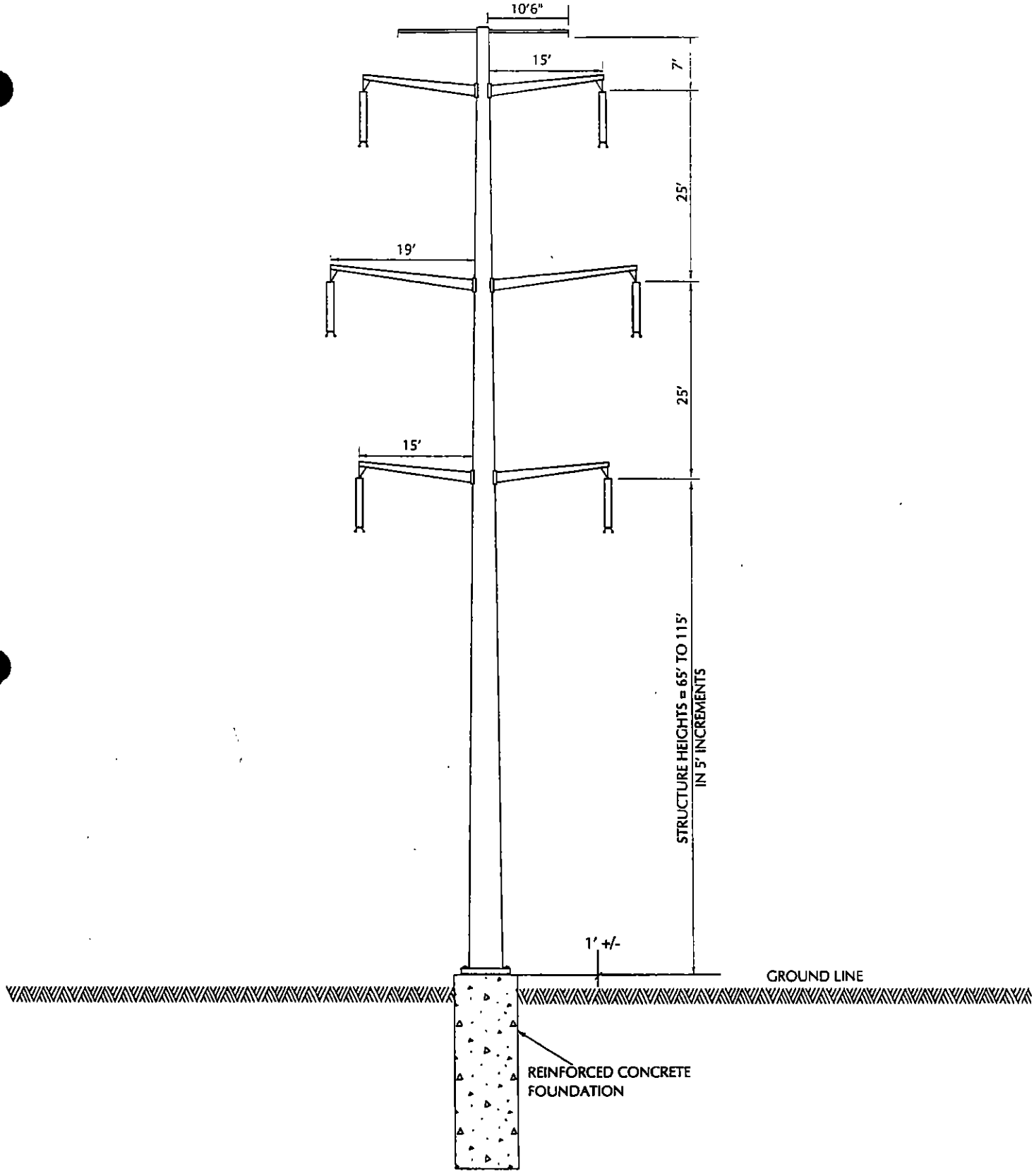
1. OPERATING CHARACTERISTICS, STRUCTURES, AND LAND REQUIREMENTS

Operating Characteristics:

The Foster-Bath transmission line is expected to be in service at all times except when it needs to be de-energized for maintenance or emergency conditions. The line is designed to operate at a nominal voltage of 345 kV (345,000 volts). Due to changing conditions within the transmission system, the voltage level may be expected to fluctuate between 5% above and 5% below this nominal voltage level. Current levels on the Foster-Bath line will also vary depending on system conditions and the demand for electrical energy present at any given time. Typically, electrical load levels, and therefor the current levels in the line, vary based on time of day, day of the week and weather conditions. Typical average load levels will result in typical current flows in this circuit of approximately 940 amperes per phase. Weather extremes will cause increased loading and currents; lower levels of load and currents occur at late night hours and on weekends when most industries are shut down, for example. Under high (peak) loading conditions, the line might be expected to carry 1180 amperes per phase. Under emergency conditions with some other major transmission facility in the transmission system out of service, the line could experience currents of 1408 amperes. The maximum rated current carrying capacity of the line under emergency conditions is 2604 amperes per phase in the summer and 3362 amperes per phase in the winter, but these load levels are not expected under present day system conditions. Such levels are remotely possible with continued system growth and expansion, extreme weather conditions, and other outage situations.

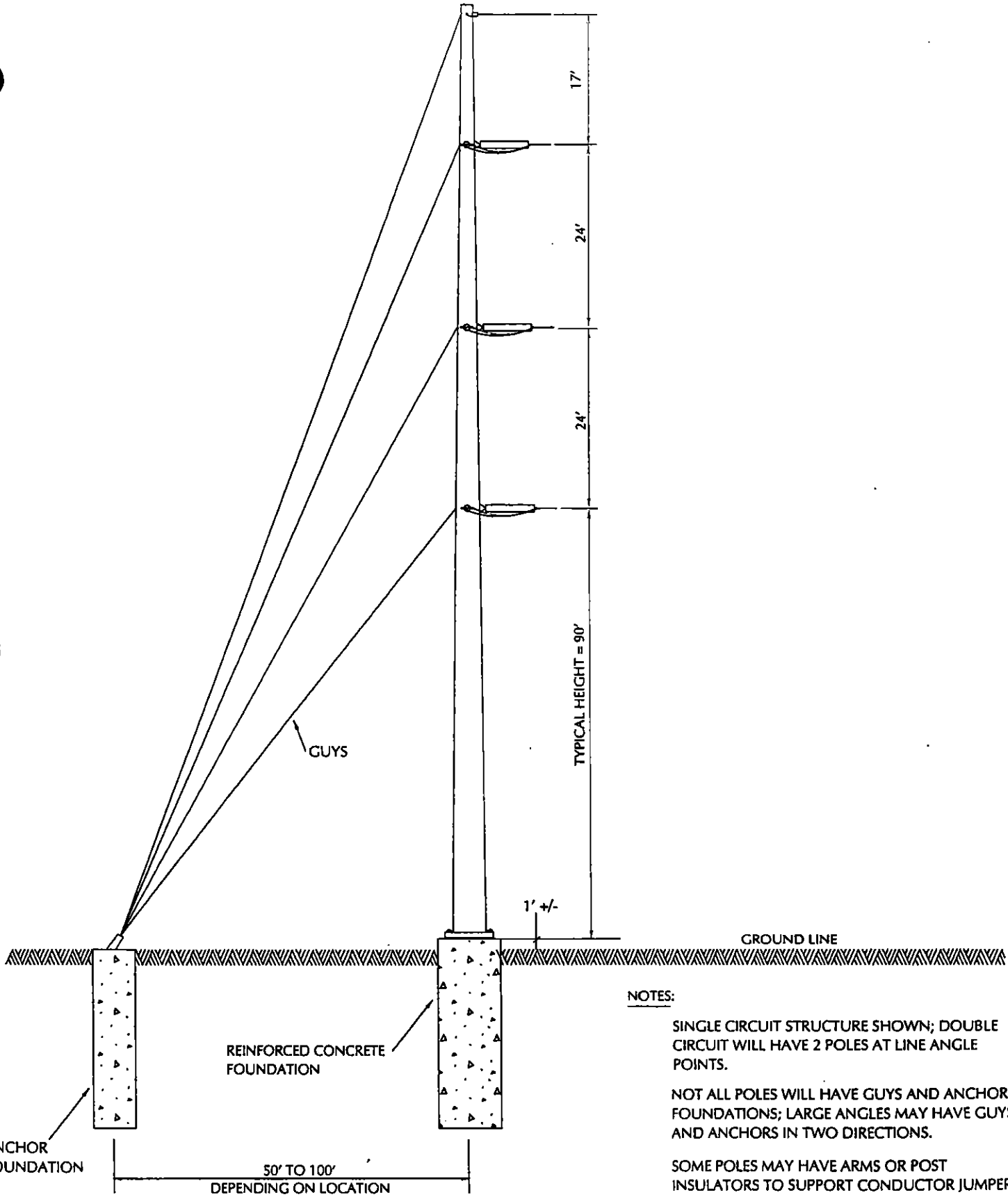
Number and Types of Structures:

Sketches of both the existing steel towers and the proposed structures to be used to rebuild the Foster-Bath line are included following as Figures B-1.1 through B-1.8. The number and types of structures required for the Foster-Bath circuit construction are identified following the sketches for each of the various line sections identified in Part A. "Need Statement," and again as shown on Figure A-1.2, the "Project Map."



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

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FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE

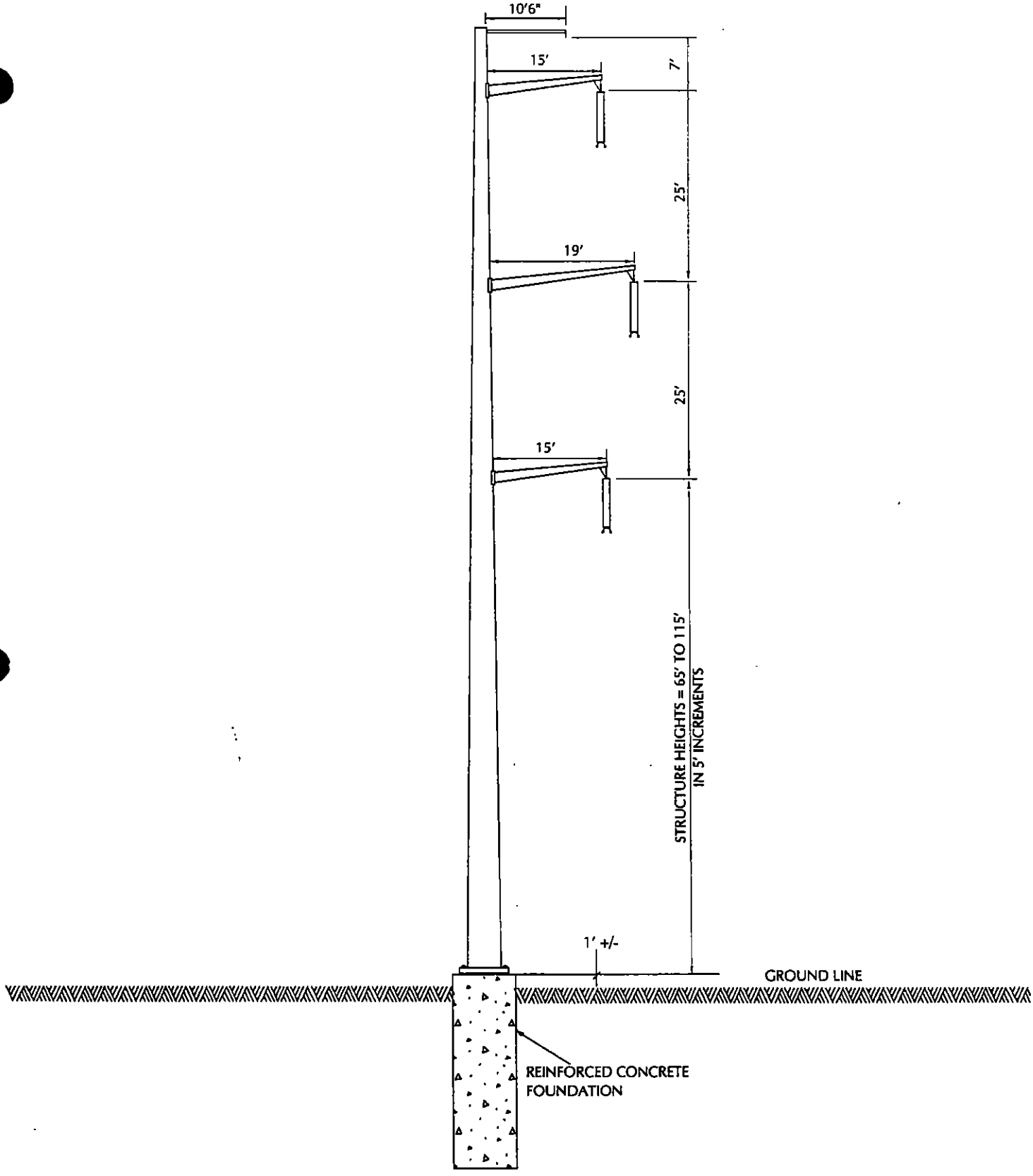

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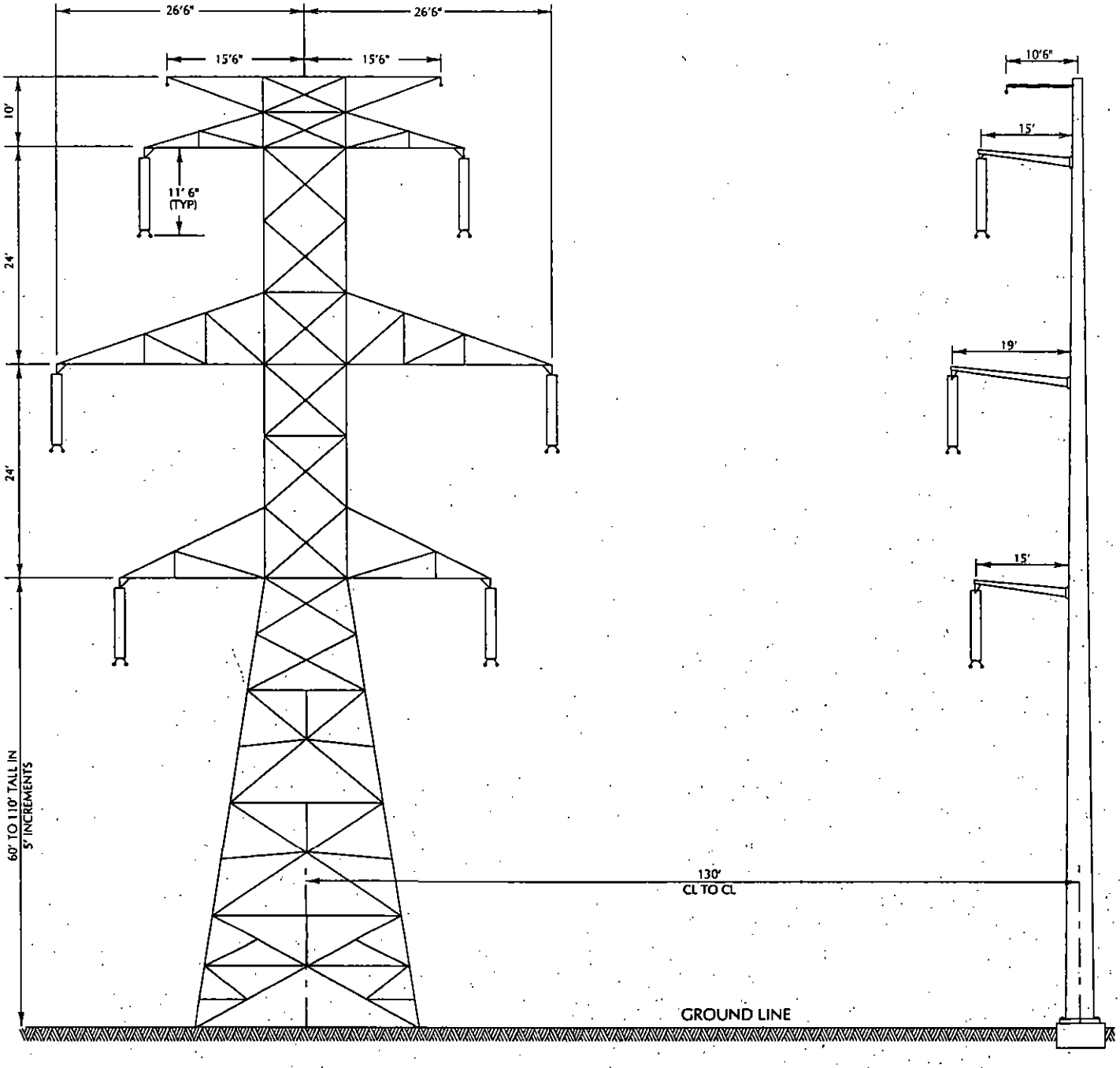
FIGURE B-1.3
SINGLE CIRCUIT
STEEL POLE (TANGENT)



LOOKING EAST

THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.4
EXISTING DOUBLE CIRCUIT
STEEL TOWER WITH PLANNED
SINGLE CIRCUIT STEEL POLE (TANGENT)

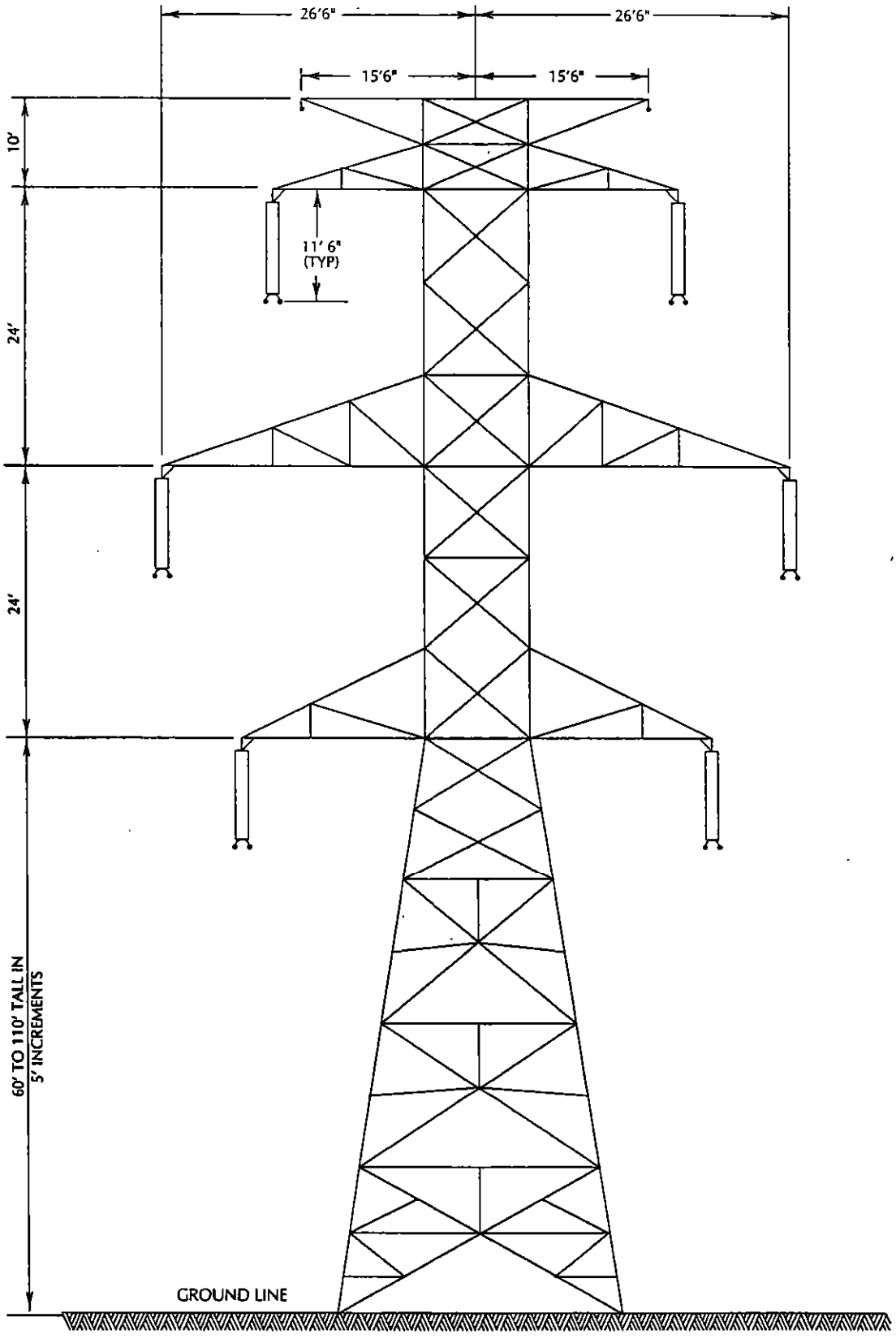


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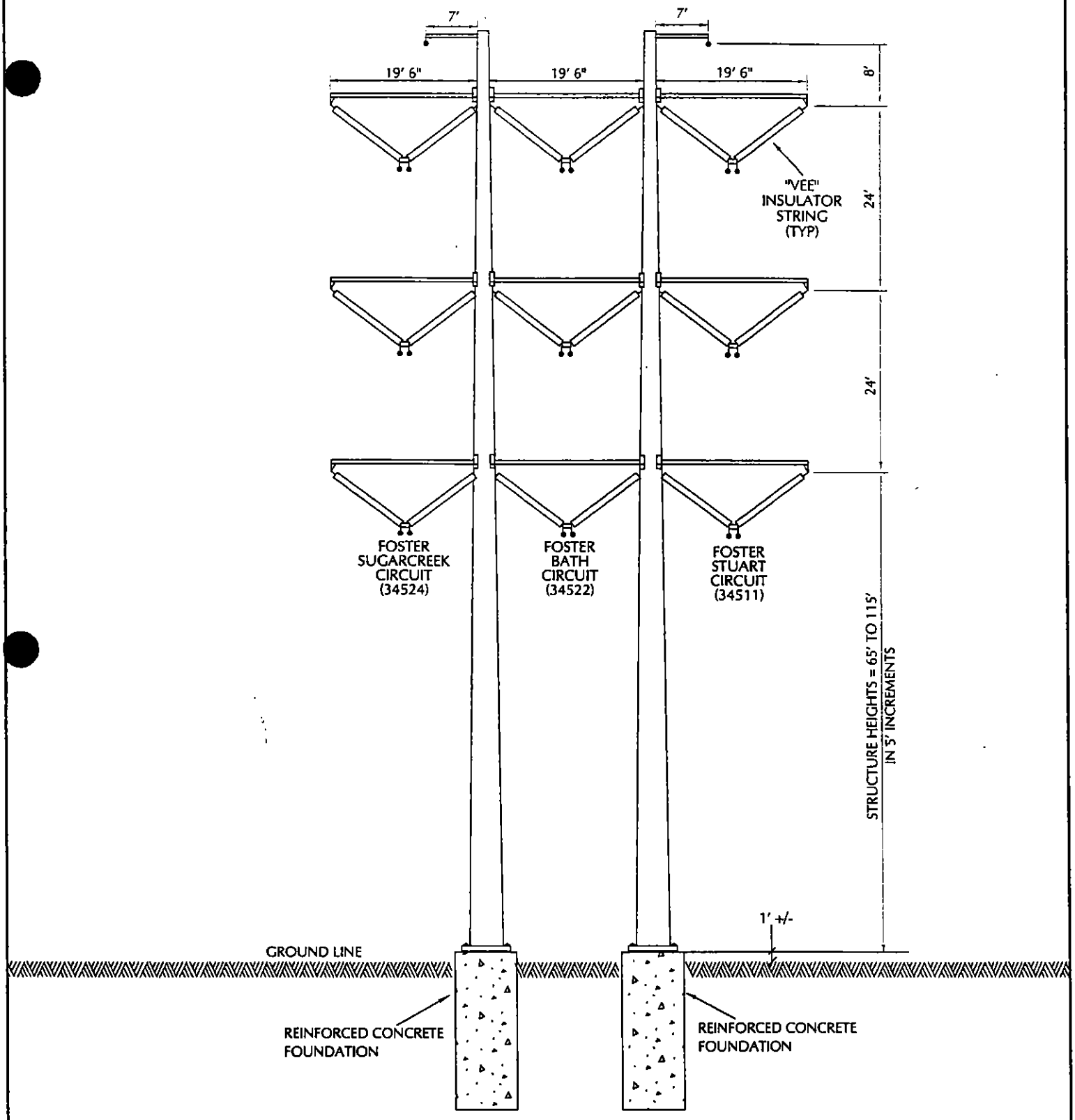
FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)



LOOKING EAST

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.6
TRIPLE CIRCUIT STEEL POLE
H-FRAME STRUCTURE (TANGENT)

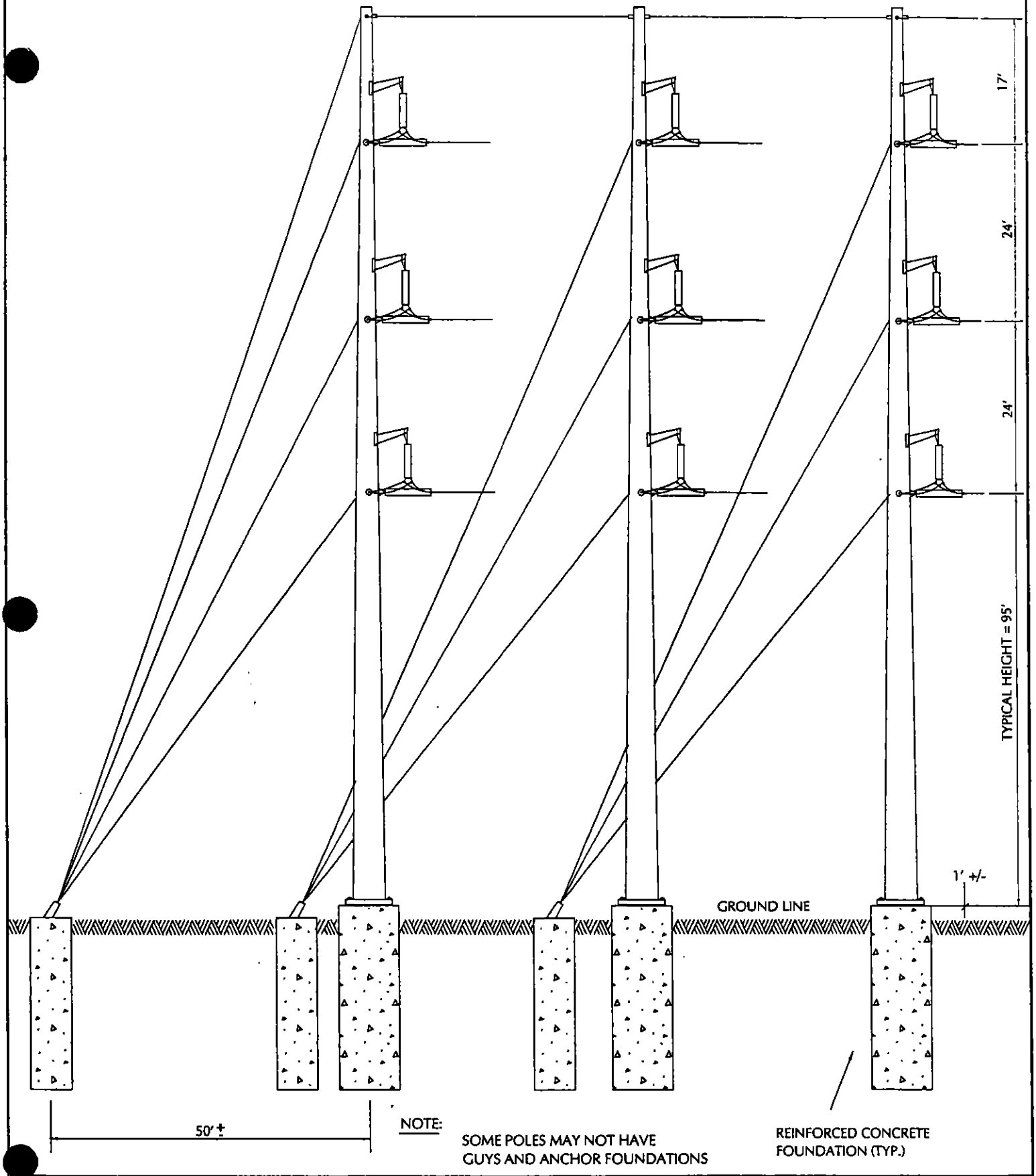


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FIGURE B-1.7
TRIPLE CIRCUIT STEEL POLE
ANGLE STRUCTURE

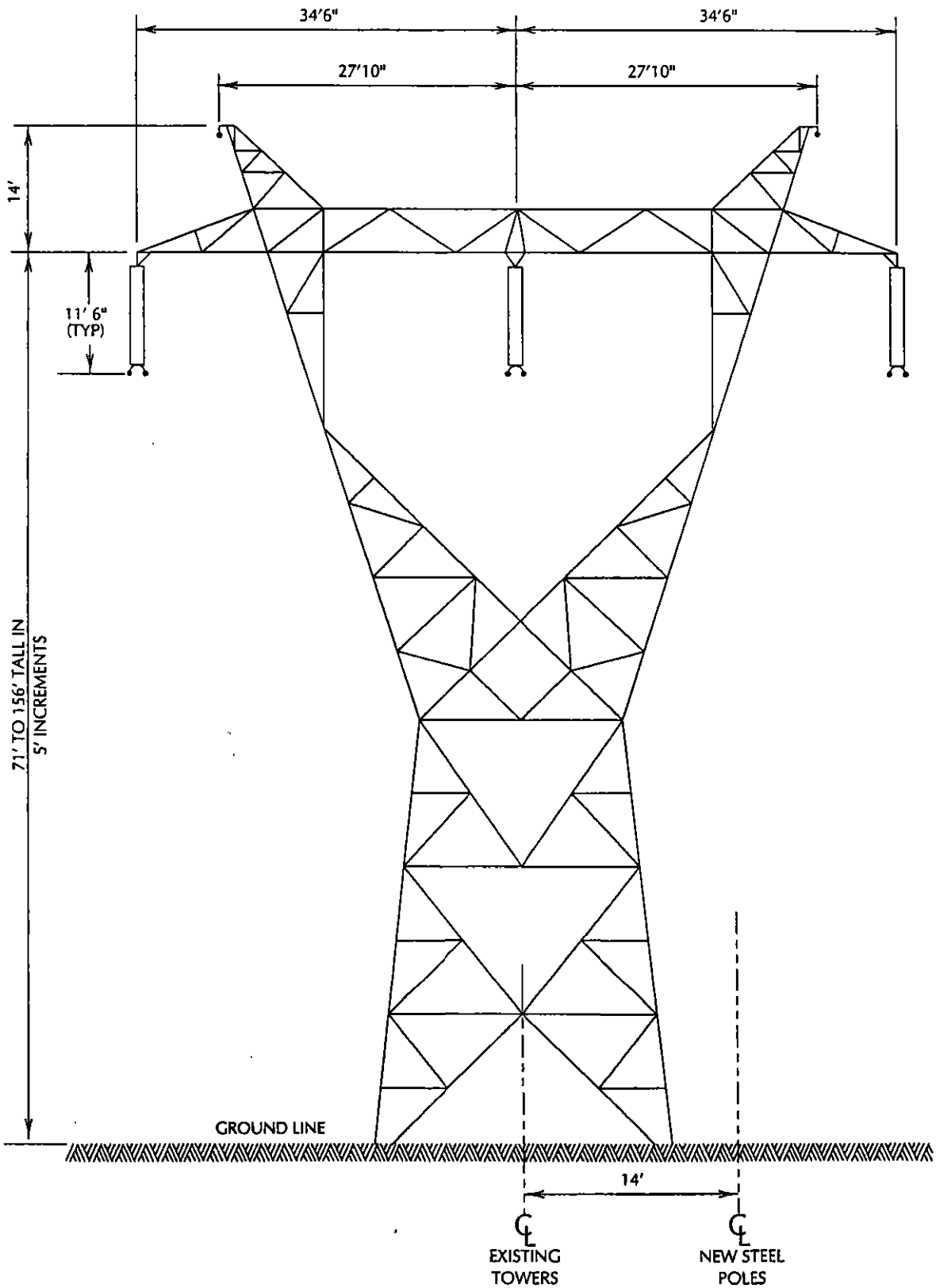

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FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

Section A: This section will include installation of a new substation bay takeoff structure at Foster Substation. This addition to the existing substation structure will continue the same lattice steel construction used for the previously installed sections of the takeoff structure. This new bay is to be added to the south end of the existing east takeoff structure; i.e., the structure toward Butterworth Road.

In Section A, an existing double circuit steel tower line with structures as sketched in Figure B-1.5 is located along the northern portion of a 300 foot wide right-of-way, with the towers approximately 75 feet south of the north right-of-way boundary. The planned construction will add a single steel pole configuration as shown in Figures B-1.2 or B-1.3 adjacent to each tower. Seven new steel pole structures will be located in this section; three will be tangent structures per Figure B-1.3 and four will be large angle/dead end type structures per Figure B-1.2. The tangent poles will be a two-circuit design with arms installed only on the north or west side of the poles for the present construction. The large angle poles will be single circuit poles with the conductors dead ended on two of the poles and a swing-out type construction used on the other two poles. These structures will be of the same basic design as those to be used in Sections C, D and E further north, except only one circuit will be installed in Section A as part of this project. The double circuit towers presently located in this section will remain. The centerline of the new steel poles will be approximately 130 feet to the south or east of the existing towers with the poles to be set generally adjacent to the towers. The resulting typical layout of structures will look like the sketch of Figure B-1.4.

Section B: This section of line presently contains double circuit steel tower structures, as sketched in Figure B-1.5, located along the centerline of a 150 foot wide right-of-way. Following the upgrade of the transmission line, this section will contain 15 three-circuit steel pole structures; ten will be tangent structures and five will be large angle/dead end type structures. The tangent structures will be made up of two steel poles in an H-Frame configuration with three horizontal arms supporting three conductor positions each. A sketch of the typical tangent structure is shown in Figure B-1.6. The five large angle/dead end structures will each consist of three steel poles, each carrying a vertically configured circuit. This type structure is shown in Figure B-1.7. The existing steel towers will be removed once the two existing circuits have been transferred to their positions on the new triple circuit pole structures.

Section C: In Section C of this project, an existing single circuit steel tower line with structures as sketched on Figure B-1.8 is located along a 150 foot wide right-of-way. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each tower. Once the existing circuit (Sugarcreek to Greene) is transferred to the new steel pole structures, the existing steel towers will be removed and the second circuit (Foster to Bath) will be added to the steel poles. A total of 136 steel towers will be replaced with steel poles in this manner in Section C. The exception to this procedure is at the "Sugarcreek Tap" point at the north end of Section C and approximately one half mile south of Centerville Road. Here a tap line runs to the west to Sugarcreek Substation. The steel tower tap point structure at this location will be modified by placing a single steel pole as shown in Figure B-1.3 just east of the tap tower to carry the Foster-Bath circuit by the tap tower which will remain as it is.

Section D: Section D of the Foster-Bath line will be of the same basic design as Section C discussed above and the same construction procedures will be used to upgrade the line. Here the existing Sugarcreek to Greene 345 kV circuit will be located on the west side of the poles and the Foster to Bath circuit will be on the east side. A total of 31 steel towers will be replaced with steel poles in this manner in Section D. This particular section of line presently has two steel pole structures located just north of Washington Mill Road. These poles replaced two steel towers that were damaged in the "Xenia Tornado" of 1974. These two steel poles will be converted from their present single circuit design to a double circuit design and look similar to the poles sketched in Figure B-1.1.

Section E: In Section E of this project, two existing single circuit steel tower lines with structures as sketched on Figure B-1.8 are located along a 300 foot wide right-of-way. The existing single circuit steel tower line (Sugarcreek to Greene) along the western portion of this 300 foot right-of-way will remain as it is. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each of the single circuit towers that carry the Clinton to Greene 345 kV circuit along the eastern portion of the right-of-way in this section. One additional steel pole structure may be required near the projected runway of the Greene County airport to accommodate the airport glide paths. Once the existing east circuit (Clinton to Greene) is transferred to the west side of the new double circuit steel pole structures, the existing Clinton to Greene steel towers will be removed, except at the first tower north of Stewart Road. Here the existing Clinton to Greene circuit will remain low on the existing tower so the new Foster to Bath circuit may cross over it on a single circuit steel pole at this location. The new second circuit (Foster to Bath) will be added to the east side of the new double circuit steel poles. A total of 7 new double circuit steel pole structures (or 8 if an additional structure is needed to provide adequate clearances for the airport) will replace existing towers in Section E.

Section F: In Section F of this project, an existing 300-foot wide right-of-way contains two steel tower transmission lines. On the western portion of the right of way the existing single circuit tower line (Sugarcreek to Greene), as sketched on Figure B-1.8, is to remain as at present. On the eastern portion of the right of way there is a double circuit steel tower line with structures as sketched on Figure B-1.5, except the existing east circuit has only one conductor per position instead of two as shown. These towers at present carry the Clinton to Greene 345 kV circuit on the west side and a 69 kV circuit on the east side of the towers. The planned construction upgrade will add a second conductor to each of the three conductor positions on the east side of the towers to form the Foster-Bath 345 kV circuit with bundled conductor phases. The 69 kV line presently on the east side of the towers will be relocated to a new wood pole construction between the two tower lines. A total of 7 existing steel towers will be modified in this manner in Section F to accommodate the Foster to Bath circuit. At the north end of this section, the Foster to Bath circuit will not terminate on a takeoff structure at the Greene Substation but will be located to a single circuit steel pole, similar to what is sketched in Figure B-1.3, just east of the substation fence on substation property. This pole will connect the Foster to Bath circuit to the next section of the line to the north.

Section G: In Section G of this project, an existing 150-foot wide right-of-way contains double circuit steel transmission line towers. These towers are as sketched on Figure B-1.5, except no circuit has yet been installed on the west side of the towers. This project will install a new set of conductors on the west side of the towers so the towers will look like those shown in Figure B-1.5. For the circuits to connect correctly in the substations, the existing Greene to Bath 345 kV circuit, now located on the east side of the towers, will be reconnected to be located on the west side of the towers. The new Foster to Bath circuit will be connected such that it is located on the east side of the towers. In Section G, a total of 26 double circuit steel towers will be upgraded in this manner. At the south end of this section, the new Foster to Bath circuit will not terminate on a takeoff structure at Greene Substation, but instead will be located on a single circuit steel pole, similar to what is sketched in Figure B-1.3, just east of the substation fence on substation property. This pole will connect the Foster to Bath circuit to the south, bypassing Greene Substation. At the Bath Substation end of the line, the newly installed west circuit will be located on a single circuit steel pole set just east of the substation fence on substation property so the circuit may drop into the substation takeoff structure. The new substation takeoff structure required will be a steel pole A-frame type structure of the same design as the existing takeoff structures at Bath Substation. The new takeoff structure will be located between the two existing eastern takeoffs at Bath.

The steel pole structures described above will be supported on steel-reinforced concrete drilled caisson foundations. Depending on structure designs and local soil conditions, the diameter of the caissons will range from 6 ft.-6 in. to 10 ft.-6 in., and the depths will range from 22 ft. to 56 ft.-6 in. At some locations the angle structures may be guyed with galvanized steel guy wire to steel reinforced concrete drilled caisson type anchor foundations.

All new steel pole structures to be used will be either galvanized or have a painted finish that will look about the same color as galvanizing. Steel towers to be retained as they presently exist are galvanized steel, or in some areas are galvanized steel that has been painted.

Right of Way and Land Requirements:

The entire Foster-Bath transmission line project is to be built on existing right of ways or lands owned by Dayton Power and Light and/or members of the CCD (CG&E/Cinergy, CSP/AEP, and DP&L) group. The existing rights of way are 300 feet in width for the first section north and east out of Foster Substation and the sections directly south of Greene Substation for approximately 2.7 miles. All the other right of ways are 150 feet in width. The Foster and Greene substation properties are owned in common by the CCD group (Cincinnati, Columbus and Dayton), and the Bath Substation property is owned by DP&L.

2. ELECTRIC AND MAGNETIC FIELDS

Electric and magnetic fields are produced by the presence of voltage and current associated with any electrical device including the operation of the proposed Foster-Bath 345 kV transmission line. Electric fields are produced by voltage and magnetic fields by current. In both cases, the field strength is related to the source, the geometry of the source, the distance from the source, and the interaction of any other sources of electric and magnetic fields in the area.

The electric field produced by a 345 kV transmission line is predictable and may be calculated for a specific wire geometry. The threshold of sensation for a person standing in an electric field is approximately 15kV/meter which is approximately three times greater than the maximum field expected directly under the 345 kV line configuration proposed for the Foster-Bath 345 kV transmission line.

Electric fields can induce a voltage on metallic objects, such as sheds, fences, and farm equipment, which may be located close to the transmission line. This is usually not a problem with 3454 kV transmission lines because of the relatively high ground clearances used for this voltage level. The induced voltage can be eliminated by properly grounding the metallic objects. DP&L will work to resolve any such problem voltage conditions in an expeditious manner. Electric fields can be reduced or eliminated by the shielding provided by buildings, trees, mounds of earth and other conducting materials. Specific values of electric fields based on the proposed design configurations and the line loading conditions specified for the Foster-Bath 345 kV transmission line are summarized in Tables B-2.1 through B-2.6.

Magnetic fields can be calculated for transmission lines, but it is more difficult to predict the actual fields at a given time and place because the field is dependent on the total load current for each phase, the current of the shield wire or neutral, other magnetic fields in the area including the earth's background fields, other grounding systems in the area, and other conditions. As electric load conditions and the currents in the wires change, so do the magnetic fields. Magnetic fields are not perceived by humans at levels generated by transmission lines. Unlike electric fields, ordinary materials do not provide a shield from magnetic fields. The line design characteristics provide for low levels of calculated magnetic field strengths. Consequently, magnetic fields are estimated to have insignificant impacts. Specific values of calculated magnetic fields based on the different proposed design configurations and the line loading conditions specified for the Foster-Bath 345 kV transmission line are also summarized in Tables B-2.1 through B-2.6.

(a) Calculated electric and magnetic field levels at one meter above ground under the lowest conductors and at the edge of the ROW for: (I) normal maximum loading; (ii) emergency line loading; and (iii) winter normal conductor rating.

The proposed typical tangent structure configurations for the Foster-Bath 345 kV transmission line have been evaluated for electric and magnetic fields. As discussed above, the basic structure configurations to be used on this project are different for the different line sections. There are five different basic configurations that will be utilized in these sections. The different sections will have different loading conditions applied based on which specific circuits are in each section.

Section A will have a new circuit installed on new steel poles essentially parallel to the existing double circuit towers. The new tangent poles will be as shown in Figure B-1.1 with only one circuit (north and west) installed. The tangent towers will be as shown in Figure B-1.5. These towers will be north and west of the steel poles with a centerline to centerline distance between adjacent structures of approximately 130 feet as shown in Figure B-1.4. Field strengths for this section are given in Table B-2.1.

Section B will have the structure configuration as shown in Figure B-1.6. The field strengths for this section are as given in table B-2.2.

Sections C and D will have the structure configuration as shown in Figure B-1.1. The field strengths for these sections are as given in tables B-2.3 and B-2.4, respectively.

Sections E and F will be built along a 300-foot wide right-of-way with the new Foster-Bath circuit located on the east side of the right-of-way. The existing Sugarcreek-Greene circuit is on single circuit towers as shown in Figure B-1.8, and is located on the western half of the right-of-way. The structure configuration on the east half of the right-of-way is steel pole structures in Section E as shown in Figure B-1.1 and double circuit towers in Section F as shown in Figure B-1.5. In both sections the Foster-Bath circuit is on the east side of the structures and the Clinton-Greene circuit is on the west. Since the basic geometry of both these structure types is so similar and the circuit loads are the same, only one set of field calculations has been made to cover both sections. These field strengths are as given in table B-2.5.

Section G will have the structure configuration as shown in Figure B-1.5. The field strengths for this section are as given in table B-2.6.

TABLE B-2.1
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION A OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Foster-Sugarcreek = 848MVA, Foster-Bath = 705MVA, Foster-Stuart = -550MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	5.227	0.592	0.580	0.145
Magnetic (mG)	100.600	18.078	20.655	8.918

Emergency Line Loading
Conductor Temperature 176 F
Foster-Sugarcreek = 0MVA, Foster-Bath =60MVA, Foster-Stuart = -34MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	6.955	2.860	0.320	0.555
Magnetic (mG)	14.863	9.704	5.135	2.397

Winter Normal Conductor Rating
Conductor Temperature 176 F
Foster-Sugarcreek = 1747MVA, Foster-Bath = 1747MVA, Foster-Stuart = -1747MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	6.318	0.572	0.592	0.133
Magnetic (mG)	263.425	55.886	40.810	30.097

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Foster-Sugarcreek = 669MVA, Foster-Bath = 562MVA, Foster-Stuart = -581MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	4.380	0.415	0.579	0.115
Magnetic (mG)	67.993	19.730	15.162	9.055

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.

TABLE B-2.2
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION B OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Foster-Sugarcreek = 848MVA, Foster-Bath = 705MVA, Foster-Stuart = -550MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	4.035	3.6	0.355	0.355
Magnetic (mG)	99.395	99.310	12.087	25.472

Emergency Line Loading
Conductor Temperature 176 F
Foster-Sugarcreek = 87MVA, Foster-Bath = 0MVA, Foster-Stuart = -36MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	6.402	5.419	0.303	0.303
Magnetic (mG)	10.325	9.131	2.965	0.737

Winter Normal Conductor Rating
Conductor Temperature 176 F
Foster-Sugarcreek = 1747MVA, Foster-Bath = 1747MVA, Foster-Stuart = -1747MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	4.681	3.988	0.312	0.312
Magnetic (mG)	312.080	312.080	31.526	87.926

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Foster-Sugarcreek = 669MVA, Foster-Bath = 562MVA, Foster-Stuart = -581MVA

Fields	Maximum Value	Centerline R/W	North edge of R/W	South edge of R/W
Electric (kV/m)	3.432	3.213	0.410	0.410
Magnetic (mG)	74.487	74.269	9.730	24.337

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

TABLE B-2.3
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION C OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Foster-Sugarcreek = 848MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.148	2.494	0.420	0.420
Magnetic (mG)	86.002	85.156	18.165	11.151

Emergency Line Loading
Conductor Temperature 176 F
Foster-Sugarcreek = 1144MVA, Foster-Bath = 0MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.886	4.112	0.384	0.620
Magnetic (mG)	135.950	113.620	43.657	24.108

Winter Normal Conductor Rating
Conductor Temperature 176 F
Foster-Sugarcreek = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.944	2.751	0.415	0.415
Magnetic (mG)	227.074	227.074	34.365	34.364

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Foster-Sugarcreek = 669MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	3.335	3.105	0.433	0.433
Magnetic (mG)	54.454	53.997	13.256	8.384

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

TABLE B-2.4
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION D OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Sugarcreek-Greene = 275MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.146	2.493	0.420	0.420
Magnetic (mG)	67.959	61.694	7.240	20.586

Emergency Line Loading
Conductor Temperature 176 F
Sugarcreek-Greene = -421MVA, Foster-Bath =789MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.944	2.751	0.415	0.415
Magnetic (mG)	105.225	90.061	32.002	38.425

Winter Normal Conductor Rating
Conductor Temperature 176 F
Sugarcreek-Greene = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.944	2.751	0.415	0.415
Magnetic (mG)	227.074	227.074	34.365	34.364

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Sugarcreek-Greene = 191MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	3.333	2.180	0.433	0.433
Magnetic (mG)	44.606	40.513	6.101	15.852

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

TABLE B-2.5
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION E&F OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Sugarcreek-Greene = 275MVA, Clinton-Greene = 621MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.502	1.618	2.071	0.437
Magnetic (mG)	67.858	20.718	15.787	15.434

Emergency Line Loading
Conductor Temperature 176 F
Sugarcreek-Greene = 447MVA, Clinton-Greene = 0MVA, Foster-Bath =842MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	6.438	1.981	2.123	0.421
Magnetic (mG)	102.279	11.280	28.408	34.030

Winter Normal Conductor Rating
Conductor Temperature 176 F
Sugarcreek-Greene = 1747MVA, Clinton-Greene = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	6.398	1.656	2.071	0.440
Magnetic (mG)	326.485	123.267	104.699	43.290

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Sugarcreek-Greene = 191MVA, Clinton-Greene = 598MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.617	1.551	2.041	0.440
Magnetic (mG)	47.592	15.953	10.182	10.947

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.

TABLE B-2.6
ELECTRIC AND MAGNETIC FIELDS FOR
SECTION G OF FOSTER-BATH TRANSMISSION LINE

Normal Maximum Loading
Conductor Temperature 120 F
Greene-Bath = 143MVA, Foster-Bath = 705MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	4.436	2.187	0.612	0.612
Magnetic (mG)	70.474	59.369	9.195	24.696

Emergency Line Loading
Conductor Temperature 176 F
Greene-Bath = -22MVA, Foster-Bath =60MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.285	2.353	0.616	0.616
Magnetic (mG)	7.0256	6.081	0.643	2.045

Winter Normal Conductor Rating
Conductor Temperature 176 F
Greene-Bath = 1747MVA, Foster-Bath = 1747MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	5.285	2.353	0.616	0.616
Magnetic (mG)	242.999	242.999	43.031	43.031

Average Normal/Typical Everyday Loading
Conductor Temperature 60 F
Greene-Bath = 143MVA, Foster-Bath = 562MVA

Fields	Maximum Value	Centerline R/W	West edge of R/W	East edge of R/W
Electric (kV/m)	3.569	1.962	0.613	0.613
Magnetic (mG)	46.328	40.588	6.630	17.947

- Maximum field strengths are given because they are sometimes higher than fields under the lowest conductor, the value requested.
- The edge of right-of-way is typically 75 feet from the center of construction

The structure types/line configurations were evaluated at the line loading conditions specified in the Letter of Notification requirements. A phase-to-phase voltage of 345 kV and balanced phase currents were assumed for the bundled 1024.5 MCM 30/7 ACAR phase conductors. For the winter normal conductor rating loading, an ambient winter temperature of 0 degrees Celsius, wind of 2 mph, emissivity factor for solar absorption of 0.8, altitude of 1,000 feet, and conductor temperature rise of 80 degrees Celsius were assumed to determine wire sag conditions. Similarly, line loading conditions and conductor temperatures were determined for a "Normal Maximum Loading" with all transmission elements in operation with the transmission system at peak load, and for an "Emergency Line Loading" condition with a contingency in place. All calculations for the electric and magnetic fields were determined at the low point of the phase conductors. Based on the calculations for fields 3 feet above the earth, the values summarized in Tables B-2.1 through B-2.6 were determined for the loading conditions specified and the basic tangent structure types.

The winter normal conductor rating capacity of the conductor and the maximum emergency line loading conditions noted above are conditions that will very seldom, if ever, be reached. The normal maximum loading condition might be expected to occur at most a few times per year. More realistic values of the electric and magnetic field strengths that may be expected to occur over more typical or average conditions have also been calculated for the alternative structure types and configurations under consideration. Electrical loading on the transmission lines is expected to vary continually throughout any given day and also throughout the year, dependent on time, weather conditions, customer usage, transmission system loading, and transmission facilities in-service conditions. On average, Circuit 34522,The Foster-Bath Circuit, expected to normally carry about 562 MVA from Foster to Bath. Electrical loading on the other circuits built jointly with Foster-Bath will also vary throughout any given day, etc., dependent on similar factors but not necessarily the same conditions. A typical conductor temperature of 60 degrees Fahrenheit has been used to determine wire sag conditions and the resulting clearances above ground for all conductors. The calculations for the electric and magnetic fields were again determined at the low point of the phase conductors. Based on the calculations for fields 3 feet above the earth, the values noted in the last loading condition in Tables B-2.1 through B-2.6 represent average everyday electric and magnetic field conditions.

For each of the configurations and loading conditions discussed above, the electric and magnetic field values have been noted in Tables B-2.1 through B-2.6. Also noted in these tables for each situation is the electrical current in amperes used for each circuit under consideration and the conductor temperature assumed. The height above ground of the lowest phase conductor of each circuit involved is as noted and is the same for all circuits.

(b) Design alternatives with respect to electric and magnetic fields.

It is DP&L's position that the present research has not established a relationship between electric and magnetic fields and any health effects. DP&L has proposed to construct this Foster-Bath 345 kV Transmission Line Project with full consideration of the current EMF research. As such, DP&L feels the construction of the line will provide the needed electrical facilities in the most cost effective, environmentally sound and aesthetically pleasing way possible.

DP&L, through its standard design practices, has evaluated possible alternative conductor configurations and phasing arrangements to provide the lowest values of electric and magnetic fields at ground level. All sections of the line will use dissimilar phasing on the different circuits to provide for lower magnetic fields associated with cancellation effects. The structure heights to be used have been designed to provide clearances over the ground and other objects to permit an emergency operation level of conductor temperature at 212 degrees F with conductors at 28 feet above ground. This is the National Electrical Safety Code (NESC) requirement plus 3 feet. The conductors will seldom, if ever, operate this close to the ground. These heights above ground provide low values of electric and magnetic fields.

The corridor location and right-of-way width for the Foster-Bath line are already existing and have been "pre-determined." Based on present day design considerations and methodology, the locations and width of right-of-way being used would be considered to meet or exceed the requirements for a new right-of-way to be secured for such a project.

3. ESTIMATED PROJECT COST

The estimated costs of the Foster-Bath Transmission Line Project by FERC account are as follows:

COST ELEMENT	TRANSMISSION LINE	FOSTER SUB	BATH SUB
(1) Land and Land Rights	800,000	0	0
(2) Structures	0	200,000	180,000
(3) Substation Equipment	0	800,000	820,000
(4) Poles and Fixtures	19,500,000	0	0
(5) Towers and Fixtures	0	0	0
(6) Overhead Conductors	7,700,000	0	0
(7) Underground Conductors	0	0	0
(8) Underground to Overhead Equip.	0	0	0
(9) Roads, Trails & Access	0	0	0
Totals	**28,000,000**	**1,000,000**	**1,000,000**

Total Cost of the Foster-Bath Transmission Project: $ 30,000,000

C. Socioeconomic Data

1. LAND USE

a. Existing Land Uses

Two counties and several townships are crossed by the right-of-way. The project area does not cross a municipality. In Warren County, the transmission line corridor crosses six townships: Hamilton, Salem, Turtle Creek, Washington, Mason, and Wayne townships. In Greene County, the line crosses three townships: Spring Valley, Sugarcreek, and Beavercreek townships.

Warren and Greene counties are characterized by generally level surface topography with major changes in relief occurring along streams as a result of relatively recent glacial advances and retreats. The route is predominantly flat with an elevation range between 640 and 950 feet above msl. Slopes are greatest leading to the Little Miami River and Caesar Creek. The entire project area is located within the Little Miami River drainage basin and weaves back and forth across the river channel.

Land use within and along DP&L's existing transmission line corridor is a combination of agricultural, forest, industrial, institutional, commercial, recreational and residential uses. Most of the existing right-of-way is currently in agricultural cultivation, or has been left fallow and vegetated with old-field and scrub-shrub communities. Generally, agriculture (i. e., rowcrop, pasture, and fallow old-field) comprises 60 percent of land use; forests comprise 25 percent; residential comprises 10 percent; and the remainder of uses collectively comprise less than five percent.

Residences are concentrated adjacent to county routes and comprise single dwelling homes. Noise sensitive areas are distributed intermittently throughout the proposed transmission line corridor. Sensitive areas include residential homes, churches, and commercial businesses.

Recreational areas comprise the Little Miami River (crossed six times), Little Miami River bike and recreation trail, the North County National Scenic Trail (NCNST) (crossed three times), Halls Creek Woods Scenic River Preserve, and Caesar Creek Gorge State Nature Preserve. The Little Miami is a state-administered component of the National Wild and Scenic River system. The NCNST winds its way through seven northern tier states, beginning in upstate New York and ending in North Dakota. The project would cross the NCNST near reference points STM020, STM036, and STM050 (Appendix A).

The socioeconomic status of the project area is predominantly rural residential and agricultural-based. In both Warren and Greene counties, population densities have been steadily increasing. Past and future population densities for Warren and Greene counties are summarized in Table C-1.1. Warren County experienced a 15 percent increase in population between 1990 and 1995. Greene County had a 3.3 percent increase. Population per square mile in Warren County is 156.1. Population per square mile in Greene County is 336.2 (O'Bryant 1997).

Mason is the largest city in Warren County with a population of 13,284. Of the townships crossed, Turtle Creek and Hamilton had the fourth and fifth highest population densities of 11,247 and 6,771, respectively.

Beavercreek is the largest city in Greene County with a population of 37,739. Xenia had a population of 24,085 in 1990. Beavercreek Township is the largest township in the county, with a 1990 population of 39,704 (O'Bryant 1997).

Per capita income for Warren County was $17,228 in 1990. Per capita income for Greene County was $18,161 (O'Bryant 1997).

b. Impacts

No impact in existing land uses is anticipated as a result of the proposed project. Minimal amounts of noise and dust created from construction and heavy equipment on surrounding roads may cause occasional minor traffic delays. The effect of new tower construction will be a comparable visual impact at each location. DP&L will replace the existing four-leg steel lattice transmission towers with one or two new single pole steel towers at the same location.

Where vegetative clearing is required, DP&L will retain the maximum vegetative screening possible in riparian areas immediately adjacent to the Little Miami River in order to preserve the visual quality of the Little Miami River corridor. Protection of the scenic qualities of the river valley will also preserve the experiences of persons using the NCNST. DP&L will make provisions to allow hikers safe access through the area during times when construction temporarily blocks the trail.

The operation of the proposed transmission line will not create additional burdens on community resources or services such as police, fire or public utilities. Maintenance activities will occur occasionally, but will not affect or inconvenience any surrounding land use.

Construction of the transmission line is not expected to adversely impact the socioeconomic status of the project area. The availability of additional electric power with the stringing of a third circuit on the line, is expected to provide future benefits to the region by encouraging economic growth through increased business, industry, and residential communities and thereby increasing the existing tax base.

TABLE C-1.1. Population densities for Warren and Greene counties.

County	Year	Population
Warren	1980	99,276
	1990	113,909
	1998	144,604
	2003	162,967
Greene	1980	129,769
	1990	136,731
	1998	139,705
	2003	141,007

From The Sourcebook, County Demographics. 11th Edition, CACI 1998.

2. AGRICULTURAL DISTRICTS

a. Agricultural District Properties

Warren County

The Warren County Auditor's office was contacted regarding the presence of agricultural districts within the county. They reported that there are currently 277 agricultural district accounts in Warren County, representing 15,397 acres of land. BHE searched Warren County Auditor records for agricultural districts crossed by the existing right-of-way. They are listed in Table C-2.1 (Warren County Auditor's Office 1999).

Greene County

The Greene County Auditor's Office was also contacted regarding agricultural district properties. Those properties in Greene County crossed by the project right-of-way that participate in the Agricultural District Program are also included in Table C-2.1. (Greene County Auditor's Office 1999).

For reference, a complete listing of the agricultural district lands in both Greene and Warren Counties is included in Appendix A.

TABLE C-2.1. Agricultural Districts crossed in Warren County and Greene County by the Foster to Bath 345 kV right-of-way (located by existing Circuit Numbers for identification).

Greene to Sugarcreek, Circuit Number 34503

Landowner	Parcel #	Acres	Tower	Parcel ID
Thomas, Dennis P. and Barbara B.	27	81.468	One	K28 0001 0001 0002000
Hershner, Marion	33	61.796	Two	K28 0001 0010 0000100
Graham, Ralph	56	25.25	One	K28 0001 0008 0001400
Graham, Ralph	57	71.50	One	K28 0001 0008 0001500
McClain, John et al.	77	82.71	-----	B04 0002 0050 0000 200
Lickliter, Robert C., Trustee	79		One	B04 0002 0050 0000 100

Greene to Bath, Circuit Number 34526

Landowner	Parcel #	Acres	Tower	Parcel ID
Allen Land Ltd.	36	92.5	One	B03 0002 0038 0000 800

Sugarcreek to Foster, Circuit Number 34524

Landowner	Parcel #	Acres	Towers	Parcel ID
Lutz, Clarence T. and Linda	13C	51.22	—	K28 0001 0004 0000 500
Walkhom, Jilas and Sana D.	14	129.73 total	3	K28 0001 0008 0003 000 K28 0001 0008 0002 900
Lebanon Citizens National Bank	21A	14.62	1	06-20-100-001
Rich, James E. and John B.	30	99.32	3	10-30-200-001
Rice, Gene and Etta	30A	5.00	—	10-30-400-007
Rich, James E. and John B.	31	72.5	4	10-29-100-003
Frye, Richard	33	194.227	1	10-38-400-007
Frye, Richard	33A	45.36	1	10-29-100-001
Frye, Gilbert N.	34	102.672	2	10-35-200-006
Shinkle, William P. and Pat	35	108.166	1	10-35-100-006
DeClarke, Candice	68.1	109.45	—	13-11-200-002
Cayot, Dale and Jane E.	78A	16.70	1	13-09-201-003
Sharpe, Jene and Casa	82	43.187	1	13-09-400-003
ZFC Inc.	133	90.7073	—	17-28-226-004
ZFC Inc.	134	1.276	1	17-28-276-001

b. Impacts

Impacts to agricultural district land will comprise the loss of 0.003 acre of tillable farmland at each proposed tower location (with the exception of tower location 1065 where two poles will be constructed on 0.006 acre). DP&L will compensate farmers for economic losses associated with these permanent structures. No net change in visual impacts will occur in agricultural district lands because existing towers will be dismantled and removed when the new steel towers are erected. No additional impacts are anticipated during construction because construction will occur prior to the growing season.

3. ARCHAEOLOGICAL OR CULTURAL RESOURCES

a. Existing Cultural Resources

Introduction

This section discusses the background research, field methods, and results of a Phase I cultural resources survey of DP&L's proposed Foster to Bath 345 kV project. A Phase I cultural resources survey was conducted by BHE at the request of DP&L. The survey was performed in order to locate any cultural resources within the proposed zone of impact and, wherever possible, assess their eligibility for the National Register of Historic Places (NRHP) in accordance with the requirements of Section 106 of the National Historic Preservation Act.

