

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

APPLICATION OF DUKE ENERGY KENTUCKY, INC.	)	
FOR A CERTIFICATE OF PUBLIC CONVENIENCE	)	CASE NO.
AND NECESSITY AUTHORIZING THE PHASE TWO	)	2023-00210
REPLACEMENT OF THE AM07 PIPELINE	)	

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**APPLICATION**

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Now comes Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the Company), pursuant to KRS 278.020 and 807 KAR 5:001, Sections 14 and 15, and other applicable law, and hereby respectfully requests from the Kentucky Public Service Commission (Commission) an Order granting a Certificate of Public Convenience and Necessity (CPCN) for approval of the construction of the second phase of its AM07 Pipeline Replacement Project (Phase Two).

The AM07 Pipeline (AM07) is approximately sixteen miles in total length and is the primary artery for Duke Energy Kentucky’s natural gas delivery system. AM07 extends to the Ohio River, transporting natural gas from upstream suppliers, and supports natural gas delivery throughout the Duke Energy Kentucky natural gas delivery system via connected pipelines. The AM07 pipeline was constructed in the 1950’s, in accordance with existing regulations at the time. Today, AM07 is of a vintage where the materials are no longer industry standard, and the pipeline is unable to meet regulations promulgated by the U.S. Pipeline and Hazardous Materials Safety Administration (PHMSA).

Duke Energy Kentucky needs to replace certain sections of its AM07 pipeline, totaling approximately 13.7 miles, and associated regulator stations through its Northern Kentucky territory over the next few years to comply with PHMSA integrity regulations. This replacement will occur over several years, in five phases.

The first phase of the AM07 replacement, consisting of an approximately 1.5-mile segment, was approved by the Commission in Case No. 2022-00084 (Phase One). Construction activities for Phase One have commenced. In order to maximize cost efficiencies, minimize work stoppages, and to complete the entire 13.7-mile AM07 replacement in 2027 to meet PHMSA regulations for inspections of natural gas pipelines, the Company needs to seek Commission authorization now to construct Phase Two, so its construction can commence immediately upon completion of Phase One.

Phase Two of the replacement project consists of abandoning the existing AM07 pipeline section and replacing it with an approximate 3.25 miles in length steel pipeline section, that is twenty-four-inches in diameter. Phase Two will be located in areas in which Duke Energy Kentucky is currently already supplying natural gas service, and will be placed primarily in a new right of way in Erlanger Kentucky, from the I-75 crossing, heading directly east to a point approximately 3.25 miles downstream along AM07. Maps depicting the precise location of Phase Two are included as an exhibit to this Application.<sup>1</sup> In support of this Application, Duke Energy Kentucky respectfully states as follows:

### **Introduction**

1. Pursuant to 807 KAR 5:001, Section 14(2), Duke Energy Kentucky is a Kentucky corporation originally incorporated on March 20, 1901, in good standing, and a

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<sup>1</sup> See Confidential Exhibit 3. This exhibit also depicts construction specifications, and engineering drawings stamped by a licensed Kentucky Engineer.

“public utility” as that term is defined in KRS 278.010(3), and, therefore, is subject to the Commission’s jurisdiction. Duke Energy Kentucky is engaged in the business of furnishing natural gas and electric services to various municipalities and unincorporated areas in Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton Counties in the Commonwealth of Kentucky.

2. Pursuant to 807 KAR 5:001, Section 14(1), Duke Energy Kentucky’s business address is 139 East Fourth Street, Cincinnati, Ohio 45202. The Company’s local office address in Kentucky is Duke Energy Erlanger Ops Center, 1262 Cox Road, Erlanger, Kentucky 41018. The facts upon which the Application are based are set forth herein.

3. Copies of all orders, pleadings and other communications related to this proceeding should be sent to:

Rocco O. D’Ascenzo  
Deputy General Counsel  
Larisa Vaysman  
Senior Counsel  
Duke Energy Kentucky, Inc.  
139 E. 4<sup>th</sup> St.  
Cincinnati, OH 45202  
Rocco.D’Ascenzo@duke-energy.com  
Larisa.Vaysman@duke-energy.com  
KYfilings@duke-energy.com

**Background**

4. Duke Energy Kentucky has identified a need to construct and replace its AM07 Pipeline in order to comply with PHMSA regulations. Phase Two consists of constructing a new, 3.25 mile in length, 24-inch steel natural gas transmission line within new and limited existing right-of-way from the I-75 crossing east to a point downstream along the AM07 pipeline. Once completed, approximately 3.25 miles of new 24-inch transmission pipe will be placed in service.

5. The AM07 replacement will improve safety and reliability to the main portion of the Company's natural gas delivery system in Northern Kentucky. Although Duke Energy Kentucky has been able to meet customer needs with safe and reliable natural gas service, replacement of AM07 infrastructure is required under recent updates to federal regulations, known as the new pipeline safety regulation, "Pipeline Safety: Safety of Gas Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments" (New Transmission Rule). The New Transmission Rule went into effect July 2020 mandating Operators to review and reconfirm transmission pipeline Maximum Allowable Operating Pressure (MAOP). The Project is also necessary for complying with other relevant regulations, specifically, Subpart L §192.607, Verification of Pipeline Materials Properties and Attributes, Subpart L §192.624, Maximum allowable operating pressure reconfirmation, Subpart M §192.710, Transmission lines: Assessments outside of high consequence areas, and Subpart O, Gas Transmission Pipeline Integrity Management.

6. To properly assess for the threats on each pipeline, under the New Transmission Rule, natural gas companies that do not have the necessary traceable, verifiable, and complete records must pressure test, perform ILI, or replace the pipe. The 1956 vintage pipe within the AM07 pipeline does not have traceable, verifiable, and complete pressure test records and is incapable of ILI. Additionally, because the AM07 is the backbone of the Company's natural gas delivery system, is it not possible to take it out of service to perform pressure testing due to complexity, timing, and extensive excavation that would be required. Moreover, due to its length and age, the Company may not be able to complete corrective action on any identified deficiencies in the existing pipeline

segments in time to place them back into service for winter heating seasons. Because the majority of AM07 is comprised of 1956 vintage pipe with active manufacturing and construction threats, the Company must take action to address these threats to comply with these regulations. The new AM07 will provide additional reliability to Duke Energy Kentucky's natural gas delivery system by replacing aging, non-piggable infrastructure with new pipe constructed from modern materials allowing the Company to continue to provide safe and reliable service and conduct cost-effective necessary inspections in the future. The new pipeline will be designed and constructed for safe passage of ILI tools allowing the Company to continue providing safe natural gas service for current and future customers

7. The purpose of, and need for, the Project is to meet PHMSA regulations and ensure the Company's natural gas delivery system continues to function in a safe and reliable manner for customers. The Project is necessary to support future load growth in the area and maintain sufficient natural gas system pressures. Additionally, the timing of the project, including the priority of completion of the project in five phases is to spread out the timing of the investments in a reasonable manner but within the compliance timeline per PHMSA regulations. The Company estimates the timeline of construction for the Phase Two to be approximately nine months.

8. Duke Energy Kentucky anticipates that the majority of the Project will be located in private easements that will be obtained following approval of this Application. Where private easements are not possible, the Company will locate the Phase Two within existing public rights-of-way. Private easements are preferable as they allow the Company to maintain greater control over the pipeline and to mitigate any impact to system integrity

and reliability due to municipal street widening or improvement projects.

9. The current estimated project cost for Phase Two is approximately \$49.3 million dollars as detailed in the chart below:

<b>Task</b>	<b>Total</b>
Design	\$2.5M
Land	\$4.1M
Construction	\$38.8M
Materials	\$3.9M
<b><u>\$49.3 M</u></b>	

**Request for Certificate of Public Convenience and Necessity**

10. In accordance with 807 KAR 5:001 Section 12(2)(a)-(i), Duke Energy Kentucky is filing the following information in Exhibit 1, which is incorporated herein and made a part of this Application filed in this proceeding:

<b><u>Exhibit 1</u></b>	<b><u>Description</u></b>	<b><u>807 KAR 5:001</u></b>
<b><u>Page</u></b>		<b><u>Section Reference</u></b>
	Financial Exhibit	12 (2)
1	Amount and kinds of stock authorized	12(2)(a)
1	Amount and kinds of stock issued and outstanding	12(2)(b)
1	Terms of preference or preferred stock	12(2)(c)
1	Brief description of each mortgage on property of Duke Energy Kentucky	12(2)(d)
1-2	Amount of bonds authorized and issued and related information	12(2)(e)
2	Notes outstanding and related information	12(2)(f)
3	Other indebtedness and related information	12(2)(g)
4	Dividend information	12(2)(h)
4-6	Detailed Income Statement and Balance Sheet	12(2)(i)

11. 807 KAR 5:001, Section 15 sets forth the filing requirements to seek a CPCN. In accordance with Section 15(2)(a), the Application and supporting testimonies describe the facts relied upon to show the Phase Two replacement is required by public convenience or necessity in that the project is necessary to comply with Federal regulations,

and from an integrity and reliability standpoint as well as, to provide adequate, efficient, and reliable service.

12. In accordance with Section 15(2)(b), the Company has previously filed with the Commission the applicable franchises from the proper public authorities. Additionally, the following permits will be required to complete Phase Two:

- a) Kentucky Transportation Cabinet permit to cross state and federal roads and to install the pipeline inside road right-of-way;
- b) Energy and Environmental Protection Cabinet - Division of Water, Application for a Permit to Construct Along or Across a Stream for stream and floodplain crossings (Stream Crossing Permit);
- c) US Army Corp Section 404 General Nationwide Permit #12 (including Section 7 Threatened and Endangered Species Act of 1973 and Section 106 National Historic Preservation Act of 1966 clearances);
- d) City of Crestview Hills and City of Erlanger encroachment permit to cross jurisdictional roads;
- e) Coordination with the Kentucky Heritage Council (KHC) regarding cultural resources, including cultural resource investigations/digs and potential viewshed impacts to architectural resources along the project route;
- f) Coordination with the U.S. Fish and Wildlife Service (USFWS) and Kentucky Department of Fish and Wildlife Resources (KDFWR) with respect to federal and state endangered, threatened and otherwise protected species;
- g) Sanitation District No. 1 Grading Permit; and
- h) KDOW Construction Storm Water Permit KYR10.

Duke Energy Kentucky has applied for each of the above listed permits except for items (g) and (h), which will be applied for following approval of this CPCN as those permits are required immediately before actual construction occurs. Duke Energy Kentucky has submitted all necessary permits except those local building/construction permits. There has been no indication that the permit applications will not be approved. The Company's permits and coordination documents/reports for cultural resources are attached as Exhibits 2(a) through (f) of the Application. The Company will supplement the application as additional permit approvals are received. The Company anticipates commencing construction in early 2024 for an in-service date in late 2024, before the beginning of the winter heating season.

13. In accordance with Section 15(2)(c), which requires the Company to provide a full description of the proposed location, route, or routes of the proposed construction or extension, including a description of the manner in which the facilities will be constructed, Duke Energy Kentucky respectfully states that this information is provided in Confidential Exhibit 3 to this Application and the direct testimony of Company Witness Bradley A. Seiter submitted in support thereof. A copy of Confidential Exhibit 3 is being provided under a petition for confidential treatment.

14. In accordance with Section 15(2)(d)(1)-(2), requiring maps showing the location or route of the proposed construction or extension and plans and specifications and drawings of the proposed plant, equipment, and facilities, Duke Energy Kentucky respectfully states that Confidential Exhibit 3 contains, among other things, maps, and engineering drawings, respectively, showing the route, location and nature of the proposed construction. Because the Project is situated solely within the Company's service territory,



it will not compete with any public utilities, corporations, or persons. Confidential Exhibit 3 further contains the preliminary work specifications for the Project.

15. In accordance with Section 15(2)(e), the Company states that it proposes to finance the construction through continuing operations and debt instruments, as necessary.

16. In accordance with Section 15(2)(f), the total estimated cost of construction for Phase Two is approximately \$49.3 million. The annual ongoing cost of operation of the Project once completed is expected to be minimal, and less than \$10,000 except for required periodic inspections and/or testing. The Company does not anticipate any incremental cost savings for the ongoing operation and maintenance of the new pipeline as compared to amounts currently in base rates as the cost to maintain the new AM07 pipeline will not substantially differ from existing costs to maintain the existing pipeline currently reflected in base rates. In fact, the new pipeline will avoid future incremental Operations and Maintenance expense that would be incurred to comply with more recent PHMSA regulations if the Company were required to pursue a more expensive and riskier alternative of taking the existing AM07 segments out of service for excavation and hydrostatic testing and make any then identified necessary repairs/replacements.

17. Duke Energy Kentucky respectfully states that AM07 Replacement is needed to meet PHMSA Regulations, enable the Company to continue to provide safe and reliable natural gas service to our customers, as well as, to provide greater reliability to the overall system. The AM07 Replacement will support future load growth and maintain sufficient natural gas system pressures to respond to an identified integrity risk to its natural gas delivery system. Moreover, as the Company will be taking the current pipeline out of service, the Project will not result in a wasteful duplication of facilities.

## Testimony and Exhibits

18. Additional facts supporting this Application are set forth in the following direct testimonies attached to this Application as Exhibits 4 through 6:

- a) Neil M. Moser, General Manager Engineering, Planning & Pipeline Integrity, provides an overview of the Company's gas operations and the Project;<sup>2</sup>
- b) Bradley A. Seiter, Senior Project Manager, discusses the Phase Two construction specifications, the permits required, and estimated costs of construction and ongoing operation;<sup>3</sup> and,
- c) Lisa D. Steinkuhl, Director of Rates and Regulatory Planning, discusses the estimated impacts to the Company's rates of the Project.<sup>4</sup>

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<sup>2</sup> Exhibit 4.

<sup>3</sup> Exhibit 5.

<sup>4</sup> Exhibit 6.

WHEREFORE, Duke Energy Kentucky respectfully requests that the Commission:

- 1) Issue a CPCN for approval of the construction of Phase Two of the AM07 Replacement Project; and
- 2) Grant any other relief to which the Company may be entitled.

Respectfully submitted,

/s/Rocco O. D'Ascenzo

Rocco O. D'Ascenzo (92796)

Deputy General Counsel

Larisa M. Vaysman (98944)

Senior Counsel

Duke Energy Business Services LLC

139 East Fourth Street, 1303-Main

Cincinnati, Ohio 45201-0960

Phone: (513) 287-4320

Fax: (513) 370-5720

rocco.d'ascenzo@duke-energy.com

*Counsel for Duke Energy Kentucky, Inc.*

**CERTIFICATE OF SERVICE**

This is to certify that the foregoing electronic filing is a true and accurate copy of the document in paper medium; that the electronic filing was transmitted to the Commission on June 28, 2023; that there are currently no parties that the Commission has excused from participation by electronic means in this proceeding; and that submitting the original filing to the Commission in paper medium is no longer required as it has been granted a permanent deviation.<sup>5</sup>

John G. Horne, II  
The Office of the Attorney General  
Utility Intervention and Rate Division  
700 Capital Avenue, Ste 118  
Frankfort, Kentucky 40601-8204

*/s/Rocco O. D'Ascenzo*  
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*Counsel for Duke Energy Kentucky, Inc.*

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<sup>5</sup>*In the Matter of Electronic Emergency Docket Related to the Novel Coronavirus COVID-19*, Order, Case No. 2020-00085 (Ky. P.S.C. July 22, 2021).

**FINANCIAL EXHIBIT**

**(1) Section 12(2)(a) Amount and kinds of stock authorized.**

1,000,000 shares of Capital Stock \$15 par value amounting to \$15,000,000 par value.

**(2) Section 12(2)(b) Amount and kinds of stock issued and outstanding.**

585,333 shares of Capital Stock \$15 par value amounting to \$8,779,995 total par value. Total Capital Stock and Additional Paid-in Capital as of March 31, 2023:

Capital Stock and Additional Paid-in Capital  
As of March 31, 2023  
(\$ per 1,000)

Capital Stock	\$8,780
Premiums thereon	18,839
Total Capital Contributions from Parent (since 2006)	133,594
Contribution from Parent Company for Purchase of Generation Assets	<u>140,061</u>
 Total Capital Stock and Additional Paid-in-Capital	 <u>\$301,274</u>

**(3) Section 12(2)(c) Terms of preference or preferred stock, cumulative or participating, or on dividends or assets or otherwise.**

There is no preferred stock authorized, issued or outstanding.

**(4) Section 12(2)(d) Brief description of each mortgage on property of applicant, giving date of execution, name of mortgagor, name or mortgagee, or trustee, amount of indebtedness authorized to be secured, and the amount of indebtedness actually secured, together with any sinking fund provision.**

Duke Energy Kentucky does not have any liabilities secured by a mortgage.

**(5) Section 12(2)(e) Amount of bonds authorized, and amount issued, giving the name of the public utility which issued the same, describing each class separately, and giving the date of issue, face value, rate of interest, date of maturity and how secured, together with the amount of interest paid thereon during the last fiscal year.**

The Company has fourteen outstanding issues of unsecured senior debentures issued under an Indenture dated December 1, 2004, between itself and Deutsche Bank Trust Company Americas, as Trustee, as supplemented by eight Supplemental Indentures. The Indenture

allows the Company to issue debt securities in an unlimited amount from time to time. The Debentures issued and outstanding under the Indenture are the following:

Supplemental Indenture	Date of Issue	Principal Amount Authorized and Issued	Principal Amount Outstanding	Rate of Interest	Date of Maturity	Interest Paid Year 2022
1 <sup>st</sup> Supplemental	3/7/2006	65,000,000	65,000,000	6.200%	3/10/2036	4,030,000
3 <sup>rd</sup> Supplemental	1/5/2016	45,000,000	45,000,000	3.420%	1/15/2026	1,539,000
3 <sup>rd</sup> Supplemental	1/5/2016	50,000,000	50,000,000	4.450%	1/15/2046	2,225,000
4 <sup>th</sup> Supplemental	9/7/2017	30,000,000	30,000,000	3.350%	9/15/2029	1,005,000
4 <sup>th</sup> Supplemental	9/7/2017	30,000,000	30,000,000	4.110%	9/15/2047	1,233,000
4 <sup>th</sup> Supplemental	9/7/2017	30,000,000	30,000,000	4.260%	9/15/2057	1,278,000
5 <sup>th</sup> Supplemental	10/3/2018	25,000,000	25,000,000	4.010%	10/15/2023	1,002,500
5 <sup>th</sup> Supplemental	10/3/2018	40,000,000	40,000,000	4.180%	10/15/2028	1,672,000
5 <sup>th</sup> Supplemental	12/12/2018	35,000,000	35,000,000	4.620%	12/15/2048	1,617,000
6 <sup>th</sup> Supplemental	7/17/2019	40,000,000	40,000,000	4.320%	7/15/2049	1,728,000
7 <sup>th</sup> Supplemental	9/15/2019	95,000,000	95,000,000	3.230%	10/01/2025	3,068,500
7 <sup>th</sup> Supplemental	9/15/2019	75,000,000	75,000,000	3.560%	10/01/2029	2,670,000
8 <sup>th</sup> Supplemental	9/15/2020	35,000,000	35,000,000	2.650%	9/15/2030	927,500
8 <sup>th</sup> Supplemental	9/15/2020	35,000,000	35,000,000	3.660%	9/15/2050	1,281,000
			630,000,000			25,276,500

**(6) Section 12(2)(f) Each note outstanding, giving date of issue, amount, date of maturity, rate of interest, in whose favor, together with amount of interest paid thereon during the last fiscal year.**

The Company has one outstanding \$50,000,000 unsecured, two-year bank term loan note issued on October 12, 2021. Interest accrues at an annual rate equal to 60 basis points plus Daily Simple SOFR (Secured Overnight Financing Rate) and is paid quarterly. The term loan will mature on October 12, 2023.