Literature Review

Prior to field investigations, a literature search was conducted at the Ohio Historic Preservation Office (OHPO) to locate any previously recorded cultural resources within the project area, to identify any archaeological investigations that had previously taken place, and to provide information on the expected types and location parameters of sites in the region. This background research had identified a number of sites in close proximity to existing tower locations listed in Table C-3.1.

The research indicated a strong likelihood for the presence of cultural resources within the area of potential effect. The larger stream valleys crossed by the proposed undertaking (e.g., the Little Miami River) represent the areas with the highest potential for prehistoric materials, while the remainder of the project area generally exhibits a moderate probability. Conversely, the probability for historic-period resources is probably lowest on the low floodplains and terraces of the project area. The lack of desirability of these landforms for historic settlement is probably due to the combined effects of the value of such landforms for agriculture, and the frequent flooding of stream valleys when considered with the planned permanence of residences during the historic period.

TABLE C-3.1. Previously recorded cultural resources within the Foster to Bath 345 kV project area.

Site Number	Location
33WA306–WA307	Located west of Morrow, a possible component of Stubbs cluster
33WA490	Located 100 m north of previously recorded site 33WA444
33WA139	50 to 100 m southeast of Tower 1136
33WA136	Located on the Little Miami River floodplain
33WA144, 33WA145, WA146, WA158	Located on the Little Miami River floodplain; only WA158 and WA 146 are located near an existing tower (1138)
33WA85	Located 100 m south of Tower 1140, north of the Little Miami River
33GR98	Early Archaic site covering 80 (sic) acres of upland slopes near corridor
33GR96	Located near the corridor, but not close to any towers
33GR99	Located near Tower 1026
33Gr1083	Located due south of Green Substation

Field Methods

Two general methods of archaeological field investigation, surface survey and shovel testing, were used during the Phase I cultural resources survey of DP&L's proposed Foster to Bath corridor. BHE implements these methods in compliance with the guidelines of the Secretary of Interior and the OHPO. For the Foster to Bath project, discussions with Dr. David Snyder of the OHPO (July 1999) devised a field strategy based upon stratifying the corridor into high, medium, and low probability areas. The demarcation of these areas was based upon the proximity of previously recorded sites, landform type, proximity to water and degree of slope. Only the tower replacement locations in high and medium probability areas were to be subjected to Phase I investigation. At these locations, sample loci were recorded between a minimum of 1 m and a maximum of 15 m intervals from the four corners of the existing tower.

Surface survey involved the visual scrutiny of exposed ground surface during controlled pedestrian coverage of the tower replacement area. An interval of 1 m to 5 m (3.3 to 16.4 feet) was maintained between linear transects walked during surface survey. Surface survey was conducted in areas offering 50 percent or greater surface visibility as well as areas of wet ground cover or steep slope. Shovel testing was used when surface visibility dropped below 50 percent, or when cultural material was identified on the surface. Individual shovel tests measured approximately 30 - 40 cm in depth and 50 cm in diameter. All excavated sediments were screened through a 1/4-inch mesh hardware cloth to ensure the recovery of relatively small artifacts. In the event that cultural material was recovered during this process, four additional shovel tests were placed at a reduced 7.5 m interval in a cruciform pattern around the positive unit in order to assess intrasite characteristics and artifact densities. Drawings, maps, photographs, and verbal descriptions were used, as necessary, to complement and document the survey conditions and locations of cultural resources.

Table C-3.2 illustrates the results of the Phase I survey and provides recommendations as to the treatment of any cultural resources discovered.

TABLE C-3.2. Cultural resources sites discovered within the Foster to Bath 345 kV right-of-way during the Phase I field survey.

Site Number	Tower Number	Description
33WA730	1047	Single biface thinning flake recovered in shovel test (ST) 2A, 0-30 cm. This site is located on the edge of a high, level glacial terrace approximately 200 m south of the Stubbs cluster sites. Due to this proximity, testing was initiated as a block of 16 shovel tests at a 5 m interval. Surface visibility in this cut soybean field was minimal. All soil profiles beneath the wires were heavily compacted; only the eastern-most transect revealed deep, friable soils. One of these, ST2A, yielded the isolated flake. Due to the close 5 m interval, no additional intrasite testing was conducted. This isolated find is not significant.
33WA731	1050	Surface scatter of debitage and fire-cracked rock approximately 30 m southeast of Tower 1050. The tower was located on a northwest-facing slope. Site area is located immediately north of US 22, across from the Stubbs sites. This location is totally disturbed by recent grading. Material was not quantified or collected.
33WA732	1051	Six flakes and fire cracked rock recovered from two shovel tests on the Little Miami River floodplain. Shovel test 3, located 10 m northwest of the tower, yielded two flakes of an unidentified reduction sequence and one biface thinning flake from the upper 30 cm. Shovel test 4, 10 m northeast of the tower, yielded one flake of an unidentified reduction sequence from the upper 30 cm. One biface thinning flake, one biface finishing flake, and a piece of burned limestone were recovered from 30 to 55 cm, in a zone of 10YR3/3 blocky silt loam (buried A horizon). No material was recovered from STs 1 and 2 to the south, and the stratigraphy was less clear in that area. No basal deposits were encountered. Additional shovel testing and deep testing were recommended for this location based on a conversation with Dr. David Snyder (Appendix B).
33WA733	1091	Two flakes of an unidentified reduction sequence and one pitted stone were recovered from the surface of a cornfield in an area 5 to 10 m north of existing Tower 1091. Visibility in the cornfield was 80 % and the setting is a narrow ridgetop in a highly dissected portion of uplands east of the Little Miami River. Despite intensified surface inspection, no additional cultural material was recovered and the site is considered insignificant.
33WA444	1101	A single flake was recovered from the plowzone of a shovel test in vicinity of previously recorded site 33WA444. Due to the presence of a known site, a block of shovel tests was placed around the tower at a 5 m interval. Two intrasite units were placed outside of the positive test, but no additional material was recovered. This site is an isolated find and further testing is not recommended.

33WA159	1137	A single burned biface fragment was found on the surface at 7 m northeast of the existing tower, in the vicinity of previously recorded site 33WA159. The site is on an undulating floodplain of the Little Miami River with gravel on the surface. Surface visibility was good, but no additional material was recovered. Shovel tests revealed no basal deposits within 60 cm of surface. The site was an isolated find, but given the floodplain location deep testing was recommended.
33GR1116	1154	Shovel test 4, located to the northeast of the existing tower, yielded one biface thinning flake from the plowzone. This site is on a high bluff over an unnamed tributary of the Little Miami River. Despite intensified surface inspection in the soybean field with over 50% visibility, no additional material was recovered. This site is not significant.

Phase I Survey in Areas of Previously Recorded Sites

The literature review discussed above identified a number of sites in close proximity to existing tower locations. All sites were subjected to heightened levels of scrutiny, but no materials were recovered. They are summarized in Table C-3.3.

TABLE C-3.3. Cultural resource sites identified in the literature search in close proximity to existing tower locations.

Site Number	Description
33WA306-WA307	Power line in this area is located on 10 to 15 m wide, 2 to 4 m high, berm of quarry spoil and the area is completely disturbed.
33WA490	No tower in vicinity, but previously recorded site is near or under wires. Area inspected had 50 to 60% surface visibility, but nothing was found.
33WA139	Shovel testing and surface inspection (50% visibility) recovered no material.
33WA136	No tower in vicinity, but site area was given a surface inspection (50% visibility). No material was collected.
33WA144, 33WA145, WA146, WA158	Only WA158 and WA146 are located near Tower 1138. The area provided 80-90% surface visibility, but it was also shovel tested due to the number of nearby archaeological sites. No material was collected and shovel tests revealed channel gravels within 1 m of surface.
33WA85	Located 100 m south of Tower 1140. The tower area was surface inspected, but no materials were recovered.
33GR98	Tower located on steep slopes subjected to surface inspection.
33GR96	No towers are in the vicinity and this site was not inspected.
33GR99	Tower 1026 in the immediate vicinity. About 100% surface visibility on the old glacial terrace. Large area intensively inspected with no cultural resources recovered.
33GR1083	Area thoroughly destroyed by grading and reshaping of landform.

Recommendations Concerning Deep Testing

Five tower replacement locations coincide with floodplain settings that required deep testing to examine buried deposits. One of these locations (Tower 1051) yielded cultural materials in shovel tests excavated during the initial Phase I survey. The following is a list of floodplain settings that had deposits that could not be examined using ordinary shovel tests and were therefore subjected to deep testing.

- Tower 1051: north side of Little Miami River crossing west of Morrow.
- Tower 1136: south side of Little Miami River crossing south of US 42.
- Tower 1137: south side of Little Miami River crossing south of US 42.
- Tower 1139: north side of Little Miami River crossing south of US 42.
- Tower 1168: north side of Little Miami River crossing west of Spring Valley.

At the suggestion of Dr. David Snyder (14 October 1999) (Appendix B), deep testing consisted of the excavation of 150 cm by 50 cm test units to examine the stratigraphy. The units were to be excavated by hand to a minimal depth of 100 cm, and a 0.25 m^2 quadrant of soil was to be screened by hand. The aim of the deep testing was to examine the profile for artifacts and features, as well as to determine the presence of any buried landforms.

The results of the deep testing indicated that only the area around Tower 1051 contained prehistoric or historic cultural materials. Five additional deep shovel tests and a 150 cm by 50 cm deep test trench revealed a buried A horizon at depths of 30 to 55 cm in depth. A total of 10 artifacts were recovered from shovel tests including four biface thinning or finishing flakes, two flakes from unspecified reduction sequences, two ceramic sherdlets, one whiteware sherd, and one burned bone fragment. In discussion with Dr. David Snyder (2 November 1999) it was pointed out that the site was low density, contained no diagnostic materials, and contained no evidence of features. Therefore, he suggested that the site was insignificant within the project boundaries and required no further investigation (Appendix B).

b. Impacts

Phase I surface reconnaissance, shovel testing and deep testing identified seven sites within the project corridor. Each of these locations is an isolated find or low-density prehistoric site that is not regarded as significant. No further investigations or other procedures are required for these locations.

4. NOTIFICATIONS

The chief executive officers of Greene and Warren counties, through the County Administrators, and the head of the township governmental agencies in the area where any part of this project is located, have been contacted with personal contacts by DP&L and Cinergy management personnel. At these contact meetings, the county and township people were given brochures and a verbal explanation briefly describing the Foster-Bath Transmission Project. They were also asked for their comments, concerns and questions regarding the project. A copy of the brochure given the officials is included in Appendix E. Additionally, all these officials will be provided a copy of this Letter of Notification at the time of filing. The project does not require work on any land owned or within the boundaries of any municipal corporation.

In addition to the county and township administration people identified above, county, state and federal agencies involved in preservation and protection of the environment, and natural, cultural and ecological resources, have also been contacted by letter and/or personal contact as noted by the documents included in Appendices. Further, these agencies will be provided a copy of this Letter of Notification.

DP&L has provided information to the public concerning this project by contacting public officials as described above with letters and/or personal contacts generally describing the project. As noted, additional detailed information will be provided them in this Letter of Notification. Further public notification has been accomplished by sending information to each property owner who owns land on which any part of the transmission facility will be located, and to those properties immediately adjacent to the right-of-way that are directly affected by tree trimming or some other activity associated with the project. This information recently sent to the owners included a map showing the line route (Figure A-1.2), a brief description of the project and work to be done, and sketches of the structures to be removed and installed on or near their property. Each owner has been sent that information pertinent to the location of that owner's property and based on the appropriate line section(s) detailed in this Letter of Notification. Owners are encouraged to contact DP&L for further information or to have their questions answered. A copy of the mailing list of property owners in each section of the line to be upgraded (as detailed ion Sections A and B of this LON) is included in Appendix E. Immediately following the mailing list for each section is a copy of a representative letter sent to each owner in that section along with the specific sketches included with their letter.

Since sending the letters and information packets the week of January 10, 2000, seven letters have been "returned to sender" with no forwarding address known. The original mailing lists were developed from county tax and ownership records. The seven letters returned have all been resent based on additional and more up-to-date information obtained from review of other directories and field trips to identify addresses.

Responses and questions have been received from a few of the property owners who were sent letters. One owner, Carlo McGinnis of Valley Springs Farm, asked that his letter response, dated January 17, 2000, be forwarded to regulatory/oversight agencies. This response letter is included in Appendix E.

Another property owner inquired about EMF effects (questions addressed) and the specific design and placement of the new replacement structure located on his property. Due to the specific manner in which he uses his property, DP&L will investigate an alternate structure arrangement to accommodate the use and topography of the property, and the owner's access lane to the rear of the property.

A third inquiry expressed concern for effects of the line-upgrading project on use of, and clearances associated with, the Greene County Airport. DP&L is in the process of designing the line upgrade in this area west of the airport to meet all FAA requirements and comply with the requirements of the Ohio Department of Transportation Aviation Administration, as further discussed in this Letter of Notification.

A couple other inquires were received concerning details of the project not specifically addressed in the property owner letters. One of these contacts was interested in a possible relocation of a structure to accommodate parking at his shop on his property. Another was concerned with soil rutting and compaction caused by construction equipment. Another was concerned about four-wheelers getting on the property during construction. All of these questions have been addressed to the satisfaction of the property owners.

Additionally, several property owners called to state they were pleased with the efforts we were making to contact them and that they thought the pole structures were a preferred alternative to the present towers.

TABLE C-4.1. Persons and agencies notified about the Foster to Bath 345 kV project.

Contact	Agency
Warren County Administrator	Robert Price 320 East Silver Street Lebanon, OH 45036
Greene County Administrator	Steve Stapleton 35 Greene Street Xenia, OH 45385
Hamilton Township Trustee	Jacqueline Terwilleger 10609 Rochester-Cozaddale Pleasant Plaines, OH 45122
Salem Township Clerk	Debbie Harper 7373 Ludlum Rd. Morrow, OH45152
Turtle Creek Township Clerk	Lois Freeze Stovall 536 North Waynesville Rd. Lebanon, OH 45036
Washington Township Clerk	Diane Owens 6427 Woodward-Claypool Rd. Morrow, OH 45152
Massie Township Clerk	Mary Wilkie 10555 E. State Route 73 Waynesville, OH 45068
Wayne Township Clerk	Darrell C. Coffman 5515 South Cincinnati-Columbus Rd. Box 1142 Waynesville, OH 45068
Deerfield Township Clerk	Benjamin Dotson 9142 Columbia Road Loveland, OH 45140
Spring Valley Township Trustees	John DeWine, Wendell Johnson, Paul Ferguson 2547 U.S. 42 S. Spring Valley OH 45370
Sugarcreek Township Trustees	Jeanne Nydegger, Carl Grubb, Dick King 26 E. Franklin St. Bellbrook, OH 45305
Beavercreek Township Trustees	John Deal, Carol Graff, Richard Little 1981 Dayton-Xenia Road Beavercreek, OH 45434
Ohio Environmental Protection Agency	Rick Queen Ohio Environmental Protection Agency Division of Surface Water P.O. Box 1049 Columbus, Ohio 43216

TABLE C-4.1 (Cont.). Persons and agencies notified about the Foster to Bath 345 kV project.

Ohio Department of Natural Resources	Kim Baker Real Estate Management Division 1952 Belcher Drive Columbus, OH 43224-1336
Ohio Department of Transportation	District 8 Office 505 South SR 741 Lebanon, Ohio 45036
Ohio Historic Preservation Office	Dr. David Snyder 1982 Velma Avenue Columbus, OH 43211
U.S. Fish and Wildlife Service	Kent Kroonemeyer Ecological Services 6950 Americana Parkway, Suite H Reynoldsburg, Ohio 43068-4132
Greene County Parks and Recreation	James A Schneider Greene County Recreation, Parks and Cultural Arts 651 Dayton-Xenia Road Xenia, Ohio 45385
Warren County Parks and Recreation	Onlie M Gully, Park Director Warren County Parks 300 East Silver Street Lebanon, Ohio

5. CURRENT OR PENDING LITIGATION

There is no current or pending litigation associated with this project at the time of filing the Letter of Notification.

6. LOCAL, STATE AND FEDERAL AGENCY GOVERNMENTAL REQUIREMENTS

Local, State and Federal permits, clearances, and approvals required for the project have been identified (Table C-6.1). DP&L is currently working with local agencies to determine the need for additional permits. DP&L has requested comments from appropriate federal and state environmental agencies having jurisdiction over the proposed project. Responses received are included in Appendix A. Certain permits require that specific design details and schedule information be supplied with the permit. This is the case for permits to cross highways, provide airspace clearance at airports, define how runoff and stormwater discharge is to be handled at certain locations, etc. The final engineering details are presently being developed so that permit applications may be finalized. DP&L will not construct any facilities until all applicable environmental permits, clearances, and/or approvals have been obtained.

TABLE C-6.1. Local, state, and federal permits and clearances required for the Foster to Bath 345 kV project.

Agency	Regulated Activity	Permit/Clearance	Date Submitted / Received
U.S. Army Corps of Engineers Louisville District	Crossing jurisdictional waters of the United States	Nationwide permit 12 (Utility crossings) for crossing waters of the United States	
U.S. Fish and Wildlife Service	Protection of federally-listed species	Clearance for federally-listed T&E species	9 September 1999/ 16 September 1999
National Park Service	Crossing of National Scenic River	Comment from Scenic Rivers Coordinator	27 September 1999 5 November 1999
Public Utilities Commission of Ohio	Project construction	Certificate to construct project	
Ohio Environmental Protection Agency	Crossing jurisdictional waters of the state	401 Water Quality Certification for crossing state-jurisdictional waters	9 September 1999
Ohio Environmental Protection Agency	Construction disturbances of greater than 5 acres	Stormwater Discharge Permit	
Ohio Department of Natural Resources (ODNR), Division of Natural Heritage	Protect species	Review and comment for state listed species	9 September 1999 13 September 1999
ODNR, Division of Natural Areas and Preserves	Crossing of State Scenic River	Comment from Scenic Rivers Coordinator	27 September 1999 5 November 1999
ODNR, Division of Natural Areas and Preserves, Department of Real Estate Management	Crossing of state-owned lands (Halls Creek Nature Preserve, Caesar Creek Nature Preserve)	License Agreement	
ODNR, Division of Wildlife	Threatened and endangered species	Review and comment for state-listed species	9 September 1999
Ohio Historic Preservation Office (OHPO)	Cultural resources	Review project and provide recommendations and clearance	Phase 1 report submitted January 28, 2000
County Floodplain Administrators	Flood hazard area crossing	Flood Hazard Area Development Permit	

TABLE C-6.1. Local, state, and federal permits and clearances required for the Foster to Bath 345 kV project, Continued.

Ohio Department of Transportation (ODOT)	Highway crossings and airport airspace	Construction and crossing permits and clearances	
Federal Aviation Administration (FAA)	Airport and airspace clearance requirements and structure markings	Permit to construct in airspace	

D. Environmental Data

1. FEDERAL AND STATE DESIGNATED SPECIES

a. Existing Conditions

Federal Species

The United States Fish and Wildlife Service (FWS) Reynoldsburg District was contacted on 9 September 1999 for information on the occurrence of federally-listed plant and animal species within and along the project corridor to assess potential ecological impacts of the project. FWS responded that they do not have site specific information on fish and wildlife habitats for the project area. They also stated that the Little Miami River is a Federally- and state-designated scenic and recreational river and that special conditions may be placed on the construction of the transmission line crossings of the Little Miami River. They have no record of any federal wildlife, forest, or park area that would be impacted by the proposed project (Appendix A). However, their records show that the following federally listed species may be present in the project area: Indiana bat (*Myostis sodalis*) (endangered), clubshell mussel (*Pleurobema clava*) (endangered), running buffalo clover (*Trifolium stoloniferum*) (endangered), and eastern massasauga (*Sistrurus catenatus catenatus*) (candidate). Each is briefly described below.

Indiana Bat

The Federally endangered Indiana bat has a range that stretches east from Oklahoma, Iowa and Wisconsin to Vermont, and south to northwestern Florida (Barbour and Davis 1969). The Indiana bat is a migratory species that roosts in trees during the summer and hibernates in caves and mines in the winter. Because no caves or mines are located within the project area, suitable summer habitat for Indiana bats is the only concern for the proposed project.

During summer, female Indiana bats migrate from winter hibernacula to summer roosting areas, where they establish maternity colonies in trees (Gardner et al. 1991, Humphrey et al. 1977, Cope et al. 1974). Certain criteria have been identified as important components of the Indiana bat summer habitat [3D Environmental (3D/E) 1995]. Summering Indiana bats typically roost beneath exfoliating bark of trees, but are also known to roost within the cavities of trees (Brack 1983). Potentially important roost tree characteristics are tree diameter, canopy cover at roost sites, tree species, roost tree density, and location of potential roost trees relative to other habitat features (e.g., foraging areas).

Maternity roost trees discovered to date have generally been trees with greater than 12 inches diameter at breast height (dbh). Smaller trees may also be used as alternate roosts as micro-climatic conditions of the primary roost tree vary throughout summer. Many tree species are utilized by Indiana bats, but species which have greater amounts of exfoliating bark [e.g., shagbark hickory (*Carya ovata*), silver maple (*Acer saccharinum*)] are generally more likely to be used. Trees with greater than 25 percent exfoliating bark are considered to have high potential as roost sites, trees with 10 to 25 percent are considered to have moderate potential. Large, dead trees often provide the greatest potential habitat, although they may serve as suitable roost sites for only a few years before bark exfoliation is complete.

Size and density of potential roost trees are important characteristics in determining habitat suitability. In optimal habitats, dbh exceeds 9 inches and tree density is greater than 27 trees per acre in upland areas, or 17 trees per acre in lowland areas (3D/E 1995).

Optimal foraging habitat for Indiana bats consists of mature forests with canopy closure of 50 to 70 percent and open subcanopy. Additionally, proximity to water also affects the suitability of habitat. Standing water should be within a 0.6 mile of the habitat under consideration for an area to be considered optimal foraging habitat.

During the field investigation conducted 6-30 September 1999, suitable habitat areas were defined by BHE biologists as areas containing potential roost trees and/or potential foraging habitat. In the proposed right-of-way, noted roost trees comprised a combination of shagbark hickories, white oaks (*Quercus alba*), and a variety or dead and dying trees, all of which may provide summer roosting habitat for the Indiana bat. Potential foraging areas included areas that provided openings or corridors that were in close proximity to the above mentioned trees. During the field investigation, seven suitable habitat areas were identified within the right-of-way. These areas were mapped using GPS and are depicted in Figure A-1.5. Six areas were located within the second growth forested habitat within the first mile of the project area. The forest covers the yet uncleared eastern 150-foot portion of the 300-ft right-of-way. These six areas contained medium-sized shagbark hickories (20-30 cm dbh) and medium to large white oaks (30-50 cm dbh). Each area contained two to six potential roost trees. This first mile did not provide large open areas or corridors; however, the area could still be utilized by the Indiana bat.

The seventh area of suitable habitat was situated in the small gorge surrounding Caesar Creek. Four small to medium-sized (15-20 cm dbh) shagbark hickories and three medium (20-30 cm) white oaks were noted in the gorge within the right-of-way. Although only seven potential roost trees were noted, this area provided a potential foraging area, Caesar Creek, which crossed the entire right-of-way.

Running Buffalo Clover

Running buffalo clover is a federally-listed endangered legume which flowers in May and early June and had an original range that included Illinois, Indiana, Kansas, Kentucky, Missouri, Ohio, and West Virginia (Brooks 1983; USFWS 1989). The greatest number of populations of running buffalo clover are presently found in southwestern Ohio and northern Kentucky. Historic records indicate this species was widespread on moist, fertile soils in the Bluegrass Region, and the species grew in open woodlands and grasslands disturbed by Indians and large herbivores like buffalo, elk, and deer (Campbell et al. 1988).

Early accounts suggest running buffalo clover inhabited woodlands dominated by sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), green ash (*Fraxinus pennsylvanica*), blue ash (*Fraxinus quadrangulata*), American elm (*Ulmus americana*), red elm (*Ulmus rubra*), black walnut (*Juglans nigra*), honey locust (*Gymnocladus dioica*), black locust (*Robinia psuedoacacia*), red mulberry (*Morus rubra*), hackberry (*Celtis occidentalis*), and scattered oaks (*Quercus* spp.) and hickories (*Carya* spp.). The ground vegetation appears to have been dominated by species including wild ryes (*Elymus* spp.), bluegrasses (*Poa* spp.), giant cane (*Arundinaria gigantea*), hog peanut (*Amphicarpa bracteata*), wood nettle (*Laportea canadensis*), and clearweed (*Pilea pumila*).

During the field investigation, while the entire project area was surveyed for running buffalo clover, no individual of this species was identified.

Clubshell Mussel

The clubshell mussel is a species typical of medium-sized and large rivers, where it occurs in gravel or mixed gravel and sand (Parmalee and Bogan 1998, Cummings and Mayer 1992). Historically this species occurred in big river habitats that are now impounded. Most current populations of this species are reduced to an occasional relict individual (Parmalee and Bogan 1998).

The clubshell once was widespread throughout most of the Ohio and Maumee River drainages. It is recorded from most Ohio River tributaries in Kentucky, Illinois, and Ohio, as well as from more isolated systems in Michigan, Pennsylvania, and West Virginia. The largest remaining population of the clubshell is in the Tippecanoe River of Indiana (USFWS 1993). It is a federally-listed endangered species and is also listed as endangered by the state of Ohio (Ohio Law 1531.25).

No in-stream survey for this species was completed during the field investigation. However, this species was not identified in the ODNR Division of Wildlife and Division of Natural Areas and Preserves database search as being located within 0.5 mile of the crossing of any project area stream.

Eastern Massasauga

The eastern massasauga rattlesnake occurs in the Great Lakes region including much of glaciated (northern) Ohio. It has been documented from Greene County (Conant 1951, Duellman 1951). The species is listed as endangered in the State of Ohio.

In Ohio, eastern massasaugas inhabit a variety of habitats including wet grasslands and undergrowth surrounding lakes or marshes, hay or grain fields, second-growth swamp forest, dry woodlands, and nearby buildings (Minton 1972). They may hide in crayfish burrows or other underground cavities (Conant and Collins 1991). This species feeds on rodents, small birds, frogs, and other snakes. Eastern massasaugas are active from April to late October or early November. During spring and fall they are diurnal and can be seen basking or searching for food. In the heat of mid-summer they are largely inactive during the day (Ernst and Barbour 1989).

During the field investigation, while the entire project area was surveyed for eastern massasauga, no individual of this species was identified.

State Species

ODNR Divisions of Wildlife and Natural Areas and Preserves were contacted on 9 September 1999 regarding information on the occurrence of state-listed plant and animal species within and along the project corridor, to assess potential ecological impacts of the project. ODNR Division of Natural Areas and Preserves reported that there are four state-listed species (few-flowered tick-trefoil (*Desmodium pauciflorum*) (potentially threatened); mooneye (*Hiodon tergisus*) (special interest); prickly pear (*Opuntia humifusa*) (potentially threatened); and Carolina willow (*Salix caroliniana*) (threatened)] known to occur within 1,300 feet of the right-of-way; however, none were mapped within or adjacent to the project area (Appendix A).

b. Impacts

A field survey for protected species within the project corridor was conducted 6-30 September 1999. No federally-listed plants or animals were found during the field survey. One osprey (*Pandion haliaetus*) (state endangered) was observed flying across the right-of-way at the beginning of the project area. However, while this individual is a state-listed bird it was believed to be migrating through the area. There are no records of this species nesting in southwestern Ohio (Peterjohn and Rice 1991). In addition, one marsh wren (*Cistothorus palustris*) (state special interest) was observed along Furnas Ditch.

No impact to state- or federally listed species is anticipated as a result of proposed project activities. DP&L is anticipating FWS' approval to remove suitable Indiana bat habitat prior to 15 April deadline in order to avoid effects to this species. No osprey nest was observed in the project area. To avoid any potential impact to this species, DP&L will avoid disturbance to reed canary grass and other vegetation along the ditch during construction if construction occurs during this species' nesting season, mid-May to mid-August (Peterjohn and Rice 1991).

2. AREAS OF ECOLOGICAL CONCERN

The right-of-way occurs near several ecological areas of concern. Each are discussed below.

a. Natural Areas and Preserves

Existing Natural Areas and Preserves

ODNR Divisions of Natural Areas and Preserves and Real Estate were contacted on 9 and 10 September 1999, respectively, for information on the project's potential to impact ecological resources including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas wildlife refuges, wildlife management areas, and wildlife sanctuaries.

ODNR Division of Natural Areas and Preserves identified several ecological areas near DP&L's right-of-way. They are listed below.

- Little Miami River
- Hall Creek Woods Scenic River Preserve
- Floodplain Forest Plant Community
- Mathers Mill Scenic River Access
- Caesar Creek Gorge State Nature Preserve
- Fossil deposit and stream gorge within Caesar Creek
- Roxanna Road Scenic River Access
- Glenn Thompson Scenic River Access
- Beaver Valley State Wildlife Area

ODNR also stated that they are unaware of breeding or non-breeding animal concentrations or state parks or forests in the project's vicinity. ODNR's response letter is provided in Appendix A.

The project crosses the Little Miami River, a State and National Scenic River, six times. Immediately after the first crossing of the Little Miami River near the Village of Morrow, the project area enters ODNR-managed Halls Creek Woods Scenic River Preserve for approximately 1,700 feet. This nature preserve is located in Warren County, 3 miles east of South Lebanon on Mason-Morrow Road. It is known for its displays of spring and summer wildflowers. Within this Preserve, the powerline crosses about 250 feet of Floodplain Forest Plant Community. DP&L will apply for a License Agreement for the crossing of the Nature Preserve.

The project area also lies within 1,300 feet west and north of Mathers Mill Scenic River Access, managed by ODNR Division of Wildlife and Preserves. The right-of-way also crosses 1,160 feet of Caesar Creek Gorge State Nature Preserve in Wayne Township on either side of the Caesar Creek crossing. This area is characterized by a limestone gorge with Ordovician fossils, and spring wildflowers. It is located in Warren County 3 miles north of the Village of Oregonia. DP&L will apply for a License Agreement for the crossing of the Nature Preserve. Near this crossing, the project area is located about 500 feet upstream from a fossil deposit and stream gorge within Caesar Creek.

Just north of Mount Holly, the right-of-way comes within 1,000 feet west of ODNR's Roxanna Road Scenic River Access. Farther north, the right-of-way comes within 1,700 feet west of ODNR's Glenn Thompson Scenic River Access in Beavercreek Township. Finally, the right-of-way comes within 2,000 feet west of ODNR's Beaver Valley State Wildlife Area in Beavercreek Township.

ODNR Scenic Rivers Program Coordinator and the Regional Environmental Coordinator with the National Park Service were contacted for comment regarding the crossing of the Little Miami River. Their responses are provided in Appendix A.

Impacts

One tower location (Tower 1052) is situated within Halls Creek Woods Scenic River Preserve. A second tower (Tower 1106) is located adjacent to Caesar Creek Nature Preserve. Construction impacts will comprise temporary soil disturbances around each tower location, and the pouring of new permanent concrete foundations. In addition, the existing transmission towers at these sites will be removed. The movement of construction equipment will temporarily disrupt existing vegetation and may disturb the underlying topsoil layer at both the old and new tower sites. To control runoff and erosion at each tower location, DP&L will implement best management practices described in their *Soil and Erosion Control Plan*.

DP&L will coordinate with Mr. Frank Shocks, ODNR' SW Ohio Preserve Manager regarding clearing and implementation of their Riparian Corridor Reforestation Management Plan (FCRMP) within the Caesars Creek Gorge and Hall's Creek Nature Preserves prior to construction.

b. Streams

Existing Conditions

The project area is located within the drainage basin of the Little Miami River, a State and National Scenic River. The Little Miami River is a major tributary of the Ohio River and it originates near Clifton Gorge in Clark County, Ohio, and flows south to the Ohio River, draining an area of 1,755 mi^2. The river supports more than 87 species of fish, 36 species of mussels (including five state-listed endangered species) and numerous species of breeding birds (ODNR 1999).

The Little Miami River is designated by OEPA as a state resource water and exceptional warm water aquatic habitat. State Scenic Rivers are the highest quality rivers in Ohio. To be classified as scenic, rivers must exhibit a high degree of natural integrity; possess good, intact native fish, macroinvertebrate, and mussel populations; possess a good quality riparian corridor; and must have little human disturbance. Any construction within 1,000 feet of a scenic river must be coordinated with ODNR. The river's use classification includes agricultural and industrial water supplies. It is also designated for primary contact recreation (OEPA 1998).

BHE completed a field survey of streams within the proposed corridor from 6-30 September 1999. All project area streams were characterized, and mapped using GPS. One hundred ten (110) streams were identified during the field survey, including 22 characterized as permanently flowing. Streams identified and named on USGS topographic maps included Salt Run (crossed twice), Hen Run (crossed twice), Bigfoot Run, Little Miami River (crossed six times), Grays Run (crossed twice), Olive Branch, Caesar Creek, Shaffers Run, and Furnas Ditch.

Streams crossed by the powerline are summarized in Table D-2.1 and illustrated on USGS topographic maps (Figure A-5.1). Stream datasheets and select photographs of permanent streams are provided in Appendix C.

Most streams crossed by the right-of-way were characterized by steep banks with typical bank heights of 10 to 20 feet. Due to bank steepness, considerable erosion was evident in some of the streams crossed. Most streams had undercut banks, and some of the larger streams exhibited evidence of exposed calcareous limestone bedrock. Typical stream substrates were composed of cobble, gravel, sand, and varying amounts of silt. No obvious signs of contamination were noted during the field survey.

TABLE D-2.1. Streams crossed by the Foster to Bath 345 kV electric transmission corridor.

Stream No.	Stream Name	Water Width (feet)	Stream Flow
1	Unnamed tributary	3	E
2	Unnamed tributary	10	P
3	Unnamed tributary	3	E
4	Unnamed tributary	10	E
5	Unnamed tributary	10	E
6	Unnamed tributary	3	E
7	Unnamed tributary	5	E
8	Unnamed tributary	3	E
9	Unnamed tributary	10	E
10	Unnamed tributary	10	E
11	Unnamed tributary	3	E
12	Unnamed tributary	8	E
13	Unnamed tributary	4	E
14	Salt Run	15	P
15	Unnamed tributary	4	E
16	Hen Run	10	P
17	Hen Run	10	P
18	Salt Run	8	P
19	Unnamed tributary	3	E
20	Unnamed tributary	5	E
21	Unnamed tributary	4	E
22	Unnamed tributary	5	E
23	Unnamed tributary	6	E
24	Bigfoot Run	7	P
25	Unnamed tributary	3	E
26	Unnamed tributary	3	E
27	Unnamed tributary	3	E
28	Little Miami River	100	P
29	Unnamed tributary	5	E
30	Unnamed tributary	3	E
31	Unnamed tributary	3	E
32	Unnamed tributary	3	E
33	Unnamed tributary	3	E
34	Unnamed tributary	3	E
35	Grays Run	5	P
36	Unnamed tributary	5	E
37	Grays Run	7	E
38	Unnamed tributary	3	E
39	Unnamed tributary	6	E
40	Unnamed tributary	5	E
41	Unnamed tributary	4	E
42	Unnamed tributary	3	E

TABLE D-2.1 (Cont.). Streams crossed by the Foster to Bath 345 kV electric transmission corridor.

43	Unnamed tributary	3	E
44	Unnamed tributary	15	E
45	Unnamed tributary	6	E
46	Unnamed tributary	8	E
47	Unnamed tributary	3	E
48	Unnamed tributary	8	E
49	Unnamed tributary	8	E
50	Unnamed tributary	4	E
51	Unnamed tributary	3	E
52	Unnamed tributary	5	E
53	Unnamed tributary	5	E
54	Unnamed tributary	5	E
55	Little Miami River	130	P
56	Unnamed tributary	3	E
57	Unnamed tributary	4	E
58	Unnamed tributary	5	E
59	Unnamed tributary	6	E
60	Unnamed tributary	5	E
61	Olive Branch	30	P
62	Unnamed tributary	30	E
63	Unnamed tributary	4	E
64	Unnamed tributary	3	E
65	Unnamed tributary	3	E
66	Unnamed tributary	7	E
67	Caesar Creek	50	P
68	Unnamed tributary	4	E
69	Unnamed tributary	3	E
70	Unnamed tributary	3	E
71	Unnamed tributary	5	E
72	Unnamed tributary	3	E
73	Unnamed tributary	3	E
74	Unnamed tributary	12	E
75	Unnamed tributary	5	E
76	Unnamed tributary	5	E
77	Unnamed tributary	3	E
78	Unnamed tributary	6	E
79	Unnamed tributary	12	P
80	Unnamed tributary	4	E
81	Shaffers Run	20	P
82	Furnas Ditch	12	P
83	Little Miami River	90	P
84	Unnamed tributary	7	P

TABLE D-2.1 (Cont.). Streams crossed by the Foster to Bath 345 kV electric transmission corridor.

85	Unnamed tributary	5	E
86	Unnamed tributary	10	E
87	Unnamed tributary	7	E
88	Unnamed tributary	3	E
89	Unnamed tributary	5	E
90	Unnamed tributary	6	E
91	Unnamed tributary	15	P
92	Little Miami River	60	P
93	Unnamed tributary	6	P
94	Unnamed tributary	3	E
95	Unnamed tributary	6	E
96	Unnamed tributary	4	E
97	Unnamed tributary	8	E
98	Unnamed tributary	4	E
99	Unnamed tributary	4	E
100	Unnamed tributary	4	E
101	Unnamed tributary	3	E
102	Unnamed tributary	3	E
103	Unnamed tributary	5	E
104	Unnamed tributary	3	E
105	Unnamed tributary	12	P
106	Little Miami River	5	P
107	Little Miami River	75	P
108	Unnamed tributary	3	E
109	Unnamed tributary	3	E
110	Unnamed tributary	3	E

P: Perennial
E: Ephemeral

Impacts

No impact to the Little Miami River will occur as a result of construction and operation activities. DP&L will implement recommendations of the National Park Service and ODNR Scenic Rivers Program (Appendix A) at these crossings. No in-stream work will be conducted in the Little Miami River or in any drainage way (storm sewer inlet, swales, ditch or tributary streams) within 1,000 feet of the Little Miami River. In addition, DP&L will not cross Bigfoot Run, Grays Run, and an unnamed tributary or oxbow (Stream 106) located just south of SR-35. All areas within 1,000 feet of the Little Miami River will be returned to pre-construction elevations and contours using the natural substrates.

No work will be conducted within the ordinary high-water mark of the Little Miami River. No riparian vegetation will be removed within 120 feet of the Little Miami River except within pre-determined areas, per ODNR, of the defined easement. No trees over 4 inches DBH will be removed until a determination has been made by ODNR during a site visit, that these trees require removal. In coordination with ODNR, DP&L will complete and implement a Riparian Corridor Reforestation Management Plan (RCRMP) to increase the riparian buffer along the Little Miami River.

If dewatering is necessary at the pole construction locations, all wastewater will be pumped onto vegetated areas away from the Little Miami River. All equipment maintenance activities and storage of hazardous materials will not be conducted within the 100-year floodplain of the Little Miami River.

Temporary disturbance to other project area streams will result from vehicle crossings during construction. Potential impacts could include stream bank and channel disturbance. However, impact to streams is expected to be short term and minimal. The crossing of streams that are characterized by steep banks or have evidence of substantial erosion potential will be avoided. Where this is not possible, DP&L will locate stream crossings where they will cause the least amount of disturbance to the channel and surrounding vegetation. Stream crossings by equipment will be made perpendicular to the channel to minimize the length of channel disturbed. Where stream banks and channels cannot support heavy equipment without damage, DP&L will construct a temporary equipment bridge crossing using equipment pads and/or clean rockfill. No equipment bridge will be constructed or stabilized with soil.

All equipment crossing material will be removed as soon as the crossing is no longer needed, except where removing stone or rock will cause additional disturbance to the stream. Stone and rock left in the channel will be formed so that it does not impede fish passage.

No impact to streams from stormwater runoff or sedimentation is anticipated from construction activities. DP&L will implement best management practices during construction to minimize stormwater runoff and stream sedimentation from disturbed tower sites. Sedimentation will be controlled across the right-of-way by directing flow from erosion control structures and sheet flow into naturally occurring, well-vegetated areas. These areas serve to reduce the velocity of water flow and act as filter traps for sediment.

Disturbed portions of the right-of-way that are characterized by steep slopes have a greater erosion potential due to greater velocities of storm water runoff along the right-of-way. DP&L will initiate clean up and restoration as soon as practical following construction to minimize erosion. This includes re-contouring, applying lime, fertilizer and seed, and mulching disturbed areas where necessary and as required. Temporary erosion controls will be properly maintained throughout construction. A variety of temporary erosion control measures may be used to limit sedimentation. They will mostly be limited to sediment barriers and mulch. Sediment barriers include, but are not limited to, jute matting, curlex, silt fence, straw or hay bales, crushed stone, and vegetative filter strips.

c. Wetlands

BHE completed a field reconnaissance within the entire project corridor during 6-30 September 1999 in order to determine the presence of wetland communities. Prior to visiting the sites, BHE obtained and reviewed all available resource information for the area. This information included USGS topographic maps, USFWS National Wetland Inventory (NWI) maps and the U.S. Natural Resources Conservation Service (NRCS) *Soil Survey of Warren County, Ohio* (USDA-NRCS 1973) and *Soil Survey of Greene County, Ohio* (USDA-NRCS 1978).

Wetlands were identified and surveyed using the "Routine Onsite Determination Method" as described in the U.S. Army Corps of Engineers Wetland Manual (1987). Dominant vegetation was determined by estimating percent aerial coverage for the most prevalent species. Dominant species include taxa which cumulatively total 50 percent of the aerial coverage and any other single species accounting for at least 20 percent aerial coverage within the plot. The wetland indicator status of each species was determined using *The National List of Plant Species That Occur in Wetlands: Northeast (Region 1)* (Reed 1988). Munsell Soil Color Charts (1994) were used to identify the hue and chroma of soil samples. Wetlands were classified in accordance with the USFWS' classification system (Cowardin et. al. 1979). All data were recorded on Wetland Delineation Data Sheets (Appendix D) and wetland boundaries were mapped using GPS.

Thirty wetlands were identified within the right-of-way. They range in size from 0.01 acre to 1.04 acres. Twenty-seven wetlands were classified as palustrine emergent (PEM) while three were a combination PEM/ palustrine scrub-shrub (PSS) wetland. PEM wetlands were dominated by reed canary grass (*Phalaris arundinacea*), soft rush (*Juncus effusus*), boneset (*Eupatorium perfoliatum*), jewelweed (*Impatiens* sp.), grass-leaved goldenrod (*Euthamia graminifolia*), clearweed (*Pilea pumila*), tickseed (*Bidens* sp.), common cattail (*Typha latifolia*), New England aster (*Aster novae angliae*), and black bulrush (*Scirpus atrovirens*). PSS wetlands had similar herbaceous layers to the PEM wetlands but also were characterized by sandbar willow (*Salix exigua*) and black willow (*Salix nigra* spp.) species scattered throughout the wetland. Wetland acreage within the right-of-way totals 3.4 acres. Project area wetlands and their acreage are summarized in Table D-2.2.

Impacts

DP&L will attempt to avoid crossing wetland areas with construction equipment where feasible during the string of cable. Maximum temporary impacts to wetlands would comprise 3.4 acres along the entire right-of-way and would consist of temporary disturbance to the upper 1 foot of soil. No vegetation will be removed except where proposed tower locations are situated in wetlands.

Two existing and proposed new transmission towers (towers 1044 and 1143) are located in wetlands 13 and 25, respectively. Two other towers (towers 1026 and 1098) are located adjacent to Wetlands 5 and 21, respectively. Impact to wetlands 13 and 25 will comprise the filling of 0.003 acre with a concrete foundation and the regrading of an area approximately 40 foot by 40-foot area (0.04 acre) each foundation. At existing tower sites, the steel lattice

above ground will be disassembled and a backhoe will dig around each leg location to a depth of 3 to 4 feet so the top part of each leg may be taken apart and removed. Once completed, the excavated soil will be replaced where each leg top section was removed.

At tower locations 1026 and 1098, impact to adjacent wetlands 5 and 12 will likely comprise soil disturbance from construction equipment during old tower removal and new tower construction activities.

Where standing water or saturated soils are present in wetlands, DP&L's contractor will use low-ground weight, or wide-track or balloon-tire construction equipment, or operate normal equipment on timber riprap, prefabricated equipment mats, or geotextile fabric overlain with gravel. Geotextile fabric used for this purpose must be strong enough to allow removal of all gravel and fabric from the wetland. DP&L will attempt to use no more than two layers of timber riprap to stabilize the right-of-way. All timber riprap, prefabricated equipment mats, geotextile fabric, and overlying gravel will be removed upon completion of construction.

Immediately after construction, all disturbed wetlands will be reseeded and stabilized following procedures outlined in the *Soil and Erosion Control Plan* (Appendix E).

TABLE D-2.2. Wetlands crossed by the Foster to Bath 345 kV electric transmission corridor.

Wetland No.	Wetland Type	Acres
1	PEM	0.08
2	PEM	0.02
3	PEM	0.01
4	PEM	0.24
5	PEM	0.08
6	PEM	0.06
7	PEM	0.03
8	PEM	0.03
9	PEM	0.01
10	PEM	0.02
11	PEM	0.01
12	PSS	0.03
13	PSS	0.10
14	PEM	0.11
15	PEM/PSS	0.12
16	PEM/PSS	0.12
17	PEM/PSS	0.08
18	PEM	0.16
19	PEM	0.10
20	PEM	0.01
21	PEM	0.03
22	PEM	0.14
23	PEM	0.10
24	PEM	0.01
25	PEM	1.04
26	PEM	0.03
27	PEM	0.30
28	PSS	0.16
29	PEM	0.17
30	PEM	0.04
TOTAL		3.44

d. Ponds

Existing Ponds

Eighteen ponds were observed within the right-of-way. The majority of ponds were located in agricultural fields or pastures - six were residential ponds. Most of the ponds were small, measuring less than 1 acre. All but two appeared to be man-made and most were used as watering holes for livestock. Pond acreage in the right-of-way totals 6.4 acres.

Impacts

DP&L will avoid impact to ponds in the right-of-way by routing their construction equipment around these areas. No proposed tower locations are designed to be located within ponds

e. Vegetation

Existing Conditions

During the field investigation, BHE characterized vegetative communities within the corridor. Most of the project area is characterized by old-field communities and agricultural row crops. Old-field vegetation was the dominant plant community in the right-of-way. Old-fields are habitats that were once cleared, but have been left to re-vegetate. Dominant herbs observed in these areas included meadow fescue (*Festuca pratensis*), brome grass (*brome* sp.), Canada goldenrod (*Solidago canadensis*), common ragweed (*Ambrosia artemisiifolia*), giant ragweed (*Ambrosia trifida*), blackberry (*Rubus* sp.), black raspberry (*Rubus occidentalis*), New England aster, and chicory (*Cichorium intybus*). Dominant shrubs or small trees scattered in the right-of-way included multiflora rose (*Rosa multiflora*), black locust (*Robinia pseudoacacia*), and white ash (*Fraxinus americana*).

Early successional forest was identified across the right-of-way on either side of Caeser Creek. Dominant trees observed in this forested area include black locust, white ash, sugar maple, black cherry (*Prunus serotina*), red maple (*Acer rubrum*), northern red oak (*Quercus rubra*), and blue beech (*Carpinus caroliniana*). Dominant plants in the shrub layer included multiflora rose, gray dogwood, amur honeysuckle (*Lonicera maackii*), and black locust. Herbs observed included Canada goldenrod, meadow fescue, blackberry, black raspberry, and white avens (*Geum canadense*).

Second-growth forest occurred within the right-of-way along the first mile. Dominant trees observed included American beech (*Fagus grandifolia*), sugar maple, red oak, yellow oak (*Quercus muehlenbergii*), sycamore (*Platanus occidentalis*), black cherry, and blue beech. Shrubs included multiflora rose, amur honeysuckle, spicebush (*Lindera benzoin*), and maple-leaved viburnum (*Viburnum acerifolium*). Herbs included white avens, wood reed (*cinna arundinacea*), common violet (*Viola sororia*), jewelweed, and horse balm (*Collinsonia canadensis*).

Impacts

Construction impacts to vegetation will consist of both temporary and permanent impacts. Temporary impacts consist of disturbance to vegetation and soil (potentially the upper 1 foot) at existing tower locations, proposed new tower locations, and within the right-of-way caused by the movement of construction equipment along it. A temporary disturbance to vegetation and soil will occur within a 40 foot by 40-foot area (0.04 acre) at each new tower location during installation. At existing tower sites, the steel lattice above ground will be disassembled and a backhoe will dig around each leg location to a depth of 3 to 4 feet so the top part of each leg may be taken apart and removed. Once completed, the excavated soil will be replaced where each leg top section was removed and the areas will be regraded and reseeded.

Old-field vegetation will naturally re-establish in these areas after construction. DP&L does not anticipate impact to existing crops because construction is planned for a time window outside of the growing season.

At tower locations there will be a permanent loss (0.003-acre) of existing vegetation due to the erection of new steel towers and the placing of concrete foundations. In agricultural lands, DP&L will compensate farmers for permanent economic losses associated with the loss of tillable land associated with these permanent structures. Temporary disturbance to old-field vegetation will also occur along the right-of-way from the movement of construction equipment during the stringing of the transmission lines and during periodic right-of-way maintenance.

There will be a permanent removal of second-growth forest within the first mile of right-of-way. It will comprise approximately 8 acres. The loss of early successional forest community along Caeser Creek will comprise approximately 4 acres.

After construction, there will be required periodic maintenance of the right-of-way that will result in brush removal across the entire width of right-of-way with the exception of agricultural areas. This has been an on-going activity in an already existing right-of-way. Old-field communities will revegetate with early successional old-field species shortly after construction.

f. Wildlife

During the field survey conducted in the right-of-way during 6-30 September 1999, BHE recorded observed wildlife species. Mammals observed included eastern cottontail (*Sylvilagus floridanus*), groundhog (*Marmota monax*), white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), eastern mole (*Scalopus aquaticus*), and white-footed mouse (*Peromyscus leucopus*).

Reptiles observed in the corridor included the blackrat snake (*Elaphe obsoleta*), northern water snake (*Nerodia sipedon sipedon*), and eastern box turtle (*Terrapene carolina carolina*). Amphibians observed in the project area included the bullfrog (*Rana catesbeiana*), green frog (*Rana clamitans melanota*), and northern spring peeper (*Hyla crucifer crucifer*). No toads were found during the survey but Fowler's toad (*Bufo woodhousii fowleri*) and American toad (*Bufo americanus*) are likely in the area. Some salamanders such as the tiger salamander (Ambystoma tigrinum tigrinum) and spotted salamander (Ambystoma maculatum) may also be found in the ponds in the spring where they breed. However, due to the time of the year and the drought conditions they were not observed during the present survey.

Bird species observed in and along the right-of-way are listed in Table D-2.3.

Impacts

The adults of birds, mammals, and some reptiles are mobile enough to avoid mortality as a direct result of construction. Younger animals and less mobile species, such as small mammals and amphibians could suffer direct losses during construction. In general, there probably will be a complete loss of reproduction within the project areas during construction. If construction activities occurred during the autumn or winter no loss of reproduction would occur.

The adults of birds, mammals and some reptiles are mobile enough to avoid mortality as a direct result of construction. Younger animals and less mobile species, such as small mammals, amphibians and birds, could suffer direct losses during construction activities. Both ground- and tree-nesting birds are particularly vulnerable if construction activities occur between April and early September.

TABLE D-2.3. Birds observed in and along the Foster to Bath right-of-way.

Common Name	Scientific Name
goldfinch	*Carduelis tristis*
northern cardinal	*Cardinalis cardinalis*
field sparrow	*Spizella pusilla*
song sparrow	*Melospiza melodia*
chimney swift	*Chaefura pelagica*
white throated sparrow	*Zonotrichia albicollis*
robin	*Turdus migratorius*
Indigo bunting	*Passerina cyanea*
mourning dove	*Zenaida macroura*
bluejay	*Cyanocitta cristata*
ruby-throated humingbird	Archilochus colubris
northern mocking bird	*Mimus polyglottos*
brown thrasher	*Toxostoma rufum*
bluebird	*Sialia sialis*
bobwhite	*Dolichonyx oryzivorus*
eastern kingbird	*Tyrannus dominicensis*
rufous-sided towhee	*Pipilo erythrophthalmus*
eastern meadowlark	*Sturnela magna*
red-winged blackbird	*Agelaius phoeniceus*
gray catbird	*Dumetella carolinensis*
downy woodpecker	*Picoides pubescens*
red-bellied woodpecker	*Melanerpes carolinus*
eastern phoebe	*Sayornis phoebe*
pileated woodpecker	*Cryocopus pileatus*
common flicker	*Colaptes auratus*
white-breasted nuthatch	*Sita canadensis*
eastern phoebe	*Sayornis phoebe*
white-eyed vireo	*Vireo griseus*
Carolina chickadee	*Parus carolinensis*
tufted titmouse	*Parus bicolor*
scarlet tanager	*Piranga olivacea*
cedar waxwing	*Bombycilla cedrorum*
Carolina chickadee	*Thryothorus ludovicianus*
yellow-rumped warbler	*Dendroica coronata*
house finch	*Carpodacus mexicanus*
common crow	*Corvus brachyrhynchos*
turkey vulture	*Cathartes aura*
red-tailed hawk	*Buteo jamaicensis*
Cooper's hawk	*Accipiter cooperii*
osprey	*Pandion haliaetus*
marsh wren	*Cistothorus palustris*
great blue heron	*Ardea herodias*
green-backed heron	*Butorides striatus*
Canada geese	*Branta* candensis
belted kingfisher	*Ceryle alcyon*
killdeer	*Charadrius vociferus*
house sparrow	*Passer domesticus*
Starling	*Sturnus vulgaris*

The permanent conversion of forested communities and temporary conversion of old-field communities in the right-of-way will displace wildlife species currently inhabiting these areas. However, no impact to these species is anticipated because they are likely to relocate into similar adjacent habitats. Old-field communities in the right-of-way will revegetate shortly after periodic right-of-way maintenance. The loss of forested community is minimal with respect to availability of similar habitat in the vicinity of the project area.

No long-term impact to project area wildlife is anticipated.

g. Flood Hazard Areas

Flood Hazard Areas Crossed

Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) were reviewed for Warren and Greene Counties, Ohio to identify flood hazard areas crossed by the proposed project (FEMA 1987, 1998). Flood hazard areas are designated as Zone A and Zone B. Zone A areas are those areas of the 100-year flood, base flood elevations and flood hazard factors not determined. Zone A1-A30 and AE are areas of 100-year flood; base elevations and flood hazard factors determined. Zone B areas are areas between 100-year flood and 500-year flood; or certain areas subject to 100-year flooding with average depths less than one foot or where the contributing drainage area is less than one square mile; or areas protected by levees from the base flood. Areas in Zone X are areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

In review of FIRM maps, BHE identified several flood hazard areas crossed by the project area. They are summarized in Tables D-2.4 and D-2.5. Proposed tower locations that are situated in flood hazard areas are also identified.

Impacts

Permanent impacts to flood hazard areas will comprise the fill of an approximate 0.003 acre area at each proposed new single tower location and approximate 0.006 acre at each proposed double tower location. DP&L will obtain required Flood Hazard Area Development Permits from the respective counties prior to construction activities.

TABLE D-2.4. Flood hazard areas crossed in Warren County by the Foster to Bath 345 kV project area.

Stream Name	Proposed Tower Number	Stream Number	Approximate Length of Flood Hazard Area Crossed by right-of-way (feet)	Flood Hazard Area designation
Salt Run	1027	14	500	Zone A
Hen Run	N/A	16	250	Zone A
Hen Run	N/A	17	375	Zone A
Salt Run	N/A	18	450	Zone A
Bigfoot Run	N/A	24	175	Zone A
Little Miami River tributary	N/A	27	325	Zone B
Little Miami River	1051	28	1375	Zone A10
Grays Run	1061 (edge)	35, 37	350	Zone A
Halls Creek	1070, 1071	41, 42	300	Zone B
Little Miami River	N/A	55	950	Zone A10
Olive Branch	N/A	61	250	Zone A
Olive Branch trib	N/A	63	125	Zone A
Caesars Creek	N/A	67	250	Zone A
Little Miami River tributary	1117	72	175	Zone B
Little Miami River tributary	N/A	79	150	Zone B
Shaffers Run	N/A	81	175	Zone B
Little Miami River	1136, 1137, 1138, 1139, 1140	83	5,450	Zone A8

TABLE D-2.5. Flood hazard areas crossed in Greene County by the Foster to Bath 345 kV project area.

Stream Name	Proposed Tower Number	Stream Number	Approximate Length of Flood Hazard Area Crossed by Right-of-way (feet)	Flood Hazard Area designation
Little Miami River	1168	92	1,575	Zone AE
Little Miami River	N/A	92	75	Zone X500
Little Miami River oxbow	N/A	95	125	Zone A
Little Miami River	Use 3 existing towers	107	3,275	Zone AE
Little Miami River	Use 3 existing towers	107	850	Zone X500

3. ENVIRONMENTAL, SOCIAL, HEALTH, OR SAFETY IMPACTS

a. Ground Water and Aquifers

Existing Resources

Several segments of the project area overlie the Little Miami River System Buried Valley Aquifer along the Little Miami River. This aquifer system is an USEPA-designated sole source aquifer (1999). Approximately 15.5 miles of the proposed right-of-way overlies the Little Miami River Valley Aquifer System. The depth to bedrock over this major aquifer is generally greater than 60 feet below ground surface and in some areas exceeds 200 feet below the surface. Subsurface material within this aquifer consists of consolidated and semi-consolidated sand and gravel of alluvial and glacial origin. Groundwater yields within this system range from as little as 5 gallons per minute (gpm) in the glacial material to as much as 1,000 gpm in the saturated subsurface material found within the floodplains of the Little Miami River.

Areas outside of the Little Miami River Valley Aquifer that are traversed by the proposed corridor are underlain by shallow bedrock consisting of thin beds of limestone and shale. Bedrock in these areas can be encountered at depths of less than 3 feet below surface in some locales. Minor amounts of groundwater are available from bedrock but yields seldom exceed 3 gpm in most areas.

Public Water Systems

Much of Warren and Greene counties is serviced by public water supply systems. There are several public water systems located within both counties (Appendix A). BHE searched OEPA's public water supply database (OEPA 1999a) to identify public water supplies within 0.25 mile of the proposed transmission tower centerline. Four water supplies were identified. In Warren County is Paramount Kings Island's non-transient water supply system that contains five water wells and serves a population of 175. It is plotted as being located about 650 feet east of centerline along Bennett Road in Salem Township. A second public water supply in Warren County is a community water supply of three wells, Plant 2, owned by the City of Lebanon in Salem Township. It is plotted as situated along project centerline at a location in Salem Township.

In Greene County, the project crosses the Valley Springs Well-field located between the Little Miami River (Stream 107) and US-35. The wellfield is owned and operated by the Greene County Water District. There are three water wells in this wellfield. PW-08 is located approximately 10 feet east of DP&L's eastern powerline centerline. PW-10 is under construction approximately 160 feet west of the western electric powerline centerline (just outside of the 300-ft construction right-of-way). PW-09 is located approximately 320 west of DP&L's western powerline centerline (outside of the 300-foot construction right-of-way) (Greene County Water District 1999).

At Ankeney Road, the right-of-way also lies within 1,000 feet east of the Beavercreek North Wellfield in the vicinity of Beaver Valley Road. This public water system is also operated by Greene County Water District, and supports three water wells (NWN7, NWN1, and NWN6) (Greene County Water District 1999) (Appendix A).

Wellhead Protection Areas

Several well head protection areas (WHPA) have been designated for public drinking water supplies utilizing the Little Miami Buried Aquifer System. The OEPA Division of Drinking and Ground Water, Wellhead Protection Area group was contacted regarding locations of approved WHPAs in the vicinity of the project area. The project area crosses the Village of Morrow's WHPA and the eastern edge of the Village of Waynesville's WHPA in Warren County.

In Greene County, the right-of-way lies within the 1-year time of travel (TOT) of the Valley Springs Wellfield WHPA (plan in progress), and lies adjacent (east) to the 15-year TOT for the Beavercreek North Wellfield (OEPA 1999b, Greene County Water District 1999) (Appendix A).

Private Water Wells

Some local residences in Warren and Greene counties still receive their water supply through private water wells. However, a survey for locations of private water wells was not completed with the study discussed herein.

Impacts

Project impacts to groundwater resources and local water supplies are expected to be negligible due to the nature of proposed construction activities. Significant subsurface incursions during this project are expected to be limited to augering of foundation holes to be used for the foundations required to support the steel pole structures that carry the electrical power lines. These foundations will consist of 6 to 10 foot diameter holes drilled to depths ranging from 15 feet to 50 feet below ground surface. The holes will be filled with reinforced concrete. This material will prevent future inflow of potential contaminants into the aquifer. Holes for wood poles along the 1.5-mile segment of right-of-way immediately south of DP&L's Greene substation will be 30 inches in diameter and typically nine feet deep. These holes will be backfilled with "crushed limestone, chips and dust" except for the top one-foot that will be backfilled with the original excavated earthen material. Due to the well graded backfill material and the high compaction used when it is installed, no porous conduit to the underlying aquifer is expected and no direct impact on aquifer water quality is anticipated from these construction or operation activities.

The aquifers underlying the project area are recharged in part through infiltration of surface water and precipitation. Hazardous fluids may similarly enter the aquifer, as a result of an accidental spill during construction, and potentially contaminate ground water resources. To minimize the potential for impact, all fueling and equipment maintenance activities will be performed off the right-of-way.

In the Valley Spring Wellfield, DP&L will avoid impact to wellheads by limiting all activity within a 150-ft radius of the wellheads. In addition, DP&L will perform all refueling and equipment maintenance activities outside of the 15-year TOT of both the Valley Spring and Beavercreek North Wellfields.

Blasting is not anticipated for this project, thus, fracturing or alterations to grain sorting within the aquifer will not occur due to activities associated with this project.

b. Herbicides

No impact from pesticide application is anticipated during routine right-of-way maintenance. DP&L will maintain their right-of-way by mowing and occasional herbicide application. Herbicides may be applied on plants that if left untreated, could interfere with the operation and safety of the transmission line. Herbicide application will be consistent with DP&L's current herbicide policy and the herbicide and application protocol will be in accord with USEPA's and state of Ohio standards. Any herbicide application to vegetation within 120 feet of the Little Miami River will be applied manually to stumps with a paint brush so as to avoid any adverse impact to the Little Miami River, watershed, or adjacent properties.

c. Safety

The design of the Foster-Bath Transmission Line and all related electric facilities is being done to comply with all provisions of the National Electrical Safety Code (NESC), Standard C2-1997, as adapted by the state of Ohio. This code has been established to assure that all clearances and strength requirements are met and adhered to for the safe construction, maintenance and operation of the facilities for both the utility workers who work on the facilities and the public in general. All work to be performed will be done in a manner to conform to the rules and regulations of OHSA and established DP&L policies and procedures.

d. Public Water and Sewer Lines

The right-of-way crosses Warren and Greene County water and sewer lines at near several pole replacement locations. DP&L will note these areas on their construction plans and ensure that their construction contractor implement necessary measures to avoid impact to these systems.

e. Additional Environmental Information

There is no known additional information or unusual conditions, situations or concerns resulting in significant environmental, social, health or safety impacts created by building this transmission line project.

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Project 173.05

9 September 1999

Kent Kroonemeyer
U.S. Fish and Wildlife Service
Ecological Services
6950 Americana parkway, Suite H
Reynoldsburg, Ohio 43068-4132

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Kroonemeyer:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

I am requesting comment from your agency regarding the presence or absence of federal and state designated species including endangered species, threatened species, rare species, species proposed for listing, species under review for listing, and species of special interest that may be located within the area likely to be disturbed by the project. In addition, please comment on the presence or absence of areas of ecological concern including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries that may be located within the areas likely to be disturbed by the project.

We have also contacted the ODNR's Division of Natural Areas and Preserves and Division of Wildlife for comment.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

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Appendix A

Environmental Agency Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, Ohio 43068-4132

(614) 469-6923/FAX (614) 469-6919
September 16, 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246

RE: Foster to Bath Transmission Line Project, Warren and Green Counties, Ohio

Dear Ms. Hoeting :

This responds to your September 9, 1999 letter requesting our comments on the proposal referenced above.

Dayton Power and Light (DP&L) is proposing to replace existing transmission towers with new steel towers and to construct a new 345kV transmission line from the exiting Bath substation in Green County to their Foster substation in Warren County, a distance of approximately 45 miles. All work will be completed within DP&L's existing 150-foot right-of-way (ROW), with the exception of the first mile of ROW to Sibcy Road and the portion of the ROW beginning approximately one mile south of the Green substation and ending at the substation. These areas comprise a 300-foot ROW. Construction, however will only require the eastern-most 150 feet.

This technical assistance letter is submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act, of 1973, as amended, and is consistent with the intent of the National Environmental Policy Act of 1969, and the U. S. Fish and Wildlife Service's Mitigation Policy. It does not, however, constitute the report of the Secretary of the Interior under Section 2(b) of the Fish and Wildlife Coordination Act, nor does it represent the review comments of the Department of the Interior on any forthcoming environmental document.

We do not have sites specific information on fish and wildlife habitats but it appears wetlands and streams will be crossed. The ROW crosses the Little Miami River three times. The Little Miami River is a Federal and state designate scenic and recreational river, which is administered by the Ohio Division of Natural Areas and Preserves, Scenic River Section. Special conditions may be placed on the construction of the transmission line crossings of the Little Miami River. Also, if any wetlands will be impacted, a permit from the Louisville Corps of Engineers may be required. We do not know of any Federal wildlife, forest, or park area that would be impacted by the proposed project..

ENDANGERED SPECIES COMMENTS: To facilitate compliance with Section 7(c) of the Endangered Species Act of 1973, as amended, we are providing you the following list of endangered (E), threatened (T), or candidate (C) species which may be present in the project area:

Indiana bat (E)
clubshell mussel (E)
running buffalo clover (E)
eastern massasauga (C)

Sincerely,

Ken Multon
for Kent Kroonemeyer
Supervisor

Project 173.05

9 September 1999

Ohio Department of Natural Resources
Division of Natural Areas and Preserves
Heritage Data Services 5533 Fair Lane
1889 Fountain Square Court, Building F-1
Columbus, Ohio 43224

Re: Foster to Bath Electric Transmission Line Project

To Whom It May Concern:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

I am requesting that a database search for threatened, endangered and rare plant and animal species, and other natural features be conducted for the entire pipeline right-of-way. Attached are topographic maps depicting the pipeline centerline along the entire route, and a Database Search Request form. I would like you to search within a ½-mile radius either side of the proposed centerline. We have also contacted the U.S. Fish and Wildlife Service and ODNR's Division of Wildlife.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

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September 13, 1999

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11711 Chesterdale Rd.
Cincinnati, OH 45246

Dear Ms. Hoeting:

I have reviewed our Natural Heritage maps and files for the Foster to Bath Electric Transmission Line project area on the Mason, South Lebanon, Lebanon, Oregonia, Waynesville, Bellbrook, Xenia and Yellow Springs Quads. The numbers on the accompanying list correspond to the areas marked in red on the accompanying maps. A dot represents an exact location, a triangle a general location within a square mile, and a square a general location withingreater than a square mile. Exactness is determined by the accuracy and detail of information provided by the surveyor. Common name, scientific name and status are given for each species.

We are unaware of any breeding or non-breeding animal concentrations or state parks or forests in the project vicinity.

Since this project is located within 1000 feet of a state designated scenic river, theapproval of the Director of ODNR may be required in accordancewith Ohio Revised Code section 1517.16. Please contact the Scenic River Coordinator in your area for further information. Don Rostofer may be contacted at 4675 N. Diamond Mill, Trotwood, OH, 45426; phone 937-854-0350; fax 937-854-9407.

Our inventory program has not completely surveyed Ohio and relies on information supplied by many individuals and organizations. Therefore, a lack of records for any particular area is not a statement that rare species or unique features are absent from that area. Please note that although we inventory all types of plant communities, we only maintain records on the highest quality areas. Also, we do not have data for all Ohio wetlands. For additional information on wetlands and National Wetlands Inventory maps, please contact Jim Given in the Division of Real Estate and Land Management at 614-265-6770.

- Little Miami River
- Halk Creek Woods Scenic River Preserve
- Floodplain Forest Plant Community
- Mathers Mill Scenic River Access
- Caesar Creek Gorge State Nature Preserve
- Fossil deposit and stream gorge within Caesar Creek
- Roxanna Road Scenic River Access
- Glenn Thompson Scenic River Access
- Beaver Valley State Wildlife Area

plant communities.
- floodplain C. Miami R.

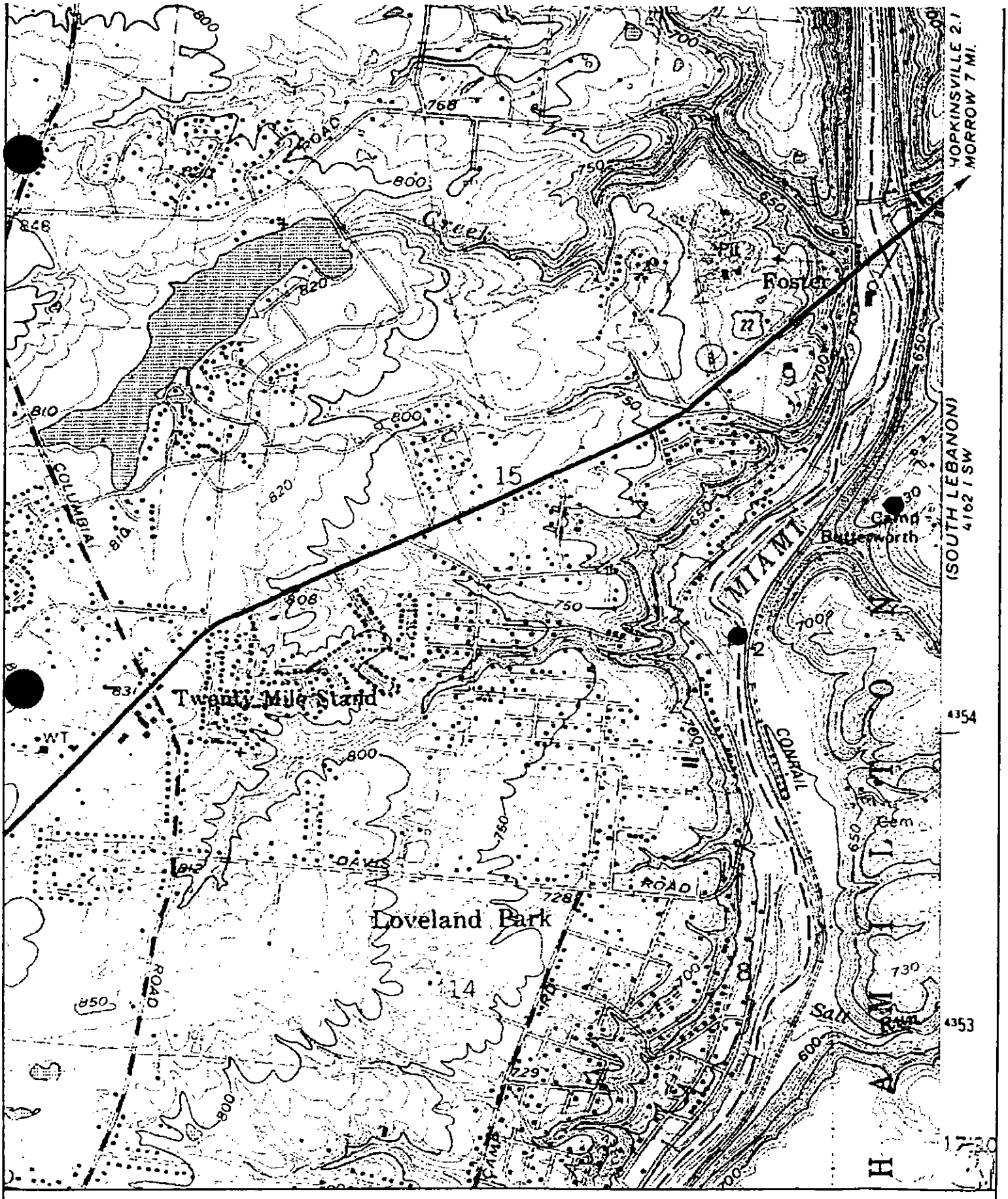
owned by ODNR
120' ft buffer & trees + natural vegetation
WQ runoff.
canoe access.
not protected for use

Please contact me at 614-265-6818 if I can be of further assistance.

Sincerely,

Debbie Woischke, Data Specialist
Division of Natural Areas & Preserves

cc: Don Rostofer, ODNR, Division of Natural Areas and Preserves, Southwest Ohio Scenic River Coordinator



Name: MASON
Date: 9/10/99
Scale: 1 inch equals 1333 feet

Location: 039° 18' 32.5" N 084° 15' 59.2" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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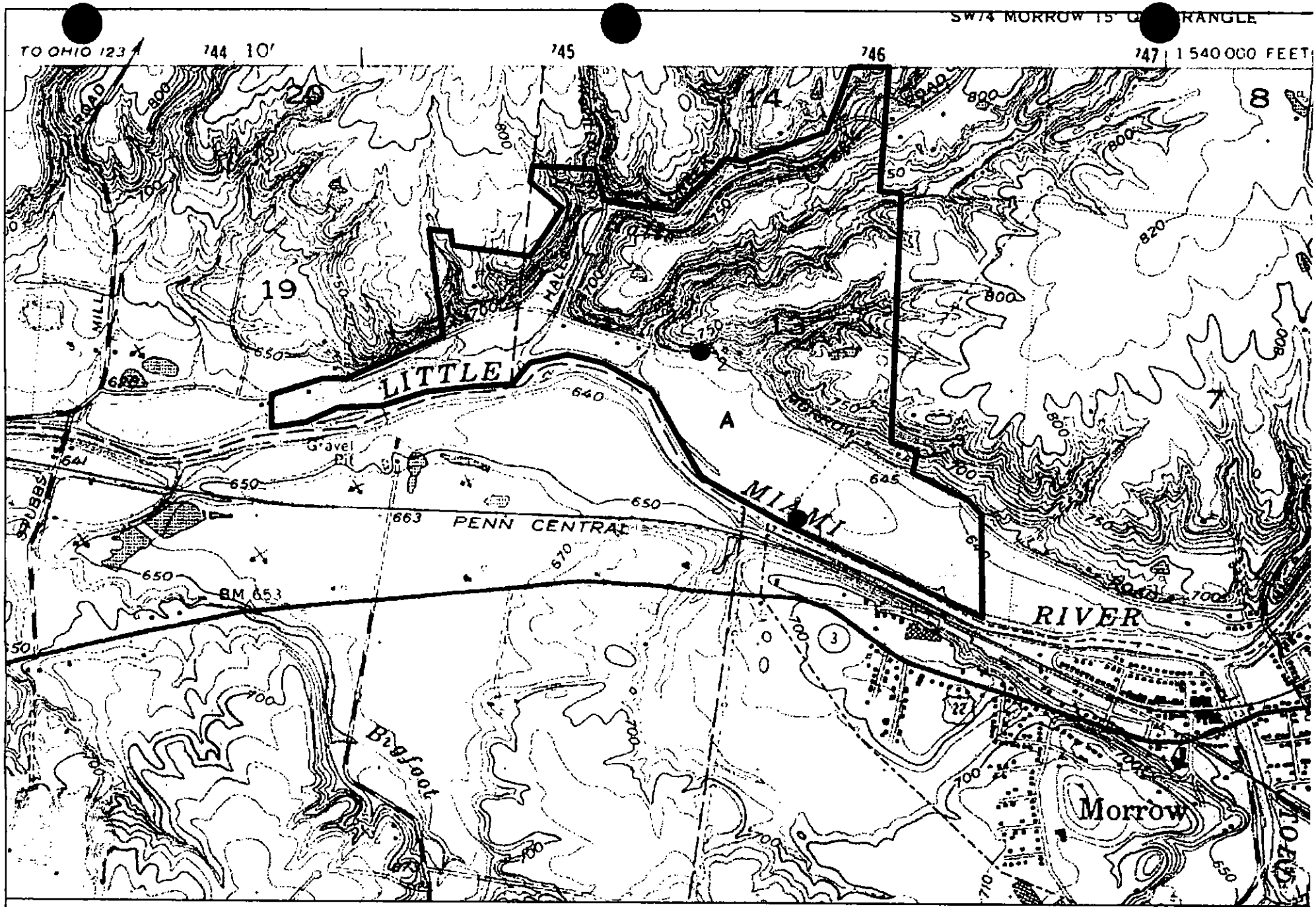

Name: SOUTH LEBANON
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 21' 44.7" N 084° 09' 06.2" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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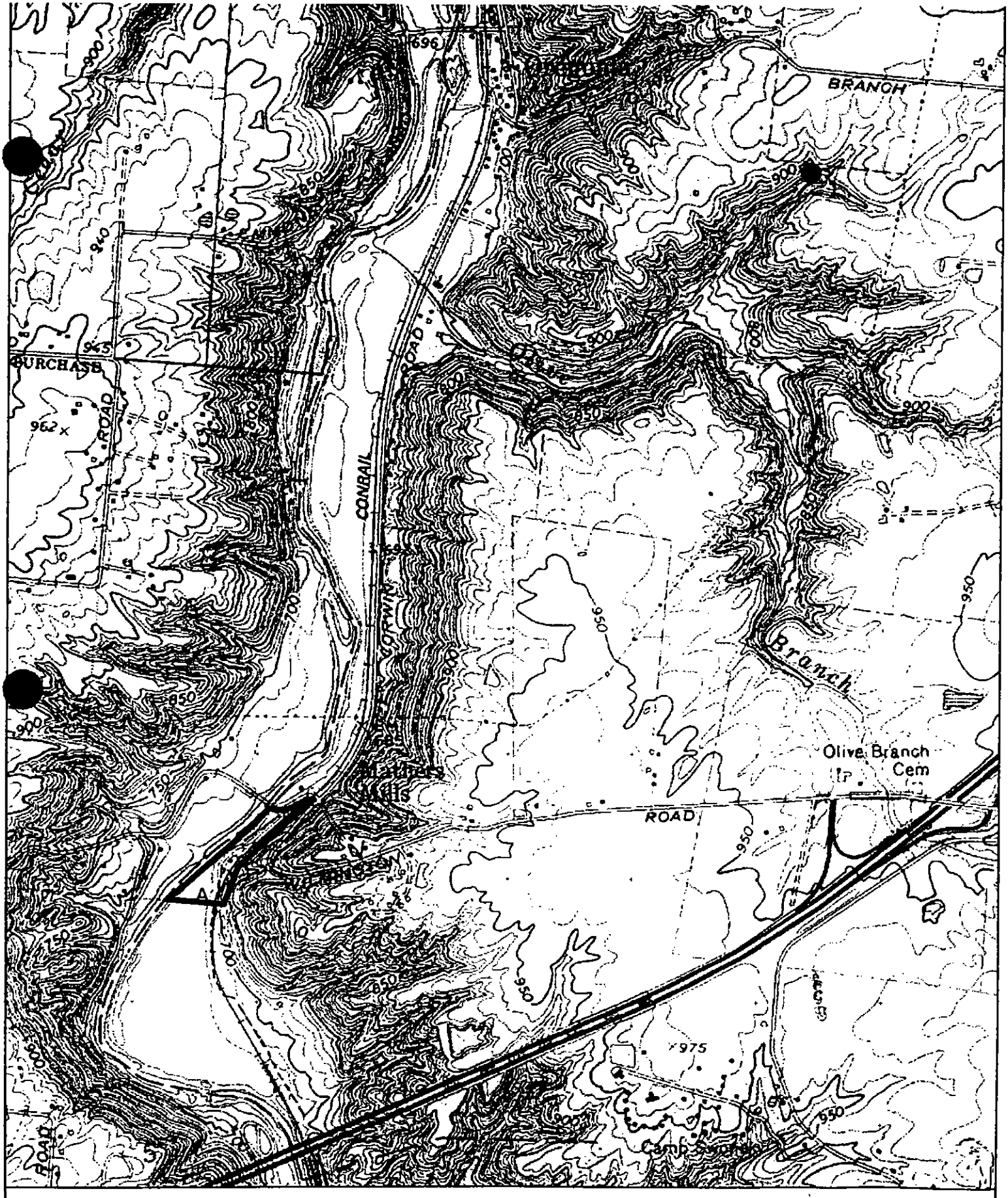

Name: OREGONIA
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 26' 08.7" N 084° 05' 46.5" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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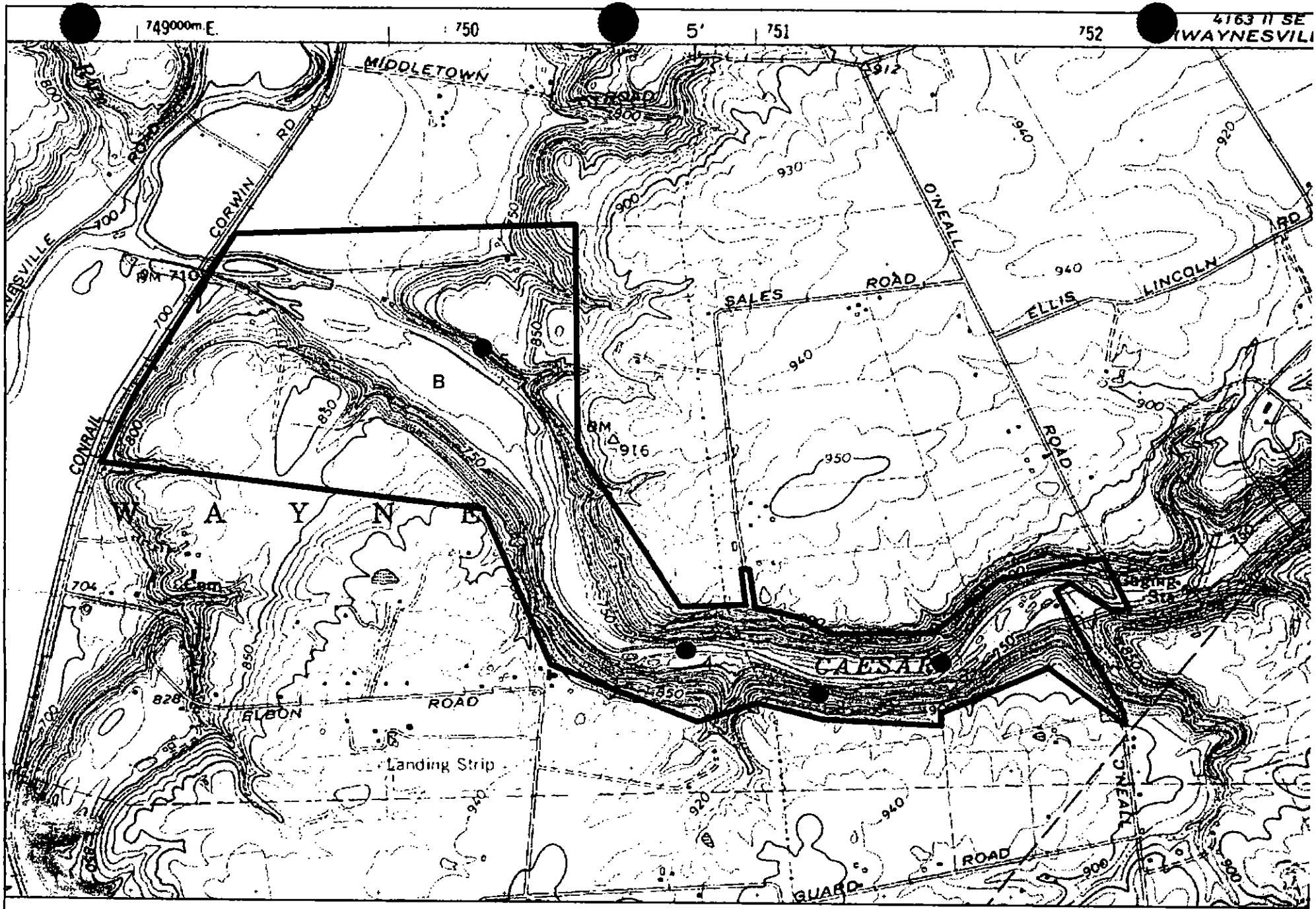

Name: OREGONIA
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 29' 12.3" N 084° 05' 05.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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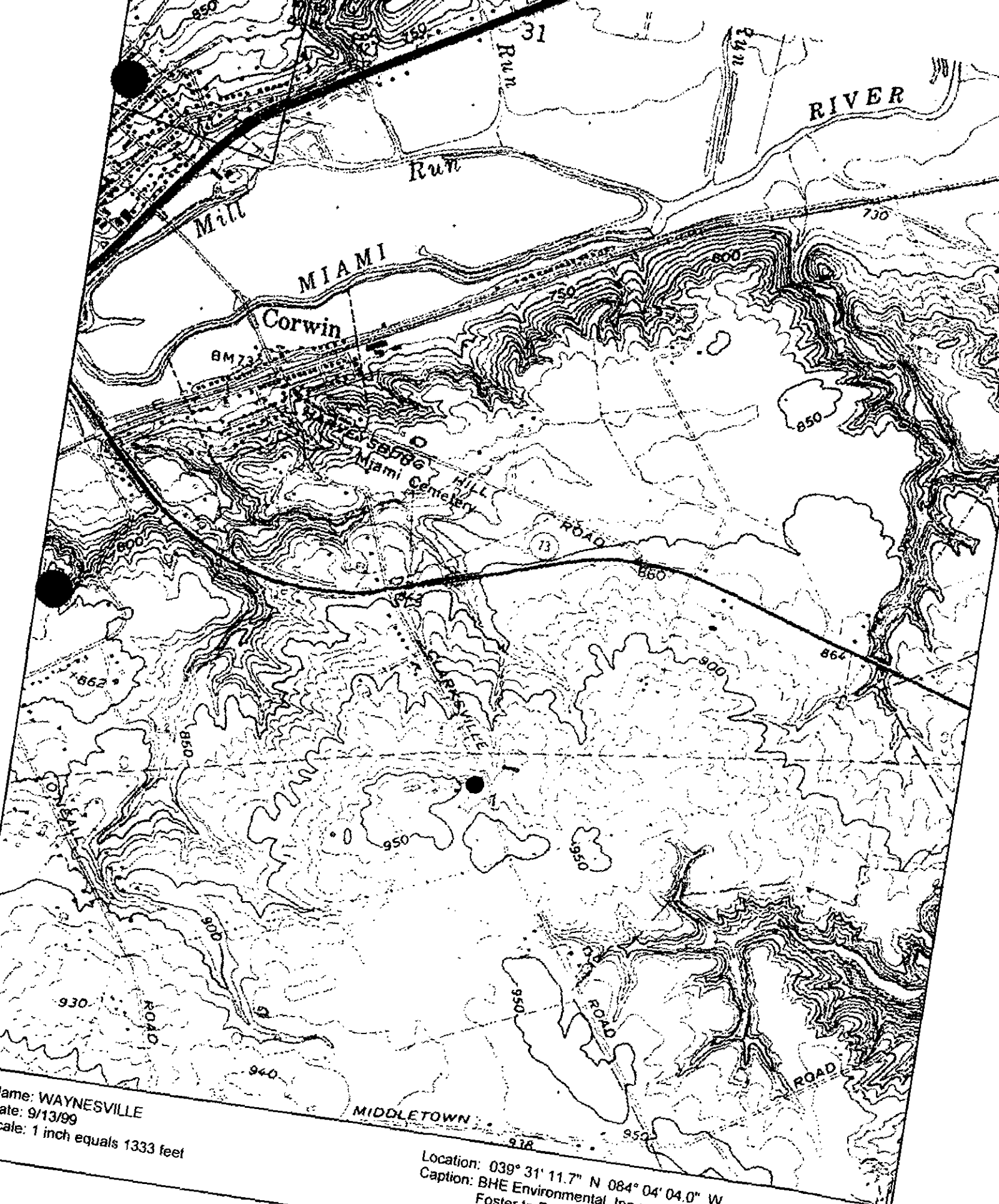

Name: WAYNESVILLE
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 31' 11.7" N 084° 04' 04.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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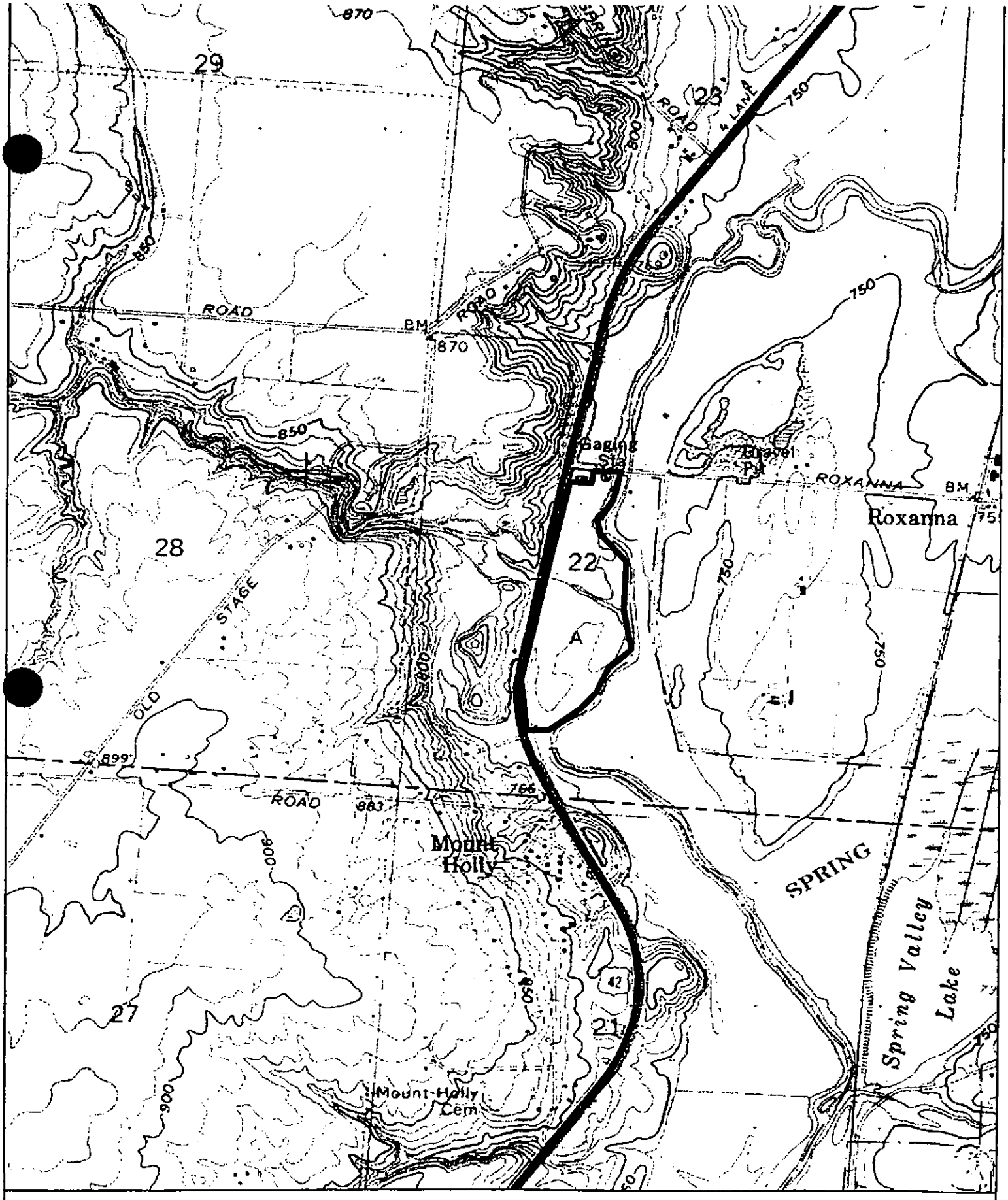

Name: WAYNESVILLE
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 34' 45.1" N 084° 02' 03.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmisson Line project

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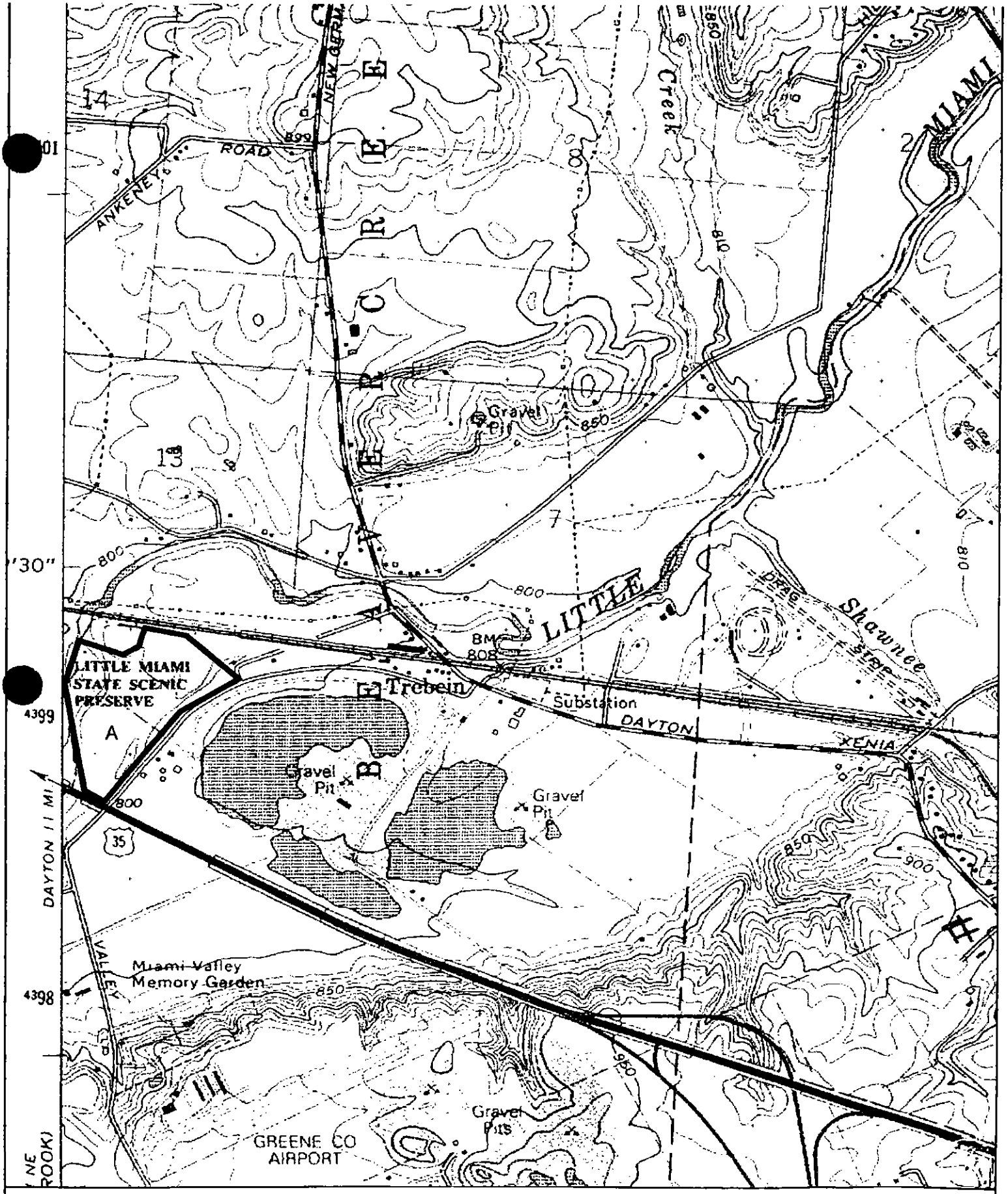

Name: XENIA
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 42' 26.6" N 083° 59' 00.0" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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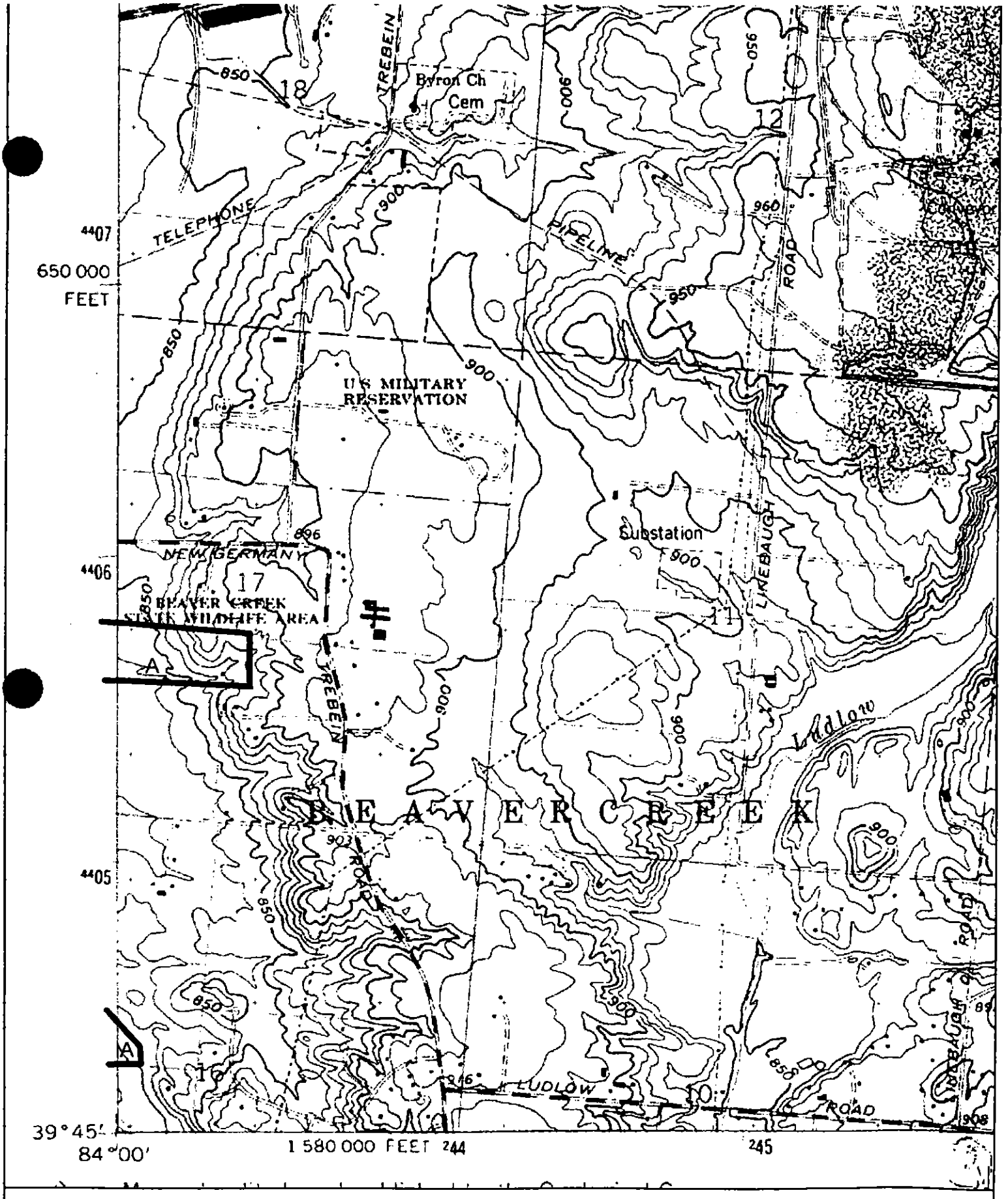

Name: YELLOW SPRINGS
Date: 9/13/99
Scale: 1 inch equals 1333 feet

Location: 039° 45' 56.9" N 083° 59' 07.4" W
Caption: BHE Environmental, Inc.;
Foster to Bath Electric Transmission Line project

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OHIO DEPARTMENT OF NATURAL RESOURCES
DIVISION OF NATURAL AREAS AND PRESERVES

September 13, 1999

Foster to Bath Electric Transmission Line Project

MASON QUAD
Little Miami State and National Scenic River
1. *Desmodium pauciflorum* - Few-flowered Tick-trefoil, P
2. *Hiodon tergisus* - Mooneye, S

SOUTH LEBANON QUAD
Little Miami State and National Scenic River
A. Halls Creek Woods Scenic River Preserve - ODNR, Division of Natural Areas and Preserves (boundaries in blue)
1. Floodplain Forest Plant Community
2. *Opuntia humifusa* - Prickly Pear, P

LEBANON QUAD
No data

OREGONIA QUAD
Little Miami State and National Scenic River
A. Mathers Mill Scenic River Access - ODNR, Division of Natural Areas and Preserves
B. Caesar Creek Gorge State Nature Preserve - ODNR, Division of Natural Areas and Preserves
1. Erratic (geologic feature)
2. Oak-Maple Forest Plant Community
3. *Salix caroliniana* - Carolina Willow, T
4. Fossil Deposit (geologic feature)
   Stream Gorge (geologic feature)
5. *Salix caroliniana* - Carolina Willow, T

WAYNESVILLE QUAD
Little Miami State and National Scenic River
1. Green Ash Ohio Champion Big Tree
A. Roxanna Road Scenic River Access - ODNR, Division of Natural Areas and Preserves

BELLBROOK QUAD
Little Miami State and National Scenic River

XENIA QUAD
Little Miami State and National Scenic River
A. Glenn Thompson Scenic River Access - ODNR, Division of Natural Areas and Preserves

YELLOW SPRINGS QUAD
A. Beaver Valley Wildlife Area - ODNR, Division of Wildlife (2 parcels)

STATUS CODES:

T = threatened
P = potentially threatened
S = special interest

Project 173.05

9 September 1999

John Marshall
Ohio Department of Natural Resources
Division of Wildlife
1840 Belcher Dr.
Columbus, OH 43224

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Marshall:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

I am requesting comment from your agency regarding potential impacts to wildlife resources known to occur in the vicinity of the project area. Please include as well, information regarding the presence or absence of areas of ecological concern including national and state forests and parks, floodplains, wetlands, designated or proposed wilderness areas, national and state wild and scenic rivers, wildlife areas, wildlife refuges, wildlife management areas, and wildlife sanctuaries that may be located within the areas likely to be disturbed by the project.

We have also contacted the U.S. Fish and Wildlife Service and ODNR's Division of Natural Areas and Preserves.

Attached are project area topographic maps. If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

Project 173.05

30 September 1999

Mr. Mike Madell
National Park Service
700 Rayovac Dr.
Suite 100
Madison WI 53711

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Madell:

The Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet. DP&L will submit a Letter of Notification to the Ohio Power Siting Board for the proposed project.

I am requesting comment from your agency on proposed project-related construction activities. The project area is situated within the drainage basin of the Little Miami River, a State and National Scenic River, which is crossed six times by the project corridor. I am including topographic maps of the transmission right-of-way, as well as alignment drawings for your review.

I have also included a general description of construction procedures used by DP&L on similar projects. Such construction methods will also be implemented on this project. Steel towers will be constructed to a minimum depth of 15 feet in rock, or to as deep as 50 feet in some areas. The auger hole diameter will measure between 6 and 10 feet, with an average diameter of roughly 7 feet.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

11733 CHESTERDALE ROAD • CINCINNATI, OH 45246 • PHONE (513) 326-1500 • FAX (513) 326-1550 • www.bheenv.com
Branch Offices: Columbus, OH • Cleveland, OH • Knoxville, TN • Houston, TX • Rolla, MO • Carlisle, PA

IN REPLY REFER TO:

United States Department of the Interior

NATIONAL PARK SERVICE

MIDWEST REGION
1709 JACKSON STREET
OMAHA, NEBRASKA 68102-2571

Stationed At:
700 Rayovac Drive, Suite 100
Madison, Wisconsin 53711
(608) 264-5257

RECEIVED
NOV 8 1999
BHE, INC.

L7619(MWR-PC/C)

November 4, 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, Ohio 45246

Dear Ms. Hoeting:

This is in response to your letter of September 30, 1999 requesting National Park Service (NPS) comment on the proposed Foster to Bath Electric Transmission Line Project. We understand Dayton Power and Light Company (DP&L) is proposing to replace existing towers with new steel towers, and to construct a new 345 kV transmission line between their Bath substation in Greene County, Ohio and their Foster substation in Warren County, Ohio. About 43 miles of the 45-mile long project would be within existing right-of-way.

Your letter correctly notes that the route of the proposed project crosses the Little Miami River at six locations. The Little Miami is a state-administered component of the National Wild and Scenic River system.

You also should be aware the route crosses the North County National Scenic Trail (NCNST) at three locations. This trail winds its way through seven northern tier states, beginning in upstate New York and ending in North Dakota. When complete, the length of the trail is likely to exceed 4,000 miles. Using the topographic drawings provided by your office, the project would cross the NCNST near reference points STM020, STM036, and STM050.

One concern related to the project is preservation of the visual quality of the river corridor. We are encouraged that DP&L is proposing to replace existing towers, as opposed to erecting additional towers in the valley. It is not clear from the information you submitted how much, if any, additional clearing will be required within the existing right-of-way. If additional clearing is required, we encourage DP&L to retain the maximum vegetative screening possible in riparian areas immediately adjacent to the Little Miami. If plantings are required to replace vegetation disturbed during construction, only species native to the area should be used. Appropriate erosion control measures also should be implemented to prevent runoff to the river. Construction equipment should be kept well away from the river when not in use.

Information you provided suggests that no work would be required within the river itself. Please keep in mind, however, that if the project requires movement of earth or construction below the ordinary high-water mark of the

river, it would be considered a water-resources project subject to requirements of Section 7(a) of the Wild and Scenic Rivers Act (Public Law 90-542). Section 7(a) states, "No department or agency of the United States shall assist by loan, grant, license or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration." If work in the river is necessary, a Section 7 evaluation should be prepared and submitted to the Ohio Department of Natural Resources for review and to the NPS for a Section 7 determination.

Protection of the scenic qualities of the river valley also is important for preserving the experiences of persons using the NCNST. Because the trail intersects the project corridor at locations near the Little Miami, the recommendations for maintenance and restoration of vegetation cited above should help avoid degradation of trail environs. Provisions also should be made to allow hikers safe access through the area during times when construction temporarily blocks the trail. Please contact Mr. Bill Menke, Trail Manager, at 608-264-5610 if you have additional specific questions related to the NCNST.

These comments have been provided as early technical assistance, and do not necessarily indicate the NPS' or the Department of the Interior's response to future environmental documents prepared in association with the project. Please contact me at 608-264-5257 if I can be of further assistance.

Sincerely,

R. Michael Madell
Regional Environmental Coordinator

cc: Mr. Don Rostofer
Ohio Department of Natural Resources
4675 North Diamond Mill Road
Troutwood, Ohio 45426

Superintendent, Midwest Trails Office
Manager, North Country NST

Midwest Region
Madison Field Office
700 Rayovac Drive, Suite 100
Madison, Wisconsin 53711
Phone 608-264-5257
Fax 608-264-5615

Fax

To: Diane Hoeting, BHE Environmental **From:** Mike Madell

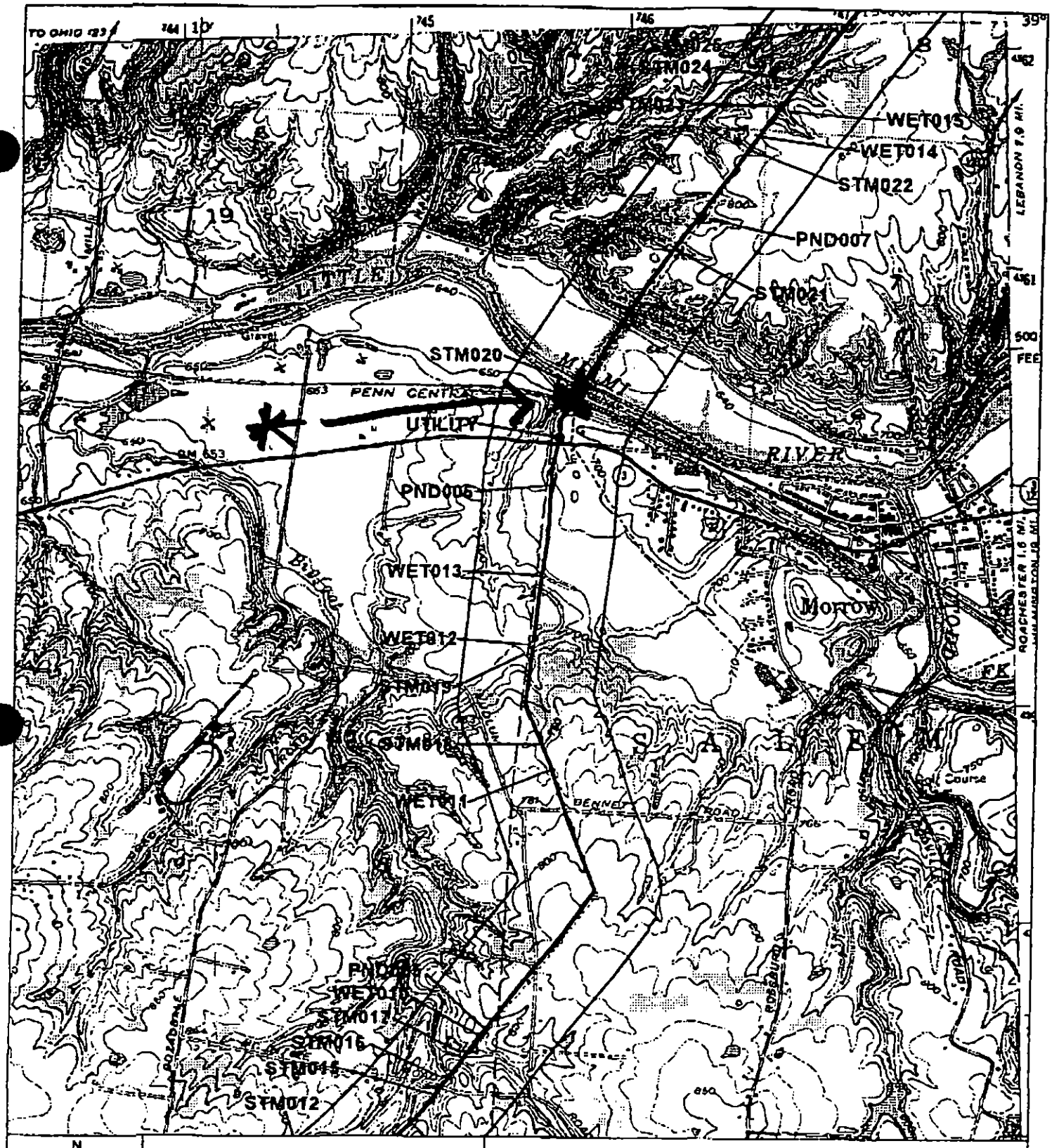
Fax: **Pages:** 4, including cover

Phone: **Date:** 11/08/99

Re: Foster to Bath Project, Xings of NCNST **CC:** [Click here and type name]

☐ **Urgent** ☐ **For Review** ☐ **Please Comment** ☐ **Please Reply** ☐ **Please Recycle**

• **Comments:** The following sheets are photocopies of maps you provided to us. The approximate locations where the proposed line crosses the North Country National Scenic Trail are noted by an asterisk and an arrow. If the fax is not legible, please let me know & I will mail a hard copy.



Proposed 345 kV transmission route and environmental features identified during the field survey.

Base Map: USGS 7.5 Minute Topographic Map - South Lebanon, OH

3D/INTERNATIONAL
ENVIRONMENTAL GROUP

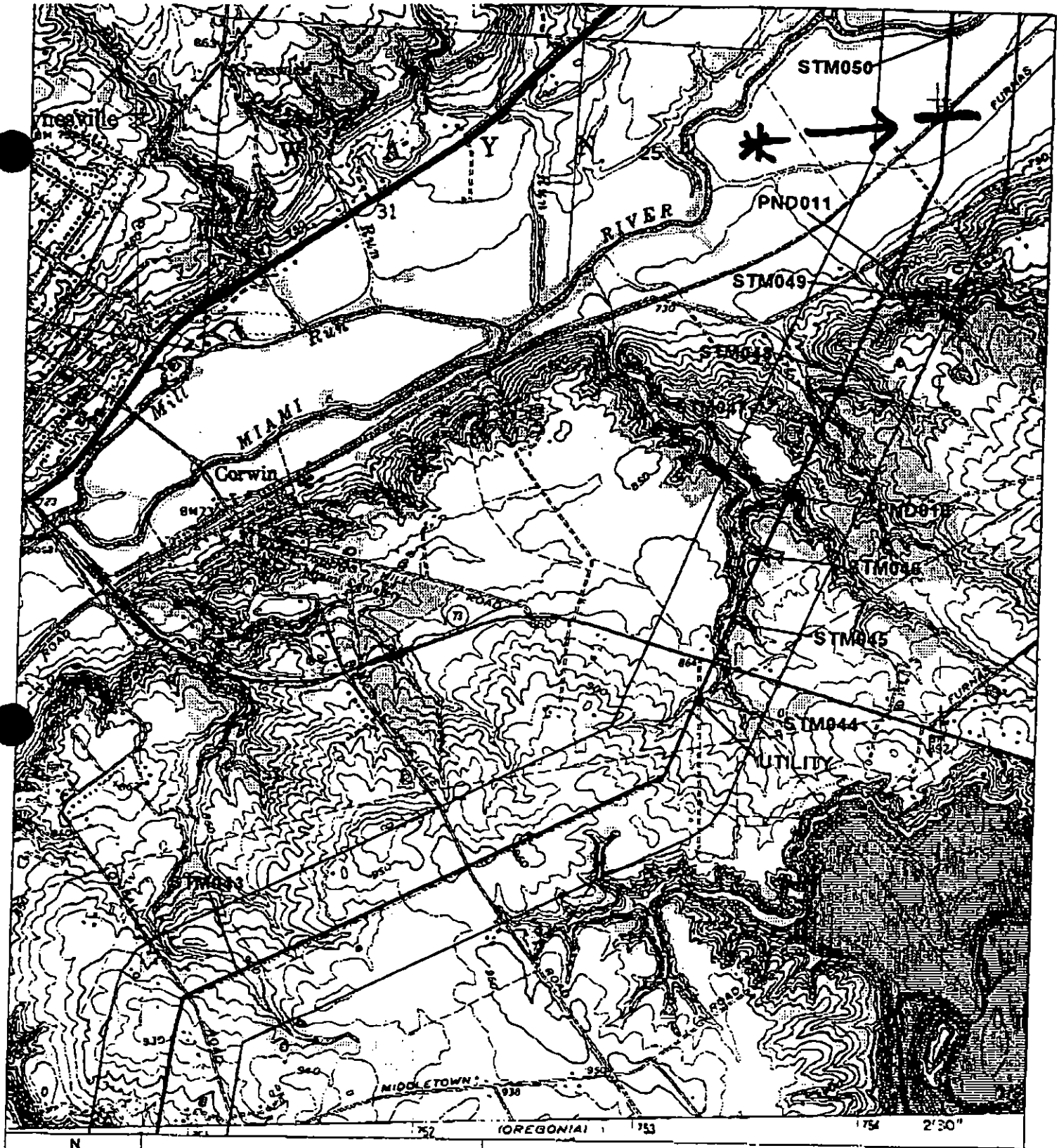
N
W E
S

Feet
1000 0 1000 2000

Proposed 345 kV transmission route and environmental features identified during the field survey.

Base Map: USGS 7.5 Minute Topographic Map - Oregonia, OH

3D/INTERNATIONAL
ENVIRONMENTAL GROUP



N
W E
S

Feet
1000 0 1000 2000

Proposed 345 kV transmission route and environmental features identified during the field survey.

Base Map: USGS 7.5 Minute Topographic Map - Wayneville, OH

3D/INTERNATIONAL
ENVIRONMENTAL GROUP

Project 173.05

27 September 1999

Mr. Don Rostofer
Scenic Rivers Coordinator
Ohio Department of Natural Resources
Division of Natural Areas and Preserves
4675 North Diamond Mill Road
Trotwood, OH 45426

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Rostofer:

The Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet. DP&L will submit a Letter of Notification to the Ohio Power Siting Board for the proposed project.

I am requesting comment from your agency on proposed project-related construction activities. The project area is situated within the drainage basin of the Little Miami River, a State and National Scenic River, which is crossed six times by the project corridor. I am including topographic maps of the transmission right-of-way, as well as alignment drawings for your review.

I have also included a general description of construction procedures used by DP&L on similar projects. Such construction methods will also be implemented on this project. Steel towers will be constructed to a minimum depth of 15 feet in rock, or to as deep as 50 feet in some areas. The auger hole diameter will measure between 6 and 10 feet, with an average diameter of roughly 7 feet.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting

11733 CHESTERDALE ROAD ♦ CINCINNATI, OH 45246 ♦ PHONE (513) 326-1500 ♦ FAX (513) 326-1550 ♦ www.bheenv.com
Branch Offices: Columbus, OH ♦ Cleveland, OH ♦ Knoxville, TN ♦ Houston, TX ♦ Rolla, MO ♦ Carlisle, PA

Bob Taft • *Governor*

Samuel W. Speck • *Director*

Division of Natural Areas and Preserves

Stuart Lewis • Acting Chief

October 26, 1999

Ms. Diane Hoeting
Environmental Scientist
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246

Dear Ms. Hoeting:

I have completed a review of documentation dated 27 September 1999 and 19 October 1999 concerning the proposed replacement of existing DP&L transmission towers with new steel towers from Foster Station to the Bath Station located adjacent to the Little Miami State and National Scenic River in Greene and Warren counties.

Because this project has the potential to negatively impact the Little Miami River and tributary streams, State of Ohio scenic conservation easement properties and nature preserves, I would like to provide the following comments on behalf of the Ohio Department of Natural Resources, Division of Natural Areas & Preserves, Scenic Rivers Program.

1. In-stream work should not be conducted on this project. Drainage ways (storm sewer inlets, swales, ditches or tributary streams) should not be crossed. All areas within 1000-feet of the Little Miami River should be returned to pre-construction elevations and contours using the natural substrates. All riverbanks within the project area shall be left undisturbed to the maximum extent possible. Areas where riverbanks are disturbed shall be returned to natural contours and elevations and revegetated with native tree species.

2. No riparian vegetation should be removed within one-hundred twenty (120) feet of the Little Miami River except within pre-determined easement areas of the project. No trees over four inches in diameter at breast height should be removed until the site has been reviewed and a determination has been made for the removal of trees. Scenic Rivers staff recommend that a Riparian Corridor Reforestation Management Plan (FCRMP) be developed and implemented to increase the riparian buffer along the Little Miami River. Planting of low growing, native trees or shrub species and cutting and hand treating invasive taller tree species with Accord herbicide would be recommended. In addition, we would recommend that any herbicide be applied manually to stumps with a paint brush. Don Rostofer, SW Scenic Rivers Coordinator, is available to assist with the review and development of the FCRMP.

3. A sediment and erosion control management plan should be developed for the site and implemented before earthwork commences. Particular attention should be given to all drainage ways (storm sewer inlets, swales, ditches or tributary streams) that could convey sediment laden water directly to the Little Miami River. Properly installed (framed and entrenched) sediment fencing should be utilized and maintained until final site stabilization is achieved. All denuded areas should be seeded and mulched immediately upon completion of earthwork or within seven days if the area is to remain idle for more than forty-five days.

4. If dewatering is necessary to facilitate work, all wastewater should be pumped onto vegetated areas away from the Little Miami River. No wastewater of any kind should be discharged directly to the Little Miami River or any tributary water sources. No storage of any idle equipment , fuels, lubricants, or other potentially toxic or hazardous materials should be permitted within the one-hundred year flood plain of the Little Miami River.

5. **Work limits shall be physically defined with orange snow fencing to establish the outer boundaries for which earthwork and denuding may commence on the project on or near State of Ohio property.**

6. Don Rostofer, the SW Ohio Scenic Rivers Coordinator, should be invited to all pre-planning meetings to facilitate the development of final plans. Mr. Rostofer shall be invited to all pre-construction meetings and notified prior to the commencement of the project. Please give Mr. Rostofer sufficient advance notice to allow for conflicts in his schedule. All permits and conditions stated herein shall be incorporated into final plan set and available to all construction personnel on site throughout the duration of the project. Please forward a final set of plans to the SW Ohio Scenic Rivers Coordinator at the following address, 4675 North Diamond Mill Road, Trotwood, OH 45426-4254.

3. A sediment and erosion control management plan should be developed for the site and implemented before earthwork commences. Particular attention should be given to all drainage ways (storm sewer inlets, swales, ditches or tributary streams) that could convey sediment laden water directly to the Little Miami River. Properly installed (framed and entrenched) sediment fencing should be utilized and maintained until final site stabilization is achieved. All denuded areas should be seeded and mulched immediately upon completion of earthwork or within seven days if the area is to remain idle for more than forty-five days.

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5. **Work limits shall be physically defined with orange snow fencing to establish the outer boundaries for which earthwork and denuding may commence on the project on or near State of Ohio property.**

6. Don Rostofer, the SW Ohio Scenic Rivers Coordinator, should be invited to all pre-planning meetings to facilitate the development of final plans. Mr. Rostofer shall be invited to all pre-construction meetings and notified prior to the commencement of the project. Please give Mr. Rostofer sufficient advance notice to allow for conflicts in his schedule. All permits and conditions stated herein shall be incorporated into final plan set and available to all construction personnel on site throughout the duration of the project. Please forward a final set of plans to the SW Ohio Scenic Rivers Coordinator at the following address, 4675 North Diamond Mill Road, Trotwood, OH 45426-4254.

If you have any further questions or concerns with the above comments please contact me at 937/854-0350.

Sincerely,

Donald E. Rostofer
SW Ohio Scenic Rivers Coordinator
Division of Natural Areas & Preserves

DER
CC: Michael Madell, National Park Service
Greene County Park District
Tim Synder, Preserves Manager, DNAP
Frank Skalski, Preserves Manager, DNAP
Stuart Lewis, Acting Chief, DNAP

Project 173.05

9 September 1999

Rick Queen
Ohio Environmental Protection Agency
Division of Surface Water
P.O. Box 1049
Columbus, Ohio 43216

Re: Foster to Bath Electric Transmission Line Project

Dear Mr. Queen:

Dayton Power & Light Company (DP&L) is proposing to replace existing transmission towers with new steel towers, and to construct a new 345 kV transmission line along their existing Bath substation in Greene County, Ohio to their Foster substation in Warren County, Ohio. The proposed route is approximately 45 miles. All required work will be completed within DP&L's existing 150-foot ROW, with the exception of the first mile of ROW to Sibcy Road, and the portion of ROW beginning at approximately 1 mile south of the Greene substation station and ending at the station. These areas comprise a 300-foot ROW. Construction, however, will only require the eastern-most 150 feet.

Please comment on any potential environmental concerns associated with the construction and operation of the proposed project. DP&L welcomes your agency's comments in order to properly address any concerns that you may have. Please indicate if this project has the potential to impact sensitive resources or other issues of concerns. Where possible, please identify specific areas where concerns are present and include any required or suggested measures to avoid or minimize impacts.

We have also contacted the ODNR's Division of Natural Areas and Preserves and Division of Wildlife for comment.

If you have any questions, please call me at 513-326-1171 or e-mail me at dhoeting@bheenv.com. I thank you in advance for your time.