<u>Note Outstanding</u>	<u>Date of Issue</u>	<u>Principal Amount Authorized and Outstanding</u>	<u>Rate of Interest</u>	<u>Date of Maturity</u>	<u>Interest Paid Year 2022</u>
Term Loan	10/12/2021	50,000,000	SOFR + 60bps	10/12/2023	1,257,234

(7) **Section 12(2)(g) Other indebtedness, giving same by classes and describing security, if any, with a brief statement of the devolution or assumption of any portion of such indebtedness upon or by person or corporation if the original liability has been transferred, together with amount of interest paid thereon during the last fiscal year.**

The Company has two series of Pollution Control Revenue Refunding Bonds issued under a Trust Indenture dated as of August 1, 2006 and a Trust Indenture dated as of December 1, 2008, between the County of Boone, Kentucky and Deutsche Bank National Trust Company as Trustee. The Company's obligation to make payments equal to debt service on the Bonds is evidenced by a Loan Agreement dated as of August 1, 2006 and December 1, 2008 between the County of Boone, Kentucky and Duke Energy Kentucky. The Bonds issued under the Indentures are below. On Nov 1, 2021, the Company bought in the Series 2008A bond, and remarketed the bond in June 2022.

Indenture	Date of Issue	Principal Amount Authorized and Issued	Principal Amount Outstanding	Rate of Interest	Date of Maturity	Interest Paid Year 2022
Series 2010	11/24/2010	26,720,000	26,720,000	3.86% <sup>(1)</sup>	8/1/2027	1,031,392
Series 2008A	12/01/2011	50,000,000	<u>50,000,000</u>	3.70% <sup>(2)</sup>	8/1/2027	<u>945,558</u>
			76,720,000			1,976,950

<sup>(1)</sup> The bonds were issued at a variable-rate and were swapped to a fixed rate of 3.86% for the life of the debt.

<sup>(2)</sup> Bonds were remarketed in June 2022 under a fixed-to-maturity interest rate mode (3.70% coupon).

The Company has no outstanding financing leases as of March 31, 2023.

The Company also has \$103,075,000 of money pool borrowings outstanding as of March 31, 2023, \$25,000,000 of which is classified as Long-Term Debt payable to affiliated companies. This obligation, which is short-term by nature, is classified as long-term due to Duke Energy Kentucky's intent and ability to utilize such borrowings as long-term financing.

- (8) **Section 12(2)(h) Rate and amount of dividends paid during the last five (5) previous fiscal years, and the amount of capital stock on which dividends were paid each year.**

**DIVIDENDS PER SHARE**

<u>Year Ending</u>	<u>Per Share</u>	<u>Total</u>	<u>No. of Shares</u>	<u>Par Value of Stock</u>
December 31, 2018	0	0	585,333	8,779,995
December 31, 2019	0	0	585,333	8,779,995
December 31, 2020	0	0	585,333	8,779,995
December 31, 2021	0	0	585,333	8,779,995
December 31, 2022	0	0	585,333	8,779,995

- (9) **Section 12(2)(i) Detailed Income Statement and Balance Sheet.**

See the attached pages for detailed Income Statement for the twelve months ended March 31, 2023 and the detailed Balance Sheet as of March 31, 2023.



**DUKE ENERGY KENTUCKY, INC.**  
**CONDENSED STATEMENTS OF OPERATIONS**  
(Unaudited)  
(In thousands)

Three Months Ended  
March 31  
2023

<b>Operating Revenues</b>	
Electric	106,413
Gas	58,128
<b>Total operating revenues</b>	<b>164,541</b>
<b>Operating Expenses</b>	
Fuel used in electric generation and purchased power	36,324
Natural gas purchased	24,549
Operation, maintenance and other	35,254
Depreciation and amortization	26,637
Property and other taxes	6,048
Goodwill and other impairment charges	78
<b>Total operating expenses</b>	<b>128,890</b>
<b>Gains on Sales of Other Assets and Other, net</b>	<b>285</b>
<b>Operating Income</b>	<b>35,936</b>
<b>Other Income and Expenses, net</b>	<b>2,558</b>
<b>Interest Expense</b>	<b>8,136</b>
<b>Income Before Income Taxes</b>	<b>30,358</b>
<b>Income Tax Expense</b>	<b>6,175</b>
<b>Income From Continuing Operations</b>	<b>24,183</b>
<b>Income From Discontinued Operations, net of tax</b>	<b>-</b>
<b>Net Income</b>	<b>24,183</b>

**DUKE ENERGY KENTUCKY, INC.**  
**Condensed Balance Sheets**  
**(Unaudited)**

(in thousands, except share amounts)	March 31, 2023
<b>ASSETS</b>	
<b>Current Assets</b>	
Cash and Cash Equivalents	1,770
Receivables (net of allowance for doubtful accounts)	9,502
Receivables from affiliated companies	34,051
Notes Receivables from affiliated companies	-
Inventory	61,746
Regulatory Assets	19,004
Other	14,938
<b>Total Current Assets</b>	<b>141,011</b>
<b>Property, Plant and Equipment</b>	
Cost	3,239,655
Less Accumulated Depreciation and Amortization	(1,085,500)
Generation Facilities To Be Retired	-
<b>Net Property Plant and Equipment</b>	<b>2,154,155</b>
<b>Other Noncurrent Assets</b>	
Regulatory Assets	111,730
Operating Lease Right-of-Use assets	7,916
Other	18,196
<b>Total Other Noncurrent Assets</b>	<b>137,842</b>
<b>Total Assets</b>	<b>2,433,008</b>
<b>LIABILITIES AND COMMON STOCKHOLDERS' EQUITY</b>	
<b>Current Liabilities</b>	
Accounts Payable	29,498
Accounts payable to affiliated companies	24,186
Notes payable to affiliated companies	78,075
Taxes Accrued	30,027
Interest Accrued	7,039
Current Maturities of Long-Term Debt	74,986
Asset Retirement Obligations	14,297
Regulatory Liabilities	12,740
Other	14,325
<b>Total Current Liabilities</b>	<b>285,173</b>
<b>Long-Term Debt</b>	<b>679,262</b>
<b>Notes payable to affiliated companies</b>	<b>25,000</b>
<b>Other Noncurrent Liabilities</b>	
Deferred Income Taxes	278,661
Asset Retirement Obligations	93,349
Regulatory Liabilities	110,940
Operating Lease Liabilities	7,944
Accrued Pension and Other Post-Retirement Benefit Costs	27,539
Other	20,772
<b>Total Other Noncurrent Liabilities</b>	<b>539,205</b>
<b>Commitments and Contingencies</b>	<b>-</b>
<b>Equity</b>	
Common Stock, \$15.00 par value, 1,000,000 shares authorized and 585,333 shares outstanding	8,780
Additional Paid in Capital	292,494
Retained Earnings	603,094
<b>Total Duke Energy Corporation Stockholders' Equity</b>	<b>904,368</b>
Noncontrolling Interests	-
<b>Total Liabilities and Equity</b>	<b>2,433,008</b>

## NOTICE OF COMPLETION OF ENCROACHMENT PERMIT WORK

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### PERMITTEE

Name: Duke Energy  
 Contact Person:  
 Address: 139 E 4th St  
 City: Cincinnati  
 State: Ohio  
 Zip: 45202  
 Telephone:

### PROJECT IDENTIFICATION

Permit Number: 06-2023-00493

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I wish to notify the Department of Highways that the above mentioned permit work and any necessary right-of-way restoration have been completed and are ready for final inspection.

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Permittee

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Please return this form to the address below when work is completed and ready for final inspection.

Please Return to: Permit Engineer  
 Department of Highways, District 6 Office  
 421 Buttermilk Pike  
 Covington, Kentucky 41017  
 (859) 341-2700  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Open trench installation of 24" steel natural gas pipeline on private property paralleling KYTC ROW.	Kenton - CS 3025	39.030392	-84.607311

APPROVED  
 JUNE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00-193



Andy Beshear  
Governor

COMMONWEALTH OF KENTUCKY  
TRANSPORTATION CABINET  
Department of Highways, District 6 Office  
421 Buttermilk Pike  
Covington, Kentucky 41017  
(859) 341-2700  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

Jim Gray  
Secretary

June 15, 2023

Duke Energy  
139 E 4th St  
Cincinnati, Ohio 45202

Subject: Permit #: 06-2023-00493  
Permit Type: Utilities - Gas  
Approval

Dear Applicant:

Attached is your permit approval and documentation for the subject permit.

Be advised that all work must be done in conformity with permit and application conditions. If you have any questions, please contact the Permits Section at this office.

Sincerely,

A handwritten signature in cursive script that reads "Linzy Brefeld".

Linzy Brefeld  
D6 Permits Supervisor

Attachments



An Equal Opportunity Employer M/F/D

APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00493



Kentucky Transportation Cabinet  
 Department of Highways  
 Division of Maintenance  
 Permits Branch

TC 99-1 (B)  
 07/2018  
 Page 1 of 1

**ENCROACHMENT PERMIT**

**KYTC KEPT #:** 06-2023-00493  


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**Permittee:** Duke Energy  


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**Permit Type / Subtype:** Utilities / Gas  


---

**Work Completion Date:** 6/5/2024  


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INDEMNITIES		
Type	Amount Required	Tracking Number
Performance Bond	\$0.00	
Cash / Check	\$0.00	
Self-Insured	\$0.00	
Payment Bond	\$0.00	
Liability Insurance	\$0.00	

This permit has been: **APPROVED**  **DENIED**

Linzy Brefeld D6 Permits Supervisor 6/14/2023  


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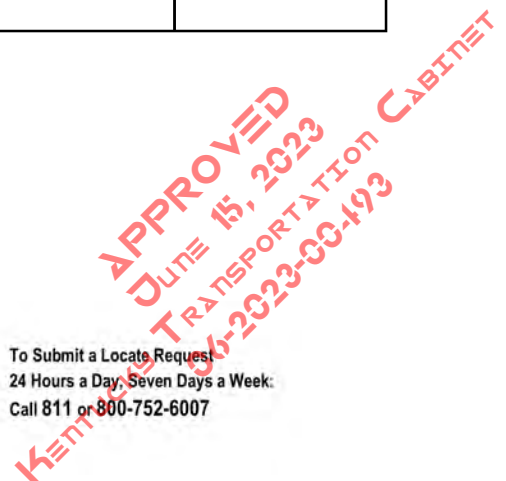
**SIGNATURE TITLE DATE**

The TC 99-1(B), including the application TC-99 1(A) and all related and accompanying documents and drawings make up the permit. It is not a permit unless both the TC 99-1(A) and TC 99-1(B) are both present.

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Open trench installation of 24" steel natural gas pipeline on private property paralleling KYTC ROW.	Kenton - CS 3025	39.030392	-84.607311



To Submit a Locate Request  
 24 Hours a Day, Seven Days a Week  
 Call 811 or 800-752-6007





KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
**PERMITS BRANCH**

TC 99-1A  
 Rev. 10/2020  
 Page 1 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

**KYTC KEPT #:** T06-2023-00493

**SECTION 1: APPLICANT CONTACT INFORMATION**

<b>APPLICANT</b> Duke Energy	<b>ADDRESS</b> 139 E 4th St		
<b>EMAIL</b> N/A	<b>CITY</b> Cincinnati	<b>STATE</b> OH	<b>ZIP</b> 45202
<b>CONTACT NAME 1</b> Josh Pedersen (on behalf of Duke Energy)	<b>EMAIL</b> jmpedersen@burnsmcd.com	<b>PHONE #</b> (913) 645-2713	
		<b>CELL #</b>	
<b>CONTACT NAME 2 (if applicable)</b> John Perkins	<b>EMAIL</b> john.perkins@duke-energy.com	<b>PHONE #</b> 513-315-8338	
		<b>CELL #</b>	

**SECTION 2: PROPOSED WORK LOCATION**

<b>ADDRESS</b> Interstate 75	<b>CITY</b> Erlanger	<b>STATE</b> Kentucky	<b>ZIP</b> 41018
<b>COUNTY</b> Kenton	<b>ROUTE #</b> I-75/I-71	<b>MILE POINT</b> 0.25 - 0.55	<b>LONGITUDE (X)</b> -84.60324°
<b>LATITUDE (Y)</b> 39.032031°			

**ADDITIONAL LOCATION INFORMATION:** Workspace encroaches 30 ft into KYTC right of way along the northbound 71 to eastbound 275 access ramp. Workspace spans approximately 1550 ft.

**FOR KYTC USE ONLY**

**PERMIT TYPE:**  Air Right  Entrance  Utilities  Vegetation Removal  Other: \_\_\_\_\_

**ACCESS:**  Full  Partial  by Permit **LOCATION:**  Left  Right  Crossing

**SECTION 3: GENERAL DESCRIPTION OF WORK**

Open trench installation of 24" steel natural gas pipeline on private property paralleling KYTC ROW. The pipeline is proposed to lay roughly 10 ft off the ROW line. Our work would propose to utilize up to 30 ft of KYTC right of way as workspace to assist in the installation of the 24" pipeline. The right of way fence would be taken down during work and replaced in the existing location. Any grading for workspace utilization would be returned to existing conditions.

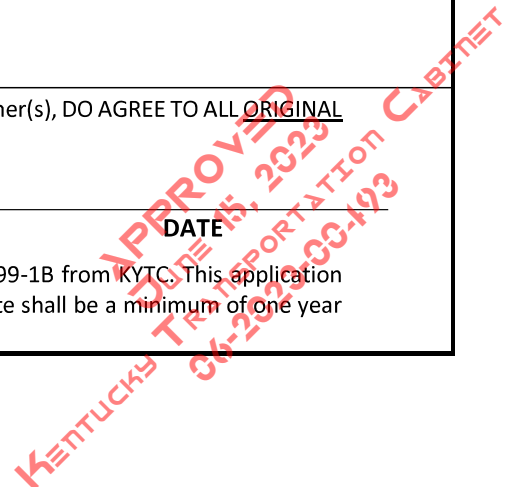
THE UNDERSIGNED APPLICANT(s), being duly authorized representative(s) or owner(s), DO AGREE TO ALL ORIGINAL UNEDITED TERMS AND CONDITIONS ON THE TC 99-1A, pages 1-4.

Digitally signed by John Perkins  
 Date: 2023.05.16 12:52:53 -04'00'

**SIGNATURE**

**DATE**

This is not a permit unless and until the applicant(s) receives an approved TC 99-1B from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be a minimum of one year from the date the applicant submits their application.





KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 2 of 4

## APPLICATION FOR ENCROACHMENT PERMIT

### TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
  - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
  - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
  - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
  - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

KENTUCKY TRANSPORTATION CABINET  
APPROVED  
36-2023-00210



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 3 of 4

### APPLICATION FOR ENCROACHMENT PERMIT

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), \_\_\_\_\_, hereby consent to the granting of the permit requested by the applicant along Route \_\_\_\_\_, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) \_\_\_\_\_, subscribed and sworn by \_\_\_\_\_, on this date \_\_\_\_\_.
11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.
12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.
13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, **shall defend, protect, indemnify and save harmless** the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnify did not exist.
14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.
15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.
16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00-193





KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
**PERMITS BRANCH**

TC 99-1A  
 Rev. 10/2020  
 Page 4 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)
18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.
19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.
20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.
21. Before You Dig: The contractor is instructed to call 1-800-752-6007 to reach KY 811, the One-Call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that the owners of underground facilities are not required to be members of the KY 811 One-Call Before U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.
22. The undersigned Utility acknowledges ownership and control of the facilities proposed to be installed, modified, or extended by the Applicant/Permittee and agrees to be bound by the requirements and terms of this application and all related documents making up the approved permit, by the Department's Permits Guidance Manual, and by all applicable regulations and statutes in effect on the date of issuance of the permit. This information and application is certified correct to the best knowledge and belief of the undersigned Utility.

**Duke Energy**

UTILITY

**John Perkins**

NAME (Utility Representative)

Digitally signed by John Perkins  
 Date: 2023.05.16 12:53:28 -04'00'

SIGNATURE (Utility Representative)

**Senior Engineer**

TITLE (Utility Representative)

**5-16-23**

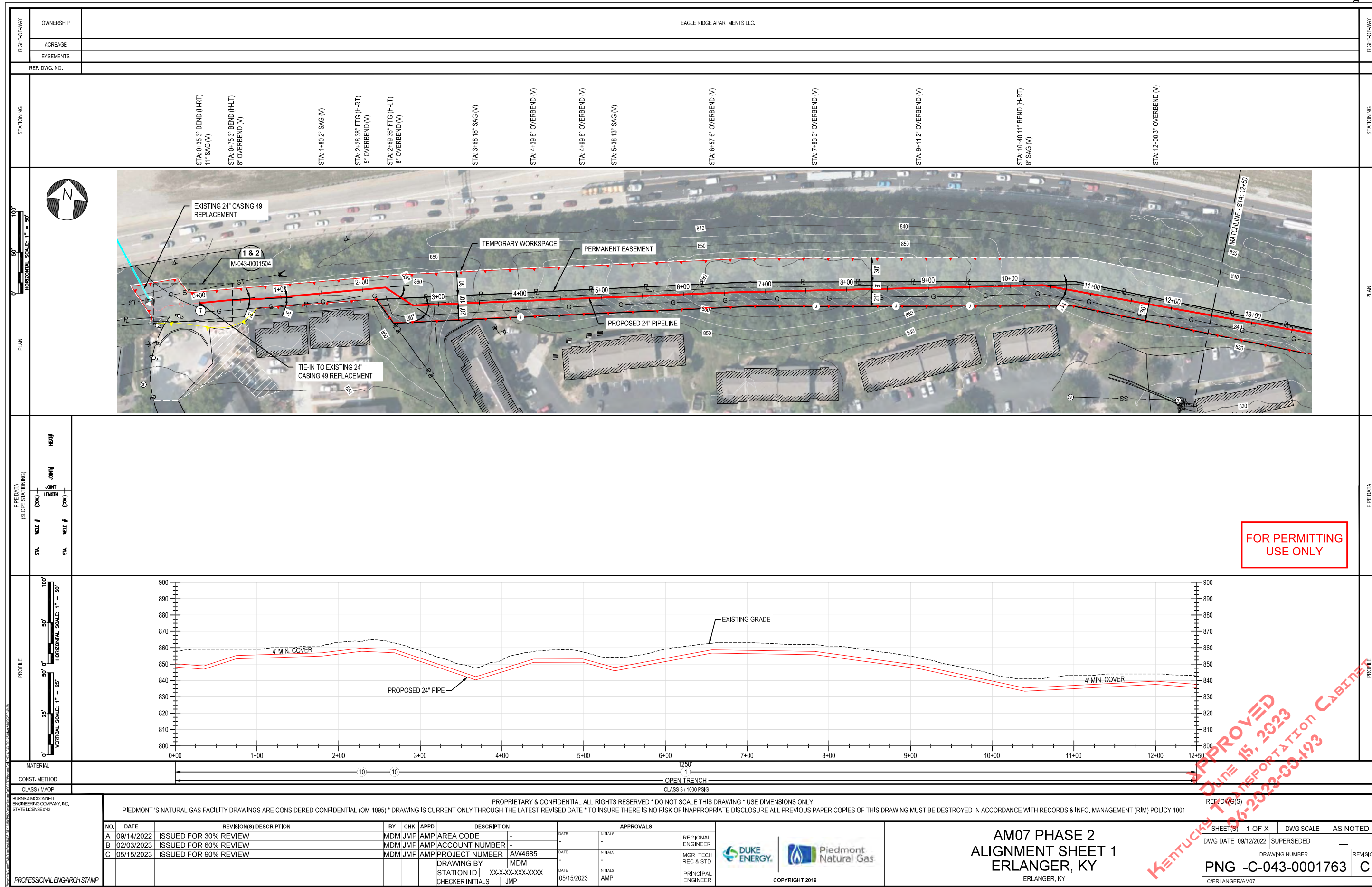
DATE



Know what's below. Call before you dig.