Sincerely,

Diane Hoeting

Diane Hoeting
Environmental Scientist

OhioEPA
State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
122 South Front St.
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

MAILING ADDRESS:
Lazarus Government Center
P. O. Box 1049
Columbus, OH 43216-1049

.October 3, 1999

Diane Hoeting

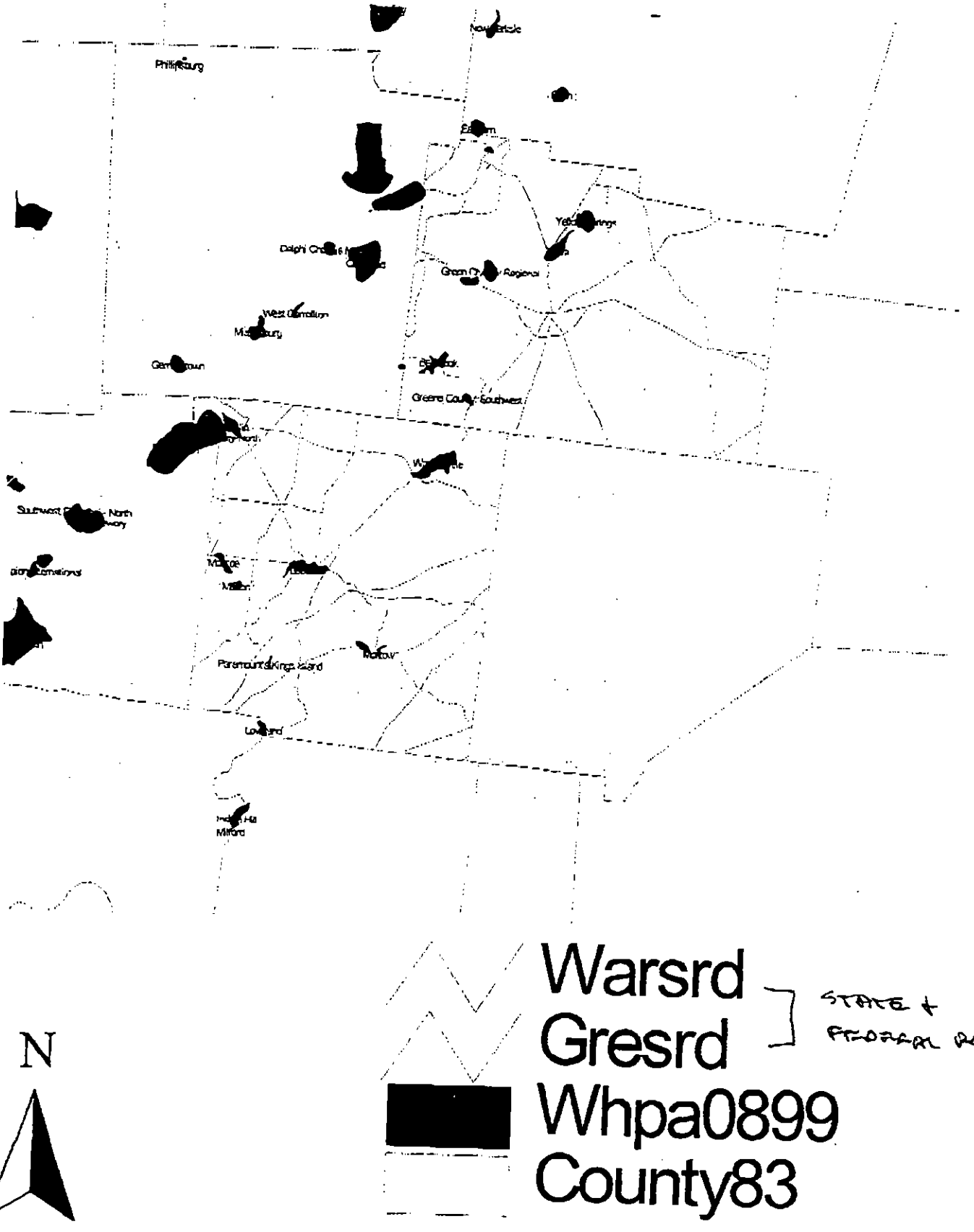
I only received two pages of your six page fax, unfortunately, I did not realize this until I started responding. I have provided information for both Greene and Warren counties so I believe I have covered the proper areas. The map illustrates the area of the WHP areas in both counties along with state and federal roads. If you need more detailed information I can copy the submitted WHP area maps and send you copies.

The county maps the locations of public water supplies (PWS) in Greene and Warren counties. Maps are provide for community surface water systems, community ground water systems, non-community/non-transient water systems, and non-community transient water systems. The locations of these PWS are approximate- the agency is in the process of locating the PWS using GPS. We have little to no information about private wells. The Ohio Department of Health and local health departments has authority over private wells and I refer you to them for information.

If you have additional questions, I would be glad to try to answer them.

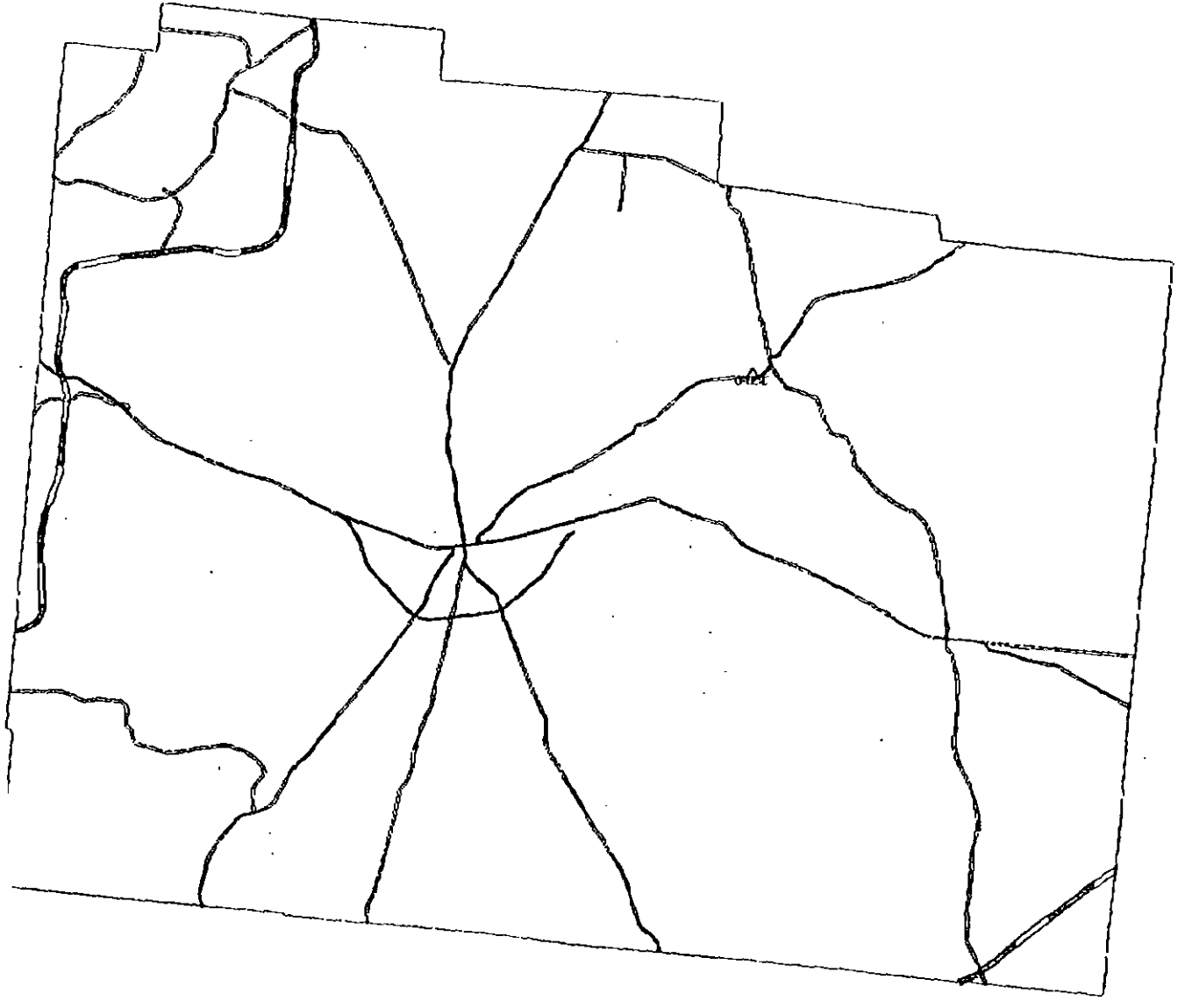
Chris Kenah, Geologist.

WHP Areas Around Greene & Warren CO.



Greene County

Community Water Supplies Using Surface Water



OhioEPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
Central Office
1800 Watermark Drive
P.O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" = 3.6 Miles

Page
AS# 80

Public Water System Data is
from MSIS as of January 1992

Geographic Information System Group
David Kelleen & Dick McHugh

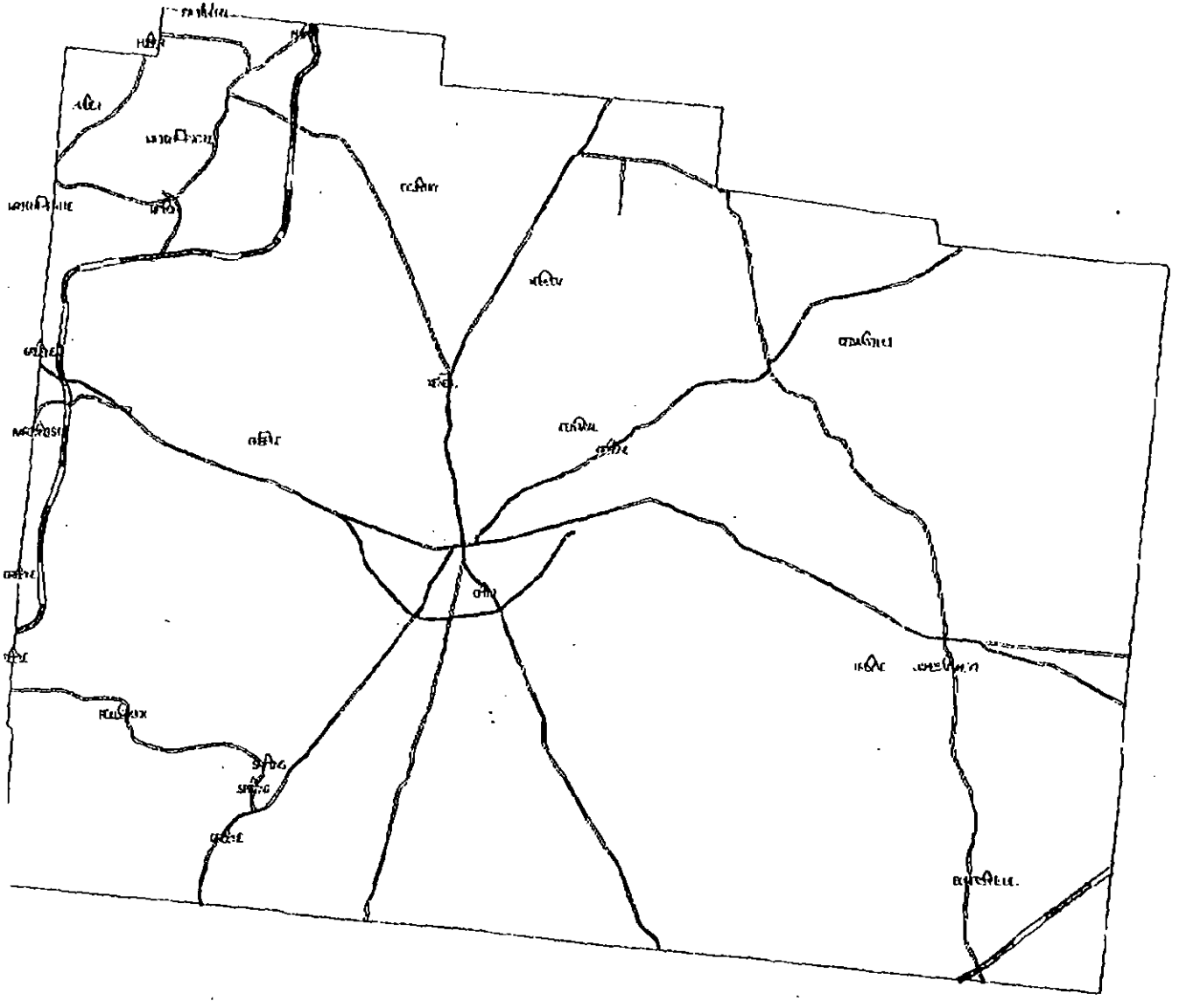
- Δ Population < 500
- ◊ 501 < Population < 3300
- O 3301 < Population < 10000
- □ 10001 < Population < 50000
- ☆ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

OCT-04-99 MON 07:04

FAX NO. 6146442909

Greene County

Community Water Supplies Using Ground Water



Ohio EPA

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Ohio Environmental Protection Agency
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513-285-6357

Scale = 1" 3.6 Miles

Page
GW: 80

Public Water System Data is from MSIS as of January 1998

Geographic Information System Group
David Wilburn & Dick McClish

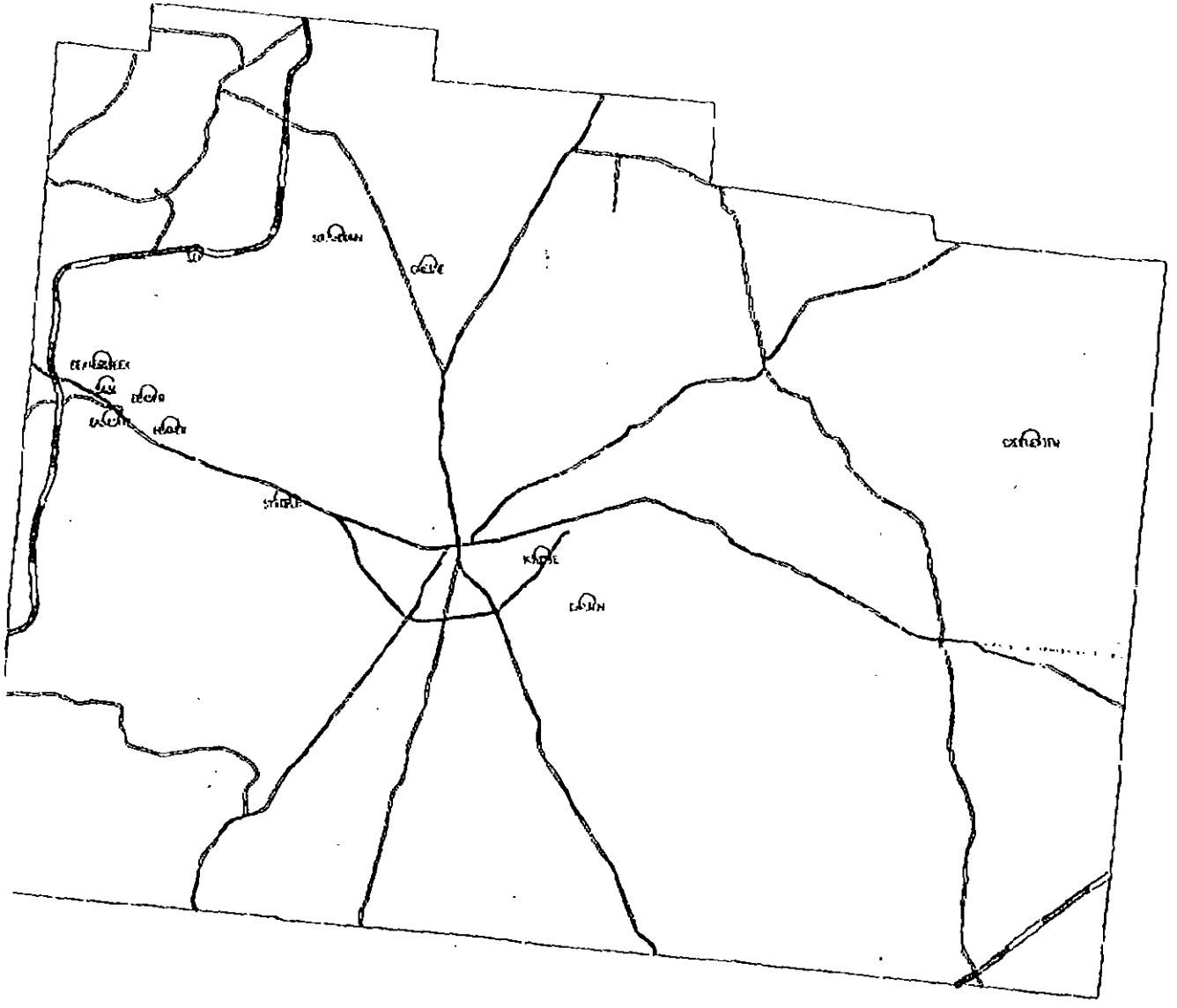
- △ Population < 500
- ◇ 501 < Population < 3300
- ○ 3301 < Population < 10000
- □ 10001 < Population < 50000
- ☆ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Greene County

Non-Community/Non-Transient Water Supplies

Ohio EPA

Division of Drinking and Ground Waters



Ohio Environmental Protection Agency
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614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" 3 6 Miles

Page NCNT: 80

Public Water System Data is from MSIS as of January 1998

Geographic Information System Group
David Wilburn & Dick McClish

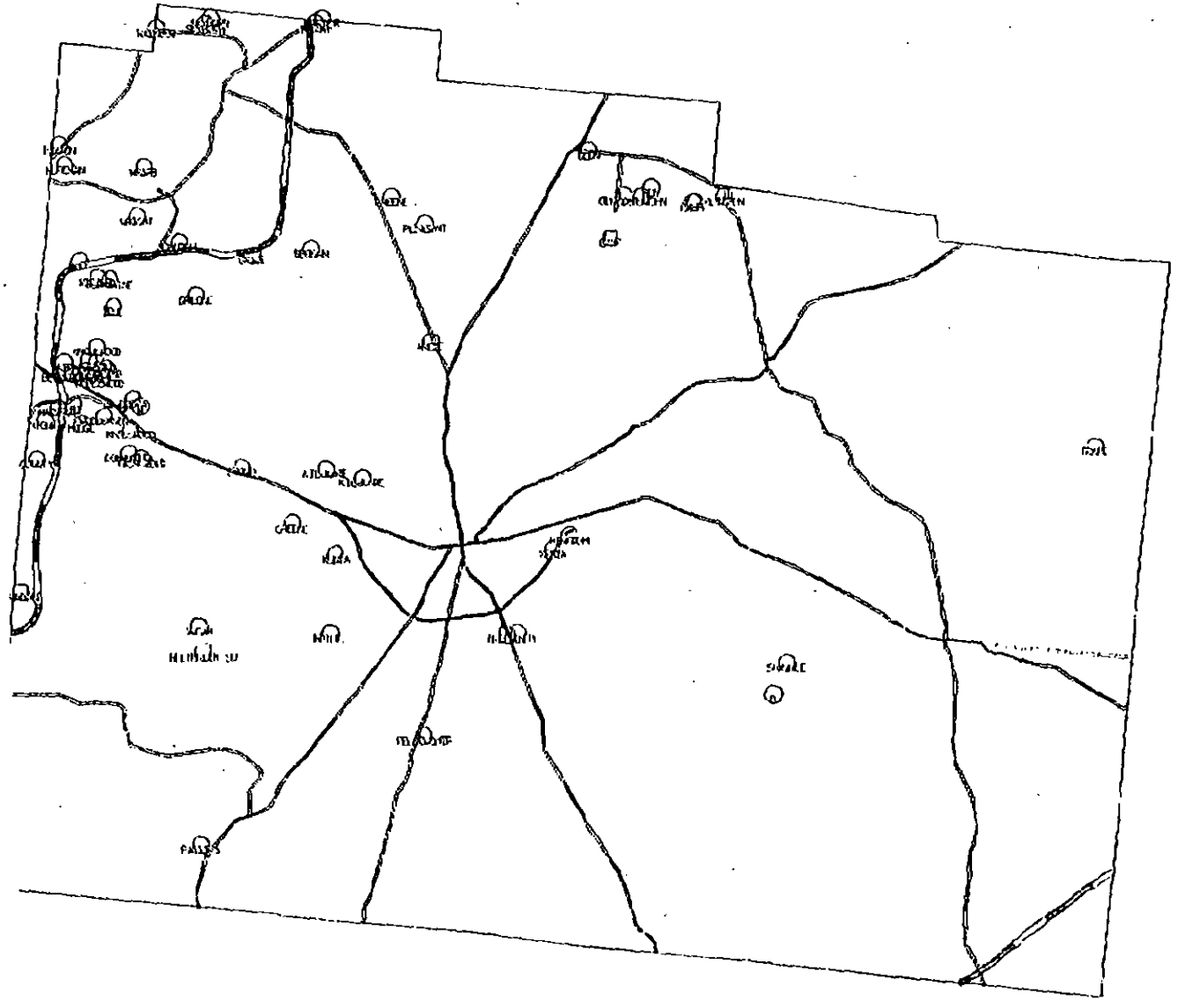
- O Ground Water Resources
- □ Surface Water Resources
- Interstate
- Turnpike
- U S Highway
- State Highway

Greene County

on-Community/Transient Water Supplies

Ohio EPA

Division of Drinking and Ground Waters



Ohio Environmental Protection Agency
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614-644-2752

Ohio Environmental Protection Agency
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513-285-6357

Scale = 1" 3.6 Miles

Page
OCT. 80

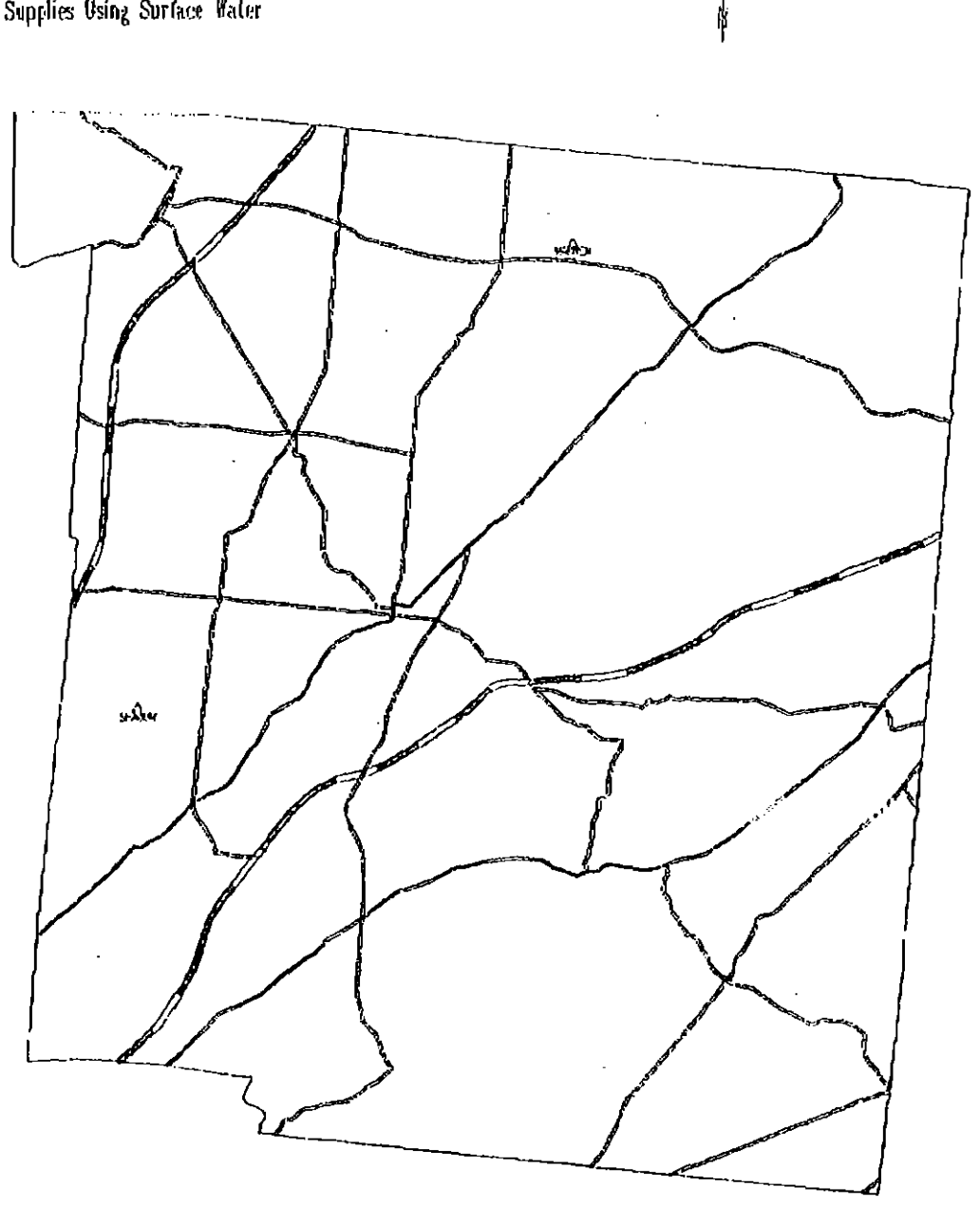
Public Water System Data is
from MSIS as of January 1998

Geographic Information System Group
David Wilburn & Dick McClish

- O Ground Water Resources
- □ Surface Water Resources
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Warren County

Community Water Supplies Using Surface Water



Ohio EPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
Central Office
1800 Watermark Drive
P.O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
Southwest District Office
401 East Fifth Street
Dayton, OH 45402-2911
513-285-6357

Scale = 1" 4 Miles

Page SW 88

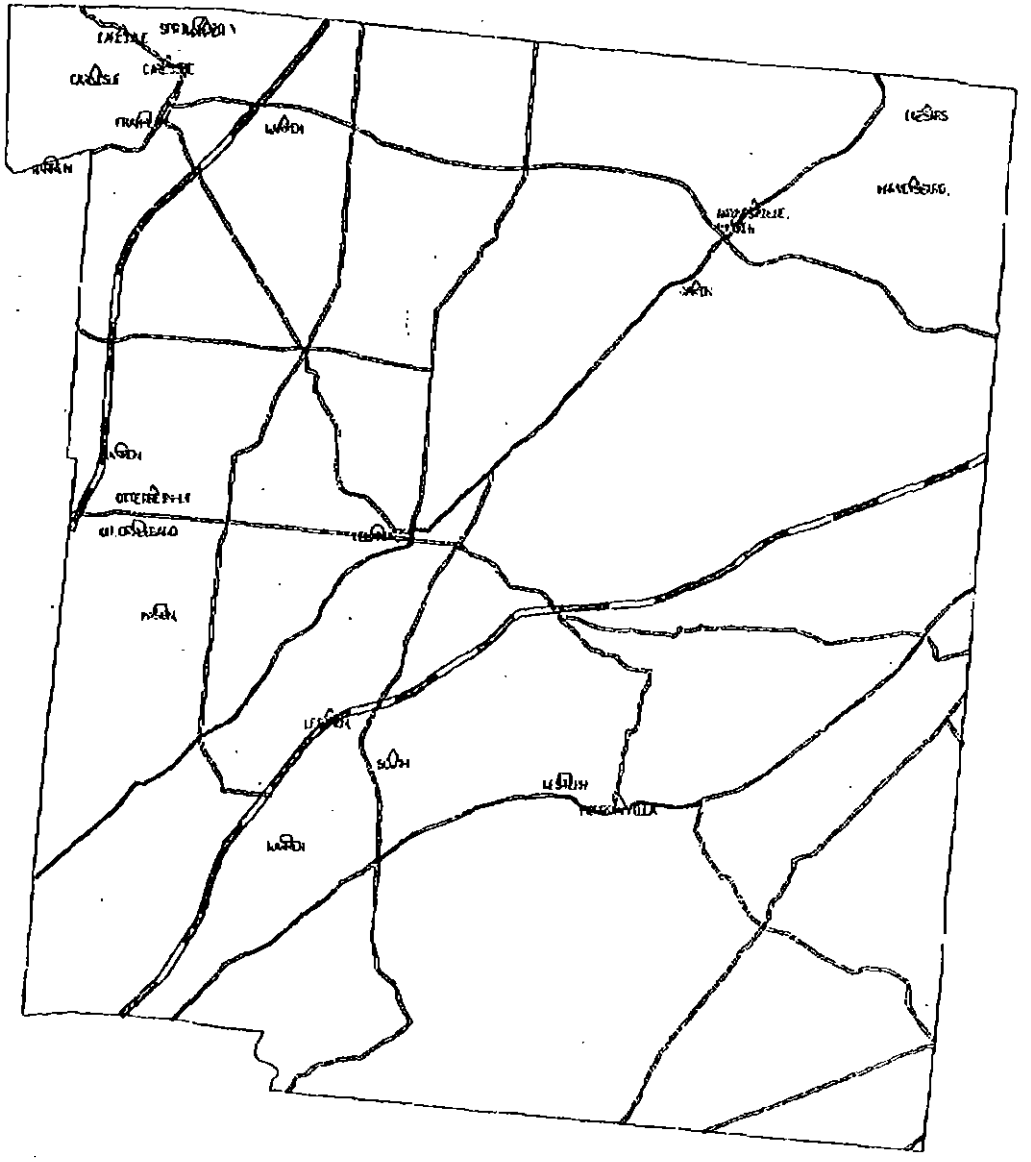
Public Water System Data is from MSIS as of January 1990

Geographic Information System Group
David Hilburn & Dick McClish

- Δ Population < 500
- ◊ 501 < Population < 3300
- O 3301 < Population < 10000
- □ 10001 < Population < 50000
- ☆ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Warren County

Community Water Supplies Using Ground Water



Ohio EPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
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1800 Watermark Drive
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Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
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513-285-6357

Scale = 1" 4 Miles

Page
GW 88

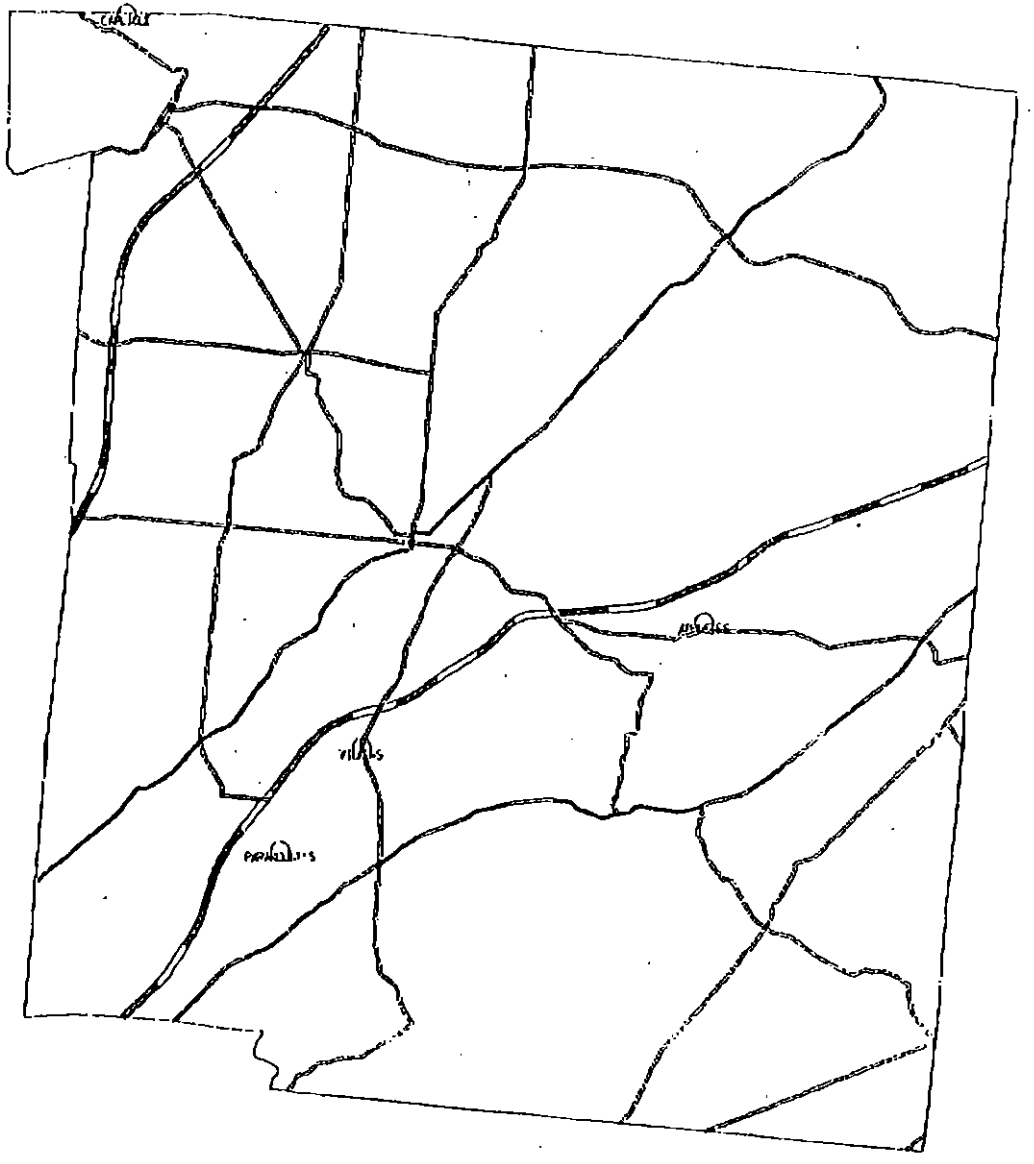
Public Water System Data is
from MSIS as of January 1998

Geographic Information System Group
David Wilburn & Dick McCrish

- Δ Population < 500
- ◊ 501 < Population < 3300
- O 3301 < Population < 10000
- 'O 10001 < Population < 50000
- ◊ 50000 < Population
- Interstate
- Turnpike
- U.S. Highway
- State Highway

Warren County

Non-Community/Non-Transient Water Supplies



Ohio EPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
Central Office
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P.O. Box 1049
Columbus, OH 43216-1049
614-644-2752

Ohio Environmental Protection Agency
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Dayton, OH 45402-2911
513-285-6357

Scale = 1" 4 Miles

Page
NONT: 88

Public Water System Data is
from MSIS as of January 1998

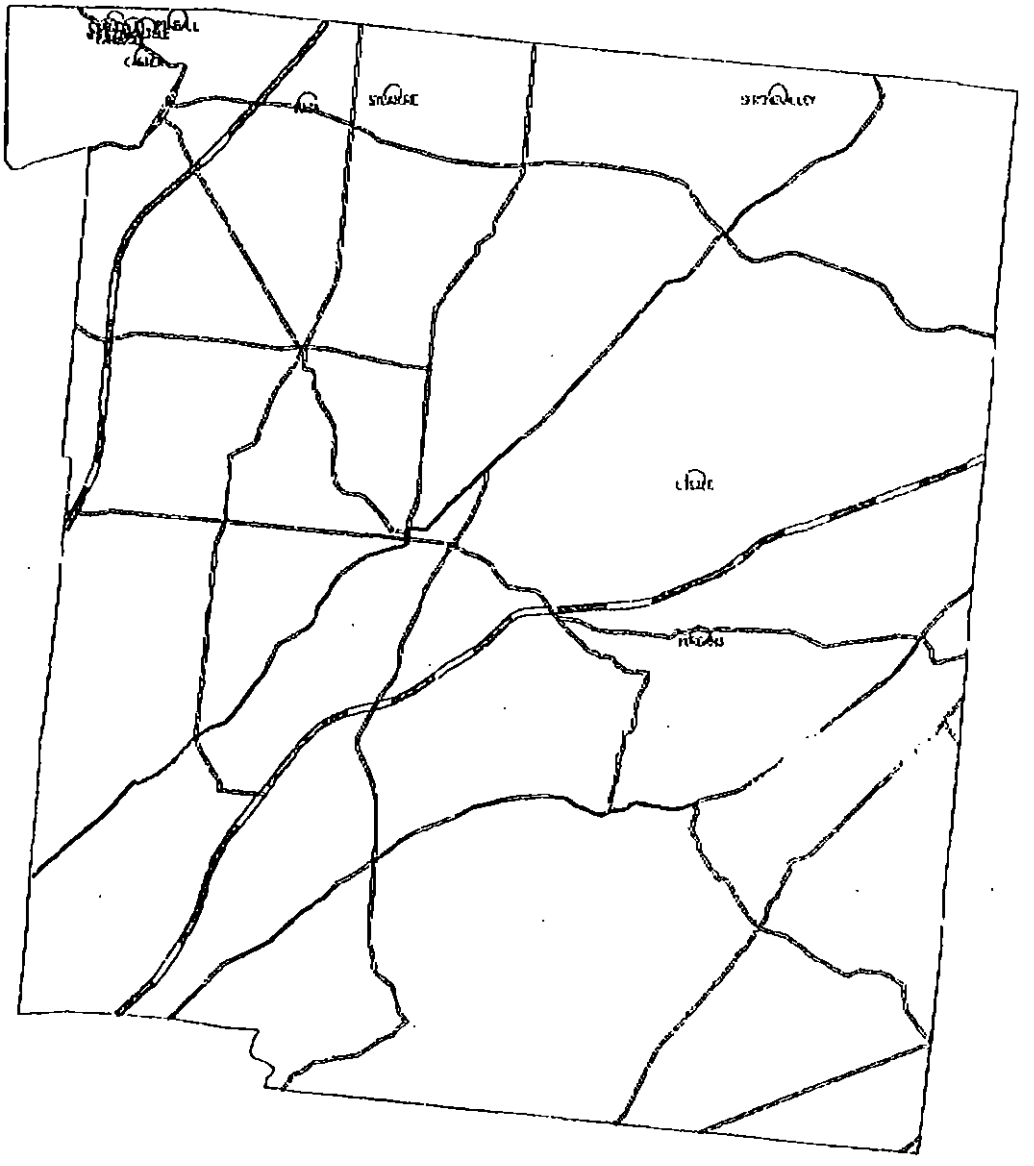
Geographic Information System Group
David Welburn & Dick McClish

- Ground Water Resources
- Surface Water Resources
- Interstate
- Interstate
- U.S. Highway
- State Highway

OCT-04-99 MON 07:12 FAX NO. 6146442909 P.03

Warren County

Non-Community/Transient Water Supplies



OhioEPA

Division of Drinking and Ground Waters

Ohio Environmental Protection Agency
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1800 Watermark Drive
P O Box 1049
Columbus, OH 43216-1049
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513-285-6357

Scale = 1" = 4 Miles

Page
NOT 88

Public Water System Data is
from VSIS as of January 1999

Geographic Information System Group
David Wilburn & Dick McClish

- O Ground Water Resources
- O Surface Water Resources
- Interstate
- Turnpike
- U.S. Highway
- State Highway

OCT-04-99 MON 07:12 FAX NO. 6146442909 P.04

Greene County

Board of Commissioners

Department of Public Works

OFFICE OF SANITARY ENGINEERING

667 Dayton-Xenia Road
Xenia, Ohio 45385-2665

Phone: (937) 376-7450
Fax: (937) 376-7465

3 November 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246

Re: Dayton Power & Light Right-of-Way
Greene County, Ohio

Dear Ms. Hoeting:

Pursuant to your fax dated 2 November 1999, please find enclosed a marked up copy of the maps showing Greene County Sanitary Engineering's water mains in blue and the sanitary sewer lines in green.

Should you have any additional questions, please do not hesitate to call either Mr. Mark Muterspaw (Project Manager) or myself at 937-376-7450. Thank you for your cooperation.

Very truly yours,

Jeffrey A. Hissong, P.E.
Director
Office of Sanitary Engineering

lc
Enclosure
c: Tim Denger
Mark Muterspaw

Enhancing the quality of life and the environment by providing excellent water, wastewater and solid waste services

BHE ENVIRONMENTAL, INC.

People Dedicated to Solving Environmental Problems

Facsimile Transmittal

Today's Date: 11-2-99 BHE PN: _____

Total Number of Pages, including cover: 7

TO:		FROM:	
Name:	Jeff Hissong	Name:	Diane Hoeting
Company:		Company:	BHE Environmental, Inc.
Phone:		Phone:	(513) 326-1500
Fax:	937-376-7465	Fax:	(513) 326-1178

Special Instructions:

Jeff - I just spoke with Tim Denzer, who asked me to fax this information to you to address. I'm working on behalf of Dayton Power & Light Co. who is proposing to do construction on their existing right-of-way. I need to determine if Greene County has any sewer line that comes within 150 ft. of their right-of-way. Please review the maps I am sending to you with our ROW on it. Thank you in advance.

PRIVATE AND CONFIDENTIAL: The sender intends to communicate the contents of this transmission only to the person to whom it is addressed. This transmission may contain information that is privileged, confidential or otherwise exempt from disclosure under applicable law. If the recipient of this transmission is not the designated recipient or the employee or agent responsible for delivering this transmission to the designated recipient, you are hereby notified that any dissemination, distribution or copying of this communication is strictly prohibited. If you have received this transmission in error, please notify us immediately by telephone (collect at 513-326-1500) and promptly return the original transmission to us at the above address by mail. We will reimburse you for any costs you may incur.

If you have a problem receiving this transmittal, please call (513) 326-1500.

11733 Chesterdale Road • Cincinnati, Ohio • 45246 • (513) 326-1500 • FAX (513) 326-1178
Branch Offices: Columbus, OH • Cleveland, OH • Knoxville, TN • Houston, TX • Rolla, MO • Carlisle, PA

- DP&L proposed route

[redacted] - GCSE water lines

[redacted] - GCSE sewer lines

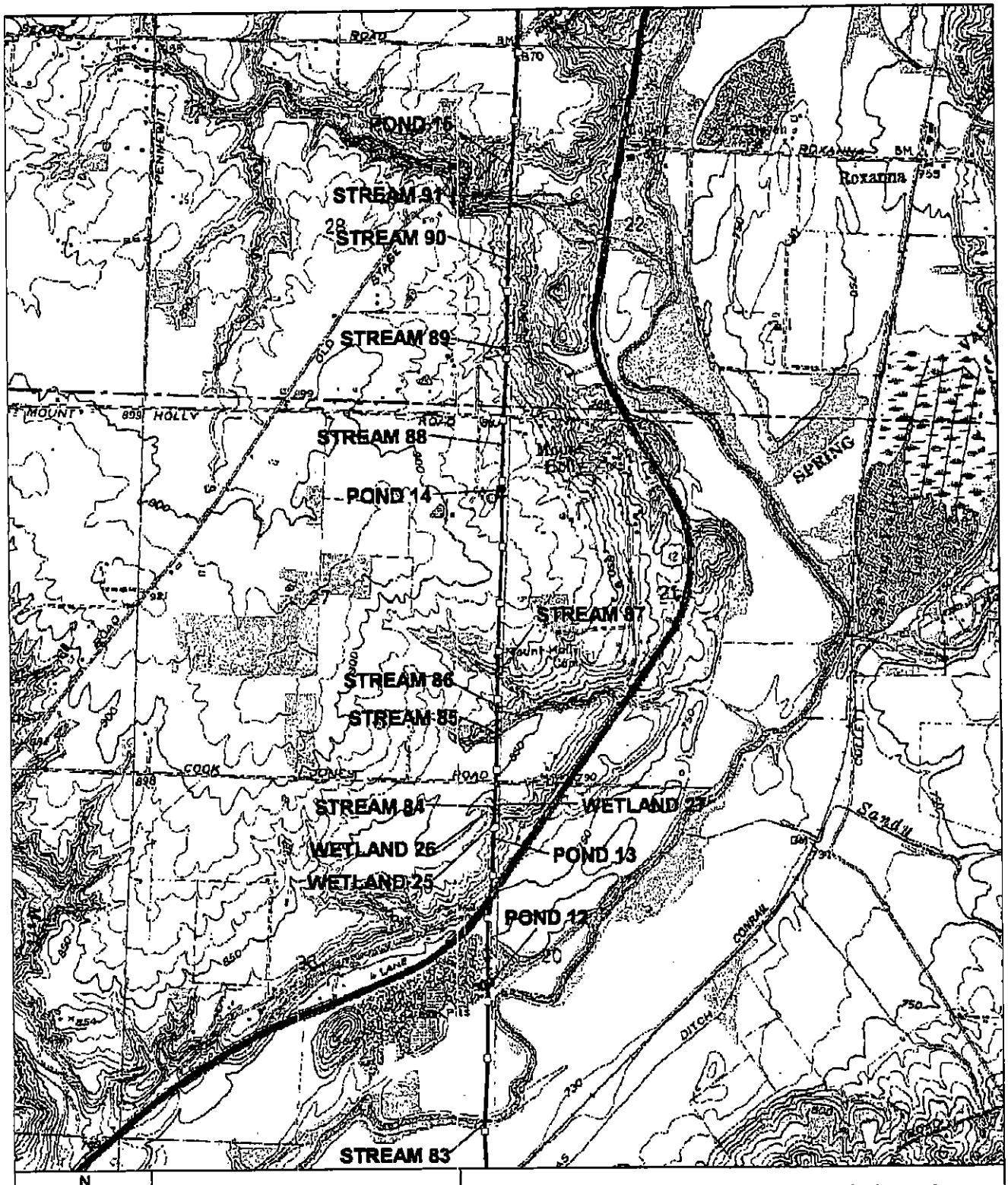

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Proposed Transmission Line | Proposed Tower Location | Suitable Bat Habitat

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

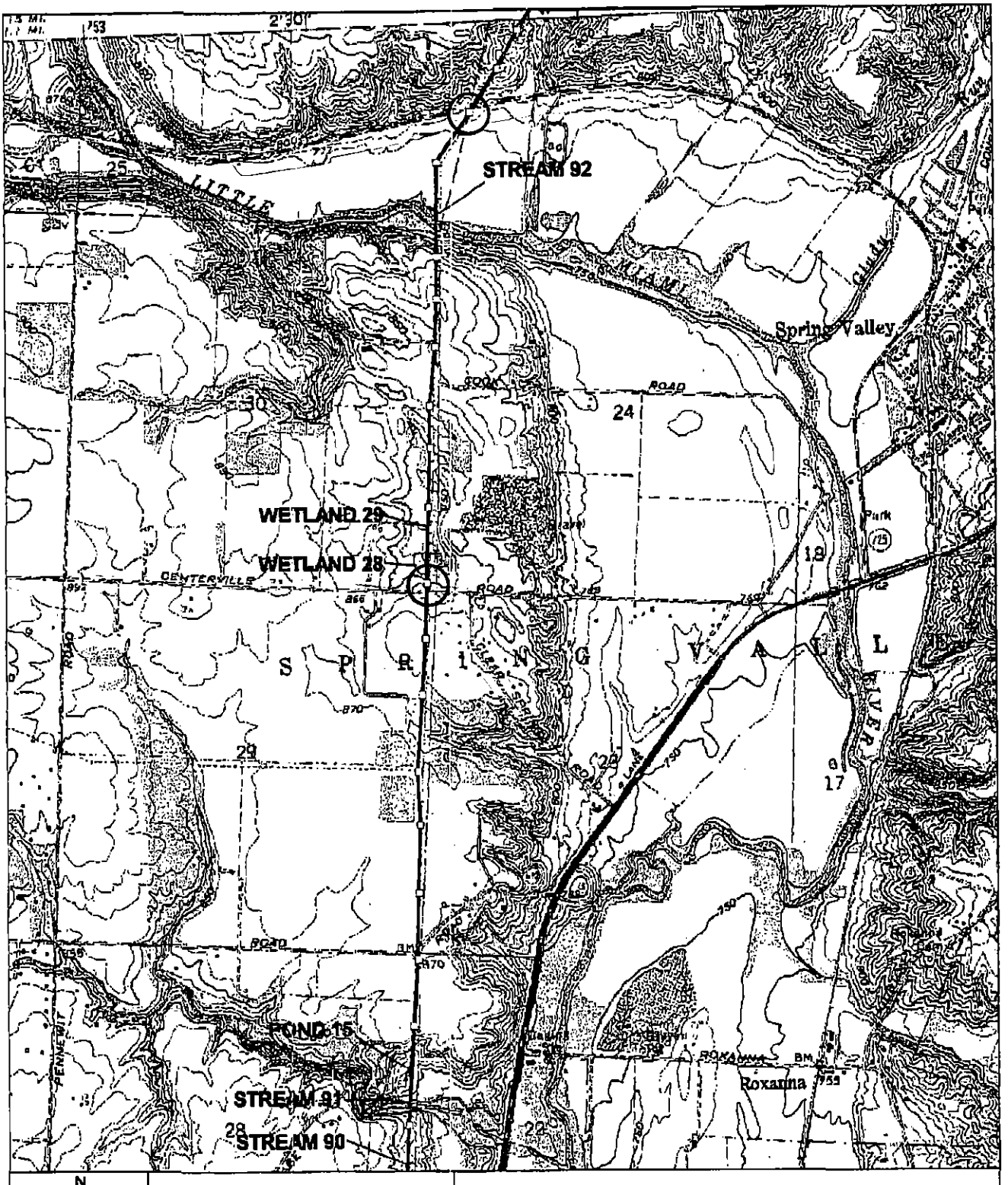

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Waynesville, OH	BHE ENVIRONMENTAL, INC.

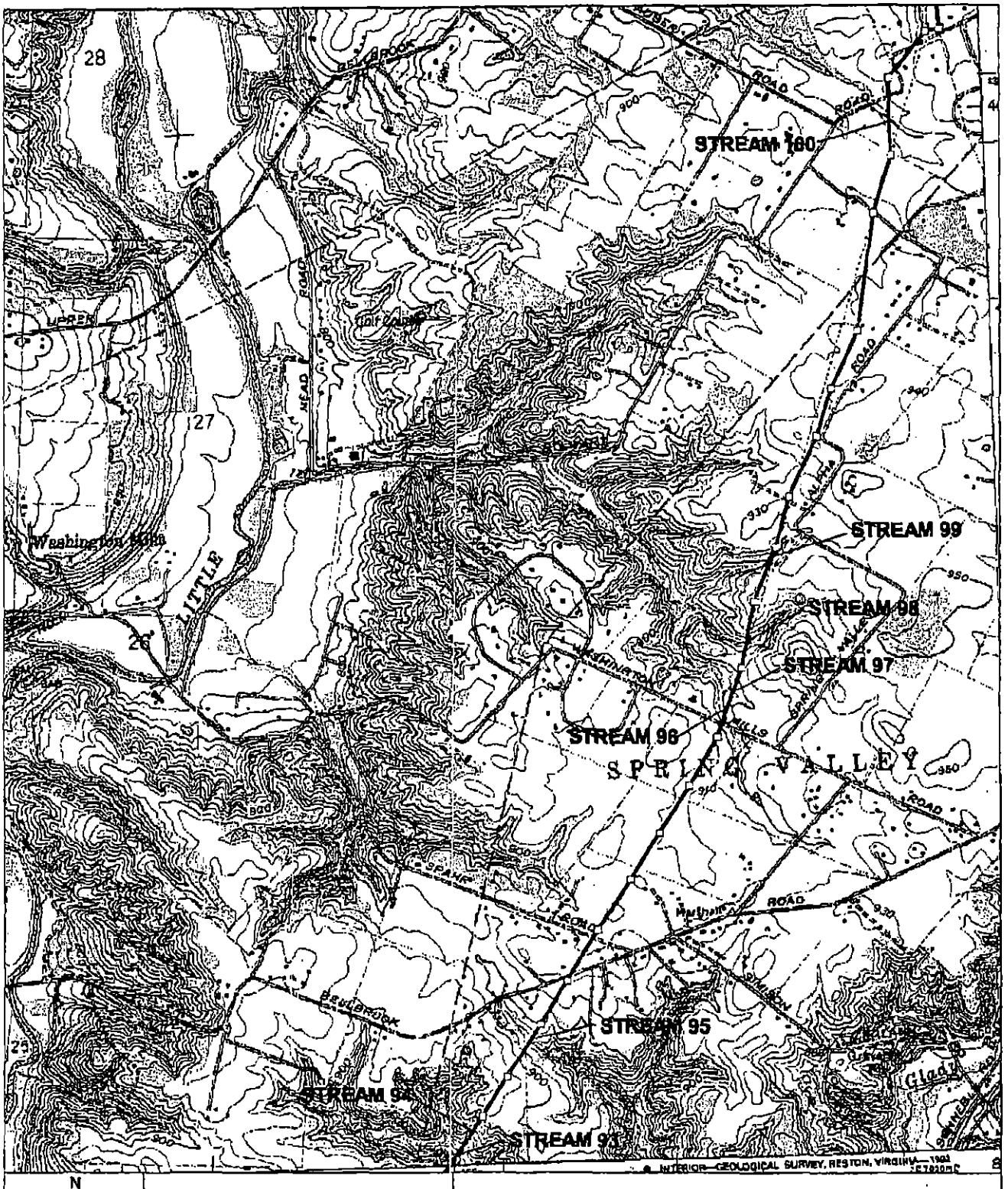

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

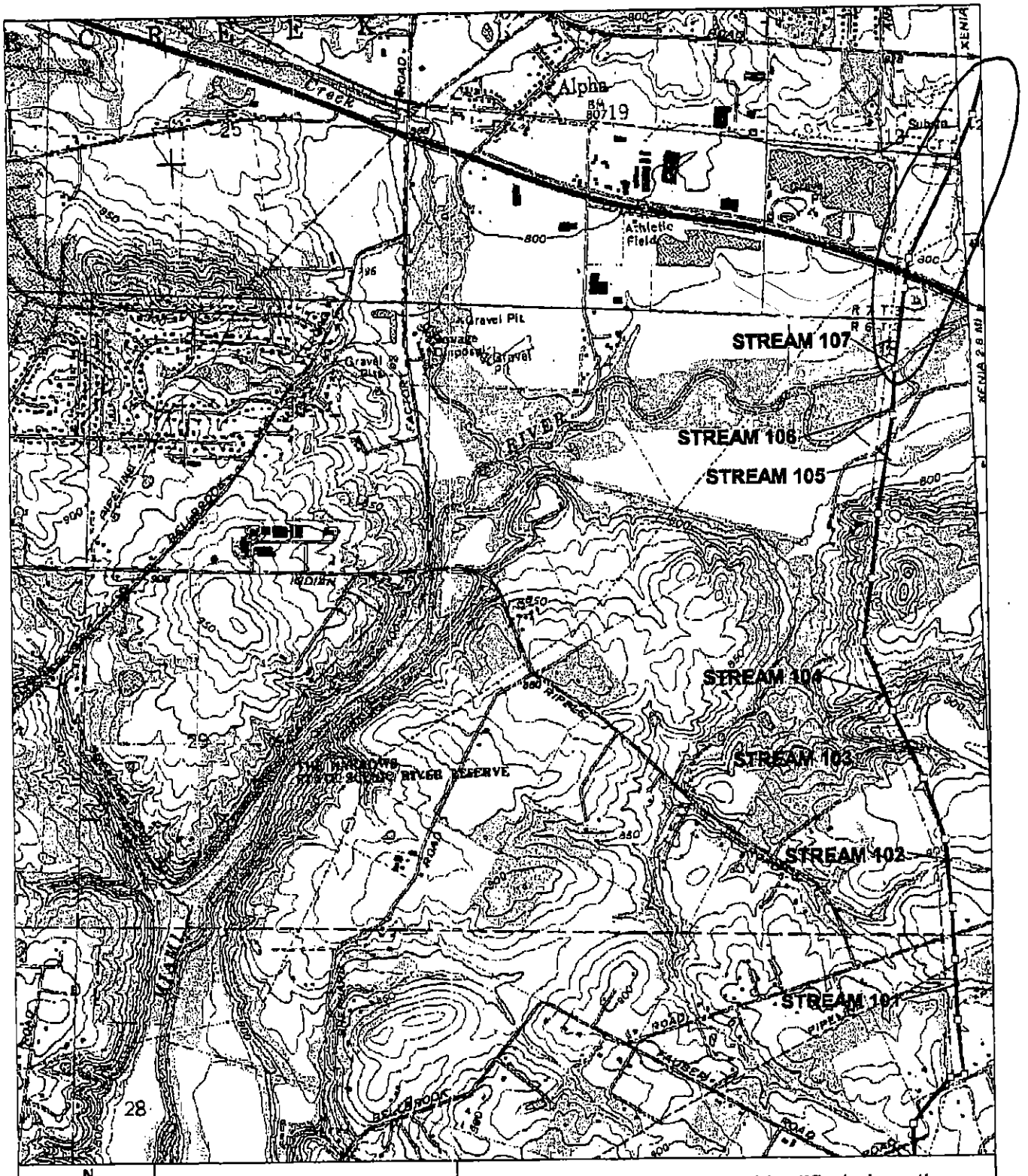

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

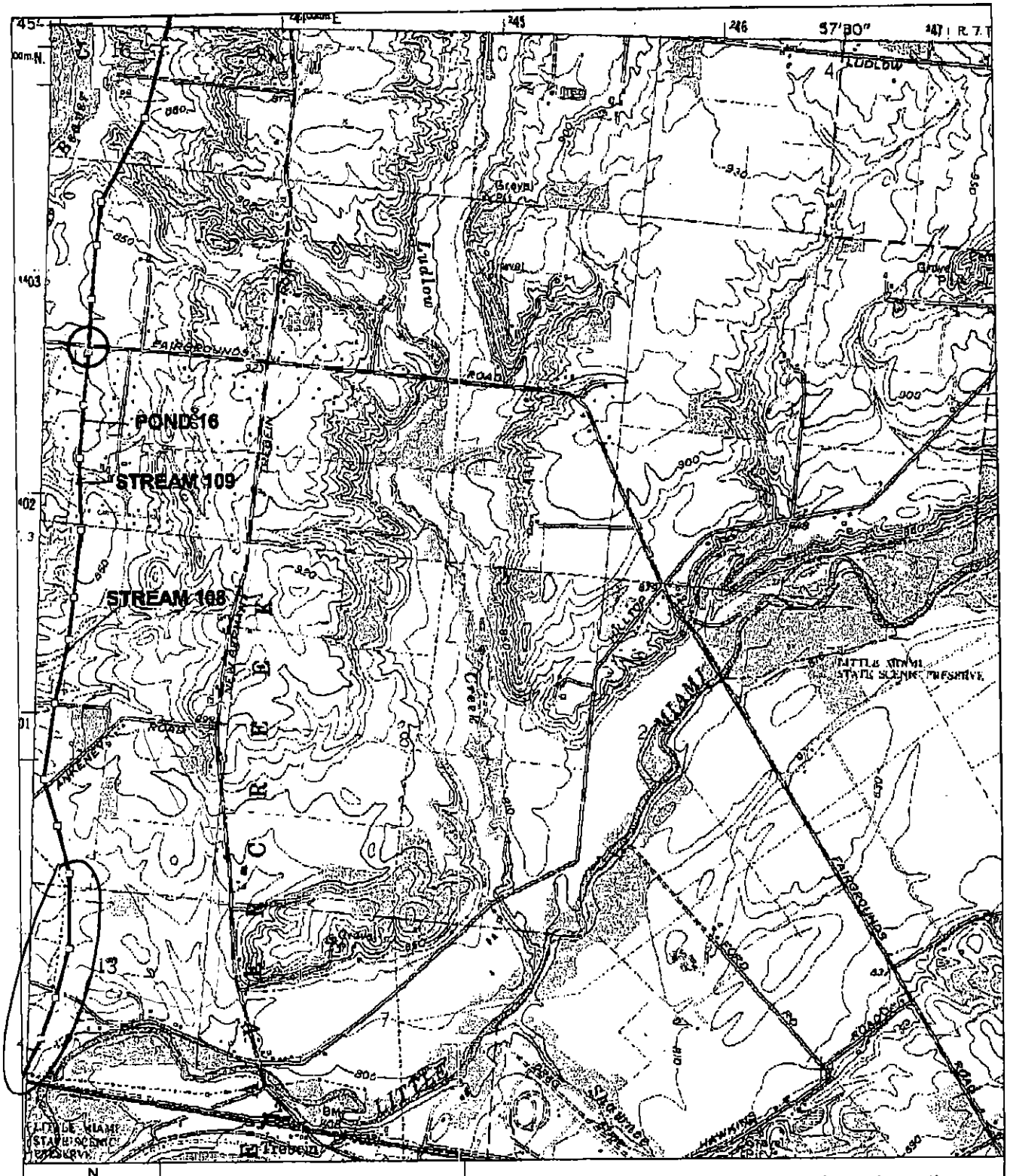

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Xenia, OH	BHE ENVIRONMENTAL, INC.

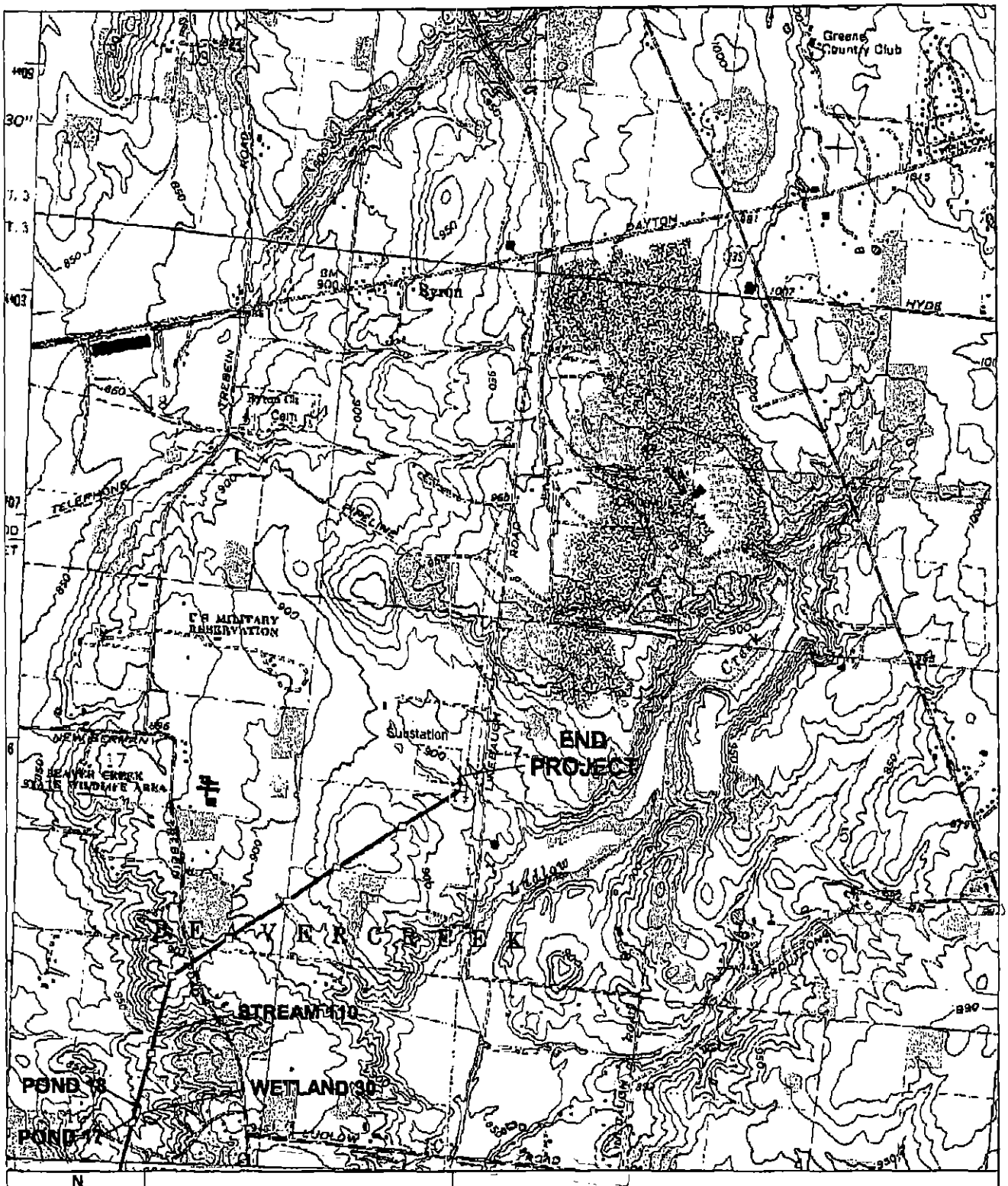

FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Yellow Springs, OH	BHE ENVIRONMENTAL, INC.

BHE ENVIRONMENTAL, INC.

People Dedicated to Solving Environmental Problems

Facsimile Transmittal

Today's Date: 11/2/99 BHE PN: _____

Total Number of Pages, including cover: 7

TO:		FROM:	
Name:	Jim Schneider	Name:	Diane Hoeting
Company:	Greene Cty Park Dist	Company:	BHE Environmental, Inc.
Phone:		Phone:	(513) 326-1500
Fax:	937-374-5900	Fax:	(513) 326-1178

Special Instructions:

Please indicate Greene Cty Parklands on or adjacent to DP&L's ROW. Please indicate any lands that are being proposed for purchase. Thanks in Advance.

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Board of County Commissioners

T. Shawn Campbell
Kathryn K. Hagler
W. Reed Madden

Greene County Recreation and Parks Department

Timothy D. Leiwig, CLP
Executive Director

GREENE COUNTY PARK DISTRICT

Board of Park District Commissioners

Vivian F. Lewis
J. Timothy Campbell
John A. Finlay

Administrative Offices
651 Dayton-Xenia Road
Xenia, Ohio 45385-2699

Phone: (937) 376-7440
or: (937) 427-2883
Ext. 7440
Fax: (937) 374-5900
TDD: (937) 376-7577

Narrows Reserve
Phone: (937) 429-9590

November 5, 1999

Ms. Diane Hoeting
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati OH 45246

Dear Ms. Hoeting:

We have reviewed the topographic maps with the subject transmission lines located thereon. In review, we found four properties owned and/or managed by Greene County Parks. Three of these properties are wetlands and the fourth is a shared-use path corridor. I have enclosed information on these sites.

We see no major concerns with the crossing of the shared-use path so long as construction does not require closure. The wetland areas, however, are a major concern, especially if there is a need to bring construction vehicles into the area. Just this summer, the Ankeney site (#2) was developed as a wetland mitigation bank. This area is now substantially wetter than it was previously. We know there is at least one transmission tower in this area.

Should DP&L desire to upgrade these towers, we would prefer to meet with their representatives to look at the scope of the work and determine how we might mitigate impacts to these areas. We will oppose any upgrade that will degrade the quality of the wetlands that we are charged to preserve and protect.

We look forward to the opportunity to discuss this project further with yourselves and DP&L.

Sincerely,

James A. Schneider, Assistant Director
Greene County Recreation, Parks and Cultural Arts

JAS/cab
Enc.

ltrjs115

NOTE TO APPENDIX A DOCUMENT

FROM GREENE COUNTY RECREATION, PARKS AND CULTURAL ARTS

The letter received from the Greene County Recreation, Parks and Cultural Arts, dated November 5, 1999, expressed concern over certain towers on the Foster to Bath Transmission Line Project that are potentially detrimental to wetlands in the area of line between Ankeney and Fairground Roads. Close inspection of the documents submitted indicate the referenced wetlands are in fact along another transmission line corridor (for DP&L's 138 kV circuit between Greene and Airway Substations). Since no work or activity is to take place on this 138 kV circuit, no further consideration needs to be made as part of this LON other to discuss the situation with the Greene County people, which will be done.

PDR:1/28/00

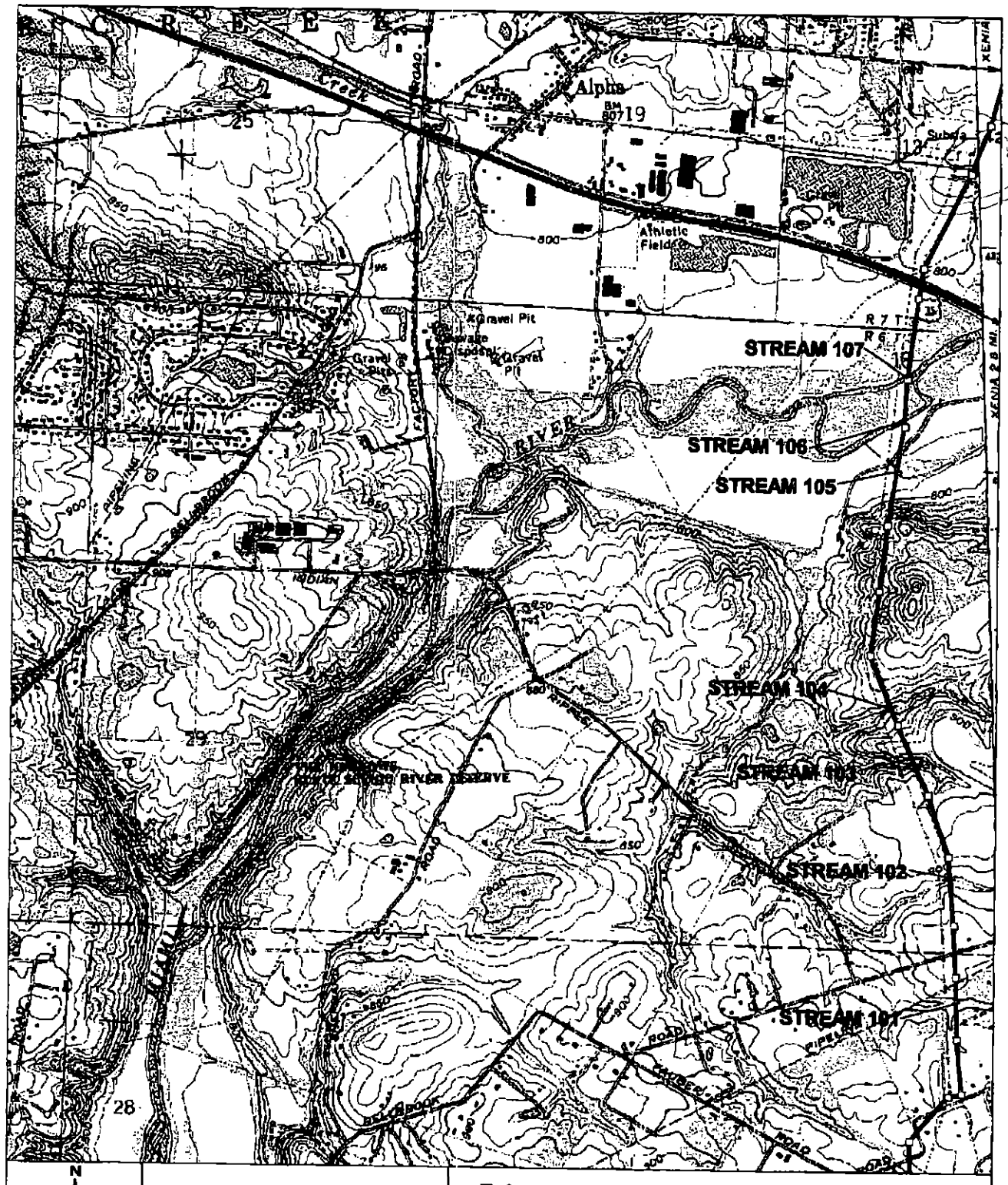


FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

Project No. 173.05	Base Map: USGS 7.5 Minute Topographic Map - Bellbrook, OH	BHE ENVIRONMENTAL, INC.

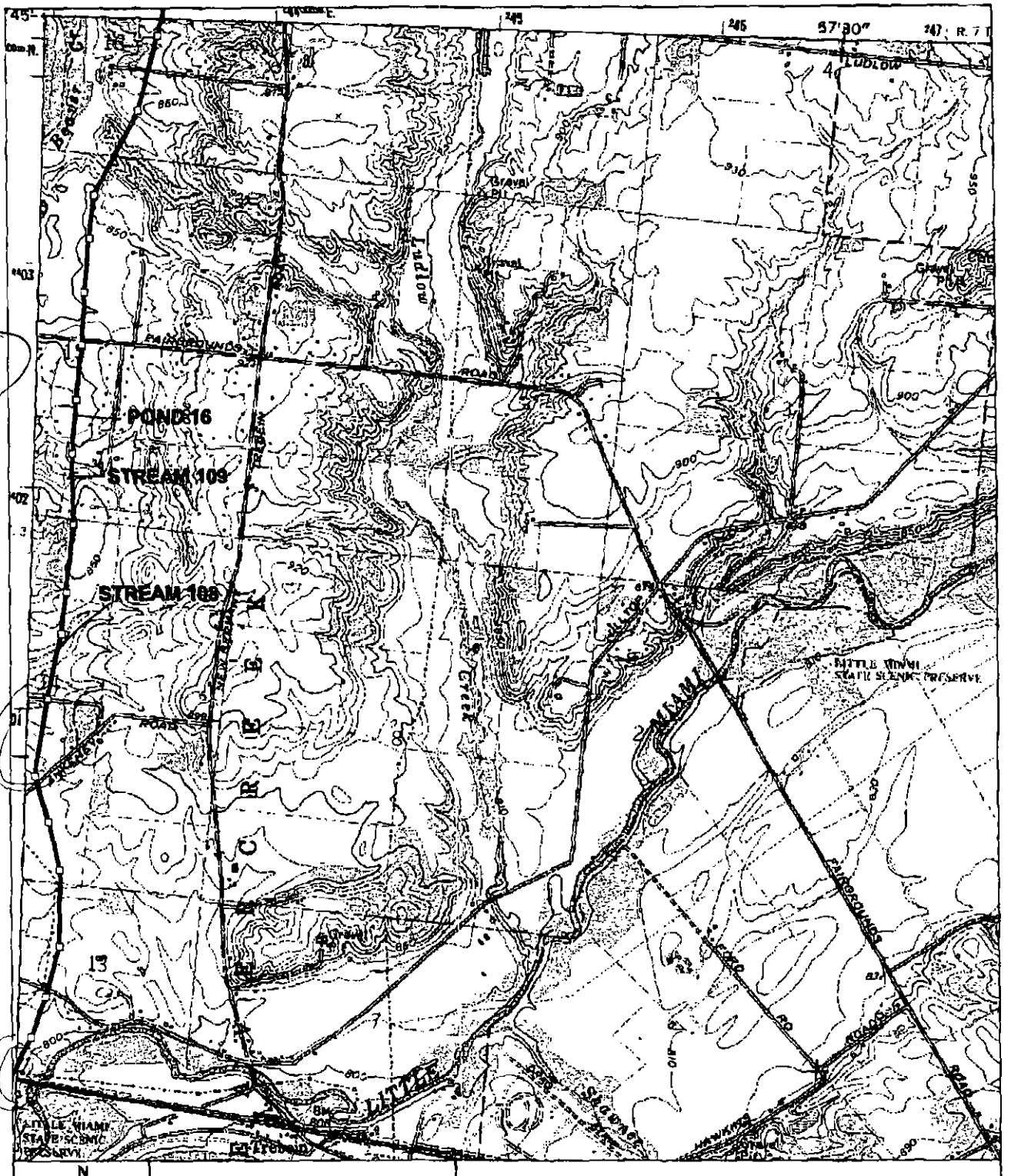
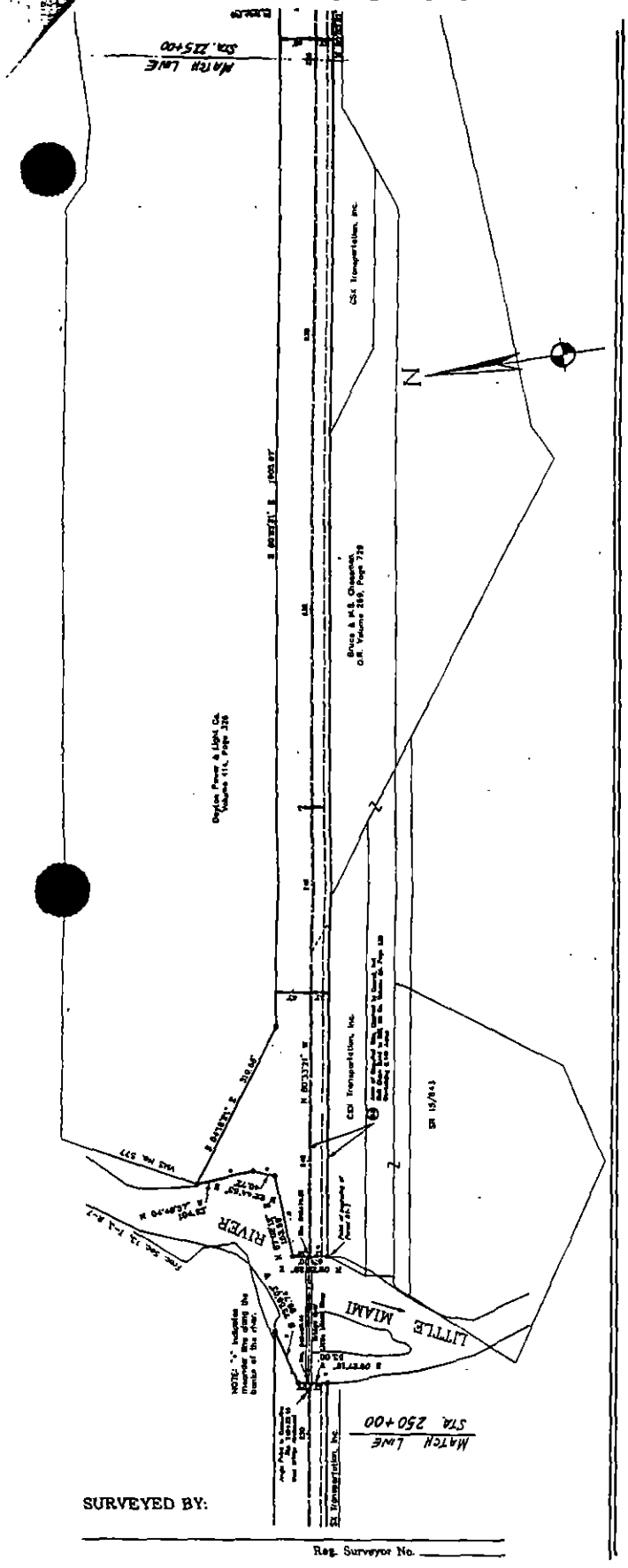


FIGURE A-5.1. Features identified along the Foster to Bath 345 kV right-of-way during the environmental survey.

BEAVERCREEK TOWNSHIP TRUSTEES

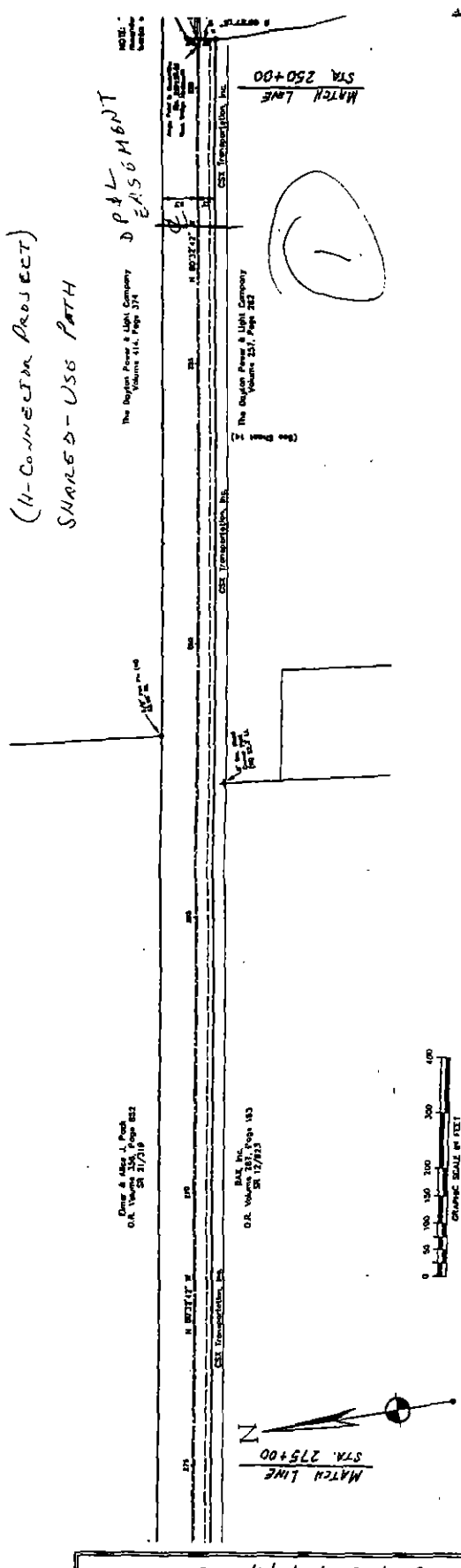
OUR CODE	LESSEE (OCCUPATION)	LOCATION BY STATION NUMBER	JURISDICTION	DOCUMENT NUMBER	ANNUAL RENT	BACK RENT
I	KIL-KARE/CHRYSLER	182+HAWKINS RD	GREENE COUNTY/ BEAVERCREEK TWN	71-02749	$ SEE I (GC)	
E	VOLKENHAND	201+	BEAVERCREEK TWN	71-00730	$ 30.00	
N	OBT	191+90(SEE CC) (SEE 186-369)	BEAVERCREEK TWN	176199	$ -0-	
Q	SIDING	206+32	BEAVERCREEK TWN	176-959	$ -0-	
Y	KIL-KARE/CHRYSLER	192+01	BEAVERCREEK TWN	161-071	$ 100.00	
Z	DP&L	268+27	BEAVERCREEK TWN	?	$?	
CC	OBT	191+90(SEE N)	BEAVERCREEK TWN	186-639	$ 15.00	
DD	DP&L	267+27	BEAVERCREEK TWN	189-614	$ NEEDS VERIFIED	
FF	OBT	210+70	BEAVERCREEK TWN	196-377	$ -0-	
YY	WATERLINE MID-STATE DEV.	284+47	BEAVERCREEK TWN	439-59-582 230-689	$ 100.00	
BBB	GREENE CO. SEWER	288+95	BEAVERCREEK TWN	236-200	$ -0-	
GGG	SIDE TRACK	262+12	BEAVERCREEK TWN	267-259	$ -0-	
KKK	AMERITECH FIBER	306+	BEAVERCREEK TWN	WITHIN ORCHARD LN RIGHT OF WAY	$ -0-	
OOO	DP&L FIBER	296+50	BEAVERCREEK TWN	44709902	$ 500.00	
RRR	DP&L	201+	BEAVERCREEK TWN	71700512	$ 24.00 –	
SSS	DP&L	183+50	BEAVERCREEK TWN	71700522	$ 15.00 –	
TTT	DP&L	184+	BEAVERCREEK TWN	71700702	$ 100.00	
VVV	DP&L	296+	BEAVERCREEK TWN	71701202	$ 100.00	
WWW	DP&L	252+50	BEAVERCREEK TWN	71700832	$ 21.00 –	
XXX	DP&L	202+20	BEAVERCREEK TWN	71700852	$ 19.00 –	
BBBB	DP&L	280+10	BEAVERCREEK TWN	71701232	$ 100.00	
CCCC	DP&L	280+50	BEAVERCREEK TWN	71701242	$ 100.00	

GREENE COUNTY SURVEYOR'S RECORD No. 24, PAGE 115



CREEKSIDE TRAIL
(N-CONNECTOR PROJECT)
SHARED-USE PATH

DP&L EASEMENT



SURVEYED BY:

Reg. Surveyor No. _____

APPROVED
Greene County Engineer

By _____ Date _____

ZONING _____

APPROVED BY:

COSLER ENGINEERING
1979 FAIRGROUND ROAD
BEAVERCREEK, OHIO 45386

GRANTOR Consolidated Rail Corp.

GRANTEE _____

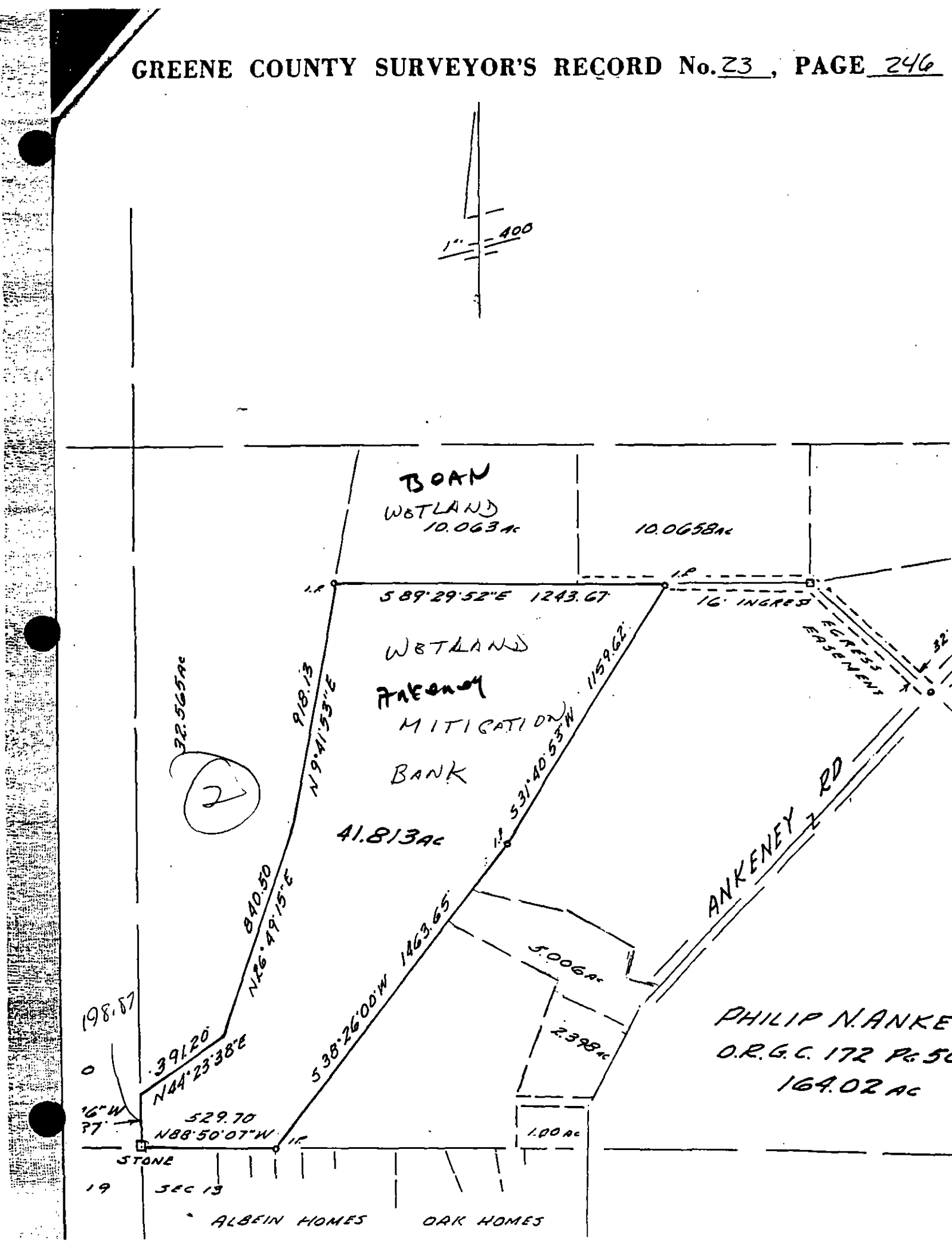
LOCATION:

Section _____, Town _____, Range _____

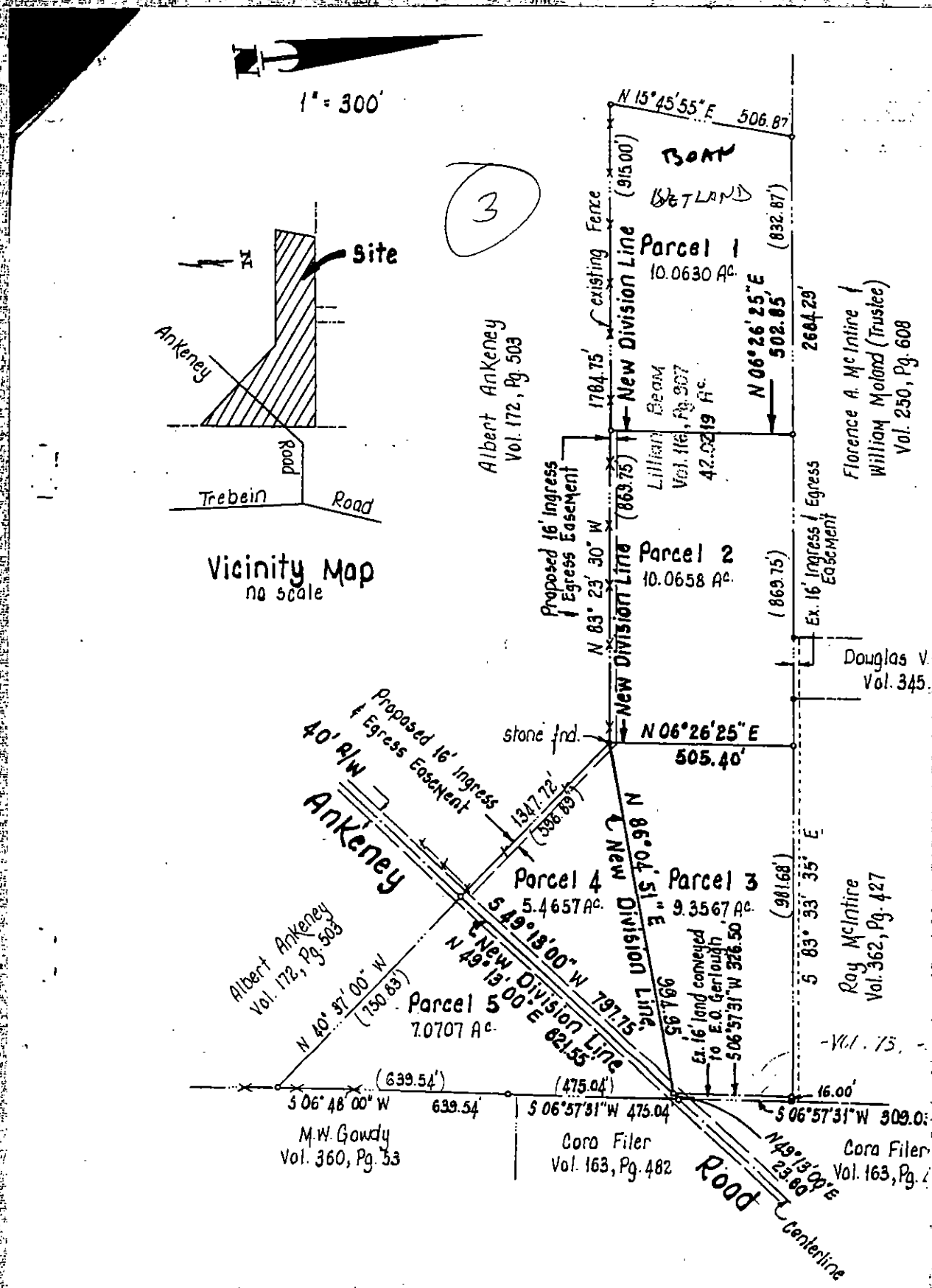
or Survey No. _____

_____ TOWNSHIP

GREENE COUNTY, OHIO


1" = 400
BOAN
WETLAND
10.063Ac
10.065Bac
I.P.
I.P.
S 89°29'52"E 1243.67'
16' INGRESS
EGRESS EASEMENT
32'
WETLAND
Takeney
MITIGATION
BANK
41.813Ac
32.565Ac
2
918.13'
N9°41'53"E
S 31°40'53"W 1159.62'
840.50'
N26°49'15"E
ANKENEY RD
5.006Ac
2.398Ac
1.00Ac
S 38°26'00"W 1463.65'
198.87'
391.20'
N44°23'38"E
16"W
37'
529.70'
N88°50'07"W
I.P.
STONE
19
SEC 13
ALBEIN HOMES
OAK HOMES
PHILIP N. ANKE
O.R.G.C. 172 Pg. 5
164.02 Ac

TOWER
Ankeney
TRACT 10
MYTIGATION
41.813 AC
BIG BOAVER
EGRESS EASEMENT
ANKENEY RD
PHILIP N ANKENEY
O.R.G.C. 172 P. 503
164.02 AC
ROTARY PARK
(2) SOFTBALL FIELDS
(4) SOFTBALL FIELDS
(3) SOCCER FIELDS
(2) SOFTBALL FIELDS
RESTROOM CONCESSION BLDG.
PLAY AREA
GROUP SHELTER
OPEN PLAY
Cemetery
ROTARY PARK
master plan
CENTRAL BEAVERCREEK COMMUNITY PARK
County Recreation
& Park Dep
outline wetland
1" = 400'
3-7-80
N
PLUS CONTROL



ZONING [illegible] to BZA Variance approved [illegible] 419 on 7/20/88.

APPROVED
Greene County Engineer
By [illegible] Date 7/26/88

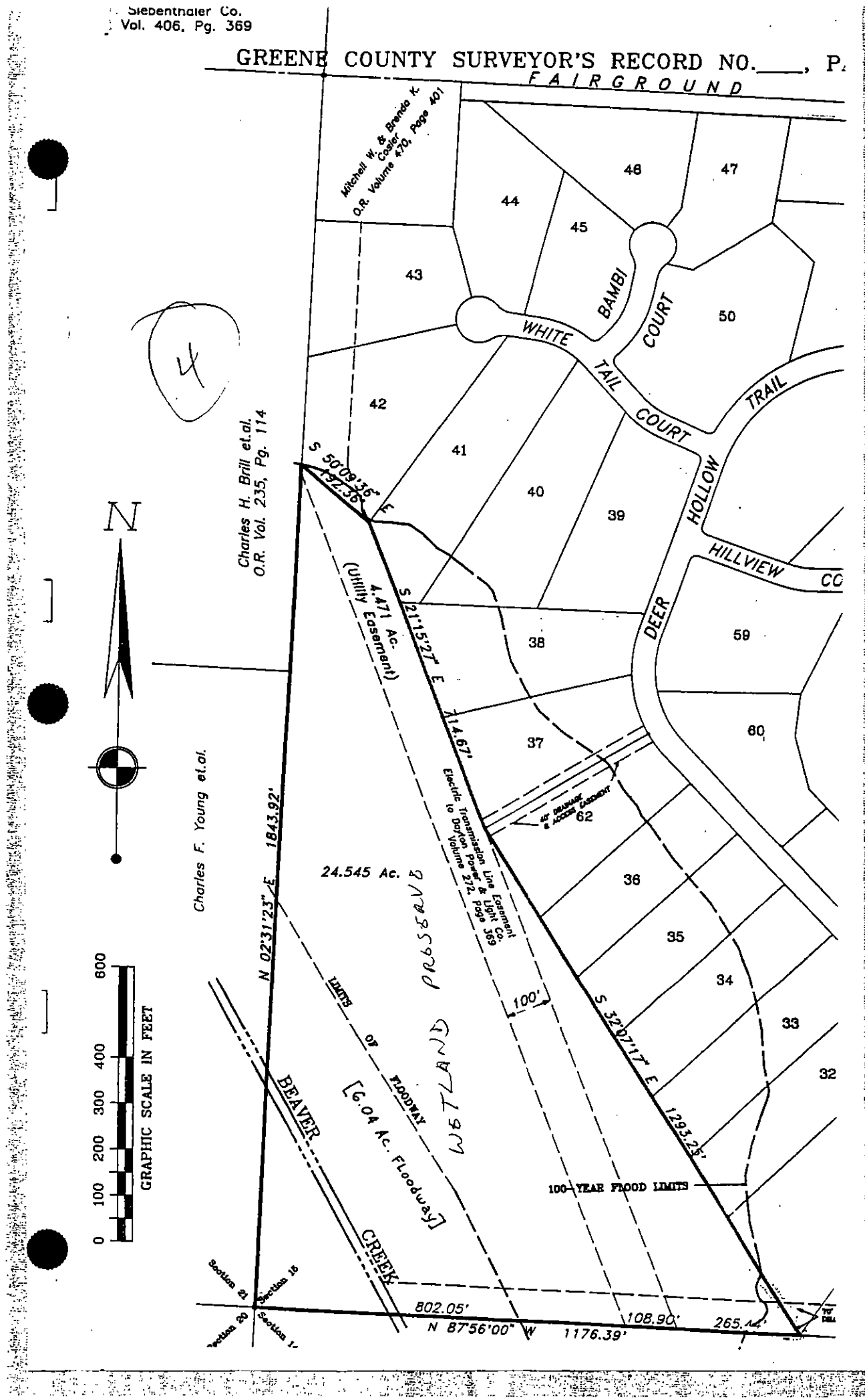
SURVEYED BY: George E. Reinke

STATE OF OHIO
GEORGE EDWARD REINKE

GRANTOR
GRANTEE
LOCATION:
Section 14

Siebenthaler Co.
Vol. 406, Pg. 369

GREENE COUNTY SURVEYOR'S RECORD NO.___, P.



panterra CORP
Earth and Water Resource Solutions

CORPORATE OFFICE
4752 FISHBURG RD. DAYTON, OH 45424
(937) 237-7050, (937)237-0162 FAX

410 WEST OAK ST. ZIONSVILLE, IN 46077
(317) 733-8385, (317) 733-8387 FAX

fax transmittal

date: November 2, 1999

to: Ms. Diane Hoeting

at: BHE Environmental, Inc.

fax: (513) 326 - 1178

project:

subject: Map of Greene County Wells and Wellhead Protection Area
for your: Information

copies	date	description

notes: Ms. Hoeting –

I hope the attached map meets your needs. I have darkened the Little Miami River for your reference. I believe the wellfield you are interested in is the Valley Springs Wellfield. Wells PW-08 and PW-09 are existing wells; well PW-10 is planned for the near future.

Concerning the wellhead protection area, I believe the County has expressed an interest in defining their wellhead protection area based on the 15-year time-of-travel boundary.

Please feel free to call me if you have any questions or comments.

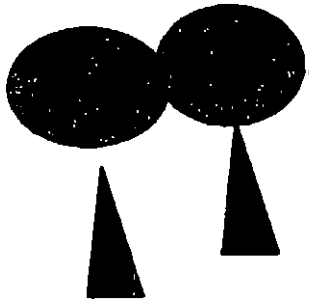
from: Bob Curley

cc:

pages including this one: 2

Transmitted from (937) 237-0162. If any portion of this fax is unreadable, please call (937) 237-7050

1" = 2000'
N
15-Year
10-Year
5-Year
1-Year
Fairground
Beaver Creek
Beavercreek North Wellfield
NWN7
NWN1
NWN6
Beaver Valley
Ankeney Road
Trebein Road
Dayton-Xenia Road
Beaver Creek
NWS1
NWS2
Alpha Road
Bike Path
Hilltop Road
Beavercreek South Wellfield
Orchard Lane
Valley-Springs Wellfield
PW-08
PW-10
PW-09
U.S. Route 35
Factory Road
Alpha-Bellbrook Road
Little Miami River
Valley Road
Haines Road
Indian Ripple Road
Upper Bellbrook Road



Warren County Parks
Onlie Gulley, Director - 300 East Silver Street - Lebanon, Ohio - 513-933-1109
Franklin-Middletown Exch. 422-9191 Cincinnati Exch. 677-6109 Dayton Exch. 885-4041

11/23/99

BHE Environmental, Inc.
Diane Hoeting
11733 Chesterdale Road
Cincinnati, Ohio 45246

Dear Diane Hoeting,

In reviewing the Foster to Bath Electric Transmission line project, as of this date 11/23/99 the project does not cross or impact existing or planned Warren County Parks that we own or manage.

Sincerely,

Onlie M. Gulley
Park Director

OMG/mg

BOARD OF PARK COMMISSIONERS
Carl E. Oeder - William P. Schroeder - Richard Jones

Table of

Agricultural District Lands

Greene County

Greene Cty Ag. District Lands.

table1

"PARID","OWN1","ACRES"
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Table of

Agricultural District Lands

Warren County

MABP25 9/09/99 Warren County ACCOUNTS WITH AGRICULTURAL DISTRICT REGISTRATION DATE PAGE 1

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
6301894	37.4890	ABERLIN, BARBARA	2/27/97	SPURLING	7/15/82
7100027	5.0100	ABSHER, DANIEL R. & GARY	3/17/97	ABSHER	7/26/82
3600122	107.5000	ANDREWS, DONALD G & DEBO	1/21/99	ANDREWS	2/10/84
3600874	20.5300	ANDREWS, DONALD G. & DEBO		ANDREWS	3/28/96
0100692	95.5480	ANELLO, FRANK M., TRUSTEE	2/19/97	ANELLO	7/08/82
0900397	37.1790	BAILEY, WM. L. & AUDREY B		BAILEY	1/05/98
0800341	23.0030	BALL, ANGELINA MARY (AKA)	2/26/96	BALL	12/09/91
2600846	64.5300	BARNETT, ROBT. ET AL	3/19/97	BARNETT ET AL	7/14/82
3513564	6.0040	BEAMER, JIM A. & BARBARA		BEAMER	10/01/96
3514374	10.7400	BEAMER, JIM A. & BARBARA		BEAMER	10/01/96
3514536	30.7570	BEAMER, JIM A. & BARBARA		BEAMER	10/01/96
3512223	10.0000	BEAMER, JIM A.& BARBARA J		BEAMER	10/01/96
4800541	55.6000	BERGER, DANIEL J. & SUSAN	4/30/97	CLARK	7/19/82
6500064	97.1000	BIEHLE, CHRIS HENRY & BRE	1/16/98	BIEHLE	7/21/83
2700077	12.6100	BIGGS. GARY EUGENE & PHYL	2/20/97	BIGGS	7/23/82
2606968	207.8690	BIGGS, GARY & PHYLLIS A	2/01/96	BIGGS	10/31/91
2601338	24.0000	BIGGS, GARY & PHYLLIS ANN	2/01/96	BIGGS	7/23/82
2608961	59.3710	BIGGS, GARY E.& PHYLLIS A	2/01/96	BIGGS	10/31/91
2700069	2.0000	BIGGS, GARY EUGENE & PHYL	2/20/97	BIGGS	7/23/82
1617206	33.0100	BISHOP, DONALD & JOYCE	1/12/98	REED	5/25/83
7606125	33.4220	BOWMAN, ALAN DALE & PAMEL	7/11/97	GRILL	7/13/82
0102155	116.9699	BRADSTREET FAMILY LTD.PAR	4/21/97	BRADSTREET, NEMA (ESTATE)	7/19/82
7200498	53.7600	BRANSTRATOR, JON V. & DOL		BRANSTRATOR	11/25/96
4805682	30.0000	BUERGERMEIER, DANIEL J. &	2/19/97	BUERGERMEIER	8/04/82
3514994	68.0480	BURWINKEL, ANTHONY L. &	2/19/99	BURWINKEL	8/23/94
4800354	16.7000	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82
4800362	.9800	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
4800371	.9990	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82
4800389	1.5700	CAYOT, DALE L. & JANE E.	2/19/97	CAYOT	8/04/82
0300055	1.0440	CLARK, MICHAEL A.& PEGGY	3/13/97	CLARK	4/14/92
0300063	25.4710	CLARK, MICHAEL A.& PEGGY	3/13/97	CLARK	4/14/92
0113182	91.4150	CLOVER HILL FARM, LTD	4/07/97	NIXON	7/21/82
0202738	29.2030	CLOVER HILL FARM, LTD		CLOVER HILL	10/28/98
0300471	50.0000	CLOVER HILL FARM, LTD	4/07/97	NIXON	7/21/82
5303516	92.7800	CLOVER HILL FARM, LTD	1/11/99	SCHIFF	9/21/94
5307121	21.4170	CLOVER HILL FARM, LTD	1/11/99	SCHIFF	9/21/94
5314364	41.0000	CONLEY, CHARLES M.	2/05/96	MEYER/ARMSTRONG	6/30/86
0103403	5.0000	CRAIG, PHILIP W.	1/31/96	CRAIG	4/22/91
0103411	5.0000	CRAIG, PHILIP W.	1/31/96	CRAIG	4/22/91
2614324	29.2000	CREEDON, MARY JO	4/16/97	ROSS	7/20/82
1407198	60.3328	DARRAGH, PHYLLIS M.	1/14/98	DARRAGH	3/24/88
7203586	105.3900	DAWKINS, BEATRICE H. &		SOWDER	4/25/96
1617133	69.5780	DAY, DEXTER & SHIRLEY		DAY	4/05/96
5302919	109.4500	DE CLARK, CANDICE R., TRU	4/07/97	TEPE	8/15/82
1407767	67.2190	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2125315	41.8010	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2125331	35.0130	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2125358	93.2280	DE HART, EUGENE & LINDA L	1/12/98	DE HART	1/13/83
2109662	6.2990	DE HART, EUGENE &LINDA LO	1/12/98	DE HART	1/13/83
0104604	30.6380	DIGIROLAMO, PASQUALE &	3/04/97	DIGIROLAMO	8/10/82
4300599	21.7700	ELLINGTON, CAROLYN L., TR	3/05/97	ELLINGTON	8/17/32
0902667	100.8890	ELLIOTT, VIRGIE & NOLIN D	1/12/98	ELLIOTT	3/14/88
7604947	28.0800	FINLEY, ROBERT KENT, JR.	3/19/97	FINLEY	8/20/82
7604955	130.8780	FINLEY, ROBERT KENT, JR.	3/19/97	FINLEY	8/20/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
0105686	9.5410	FISHMAN, JACQUELINE	2/18/97	FISHMAN	7/15/82
0105694	24.7030	FISHMAN, JACQUELINE	2/18/97	FISHMAN	7/15/82
3507106	80.3800	FLANNERY, VERNON H., TRUS	3/04/97	PLUMMER ET AL	8/18/82
2623234	42.0000	FOSTER, THOMAS B. JR. & A	2/19/97	FOSTER	8/04/82
4301331	132.7500	FRYE, DON R. & RICHARD B.	2/05/97	FRYE	7/12/82
4301323	109.0000	FRYE, DON R.+RICHARD B.	2/05/97	FRYE	7/12/82
7201427	100.0000	FRYE, GILBERT S. ET AL	2/05/97	FRYE ET AL	7/12/82
7201435	114.7200	FRYE, GILBERT S. ET AL	2/05/97	FRYE ET AL	7/12/82
7605323	42.9400	FRYE, RICHARD B. & DON R.	2/05/97	FRYE	6/29/82
7605331	194.2270	FRYE, RICHARD B. & DON R.	2/05/97	FRYE	6/29/82
7203276	71.6100	GEORGE, PHILIP J & NELLIE		GEORGE	4/25/96
0802743	100.0440	GILBERT, WM L & FRANCES H		GILBERT	7/02/98
7621175	23.7380	GOBRAIL, MAKRAM & BARBARA	3/24/97	GOBRAIL	12/29/87
3506797	4.5850	GOODWIN, BRUCE D. & CAROL	2/28/97	MUELLER	7/09/82
3506801	65.5508	GOODWIN, BRUCE D. & CAROL	2/28/97	MUELLER	7/09/82
5313694	381.1361	GROH, GEORGE A. & BARBARA		GROH	2/05/97
1604414	60.8710	HAMLIN, RAY D. ET AL	4/07/97	HAMLIN	8/04/82
1604422	13.6960	HAMLIN, RAY DICKEY ET AL:	4/07/97	HAMLIN	8/11/82
7101376	18.0000	HANAGHAN, DENNIS M. & PAT	2/21/97	LAUTERBACH ET AL	7/19/82
7202261	234.5800	HANAGHAN, DENNIS M. & PAT	2/21/97	LAUTERBACH ET AL	7/19/82
3504085	31.5080	HARPER, DOLORES F.	2/19/97	HARPER	8/04/82
5308241	10.7590	HENRY, STEVEN G. & KATHLE	1/09/98	HENRY	9/08/93
6135714	1.0220	HENRY, STEVEN G. & KATHLE	1/09/98	HENRY	9/14/93
6602291	49.8800	HILL, VERNON K. & CLARINE	2/18/97	HILL	7/12/82
1413139	40.7600	HORST, MARY DINUS ET AL:	4/11/97	HORST	11/05/87
1700448	12.0000	HORST, MARY DINUS ET AL:	4/11/97	HORST	11/05/97
0803341	16.5820	HOWARD, DOWELL JENNINGS +		HOWARD	2/25/98

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
3502783	32.9910	J & D CO.	1/12/98	EL JIROTO	1/14/83
3502791	42.0000	J & D CO.	1/12/98	EL JIROTO	1/14/83
3502805	43.0000	J & D CO.	1/12/98	EL JIROTO	1/14/83
3502813	100.0000	J & D CO.	1/12/98	EL JIROTO	1/14/83
3504867	262.5650	JACKSON, HARRIETTE L.	2/19/97	JACKSON	8/24/82
5319871	21.4350	JAMESON, WILLIAM C. & REE	1/13/98	JAMESON	2/02/83
5319889	106.6600	JAMESON, WILLIAM C. & REE	1/13/98	JAMESON	2/02/83
5319897	1.3900	JAMESON, WILLIAM C. & REE	1/13/98	JAMESON	2/02/83
5314046	36.4600	JONES, JAMES A. & CAROLYN	2/19/97	CLARK (TRUSTEE)	7/19/82
7618662	18.0440	JONES, RODNEY B. & DEBRA		JONES	5/30/95
5305799	30.0000	KERSEY, DAWN B.	3/12/97	KERSEY	7/15/82
5305811	45.3600	KERSEY, DAWN B.	3/12/97	KERSEY	7/15/82
0724734	13.6300	KLEATHER, ROBERT J. ET AL	3/16/97	SNIDER	7/20/82
0724742	30.3200	KLEATHER, ROBERT J. ET AL	3/16/97	SNIDER	7/20/82
0109771	50.0330	LAING, ROBERT S.JR. ET AL	2/27/97	LAING ET AL	8/12/82
7605307	102.6720	LEBANON CITIZENS NAT'L BA	2/05/97	FRYE, GILBERT	6/29/82
7605315	80.1420	LEBANON CITIZENS NAT'L BA	2/05/97	FRYE, GILBERT	6/29/82
7601808	78.0120	LEBANON CITIZENS NATIONAL	2/05/97	FRYE, BETTY	7/12/82
0110434	1.3920	LEISZ, CHARLES E., TRUSTE	4/11/97	LEISZ	7/28/82
0110442	109.5970	LEISZ, CHARLES E., TRUSTE	4/11/97	LEISZ	7/28/82
2610191	59.2500	LEWIS, DORIS EMILIE	2/18/97	LEWIS	7/19/82
2610698	18.8520	LEWIS, DORIS M. & PROV.	2/18/97	LEWIS	7/19/82
2610701	139.4200	LEWIS, DORIS M. & PROV.	2/18/97	LEWIS	7/19/82
2630035	4.1391	LEWIS, DORIS M. & PROV.	2/18/97	LEWIS	7/19/82
2610221	86.5000	LEWIS, MARK	2/25/97	LEWIS	2/18/92
2610213	99.1510	LEWIS, ROBERT T.	2/25/97	LEWIS	2/18/92
2615657	21.8260	LEWIS, ROBERT TIMOTHY ET	2/25/97	LEWIS	2/18/92

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
1608398	38.5100	LIBECAP, JORITA	1/12/98	REED	5/25/83
3505677	45.2690	LIGHT, CLAUDE M. & LAVON	3/11/97	LIGHT	9/27/82
3505685	73.7880	LIGHT, CLAUDE M. & LAVON	3/11/97	LIGHT	9/27/82
2601796	146.0000	LITTLE BIG FOOT FARMS *	2/19/97	BOWLING	8/04/82
2601826	100.0000	LITTLE BIG FOOT FARMS *	2/19/97	BOWLING	8/04/82
3506282	122.0300	LOGAN, FRANCIS M. & DOLOR	4/08/97	MEINEKE	7/21/82
3700968	72.0004	LONG, PAUL BURDETTE & **	2/20/97	LONG	7/08/82
3700941	33.3240	LONG, PAUL BURDETTE ET AL	2/20/97	LONG	7/08/82
3703215	5.4330	LONG, PAUL BURDETTE ET AL	2/20/97	LONG	7/08/82
0804908	41.2059	LOSH FAMILY LIMITED PARTN		LOSH FAMILY	2/23/99
0820211	12.4490	LOSH, GRACE M. TRUSTEE		LOSH	2/23/99
5306281	10.3500	LUTMER, JAMES & SHIRLEY	3/08/99	LUTMER	11/30/94
5330337	2.1390	LUTMER, JAMES A & SHIRLEY	3/08/99	LUTMER	11/30/94
5307015	20.7000	LUTMER, THOMAS A. TRUSTEE	2/09/99	LUTMER	9/23/94
5307023	50.0000	LUTMER, THOMAS A. TRUSTEE	2/09/99	LUTMER	9/23/94
0806412	6.4870	MASON MISSION PRESBYTERIA	2/19/97	ROGERS	7/19/82
3506274	121.6300	MAULL, CHARLES C. III & *	2/18/97	MAULL	7/27/82
3505987	40.3300	MC GHEE, LILLIAN J. TRUST	2/24/97	MC GHEE	7/19/82
3505995	25.2500	MC GHEE, LILLIAN J., TRUS	2/24/97	MC GHEE	7/19/82
3506002	5.7300	MC GHEE, LILLIAN J., TRUS	2/24/97	MC GHEE	7/19/82
5307538	139.6200	MC KINNEY, RAYMOND F.& GE	2/24/97	MC KINNEY	8/17/82
2611031	79.4345	MEGIE-ROOKS, HELEN JO, TR	3/19/97	MEGIE	10/29/82
7900082	21.3060	METZ, BERNICE L.	2/19/97	METZ	8/11/82
5308062	45.0000	MEYER, BRUCE E. & JANE	2/05/96	MEYER	6/30/86
7610408	101.0700	MICHENER, DWIGHT A. TRUST		MICHENER	9/19/86
0300071	.5410	MIKE FARM ENTERPRISES INC	3/13/97	MIKE FARM ENT.	4/14/82
0300101	28.8990	MIKE FARM ENTERPRISES INC	3/13/97	MIKE FARM ENT.	4/14/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
0300837	70.9440	MIKE FARM ENTERPRISES INC	3/13/97	MIKE FARM ENT.	4/14/82
0117579	.5000	MIKE FARM ENTERPRISES, IN		MIKE FARM ENTERPRISES	5/19/98
0300764	70.8180	MIKE FARM ENTERPRISES, IN		MIKE FARM ENTERPRISES	5/19/98
0310751	48.4910	MIKE FARM ENTERPRISES, IN		MIKE FARM ENTER.	3/13/97
0300756	49.4600	MIKE FARM ENTERPRISES,INC	3/13/97	HOAK	2/13/84
0104868	50.0000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111902	.9900	MILLER, RUTH I. & MILLER,	3/30/92	MILLER	12/14/82
0111911	7.8810	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111945	54.6000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111953	55.9500	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111961	93.1300	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111988	103.2800	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0111996	106.6000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0129364	6.8430	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0201138	43.0000	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0201146	59.9370	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
7621248	233.8330	MILLER, RUTH I. & MILLER,	2/19/97	MILLER	12/14/82
0112119	11.0000	MILLS, RALPH R. & GUILDA	4/10/97	MILLS	7/20/82
0112127	29.2500	MILLS, RALPH R. & GUILDA	4/10/97	MILLS	7/20/82
0112135	99.1300	MILLS, RALPH R. & GUILDA	4/10/97	MILLS	7/20/82
1423118	121.2590	MONTGOMERY, HAROLD E.,TRU	2/05/97	ROBISON	7/15/82
1423088	58.7890	MONTGOMERY, RICHARD H., T	2/20/97	MONTGOMERY	7/15/82
1423096	22.1100	MONTGOMERY, RICHARD H., T	2/20/97	MONTGOMERY	7/15/82
0113271	.5000	MONTGOMERY, ROBERT E. &	3/03/97	MONTGOMERY	7/15/82
0113298	13.4070	MONTGOMERY, ROBERT E. &	3/03/97	MONTGOMERY	7/15/82
0113301	60.1900	MONTGOMERY, ROBERT E. &	3/03/97	MONTGOMERY	7/15/82
5308674	90.0000	MULFORD, HEWETT P. JR. ET	1/13/98	MULFORD ET AL	9/30/98

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
5308704	38.4220	MULFORD, HEWETT P. JR. ET	1/13/98	MULFORD ET AL	9/30/88
5308658	24.7500	MULFORD, MARION R ET AL	1/13/98	MULFORD	9/30/88
5308666	57.9300	MULFORD, MARION R ET AL	1/13/98	MULFORD	9/30/88
3700682	4.3530	NATIONAL BANK & TRUST COM	2/20/97	LONG	7/08/82
3700976	62.9300	NATIONAL BANK & TRUST COM	2/20/97	LONG	7/08/82
3700984	105.9140	NATIONAL BANK & TRUST COM	2/20/97	LONG	7/08/82
3703053	1.0000	NATIONAL BANK & TRUST COM	2/20/97	LONG	7/08/82
3703614	29.6880	NATIONAL BANK & TRUST COM	2/20/97	LONG	7/08/82
4807499	37.6450	OREN, HERBERT & JUNE	2/21/97	OREN	9/13/82
4301455	116.0000	OSBORN, NELLIE D.	3/04/97	OSBORN	8/30/82
5301343	51.4200	PAIGE,DONALD LEE & MARTHA	2/19/97	SHRODER	7/15/82
0310469	31.9140	PETERS, KENNETH & JEANNIN	1/23/98	PETERS	2/12/93
0310760	17.6230	PETERS, KENNETH D. & JEAN	1/23/98	PETERS	2/12/93
1421743	98.6900	PURSLEY, HATTIE J.	2/21/97	PURSLEY	8/27/82
1421735	74.7100	PURSLEY, HATTIE JANE AKA	2/21/97	PURSLEY	8/27/82
1421875	116.2574	RALSTON, BETTY		RALSTON	6/24/96
5310288	84.0960	RALSTON, BETTY B.		RALSTON	3/05/96
1406876	51.3760	RAYMOND, MARY ANN		RAYMOND	3/05/96
5310261	47.7510	RAYMOND, RANDALL GRANT &		RAYMOND	3/05/96
0105198	67.0850	RHODEHAMEL, DONALD E. & H	2/20/97	EMLEY	12/23/82
0129399	47.7490	RHODEHAMEL, DONALD E. & H	2/20/97	EMLEY	12/23/82
0203726	56.9040	RHUDE, V. ELOISE	2/24/97	RHUDE	10/08/82
0210331	40.4220	RHUDE, V. ELOISE	2/24/97	RHUDE	10/08/82
7612184	53.9070	RICH, JAMES E.& JOHN B.(P	2/21/97	RICH ET AL	7/07/82
7612192	72.5000	RICH, JAMES E.& JOHN B.(P	2/21/97	RICH ET AL	7/07/82
7612206	99.3200	RICH, JAMES E.& JOHN B.(P	2/21/97	RICH ET AL	7/07/82
4301617	88.0520	RICH, JOHANNA L.	2/18/97	CIRCLE "R" INC.	9/02/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
4300254	163.6700	RICH, RAYMND L. & NELLIE	2/20/97	RICH	8/06/32
4303962	5.0010	RITTINGER, PAMELA L.	2/18/97	CIRCLE "R" INC.	9/02/32
0806323	145.4100	ROBERTS, RUFUS & MARY M.	9/18/98	ROBERTS	9/18/98
4808673	141.5300	ROHRER, RICHARD G.	2/21/97	ROHRER	8/13/32
1608843	34.2960	ROWLAND, JAMES F. & SUSIE	3/31/97	ROWLAND	7/26/32
7612583	25.0000	RYE, CHARLES L. & DOROTHE		RYE	2/03/97
7612591	90.0000	RYE, CHARLES L. & DOROTHE		RYE	2/03/97
7612605	20.4910	RYE, CHARLES L. & DOROTHE		RYE	2/03/97
0300021	102.5370	SANTAROMITA, GREGORY & AN	2/19/98	BACK	4/13/98
7600917	1.7070	SANTAROMITA, GREGORY & AN	2/19/98	BACK	4/13/98
1608983	97.1600	SAUTER, HENRY W.	1/20/99	SAUTER	2/15/34
1608941	105.3720	SAUTER, WILLIAM & JANET M	1/12/99	SAUTER	2/15/34
7207220	100.3410	SCHAEFER, PAUL R. ET AL	1/11/99	SCHAEFER ET AL	3/25/34
3504417	14.8200	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/32
3506088	17.7000	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/32
3507149	64.1850	SCHOELLMAN, STEPHEN WAYNE		SCHOELLMAN	2/20/97
3507858	5.0200	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/32
3507866	85.5940	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/32
3507874	131.7100	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/32
3513696	32.8220	SCHOELLMAN, STEPHEN WAYNE	2/20/97	SCHOELLMAN, CARL	8/04/32
3509354	42.3380	SCHOELLMAN'S DAIRY FARM		WALTER/SCHOELLMAN	2/20/97
4301749	67.8450	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
4301757	98.2000	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
4301765	31.7000	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
7203373	.6300	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
7203411	77.2700	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34
7203438	144.1300	SETTLEMYRE FARMS, INC.	1/11/99	SETTLEMYRE FARMS	3/25/34

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
7102429	81.1100	SEXTON, PAUL AKA: SHELBY	3/12/97	SEXTON	7/22/82
4801822	5.0000	SHARPE, JENE & CASA LOMA	2/19/97	SHARPE	8/05/82
4808576	5.0000	SHARPE, JENE & CASA LOMA	2/19/97	SHARPE	8/05/82
4808584	43.1870	SHARPE, JENE & CASA LOMA	2/19/97	SHARPE	8/05/82
2900149	48.0000	SHAVER, RICHARD H. & WILH	1/11/99	SHAVER	7/19/84
2900157	1.0580	SHAVER, RICHARD H. & WILH	1/11/99	SHAVER	7/19/84
7613253	108.1660	SHINKLE, WILLIAM P. & PAT	2/18/97	SHINKLE	7/19/82
0804894	73.4697	SHULL-SCRUGGS FAMILY LIMI		SHULL-SCRUGGS	2/23/99
4300165	9.9730	SILVERBROOK FARMS (PARTN)	1/11/99	SILVERBROOK FARMS	3/25/94
7203446	.8600	SILVERBROOK FARMS PTN*P	1/11/99	SILVERBROOK FARMS	3/25/94
7203454	102.5000	SILVERBROOK FARMS PTN*P	1/11/99	SILVERBROOK FARMS	3/25/94
5301777	43.0300	SMITH, THOMAS G. & JOSEPH	4/04/97	SMITH	7/13/82
0910317	1.2620	SPEIDEL, JANE B. TRUSTEE	2/25/97	SPEIDEL	5/29/82
0910325	68.7960	SPEIDEL, JANE B. TRUSTEE	2/25/97	SPEIDEL	5/29/82
0930083	1.3154	SPEIDEL, JANE B. TRUSTEE*	2/25/97	SPEIDEL	5/29/82
3508587	18.4970	STEGEMOLLER, WILLIAM H. &	2/25/97	STEGEMOLLER	11/23/82
3508595	64.8100	STEGEMOLLER, WILLIAM H. &	2/25/97	STEGEMOLLER	11/23/82
3701638	110.8540	STEGEMOLLER, WILLIAM H. &	2/25/97	STEGEMOLLER	11/23/82
5302218	181.1300	STEINER, PAUL A. & ROSEMA		STEINER	2/04/97
2138285	48.7250	STEWART, JAMES A. ET AL:		STEWART	2/13/95
2138289	5.9320	STEWART, JAMES A. ET AL:		STEWART	2/13/95
7614268	30.0717	STILES, LARRY A. & SANDRA	2/24/97	STILES	7/13/82
3701689	25.9200	STILES, ROGER & LOUISE F.	1/14/98	STILES	3/15/83
3701697	27.8000	STILES, ROGER & LOUISE F.	1/14/98	STILES	3/15/83
4301251	14.9480	STINGLEY, CHARLES P.	3/04/97	LUKENS	7/15/82
4301269	34.2550	STINGLEY, CHARLES P.	3/04/97	LUKENS	7/15/82
4302265	12.0510	STINGLEY, CHARLES P.	3/04/97	W.C.B.P.C./LUKENS	7/15/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIAL DATE
4302273	23.4640	STINGLEY, CHARLES P.	3/04/97	W.C.B.P.C./LUKENS	7/15/82
2616319	22.6990	STOLL, ROBERT E. & SHIRLE	1/19/99	STOLL	4/13/94
5302676	57.5000	STRATTON, DAVID G. & NORM	1/15/98	STRATTON	1/14/83
5322421	9.0000	STRATTON, DAVID G. & NORM	1/15/98	STRATTON	1/14/83
1608975	79.4800	THACKER, VERNON CLAY & TW	1/11/99	SAUTER	2/15/84
0117757	124.7700	THOMA, DONALD C. & MARY M	3/05/97	THOMA	7/13/82
0139050	173.4980	THOMAS, MARY K.		THOMAS	12/31/98
3502767	4.8800	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502775	19.3360	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502821	68.6500	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502848	85.7400	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
3502872	109.1800	TOCO ENTERPRISES	1/09/98	EL JIROTO	1/14/83
5317746	100.7400	TRIPLE CREEK FARMS	2/03/98	TRIPLE CREEK FARMS	2/13/83
5303427	98.3800	ULRICH, MARILYN LEE & **	3/04/97	ULRICH	7/22/82
5303583	113.5000	VERBRYKE, HAZEL		VERBRYKE	9/25/95
7613229	129.7500	WAIKHOM, LTD.	2/28/97	WILSON	9/01/82
6300758	3.0800	WARNECK, MARJORIE A. & RO	2/21/97	BUSHELMAN	8/20/82
6300731	1.2900	WARNECKE, MARJORIE A. & R	2/21/97	BUSHELMAN	8/20/82
6300766	43.9000	WARNECKE, MARJORIE A. & R	2/21/97	BUSHELMAN	8/20/82
0110116	25.7190	WENTWORTH, JEFFREY R. ET	2/16/95	WENTWORTH	9/05/90
0137006	12.0000	WENTWORTH, JEFFREY R., TR	1/15/99	WENTWORTH	5/23/94
5315191	15.6130	WHITE, WANDA D		WHITE	2/15/96
5315204	45.9000	WHITE, WANDA D		WHITE	2/15/96
0119156	57.5710	WIGHT, ALLAN C.	1/22/98	WIGHT	10/11/88
7204213	119.0000	WILLIAMS, DENVER L. & VIR		WILLIAMS	7/23/96
7204205	77.0000	WILLIAMS, DENVER L. & VIR		WILLIAMS	7/23/96
7615965	45.0000	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/82

ACCOUNT	ACREAGE	CURRENT OWNER	RENEWAL DATE	ORIGINAL APPLICANT	INITIA_ DATE
7615973	28.1000	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/82
7615981	15.4400	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/82
7616007	36.5500	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/82
7616023	53.0000	WILSON FRIENDLY MAPLE *	2/28/97	WILSON, ROBT.	7/13/82
7616015	18.0900	WILSON FRIENDLY MAPLE*	2/28/97	WILSON, ROBT.	7/13/82
2618893	44.1700	WOODLEY, LESTER A. & CHRI	2/19/97	WOODLEY	8/05/82
0105279	43.0000	WOOLLARD, WILBUR L. JR &	4/04/97	WOOLLARD	9/27/82
2622157	49.6000	YERIAN, CAROL BURGESS	2/26/97	YERIAN & BURGESS	9/27/82
2612151	69.9300	ZFC, INC.	2/02/98	DEDER, ELVA	5/19/83
2612178	44.5067	ZFC, INC.	2/02/98	DEDER, ELVA	5/19/83
2612186	90.7073	ZFC, INC.	2/02/98	DEDER	5/19/83
TOTAL ACCOUNTS	281	TOTAL ACRES:	15878.5487		

Appendix B

Cultural Resource Agency Correspondence

Dr. David Snyder
Ohio Historic Preservation Office
567 East Hudson Street
Columbus, Ohio 43211-1030

January 28, 1999

Dear Dr. Snyder,

Enclosed is a copy of a Phase I Cultural Resource Management report by BHE Environmental, Inc. (BHE) of Cincinnati, for Dayton Power & Light (DP&L) of Dayton, Ohio. BHE's report covers areas potentially affected by DP&L's proposed construction work on replacement support structures for its new 345-KV transmission circuit, which will be located in DP&L's existing utilities corridor in Warren and Greene counties, Ohio. The report consists of explanations and recommendations concerning BHE's Phase I background research, initial fieldwork survey, and subsequent deep test excavations along DP&L's transmission line corridor.