To Submit a Locate Request  
 24 Hours a Day, Seven Days a Week:  
 Call 811 or 800-752-6007

APPROVED  
 MAY 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 504-203-0493



STA: 0+35.3' BEND (H-RT) 11" SAG (V)	STA: 1+80.2' SAG (V)	STA: 2+28.38' FTG (H-RT) 5" OVERBEND (V)	STA: 2+69.36' FTG (H-LT) 8" OVERBEND (V)	STA: 3+66.18' SAG (V)	STA: 4+39.8' OVERBEND (V)	STA: 4+89.8' OVERBEND (V)	STA: 5+38.13' SAG (V)	STA: 6+57.6' OVERBEND (V)	STA: 7+83.3' OVERBEND (V)	STA: 9+11.2' OVERBEND (V)	STA: 10+40.1' BEND (H-RT) 8" SAG (V)	STA: 12+00.3' OVERBEND (V)
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FOR PERMITTING  
USE ONLY

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% REVIEW	MDM	JMP	AMP	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	MDM		
						STATION ID	XX-X-XX-XXX-XXXX	05/15/2023	AMP
						CHECKER INITIALS	JMP		

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED \* DO NOT SCALE THIS DRAWING \* USE DIMENSIONS ONLY

DUKE ENERGY | Piedmont Natural Gas

AM07 PHASE 2  
ALIGNMENT SHEET 1  
ERLANGER, KY

APPROVED  
DATE 15, 2023  
KENTUCKY TRANSPORTATION CABINET

REF: DWG(S)	SHEET(S) 1 OF X	DWG SCALE AS NOTED
DWG DATE 09/12/2022	SUPERSEDED	REVISION
DRAWING NUMBER		REVISION
PNG -C-043-0001763		C

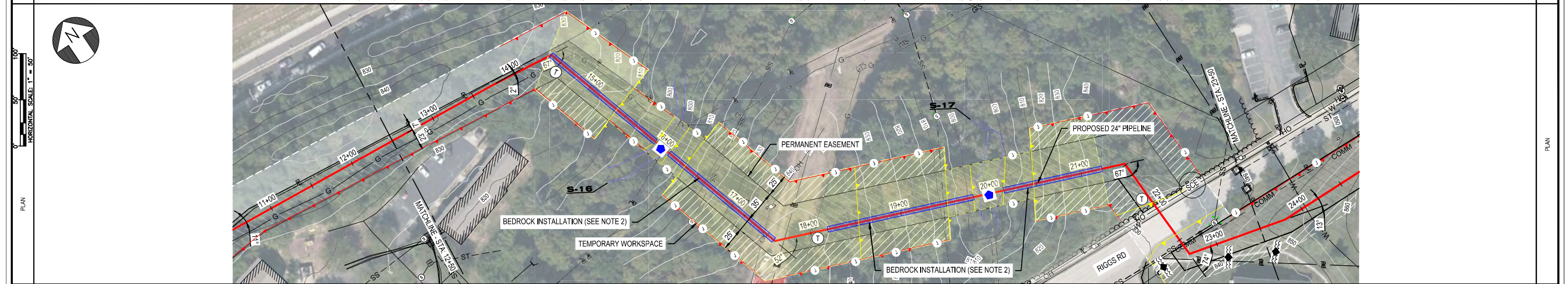
C/ERLANGER/AM07

BURNS & MCDONNELL  
ENGINEERING COMPANY, INC.  
STATE LICENSE #43

PROFESSIONAL ENGINEER'S STAMP

RIGHT-OF-WAY	OWNERSHIP	EAGLE RIDGE APARTMENTS LLC.	ANCHOR BAPTIST CHURCH INC.	VAPTIST CONVALESCENT	ROW	
	ACREAGE					
	EASEMENTS					
REF. DWG. NO.						

STATIONING	STA: 13+72.2' BEND (H-RT)	STA: 14+10.0' OVERBEND (V)	STA: 14+45.67' FTG (H-RT) 12' SAG (V)	STA: 14+67.16' OVERBEND (V)	STA: 15+35.6' SAG (V)	STA: 15+95.0' SAG (V)	STA: 16+15.27' FTG SAG (V)	STA: 16+46.15' OVERBEND (V)	STA: 16+77.2' SAG (V)	STA: 17+60.52' FTG (H-LT) 17' OVERBEND (V)	STA: 18+24.12' OVERBEND (V)	STA: 19+35.22' FTG OVERBEND (V)	STA: 19+47.28' FTG SAG (V)	STA: 19+82.10' SAG (V)	STA: 20+12.16' FTG SAG (V)	STA: 20+55.9' SAG (V)	STA: 21+09.18' OVERBEND (V)	STA: 21+48.67' FTG (H-RT) 10' OVERBEND (V)	STA: 21+68.10' OVERBEND (V)	STA: 22+08.13' SAG (V)	STA: 22+69.74' FTG (H-LT) 17' SAG (V)	STA: 23+14.9' OVERBEND (V)
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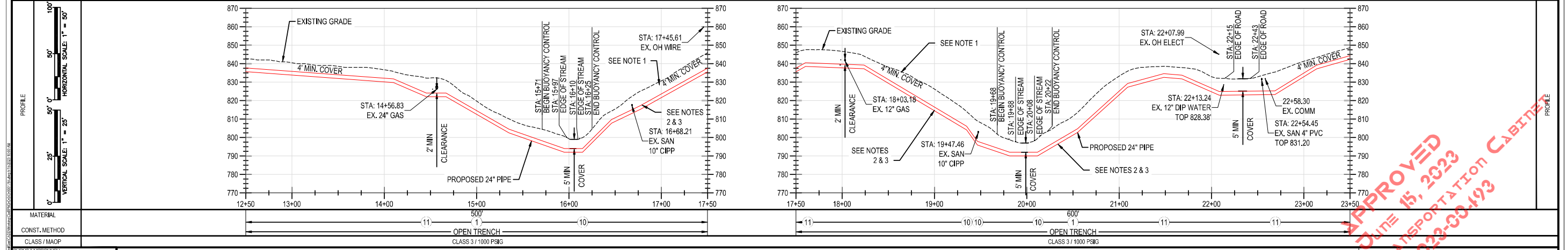


PIPE DATA (SLOPE STATIONING)	STA.	WELD #	COV.	JOINT	LENGTH	HEAVY
	STA.	WELD #	COV.			

**CONSTRUCTION NOTES:**

- IN THE AREAS SPECIFIED IN NOTE 2, MINIMUM COVER SHALL BE THE GREATER VALUE OF THE FOLLOWING TWO OPTIONS:
  - 4-FT COVER FROM NATURAL GRADE
  - CROWN OF PIPE EMBEDDED 1-FT BELOW DETERMINED BEDROCK.
- CROWN OF PIPE SHALL BE EMBEDDED 1' BELOW BEDROCK IN THE FOLLOWING AREAS:
  - STA. 16+15 THRU 17+50
  - STA. 18+25 THRU 20+50
- PIPE PROFILE SHOWN IS ESTIMATED BASED ON GEOTECHNICAL BORINGS AND REPORT. ACTUAL INSTALLATION DEPTH IS SUBJECT TO CHANGE BASED ON FIELD VERIFIED DEPTH TO BEDROCK.

FOR PERMITTING  
USE ONLY



MATERIAL	
CONST. METHOD	OPEN TRENCH
CLASS / MAOP	CLASS 3 / 1000 PSIG

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED \* DO NOT SCALE THIS DRAWING \* USE DIMENSIONS ONLY

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-10995) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% REVIEW	MDM	JMP	AMP	AREA CODE			REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER			MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	PROJECT NUMBER	AW4685		PRINCIPAL ENGINEER

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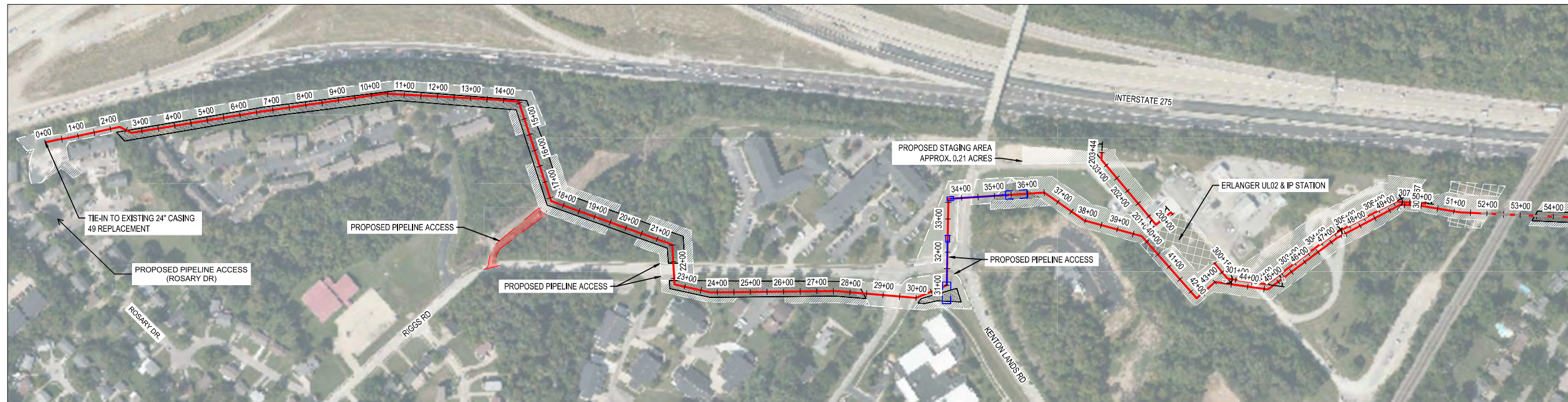
**AM07 PHASE 2  
ALIGNMENT SHEET 2  
ERLANGER, KY**

ERLANGER, KY

REF: DWG(S)

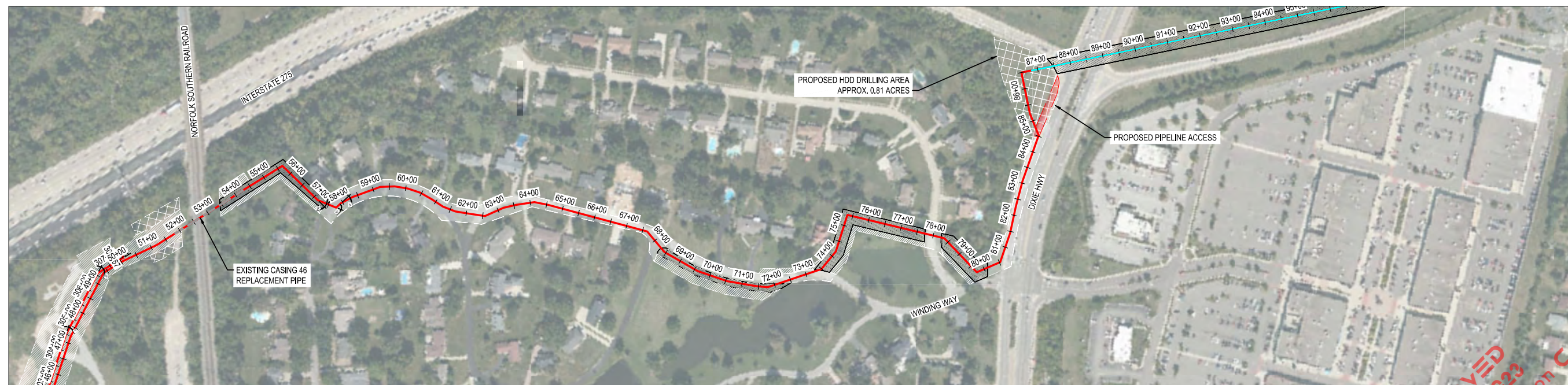
SHEET(S)	1 OF X	DWG SCALE	AS NOTED
DWG DATE	09/13/2022	SUPERSEDED	
DRAWING NUMBER		REVISION	
PNG -C-043-0001764		C	

C/ERLANGER/AM07



PIPELINE ACCESS & LAYDOWN 1

SCALE: 1:150



PIPELINE ACCESS & LAYDOWN 2

SCALE: 1:100

BURNS & MCDONNELL  
ENGINEERING COMPANY, INC.  
STATE LICENSE #43

APPROVED  
DATE 05/15/2023  
FOR PERMITTING  
USE ONLY

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	JMP	JMP	AMP	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	SFS	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



**AM07 PHASE 2  
ACCESS ROUTES AND LAYDOWN 1  
ERLANGER, KY**

ERLANGER, KY

REF. DWG(S)	
SHEET(S)	X OF X
DWG DATE	09/14/2022
DWG SCALE	NONE
DRAWING NUMBER	PNG -C-043-0001755
REVISION	C

PROFESSIONAL ENGINEER STAMP

COPYRIGHT 2019

GENERAL NOTES

- 1. "COMPANY" IS DEFINED AS DUKE ENERGY OR DUKE ENERGY'S APPROVED REPRESENTATIVE.
2. INSTALLER SHALL FURNISH ALL MATERIALS NOT PROVIDED BY THE COMPANY (UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFICATIONS) INCLUDING EQUIPMENT TRANSPORTATION, SERVICES AND PERFORM ALL NECESSARY WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREINAFTER.
3. IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO VERIFY ALL DIMENSIONS GIVEN ON THE DRAWINGS. ANY ITEM IN QUESTION SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO PROCEEDING WITH THE WORK.
4. INSTALLER SHALL BE RESPONSIBLE FOR PROTECTION OF ALL SURROUNDING AREAS.
5. ALL BELOW GROUND WELDS SHALL BE COATED WITH A TWO-PART EPOXY (DENSO 7125, 7200, OR 7300) PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
6. ALL ABOVE GROUND PIPING TO BE BLASTED TO CORRECT SOCIETY FOR PROTECTIVE COATINGS (SSPC) SURFACE PROFILE. PAINT SYSTEM TO BE UTILIZED SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
7. UPON BACKFILLING IN AREAS OF ROCK, BURIED PIPE SHALL HAVE 6" OF SAND PAD FILL PLACED AROUND THE PIPE'S CIRCUMFERENCE.
8. PRESSURE TESTING SHALL MEET THE REQUIREMENTS OF DUKE ENERGY'S CURRENT STRENGTH AND LEAK TEST PROCEDURES AND STANDARDS.
9. INSTALLER SHALL DEWATER ALL HYDROSTATICALLY TESTED PIPING, USING CLEANING PIGS AS REQUIRED, AND DRY TO A DEWPOINT OF -40 °F PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
10. ALL WELDS SHALL BE INSPECTED PER DUKE GAS STANDARD WELD-ST-1060.
11. INSTALLER IS REQUIRED TO FOLLOW DUKE ENERGY WELD -ST-1010 WELDING PROCEDURES.
12. ALL EXISTING PIPELINE INFORMATION PER DUKE RECORDS.

CONSTRUCTION NOTES

- 1. EXISTING OVERHEAD AND BELOW GROUND FACILITIES MAY BE IN THE WORK AREA VICINITY. INSTALLER IS RESPONSIBLE FOR HAVING SUCH FACILITIES LOCATED AND IS RESPONSIBLE FOR MAINTENANCE AND PRESERVATION OF THESE FACILITIES.
2. PER PERTINENT DUKE ENERGY DESIGN AND CONSTRUCTION STANDARDS, INSTALLER IS REQUIRED TO CALL 811 FOR UTILITY LOCATES A MINIMUM OF 72 HOURS AND MAXIMUM OF 10 DAYS PRIOR TO COMMENCEMENT OF WORK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR DELAYS FROM ANY WORK PROVIDED BY OTHER UTILITIES.
3. IF EXISTING UTILITIES OF ANY TYPE ARE ENCOUNTERED IN THE FIELD AND DEEMED TO BE IN CONFLICT WITH INSTALLATION OF FACILITIES, INSTALLER SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
4. WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, INSTALLER SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR PRIVATE DRAINS OR SEWERS. RESTORATION OF THESE FACILITIES IS TO BE PERFORMED ONCE CONSTRUCTION IS COMPLETE AND ARE CONSIDERED INCIDENTAL COSTS OF THE PROJECT.
5. ALL DRAWING MEASUREMENTS ARE TO BE TAKEN FROM EXISTING GRADE, FINAL GRADE SHALL BE MATCHED TO SURROUNDING GRADE AS PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
6. INSTALLER IS TO REMAIN WITHIN CONSTRUCTION WORKING LIMITS. ACCESS TO AREAS OUTSIDE WORKING LIMITS MUST BE COORDINATED WITH THE OWNER OR DUKE ENERGY PROJECT MANAGER.
7. ALL EXCESS EXCAVATION, CONSTRUCTION DEMOLITION DEBRIS AND UNSUITABLE MATERIALS THAT DO NOT CONTAIN ASBESTOS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
8. STANDARD SPECIFICATIONS REFERENCED ON THIS SHEET AND CONSTRUCTION PLANS ARE CONSIDERED AS PART OF THE CONTRACT DOCUMENTS. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED TO BE A PART OF THIS CONTRACT.
9. BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY DUKE ENERGY OR COMPANY REPRESENTATIVE. FINAL PAYMENT SHALL BE MADE AFTER ALL OF THE INSTALLER'S WORK HAS BEEN ACCEPTED AND APPROVED AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
10. DURING CONSTRUCTION, ALL LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, SHALL BE REMOVED AT THE END OF EACH WORK DAY.
11. ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE EXTENDED TO OUTLET INTO AN EXISTING DRAINAGE WAY. A RECORD OF ALL FIELD TILE FOR ONSITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE INSTALLER AND TURNED OVER TO THE PROJECT MANAGER UPON COMPLETION OF THE PROJECT.
12. INSTALLER IS REQUIRED TO MAINTAIN A SET OF ISSUED FOR CONSTRUCTION DRAWINGS AND ALL PERMITS AT THE JOB SITE. ANY MODIFICATIONS OR ALTERATIONS TO THE PLANS OR SPECIFICATIONS SHALL BE APPROVED BY THE PROJECT MANAGER.
13. INSTALLER IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. INSTALLER IS RESPONSIBLE FOR THE CONSTRUCTION METHODS AND TECHNIQUES, SEQUENCES, TIME OF PERFORMANCE, AND ALL SAFETY PRECAUTIONS.
14. MINIMUM DEPTH OF BURIAL SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
15. ALL PIPELINES BEING CROSSED ARE TO BE PROTECTED WITH A MINIMUM OF THREE (3) 4 FEET X 18 FEET WOODEN MATS.
16. PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS, FOR OPEN DITCH EXCAVATION, A

- MINIMUM OF TWO FEET OF SEPARATION SHALL BE MAINTAINED BETWEEN ALL CROSSING STRUCTURES. SEPARATION BETWEEN CROSSING STRUCTURES AND PIPELINES THAT ARE INSTALLED VIA DIRECTIONAL DRILLING METHODS IS AT THE DISCRETION OF ENGINEERING.
17. DURING BACKFILLING, A SIX INCH CROWN SHALL BE PLACED ON ALL DISTURBED AREAS. COMPACTION REQUIREMENTS SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
18. FLOWABLE FILL MUST BE USED IN ROADWAY AND WITHIN 3' OF ROADWAY PER DUKE STANDARDS.
19. SUE LEVEL B SURVEY ACQUIRED. TOP OF PIPE ELEVATIONS SHOWN FOR KNOWN UTILITY DEPTHS. REMAINING UTILITIES ASSUMED TO HAVE 4 FT. OF COVER. CONTRACTOR TO FIELD VERIFY ALL UTILITY DEPTHS.