Copies of the report have been submitted to DP&L, who will submit the report to the Ohio Power Siting Board.

Enclosed also are completed site forms for new sites found by BHE during its cultural resources survey of DP&L's transmission line, including four in Warren County (33WA730, 33WA731, 33WA732 and 33WA733) and one in Greene County (33GR1116).

Should you have any questions, please contact me (mail, e-mail, and phone provided below).

Yours Sincerely,

Mr. Jim Wilson
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, OH 45246
jwilson@bheenv.com
(513) 326-1500

cc: Mr. Philip Robertson, DP&L Engineering

From: Chris Bergman
To: Diane Hoeting, Eric Riekert, Ken Duerksen, Phil...
Date: Mon, Oct 4, 1999 11:50 AM
Subject: Conversations with P. Robertson and D. Snyder (OHPO)

10/04

Today I talked to Philip Robertson about the comments that Dave Snyder had on 09/27 2:45 pm about the CRM on DPL Foster-Bath. We covered the following points:

1) Dave Snyder said that he was concerned about cultural resource sites on these kinds of projects. He also stated that the OPSB appreciated close consultation with the OHPO.

2) Dave stated that BHE needed to find a way to report the results of the project scientifically given the small area examined at each location in the Phase I survey.

3) Dave stated that we needed to avoid equivocal statements about eligibility for any potentially significant sites we located. BHE needs to be careful how they describe the site vis a vis the limited area investigated. (This was in response to my comments that per previous discussion we were testing high probability locations only within the boundaries of the new pylon emplacements as specified by our client.)

4) Dave stated that our client will need to provide reasons as to why they must locate the pylon in a particular location. This was especially important if an archaeological site was involved.

5) The pros and cons of testing (particularly deep testing) must be considered. Will they be more damaging than simply emplacing the pylon? (DPL will provide BHE with an exact description of impact to potentially significant areas or site locations.)

6) Finally, Dave stated that a modified Phase II testing plan could be coordinated with the OHPO (given the small area of impact) if needed.

In my conversation with Phil I stated that only one (1) potentially significant cultural resource site was located during the survey.

Robertson, Philip

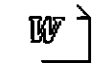
From: Robertson, Philip
Sent: Tuesday, October 12, 1999 4:09 PM
To: 'cbergman@bheenv.com'
Cc: 'DHoeting@bheenv.com'
Subject: FOSTER-BATH CULTURAL RESOURCE CONCERNS

October 12,1999

Chris,

The attached document is intended to address our recent discussions about the cultural resources concerns on the Foster-Bath Transmission Line Project. If you have any further questions or issues to discuss, please call.

Thanks,
Phil



FB Cultural Resources Concerns...

FOSTER-BATH 345KV TRANSMISSION LINE

CULTURAL RESOURCE CONCERNS

Five sites along the Foster-Bath line have been identified as areas with cultural resources concerns. Of primary interest is determining how much disturbance to the ground, and potentially to cultural resources, will occur during installation and operation of the line.

The new pole structures to be installed at these sites (identified by pole number) are described as follows:

Pole 1051: Single, 191 ft. pole
1 degree angle
8 ft. diameter by 37 ft. deep foundation
70 cubic yd. excavation/concrete
New pole 25 ft. north of existing tower

Pole 1136: Two, 140 ft. poles
19 degree angle
Two, 9.5 ft. diameter by 56.5 ft. deep foundations
150 cubic yd. excavation/concrete each, 300 cubic yd. total
New poles beside existing tower

Pole 1137: Single, 142 ft. pole
1 degree angle
7.5 ft. diameter by 41 ft. deep foundation
68 cubic yd. excavation/concrete
New pole 25 ft. north of existing tower

Pole 1139 Single, 150 ft. pole
Tangent
7 ft. diameter by 41 ft. deep foundation
60 cubic yd. excavation/concrete
New pole 30 ft. north of existing tower

Pole 1168: Two, 156 ft. poles
32 degree angle
One, 9.5 ft. diameter by 41 ft. deep foundation
One, 9.5 ft. diameter by 41.5 ft. deep foundation
225 cubic yd. total excavation/concrete
New poles beside existing tower

For each site, the surface area for about 40 feet around each pole/foundation location will be disturbed by construction equipment. The equipment used will include a drilling rig, a rubber wheeled crane, a track crawler crane, concrete trucks, a bulldozer, a backhoe, and

several material and pick-up trucks. Use of this equipment in general can be expected to disturb the topsoil down to perhaps 9 inches to a foot deep at each site and along the right of way to each site. Since all the noted sites and access locations are in present or past farm cultivation areas, the construction equipment is not expected to disturb the area more than typical farming operations already have.

At each pole/foundation location a circular shaft will be augured into the ground with the drilling rig. The foundations will be of the diameter and depths shown above for each site, and the amount of material excavated (in cubic yards) will be approximately as noted. The excavated material will be replaced by placing steel reinforcing and pouring concrete (of approximately the same volume as the excavated material) in the augured hole to form a foundation. Later the steel pole will be set on this foundation. The excavated soil/rock material will either be spread around the site or hauled off, whichever is determined to be in the best interest of the property owner and/or is most environmentally appropriate at each site. The final step in foundation installation will be to drive one or more ground rods ($5/8^{ths}$ inch diameter) into the soil adjacent to the concrete foundation. These ground rods will be connected to the steel poles by a copper wire placed in a narrow, two-foot deep trench between the ground rod and the pole foundation.

Also at each site, the existing tower will be removed. To remove a tower, the steel lattice above ground will be disassembled, and then a backhoe will dig around each leg location to a depth of three or four feet so the top part of each leg may be taken apart and removed. Once that is done the excavated soil will be replaced where each leg top section was removed.

All other work required at each site will be above grade and the only disturbance to the earth will be the equipment and people working on the surface as noted previously.

The steel poles and their reinforced concrete caisson foundations need to be located where they are identified to be on the drawings to achieve a sound engineering design and an economical line installation. The new poles have been located as close as reasonably possible (within safe construction and operating parameters) to existing towers to minimize new impacts to the area. Some minor variation (along the right of way up to 100-200 feet) of tangent and one-degree angle pole locations (#1051, #1137, #1139) can be made without major cost or design impacts to the line. Any such minor change in location of these structures would readily be done if this reduced the environmental impacts of the line. Relocation of angle structures (#1136, #1168) however, cannot be accomplished without adding greatly to the costs of construction, and this would also require obtaining new right of way that may or may not be available.

Elimination of poles from the identified flood plain areas does not appear practical due to the apparent extent of these flood plains. To remove #1051 from the flood plain could be done by redesigning structures for present pole locations #1050 and #1052 to be tall enough to span the line across the river valley. Resulting pole heights would be approximately 210 to 230 feet which makes them very expensive and also tall enough

that aircraft lighting would probably be required to comply with FAA regulations. Poles adjacent to #1050 and #1052 would also need to increase in height. The resulting modifications required to eliminate #1051 are roughly estimated to cost between $100,000 and $200,000.

To remove the other poles noted from the flood plain areas would require some type of relocation of the line to a new right of way and alignment. To do so would require a new design, obtaining new right of way if available, increased construction costs, and impacting the environment with the line in a new location where there presently is no line like exists on the present route. Additionally, the line must still cross the Little Miami River somewhere in the vicinity of the existing crossings, and finding a location where the structures could be located to span the flood plain at a new location poses the same problems noted above for structure #1051. Overall, removal of any or all of structures #1136, #1137, #1139 or #1168 from flood plains could result in additional costs of $200,000 to $3,000,000 which does not appear like a prudent or reasonable thing to do.

P. D. Robertson
10/12/99

From: Chris Bergman
To: Diane Hoeting
Date: Thu, Oct 14, 1999 3:29 PM
Subject: Contact report with Dave Snyder, OHPO, 10/14 1:50 pm

At the request of Phil Robertson of DP&L, Chris Bergman called Dave Snyder of the OHPO to discuss the problem of deep testing and potential Phase II testing at five pole replacement locations: 1051, 1136, 1137, 1139, and 1168. The locations all coincide with floodplain settings; in addition, a potentially significant prehistoric lithic scatter site was identified at location 1051.

Dave was informed of the project impacts using the narrative provided by Phil Robertson. After considering the impacts, Dave stated the following:

1) That the impacts were generally more than he expected, but his office wanted to facilitate the work of electric utility companies by not demanding too much in terms of a project's scope-of-work.

2) Dave further stated that he was concerned about the potential presence of buried landforms and prehistoric occupations on floodplains.

3) To address both of the above issues he suggested the following strategy:

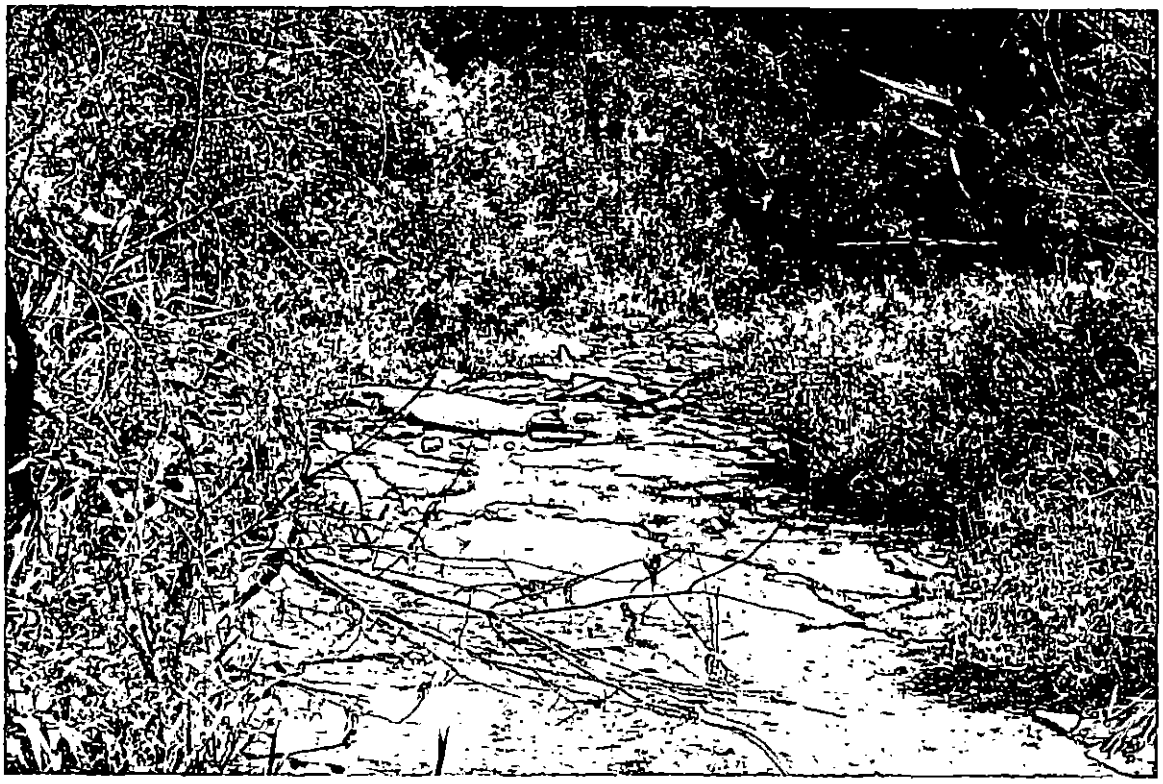
a) excavate a 1m x 1m unit to a depth of 2-3ft alongisde the tower and another at the pole replacement hole (or holes) location;
b) hand-screen a quadrant of sediment at each unit (0.25m2);
c) profile the walls and check for buried soil horizons; and
d) for pole replacement area 1051, Dave stated that additional intensive shovel testing would be needed to demonstrate that no surface deposits would be impacted by vehicular traffic.

Christopher Bergman, Ph.D., RPA
BHE Environmental, Inc.
11733 Chesterdale Road
Cincinnati, Ohio 45246

phone 513-326-1167 fax 513-326-1178
email: cbergman@bheenv.com

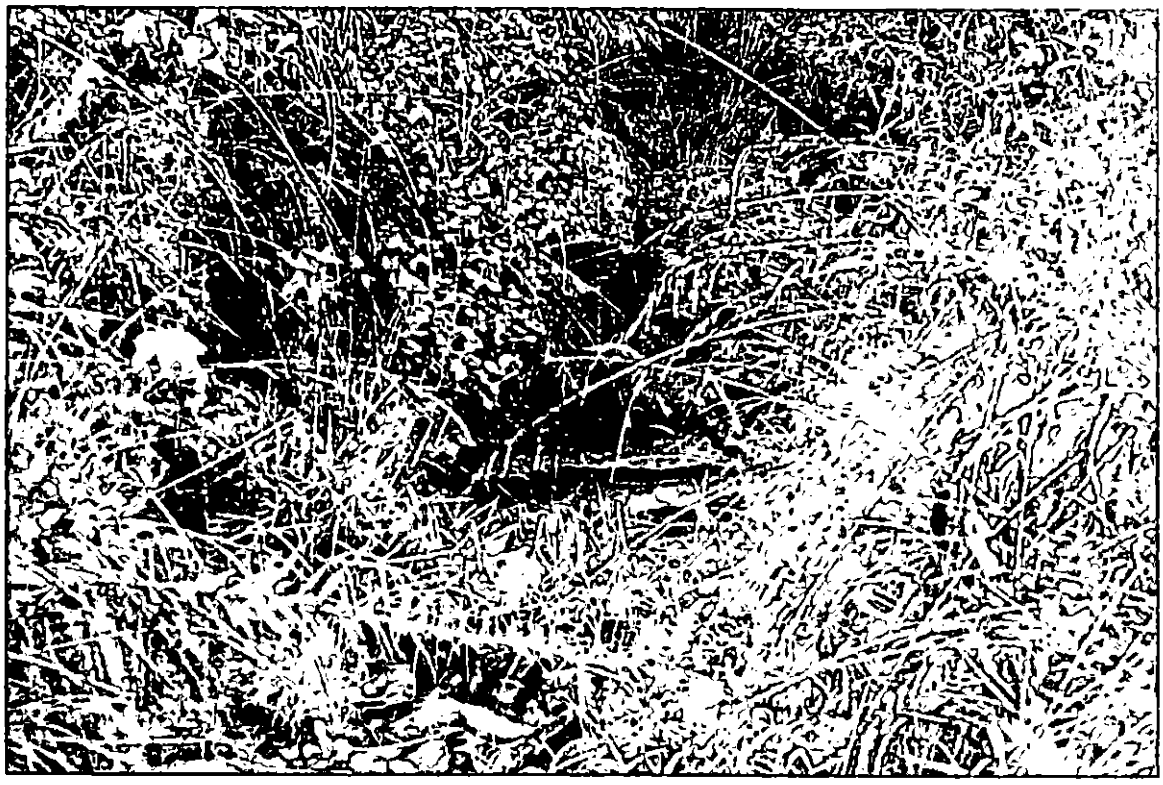
Appendix C

Stream Datasheets and Photographs



Photograph 1: Salt Run.

Photograph 2: Hen Run.



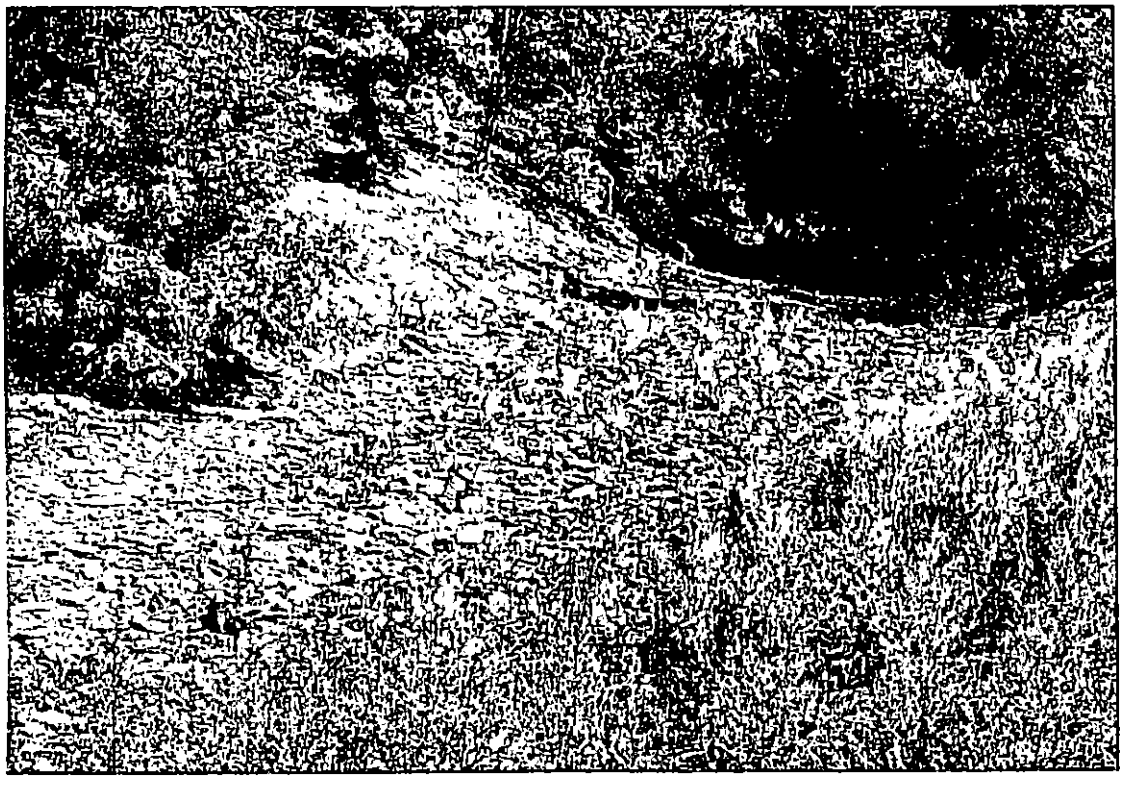
Photograph 3: Bigfoot Run.

Photograph 4: Grays Run.

Photograph 5: Little Miami River (second crossing).

Photograph 6: Olive Branch.

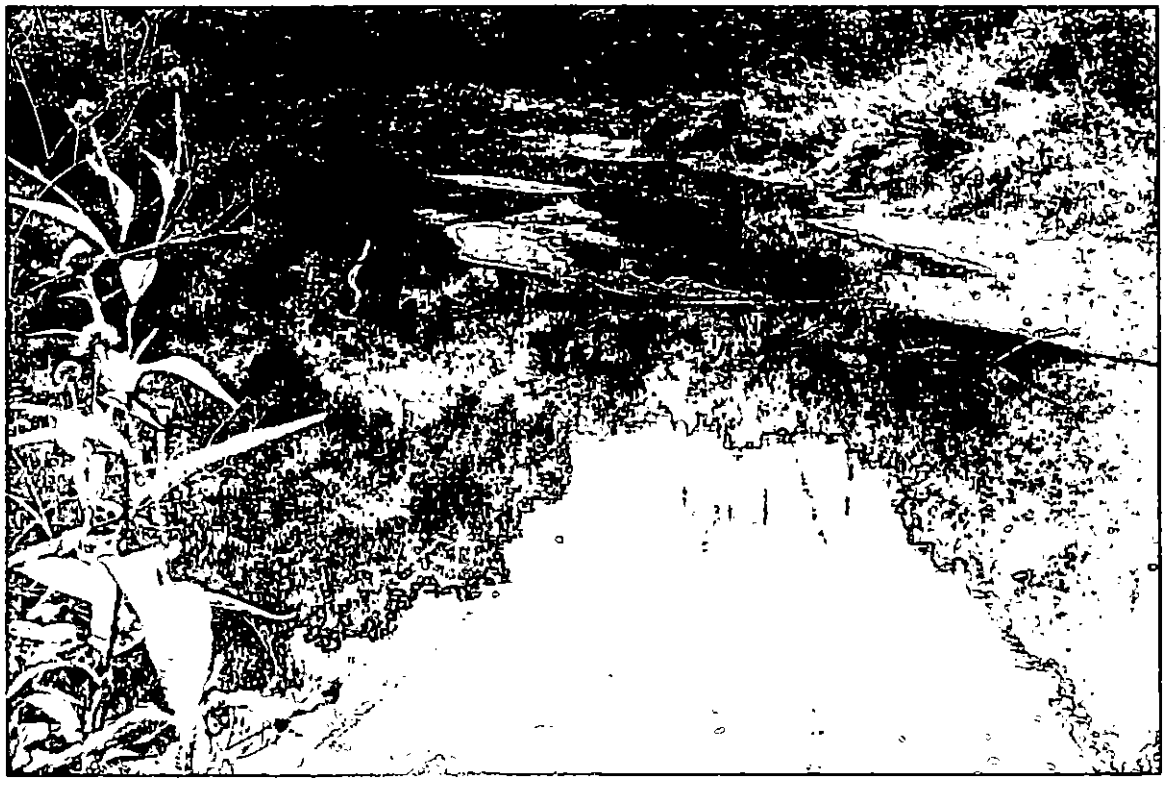
Photograph 7: Caesar Creek.



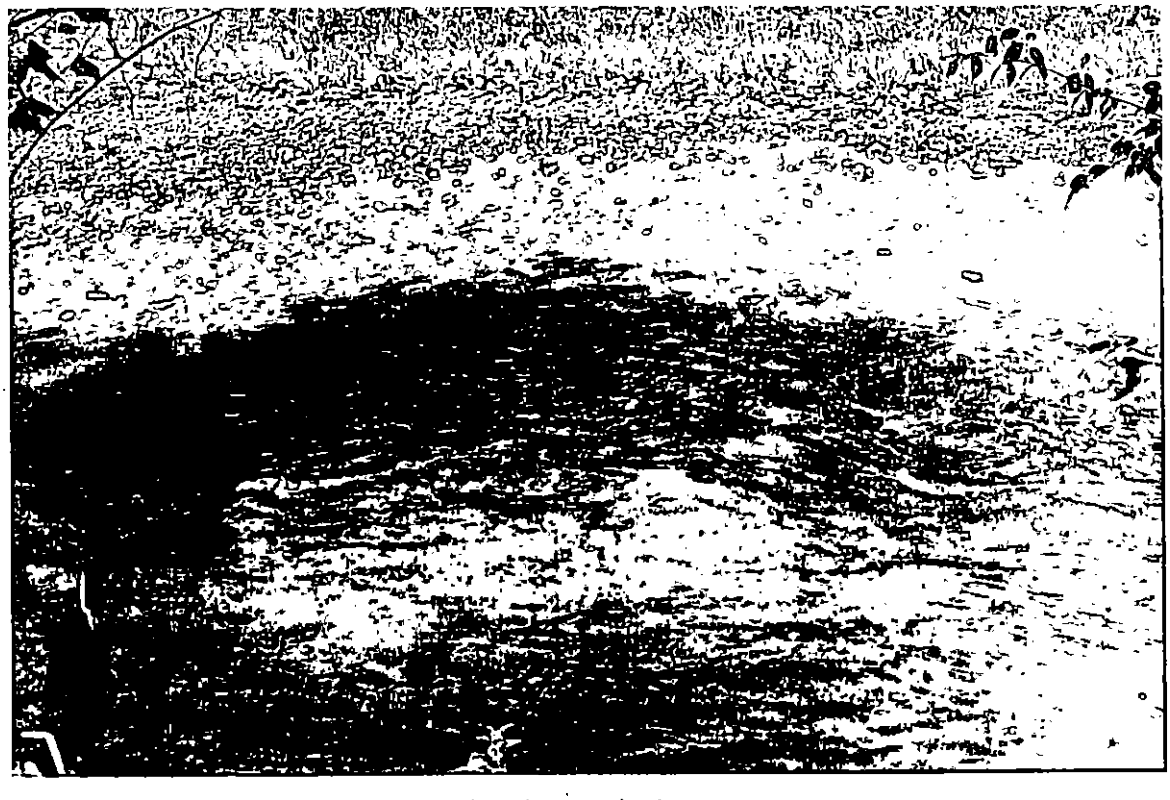
Photograph 8: Shaffers Run.

Photograph 9: Furnas Ditch.

Photograph 10: Little Miami River (third crossing).



Photograph 11: Little Miami River (third crossing).



Photograph 12: Little Miami River (fourth crossing).

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 1 Project #: 173.05 Date: 9-8-99

Project Name: DPL Foster-Bath Location: Warren Co.

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. Brewer / M. Little Photograph (Roll / #): 1-1

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Width of Water 3ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 Ft

Width of Riparian Zone N/A Left Bank _____ Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ___✓___ No ___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) Dry Run

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe Bank

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to ~~Riparian Zone~~ stream

Forest

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 2 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 1-2

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 15 Width of Water 10

Depth of Water 3" Range 0-6 Average

Depth of Channel 3ft

Width of Riparian Zone 20 South Left Bank 50 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles, _____ Glides, _____ Runs (ALMOST DRY RUN)

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

FOREST ALONG ONE SIDE / RIGHT OF WAY ALONG OTHER

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 3 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 40 ft Width of Water 3ft - DRY RUN

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone 20 Left Bank 20 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, _____ Limestone, ___✓___ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone FOREST

Describe Land Use Adjacent to Riparian Zone FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 4 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and~~/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-5

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft - DRY RUN

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 200 Left Bank 200 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, _____ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs ✓ DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

oldfield

Describe Land Use Adjacent to Riparian Zone

Forest to south, old field to north

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 5 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name~~ and/or (Tributary of): Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 1-7

I. Stream Flow:

____ perennial _✓_ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Width of Water 8

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock ____ Sandstone, _✓_ Limestone, ____ Shale,

____ Other ____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ____ No ✓ Don't Know

Additional Substrate Components ____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ____ Silt, ____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ____ Pools, ____ Riffles, ____ Glides, ____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes ____ No

If Yes, Describe BANK

Has the Stream been Channelized ? _____Yes _____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

NONE (DEEPLY CUT BANK)

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 6 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___✓___ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST ; SECONDARY GROWTH - MATURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

DRAINING NORTH DOWN MT.S

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 7 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-13

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST; SECONDARY GROWTH - MATURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 8 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-14

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3 ft

Depth of Water 1" Range 0 - 1" Average

Depth of Channel 20

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

_____ Gravel, _____ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs

DRY RUN EXCE FOR PUDDLE

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

NONE - STEEP BANK

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

FOREST

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 9 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-15

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe STEEP BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 10 Project #: 173.05 Date: 09-08-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-16

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 10 ft

Depth of Water 0 Range 0 Average

Depth of Channel 15

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 11 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN

~~Stream Name and~~/or Tributary of: Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-17

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 12 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of): Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-18

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 Width of Water 8 ft

Depth of Water 2" Range 0-2" Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank 50 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, _____ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles, (ALMOST DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / MEADOW

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 13 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-22

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 3 ft

Depth of Water 0 Range 0 Average

Depth of Channel 6

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

POWER LINE RIGHT OF WAY

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 14 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name ~~and/or Tributary~~ of: SALT RUN

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-23

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 15 ft

Depth of Water 1" Range 0-1" Average

Depth of Channel 6 ft

Width of Riparian Zone 25 Left Bank 50 Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ✓ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No ___Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____Gravel, _____Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

POWERLINE RIGHT OF WAY

Describe Land Use Adjacent to Riparian Zone

POWERLINE RIGHT OF WAY

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 15 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN

~~Stream Name and/or~~ Tributary of: Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 1-24

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 4 ft

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST AND POWERLINE RIGHT OF WAY

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 16 Project #: 173.05 Date: 09-09-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Hen Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-1

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 10 ft

Depth of Water 3" Range 0-6" Average

Depth of Channel 3ft

Width of Riparian Zone 100 Left Bank 100 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / PIPELINE RIGHT OF WAY

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 17 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-RATH Location: WARREN CO.

~~Stream Name~~ and/or (Tributary of): Hen Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-3

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft. Width of Water 8 ft

Depth of Water 3" Range 0-6" Average

Depth of Channel 2 ft

Width of Riparian Zone 20 ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 18 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Salt Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs — DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover _____ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 19 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-11

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3ft - 10ft

Depth of Water 0 Range 0 Average

Depth of Channel 1ft - 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANK SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___✓ Overhanging Vegetation, _____ Rootwads,

___✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 20 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO,

~~Stream Name and/or~~ (Tributary of): Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-12

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft

Depth of Water 0 Range 0 Average

Depth of Channel 1.5 ft

Width of Riparian Zone 30 ft Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs } DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / PASTURE

Describe Land Use Adjacent to Riparian Zone

PASTURE IN PIPELINE RIGHT OF WAY / FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 21 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of): Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-13

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 5 ft

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 0 Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD / PASTURE

Describe Land Use Adjacent to Riparian Zone

OLD FIELD SURROUNDED BY FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 22 Project #: 173.05 Date: 09-10-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-16

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 4 ft

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - VERY ERODED

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 23 Project #: 173.05 Date: 09-13-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Bigfoot Run

Field Crew: L.BREWER / M. LITTLE Photograph (Roll / #): 2-17

I. Stream Flow:

_____ perennial __✓__ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft

Depth of Water 0 Range 0 Average

Depth of Channel 2.5 ft

Width of Riparian Zone 40 ft Left Bank 50 ft Right bank

III. Substrate:

Type of Bedrock ____Sandstone, __✓__ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ____ No _✓_Don't Know

Additional Substrate Components ____ Boulder, _✓_ Cobble,

_✓_Gravel, _✓_Sand, _✓_Silt, ____Organic

IV. Stream Morphology:

Which of these Characters Occur ? ____ Pools, ____ Riffles, ____ Glides, ____ Runs) DRY RUN

Are Erosional Processes Present ? _✓_Yes ____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD / RESIDENTIAL

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 24 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

Stream Name ~~and/or Tributary of:~~ Bigfoot Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 2-18

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft. Width of Water 6 ft

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock ____Sandstone, ✓ Limestone, ____Shale,

____ Other ____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes ____ No ___Don't Know

Additional Substrate Components ____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ____Organic

IV. Stream Morphology:

Which of these Characters Occur ? ____ Pools, ____ Riffles, ____ Glides, ____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes ____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 26 Project #: 173.05 Date: 10/7/99

Project Name: DPL Foster-Bath Location: Warren County

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. Brewer / M. Little Photograph (Roll / #): no photo taken

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Width of Water 8 Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone 25 ft Left Bank 25 ft Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___Don't Know

Additional Substrate Components _____ Boulder, ____✓Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, Dry Run

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe _____

Has the Stream been Channelized ? _____Yes ___✓___ No

Which of these Characters Apply ?

___ No sinuousity, ___✓___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___✓___ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

done

Describe Land Use Adjacent to Riparian Zone

old field

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 27 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-2

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 28 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: LITTLE MIAMI RIVER

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): no photo

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 300 ft Width of Water 200 ft

Depth of Water 2 ft Range 0 - 2ft Average

Depth of Channel 15

Width of Riparian Zone 50 (south) Left Bank 300 (north) Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ___✓___ No ___Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, ___✓___Silt, ___✓___Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? _____Yes _____ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___✓___ Overhanging Vegetation, _____ Rootwads,

___✓___ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

old field

Describe Land Use Adjacent to Riparian Zone

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 29 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name~~ and/or (Tributary of): Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 3-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 10 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone 0 Left Bank 0 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs

DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 30 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of) Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1.5 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD / FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 31 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-5

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 32 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-6

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 33 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-8

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 1o ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____Gravel, ___✓___Sand, ___✓___Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 34 Project #: 173.05 Date: 09-14-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-9

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 25 ft Left Bank 25 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 35 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

(Stream Name) ~~and/or Tributary of~~: Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-12

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft

Depth of Water 6" Range 0-12" Average

Depth of Channel 2.5 ft

Width of Riparian Zone 25 Left Bank 25 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 36 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-13

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 5 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

PHOTO #7

STREAM DATA SHEET
(fill in blanks or circle all appropriate respo

Stream #: 37 Project #: 173.05 Date:

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name ~~and/or Tributary of~~: Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-14

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 38 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Grays Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 25 ft Left Bank 25 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 39 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Halls Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-17

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 40 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Halls Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-18

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 41 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

~~Stream Name and/or~~ (Tributary of): Halls Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-19

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 3 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 42 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or (Tributary of) Halls Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-22

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2

Width of Riparian Zone 100 ft Left Bank 0 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

WETLAND - PEM

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 43 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 3-25

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 0 Left Bank 0 Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 44 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4 - 1

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, _____Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? _____Yes ___✓___ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 45 Project #: 173.05 Date: 05-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-2

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 9 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 46 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-3

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 47 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-4

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Ft Width of Water 6 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 Ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 48 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-5

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 49 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-6

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 50 Project #: 173.05 Date: 09-15-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-7

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Ft Width of Water 6 Ft DryRun

Depth of Water 0 Range 0 Average

Depth of Channel 8 Ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 51 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-7

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 5 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 52 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-8

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs — DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 54 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft DryRun

Depth of Water 0 Range 0 Average

Depth of Channel 5 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 53 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): no photo

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 55 Project #: 173.05 Date: 09-16-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

(Stream Name) ~~and/or Tributary of~~: LITTLE MIAMI RIVER

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-11

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 150 ft Width of Water 130 ft

Depth of Water 3 ft Range 2ft - 4ft Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 56 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 5 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 57 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO.

Stream Name and/or Tributary of: Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-14

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 3ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 58 Project #: 173.05 Date: 09-18-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover _____ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 59 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-16

I. **Stream Flow:**

_____ perennial ___✓___ ephemeral

II. **Measurable Characteristics:**

Width of Channel 20 ft Width of Water 0 Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. **Substrate:**

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. **Stream Morphology:**

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs — DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 60 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of:) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-17

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft+ Width of Water 3 ft+ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 25 ft+

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs (DRY RUN)

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 61 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-18

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 12 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 62 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or (Tributary of) Olive Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-20

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 40 ft Width of Water 20 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANK

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 63 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of) Olive Branch

Field Crew: L.BREWER/M.LITTLE Photograph (Roll / #): 4-21

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 4ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components ___✓___ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

FOREST / OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 64 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of:) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-22

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 65 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-23

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 5 Ft Width of Water 2 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ✓ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 6.6 Project #: 173.05 Date: 09-17-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Olive Branch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 4-24

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ✓ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs (DRY RUN)

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 67 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name ~~and/or Tributary of~~: CAESAR CREEK

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-3

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 100 ft Width of Water 50 ft

Depth of Water 2 ft Range 1ft - 3ft Average

Depth of Channel 20 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ✓ Aquatic Macrophytes

Describe Riparian Zone FLOOD PLAIN

Describe Land Use Adjacent to Riparian Zone FOREST

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 68 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): CAESAR Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-8

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 69 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Ceasar Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 6 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ___✓___ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs — DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 70 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Ceaser Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-12

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 3 FT Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ___ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 71 Project #: 173.05 Date: 09-21-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Ceaser Creak

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5 - 13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

CHANNEL DEPTH?

STREAM DATA SHEET

(fill in blanks or circle all appropriate resp

Stream #: 72 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-15

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 Ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel _____

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, _____ Limestone, ✓ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover _____ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 73 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L.BREWER / M.LITTLE Photograph PHOTO?

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD / PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 74 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-16

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 12 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 7 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components ✓ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 75 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-17

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 9 ft Width of Water 5 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 20 ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 76 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-18

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2ft

Width of Riparian Zone 20ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? _____ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone OLD FIELD

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 77 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER Photograph (Roll / #): 5-19

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 4 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank ALONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ____✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 78 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and~~/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-20

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 79 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER - BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-22

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft Width of Water 15 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 80 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 5-23

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 81 Project #: 173.05 Date: 09-22-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Shaffers Run

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 5-24

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 40 ft Width of Water 20 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 8 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, ✓ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 82 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or Tributary of: Furnas Ditch

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-2

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 10 ft

Depth of Water 10" Range 6" - 12" Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

✓ No sinuousity, ___ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

AGRICULTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

CHANNEL DEPTH

STREAM DATA SHEET

(blanks or circle all appropriate responses)

Stream #: 83 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN

~~Stream Name and/or Tributary of~~: LITTLE MIAMI River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-3

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 125 ft Width of Water 80 ft

Depth of Water 2 ft Range 1-3 ft Average

Depth of Channel _____

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

AGRICULTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 84 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L.BREWER/M.LITTLE Photograph (Roll / #): 6-8

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 Ft Width of Water 4 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 Ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____ Gravel, ___✓___ Sand, ___✓___ Silt, ___✓___ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 85 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name~~ and/or (Tributary of) Little Miami River

Field Crew: L.BREWER / M.LITTLE Photograph (Roll / #): 6-10

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No _____ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 86 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

Stream Name and/or (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-11

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 Ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 87 Project #: 173.05 Date: 09/23/99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ Tributary of: Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-12

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 7 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 88 Project #: 173.05 Date: 09-23-99

Project Name: DPL FOSTER-BATH Location: WARREN CO

~~Stream Name and/or~~ (Tributary of:) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-14

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 8 ft Width of Water 3 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____ Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ___ Mildly sinuous, ✓ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 79 Project #: 173.05 Date: 09-24-99

Project Name: DPL FOSTER-BATH Location: GREENE

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-15

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 15 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 90 Project #: 173.05 Date: 09/26/99

Project Name: DPL FOSTER-BATH Location: GREENE

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 6-16

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 8 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

WATER DEPTH ?
CHANNEL DEPTH ?

STREAM DATA SHEET

(Fill in blanks or circle all appropriate responses)

Stream #: 91 Project #: 173.05 Date: 09-24-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

Stream Name and/or (Tributary of): Little Miami River

Field Crew: L.BREWER / M.LITTLE Photograph (Roll / #): 6-17, 6-18

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 25 ft. Width of Water 15 ft

Depth of Water 8 in Range 6-10 in. Average

Depth of Channel 7 ft

Width of Riparian Zone 25ft Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, _____ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 92 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

Stream Name and/or Tributary of: LITTLE MIAMI

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-1

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 100 ft Width of Water 60 ft

Depth of Water 3 ft Range 2 ft - 4 ft + Average

Depth of Channel 6 ft

Width of Riparian Zone 50 ft + Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS - ESPECIALLY NORTH SIDE

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 93 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-2

I. **Stream Flow:**

✓ perennial _____ ephemeral

II. **Measurable Characteristics:**

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 10 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. **Substrate:**

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. **Stream Morphology:**

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 94 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-3

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 95 Project #: 173.05 Date: 09-27-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name~~ and/or (Tributary of:) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7 - 4

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10ft Width of Water 6ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ✓ Sand, ✓ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ✓ Yes ____ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 96 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-5

I. Stream Flow:

__✓__ perennial ____ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 6 ft+ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock ____ Sandstone, _✓_ Limestone, ____ Shale,

____ Other ____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes ____ No _✓_ Don't Know

Additional Substrate Components ____ Boulder, _✓_ Cobble,

_✓_ Gravel, _✓_ Sand, ____ Silt, ____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ____ Pools, ____ Riffles,) DRY RUN

____ Glides, ____ Runs

Are Erosional Processes Present ? _✓_ Yes ____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD / SHRUB

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 97 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-6

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 15 ft Width of Water 8 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

OLD FIELD/SHRUB

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 98 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-7

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 12 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone PASTURE

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 99 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-8

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 0 Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 5 ft

Width of Riparian Zone 10 ft Left Bank 10 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

✓ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone HAY FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 100 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-9

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 Width of Water _____ Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 101 Project #: 173.05 Date: 09-28-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-10

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 8 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

✓ Gravel, ___✓___ Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,) DRY RUN

_____ Glides, _____ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 102 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-11

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 2 ft

Width of Riparian Zone 20 ft Left Bank 20 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, _____ Runs

DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ____ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 103 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-12

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 104 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-13

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 6 Ft Width of Water 2 Ft Dry Run

Depth of Water 12" Range 8" Average

Depth of Channel 2ft

Width of Riparian Zone 10ft Left Bank 20ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, ___✓___ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 105 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO.

~~Stream Name and/or~~ (Tributary of) Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-14

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 17 ft Width of Water 12 ft

Depth of Water 6" Range 3" - 11" Average

Depth of Channel 3 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ___✓___ Limestone, ____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

___✓___ Gravel, ___✓___ Sand, ___✓___ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, ___✓___ Riffles,

___✓___ Glides, ___✓___ Runs

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone

N/A

Describe Land Use Adjacent to Riparian Zone

CORN FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 102 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER - BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of): Little Miami River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-15

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 30 ft Width of Water 10 ft

Depth of Water 3" Range 1" - 3" Average

Depth of Channel 5 ft

Width of Riparian Zone 200 ft Left Bank 200 ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles,

_____ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 107 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

Stream Name ~~and/or Tributary of:~~ LITTLE MIAMI River

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-16

I. Stream Flow:

✓ perennial _____ ephemeral

II. Measurable Characteristics:

Width of Channel 50 ft Width of Water 20 ft

Depth of Water 1 ft Range 2ft - 6ft Average

Depth of Channel 6ft

Width of Riparian Zone 200ft Left Bank 200ft Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ✓ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? ✓ Pools, ✓ Riffles,

✓ Glides, ✓ Runs

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

✓ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone

OLD FIELD

Describe Land Use Adjacent to Riparian Zone

OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 108 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of:) Beaver Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-17

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 10 ft Width of Water 2 ft Dry run

Depth of Water 0 Range 0 Average

Depth of Channel .1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ___✓___Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

_____Gravel, ___✓___Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ___✓___ Yes _____ No

If Yes, Describe BANKS

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 109 Project #: 173.05 Date: 09-30-99

Project Name: DPL FOSTER-BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of) Beaver Creek

Field Crew: L. BREWER / M. LITTLE Photograph (Roll / #): 7-18

I. Stream Flow:

_____ perennial ✓ ephemeral

II. Measurable Characteristics:

Width of Channel 6 ft Width of Water 2 ft dry run

Depth of Water 0 Range 0 Average

Depth of Channel 1 ft

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____ Sandstone, ✓ Limestone, _____ Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? _____ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, _____ Cobble,

✓ Gravel, ✓ Sand, _____ Silt, _____ Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs) DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, _____ Rootwads,

_____ Logs/Debris, _____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone OLD FIELD

Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

STREAM DATA SHEET
(fill in blanks or circle all appropriate responses)

Stream #: 110 Project #: 173.05 Date: 10-01-99

Project Name: DPL FOSTER BATH Location: GREENE CO

~~Stream Name and/or~~ (Tributary of): Beaver Creek

Field Crew: L. BREWER/M. LITTLE Photograph (Roll / #): 7-23

I. Stream Flow:

_____ perennial ___✓___ ephemeral

II. Measurable Characteristics:

Width of Channel 20 ft Width of Water 6 ft Dry Run

Depth of Water 0 Range 0 Average

Depth of Channel 0

Width of Riparian Zone NONE Left Bank NONE Right bank

III. Substrate:

Type of Bedrock _____Sandstone, ___✓___ Limestone, ____Shale,

_____ Other _____ Don't Know

Is Bedrock at or Near the Surface ? ___ Yes _____ No ✓ Don't Know

Additional Substrate Components _____ Boulder, ___✓___ Cobble,

___✓___Gravel, ___✓___Sand, _____Silt, _____Organic

IV. Stream Morphology:

Which of these Characters Occur ? _____ Pools, _____ Riffles, _____ Glides, _____ Runs — DRY RUN

Are Erosional Processes Present ? ✓ Yes _____ No

If Yes, Describe BANKS SLIGHTLY

Has the Stream been Channelized ? ____Yes ✓ No

Which of these Characters Apply ?

___ No sinuousity, ✓ Mildly sinuous, ___ Stongly Sinuous

V. Additional Characteristics:

Instream Cover ✓ Overhanging Vegetation, ____ Rootwads,

____ Logs/Debris, ____ Aquatic Macrophytes

Describe Riparian Zone N/A

Describe Land Use Adjacent to Riparian Zone RESIDENTIAL

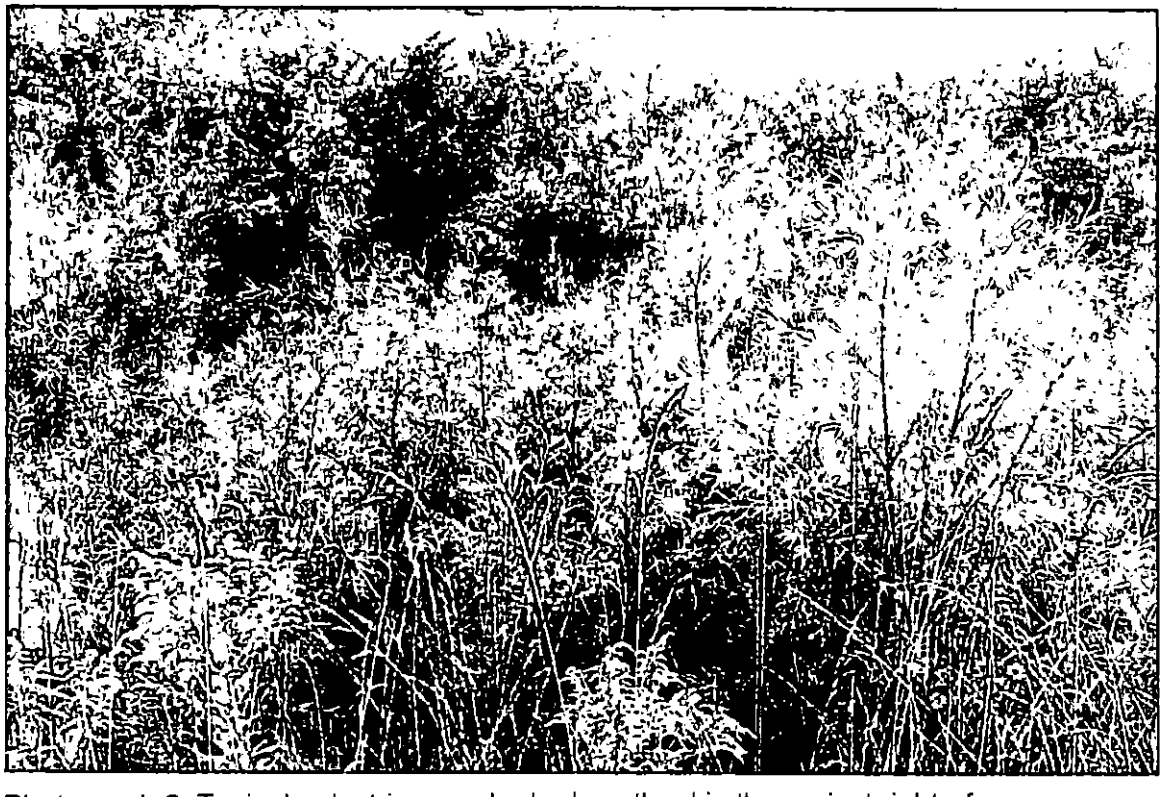
Describe any Observable Noteworthy Conditions Upstream or Downstream

Photograph and/or Drawing

Appendix D

Wetland Data Sheets and Typical Photographs

Photograph1: Typical palustrine emergent wetland in the project right-of-way.



Photograph 2: Typical palustrine scrub-shrub wetland in the project right-of-way.

Plot #: 1

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Cinnia arundinacea	Herb	FACW+	6.		
3. Euthamia graminifolia	Herb	FAC	7.		
4. Equisetum hyemale	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-6	A	10YR 5/4	-	-	silt-loam
7-12	B	5YR 4/1	7.5 YR 4/6		silt-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 2

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5.		
2. Eupatorium rugosum	Herb	FACU+	6.		
3. Laportea canadensis	Herb	FACW	7.		
4. Pilea pumila	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 75%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	1%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	7.5 YR 5/8	10%	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 3

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Lysmachia nummularia	Herb	FACW+	6.		
3. Leersia orysoides	Herb	OBL	7.		
4. Pilea pumila	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks	X	Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silt-loam (some organic)

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 3

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/8/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Impatiens capensis	Herb	FACW	5		
2. Lysmachia nummularia	Herb	FACW+	6.		
3. Leersia orysoides	Herb	OBL	7.		
4. Pilea pumila	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks	X	Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silt-loam (some organic)

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 4

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/9/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Junus effusus	Herb	FACW+	5		
2. Typha latifolia	Herb	OBL	6.		
3. Panicum sp.	Herb	-	7.		
4. Sagittaria latifolia	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks	X	Local Soil Survey Data	
Drift Lines	X	FAC-Neutral Test	
Sediment Deposits	X	Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	5G 4/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 5

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/9/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Phalaris arundinacia	Herb	FACW+	5		
2. Typha latifolia	Herb	OBL	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	2.5YR	7.5Y 3/4	10%	clay loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 6

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Euthamia graminifolia	Herb	FAC	6.		
3. Agrimonia parviflora	Herb	FAC	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1		-	clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 7

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Bidens sp.	Herb	-	7.		
4. Asclepias incarnata	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	X
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inches
Depth to Free Water in Pit:	2 inches	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 8

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5.		
2. Agrostis alba	Herb	FACW	6.		
3. Bidens sp	Herb		7.		
4. Juncus tenuis	Herb	FAC-	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	6 inch
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silt-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 9

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Carex sp.	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	X
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 10

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/10/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Impatiens capensis	Herb	FACW	6.		
3. Agrostis alba	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 11

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/13/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5.		
2. Impatiens capensis	Herb	FACW	6.		
3. Polygonum sagittatum	Herb	OBL	7.		
4. Eupatorium perforatum	Herb	FACW+	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

		Secondary Hydrology Indicators	
Inundated	x	Oxidized Root Channels in Upper 12"	x
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland			
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 12

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/13/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Salix exigua	Herb	OBL	6.		
3.		-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	3%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 13

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/13/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2. Salix exigua	Herb	OBL	6.		
3. Impatiens capensis	Herb	FACW	7.		
4. Scirpus atrovirens	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	3%

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 14

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/14/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5 Eupatorium perforatum	Herb	FACW+
2. Salix exigua	Herb	OBL	6. Typha latifolia	Herb	OBL
3. Phalaris arundinacia	Herb	FACW+	7.		
4. Bidens sp.	Herb	-	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10 inches
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 15

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/14/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM/PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Leersia orzoides	Herb	OBL	5		
2. Salix nigra	Herb	OBL	6.		
3. Alisma subcordatum	Herb	OBL	7.		
4. Lemna minor.	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits	X	Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low Chroma
- ___ Concretions
- ___ High Organic Content in Surface Layer of Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 16

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/14/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM/PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Carex frankii	Herb	OBL	5		
2.Impatiens capensis	Herb	FACW	6.		
3. Salix nigra	Herb	OBL	7.		
4. Bidens sp.	Herb	-	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 17

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/15/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5		
2.	Herb	FACW+	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10YR 3/1	7.5 YR 5/8	10%	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 18

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/15/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Juncus effusus	Herb	FACW+	5 Agrostis alba	Herb	FACW
2. Eupatorium perforatum	Herb	FACW+	6. Festuca pratensis	Herb	FACU
3. Agrostis alba	Herb	FACW	7.		
4. Impatiens capensis	Herb	FACW	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 83%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	X
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits	X	Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	2.5YR 5/2	7.5 YR 5/8	10%	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 19

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/116/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		
2. Echinochloa crusgalli	Herb	FACU	6.		
3. Bidens frondosa	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 67 %

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/2	5 YR 5/8	-	clay-

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 20

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/16/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perforatum	Herb	FACW+	5. Bidens sp.	Herb	-
2. Asternovae-angliae	Herb	FACW-	6.		
3. Scirpus atrovirens	Herb	OBL	7.		
4. Salix exigua	Shrub	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	
Water-Stained Leaves	X
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/2	5 YR 5/8	-	clay-

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 20

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/16/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		-
2. Echinochloa crusgalli	Herb	FACU	6.		
3. Bidens frondosa	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 67%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated		Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	X
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland	X		
Springs Present			

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/2	5 YR 5/8	-	clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 21

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Phalaris arundinacia	Herb	FACW+	5		-
2.		-	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	8
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 22

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Agrostis alba	Herb	FACW+	5 Onoclea sensibilis	herb	OBL
2. Eupatorium perforatum	Herb	FACW+-	6.		
3. Euthamia graminifolia	Herb	FAC	7.		
4. Scirpus atrovirens	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	8 inches
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 23

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Agrostis alba	Herb	FACW	5		
2. Scirpus atrovirens	Herb	OBL	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	clay-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	X Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 24

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/21/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perforatum	Herb	FACW+	5		
2. Scirpus atrovirens	Herb	OBL	6.		
3. Impatiens capensis	Herb	FACW	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	8 inches
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR4/1	-	-	silty loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 25

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Warren County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perforatum	Herb	FACW+	5		
2. Eleocharis sp.	Herb	FACW+	6.		
3. Bidens sp.	Herb	-	7.		
4. Mimulus alatus	Herb	OBL	8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators		Secondary Hydrology Indicators	
Inundated	X	Oxidized Root Channels in Upper 12"	
Saturated in Upper 12"	X	Water-Stained Leaves	
Water Marks		Local Soil Survey Data	
Drift Lines		FAC-Neutral Test	
Sediment Deposits		Other (explain on back of form)	
Drainage Patterns in Wetland			
Springs Present			

Field Observations

Depth of Surface Water:	3 inches	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-clay

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 26

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM WETLAND RESULTING FROM SPRING

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Acorus calamus	Herb	OBL	5		
2. Impatiens capensis	Herb	FACW+	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	X
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	x
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	3 inches	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 27

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM WETLAND RESULTING FROM Seep

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Eupatorium perporatum	Herb	FACW+	5		
2. Carex sp.	Herb	-	6.		
3. Bidens sp	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	X
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	x
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	1inches	Depth to Saturated Soil:	0
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 28

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/23/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PSS

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Salix exigua	Herb	OBL	5		
2. Carex sp.	Herb	-	6.		
3. Aster sp	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	9
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR2/1	-	-	silty-loam

Hydric Soil Indicators:

- ___ Histosol
- ___ Histic Epipedon
- ___ Sulfidic Odor
- ___ Aquic Moisture Regime
- ___ Reducing Conditions
- X Gleyed or Low Chroma
- ___ Concretions
- ___ High Organic Content in Surface Layer of Sandy Soils
- ___ Organic Streaking in Sandy Soils
- ___ Listed on Local Hydric Soils List
- ___ Listed on National Hydric Soils List
- ___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 29

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 9/24/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Cyperus strigosus	Herb	FACW	5		
2. Bidens sp.	Herb	-	6.		
3. Carex sp.	Herb	-	7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR3/1	-	-	silty-loam

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Plot #: 30

DATA FORM
ROUTINE ONSITE WETLAND DETERMINATION

Project Site: Foster-Bath **Applicant/Owner:** DP&L **Date:** 10/1/99

Location: Green County **Investigator:** L. Brewer, M. Little

Do normal circumstances exist on the site? Yes
Is the site significantly disturbed (Atypical Situation)? No
Is the area a potential Problem Area? No

VEGETATION (use back of form for remarks) PEM

Dominant Species	Stratum	Indicator	Dominant Species	Stratum	Indicator
1. Typha latifolia	Herb	OBL	5		
2. Acorus calamus	Herb	OBL	6.		
3.			7.		
4.			8.		

Percent of Dominant Species that are OBL, FACW, or FAC: 100%

HYDROLOGY (use back of form for remarks)

Primary Hydrology Indicators

Inundated	
Saturated in Upper 12"	X
Water Marks	
Drift Lines	
Sediment Deposits	
Drainage Patterns in Wetland	X
Springs Present	

Secondary Hydrology Indicators

Oxidized Root Channels in Upper 12"	X
Water-Stained Leaves	
Local Soil Survey Data	
FAC-Neutral Test	
Other (explain on back of form)	

Field Observations

Depth of Surface Water:	none	Depth to Saturated Soil:	10
Depth to Free Water in Pit:	none	Slope	0

SOILS (use back of form for remarks) Drainage Class:

Mapping Unit Name: **Hydric Soils List?** Yes **Confirmed in Field?** Yes

Profile Description:

Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Color (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
1-12	A/B	10 YR3/1	-	-	organic/silt

Hydric Soil Indicators:

___ Histosol	___ Reducing Conditions	___ Organic Streaking in Sandy Soils
___ Histic Epipedon	_X_ Gleyed or Low Chroma	___ Listed on Local Hydric Soils List
___ Sulfidic Odor	___ Concretions	___ Listed on National Hydric Soils List
___ Aquic Moisture Regime	___ High Organic Content in Surface Layer of Sandy Soils	___ Other (explain in remarks)

WETLAND DETERMINATION

Hydrophytic Vegetation Present? Yes **Hydric Soils Present?** Yes

Wetland Hydrology Present? Yes

Is this Sampling Point Within a Wetland? Yes

Appendix E

Public Notification Documents

Additional Information

DP&L will be responsible for the layout, design, Ohio Power Siting Board filing, construction and all property owner contacts associated with this line project. For further information and answers to your questions concerning the upgrade project, you may call or write to:

Mr. Bruce Taylor, Manager
DP&L Real Estate Services Department
1900 Dryden Road
Dayton, Ohio 45439
(937) 331-4497

Foster-Bath Transmission Upgrade

DP&L

Maintaining Reliability For The Region

Overview: Upgrading An Existing Transmission Line

- The planned Foster-Bath Transmission *Upgrade project entails upgrading* sections of existing 345,000 volt transmission lines between the existing Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio.
- The upgrade will be constructed on existing right-of-way and no new access roads will be required.
- Upgrade work is scheduled to begin in the spring of 2000 and be completed by June 2002.
- The upgraded transmission line will be 40.2 miles long and the estimated total cost of the project is $30 million.

Goal: Maintaining Service Reliability

The existing 345,000 volt transmission line to be upgraded is jointly owned by Cinergy, which serves the Cincinnati area, American Electric Power, which serves the Columbus area, and DP&L, which serves the Dayton area. This project is being undertaken to improve the quality and reliability of service to the customers in the Cincinnati, Columbus, and Dayton areas. The upgraded transmission line will strengthen the transmission system, allowing service reliability to keep pace with the growing economy and increasing demand for electricity.

Project Implementation: Minimal Landowner Impact

Over the entire length of the project, existing transmission line right-of-way and substation properties will be used. No new right-of-way, properties or access roads will be required. Prior to the start of construction, the existing right-of-way will receive a routine maintenance tree trimming and clearing similar to what has been done there many times in the past.

Despite our best efforts, minor impacts and some possible damage to grounds and crops may occur as the clearing and construction proceeds. We will repair or appropriately compensate landowners for all such damages we create.