CIVIL AND STRUCTURAL NOTES

- 1. ADDITIONAL EXCAVATIONS BELOW FOOTINGS MAY BE NECESSARY TO REACH UNDISTURBED SOIL. SHOULD THIS OCCUR, THE EXCAVATION SHALL BE BROUGHT TO THE BOTTOM OF THE FOOTING ELEVATION WITH COMPACTED SAND FILL MEETING THE REQUIREMENTS OF MODIFIED PROCTOR COMPACTION TEST (ASTM D1557) TO 95% IN SIX INCH LIFTS.
2. ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1" X 1" 45° CHAMFER.
3. CONCRETE SHALL BE MIXED AND POURED PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS. TESTING SHALL CONFORM TO ACI 318. INSTALLER TO SUPPLY ALL CONCRETE AND TESTING.
4. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 SPECIFICATION. STEEL REINFORCING BAR SHALL CONFORM TO ASTM A615 GRADE 60 AND WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. TIE WIRE SHALL CONFORM TO ASTM A82.
5. UNSUITABLE OR EXCESS EARTH SPOIL SHALL BE DISPOSED OF AT AN APPROVED WASTE LOCATION. SOIL BEING TRANSPORTED ONTO THE JOB SITE SHALL BE APPROVED BY EITHER THE PROJECT MANAGER OR CONSTRUCTION MANAGER.
6. ROCKSHIELD OR SIMILAR COMPANY APPROVED PRODUCT MUST BE INSTALLED BETWEEN ALL PIPE AND FITTINGS THAT COME INTO CONTACT WITH CONCRETE. A LAYER OF NON ABRASIVE MATERIAL SUCH AS FRP SHALL BE INSTALLED BETWEEN ALL PIPE SUPPORTS AND PIPING.
7. ALL FIELD BENDING OF REBAR SHALL BE DONE COLD.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- 1. INSTALLER IS TO CONSTRUCT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SEQUENCE WITH THE PIPELINE CONSTRUCTION, PROVIDE MAINTENANCE AND ASSURE EFFECTIVENESS THROUGHOUT THE DURATION OF THE PROJECT.
2. AS PER THE CONSTRUCTION STORMWATER PERMIT REQUIREMENTS OUTLINED IN THE KDEP-KOW KPDES PERMIT NO. KYR100000, AREAS LEFT TEMPORARILY UNDISTURBED OR AT FINAL GRADE WILL BE STABILIZED WITHIN 14 DAYS OF ACTIVITY CESSATION.
3. ALL SPOILS INCLUDING ORGANIC SOILS, VEGETATION AND DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF IN SUCH A MANNER AS TO NOT ERODE INTO ANY BODY OF WATER OR WETLAND.
4. PERIMETER EROSION CONTROLS (E.G. SILT FENCING) SHALL BE PLACED AS PER THE PLANS AND WHERE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE WORK AREA.
5. CATCH-ALL INLET FILTERS ARE REQUIRED AT ALL SEWER INLETS, GRATES AND MANHOLES FOR SEDIMENT CONTROL.
6. TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFFSITE AREAS.
7. ALL ENVIRONMENTAL MEASURES SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS, AS OUTLINED IN SWPPP NARRATIVES AND APPLICABLE STORMWATER PERMITS.
8. ALL STREAMS AND WETLANDS WITHIN THE PROJECT WORKSPACE MUST BE MATTED IN AREAS WHERE EQUIPMENT OR VEHICLE ACCESS IS NEEDED. IF A WETLAND OR STREAM IS CROSSED AND THE DECISION IS MADE THAT THE FEATURE DOES NOT NEED TO BE MATTED OVER THE ENTIRETY THEN PERIMETER CONTROLS (E.G. SILT FENCE, FILTER SOCK) MUST BE INSTALLED UP SLOPE FROM THE WATER FEATURE CONTINUOUSLY FROM THE EDGE OF THE WORKSPACE UP TO THE CORNERS OF THE MATTING TO PREVENT SEDIMENT FROM ENTERING THE WATER FEATURE. NOTE THAT THIS REQUIREMENT IS NOT EXPLICITLY LOCATED ON THESE PLANS.
9. CONTRACTOR SHALL INSTALL EROSION CONTROL BMPs IN SEQUENCE WITH PIPELINE CONSTRUCTION. NOT ALL CONTROLS NEED TO BE PRESENT SIMULTANEOUSLY. ALL BMPs ARE SHOWN ON THE PLANS FOR LOCATION AND CLARITY, BUT CONTROLS SHALL BE INSTALLED AS PIPELINE CONSTRUCTION PROGRESSES AND IN ACCORDANCE WITH COMPANY INSPECTOR'S DIRECTION.
10. ALL SEDIMENT RELEASES BEYOND THE SITE PERIMETER CONTROLS AND SPILLS REGARDLESS OF AMOUNT OR LOCATION ARE TO BE IMMEDIATELY REPORTED TO THE DUKE ENERGY ENVIRONMENTAL FIELD PROFESSIONAL. IF THE DUKE ENERGY ENVIRONMENTAL PROFESSIONAL CANNOT BE REACHED, THE DUKE ENERGY SPILL HOTLINE IS TO BE CALLED AT 1-800-527-3853.
11. IN AREAS WHERE IT IS FIELD DETERMINED TO REDUCE WORKSPACE OR IMPACT, EROSION AND SEDIMENT CONTROLS SHALL BE ADJUSTED TO MATCH WORKSPACE BOUNDARIES.

SURVEY INVESTIGATION NOTES:

- 1. BEARINGS AND COORDINATES ARE RELATIVE TO NAD83 KENTUCKY STATE PLANE, NORTH ZONE, US. FOOT. VERTICAL DATUM IS NAVD88.

CATHODIC PROTECTION & AC MITIGATION NOTES:

- 1. CONTRACTOR SHALL PROVIDE AND INSTALL ALL MISCELLANEOUS PARTS TO COMPLETE PROJECT PER CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS, ELECTRICAL CODES, STATE AND LOCAL CODES AND STANDARDS, AND LOCAL ELECTRICAL DISTRIBUTION COMPANY REQUIREMENTS. PARTS INCLUDE, BUT ARE NOT LIMITED TO, WIRING AND MOUNTING MATERIALS, METER SOCKET, DISCONNECT EQUIPMENT, ENCLOSURES, TRANSIENT VOLTAGE SURGE SUPPRESSORS, AC MAIN BUSS TERMINATION, CIRCUIT BREAKERS, AND OTHER ELECTRICAL EQUIPMENT REQUIRED. ACTUAL LENGTH WIRING IS DEPENDENT ON DISTANCE FROM INSTALLATION.

DESIGN NOTES:

- 1. DESIGNED IN ACCORDANCE WITH PHMSA 49 CFR 192 GUIDELINES.
2. PIPELINES TO BE CATHODICALLY PROTECTED (SEE DWG PNG-E-043-0001614)
3. DESIGN PRESSURES

AM07 PHASE 2 (TRANSMISSION)

- AM07 PHASE 2 DESIGN PRESSURE : 1000 PSIG
- AM07 MAOP: 370 PSIG

UL02 FEED (TRANSMISSION)

- UL02 DESIGN PRESSURE: 1000 PSIG
- UL02 MAOP: 230 PSIG

IP FEED (DISTRIBUTION)

- IP DESIGN PRESSURE: 285 PSIG
- IP MAOP: 30 PSIG

- 2. FOR 24" PIPE, FIELD BEND ALL ANGLES LESS OR EQUAL TO 18 DEGREES. ALL FIELD BENDS REQUIRE 5' TANGENTS, CUT SEGMENTABLE FITTINGS FOR ALL ANGLES ABOVE 18 DEGREES, OR WHERE SPECIFIED.

APPROVED DATE 15, 2023
FOR PERMITTING USE ONLY
KENTUCKY TRANSPORTATION CABINET

BURNS & MCCONNELL ENGINEERING COMPANY, INC. STATE LICENSE #043

PIEDMONT 'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RM) POLICY 1001

Table with columns: NO., DATE, REVISION(S) DESCRIPTION, BY, CHK, APPD, DESCRIPTION, APPROVALS. Includes revision history for design stages A, B, and C.

Table with columns: DATE, INITIALS, REGIONAL ENGINEER, MGR TECH REC & STD, PRINCIPAL ENGINEER. Includes signatures and dates for approval.



AM07 PHASE 2 GENERAL NOTES ERLANGER, KY

Table with columns: SHEET(S) X OF X, DWG SCALE, AS NOTED, DWG DATE, SUPERSEDED, DRAWING NUMBER, REVISION, G / ERLANGER / AM07. Includes drawing number PNG -G-043-0001430 and revision C.

PROFESSIONAL ENGRARCH STAMP

**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSATIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / PL	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

REF. DWG(S)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	CNS	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR. TECH REC. & STD.
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	JMP		
						STATION ID	-		
						CHECKER INITIALS	JMP	05/15/2023	AMP



AM07 PHASE 2  
ABBREVIATIONS & LEGEND  
ERLANGER, KY

SHEET(S) XX OF XX	DWG SCALE	NONE
DWG DATE 09/13/2022	SUPERSEDED	-
DRAWING NUMBER	REVISION	
PNG - G-043-0001431	C	

PROFESSIONAL ENGINEER STAMP

APPROVED  
DATE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
FOR PERMITTING USE ONLY



**KYTC Division of Maintenance  
Permits Branch  
District 6**



**ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS**

**YOU MUST NOTIFY KYTC BEFORE BEGINNING ANY WORK IN THE RIGHT-OF-WAY. Failure to alert KYTC of working within the right of way may result in permit revocation.**

Two ways to notify KYTC of your construction start date:

**By Email: [KYTCD6PERMITS@KY.GOV](mailto:KYTCD6PERMITS@KY.GOV)**

*\*must include permit number and county in subject line*

**By Phone: 859-341-2700**

*\*must know permit number and county when calling*

**YOU MUST ALSO NOTIFY KYTC UPON COMPLETION OF WORK WITHIN RIGHT-OF-WAY. Failure to alert KYTC of completion of work may result in withholding release of any associated bonds.**



APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00-193

Permit No. T06-2023-00493

**I. SAFETY**

**A. General Provisions**

- All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, latest edition, Part VI, and safety requirements shall comply with the Permits Manual. Federal law requires that traffic control shall be implemented in accordance with MUTCD standards and KYTC's Standard Specifications for Road and Bridge Construction (KYTC SSRBC) under the supervision of a certified Work Zone Traffic Control Supervisor.
- All work necessary in shoulder or ditch line areas of a state highway shall be scheduled to be promptly completed so that hazards adjacent to the traveled way are kept to an absolute minimum.
- No more than one (1) traveled-lane shall be blocked or obstructed during normal working hours. All signs and flaggers during lane closure shall conform to the MUTCD. The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility. No non-construction equipment or vehicles or office trailers shall be allowed on the right of way during working hours. The right of way shall be left free and clear of equipment, material, and vehicles during non-working hours.
- When necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes shall be blocked or obstructed during adverse weather conditions (rain, snow, fog, etc.) without specific permission from the Department.
- Working hours shall be between 8:00 AM and 4:30 PM. Further date and time restrictions are as follows:

**B. Explosives**

- No explosive devices or explosive material shall be used within state right of way without proper license and approval of the Kentucky Department of Mines and Minerals, Explosive Division.

**C. OSHA**

- Kentucky Occupational Safety and Health Standards for the construction industry, which has the effect of law, states in part: (Page 52, 1926.651, Specific Excavation Requirements) "Prior to opening an excavation, effort shall be made to determine whether underground installations, (sewer, telephone, water, fuel, electric lines, etc.) will be encountered, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined, and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation."

**D. Archaeological**

- Whenever materials of an archaeological nature are discovered during the course of construction work or maintenance operations, contact shall be made immediately with the Division of Environmental Analysis, which maintains an archaeologist on staff, or with the Office of the State Archaeologist located at the University of Kentucky. Following this consultation, further action shall be decided on a case-by-case basis by the State Highway Engineer or the Transportation Planning Engineer or their designated representative.

**E. Environmental**

- If the activity to which this permit related disturbs one acre or more of land, you must obtain KPDES KYR10 permit. Information can be found at <http://water.ky.gov/permitting/Pages/GeneralPermits.aspx>

**F. Additional Notes**

- The following additional notes apply to this permit:

No access permitted from the Interstate. Temporary fence must be constructed prior to pipe installation.

APPROVED  
 JUL 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00493



Permit No. T06-2023-00493

**II. UTILITIES**

The permittee shall be responsible for any damage to existing utilities. Any utility modifications or relocations within state right of way necessary, as determined by the Department or by the owner of the utility, shall be at the expense of the permittee and subject to the approval of the Department. Operators of underground utilities in right of way shall be members of Kentucky 811.

All existing manholes and valve boxes shall be adjusted to be flush with finished grade.

All pavement cuts shall be restored per Kentucky Transportation Cabinet standards and specifications.

Any excavation within 3' of edge of pavement will require flowable fill as backfill.

The clear zone requirement shall be met to the extent possible in accordance with the Roadside Design Guide.

Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual. Pipe encasing shall not be required if the pipe crossing is 2" or less.

Aerial crossing of utility lines shall have a minimum clearance from the high point of the roadway to the low point of the line of 24' on fully controlled access highways and 18' on non-fully controlled access highways

Minimum depth for underground Gas and Electric lines is 60" under roadways, ramps, and ditch lines and 42" in all other areas within state right of way. The minimum depth for all other utilities is 42" in all areas.

When steel plates are installed over an open excavation in the roadway, they must be anchored to the pavement and have asphalt applied to all exposed edges and an MUTCD approved sign noting "Road Plates Ahead." KYTC must be notified of the location, date, time, and permit number associated to BOTH the installation and removal of the plate. Failure to do so may result in permit revocation.

Utility poles moved for replacement must be removed in their entirety and the hole left behind must be backfilled.

No poles or anchors shall be installed in a roadside ditch.

**Utility notes specific to fully-controlled access highways ONLY:**

All work necessary within the right-of-way shall be performed behind a temporary fence erected prior to the start of work. The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way, and the control of access immediately restored to original condition, in accordance with applicable KYTC SSRBC. All vents, valves, manholes, etc., shall be located outside of the right-of-way. Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of 42 inches deep. Work in interstate right-of-way requires approval from FHWA (Federal Highway Administration).

Additional notes:

[Empty rectangular box for additional notes]

**APPROVED**  
**JUNE 15, 2023**  
**KENTUCKY TRANSPORTATION CABINET**  
**06-2023-00493**

Permit No. T06-2023-00493

**III. DRAINAGE**

- Negative impacts to existing drainage will be the applicant's responsibility to repair in accordance with KYTC SSRBC.
- All pipe shall be laid in a straight alignment, to proper grades, and with all materials and methods of installation including bedding and joint seating. Pipe shall not be covered until inspected by the Department and express permission obtained to make backfill. It is the applicant's responsibility to request inspection.
- All gutter lines at the base of new curbs shall be on continuous grades, and pockets of water along with curbs or in entrance areas or other paved areas within the right-of-way shall not be acceptable.
- All drainage structures and appurtenances (manholes, catch basins, curbing, inlet basins, etc.) shall conform to the Department specifications and shall be constructed in accordance with the KYTC's Standard Drawings.
- Additional notes:

**IV. PAVING**

- No bituminous pavement shall be installed within the right of way between November 15 and April 1, nor when the temperature is below 40 degrees Fahrenheit, without the express consent of the Department. No bituminous pavement shall be installed when the underlying course is wet.
- Paving within the right of way shall be as follows:
  - Base (Type): Match Existing, (Thickness) Match Existing
  - Surface Base (Type) Match Existing, (Thickness) Match Existing
  - Finished Surface (Type) Match Existing, (Thickness) Match Existing
- All materials and methods of construction, including base and subgrade preparation, shall be in accordance with KYTC's Standard Specifications. At least 24 hours notice to the Department is required prior to beginning paving operations.  
 Phone: 859-341-2700 Name: \_\_\_\_\_
- Utility companies performing road cuts must restore the pavement to pre-existing condition. Pictures/videos are recommended to ensure proper placement of signs and lane markers that are temporarily removed for paving operations. In some cases, a pre-work inventory may be requested from the Department.
- Existing pavement and shoulder material shall be removed to accommodate the above paving specifications.
- The finished surface of all new pavement within the right of way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by KYTC.
- To ensure proper surface drainage, the new pavement shall be flush with the edge of existing highway pavement and shall slope away from the existing edge of the pavement as specified in drawings.
- Existing edge of pavement shall be saw-cut to provide a straight and uniform joint for new pavement, and an edge key will be installed in the overlap. An approved joint sealer, in accordance with Kentucky Department of Highways Standard Specifications (latest edition), shall be applied between new and existing pavements.
- Additional notes:

APPROVED  
JULY 11 2023  
KENTUCKY TRANSPORTATION CABINET  
36-2023-00493

Permit No. T06-2023-00493

**V. ENTRANCES**

- Encroachment permits issued by KYTC in no way supersede local planning/zoning requirements or subdivision regulations. KYTC has no authority with zoning changes.
- Commercial entrances must be paved to the right-of-way line. Any deviations must be approved by KYTC before installation.
- KYTC can dictate drainage improvement installation during construction or after entrance is at final grade. The permit release does not release the permit applicant from drainage maintenance.
- Signs (ground-mounted and span-mounted), stop bars, crosswalk, and proper lane markings must be in-place before entrance is open for traffic. Lane width modifications must be approved by the Department.
- Guardrail installation must be pre-approved by the Department and installed by a KYTC pre-qualified contractor. Any guardrail that is removed during construction must be returned to the local KYTC maintenance facility.

Additional notes:

**VI. TRAFFIC**

- Any contractor performing work within the vicinity of KYTC roadway lighting or traffic signals, must request locates from the KYTC District 6 Traffic section at least one week before of starting work in the right-of-way.
- Applicant must maintain all KYTC Roadway signage that is impacted by the permitted work. In the event that any signs have to be moved, it is the applicant's responsibility to mark the sign's location before removal and to install the original or new sign per KYTC standards for sign installation.
- Any thermoplastic or striping damaged during the encroachment must be restored in a timely manner per KYTC standards. Stopbars, arrows, and crosswalks must be thermoplastic material, paint is not acceptable. This work must be performed by a KYTC pre-qualified contractor.
- Excavating near a signal, lighting pole, or anchoring facility must be done so that it does not impact the structural integrity of the pole. Any work that requires a temporary support or anchoring must receive prior approval.
- If the scope of the permit involves a signal build or rebuild, it is the applicant's responsibility to apply for power service (and pay monthly electrical bill) as well as request electrical inspection from the KYTC District 6 Traffic section. If the signal modifications require timing or phasing changes this must be requested at least two weeks in advance of the signal's turn-on date. KYTC will not take ownership of permitted signals until the electrical inspection is formally accepted and approved.
- Work which impacts traffic loops requires 48-hour notice to the KYTC District 6 Traffic section at 859-341-2700. Accidental damage of a traffic loop must be reported immediately to KYTC District 6's emergency line at 859-620-2738. Any disturbed traffic loops must be replaced in a timely manner. Traffic loops out of operation for more than five working days will subject the applicant to the cancellation of the permit. Loop repair must be performed by a KYTC pre-qualified contractor.

Additional Notes:

APPROVED  
 JUNE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00-193

Permit No. T06-2023-00493

**VII. SIDEWALK SPECIFICATIONS**

All sidewalk modifications, retrofitting, or installations must meet current ADA guidelines

**A. New Sidewalks**

New sidewalk specifications, dimensions, and designs shall be in accordance with KYTC's latest edition of the Standard Specifications, or with the plans provided on the permit if approved by a KYTC D6 Construction or Permits Engineer.

All materials and methods of construction, including curing, shall be in accordance with KYTC's latest edition of the Standard Specifications.

**B. Existing Sidewalks**

Use of the sidewalk shall not be blocked or obstructed and a usable walkway shall be maintained across the construction area at all times per MUTCD . Sidewalk closures must be approved by the Department before implementation.

The location of ADA ramps (truncated domes/tactile warnings/etc.) will need to be field verified by KYTC before installation.

Any section of sidewalk that becomes damaged shall be entirely replaced to match existing sections.

Additional notes:

[Empty text box for additional notes]

**VIII. RIGHT OF WAY RESTORATION**

All disturbed portions of the right of way shall be restored to grass as per Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition). A satisfactory turf, as determined by the Department, shall be established by the permittee prior to release of indemnity. Sodding or seeding shall be as follows:

Slopes 3:1 or Less: 90% Kentucky 31 Tall Fescue and 10% White Dutch Clover at 100 lbs/acre

Slopes Greater than 3:1: 90% Kentucky 31 Tall Fescue and 10% Partridge Pea at 100 lbs/acre

Urban or Residential Areas: 95% Turf Type Fall Fescue Blend and 5% White Dutch Clover at 275 lbs/acre

Two tons of clean straw mulch per acre of seeding.

Prior to seeding, the ground shall be prepared in accordance with Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).

Substitutes for sod such as artificial turf, rocked mulch, or paved areas may be acceptable if they are aesthetically pleasing and receive prior approval from KYTC.

All ditch-flow lines and all ditch-side slopes shall be sodded.

Existing concrete right of way markers shall not be disturbed. If damaged in any way, they shall be entirely replaced by the permittee with new concrete markers to match the original markers, in accordance with Kentucky Department of Highways Standard Drawings. Markers that are entirely removed shall be re-established in the proper locations by the permittee and to the satisfaction of the Department.

Additional notes:

[Empty text box for additional notes]

APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00-193

Permit No. T06-2023-00493

**IX. RIGHT OF WAY FENCE RESTORATION**

- The replacement fence shall be a height of at least 48 inches and shall be of sufficient density to protect against encroachment.
- The replacement fence shall be a minimum of 1 foot and a maximum of 2 feet outside the right-of-way line
- The fence materials and design shall meet accepted industry standards and be treated as paintable. Durable finish materials such as vinyl are acceptable.
- The permittee shall be required to construct and maintain the replacement fencing to an acceptable level of functionality and state of repair. All work on the fencing shall be performed by access from the private property. Access from the roadway is not allowed.
- The existing fence shall be removed by permittee and stored at the Department's maintenance storage yard for future reuse by the Department, or the Department shall be reimbursed the cost of fencing removed.
- Right of way monuments shall be installed regardless of if replacement fence is installed or not.
- The control of access shall not be diminished as a result of replacement of the fence.
- Additional notes:

[Empty rectangular box for additional notes]

**X. MISCELLANEOUS NOTES**

[Large empty rectangular box for miscellaneous notes]

**NOTICE TO PERMITTEE**

**THE PERMITTEE AGREES THAT ALL WORK WITHIN THE EXISTING RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE CURRENT KYTC STANDARD SPECIFICATIONS AND THE PLANS AS APPROVED AND PERMITTED BY AN ENCROACHMENT PERMIT. ANY CHANGES OR VARIANCES MADE AT THE TIME OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT OF HIGHWAYS SHALL BE REMOVED BY THE PERMITTEE AT NO EXPENSE TO THE DEPARTMENT OF HIGHWAYS AND SHALL BE REDONE BY THE PERMITTEE TO CONFORM WITH THE APPROVED PLANS.**

**APPROVED**  
**KENTUCKY TRANSPORTATION CABINET**  
2023

EXHIBIT

Access Control Fence Removal / Replacement Agreement

**PE-9020**

## ACCESS CONTROL FENCE REMOVAL / REPLACEMENT AGREEMENT

**KYTC KEPT #:** T06-2023-00493

This Agreement, entered into by and between the Commonwealth of Kentucky, Transportation Cabinet, Department of Highways, hereinafter referred to as the “**Department**”, and (*Permittee Name and Address*), hereinafter referred to as the “**Permittee**”. The parties are owners of adjoining parcels of real property located in the County of KENTON, Kentucky, being fully described as exhibit “A” attached hereto, which includes a legal deed description and a survey plat by a licensed land surveyor.

In consideration of the mutual covenants and agreements set forth below, the parties agree as follows:

1. Prior to the proposed removal of existing fencing on behalf of the **Permittee**, the **Permittee** agrees to hire SGC ENGINEERING, PLS # L-4308, a licensed land surveyor, to perform and verify pertinent boundary line survey points, as well as install all required right-of-way monuments regardless of whether or not a new fence is proposed to be installed. A plat, drawing, or graphic created by a licensed land surveyor shall be provided to the Department that accurately represents all monuments established or verified with the associated right-of-way boundary and that clearly shows the location of all fencing remove and replaced.
2. The existing fence shall be removed and transported by the Permittee to the designated local **Department** maintenance storage facility for future reuse by the **Department**. If not, the **Department** shall be reimbursed for the fair market value of the fence removed from the site unless the **Department** agreed prior to removal that the fence is unsuitable for future **Department** use. Any existing fencing that is not returned to the Department shall be removed from **Department** right-of-way and disposed of properly.
3. The replacement fence shall be a height of at least 48 inches and proposed replacement fencing material shall be approved by appropriate **Department** personnel prior to installation.
4. **Permittee** shall erect the replacement fence along the described right-of-way boundary line situated a minimum of one foot and a maximum of two feet outside of, or beyond the described right-of-way boundary line.
5. The existing access fence will be removed and, if applicable, the proposed replacement fence will be installed along the described boundary line for a distance of 1,450 feet more or less.

APPROVED  
 JUL 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00493

EXHIBIT

Access Control Fence Removal / Replacement Agreement

**PE-9020**

6. The control of access shall in no way be altered and/or diminished as a result of the removal or replacement of the fence.
7. Any access control fencing removed from fully controlled access roadways shall be replaced with acceptable alternative fencing.
8. No gates will be permitted or allowed on fully controlled access roadways.
9. **Perpetual** maintenance of approved replacement fencing shall be the sole responsibility of the Permittee, its successors and assigns. All work on the fence shall be performed by access from private property. Access from the roadway will not be allowed.
10. The **Permittee** shall perpetually maintain the fence to a **Department** approved level of functionality and/or state of repair.
11. This agreement, and the rights and duties hereunder, shall bind and inure to the benefit of the parties, their successors, and assigns.

The undersigned Permittee(s), being duly authorized representative(s) or owner(s) do hereby agree to all terms and conditions stated herein.


The parties have caused these presents to be executed by their officers thereunto duly authorized.

**Kentucky Transportation Cabinet, Department of Highways:**

\_\_\_\_\_ Date

(Name), (District XX, Chief District Engineer)

**(Permittee):**

 Digitally signed by John Perkins  
Date: 2023.05.16 12:55:45 -04'00' , Sr Engineer \_\_\_\_\_ Date

(Name), (Title of Permittee's Representative)

APPROVED  
JUL 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
66-2023-00-493

**NOTICE OF COMPLETION OF ENCROACHMENT PERMIT WORK****PERMITTEE**

Name: Duke Energy  
 Contact Person:  
 Address: 139 E 4th St  
 City: Cincinnati  
 State: Ohio  
 Zip: 45202  
 Telephone:

**PROJECT IDENTIFICATION**

Permit Number: 06-2023-00530

I wish to notify the Department of Highways that the above mentioned permit work and any necessary right-of-way restoration have been completed and are ready for final inspection.

\_\_\_\_\_  
 Permittee

Please return this form to the address below when work is completed and ready for final inspection.

Please Return to: Permit Engineer  
 Department of Highways, District 6 Office  
 421 Buttermilk Pike  
 Covington, Kentucky 41017  
 (859) 341-2700  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Open trench installation of 24" steel natural gas pipeline within the sidewalk on the north side of Dixie Highway (US 25).	Kenton - US 25	39.026764	-84.581164

**APPROVED**  
 JUNE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00530





Andy Beshear  
Governor

COMMONWEALTH OF KENTUCKY  
TRANSPORTATION CABINET  
Department of Highways, District 6 Office  
421 Buttermilk Pike  
Covington, Kentucky 41017  
(859) 341-2700  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

Jim Gray  
Secretary

June 15, 2023

Duke Energy  
139 E 4th St  
Cincinnati, Ohio 45202

Subject: Permit #: 06-2023-00530  
Permit Type: Utilities - Gas  
Approval

Dear Applicant:

Attached is your permit approval and documentation for the subject permit.

Be advised that all work must be done in conformity with permit and application conditions. If you have any questions, please contact the Permits Section at this office.

Sincerely,

A handwritten signature in cursive script that reads "Linzy Brefeld".

Linzy Brefeld  
D6 Permits Supervisor

Attachments



An Equal Opportunity Employer M/F/D

**APPROVED**  
**JUNE 15, 2023**  
**KENTUCKY TRANSPORTATION CABINET**  
**06-2023-00530**



Kentucky Transportation Cabinet  
 Department of Highways  
 Division of Maintenance  
 Permits Branch

TC 99-1 (B)  
 07/2018  
 Page 1 of 1

**ENCROACHMENT PERMIT**

**KYTC KEPT #:** 06-2023-00530

---

**Permittee:** Duke Energy

---

**Permit Type / Subtype:** Utilities / Gas

---

**Work Completion Date:** 6/13/2024

---

INDEMNITIES		
Type	Amount Required	Tracking Number
Performance Bond	\$0.00	
Cash / Check	\$0.00	
Self-Insured	\$0.00	
Payment Bond	\$0.00	
Liability Insurance	\$0.00	

This permit has been: **APPROVED**  **DENIED**

Linzy Brefeld	D6 Permits Supervisor	6/14/2023
<b>SIGNATURE</b>	<b>TITLE</b>	<b>DATE</b>

The TC 99-1(B), including the application TC-99 1(A) and all related and accompanying documents and drawings make up the permit. It is not a permit unless both the TC 99-1(A) and TC 99-1(B) are both present.

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Open trench installation of 24" steel natural gas pipeline within the sidewalk on the north side of Dixie Highway (US 25).	Kenton - US 25	39.026764	-84.581164



To Submit a Locate Request  
 24 Hours a Day, Seven Days a Week  
 Call 811 or 800-752-6007

APPROVED  
 JUNE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00530



KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
**PERMITS BRANCH**

TC 99-1A  
 Rev. 10/2020  
 Page 1 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

KYTC KEPT #: T06-2023-00530

**SECTION 1: APPLICANT CONTACT INFORMATION**

<b>APPLICANT</b> Duke Energy	<b>ADDRESS</b> 139 E 4th St		
<b>EMAIL</b> N/A	<b>CITY</b> Cincinnati	<b>STATE</b> OH	<b>ZIP</b> 45202
<b>CONTACT NAME 1</b> Josh Pedersen (on behalf of Duke Energy)	<b>EMAIL</b> jmpedersen@burnsmcd.com	<b>PHONE #</b> (913) 645-2713	
		<b>CELL #</b>	
<b>CONTACT NAME 2 (if applicable)</b> John Perkins	<b>EMAIL</b> john.perkins@duke-energy.com	<b>PHONE #</b> 513-315-8338	
		<b>CELL #</b>	

**SECTION 2: PROPOSED WORK LOCATION**

<b>ADDRESS</b> Interstate 75	<b>CITY</b> Erlanger	<b>STATE</b> Kentucky	<b>ZIP</b> 41018
<b>COUNTY</b> Kenton	<b>ROUTE #</b> Route 25 Dixie Hwy	<b>MILE POINT</b> 7.35 - 7.40	<b>LONGITUDE (X)</b> -84.580555° <b>LATITUDE (Y)</b> 39.02722°

**ADDITIONAL LOCATION INFORMATION:** Workspace in the westbound lane of Dixie Hwy just west of the I-275 exit ramp.

**FOR KYTC USE ONLY**

**PERMIT TYPE:**  Air Right  Entrance  Utilities  Vegetation Removal  Other: \_\_\_\_\_

**ACCESS:**  Full  Partial  by Permit **LOCATION:**  Left  Right  Crossing

**SECTION 3: GENERAL DESCRIPTION OF WORK**

Open trench installation of 24" steel natural gas pipeline within the sidewalk on the north side of Dixie Highway. Our work would propose to utilize the northern westbound lane of Dixie Hwy as workspace to assist with pipeline install. Sidewalk, curb and possible road surface restoration may be needed upon completion of installation.

(See attached design drawing Sta: 81+00 - 85+00)

Project estimated to be in construction February 2024 - October 2024. Exact timeline of Dixie Hwy installation has yet to be determined.

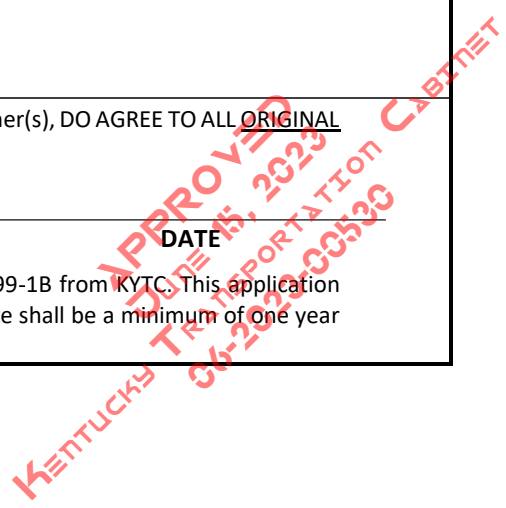
THE UNDERSIGNED APPLICANT(s), being duly authorized representative(s) or owner(s), DO AGREE TO ALL ORIGINAL UNEDITED TERMS AND CONDITIONS ON THE TC 99-1A, pages 1-4.

Digitally signed by John Perkins  
 Date: 2023.05.16 13:57:29  
 -04'00'

**SIGNATURE**

**DATE**

This is not a permit unless and until the applicant(s) receives an approved TC 99-1B from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be a minimum of one year from the date the applicant submits their application.





KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 2 of 4

## APPLICATION FOR ENCROACHMENT PERMIT

### TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
  - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
  - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
  - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
  - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

APPROVED  
 06-23-2023  
 KENTUCKY TRANSPORTATION CABINET



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 3 of 4

### APPLICATION FOR ENCROACHMENT PERMIT

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), \_\_\_\_\_, hereby consent to the granting of the permit requested by the applicant along Route \_\_\_\_\_, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) \_\_\_\_\_, subscribed and sworn by \_\_\_\_\_, on this date \_\_\_\_\_.
11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.
12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.
13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, **shall defend, protect, indemnify and save harmless** the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnify did not exist.
14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.
15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.
16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00530



KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
**PERMITS BRANCH**

TC 99-1A  
 Rev. 10/2020  
 Page 4 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee’s rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)
18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department’s Engineer on the project in order to coordinate all permitted work with the Department’s prime contractor on the project.
19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.
20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.
21. Before You Dig: The contractor is instructed to call 1-800-752-6007 to reach KY 811, the One-Call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that the owners of underground facilities are not required to be members of the KY 811 One-Call Before U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.
22. The undersigned Utility acknowledges ownership and control of the facilities proposed to be installed, modified, or extended by the Applicant/Permittee and agrees to be bound by the requirements and terms of this application and all related documents making up the approved permit, by the Department’s Permits Guidance Manual, and by all applicable regulations and statutes in effect on the date of issuance of the permit. This information and application is certified correct to the best knowledge and belief of the undersigned Utility.

Duke Energy

UTILITY

John Perkins

Senior Engineer

NAME (Utility Representative)

TITLE (Utility Representative)

Digitally signed by John Perkins  
 Date: 2023.05.16 13:58:06 -04'00'

SIGNATURE (Utility Representative)

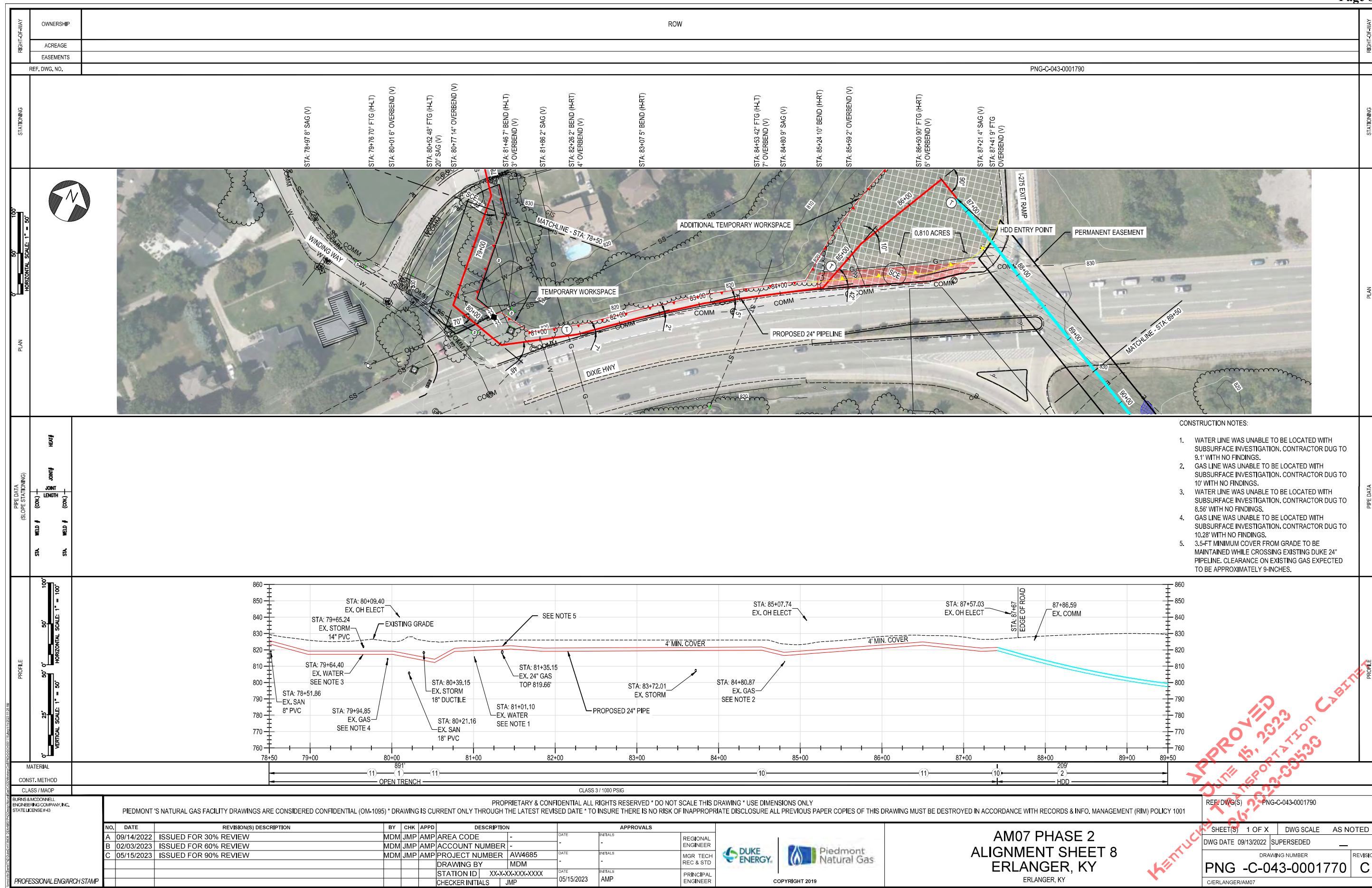
DATE



Know what's below. Call before you dig.

To Submit a Locate Request  
 24 Hours a Day, Seven Days a Week:  
 Call 811 or 800-752-6007

APPROVED  
 MAY 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 05-2023-0530



- CONSTRUCTION NOTES:
1. WATER LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 9.1' WITH NO FINDINGS.
  2. GAS LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 10' WITH NO FINDINGS.
  3. WATER LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 8.56' WITH NO FINDINGS.
  4. GAS LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 10.28' WITH NO FINDINGS.
  5. 3.5-FT MINIMUM COVER FROM GRADE TO BE MAINTAINED WHILE CROSSING EXISTING DUKE 24" PIPELINE. CLEARANCE ON EXISTING GAS EXPECTED TO BE APPROXIMATELY 9-INCHES.