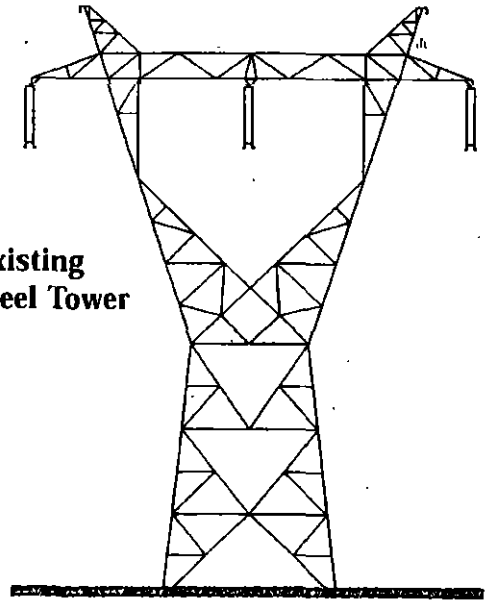
Physical Characteristics: Less Land Use

The existing single circuit line sections to be upgraded are all constructed with lattice steel tower structures. They will be replaced with new double circuit steel poles installed on concrete foundations.

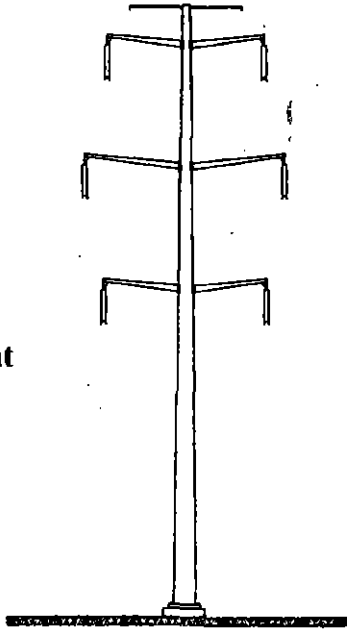
The typical existing steel towers and planned steel pole replacements are shown in the drawings to the right. The planned pole structures will use less land at the base of the poles.

Property Taxes: $1,800,000 Annually

The utility companies will pay an additional $1,800,000 in annual property taxes to Warren and Greene Counties as a result of the upgrade project.



Existing Steel Tower



Planned Steel Pole Replacement

FOSTER-BATH SECTION A PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Wesreal Inc.		10776 Montgomery Rd.	Cincinnati	OH	45242
Rippe	Elaine B.	1071 Celestial St., Ste. 1401	Cincinnati	OH	45202
Rippe	Mark A.	3445 Arnold	Cincinnati	OH	45208
Rippe, Trustee	Joseph F.	1071 Celestial St., Ste. 1401	Cincinnati	OH	45202
Dobbs	John G.& Vicki L.	8630 Celso Dr.	Maineville	OH	45039
Rippe	Joseph L. & Melissa	8378 Butterworth Rd.	Maineville	OH	45039
Biehle	Carl Edward	8609 Butterworth Rd.	Maineville	OH	45039

DP&L

Working For You Today and Tomorrow

January 7, 2000

Wesreal Inc.
10776 Montgomery Rd.
Cincinnati, OH 45242

Dear Wesreal Inc.:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section A on the enclosed map, Figure A-1.2. In Section A of this project, an existing double circuit steel tower line with structures as sketched on Figure B-1.5, enclosed, is located along the northern portion of a 300 foot wide right-of-way. The planned construction will add a single steel pole configuration as shown in Figure B-1.2 or B-1.3 adjacent to each tower. The steel poles will be located along the southern portion of the 300 foot right-of-way resulting in a typical layout as sketched in Figure B-1.4.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

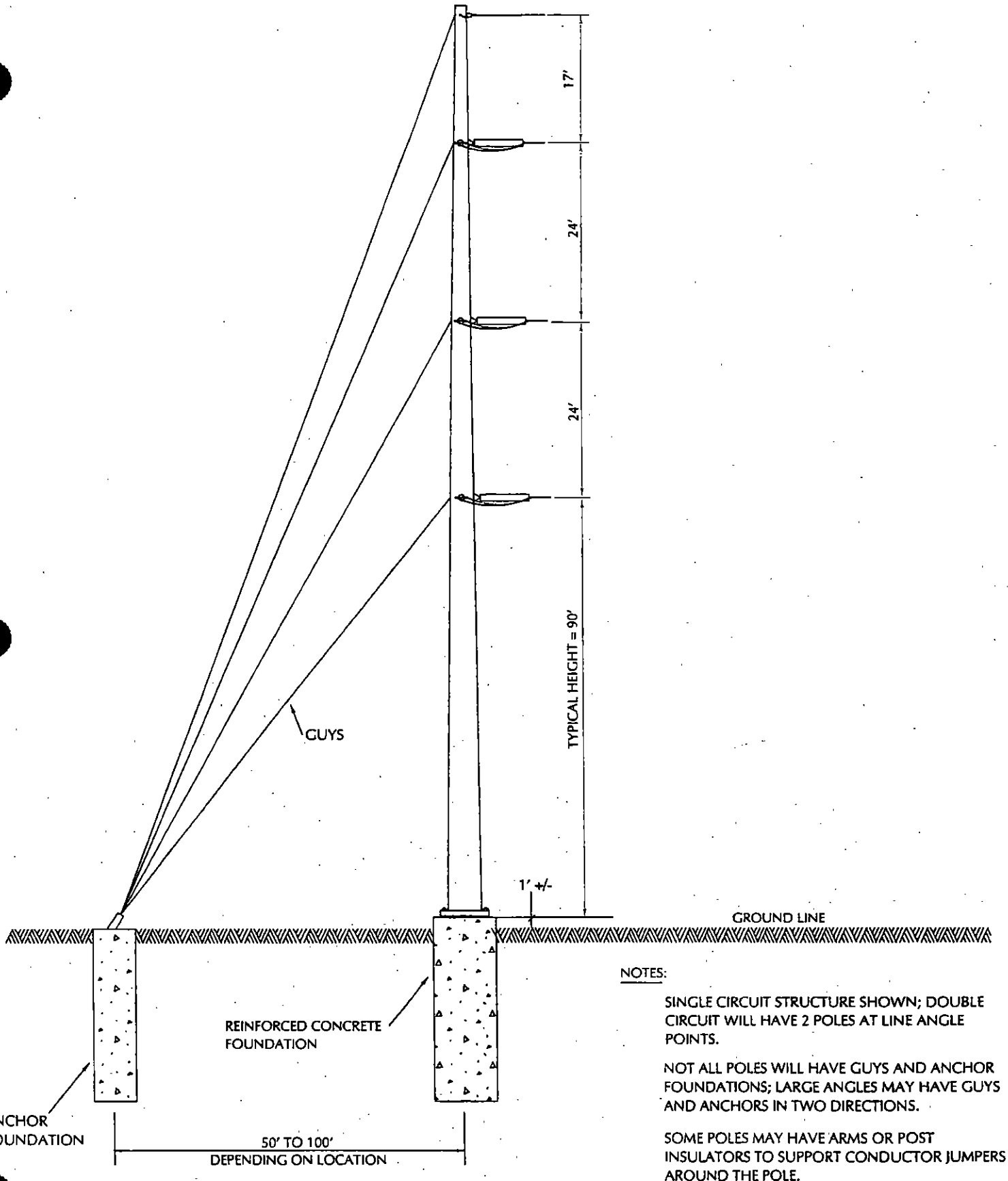
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



NOTES:

SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE

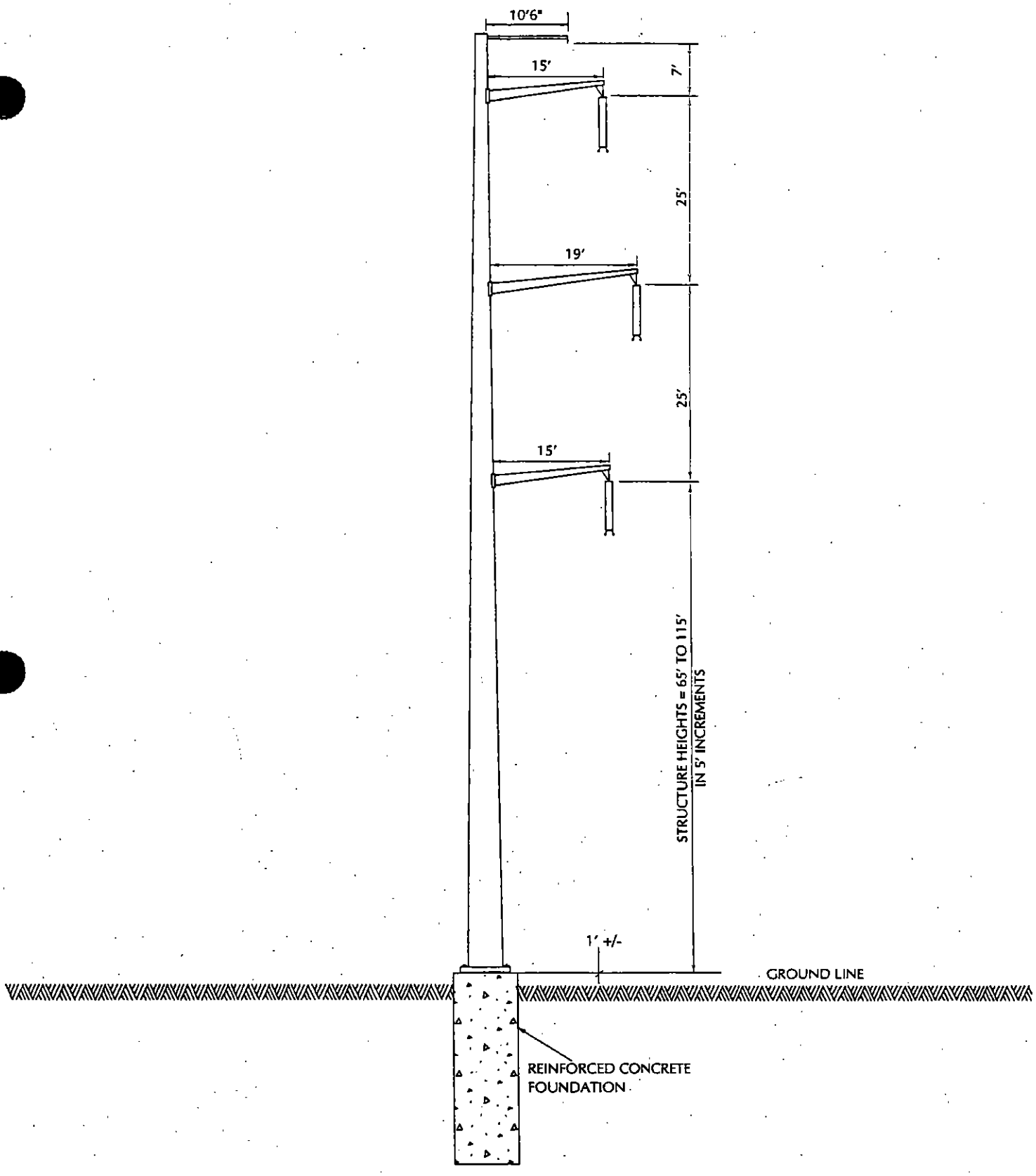


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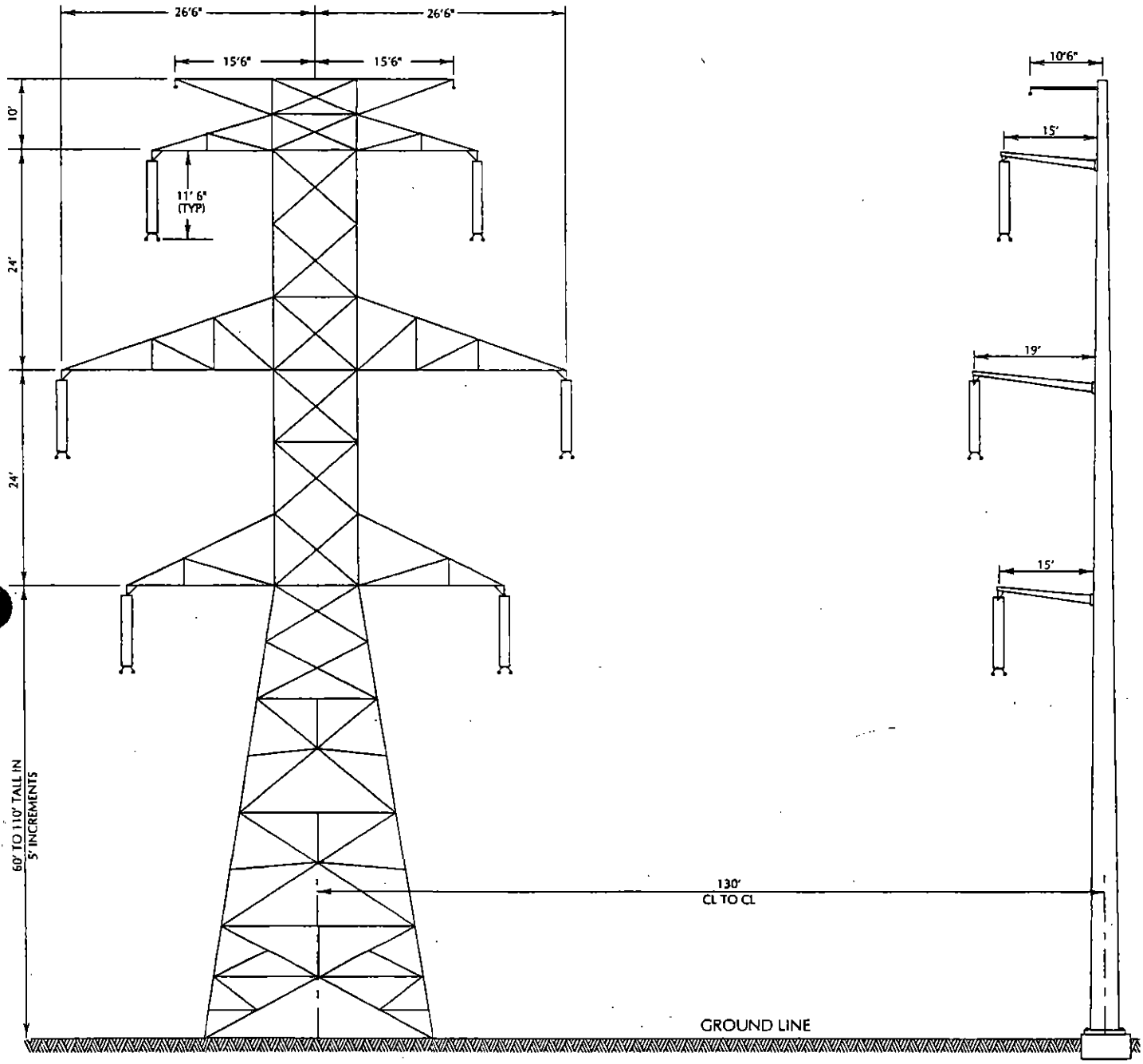
FIGURE B-1.3
SINGLE CIRCUIT
STEEL POLE (TANGENT)



LOOKING EAST

THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.4
EXISTING DOUBLE CIRCUIT
STEEL TOWER WITH PLANNED
SINGLE CIRCUIT STEEL POLE (TANGENT)

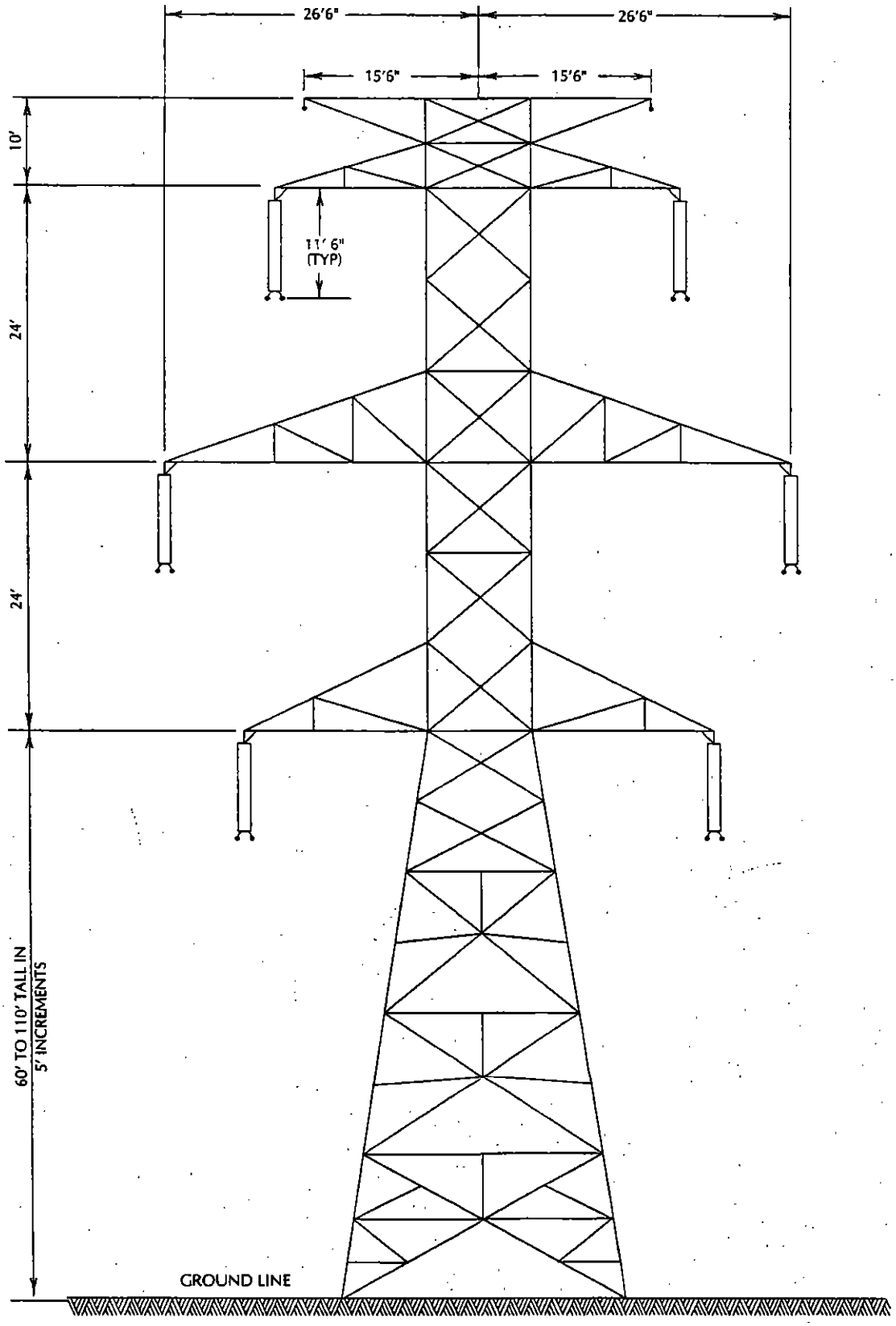


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FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION B PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Coors, Etal.	Clifford H.	5100 Gray Rd.	Cincinnati	OH	45232
Marr	Lawrence E & Kathryn	912 Nunner Rd.	Maineville	OH	45039
Maineville Properties		141 E. Foster-Maineville Rd.	Maineville	OH	45039
Fields	Joyce J.	8298 S. R. 48	Maineville	OH	45039
Perkins	Gary N. & Mary	8473 S. R. 48	Maineville	OH	45039
Mann	Marilyn R. & Paul	7942 Cooper Rd.	Cincinnati	OH	45242
Miller, Jr.	Kenneth & Edward E.	5854 Countrydale Ct.	Fairfield	OH	45014
Kingery	Douglas M.	8655 Maineville Rd.	Maineville	OH	45039
Hensey	Melville D. & Carol	8220 Riversedge Circle	Maineville	OH	45039
Rumsey	Philip J. & Jacqueline	8573 Maineville Rd.	Maineville	OH	45039
Wynne	Walter J. & Louis Z.	1937 Stockton Dr.	Loveland	OH	45140

DP&L

Working For You Today and Tomorrow

January 7, 2000

Clifford H. Coors, Etal.
5100 Gray Rd.
Cincinnati, OH 45232

Dear Clifford H. Coors, Etal.:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section B on the enclosed map, Figure A-1.2. In Section B of this project, an existing double circuit steel tower line with structures as sketched on Figure B-1.5, enclosed, is located along a 150 foot wide right-of-way. The planned construction will install a double steel pole "H-frame" configuration shown in Figure B-1.6 or B-1.7 adjacent to each tower. Once the two existing circuits are transferred to the new steel pole structures, the existing steel towers will be removed and the third circuit added to the steel pole structures. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor
Manager, Real Estate Services

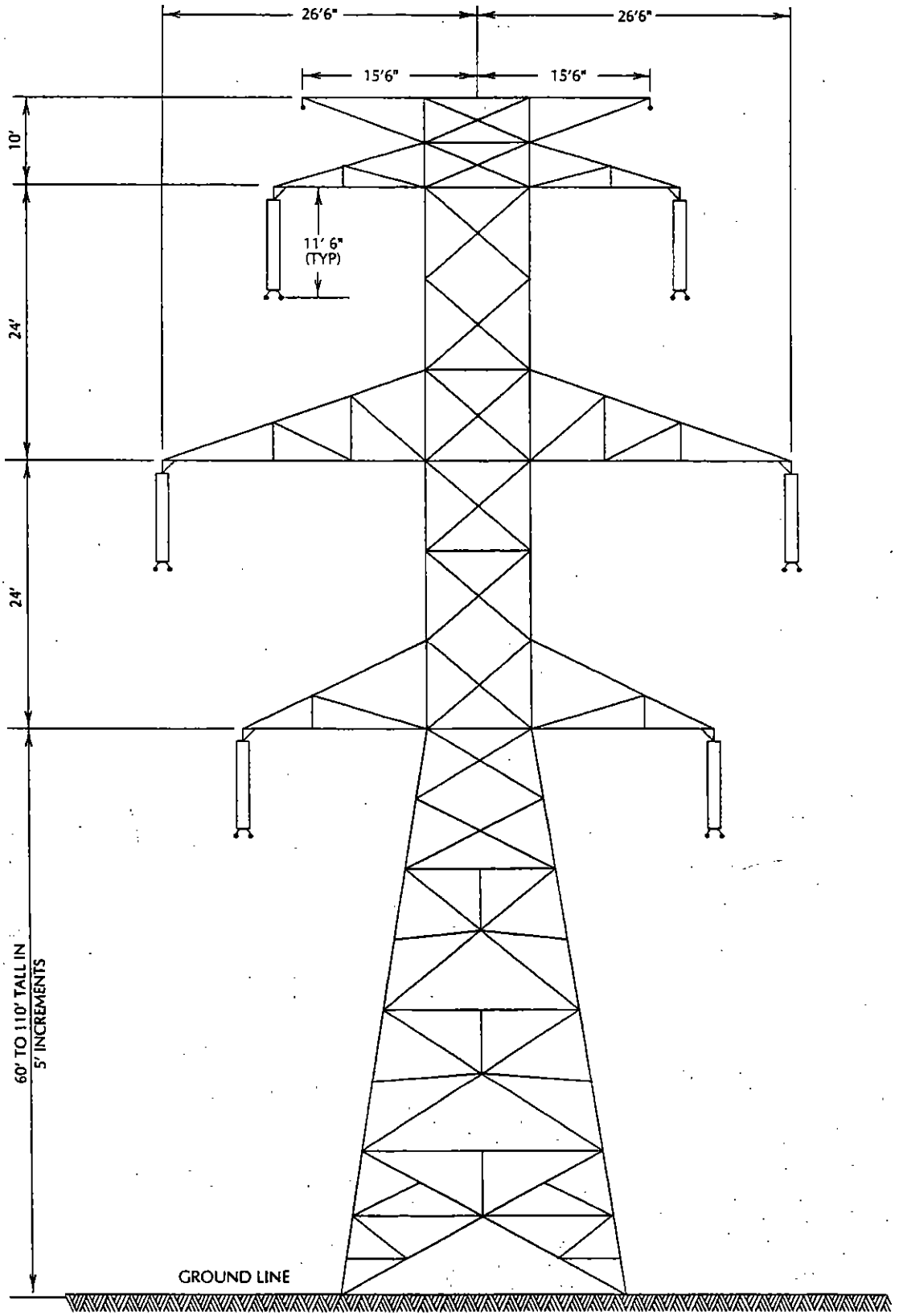

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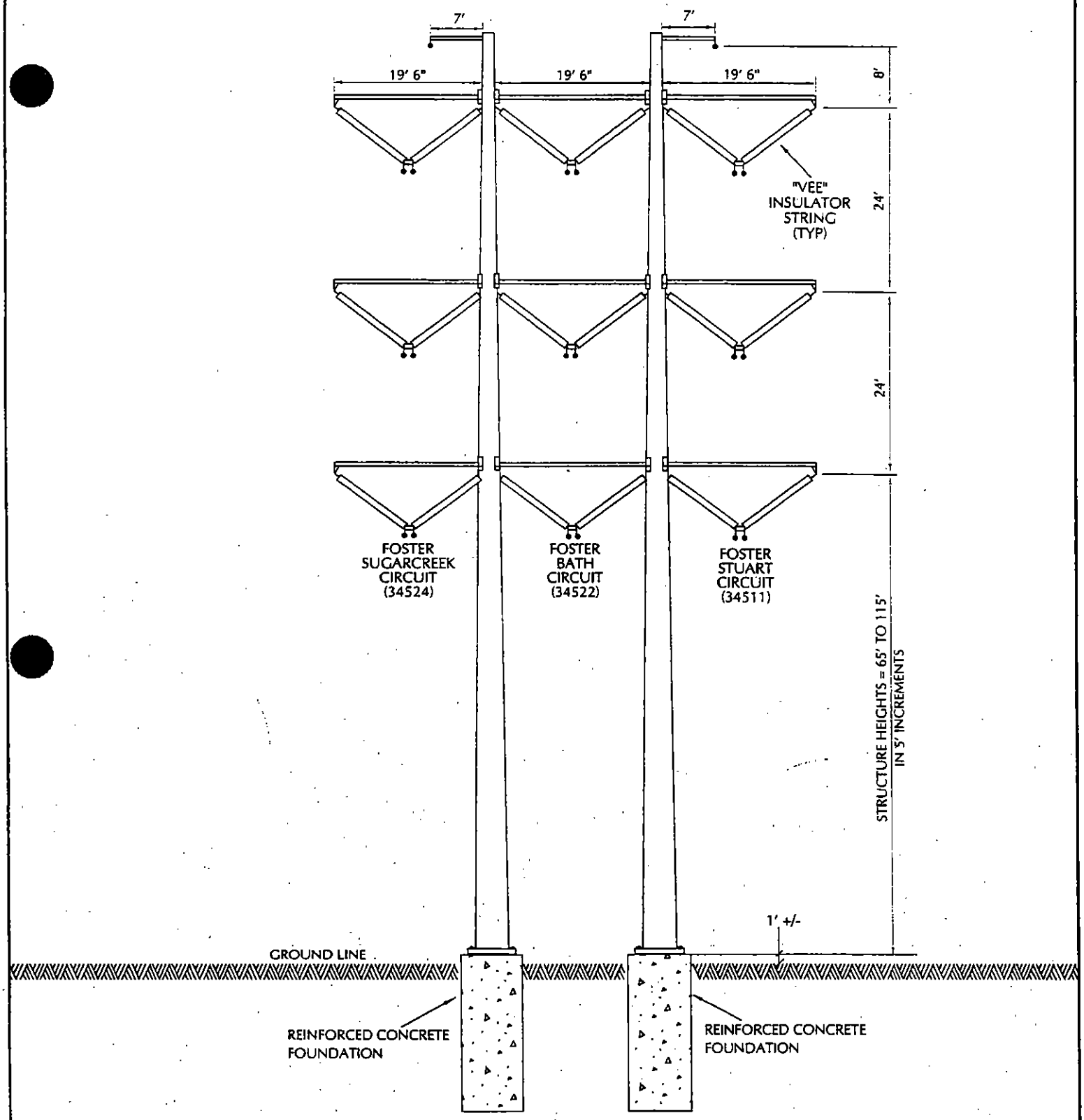
FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)



LOOKING EAST

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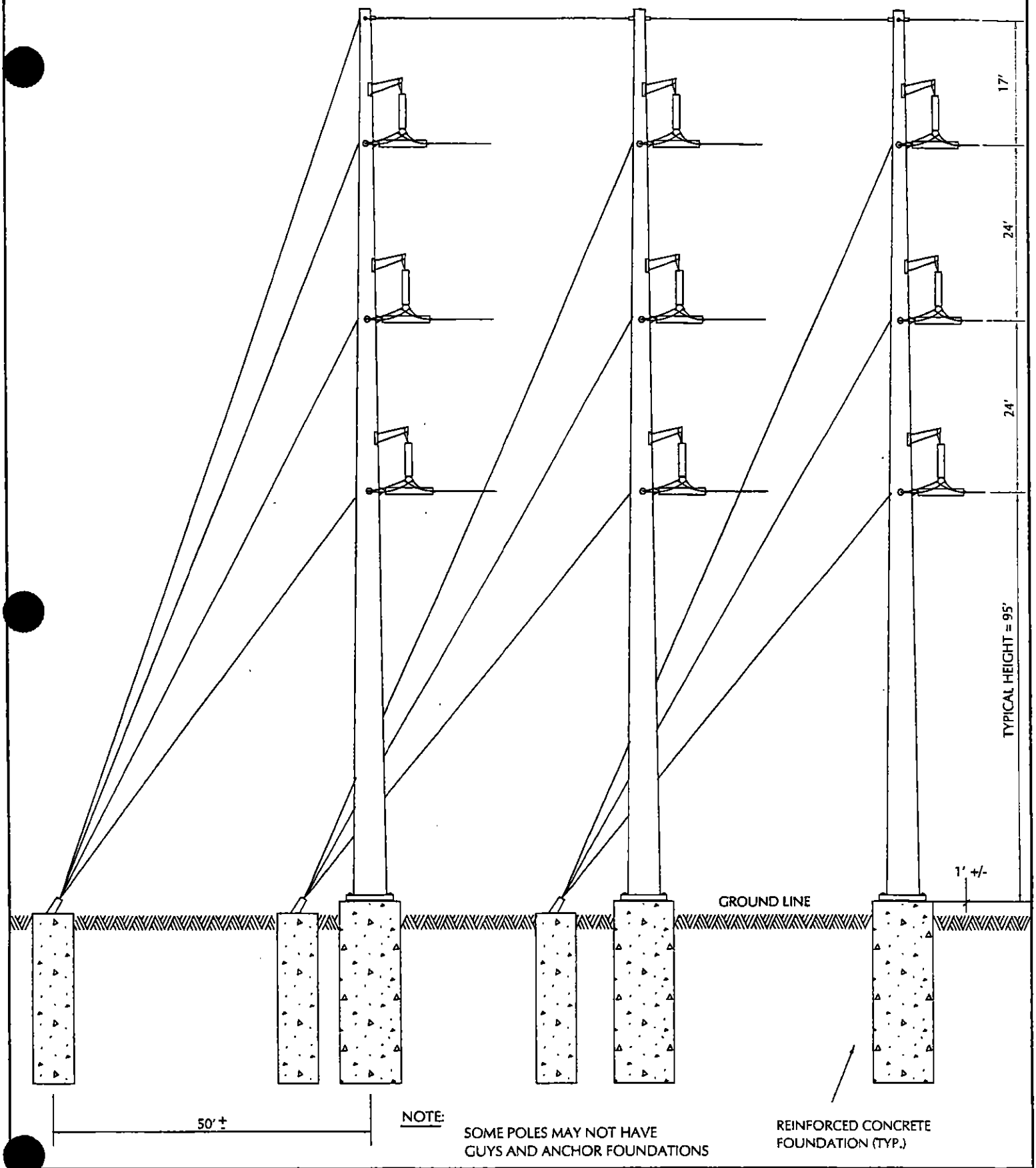
FIGURE B-1.6
TRIPLE CIRCUIT STEEL POLE
H-FRAME STRUCTURE (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.7
TRIPLE CIRCUIT STEEL POLE
ANGLE STRUCTURE

FOSTER-BATH SECTION C PROPERTY OWNER LIST

L Name	F Name	F&L Name	Address	City	State	Zip
Brown	Odis W.		P. O. Box 59	Lebanon	OH	45036
Madden	W. Reed & Judith A.		3151 Clear Springs Rd.	Spring Valley	OH	45370
Smallwood, Trustee	Oliver C.		8989 Escalante Rd., # 137	Tucson	AZ	85730
Wenzel	John T.	Janet M. Simon	3391 Old Stage Rd.	Spring Valley	OH	45370
Brockman	Henry F. & Carol L.		3402 Old Stage Rd.	Spring Valley	OH	45370
Shafer, Trustee	Carol H.		3626 Old Stage Rd.	Spring Valley	OH	45370
Tinnerman	David E. & Catherine M.		3836 Old Stage Rd.	Spring Valley	OH	45370
Rizo-Patron	Alfredo		7860 Mt. Holly Rd.	Waynesville	OH	45068
Albers	David L. & Cheryl L.		7964 Mt. Holly Rd.	Waynesville	OH	45068
Shafer	Thomas H. & John D.		3626 Old Stage Rd.	Spring Valley	OH	45370
Shafer, Trustee	Carol J.		3626 Old Stage Rd.	Spring Valley	OH	45370
Lutz, Jr.	Clarence T. & Linda D.		3925 U.S. 42 S.	Waynesville	OH	45068
Walkhom	Jilas & Sana D.		P. O. Box 368	Xenia	OH	45385
Cammerer	Robert & Linda		8128 Cook Jones Rd.	Waynesville	OH	45068
Strickler	Steven A.		1931 Alda Ct.	Dayton	OH	45459
Miller	William E. & Linda L.		578 Wards Corner Rd.	Loveland	OH	45140
Rommes	Bobby D. & Claudia		8203 Middle St.	Waynesville	OH	45068
Miller	James Edward & R. I.		8201 Middle St.	Waynesville	OH	45068
Hignite	Terry E. & Cathy		9753 Old Main St.	Waynesville	OH	45068
Ferguson	James C. & Jean		9463 Cincinnati-Columbus Rd.	Waynesville	OH	45068
Blake	Jennifer A. M.		8072 Mt. Holly Rd.	Waynesville	OH	45068
Clark	Charlene A.		7959 Cook Jones Rd. - P.O. Box 612	Waynesville	OH	45068
Fink	Eugene William		2207 Jenkins Rd.	Wilmington	OH	45177
O'Banion	Wilma & David		8059 N. U.S. Rt. 42	Waynesville	OH	45068
Cornett Enterprises		c/o Michael Cornett	732 S. Ludlow St.	Dayton	OH	45402
Lindamood	Bruce A.		8642 N. U.S. RT. 42	Waynesville	OH	45068
Lebanon Citizens National Bank		Trust Dep.-Sanford	P. O. Box 59	Lebanon	OH	45036
Hartman Farms			P. O. Box 1	Spring Valley	OH	45370
Frye	Betty E.		9900 New Burlington Rd.	Waynesville	OH	45068
Rogers	Diana & Braddock		8025 New Burlington Rd.	Waynesville	OH	45068
Shaffer	Lester E. & Dori		7683 New Burlington Rd.	Waynesville	OH	45068
Bailey Brothers Trust		c/o Sammie Bailey, Etal.	8774 Wilson Rd.	Waynesville	OH	45068
Shick	Robert D. & Paula K.		39 Gerlaugh Ave.	Dayton	OH	45403

Rich	James E. & John B.		19177 Tamara Lane	Jupiter	FL	33458
Rice	Gene & Etta		7550 E. S.R. 73	Waynesville	OH	45068
Furnas	Richard		7143 E. S.R. 73	Waynesville	OH	45068
Frye	Richard B. & Don R.		9900 New Burlington Rd.	Waynesville	OH	45068
Frye, Etal.	Richard B.		5349 N. Clarksville Rd.	Waynesville	OH	45068
Frye	Gilbert		9900 New Burlington Rd.	Waynesville	OH	45068
Shinkle	William P. & Pat		5760 O'Neall Rd.	Waynesville	OH	45068
Harris	Thomas L.& Paula		2662 Cross Country Rd.	Beavercreek	OH	45324
Hayes	Janet & Michael J.		5087 O'Neall Rd.	Waynesville	OH	45068
Frye	Walter L.		5043 O'Neall Rd.	Waynesville	OH	45068
Thompson	Loyd G. & Mari		4991 O'Neall Rd.	Waynesville	OH	45068
Manley	Martha A. & Roy E.		4967 O'Neall Rd.	Waynesville	OH	45068
Fultz	Marilyn Jean & Clint		119 Ellis Dr.	Waynesville	OH	45068
Elam	Susan D.		5988 Middletown Rd.	Waynesville	OH	45068
Tirey	Thomas L. & Connie	c/o Option One Mtg.	Dept. 7821	Los Angeles	CA	90084
Tirey	Thomas L. & Connie		6097 Middletown Rd.	Waynesville	OH	45068
Hibbs, Trustee	William G.		1221 Rose Bower Ave.	Dayton	OH	45429
Hisey, Etal.	Benjamin H.		3453 S.R. 138	Greenfield	OH	45123
Lewis	Roger & Sherry		4876 Pennyroyal Rd.	Franklin	OH	45005
Begley	Archie & Betty		6390 Sales Rd.	Waynesville	OH	45068
Strausburg	Larry D. & Pat		P.O. Box 704	Waynesville	OH	45068
Coffman	Dale E.& Judith		6270 Sales Rd.	Waynesville	OH	45068
Coffman	James Eric & Kimberly		6216 Sales Rd.	Waynesville	OH	45068
Williams	Lori O.		6079 Sales Rd.	Waynesville	OH	45068
Pierce	Carl A. & Louise		6106 Sales Rd.	Waynesville	OH	45068
Sholski	Frank	ODNR-Caesar Creek Area	P. O. Box 186	Oregonia	OH	45054
Mead	Whitaker W.		5702 Elbon Rd.	Waynesville	OH	45068
Greer	Jan Gary & Joyce Ann		6478 Gard Rd.	Waynesville	OH	45068
Stolle, Company	Ralph J.		6954 Cornell Rd.	Cincinnati	OH	45242
Pennington	Lucille		5510 Harveysburg Rd.	Waynesville	OH	45068
Ullum	Eleanor C.		41-B Springhouse Court	Lebanon	OH	45036
Ferrau	Joseph & Valerie		6218 Olive Branch Rd.	Oregonia	OH	45054
Stephens	Vivian M.		50-B Shaker Run Rd.	Lebanon	OH	45036
Amburgy	Bob C. & Mona M.		6545 Olive Branch Rd.	Oregonia	OH	45054
Miami Highlands			6565 Olive Branch Rd.	Oregonia	OH	45054
Miami Highlands		c/o Tom Noe	133 W. 4th St. - 4th Floor	Cincinnati	OH	45202
Bryant	Yorkie		6373 E. U.S. Rt. 22 & 3	Morrow	OH	45152

Parker	Bonnie J. & Troy		5868 Wilmington Rd.	Oregonia	OH	45054
Wurzelbacher	G. Michael		4164 Hutchison Rd.	Cincinnati	OH	45248
Powell	Kenneth E. & Nora		232 Corwin Rd.	Oregonia	OH	45054
Clark	Paul & Judy		156 Corwin Rd.	Oregonia	OH	45054
Ritz	Ronald W.		7845 Elizabeth St.	Cincinnati	OH	45231
Herres	Michael D.		5242 Wilmington Rd.	Oregonia	OH	45054
McCall	Jack L. & Betty		6115 KY Hwy. 78	Stanford	KY	40484
Shaw	Elizabeth J.	c/o Edward C. Shaw	310 S. Mechanic St.	Lebanon	OH	45036
Cincinnati Gas & Electric Co.			P. O. Box 960 - Room 260A	Cincinnati	OH	45201
Caum	William & Bonnie Lou		674 S. Nixon Camp Rd.	Oregonia	OH	45054
Declark	Candice		200 S. Nixon Camp Rd.D109	Oregonia	OH	45054
Johnson	Ronald H.		1038 Redford Ct.	Fairfield	OH	45014
Taylor	Keith A.		945 S. Nixon Camp Rd.	Oregonia	OH	45054
Bednar	Robert E. & Chris		1029 S. Nixon Camp Rd.	Oregonia	OH	45054
Leasure	Mary Alice		141 W. Concord Dr.	Lebanon	OH	45036
Updyke	Paul S. & Carol		5017 Green Tree Rd.	Lebanon	OH	45036
Updyke	Charles V.		4563 S.R. 350	Lebanon	OH	45036
Tkatschenko	John A.		1747 S. Nixon Camp Rd.	Lebanon	OH	45036
Geiser	Thomas I. & Kari E.		1811 S. Nixon Camp Rd.	Lebanon	OH	45036
Davidson	John & Mary		1849 S. Nixon Camp Rd.	Lebanon	OH	45036
Rowe	Boyd W.		P. O. Box 526	Lebanon	OH	45036
Sizemore	Sherry & Gary D.		2426 S. S.R. 123	Lebanon	OH	45036
Cayot	Dale L. & Jane E.		2400 S. S.R. 123	Lebanon	OH	45036
Cunningham	Lonnie M.		2478 S. S.R. 123	Lebanon	OH	45036
Clark	Paul E. & Brad		95 N. Hill St.	Brookville	OH	45309
Powell	Charles B. & Edna		1018 Shawhan Rd.	Morrow	OH	45152
Brunty	Tom J. & Lois A.		2715 S. S.R. 123	Morrow	OH	45152
Sharpe	Jene & Casa		2841 S. S.R. 123	Morrow	OH	45152
Simmerman	Thomas V.		2905 S. S.R. 123	Morrow	OH	45152
Lamb, Etal.	Emery		2949 S. S.R. 123	Morrow	OH	45152
Davis	Pam Frank & Mark E.		8412 West Ohio State	Lancaster	OH	43130
Alderson	Ruth Ann		3095 S. S.R. 123	Morrow	OH	45152
Singleton	Lee M. & Ann S.		3701 S. Waynesville Rd.	Morrow	OH	45152
Watkins	Hilda B.		3479 S. Waynesville Rd. - Apt. 1	Morrow	OH	45152
Harrington	John E.		3553 S. Waynesville Rd.	Morrow	OH	45152
Philpot	James T. & Sharo		3576 Bramble Bush Dr.	Morrow	OH	45152
Warren	Brent A. & Bernae		3568 Bramble Bush Dr.	Morrow	OH	45152

Naylor	Jeffrey A. & Linda		3530 Bramble Bush Dr.	Morrow	OH	45152
Kilburn	Charles W.		P.O. Box 31	Morrow	OH	45152
Kilburn	Wayne & Joy		3286 S. Waynesville Rd.	Morrow	OH	45152
Wall	Harold D.	TBL Investments	8778 Roachester-Cozzadale Rd.	Pleasant Plain	OH	45162
Anderson	Shawn D. & Kare		2358 Tumble Weed Lane	Lebanon	OH	45036
Cook	Steve & Becky		3764 Mason-Morrow-Millgrove Rd.	Morrow	OH	45152
Isacs	Floyd T. & Kathryn		3534 E. U.S. Rt. 22	Morrow	OH	45152
Sholski	Frank	ODNR- Morrow Area	P. O. Box 186	Oregonia	OH	45054
Morrow Gravel Co.			11641 Mosteller Rd.	Cincinnati	OH	45241
Morrow Church of Christ			P.O. Box 174	Morrow	OH	45152
Western Water Company			3577 Bennett Rd.	Morrow	OH	45152-0964
Brandenburg, Etal.	Gary		3929 Bennett Rd.	Morrow	OH	45152
Peel	Steven B. & Eileen		7427 Hamilton Ave.	Maineville	OH	45039
Netherly, Etal.	Mark		6320 Ludlum Rd.	Morrow	OH	45152
Johnson	Randy & Deborah		6406 Ludlum Rd.	Morrow	OH	45152
Johnson	Earl G. & Marilyn		6458 Ludlum Rd.	Morrow	OH	45152
Crow	David & Theresa		6520 Ludlum Rd.	Morrow	OH	45152
Elliott	Rick		9541 Rich Rd.	Loveland	OH	45140
Lukens	Joseph T.		6565 Ludlum Rd.	Morrow	OH	45152
Nicholson	J. Morton & B. A.		6675 Ludlum Rd.	Morrow	OH	45152
Norman	Gary B. & Eva		P.O. Box 211	Morrow	OH	45152
Allison	Greg & Angie		3266 McIntire Rd.	Morrow	OH	45152
Maxfield	Thomas S. & Son		3301 McIntire Rd.	Morrow	OH	45152
Evans	Elvis W.		3191 McIntire Rd.	Morrow	OH	45152
Church	Chandler		6972 Morrow Cozaddale Rd.	Morrow	OH	45152
Lymangrover	John R.		12909 Turkey Branch Parkway	Rockville	MD	20853
Casselman	Kenneth J. & P.		2644 Ireland Rd.	Morrow	OH	45152
Todia	Judith R.		2594 Ireland Rd.	Morrow	OH	45152
Ertel	Earl C. & Marilyn		2698 Ireland Rd.	Morrow	OH	45152
Crawford	Jeffrey W. & K. A.		7284 Morrow Cozaddale Rd.	Morrow	OH	45152
Wilson	Dorothy		7063 Morrow Cozaddale Rd.	Morrow	OH	45152
Hildebrant Family Farm			2098 Mounts Rd.	Morrow	OH	45152
Hildebrant Family Partner			2098 Mounts Rd.	Morrow	OH	45152
ZFC, Inc.			7370 Zoar Rd.	Maineville	OH	45039
Sandy Cove Corp.			2098 Mounts Rd.	Morrow	OH	45152
Smith	Eleanor C.		1552 E. Foster-Maineville Rd.	Morrow	OH	45152

DP&L

Working For You Today and Tomorrow

January 7, 2000

Odis W. Brown
P. O. Box 59
Lebanon, OH 45036

Dear Odis W. Brown:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section C on the enclosed map, Figure A-1.2. In Section C of this project, an existing single circuit steel tower line with structures as sketched on Figure B-1.8, enclosed, is located along a 150 foot wide right-of-way. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each tower. Once the existing circuit is transferred to the new steel pole structures, the existing steel towers will be removed and the second circuit added to the steel poles. The exception to this procedure is at the "Sugarcreek Tap" point at the north end of Section C and approximately one half mile south of Centerville Road. Here a tap line runs to the west to Sugarcreek Substation. The steel tower tap point structure at this location will be modified by placing a single steel pole just east of the tap tower to carry the Foster-Bath circuit by the tap tower which will remain as it is. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

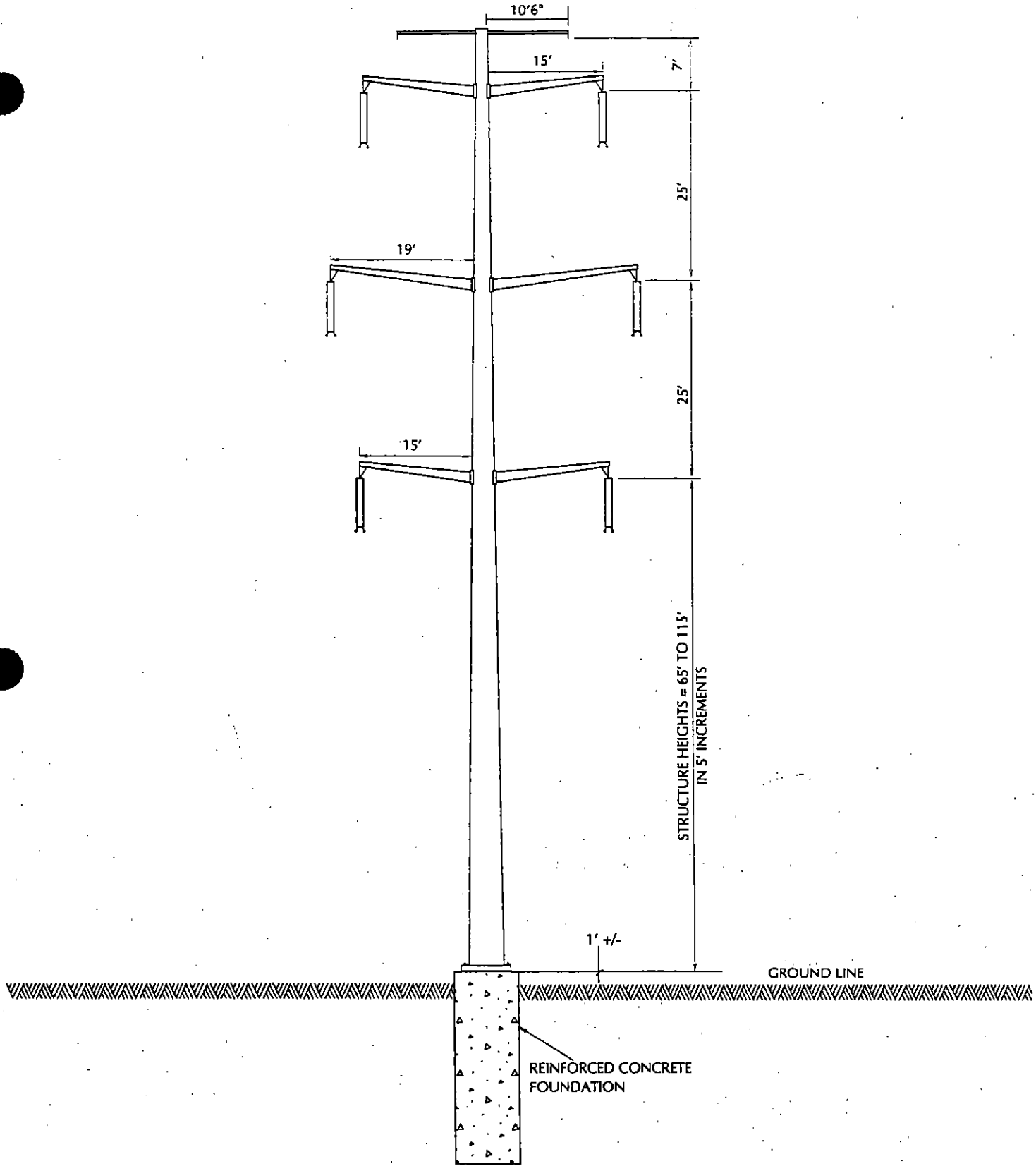
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

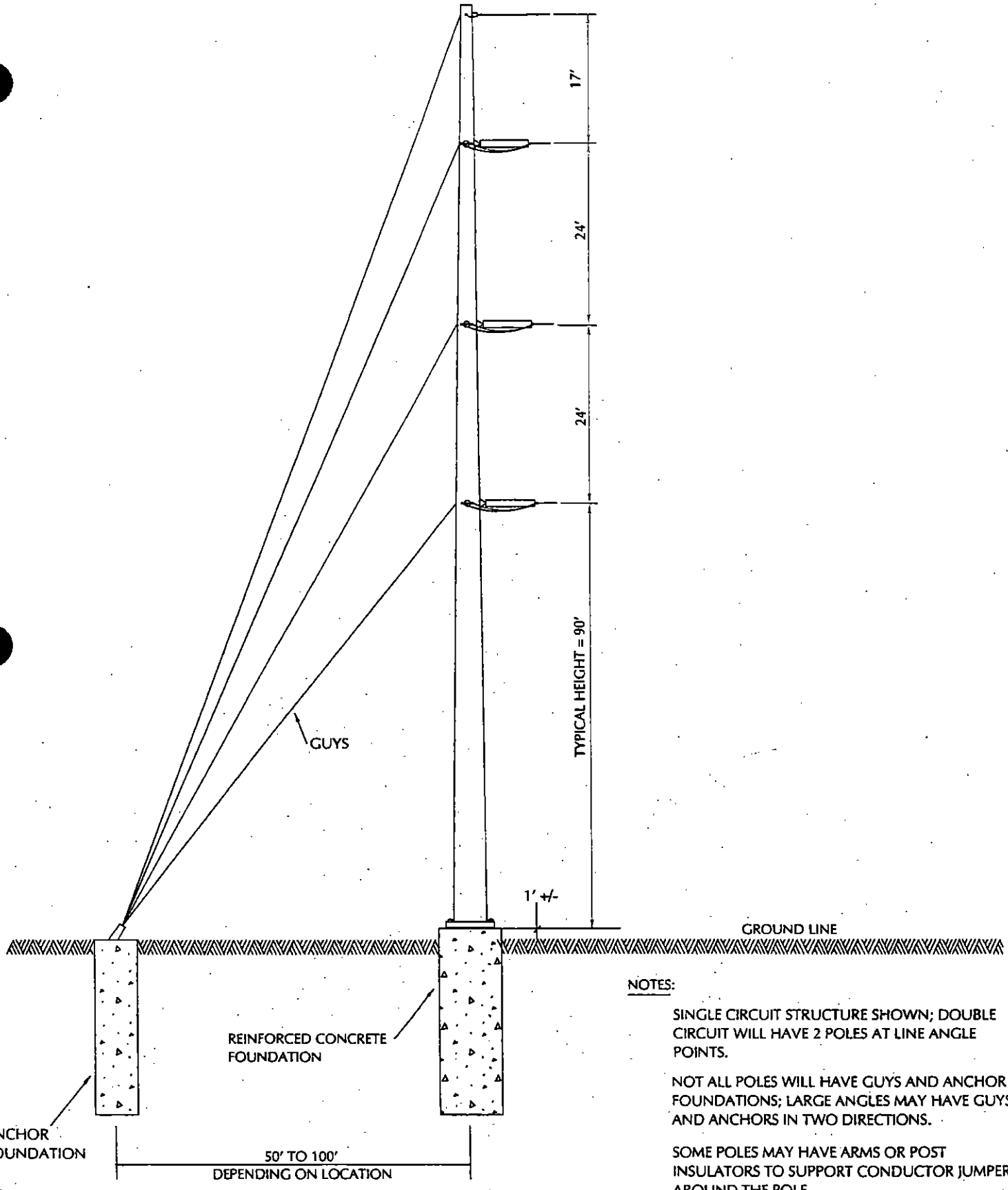
Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

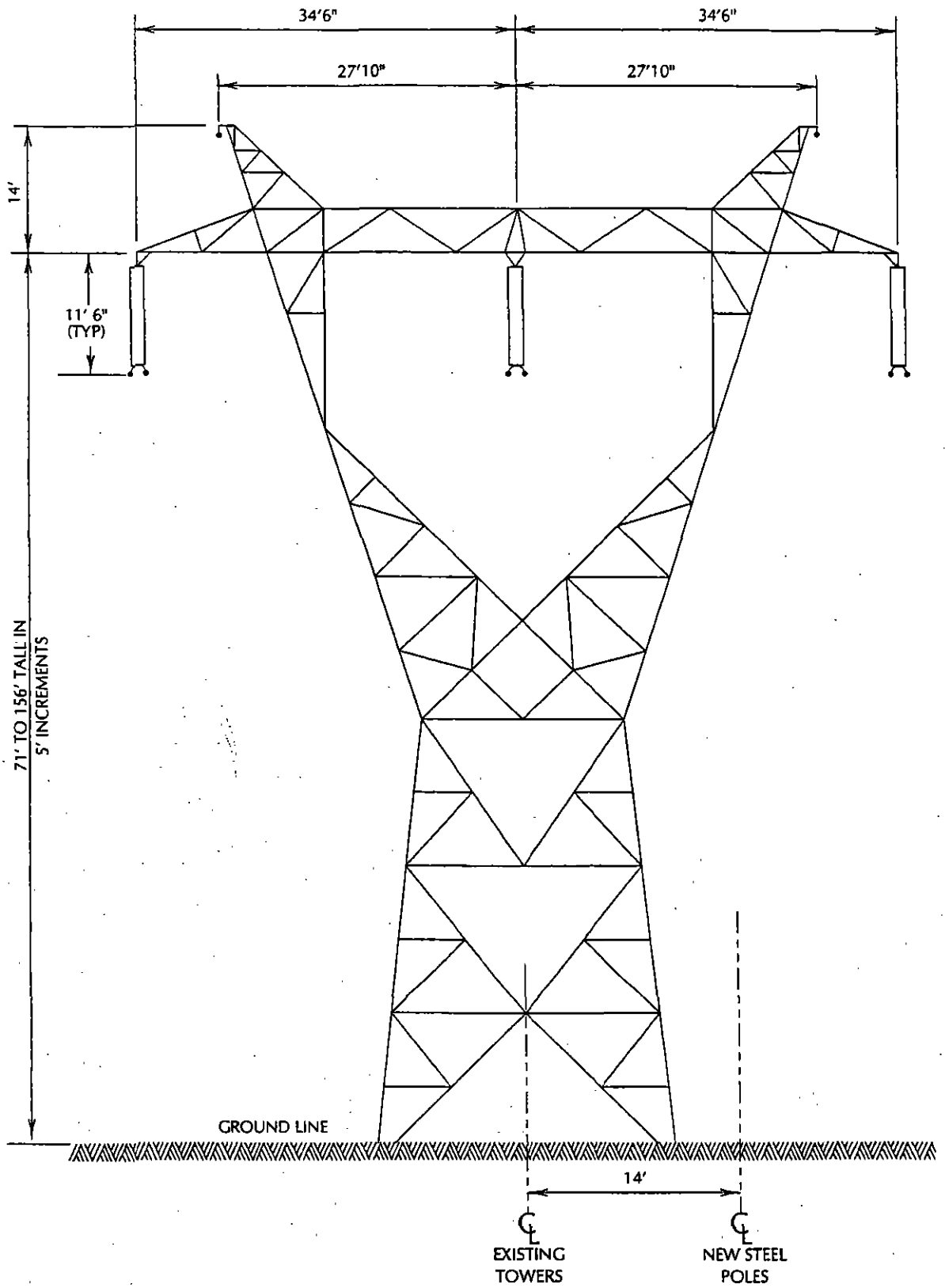
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION D PROPERTY OWNER LIST

L Name	F Name	F&L Name	Address	City	State	Zip
Kyne, Trustees	James B. & Marjorie J.		2577 Centerville Rd.	Spring Valley	OH	45370
Kyne	Christopher B. & Kristi L.		2575 Centerville Rd.	Spring Valley	OH	45370
Cimino	James J. & Terry		3107 Clear Springs Rd.	Spring Valley	OH	45370
Francis	Edward J. & Hannah H.		3101 Clear Springs Rd.	Spring Valley	OH	45370
Stahl	Richard D. & Linda K.		3081 Clear Springs Rd.	Spring Valley	OH	45370
Sonnycalb	Cindy		3061 Clear Springs Rd.	Spring Valley	OH	45370
Chong	Salley A.		3041 Clear Springs Rd.	Spring Valley	OH	45370
Thomas	Dennis P. & Barbara B.		2567 Cook Rd.	Spring Valley	OH	45370
Hidden Springs Farm			2567 Cook Rd.	Spring Valley	OH	45370
Kyne	Helen		2324 Centerville Rd.	Spring Valley	OH	45370
Key Trust Company of Ohio, NA			34 N. Main St.	Dayton	OH	45401
Mongin	Matthew Ross & Jane Kaye		3006 Blue Green Dr.	Dayton	OH	45431
Metzler	Mark T. & Wendy J.		2470 Cook Rd.	Spring Valley	OH	45370
Hershner	Marion		865 Spring Valley Paintersville Rd.	Spring Valley	OH	45370
Soin	Rajesh K. & Indu		4032 Linden Ave.	Dayton	OH	45432
Salerno, Trustee	Francesco M.		665 Evans Ln.	Dayton	OH	45459
Bensman	Thomas E.	Christine A. Hammer	P.O. Box 751021	Dayton	OH	45475
Ables	Jimmy		2355 Lower Bellbrook	Spring Valley	OH	45370
Meyer	George R.	Calleen M. Moloney	2149 Lower Bellbrook	Spring Valley	OH	45370
Gouge, Jr.	Horace E. & Ada L.		2325 Lower Bellbrook	Spring Valley	OH	45370
Loeffelman	Joseph W. & Shirley A.		2303 Lower Bellbrook	Spring Valley	OH	45370
Ingram	Carley Jean		2155 Lower Bellbrook	Spring Valley	OH	45370
Dulin	David L. & Loreen O.		2266 Lower Bellbrook	Spring Valley	OH	45370
Bingman	Mark A. & Linda G.		2241 Spahr Rd.	Xenia	OH	45385
Thomeczek	Thomas A. & Betty A.		2217 Spahr Rd.	Xenia	OH	45385
Bledsoe	Christopher L. & Pamela M.		2230 Spahr Rd.	Xenia	OH	45385
Crowe	Ralph & Elsie Eileen		2200 Spahr Rd.	Xenia	OH	45385
Covey	Robert Eric & Rebekah R.		2302 Schnebly Rd.	Spring Valley	OH	45370
Lorenzo	Loren L.		1988 Lower Bellbrook	Xenia	OH	45385
Torrence	Barbara L.	Evette A. White	1682 Sutts Trail	Xenia	OH	45385
Dabbelt	Michael S. & Tammy M.		1688 Sutts Trail	Xenia	OH	45385
Leiter	Robert E. & Charity A.		1666 Suman Ave.	Dayton	OH	45403
Greene Tree Development Inc.			7245 Far Hills Ave.	Dayton	OH	45459

Vincent, Jr.	Norman K. & Barbara L.		2063 Washington Mill Rd.	Xenia	OH	45385
Caron	Stephen M. & Diane L.		2025 Washington Mill Rd.	Xenia	OH	45385
Fear	Norman D. & Yvonne		2140 Washington Mill Rd.	Xenia	OH	45385
Graham	Ralph A. & F. J.		1445 Spring Valley Alpha Rd.	Xenia	OH	45385
Parsons	Elmer & L. V.		1315 Spring Valley Alpha Rd.	Xenia	OH	45385
Gerspacher	Paul & Mary K.		1238 Spring Valley Alpha Rd.	Xenia	OH	45385
Gerspacher	Mary K.		1238 Spring Valley Alpha Rd.	Xenia	OH	45385
Mitchell	Gerald L. & Diana L.		1161 Spring Valley Alpha Rd.	Xenia	OH	45385
Chandler	Donald L. & Janice L.		1055 Spring Valley Alpha Rd.	Xenia	OH	45385
Rizki	Mateen M. & Pamela S.		1045 Spring Valley Alpha Rd.	Xenia	OH	45385
Studer	Richard E. & Alison E.		2077 Stewart Rd.	Xenia	OH	45385
Frederick	Richard L. & W. Jeanne		895 Spring Valley Alpha Rd.	Xenia	OH	45385
Schaaf	Kathleen		1929 Stewart Rd.	Xenia	OH	45385
Davis	Timothy R. & Ann L.		1887 Stewart Rd.	Xenia	OH	45385
Bockhorn	David A.		1869 Stewart Rd.	Xenia	OH	45385
Nayles	Rodney L. & Gina M.		1725 Bambi Ct.	Xenia	OH	45385
Knick	David E.	Cheryl K. Finney	1847 Stewart Rd.	Xenia	OH	45385
Laudermilk	Kenneth J. & Ruth		1811 Stewart Rd.	Xenia	OH	45385