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% REVIEW	MDM	JMP	AMP	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	MDM		
						STATION ID	XX-X-XX-XXX-XXXX	05/15/2023	AMP
						CHECKER INITIALS	JMP		

AM07 PHASE 2  
ALIGNMENT SHEET 8  
ERLANGER, KY

DUKE ENERGY | Piedmont Natural Gas

COPYRIGHT 2019

PROFESSIONAL ENGINEER

REF: DWG(S) PNG-C-043-0001790

SHEET(S) 1 OF X DWG SCALE AS NOTED

DWG DATE 09/13/2022 SUPERSEDED

DRAWING NUMBER PNG -C-043-0001770 REVISION C

C/E: ERLANGER/AM07

APPROVED DATE 15, 2023 KENTUCKY TRANSPORTATION CABINET

GENERAL NOTES

- "COMPANY" IS DEFINED AS DUKE ENERGY OR DUKE ENERGY'S APPROVED REPRESENTATIVE.
- INSTALLER SHALL FURNISH ALL MATERIALS NOT PROVIDED BY THE COMPANY (UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFICATIONS) INCLUDING EQUIPMENT TRANSPORTATION, SERVICES AND PERFORM ALL NECESSARY WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREINAFTER.
- IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO VERIFY ALL DIMENSIONS GIVEN ON THE DRAWINGS. ANY ITEM IN QUESTION SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO PROCEEDING WITH THE WORK.
- INSTALLER SHALL BE RESPONSIBLE FOR PROTECTION OF ALL SURROUNDING AREAS.
- ALL BELOW GROUND WELDS SHALL BE COATED WITH A TWO-PART EPOXY (DENS0 7125, 7200, OR 7300) PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- ALL ABOVE GROUND PIPING TO BE BLASTED TO CORRECT SOCIETY FOR PROTECTIVE COATINGS (SSPC) SURFACE PROFILE. PAINT SYSTEM TO BE UTILIZED SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- UPON BACKFILLING IN AREAS OF ROCK, BURIED PIPE SHALL HAVE 6" OF SAND PAD FILL PLACED AROUND THE PIPE'S CIRCUMFERENCE.
- PRESSURE TESTING SHALL MEET THE REQUIREMENTS OF DUKE ENERGY'S CURRENT STRENGTH AND LEAK TEST PROCEDURES AND STANDARDS.
- INSTALLER SHALL DEWATER ALL HYDROSTATICALLY TESTED PIPING, USING CLEANING PIGS AS REQUIRED, AND DRY TO A DEWPOINT OF -40 °F PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- ALL WELDS SHALL BE INSPECTED PER DUKE GAS STANDARD WELD-ST-1060.
- INSTALLER IS REQUIRED TO FOLLOW DUKE ENERGY WELD -ST-1010 WELDING PROCEDURES.
- ALL EXISTING PIPELINE INFORMATION PER DUKE RECORDS.

CONSTRUCTION NOTES

- EXISTING OVERHEAD AND BELOW GROUND FACILITIES MAY BE IN THE WORK AREA VICINITY. INSTALLER IS RESPONSIBLE FOR HAVING SUCH FACILITIES LOCATED AND IS RESPONSIBLE FOR MAINTENANCE AND PRESERVATION OF THESE FACILITIES.
- PER PERTINENT DUKE ENERGY DESIGN AND CONSTRUCTION STANDARDS, INSTALLER IS REQUIRED TO CALL 811 FOR UTILITY LOCATES A MINIMUM OF 72 HOURS AND MAXIMUM OF 10 DAYS PRIOR TO COMMENCEMENT OF WORK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR DELAYS FROM ANY WORK PROVIDED BY OTHER UTILITIES.
- IF EXISTING UTILITIES OF ANY TYPE ARE ENCOUNTERED IN THE FIELD AND DEEMED TO BE IN CONFLICT WITH INSTALLATION OF FACILITIES, INSTALLER SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, INSTALLER SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR PRIVATE DRAINS OR SEWERS. RESTORATION OF THESE FACILITIES IS TO BE PERFORMED ONCE CONSTRUCTION IS COMPLETE AND ARE CONSIDERED INCIDENTAL COSTS OF THE PROJECT.
- ALL DRAWING MEASUREMENTS ARE TO BE TAKEN FROM EXISTING GRADE, FINAL GRADE SHALL BE MATCHED TO SURROUNDING GRADE AS PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- INSTALLER IS TO REMAIN WITHIN CONSTRUCTION WORKING LIMITS. ACCESS TO AREAS OUTSIDE WORKING LIMITS MUST BE COORDINATED WITH THE OWNER OR DUKE ENERGY PROJECT MANAGER.
- ALL EXCESS EXCAVATION, CONSTRUCTION DEMOLITION DEBRIS AND UNSUITABLE MATERIALS THAT DO NOT CONTAIN ASBESTOS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- STANDARD SPECIFICATIONS REFERENCED ON THIS SHEET AND CONSTRUCTION PLANS ARE CONSIDERED AS PART OF THE CONTRACT DOCUMENTS. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED TO BE A PART OF THIS CONTRACT.
- BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY DUKE ENERGY OR COMPANY REPRESENTATIVE. FINAL PAYMENT SHALL BE MADE AFTER ALL OF THE INSTALLER'S WORK HAS BEEN ACCEPTED AND APPROVED AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- DURING CONSTRUCTION, ALL LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, SHALL BE REMOVED AT THE END OF EACH WORK DAY.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE EXTENDED TO OUTLET INTO AN EXISTING DRAINAGE WAY. A RECORD OF ALL FIELD TILE FOR ONSITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE INSTALLER AND TURNED OVER TO THE PROJECT MANAGER UPON COMPLETION OF THE PROJECT.
- INSTALLER IS REQUIRED TO MAINTAIN A SET OF ISSUED FOR CONSTRUCTION DRAWINGS AND ALL PERMITS AT THE JOB SITE. ANY MODIFICATIONS OR ALTERATIONS TO THE PLANS OR SPECIFICATIONS SHALL BE APPROVED BY THE PROJECT MANAGER.
- INSTALLER IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. INSTALLER IS RESPONSIBLE FOR THE CONSTRUCTION METHODS AND TECHNIQUES, SEQUENCES, TIME OF PERFORMANCE, AND ALL SAFETY PRECAUTIONS.
- MINIMUM DEPTH OF BURIAL SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- ALL PIPELINES BEING CROSSED ARE TO BE PROTECTED WITH A MINIMUM OF THREE (3) 4 FEET X 18 FEET WOODEN MATS.
- PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS, FOR OPEN DITCH EXCAVATION, A

MINIMUM OF TWO FEET OF SEPARATION SHALL BE MAINTAINED BETWEEN ALL CROSSING STRUCTURES. SEPARATION BETWEEN CROSSING STRUCTURES AND PIPELINES THAT ARE INSTALLED VIA DIRECTIONAL DRILLING METHODS IS AT THE DISCRETION OF ENGINEERING.

- DURING BACKFILLING, A SIX INCH CROWN SHALL BE PLACED ON ALL DISTURBED AREAS. COMPACTION REQUIREMENTS SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- FLOWABLE FILL MUST BE USED IN ROADWAY AND WITHIN 3' OF ROADWAY PER DUKE STANDARDS.
- SUE LEVEL B SURVEY ACQUIRED. TOP OF PIPE ELEVATIONS SHOWN FOR KNOWN UTILITY DEPTHS. REMAINING UTILITIES ASSUMED TO HAVE 4 FT. OF COVER. CONTRACTOR TO FIELD VERIFY ALL UTILITY DEPTHS.

CIVIL AND STRUCTURAL NOTES

- ADDITIONAL EXCAVATIONS BELOW FOOTINGS MAY BE NECESSARY TO REACH UNDISTURBED SOIL. SHOULD THIS OCCUR, THE EXCAVATION SHALL BE BROUGHT TO THE BOTTOM OF THE FOOTING ELEVATION WITH COMPACTED SAND FILL MEETING THE REQUIREMENTS OF MODIFIED PROCTOR COMPACTION TEST (ASTM D1557) TO 95% IN SIX INCH LIFTS.
  - ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1" X 1" 45° CHAMFER.
  - CONCRETE SHALL BE MIXED AND POURED PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS. TESTING SHALL CONFORM TO ACI 318. INSTALLER TO SUPPLY ALL CONCRETE AND TESTING.
  - ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 SPECIFICATION. STEEL REINFORCING BAR SHALL CONFORM TO ASTM A615 GRADE 60 AND WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. THE WIRE SHALL CONFORM TO ASTM A82.
  - UNSUITABLE OR EXCESS EARTH SPOIL SHALL BE DISPOSED OF AT AN APPROVED WASTE LOCATION. SOIL BEING TRANSPORTED ONTO THE JOB SITE SHALL BE APPROVED BY EITHER THE PROJECT MANAGER OR CONSTRUCTION MANAGER.
  - ROCKSHIELD OR SIMILAR COMPANY APPROVED PRODUCT MUST BE INSTALLED BETWEEN ALL PIPE AND FITTINGS THAT COME INTO CONTACT WITH CONCRETE. A LAYER OF NON ABRASIVE MATERIAL SUCH AS FRP SHALL BE INSTALLED BETWEEN ALL PIPE SUPPORTS AND PIPING.
  - ALL FIELD BENDING OF REBAR SHALL BE DONE COLD.
- SOIL EROSION AND SEDIMENT CONTROL NOTES
- INSTALLER IS TO CONSTRUCT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SEQUENCE WITH THE PIPELINE CONSTRUCTION, PROVIDE MAINTENANCE AND ASSURE EFFECTIVENESS THROUGHOUT THE DURATION OF THE PROJECT.
  - AS PER THE CONSTRUCTION STORMWATER PERMIT REQUIREMENTS OUTLINED IN THE KDEP-KOW KPDES PERMIT NO. KYR100000, AREAS LEFT TEMPORARILY UNDISTURBED OR AT FINAL GRADE WILL BE STABILIZED WITHIN 14 DAYS OF ACTIVITY CESSATION.
  - ALL SPOILS INCLUDING ORGANIC SOILS, VEGETATION AND DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF IN SUCH A MANNER AS TO NOT ERODE INTO ANY BODY OF WATER OR WETLAND.
  - PERIMETER EROSION CONTROLS (E.G. SILT FENCING) SHALL BE PLACED AS PER THE PLANS AND WHERE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE WORK AREA.
  - CATCH-ALL INLET FILTERS ARE REQUIRED AT ALL SEWER INLETS, GRATES AND MANHOLES FOR SEDIMENT CONTROL.
  - TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFFSITE AREAS.
  - ALL ENVIRONMENTAL MEASURES SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS, AS OUTLINED IN SWPPP NARRATIVES AND APPLICABLE STORMWATER PERMITS.
  - ALL STREAMS AND WETLANDS WITHIN THE PROJECT WORKSPACE MUST BE MATTED IN AREAS WHERE EQUIPMENT OR VEHICLE ACCESS IS NEEDED. IF A WETLAND OR STREAM IS CROSSED AND THE DECISION IS MADE THAT THE FEATURE DOES NOT NEED TO BE MATTED OVER THE ENTIRETY THEN PERIMETER CONTROLS (E.G. SILT FENCE, FILTER SOCK) MUST BE INSTALLED UP SLOPE FROM THE WATER FEATURE CONTINUOUSLY FROM THE EDGE OF THE WORKSPACE UP TO THE CORNERS OF THE MATTING TO PREVENT SEDIMENT FROM ENTERING THE WATER FEATURE. NOTE THAT THIS REQUIREMENT IS NOT EXPLICITLY LOCATED ON THESE PLANS.
  - CONTRACTOR SHALL INSTALL EROSION CONTROL BMPs IN SEQUENCE WITH PIPELINE CONSTRUCTION. NOT ALL CONTROLS NEED TO BE PRESENT SIMULTANEOUSLY. ALL BMPs ARE SHOWN ON THE PLANS FOR LOCATION AND CLARITY, BUT CONTROLS SHALL BE INSTALLED AS PIPELINE CONSTRUCTION PROGRESSES AND IN ACCORDANCE WITH COMPANY INSPECTOR'S DIRECTION.
  - ALL SEDIMENT RELEASES BEYOND THE SITE PERIMETER CONTROLS AND SPILLS REGARDLESS OF AMOUNT OR LOCATION ARE TO BE IMMEDIATELY REPORTED TO THE DUKE ENERGY ENVIRONMENTAL FIELD PROFESSIONAL. IF THE DUKE ENERGY ENVIRONMENTAL PROFESSIONAL CANNOT BE REACHED, THE DUKE ENERGY SPILL HOTLINE IS TO BE CALLED AT 1-800-527-3853.
  - IN AREAS WHERE IT IS FIELD DETERMINED TO REDUCE WORKSPACE OR IMPACT, EROSION AND SEDIMENT CONTROLS SHALL BE ADJUSTED TO MATCH WORKSPACE BOUNDARIES.

SURVEY INVESTIGATION NOTES:

- BEARINGS AND COORDINATES ARE RELATIVE TO NAD83 KENTUCKY STATE PLANE, NORTH ZONE, US. FOOT. VERTICAL DATUM IS NAVD88.

CATHODIC PROTECTION & AC MITIGATION NOTES:

- CONTRACTOR SHALL PROVIDE AND INSTALL ALL MISCELLANEOUS PARTS TO COMPLETE PROJECT PER CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS, ELECTRICAL CODES, STATE AND LOCAL CODES AND STANDARDS, AND LOCAL ELECTRICAL DISTRIBUTION COMPANY REQUIREMENTS. PARTS INCLUDE, BUT ARE NOT LIMITED TO, WIRING AND MOUNTING MATERIALS, METER SOCKET, DISCONNECT EQUIPMENT, ENCLOSURES, TRANSIENT VOLTAGE SURGE SUPPRESSORS, AC MAIN BUSS TERMINATION, CIRCUIT BREAKERS, AND OTHER ELECTRICAL EQUIPMENT REQUIRED. ACTUAL LENGTH WIRING IS DEPENDENT ON DISTANCE FROM INSTALLATION.

DESIGN NOTES:

- DESIGNED IN ACCORDANCE WITH PHMSA 49 CFR 192 GUIDELINES.
- PIPELINES TO BE CATHODICALLY PROTECTED (SEE DWG PNG-E-043-0001614)
- DESIGN PRESSURES

AM07 PHASE 2 (TRANSMISSION)

- AM07 PHASE 2 DESIGN PRESSURE : 1000 PSIG
- AM07 MAOP: 370 PSIG

UL02 FEED (TRANSMISSION)

- UL02 DESIGN PRESSURE: 1000 PSIG
- UL02 MAOP: 230 PSIG

IP FEED (DISTRIBUTION)

- IP DESIGN PRESSURE: 285 PSIG
- IP MAOP: 30 PSIG

- FOR 24" PIPE, FIELD BEND ALL ANGLES LESS OR EQUAL TO 18 DEGREES. ALL FIELD BENDS REQUIRE 5' TANGENTS, CUT SEGMENTABLE FITTINGS FOR ALL ANGLES ABOVE 18 DEGREES, OR WHERE SPECIFIED.

BURNS & MCCONNELL ENGINEERING COMPANY, INC. STATE LICENSE #043

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	AMP	AREA CODE	-
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685
						DRAWING BY	MDM
						STATION ID	-
						CHECKER INITIALS	JMP

DATE	INITIALS	REGIONAL ENGINEER
-	-	-
DATE	INITIALS	MGR TECH REC & STD
05/15/2023	AMP	-
DATE	INITIALS	PRINCIPAL ENGINEER
-	-	-



AM07 PHASE 2  
GENERAL NOTES  
ERLANGER, KY  
ERLANGER, KY

REF. DWG(S)	
SHEET(S) X OF X	DWG SCALE AS NOTED
DWG DATE 09/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
PNG -G-043-0001430	C
G / ERLANGER / AM07	

APPROVED  
 DATE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET

PROFESSIONAL ENGINEER STAMP



**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSITIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / P/L	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POT HOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

REF. DWG(S)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	CNS	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR. TECH REC. & STD.
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	JMP		
						STATION ID	-		
						CHECKER INITIALS	JMP	05/15/2023	AMP

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**AM07 PHASE 2**  
**ABBREVIATIONS & LEGEND**  
**ERLANGER, KY**  
 ERLANGER, KY

SHEET(S) XX OF XX	DWG SCALE	NONE
DWG DATE 09/13/2022	SUPERSEDED	-
DRAWING NUMBER	REVISION	
<b>PNG - G-043-0001431</b>	<b>C</b>	
G/ERLANGER/AM07		

APPROVED  
 DATE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET



**KYTC Division of Maintenance  
Permits Branch  
District 6**



**ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS**

**YOU MUST NOTIFY KYTC BEFORE BEGINNING ANY WORK IN THE RIGHT-OF-WAY. Failure to alert KYTC of working within the right of way may result in permit revocation.**

Two ways to notify KYTC of your construction start date:

**By Email: [KYTCD6PERMITS@KY.GOV](mailto:KYTCD6PERMITS@KY.GOV)**

*\*must include permit number and county in subject line*

**By Phone: 859-341-2700**

*\*must know permit number and county when calling*

**YOU MUST ALSO NOTIFY KYTC UPON COMPLETION OF WORK WITHIN RIGHT-OF-WAY. Failure to alert KYTC of completion of work may result in withholding release of any associated bonds.**



APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00520

Permit No. T06-2023-00530

**I. SAFETY**

**A. General Provisions**

- All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, latest edition, Part VI, and safety requirements shall comply with the Permits Manual. Federal law requires that traffic control shall be implemented in accordance with MUTCD standards and KYTC's Standard Specifications for Road and Bridge Construction (KYTC SSRBC) under the supervision of a certified Work Zone Traffic Control Supervisor.
- All work necessary in shoulder or ditch line areas of a state highway shall be scheduled to be promptly completed so that hazards adjacent to the traveled way are kept to an absolute minimum.
- No more than one (1) traveled-lane shall be blocked or obstructed during normal working hours. All signs and flaggers during lane closure shall conform to the MUTCD. The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility. No non-construction equipment or vehicles or office trailers shall be allowed on the right of way during working hours. The right of way shall be left free and clear of equipment, material, and vehicles during non-working hours.
- When necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes shall be blocked or obstructed during adverse weather conditions (rain, snow, fog, etc.) without specific permission from the Department.
- Working hours shall be between N/A and N/A. Further date and time restrictions are as follows:

Working hours must be between 9:00pm and 5:00am. All lanes of traffic must be open between the hours of 5:00am and 9:00pm.

**B. Explosives**

- No explosive devices or explosive material shall be used within state right of way without proper license and approval of the Kentucky Department of Mines and Minerals, Explosive Division.

**C. OSHA**

- Kentucky Occupational Safety and Health Standards for the construction industry, which has the effect of law, states in part: (Page 52, 1926.651, Specific Excavation Requirements) "Prior to opening an excavation, effort shall be made to determine whether underground installations, (sewer, telephone, water, fuel, electric lines, etc.) will be encountered, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined, and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation."

**D. Archaeological**

- Whenever materials of an archaeological nature are discovered during the course of construction work or maintenance operations, contact shall be made immediately with the Division of Environmental Analysis, which maintains an archaeologist on staff, or with the Office of the State Archaeologist located at the University of Kentucky. Following this consultation, further action shall be decided on a case-by-case basis by the State Highway Engineer or the Transportation Planning Engineer or their designated representative.

**E. Environmental**

- If the activity to which this permit related disturbs one acre or more of land, you must obtain KPDES KYR10 permit. Information can be found at <http://water.ky.gov/permitting/Pages/GeneralPermits.aspx>

**F. Additional Notes**

- The following additional notes apply to this permit:

APPROVED  
 JUNE 15, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00530

Permit No. T06-2023-00530

**II. UTILITIES**

The permittee shall be responsible for any damage to existing utilities. Any utility modifications or relocations within state right of way necessary, as determined by the Department or by the owner of the utility, shall be at the expense of the permittee and subject to the approval of the Department. Operators of underground utilities in right of way shall be members of Kentucky 811.

All existing manholes and valve boxes shall be adjusted to be flush with finished grade.

All pavement cuts shall be restored per Kentucky Transportation Cabinet standards and specifications.

Any excavation within 3' of edge of pavement will require flowable fill as backfill.

The clear zone requirement shall be met to the extent possible in accordance with the Roadside Design Guide.

Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual. Pipe encasing shall not be required if the pipe crossing is 2" or less.

Aerial crossing of utility lines shall have a minimum clearance from the high point of the roadway to the low point of the line of 24' on fully controlled access highways and 18' on non-fully controlled access highways

Minimum depth for underground Gas and Electric lines is 60" under roadways, ramps, and ditch lines and 42" in all other areas within state right of way. The minimum depth for all other utilities is 42" in all areas.

When steel plates are installed over an open excavation in the roadway, they must be anchored to the pavement and have asphalt applied to all exposed edges and an MUTCD approved sign noting "Road Plates Ahead." KYTC must be notified of the location, date, time, and permit number associated to BOTH the installation and removal of the plate. Failure to do so may result in permit revocation.

Utility poles moved for replacement must be removed in their entirety and the hole left behind must be backfilled.

No poles or anchors shall be installed in a roadside ditch.

**Utility notes specific to fully-controlled access highways ONLY:**

All work necessary within the right-of-way shall be performed behind a temporary fence erected prior to the start of work. The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way, and the control of access immediately restored to original condition, in accordance with applicable KYTC SSRBC. All vents, valves, manholes, etc., shall be located outside of the right-of-way. Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of 42 inches deep. Work in interstate right-of-way requires approval from FHWA (Federal Highway Administration).

Additional notes:

APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00530

Permit No. T06-2023-00530

**III. DRAINAGE**

- Negative impacts to existing drainage will be the applicant's responsibility to repair in accordance with KYTC SSRBC.
- All pipe shall be laid in a straight alignment, to proper grades, and with all materials and methods of installation including bedding and joint seating. Pipe shall not be covered until inspected by the Department and express permission obtained to make backfill. It is the applicant's responsibility to request inspection.
- All gutter lines at the base of new curbs shall be on continuous grades, and pockets of water along with curbs or in entrance areas or other paved areas within the right-of-way shall not be acceptable.
- All drainage structures and appurtenances (manholes, catch basins, curbing, inlet basins, etc.) shall conform to the Department specifications and shall be constructed in accordance with the KYTC's Standard Drawings.
- Additional notes:

**IV. PAVING**

- No bituminous pavement shall be installed within the right of way between November 15 and April 1, nor when the temperature is below 40 degrees Fahrenheit, without the express consent of the Department. No bituminous pavement shall be installed when the underlying course is wet.
- Paving within the right of way shall be as follows:
  - Base (Type): Match Existing, (Thickness) Match Existing
  - Surface Base (Type) Match Existing, (Thickness) Match Existing
  - Finished Surface (Type) Match Existing, (Thickness) Match Existing
- All materials and methods of construction, including base and subgrade preparation, shall be in accordance with KYTC's Standard Specifications. At least 24 hours notice to the Department is required prior to beginning paving operations.  
 Phone: 859-341-2700 Name: \_\_\_\_\_
- Utility companies performing road cuts must restore the pavement to pre-existing condition. Pictures/videos are recommended to ensure proper placement of signs and lane markers that are temporarily removed for paving operations. In some cases, a pre-work inventory may be requested from the Department.
- Existing pavement and shoulder material shall be removed to accommodate the above paving specifications.
- The finished surface of all new pavement within the right of way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by KYTC.
- To ensure proper surface drainage, the new pavement shall be flush with the edge of existing highway pavement and shall slope away from the existing edge of the pavement as specified in drawings.
- Existing edge of pavement shall be saw-cut to provide a straight and uniform joint for new pavement, and an edge key will be installed in the overlap. An approved joint sealer, in accordance with Kentucky Department of Highways Standard Specifications (latest edition), shall be applied between new and existing pavements.
- Additional notes:

APPROVED  
JULY 11 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00530

Permit No. T06-2023-00530

**V. ENTRANCES**

- Encroachment permits issued by KYTC in no way supersede local planning/zoning requirements or subdivision regulations. KYTC has no authority with zoning changes.
- Commercial entrances must be paved to the right-of-way line. Any deviations must be approved by KYTC before installation.
- KYTC can dictate drainage improvement installation during construction or after entrance is at final grade. The permit release does not release the permit applicant from drainage maintenance.
- Signs (ground-mounted and span-mounted), stop bars, crosswalk, and proper lane markings must be in-place before entrance is open for traffic. Lane width modifications must be approved by the Department.
- Guardrail installation must be pre-approved by the Department and installed by a KYTC pre-qualified contractor. Any guardrail that is removed during construction must be returned to the local KYTC maintenance facility.
- Additional notes:

**VI. TRAFFIC**

- Any contractor performing work within the vicinity of KYTC roadway lighting or traffic signals, must request locates from the KYTC District 6 Traffic section at least one week before of starting work in the right-of-way.
- Applicant must maintain all KYTC Roadway signage that is impacted by the permitted work. In the event that any signs have to be moved, it is the applicant's responsibility to mark the sign's location before removal and to install the original or new sign per KYTC standards for sign installation.
- Any thermoplastic or striping damaged during the encroachment must be restored in a timely manner per KYTC standards. Stopbars, arrows, and crosswalks must be thermoplastic material, paint is not acceptable. This work must be performed by a KYTC pre-qualified contractor.
- Excavating near a signal, lighting pole, or anchoring facility must be done so that it does not impact the structural integrity of the pole. Any work that requires a temporary support or anchoring must receive prior approval.
- If the scope of the permit involves a signal build or rebuild, it is the applicant's responsibility to apply for power service (and pay monthly electrical bill) as well as request electrical inspection from the KYTC District 6 Traffic section. If the signal modifications require timing or phasing changes this must be requested at least two weeks in advance of the signal's turn-on date. KYTC will not take ownership of permitted signals until the electrical inspection is formally accepted and approved.
- Work which impacts traffic loops requires 48-hour notice to the KYTC District 6 Traffic section at 859-341-2700. Accidental damage of a traffic loop must be reported immediately to KYTC District 6's emergency line at 859-620-2738. Any disturbed traffic loops must be replaced in a timely manner. Traffic loops out of operation for more than five working days will subject the applicant to the cancellation of the permit. Loop repair must be performed by a KYTC pre-qualified contractor.
- Additional Notes:

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JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00530

Permit No. T06-2023-00530

**VII. SIDEWALK SPECIFICATIONS**

All sidewalk modifications, retrofitting, or installations must meet current ADA guidelines

**A. New Sidewalks**

New sidewalk specifications, dimensions, and designs shall be in accordance with KYTC's latest edition of the Standard Specifications, or with the plans provided on the permit if approved by a KYTC D6 Construction or Permits Engineer.

All materials and methods of construction, including curing, shall be in accordance with KYTC's latest edition of the Standard Specifications.

**B. Existing Sidewalks**

Use of the sidewalk shall not be blocked or obstructed and a usable walkway shall be maintained across the construction area at all times per MUTCD . Sidewalk closures must be approved by the Department before implementation.

The location of ADA ramps (truncated domes/tactile warnings/etc.) will need to be field verified by KYTC before installation.

Any section of sidewalk that becomes damaged shall be entirely replaced to match existing sections.

Additional notes:

[Empty text box for additional notes]

**VIII. RIGHT OF WAY RESTORATION**

All disturbed portions of the right of way shall be restored to grass as per Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition). A satisfactory turf, as determined by the Department, shall be established by the permittee prior to release of indemnity. Sodding or seeding shall be as follows:

Slopes 3:1 or Less: 90% Kentucky 31 Tall Fescue and 10% White Dutch Clover at 100 lbs/acre

Slopes Greater than 3:1: 90% Kentucky 31 Tall Fescue and 10% Partridge Pea at 100 lbs/acre

Urban or Residential Areas: 95% Turf Type Fall Fescue Blend and 5% White Dutch Clover at 275 lbs/acre

Two tons of clean straw mulch per acre of seeding.

Prior to seeding, the ground shall be prepared in accordance with Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).

Substitutes for sod such as artificial turf, rocked mulch, or paved areas may be acceptable if they are aesthetically pleasing and receive prior approval from KYTC.

All ditch-flow lines and all ditch-side slopes shall be sodded.

Existing concrete right of way markers shall not be disturbed. If damaged in any way, they shall be entirely replaced by the permittee with new concrete markers to match the original markers, in accordance with Kentucky Department of Highways Standard Drawings. Markers that are entirely removed shall be re-established in the proper locations by the permittee and to the satisfaction of the Department.

Additional notes:

[Empty text box for additional notes]

APPROVED  
JUNE 15, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00530

Permit No. T06-2023-00530

**IX. RIGHT OF WAY FENCE RESTORATION**

- The replacement fence shall be a height of at least 48 inches and shall be of sufficient density to protect against encroachment.
- The replacement fence shall be a minimum of 1 foot and a maximum of 2 feet outside the right-of-way line
- The fence materials and design shall meet accepted industry standards and be treated as paintable. Durable finish materials such as vinyl are acceptable.
- The permittee shall be required to construct and maintain the replacement fencing to an acceptable level of functionality and state of repair. All work on the fencing shall be performed by access from the private property. Access from the roadway is not allowed.
- The existing fence shall be removed by permittee and stored at the Department's maintenance storage yard for future reuse by the Department, or the Department shall be reimbursed the cost of fencing removed.
- Right of way monuments shall be installed regardless of if replacement fence is installed or not.
- The control of access shall not be diminished as a result of replacement of the fence.
- Additional notes:

[Empty rectangular box for additional notes]

**X. MISCELLANEOUS NOTES**

[Large empty rectangular box for miscellaneous notes]

**NOTICE TO PERMITTEE**

**THE PERMITTEE AGREES THAT ALL WORK WITHIN THE EXISTING RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE CURRENT KYTC STANDARD SPECIFICATIONS AND THE PLANS AS APPROVED AND PERMITTED BY AN ENCROACHMENT PERMIT. ANY CHANGES OR VARIANCES MADE AT THE TIME OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT OF HIGHWAYS SHALL BE REMOVED BY THE PERMITTEE AT NO EXPENSE TO THE DEPARTMENT OF HIGHWAYS AND SHALL BE REDONE BY THE PERMITTEE TO CONFORM WITH THE APPROVED PLANS.**

**APPROVED**  
**2023**  
**KENTUCKY TRANSPORTATION CABINET**



## NOTICE OF COMPLETION OF ENCROACHMENT PERMIT WORK

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### PERMITTEE

Name: Duke Energy  
 Contact Person:  
 Address: 139 E 4th St  
 City: Cincinnati  
 State: Ohio  
 Zip: 45202  
 Telephone:

### PROJECT IDENTIFICATION

Permit Number: 06-2023-00544

---

I wish to notify the Department of Highways that the above mentioned permit work and any necessary right-of-way restoration have been completed and are ready for final inspection.

---

Permittee

---

Please return this form to the address below when work is completed and ready for final inspection.

Please Return to: Permit Engineer  
 Department of Highways, District 6 Office  
 421 Buttermilk Pike  
 Covington, Kentucky 41017  
 (859) 341-2700  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Open trench installation of 24" steel natural gas pipeline within KYTC ROW from station 32+50 - 33+50. The pipeline is proposed to lay a minimum of 5' cover between the two auger bores. Auger bore under Crescent Springs Pike for 150' at mile point .85.	Kenton - KY 2373	39.030872	-84.593515

APPROVED  
 JUNE 21, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-005-1-1



Andy Beshear  
Governor

COMMONWEALTH OF KENTUCKY  
TRANSPORTATION CABINET  
Department of Highways, District 6 Office  
421 Buttermilk Pike  
Covington, Kentucky 41017  
(859) 341-2700  
[www.transportation.ky.gov/](http://www.transportation.ky.gov/)

Jim Gray  
Secretary

June 21, 2023

Duke Energy  
139 E 4th St  
Cincinnati, Ohio 45202

Subject: Permit #: 06-2023-00544  
Permit Type: Utilities - Gas  
Approval

Dear Applicant:

Attached is your permit approval and documentation for the subject permit.

Be advised that all work must be done in conformity with permit and application conditions. If you have any questions, please contact the Permits Section at this office.

Sincerely,

A handwritten signature in cursive script that reads "Linzy Brefeld".

Linzy Brefeld  
D6 Permits Supervisor

Attachments



An Equal Opportunity Employer M/F/D

**APPROVED**  
**JUNE 21, 2023**  
**KENTUCKY TRANSPORTATION CABINET**  
**06-2023-00544**



Kentucky Transportation Cabinet  
 Department of Highways  
 Division of Maintenance  
 Permits Branch

TC 99-1 (B)  
 07/2018  
 Page 1 of 1

**ENCROACHMENT PERMIT**

**KYTC KEPT #:** 06-2023-00544  


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**Permittee:** Duke Energy  


---

**Permit Type / Subtype:** Utilities / Gas  


---

**Work Completion Date:** 6/20/2024  


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INDEMNITIES		
Type	Amount Required	Tracking Number
Performance Bond	\$0.00	
Cash / Check	\$0.00	
Self-Insured	\$0.00	
Payment Bond	\$0.00	
Liability Insurance	\$0.00	

This permit has been: **APPROVED**  **DENIED**

Linzy Brefeld D6 Permits Supervisor 6/21/2023  


---

**SIGNATURE TITLE DATE**

The TC 99-1(B), including the application TC-99 1(A) and all related and accompanying documents and drawings make up the permit. It is not a permit unless both the TC 99-1(A) and TC 99-1(B) are both present.

LOCATION(S)			
Description	County - Route	Latitude	Longitude
Open trench installation of 24" steel natural gas pipeline within KYTC ROW from station 32+50 - 33+50. The pipeline is proposed to lay a minimum of 5' cover between the two auger bores. Auger bore under Crescent Springs Pike for 150' at mile point .85.	Kenton - KY 2373	39.030872	-84.593515

APPROVED  
 JUNE 21, 2023  
 KENTUCKY TRANSPORTATION CABINET  
 06-2023-00544-1



To Submit a Locate Request  
 24 Hours a Day, Seven Days a Week  
 Call 811 or 800-752-6007



KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
**PERMITS BRANCH**

TC 99-1A  
 Rev. 10/2020  
 Page 1 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

KYTC KEPT #: T06-2023-00544

**SECTION 1: APPLICANT CONTACT INFORMATION**

<b>APPLICANT</b> Duke Energy	<b>ADDRESS</b> 139 E 4th St		
<b>EMAIL</b> N/A	<b>CITY</b> Cincinnati	<b>STATE</b> OH	<b>ZIP</b> 45202
<b>CONTACT NAME 1</b> Josh Pedersen (on behalf of Duke Energy)	<b>EMAIL</b> jmpedersen@burnsmcd.com	<b>PHONE #</b> (913) 645-2713	
		<b>CELL #</b>	
<b>CONTACT NAME 2 (if applicable)</b> John Perkins	<b>EMAIL</b> john.perkins@duke-energy.com	<b>PHONE #</b> 513-315-8338	
		<b>CELL #</b>	

**SECTION 2: PROPOSED WORK LOCATION**

<b>ADDRESS</b> 3000 Riggs Ave, Erlanger, KY 41018	<b>CITY</b> Erlanger	<b>STATE</b> Kentucky	<b>ZIP</b> 41018	
<b>COUNTY</b> Kenton	<b>ROUTE #</b> Crescent Springs Pike	<b>MILE POINT</b> 0.85	<b>LONGITUDE (X)</b> -84.593474	<b>LATITUDE (Y)</b> 39.031411

**ADDITIONAL LOCATION INFORMATION:** Workspace along the east and west side of Crescent Springs Pike near mile marker 0.85.

**FOR KYTC USE ONLY**

**PERMIT TYPE:**  Air Right  Entrance  Utilities  Vegetation Removal  Other: \_\_\_\_\_

**ACCESS:**  Full  Partial  by Permit **LOCATION:**  Left  Right  Crossing

**SECTION 3: GENERAL DESCRIPTION OF WORK**

Open trench installation of 24" steel natural gas pipeline within KYTC ROW from STA: 32+50 - 33+50. The pipeline is proposed to lay a minimum of 5' cover between the two auger bores. Auger bore under Crescent Springs Pike for 150' at mile marker 0.85. Bore pit will be located in KYTC ROW on the west side of the road and workspace for construction activities located on East side. The crossing is NOT cased, but utilizes FBE + ARO coated pipe. Installation will be cathodically protected with the existing pipeline deep well system.

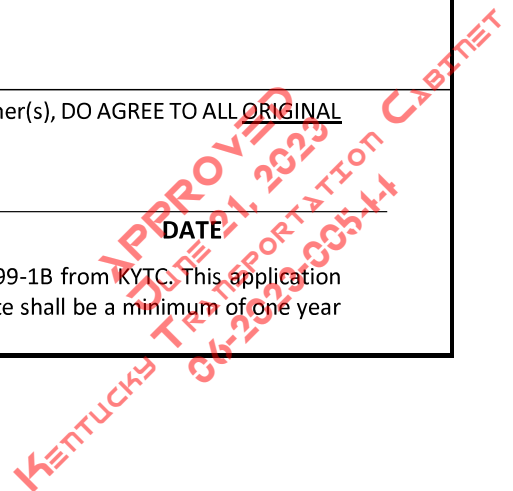
THE UNDERSIGNED APPLICANT(s), being duly authorized representative(s) or owner(s), DO AGREE TO ALL ORIGINAL UNEDITED TERMS AND CONDITIONS ON THE TC 99-1A, pages 1-4.

Digitally signed by John Perkins  
 Date: 2023.06.19 15:21:31 -04'00'

**SIGNATURE**

**DATE**

This is not a permit unless and until the applicant(s) receives an approved TC 99-1B from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be a minimum of one year from the date the applicant submits their application.





KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 2 of 4

## APPLICATION FOR ENCROACHMENT PERMIT

### TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
  - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
  - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
  - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
  - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.

KENTUCKY TRANSPORTATION CABINET  
 APPROVED  
 06-20-2023



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 3 of 4

### APPLICATION FOR ENCROACHMENT PERMIT

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), \_\_\_\_\_, hereby consent to the granting of the permit requested by the applicant along Route \_\_\_\_\_, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) \_\_\_\_\_, subscribed and sworn by \_\_\_\_\_, on this date \_\_\_\_\_.
11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.
12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.
13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, **shall defend, protect, indemnify and save harmless** the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnify did not exist.
14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.
15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.
16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.

APPROVED  
JUNE 21, 2023  
KENTUCKY TRANSPORTATION CABINET  
36-2023-005-1-1



KENTUCKY TRANSPORTATION CABINET  
Department of Highways  
PERMITS BRANCH

TC 99-1A  
Rev. 10/2020  
Page 4 of 4

**APPLICATION FOR ENCROACHMENT PERMIT**

- 17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)
- 18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.
- 19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.
- 20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.
- 21. Before You Dig: The contractor is instructed to call 1-800-752-6007 to reach KY 811, the One-Call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that the owners of underground facilities are not required to be members of the KY 811 One-Call Before U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.
- 22. The undersigned Utility acknowledges ownership and control of the facilities proposed to be installed, modified, or extended by the Applicant/Permittee and agrees to be bound by the requirements and terms of this application and all related documents making up the approved permit, by the Department's Permits Guidance Manual, and by all applicable regulations and statutes in effect on the date of issuance of the permit. This information and application is certified correct to the best knowledge and belief of the undersigned Utility.

**Duke Energy**

UTILITY

**John Perkins**

NAME (Utility Representative)

Digitally signed by John Perkins  
Date: 2023.06.19 15:22:10 -04'00'

SIGNATURE (Utility Representative)

**Sr Engineer**

TITLE (Utility Representative)

DATE



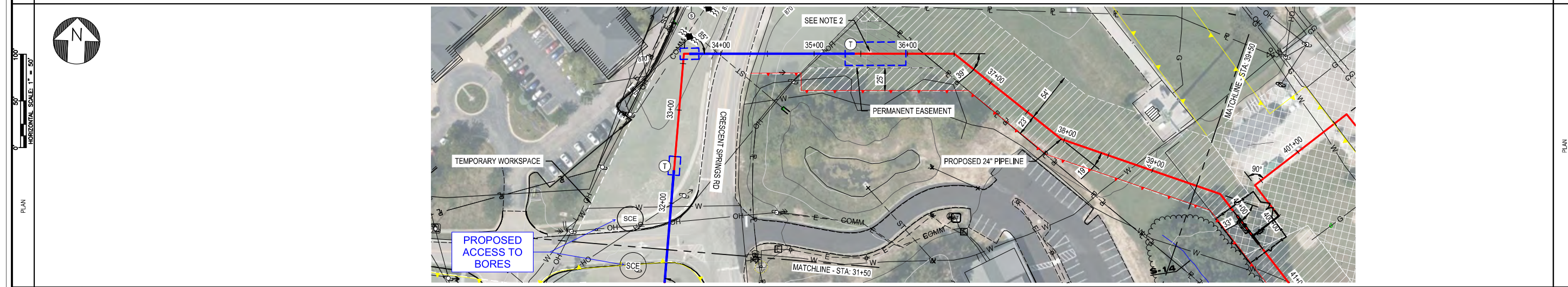
Know what's below. Call before you dig.