DP&L

Working For You Today and Tomorrow

January 7, 2000

James B. & Marjorie J. Kyne, Trustees
2577 Centerville Rd.
Spring Valley, OH 45370

Dear James B. & Marjorie J. Kyne, Trustees:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section D on the enclosed map, Figure A-1.2. In Section D of this project, an existing single circuit steel tower line with structures as sketched on Figure B-1.8, enclosed, is located along a 150 foot wide right-of-way. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each tower. Once the existing circuit is transferred to the new steel pole structures, the existing steel towers will be removed and the second circuit added to the steel poles. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace. The exception to this procedure is that there are presently two steel poles in the line just north of Washington Mill Road. These will be converted from a single circuit to a double circuit configuration, the resulting poles looking similar to Figure B-1.1.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

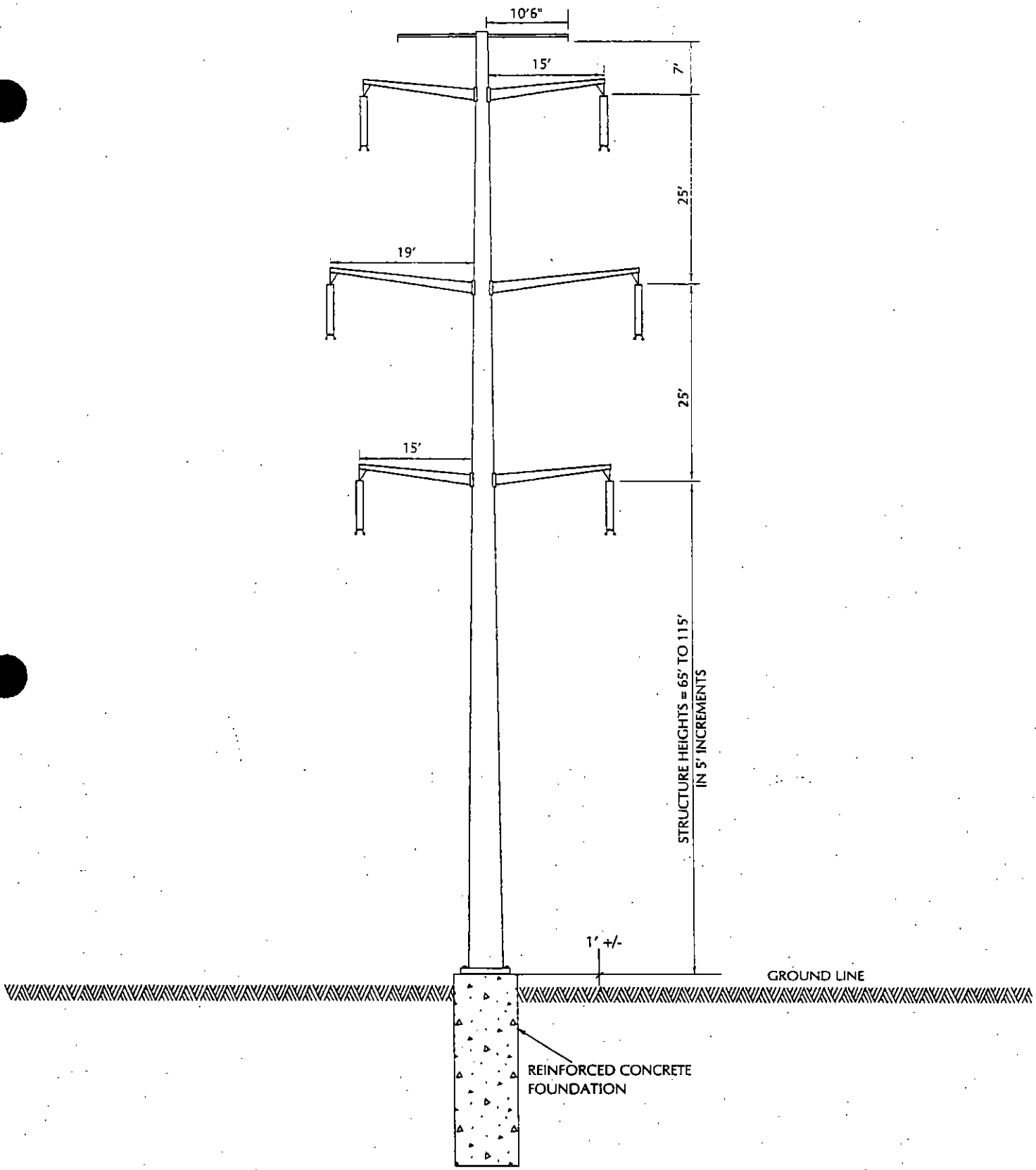
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

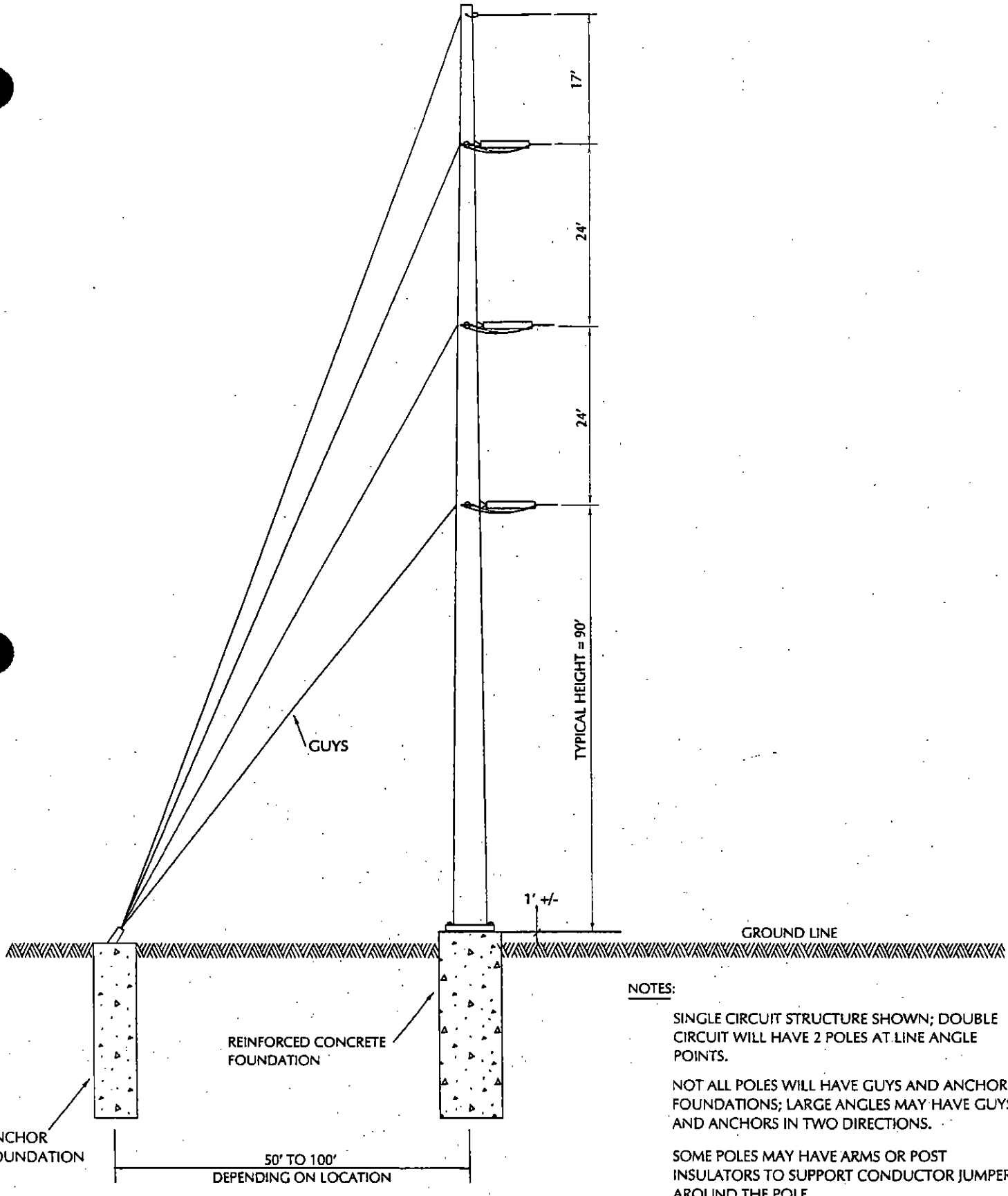
Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

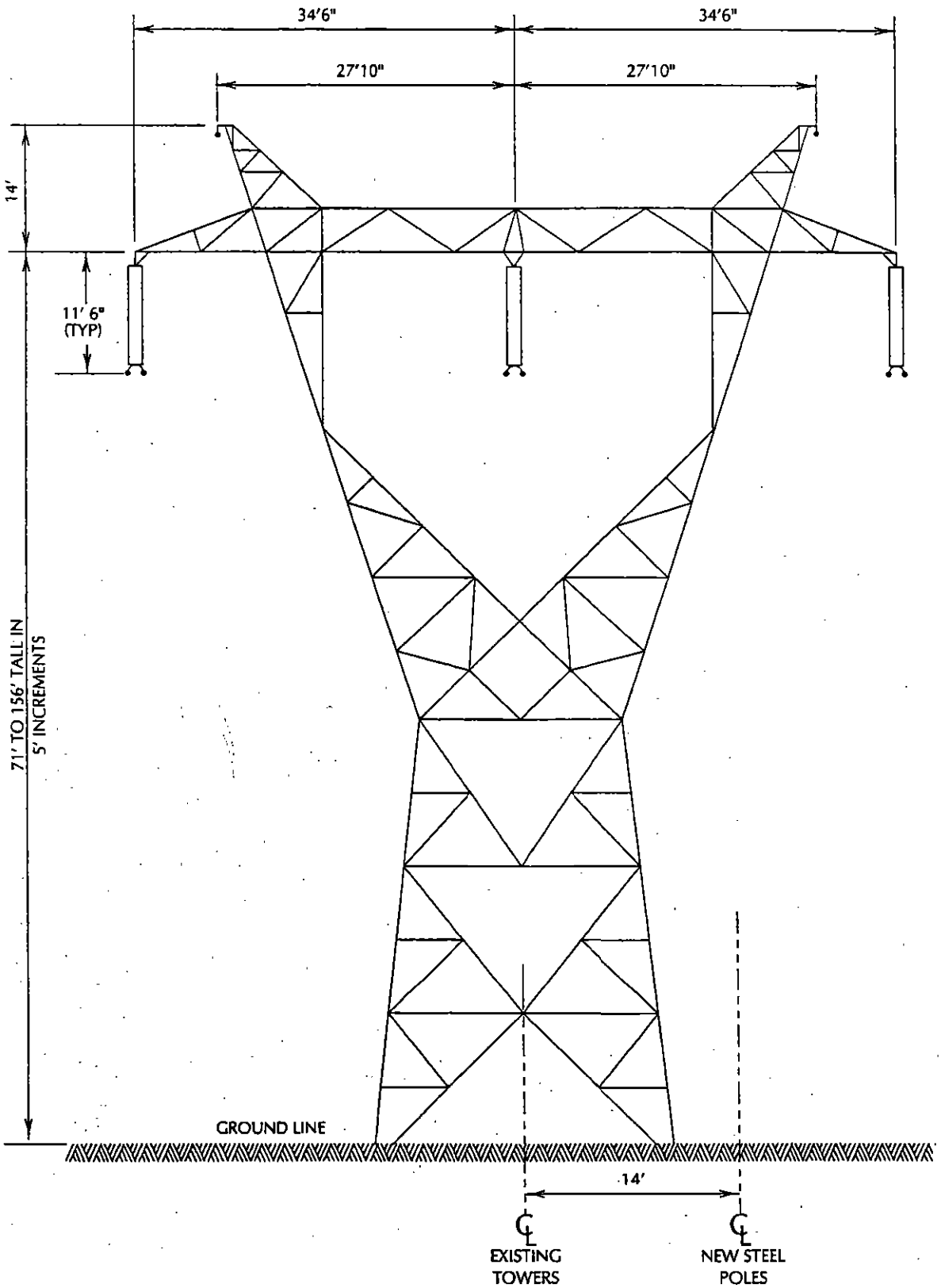
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION E PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Knapp	Timothy M.	1770 Stewart Rd.	Xenia	OH	45385
Hislope	Cecil W. & Mattie L.	1754 Stewart Rd.	Xenia	OH	45385
McWilliams	Howard H. & Patricia T.	1806 Stewart Rd.	Xenia	OH	45385
Jones	Steven P. & Frances A.	521 Van Eaton	Xenia	OH	45385
Sultzbach, Trustee	Richard E.	1331 Tall Timber Trail	Dayton	OH	45409
McClain, Etal., Trustees	John	1630 Upper Bellbrook Rd.	Xenia	OH	45385
Lickliter, Trustee	Robert C.	15 S. Valley Rd.	Xenia	OH	45385
Russ	Fritz J.	2380 Kemp Rd.	Dayton	OH	45431

DP&L

Working For You Today and Tomorrow

January 7, 2000

Timothy M. Knapp
1770 Stewart Road
Xenia, OH 45385

Dear Timothy M. Knapp:

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section E on the enclosed map, Figure A-1.2. In Section E of this project, two existing single circuit steel tower lines with structures as sketched on Figure B-1.8, enclosed, are located along a 300 foot wide right-of-way. The existing single circuit steel tower line along the western portion of the 300 foot right-of-way will remain as it is. The planned construction will install a double circuit steel pole configuration as shown in Figure B-1.1 or B-1.2 adjacent to each of the single circuit towers along the eastern portion of the right-of-way. One additional steel pole structure may be required near the projected runway of the Greene County airport to accommodate the airport glide paths. Once the existing east circuit is transferred to the new steel pole structures, the existing east steel towers will be removed, except at the first tower north of Stewart Road where the existing circuit will remain on the existing tower. The new second circuit (Foster-Bath) will then be added to the new steel poles. The new steel pole structures will require use of significantly less land at their base, and have better aesthetics than the existing steel towers they will replace.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

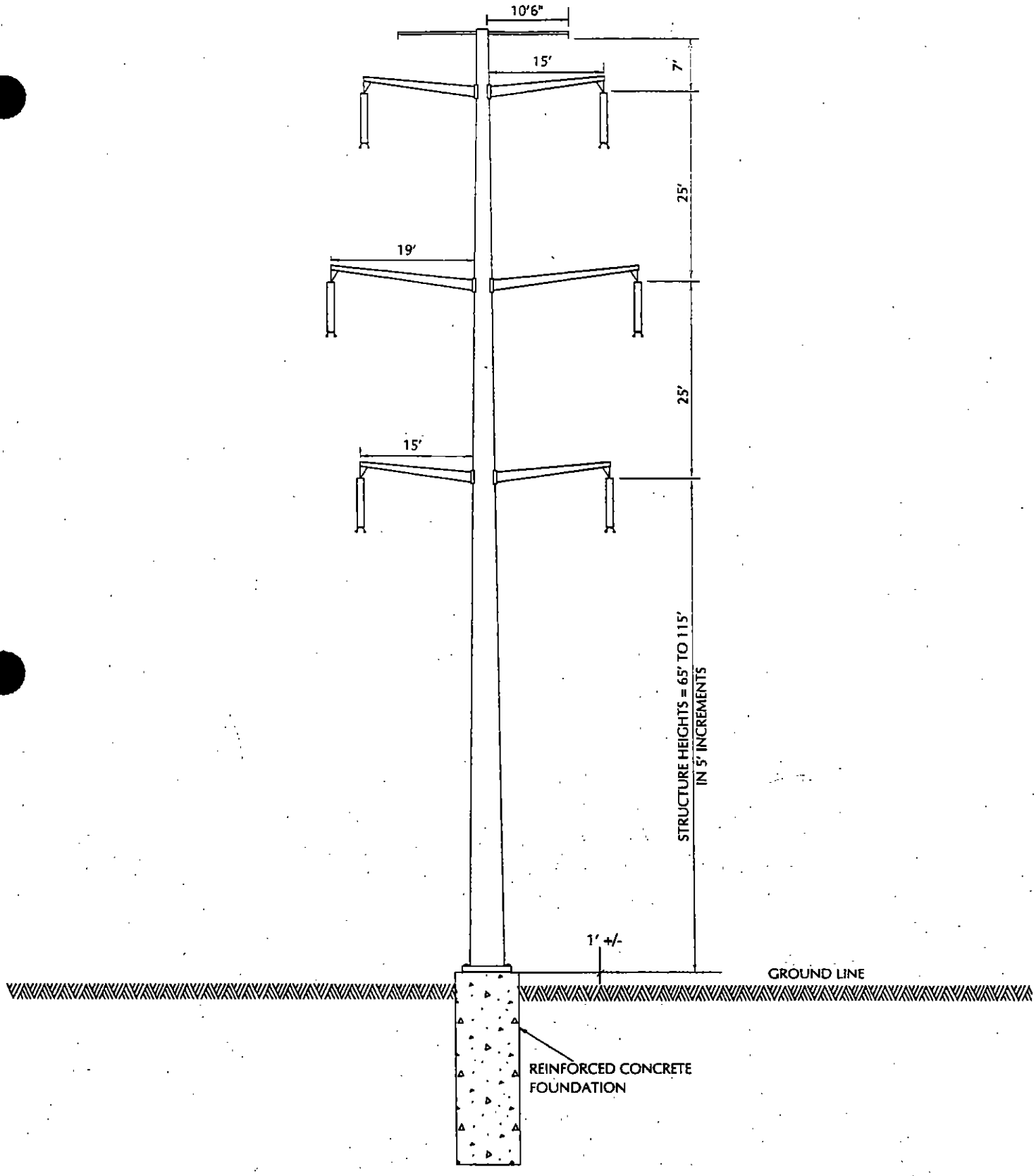
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

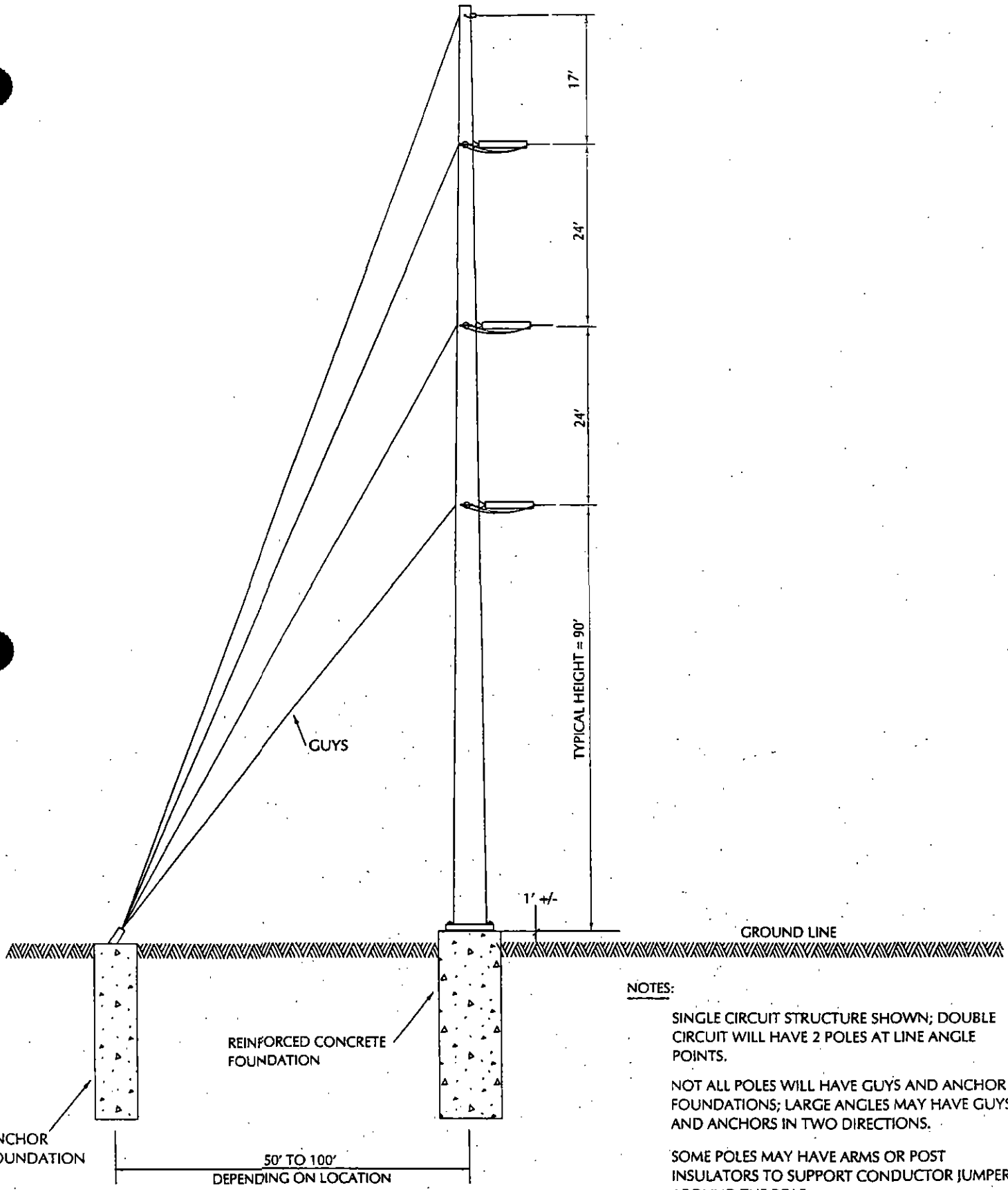
Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.1
DOUBLE CIRCUIT
STEEL POLE (TANGENT)



NOTES:

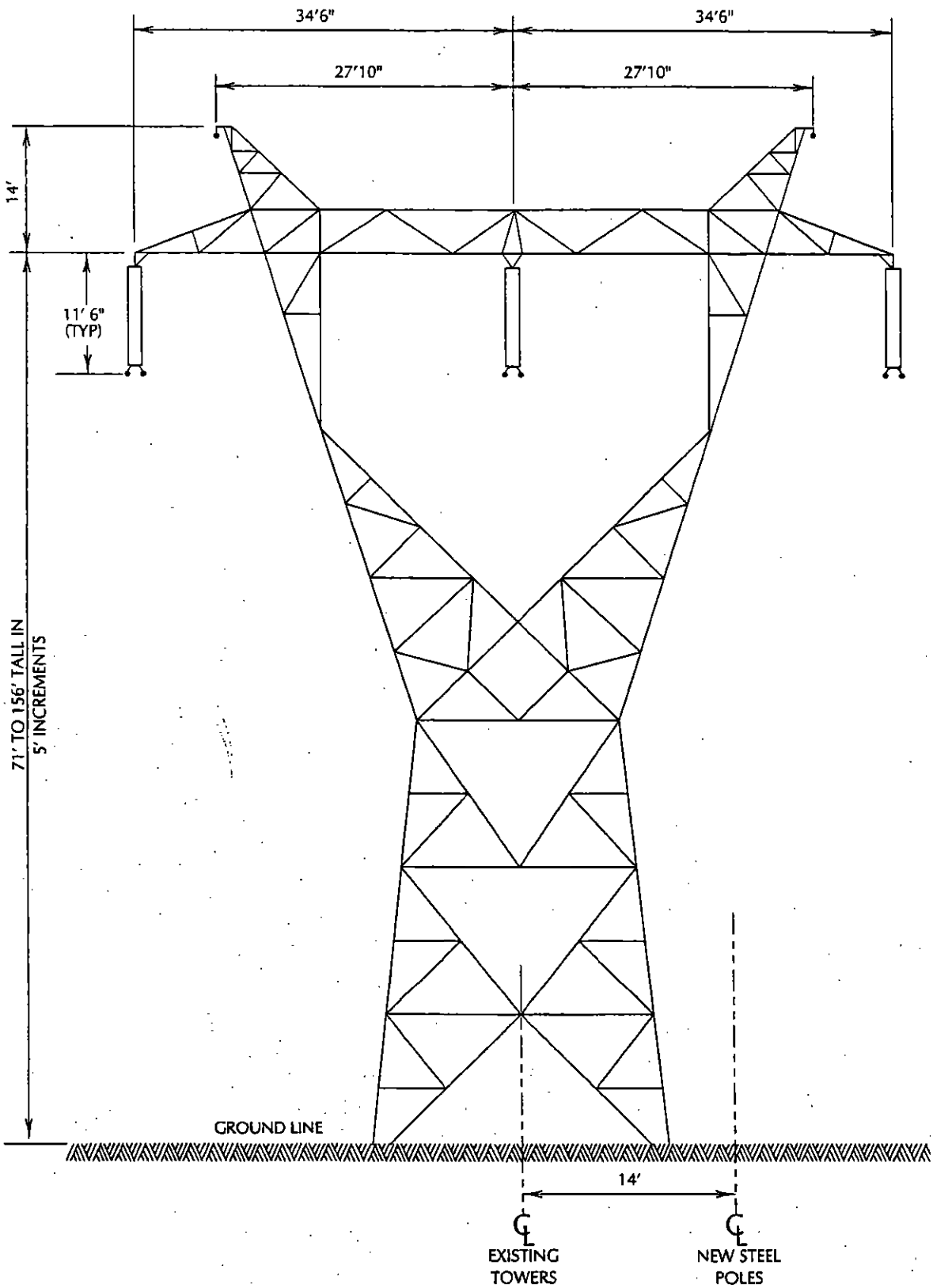
SINGLE CIRCUIT STRUCTURE SHOWN; DOUBLE CIRCUIT WILL HAVE 2 POLES AT LINE ANGLE POINTS.

NOT ALL POLES WILL HAVE GUYS AND ANCHOR FOUNDATIONS; LARGE ANGLES MAY HAVE GUYS AND ANCHORS IN TWO DIRECTIONS.

SOME POLES MAY HAVE ARMS OR POST INSULATORS TO SUPPORT CONDUCTOR JUMPERS AROUND THE POLE.

DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.2
STEEL POLE
ANGLE STRUCTURE



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION F PROPERTY OWNER LIST

L Name	F Name	Address	City	State	Zip
Valley Springs Farm - McGinnis Property		130 W. Second St., Ste. 800	Dayton	OH	45402
Bd. of Trustees Beavercreek Twp.		1981 Dayton-Xenia Rd.	Beavercreek	OH	45434

DP&L

Working For You Today and Tomorrow

January 7, 2000

Valley Springs Farm-McGinnis Property
130 W. Second St. Ste. 800
Dayton, OH 45402

Dear Valley Springs Farm-McGinnis Property

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section F on the enclosed map, Figure A-1.2. In Section F of this project, an existing 300 foot wide right-of-way contains two steel tower transmission lines. On the western portion of the right of way the existing single circuit tower line, as sketched on Figure B-1.8, enclosed, is to remain as at present. On the eastern portion of the right of way there is a double circuit steel tower line with structures as sketched on Figure B-1.5, except the existing east circuit has only one conductor per position instead of two as shown. The towers at present carry a 345 kV circuit on the west side and a 69 kV circuit on the east side of the towers. The planned construction will add a second conductor to each of the three conductor positions on the east side of the towers to form the Foster-Bath 345 kV circuit. The 69 kV line presently on the east side of the towers will be relocated to a new wood pole construction between the two tower lines.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

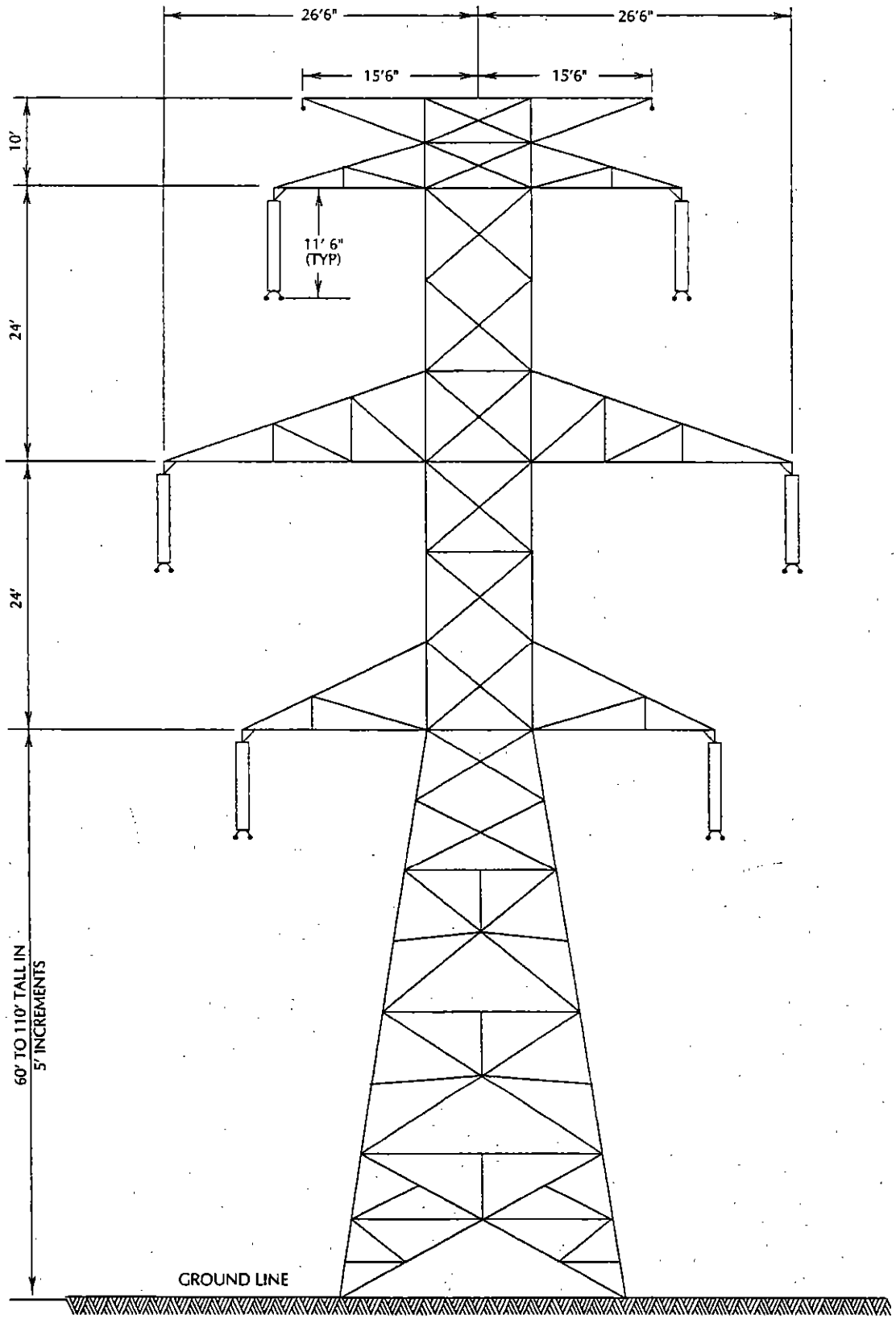
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

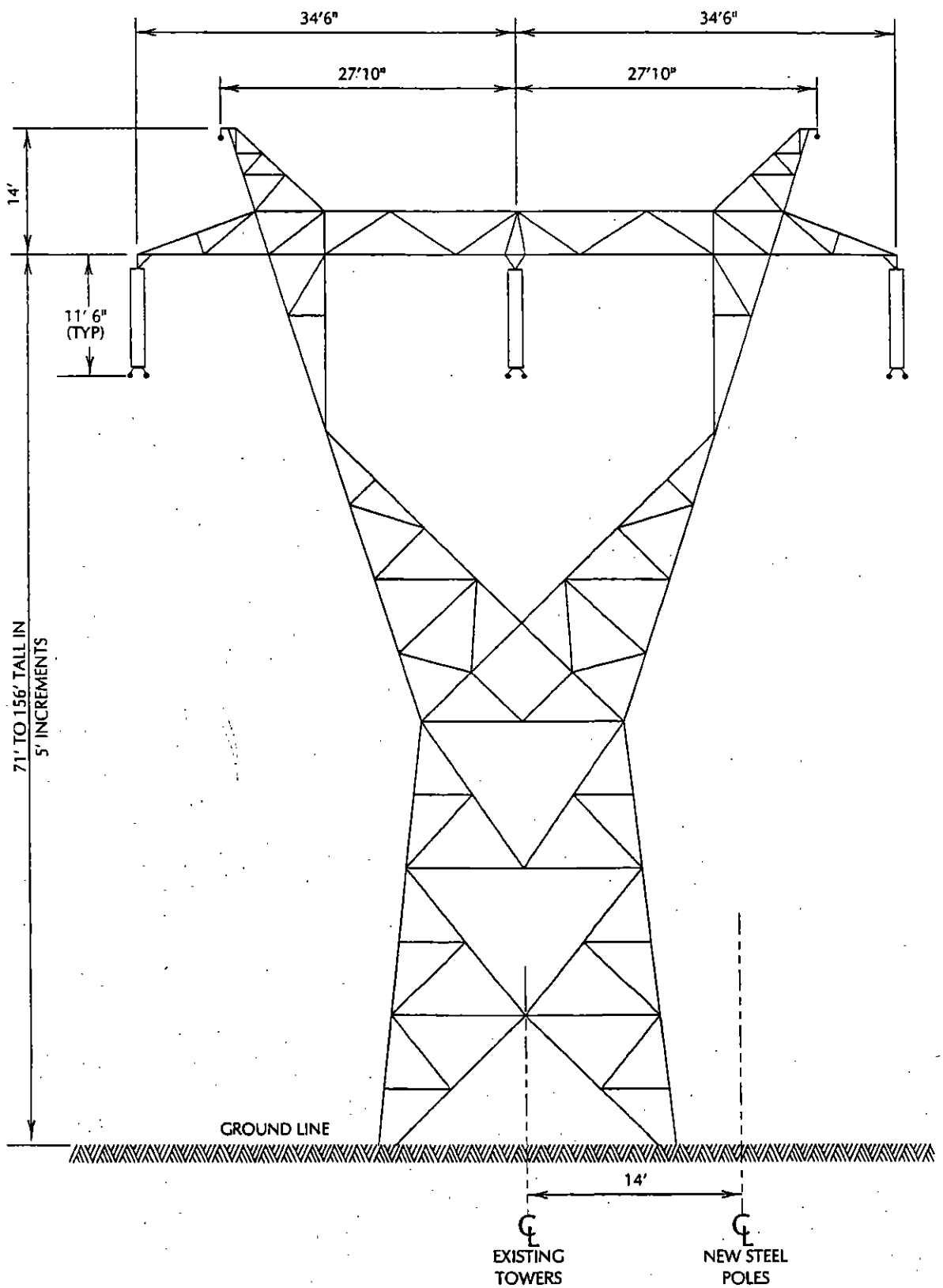
Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)

FOSTER-BATH SECTION G PROPERTY OWNER LIST

L Name	F Name	F&L Name	Address	City	State	Zip
Nutter Enterprises LTD.			P.O. Box 80	Alpha	OH	45301
Peed	James E. & Harriet M.		1076 Ankeney Rd.	Xenia	OH	45385
Sneed	Warner R., Jr. & Kimberley M.		2347 Haines Rd.	Dayton	OH	45431
Soward	Steven K.		1110 Ankeney Rd.	Xenia	OH	45385
Trame	Joseph A. & Terri L.		1122 Ankeney Rd.	Xenia	OH	45385
Piatka	John & Brenda L.		1140 Ankeney Road	Xenia	OH	45385
Downey	Deborah Ann		P.O. Box 21	Alpha	OH	45301
Hickey	Christopher J.	Janine S. Frank	1167 Ankeney Rd.	Xenia	OH	45385
Pitzer	Vaughn & Goldie		1189 Ankeney Rd.	Xenia	OH	45385
Siwecki	Ronald E. & Denise I.		1219 Ankeney Rd.	Xenia	OH	45385
Moland, Trustee	William W.		5005 Rhine Way	Dayton	OH	45458
McIntire	Ray G.		P.O. Box 34	Xenia	OH	45385
Clay	Bruce A. & Jean A.		1725 W. Slater Ct.	Xenia	OH	45385
Bader	Robert M. & Laura		1613 Kingsway Dr.	Xenia	OH	45385
Lavilla	Eduardo T. & Cheryl M.		1635 Kingsway Dr.	Xenia	OH	45385
Turner, III	Elijah W. & Alaire B.		1655 Kingsway Dr.	Xenia	OH	45385
Dressler	Frank E. & Carol J.		1675 Kingsway Dr.	Xenia	OH	45385
Finkbeiner	Jon R. & Barbara J.		1695 Kingsway Dr.	Xenia	OH	45385
Becker	Frederick H. & Margaret S.		1715 Kingsway Dr.	Xenia	OH	45385
Spurgeon	Roger L.		1735 Kingsway Dr.	Xenia	OH	45385
McClure	Robert A. & Arvetta		1755 Kingsway Dr.	Xenia	OH	45385
Heiney	Thomas I. & Wilma J.		1590 Cosler Ct.	Xenia	OH	45385
Dagett	Thomas R. & Patti L.		1610 Cosler Ct.	Xenia	OH	45385
Strickland	Marlyn F. & Linda R.		1628 Cosler Ct.	Xenia	OH	45385
Henry	Michael & Anita L.		1680 Heatherwood Trl.	Xenia	OH	45385
Zindorf	John M. & Susan K.		1700 Heatherwood Trl.	Xenia	OH	45385
Herting	Carl A. & Judy W.		1718 Heatherwood Trl.	Xenia	OH	45385
Bennett	Richard W.	Shirley G. Leyes	1734 Heatherwood Trl.	Xenia	OH	45385
Sultzbach, Trustee	Catharine Nelle		1331 Tall Timber Trl.	Dayton	OH	45409
Ankeney	Dale F.	Joan Ellen Fuller	1828 Fairground Rd.	Xenia	OH	45385
Allen Land LTD.			P.O. Box 357	Beavercreek	OH	45434
Branham	Randy & Ronna		1649 Oakwood Trl.	Xenia	OH	45385
Moran	Timothy J.	Rebecca L. Westlake	PCS 3 Box 4616	APO AP		96266

Maurer	Janet L.	1034 Sundance Dr.	Miamisburg	OH 45342
Haines	Charles R. & Peggy E.	1670 Woodland Trl.	Xenia	OH 45385
Rodenfels	Jerome F. & Ann T.	1694 Woodland Trl.	Xenia	OH 45385
Epperson, Trustee	William E. & Joan G.	2271 Walnut Ct.	Xenia	OH 45385
Phillips	Dennis K. & Susan L.	2289 Walnut Ct.	Xenia	OH 45385
Moore	Allen K. & Norma Jean	2294 Walnut Ct.	Xenia	OH 45385
Ali	Frank F. & Viola P.	1619 Grand Portage Trl.	Xenia	OH 45385
Ali	Jeannie R.	1671 Grand Portage Trl.	Xenia	OH 45385
Nutter Enterprises		2458 Dayton Xenia Rd., #200	Beavercreek	OH 45434
Croom	Christopher S.	2377 Passage Key Trl.	Xenia	OH 45385
Gilbert Homes, Inc.		6810 Brigantine Way	Dayton	OH 45414
Wingate	Leo K. & Katherine H.	2393 Passage Key Trl.	Xenia	OH 45385
STS Investments		3300 Suburban Dr.	Dayton	OH 45432
Willis	Woodrow D. & Lynn C.	2542 Rolling Meadows Dr.	Xenia	OH 45385
Eldridge	Michael G.	2548 Rolling Meadows Dr.	Xenia	OH 45385
Taylor	Roger L. & Linda S.	25 S. Central Ave.	Fairborn	OH 45324
Conley	Gary L. & Nancy M.	3942 Darden Dr.	Dayton	OH 45431
Derrick	Martha J.	198 Brush Row Rd.	Xenia	OH 45385
Southdown Inc.		3250 Linebaugh Rd.	Xenia	OH 45385
Barker	Juanita D.	2482 Trebein Rd.	Xenia	OH 45385
Rolling Meadows Business Trust		25 S. Central Ave.	Fairborn	OH 45324

DP&L

Working For You Today and Tomorrow

January 7, 2000

Nutter Enterprises LTD.
P.O. Box 80
Alpha, OH 45301

Dear Nutter Enterprises LTD.:

The Dayton Power and Light Company (DP&L) owns and operates a 345,000 volt transmission line in your area. This line connects with other transmission facilities in the area that DP&L owns jointly with the Cincinnati Gas & Electric Company (CG&E/Cinergy) and Columbus Southern Power/American Electric Power (CSP/AEP). A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section G on the enclosed map, Figure A-1.2. In Section G of this project, an existing 150 foot wide right-of-way contains double circuit steel transmission line towers. These towers are as sketched on Figure B-1.5, enclosed, except no circuit has yet been installed on the west side of the towers. This project will install a circuit on the west side of the towers such that they will look like those shown in Figure B-1.5.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

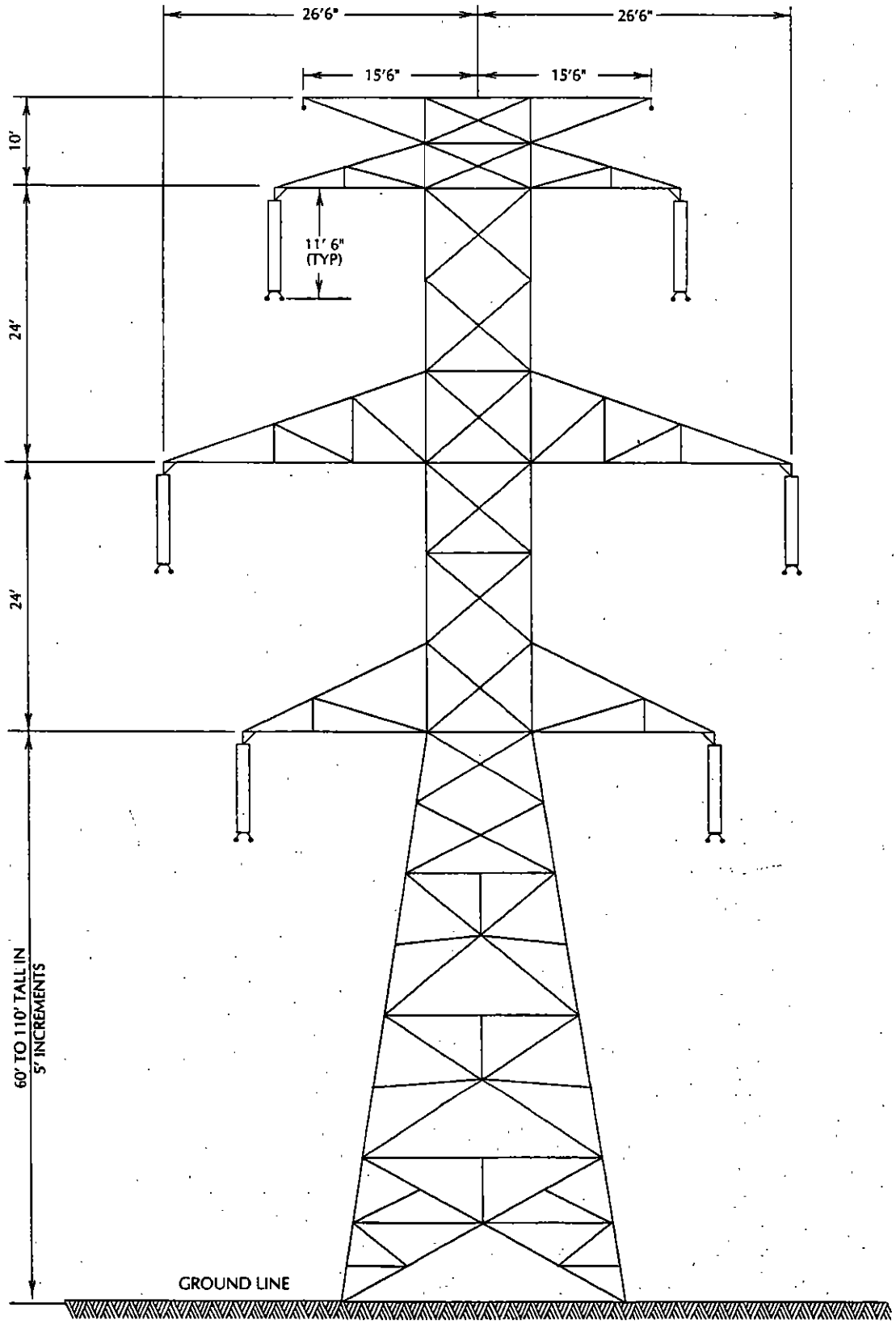
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)

LAW OFFICES

YOUNG, PRYOR, LYNN & JERARDI

FIRST NATIONAL PLAZA, SUITE 600

130 WEST SECOND STREET

DAYTON, OHIO 45402-1501

(937) 224-1981

FAX #(937) 224-5649

MICHAEL J. BURDGE
ROBERT B. COUGHLIN*
PETER J. JERARDI, JR.
CARLO C. McGINNIS**
LARRY A. SMITH

*ALSO ADMITTED IN INDIANA
**ALSO ADMITTED IN CALIFORNIA

OF COUNSEL
RICHARD E. PRYOR
JAMES T. LYNN, JR.

CHARLES F. YOUNG 1921-1993

January 17, 2000

Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
PO Box 1807
Dayton, Ohio 45401-1807

RE: Valley Springs Farm Company – McGinnis Property

Dear Mr. Taylor:

Thank you for your correspondence dated January 7, 2000 (see copy enclosed). My client appreciates your company's efforts to keep us apprised of your proposed improvements to the subject right of way over its property. However, I have been asked to communicate to you my client's objection to the said proposed improvements on account of the known and unknown negative effects that such transmission lines have upon adjacent property. In other words, the proposed expansion appears to also expand the geographic area subject to the negative impacts of the subject transmission lines. Given this state of affairs, and given that nothing in your January 7, 2000 letter addresses this issue, it is hereby respectfully requested that you make note of our objection and pass same along to all regulatory and/or oversight agencies.

I would like to take this opportunity to thank you in advance for your attention to this matter.

Very truly yours,

Carlo C. McGinnis

CCM/slv
cc: F. McGinnis

DP&L

Working For You Today and Tomorrow

January 7, 2000

Valley Springs Farm-McGinnis Property
130 W. Second St. Ste. 800
Dayton, OH 45402

Dear Valley Springs Farm-McGinnis Property

The Cincinnati Gas & Electric Company (CG&E/Cinergy), Columbus Southern Power/American Electric Power (CSP/AEP) and The Dayton Power and Light Company (DP&L) jointly own and operate a 345,000 volt transmission line(s) in your area. A joint project is being undertaken to upgrade the line that will improve the quality and reliability of service to all our customers. The Dayton Power and Light Company will be responsible for development and construction of the project.

The improvement will essentially entail upgrading an existing 345,000 volt tower configuration transmission line to basically a double circuit configuration. A circuit called Foster-Bath will be established that will connect Foster Substation near Maineville in Warren County, Ohio and Bath Substation near Beavercreek in Greene County, Ohio. A map showing the general location of the project is enclosed for your reference. Existing transmission line right-of-way and substation properties will be used for the entire length, so no new right-of-way, properties or access roads will be required for this project.

The existing transmission line to be upgraded is on or adjacent to your property. Your property is included in Section F on the enclosed map, Figure A-1.2. In Section F of this project, an existing 300 foot wide right-of-way contains two steel tower transmission lines. On the western portion of the right of way the existing single circuit tower line, as sketched on Figure B-1.8, enclosed, is to remain as at present. On the eastern portion of the right of way there is a double circuit steel tower line with structures as sketched on Figure B-1.5, except the existing east circuit has only one conductor per position instead of two as shown. The towers at present carry a 345 kV circuit on the west side and a 69 kV circuit on the east side of the towers. The planned construction will add a second conductor to each of the three conductor positions on the east side of the towers to form the Foster-Bath 345 kV circuit. The 69 kV line presently on the east side of the towers will be relocated to a new wood pole construction between the two tower lines.

Prior to the actual beginning of construction, the existing right-of-way will undergo routine tree trimming and clearing, similar to what has been done many times in the past, to accommodate the transmission line upgrade. The tree-clearing contractor will contact you prior to starting this work. They will explain the clearing and trimming work to be done on your property in order to proceed with the project. This clearing process is planned to begin early in 2000. Actual construction of the structures and wire installation will be done by line construction contractors and is planned to begin in the spring of 2000 and be completed by June 2002. The contractors will utilize existing right-of-way as much as possible for access, the tree-clearing process and construction of the facilities. If additional access is needed, we will secure permission to utilize other points of access. Despite our contractor's best efforts, it is possible some damage to grounds or crops may occur as the project proceeds. Our contractor will repair all damages and/or appropriately compensate the owner for damages, including crops.

As part of the development of this project, Dayton Power and Light will submit a Letter of Notification to the Ohio Power Siting Board (OPSB). The OPSB must review and approve the Letter of Notification before we can begin construction. The project will be constructed in accordance with criteria specified by the OPSB. We will also be notifying the Warren and Greene county commissioners, township trustees and other governmental agencies that this line will be upgraded. These government officials will be provided a copy of the Letter of Notification.

If you need any further information on the project at this time, you can contact me at (937) 331-4497. If you prefer, you may send a letter to:

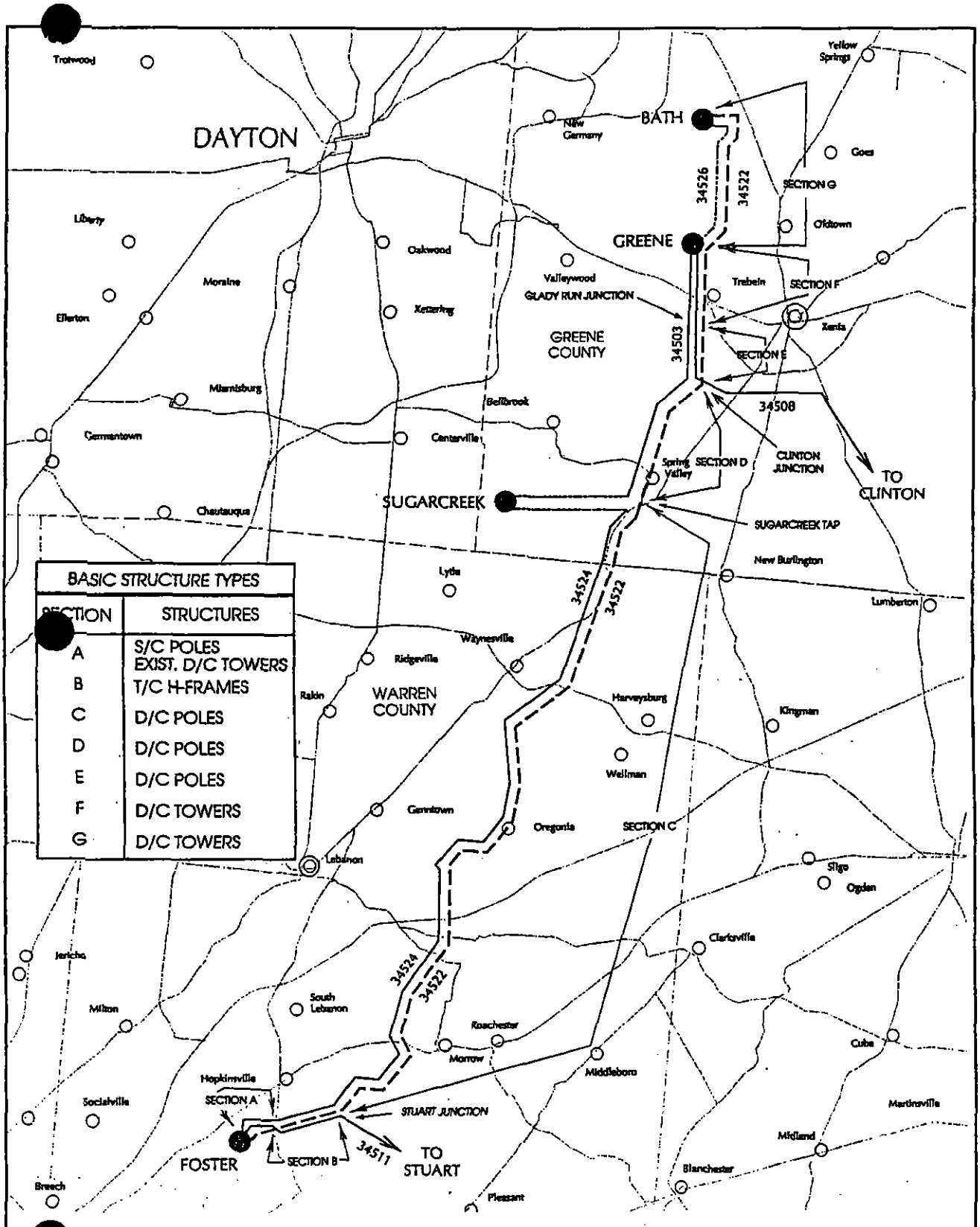
Mr. Bruce Taylor
Real Estate Services Department
The Dayton Power and Light Company
P. O. Box 1807
Dayton, Ohio 45401-1807

We offer our sincere thanks for your patience and understanding as we work to complete this project.

Sincerely,

Bruce Taylor

Bruce Taylor
Manager, Real Estate Services



BASIC STRUCTURE TYPES	
SECTION	STRUCTURES
A	S/C POLES EXIST. D/C TOWERS
B	T/C H-FRAMES
C	D/C POLES
D	D/C POLES
E	D/C POLES
F	D/C TOWERS
G	D/C TOWERS

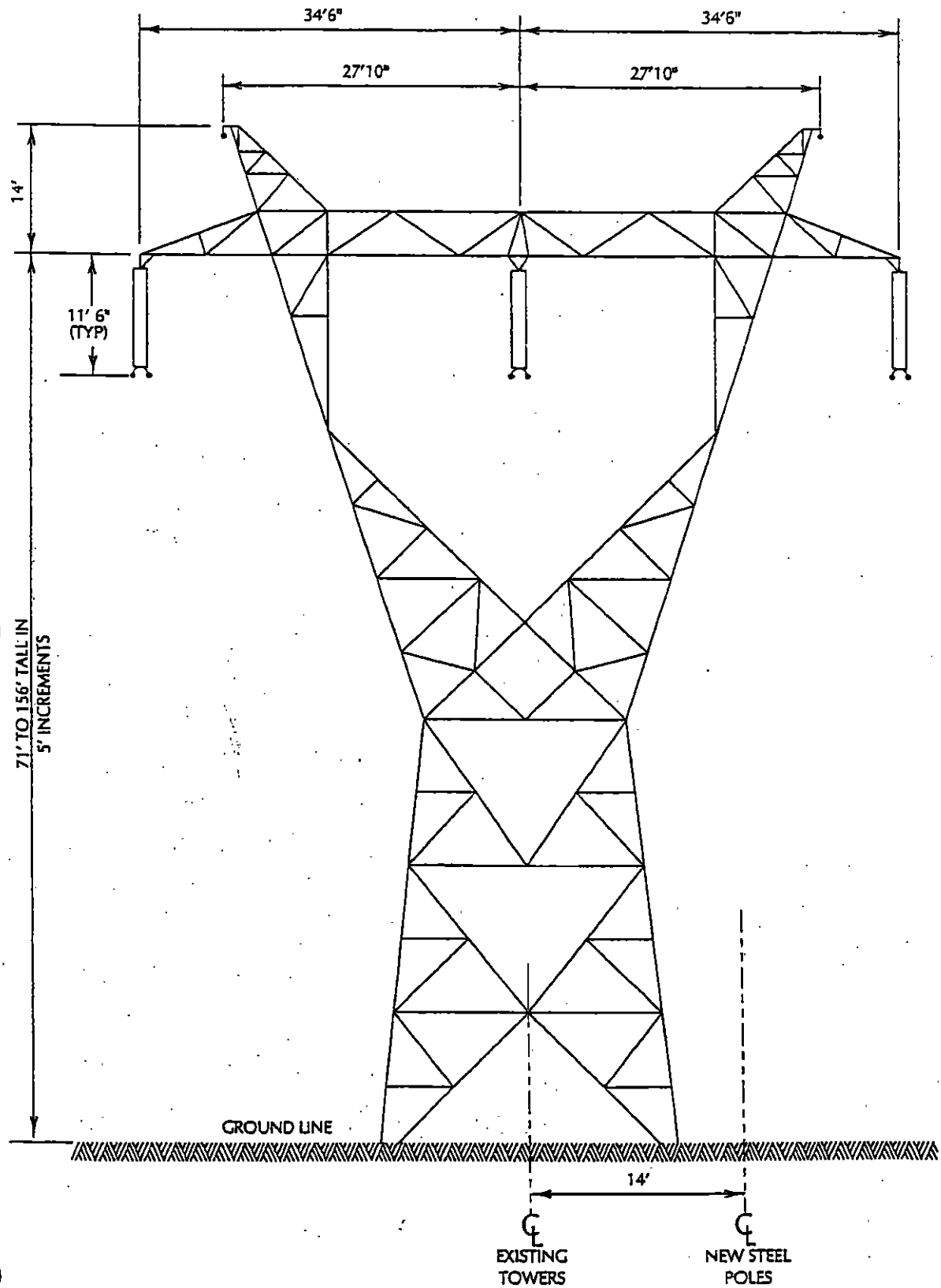
CCD LINES

FOSTER - BATH

DP&L LINES

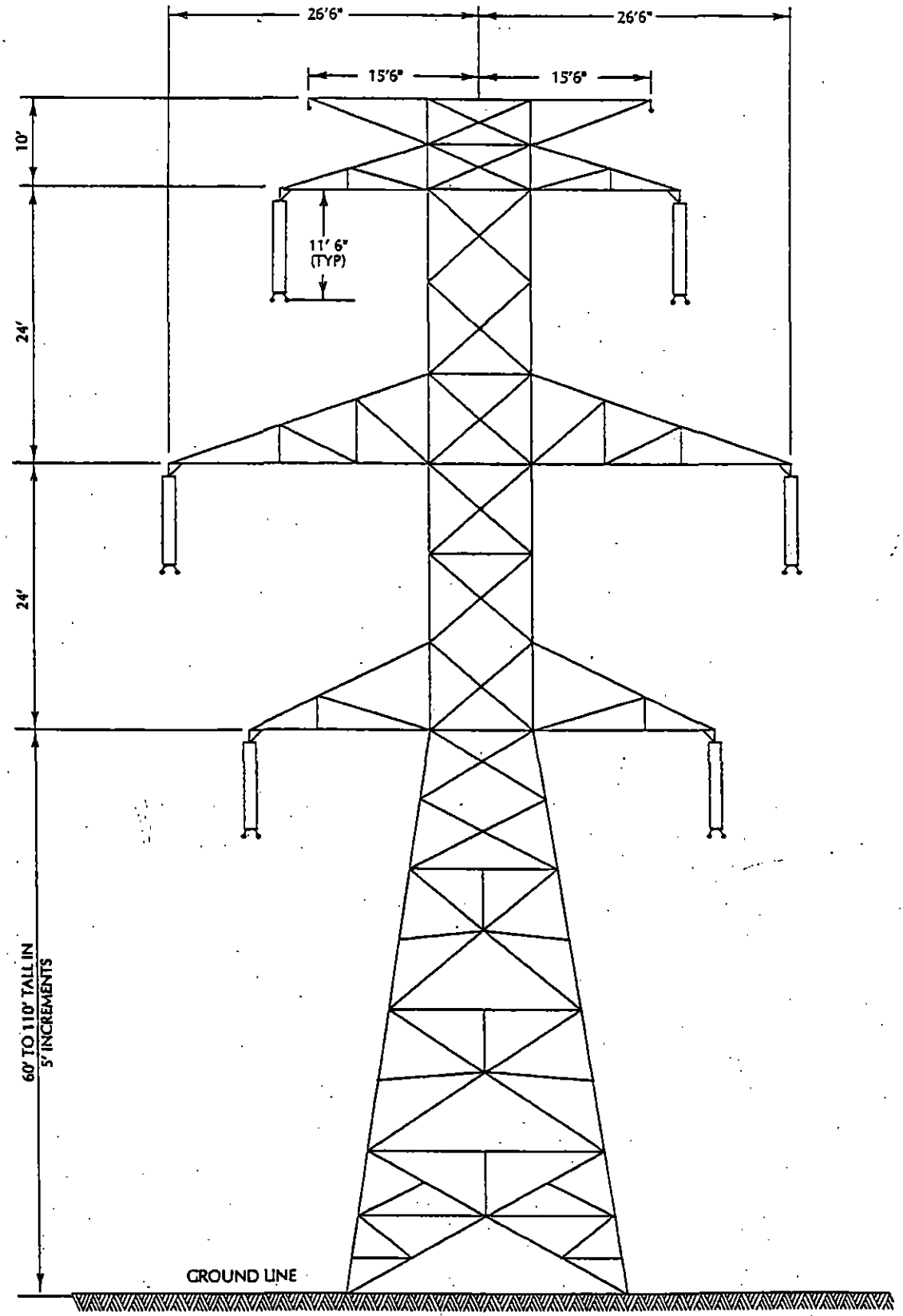
SUBSTATIONS

FOSTER TO BATH 345 KV
TRANSMISSION LINE
PROJECT MAP
FIGURE A-1.2



THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.8
EXISTING SINGLE CIRCUIT
STEEL TOWER (TANGENT)



DP&L THE DAYTON POWER AND LIGHT COMPANY

FIGURE B-1.5
EXISTING DOUBLE CIRCUIT
STEEL TOWER (TANGENT)