To Submit a Locate Request  
24 Hours a Day, Seven Days a Week:  
Call 811 or 800-752-6007

APPROVED  
JUN 21, 2023  
KENTUCKY TRANSPORTATION CABINET  
36-2023-05-14

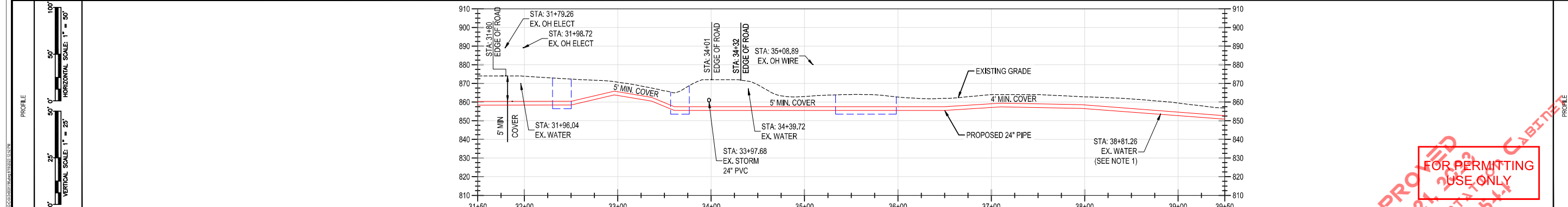
RIGHT-OF-WAY	OWNERSHIP	ROW	KENTON COUNTY COOPERATIVE	UNION LIGHT, HEAT AND POWER COMPANY
	ACREAGE			
	EASEMENTS			
REF. DWG. NO.	PNG-C-043-0001762			

STATIONING	STA: 32+50.7 SAG (V)	STA: 32+96.11° OVERBEND (V)	STA: 33+36.7° OVERBEND (V)	STA: 33+60.85° FTG (H-RT) 12' OVERBEND (V)	STA: 36+50.39° FTG (H-RT) 2' SAG (V)	STA: 37+11.2° OVERBEND (V)	STA: 37+87.19° FTG (H-LT) 2' OVERBEND (V)
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PIPE DATA (SLOPE STATIONING)	STA.	WELD #	(CONC.)	JOINT LENGTH	HEAVY
	STA.	WELD #	(CONC.)	JOINT LENGTH	HEAVY

- CONSTRUCTION NOTES:
1. WATER LINE COULD NOT BE LOCATED VIA SUBSURFACE EXPLORATION. CONTRACTOR TO VERIFY IF LINE IS PRESENT BEFORE INSTALLATION.
  2. LARGE TREE STUMP TO BE REMOVED BY CONTRACTOR PRIOR TO BORE INSTALLATION



MATERIAL	CLASS 3 / 1000 PSIG	
CONST. METHOD	BORE	OPEN TRENCH
CLASS / MAOP		

FOR PERMITTING USE ONLY

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NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% REVIEW	MDM	JMP	AMP	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	MDM	-	
						STATION ID	XX-X-XX-XXX-XXXX	05/15/2023	AMP
						CHECKER INITIALS	JMP		

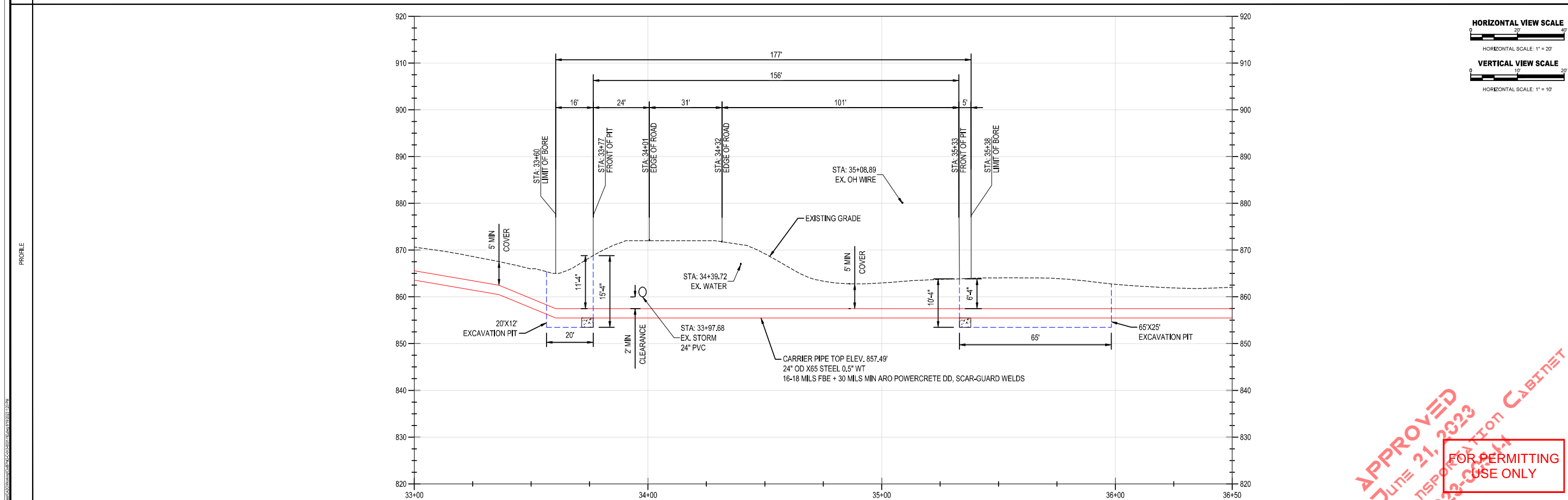
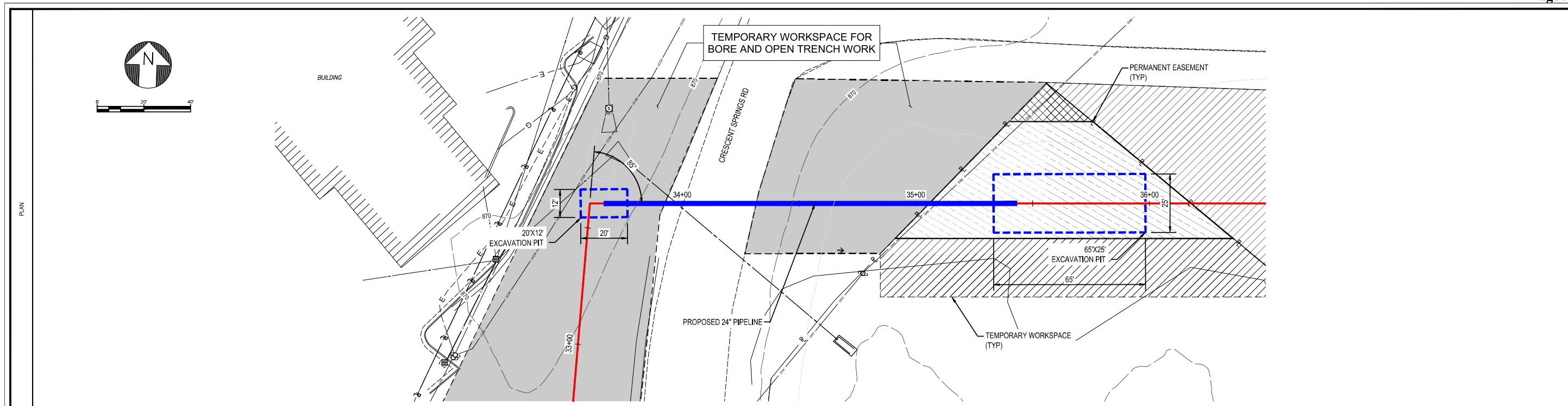
**AM07 PHASE 2  
ALIGNMENT SHEET 4  
ERLANGER, KY**

ERLANGER, KY

REF. DWG(S)	SHEET(S) 1 OF X			DWG SCALE	AS NOTED
DWG DATE	09/13/2022	SUPERSEDED			
DRAWING NUMBER	PNG -C-043-0001766		REVISION	C	
C/ERLANGER/AM07					

PROFESSIONAL ENGINEER STAMP





**HORIZONTAL VIEW SCALE**  
 HORIZONTAL SCALE: 1" = 20'  
**VERTICAL VIEW SCALE**  
 HORIZONTAL SCALE: 1" = 10'

**APPROVED**  
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B	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
						PROJECT NUMBER	AW4685		
						DRAWING BY	MDM		
						STATION ID	XX-X-XX-XXX-XXXX		PRINCIPAL ENGINEER
						CHECKER INITIALS	JMP		



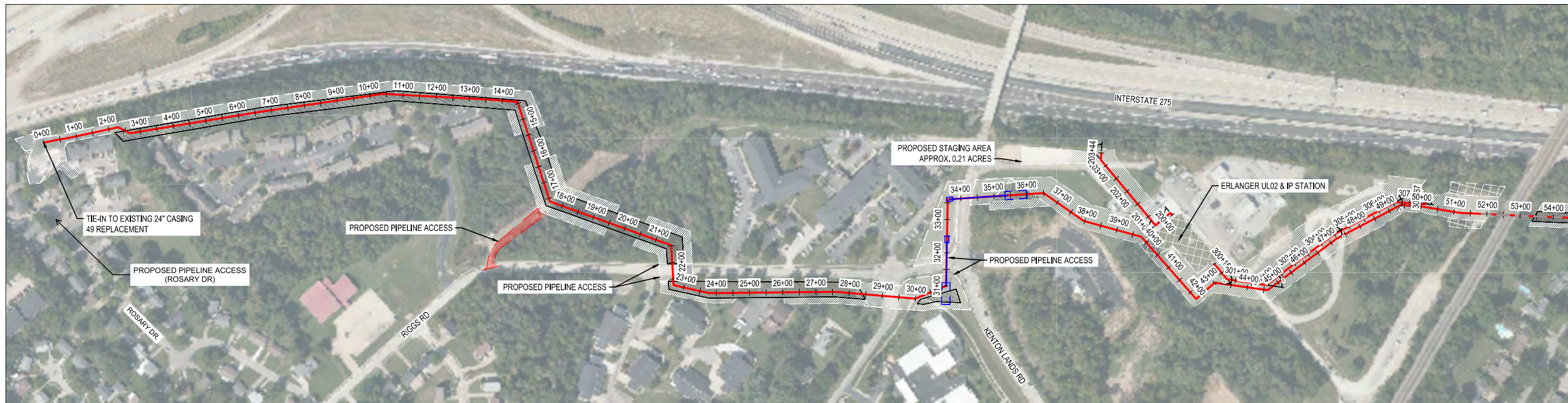
**AM07 PHASE 2  
 BORE CROSSING DETAIL 2  
 ERLANGER, KY**

REF: DWG(S)	SHEET(S) 1 OF X	DWG SCALE AS NOTED
DWG DATE 01/03/2023	SUPERSEDED	REVISION
DRAWING NUMBER	REVISION	
<b>PNG -C-043-0001792</b>	<b>B</b>	

PROFESSIONAL ENGINEER ARCHITECT STAMP

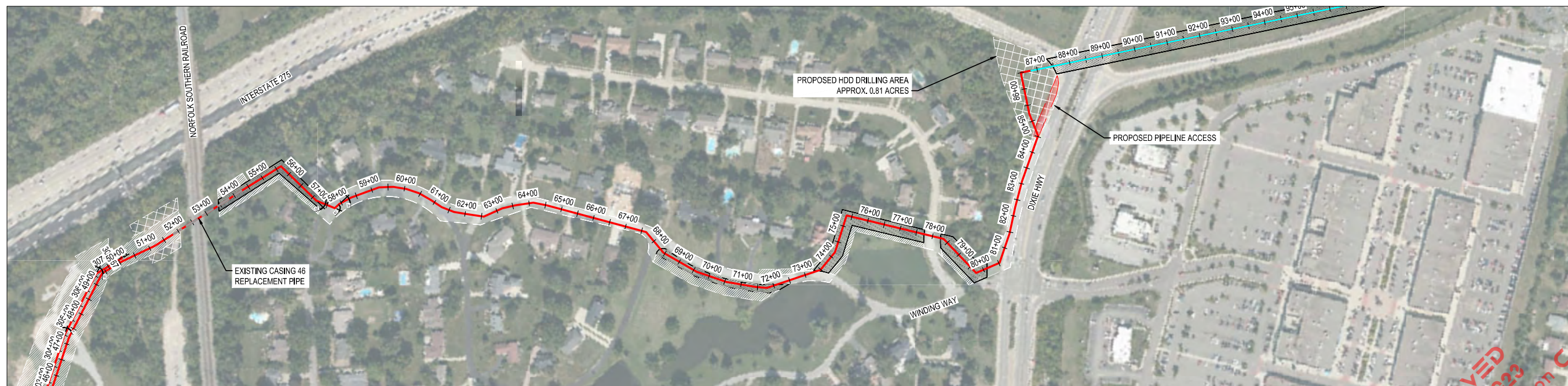
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**PIPELINE ACCESS & LAYDOWN 1**

SCALE: 1:150



**PIPELINE ACCESS & LAYDOWN 2**

SCALE: 1:100

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DATE: 05/15/2023  
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C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	SFS	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



**AM07 PHASE 2  
ACCESS ROUTES AND LAYDOWN 1  
ERLANGER, KY**

REF. DWG(S)	
SHEET(S)	X OF X
DWG DATE	09/14/2022
DRAWING NUMBER	PNG -C-043-0001755
REVISION	C

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GENERAL NOTES

- "COMPANY" IS DEFINED AS DUKE ENERGY OR DUKE ENERGY'S APPROVED REPRESENTATIVE.
- INSTALLER SHALL FURNISH ALL MATERIALS NOT PROVIDED BY THE COMPANY (UNLESS OTHERWISE NOTED ON DRAWINGS OR SPECIFICATIONS) INCLUDING EQUIPMENT TRANSPORTATION, SERVICES AND PERFORM ALL NECESSARY WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREINAFTER.
- IT SHALL BE THE RESPONSIBILITY OF THE INSTALLER TO VERIFY ALL DIMENSIONS GIVEN ON THE DRAWINGS. ANY ITEM IN QUESTION SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT MANAGER PRIOR TO PROCEEDING WITH THE WORK.
- INSTALLER SHALL BE RESPONSIBLE FOR PROTECTION OF ALL SURROUNDING AREAS.
- ALL BELOW GROUND WELDS SHALL BE COATED WITH A TWO-PART EPOXY (DENSO 7125, 7200, OR 7300) PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- ALL ABOVE GROUND PIPING TO BE BLASTED TO CORRECT SOCIETY FOR PROTECTIVE COATINGS (SSPC) SURFACE PROFILE. PAINT SYSTEM TO BE UTILIZED SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- UPON BACKFILLING IN AREAS OF ROCK, BURIED PIPE SHALL HAVE 6" OF SAND PAD FILL PLACED AROUND THE PIPE'S CIRCUMFERENCE.
- PRESSURE TESTING SHALL MEET THE REQUIREMENTS OF DUKE ENERGY'S CURRENT STRENGTH AND LEAK TEST PROCEDURES AND STANDARDS.
- INSTALLER SHALL DEWATER ALL HYDROSTATICALLY TESTED PIPING, USING CLEANING PIGS AS REQUIRED, AND DRY TO A DEWPOINT OF -40 °F PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- ALL WELDS SHALL BE INSPECTED PER DUKE GAS STANDARD WELD-ST-1060.
- INSTALLER IS REQUIRED TO FOLLOW DUKE ENERGY WELD -ST-1010 WELDING PROCEDURES.
- ALL EXISTING PIPELINE INFORMATION PER DUKE RECORDS.

CONSTRUCTION NOTES

- EXISTING OVERHEAD AND BELOW GROUND FACILITIES MAY BE IN THE WORK AREA VICINITY. INSTALLER IS RESPONSIBLE FOR HAVING SUCH FACILITIES LOCATED AND IS RESPONSIBLE FOR MAINTENANCE AND PRESERVATION OF THESE FACILITIES.
- PER PERTINENT DUKE ENERGY DESIGN AND CONSTRUCTION STANDARDS, INSTALLER IS REQUIRED TO CALL 811 FOR UTILITY LOCATES A MINIMUM OF 72 HOURS AND MAXIMUM OF 10 DAYS PRIOR TO COMMENCEMENT OF WORK. NO EXTRA COMPENSATION WILL BE ALLOWED FOR DELAYS FROM ANY WORK PROVIDED BY OTHER UTILITIES.
- IF EXISTING UTILITIES OF ANY TYPE ARE ENCOUNTERED IN THE FIELD AND DEEMED TO BE IN CONFLICT WITH INSTALLATION OF FACILITIES, INSTALLER SHALL NOTIFY THE PROJECT MANAGER IMMEDIATELY SO THE CONFLICT MAY BE RESOLVED.
- WHEN EXISTING DRAINAGE FACILITIES ARE DISTURBED, INSTALLER SHALL PROVIDE AND MAINTAIN TEMPORARY OUTLETS AND CONNECTIONS FOR PRIVATE DRAINS OR SEWERS. RESTORATION OF THESE FACILITIES IS TO BE PERFORMED ONCE CONSTRUCTION IS COMPLETE AND ARE CONSIDERED INCIDENTAL COSTS OF THE PROJECT.
- ALL DRAWING MEASUREMENTS ARE TO BE TAKEN FROM EXISTING GRADE, FINAL GRADE SHALL BE MATCHED TO SURROUNDING GRADE AS PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- INSTALLER IS TO REMAIN WITHIN CONSTRUCTION WORKING LIMITS. ACCESS TO AREAS OUTSIDE WORKING LIMITS MUST BE COORDINATED WITH THE OWNER OR DUKE ENERGY PROJECT MANAGER.
- ALL EXCESS EXCAVATION, CONSTRUCTION DEMOLITION DEBRIS AND UNSUITABLE MATERIALS THAT DO NOT CONTAIN ASBESTOS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED.
- STANDARD SPECIFICATIONS REFERENCED ON THIS SHEET AND CONSTRUCTION PLANS ARE CONSIDERED AS PART OF THE CONTRACT DOCUMENTS. INCIDENTAL ITEMS OR ACCESSORIES NECESSARY TO COMPLETE THIS WORK MAY NOT BE SPECIFICALLY NOTED, BUT ARE CONSIDERED TO BE A PART OF THIS CONTRACT.
- BEFORE ACCEPTANCE BY THE OWNER AND FINAL PAYMENT, ALL WORK SHALL BE INSPECTED AND APPROVED BY DUKE ENERGY OR COMPANY REPRESENTATIVE. FINAL PAYMENT SHALL BE MADE AFTER ALL OF THE INSTALLER'S WORK HAS BEEN ACCEPTED AND APPROVED AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- DURING CONSTRUCTION, ALL LOOSE MATERIAL THAT IS DEPOSITED IN THE FLOW LINE OF GUTTERS, DRAINAGE STRUCTURES, DITCHES, ETC. SUCH THAT THE NATURAL FLOW LINE OF WATER IS OBSTRUCTED, SHALL BE REMOVED AT THE END OF EACH WORK DAY.
- ALL FIELD TILE ENCOUNTERED DURING CONSTRUCTION SHALL BE EXTENDED TO OUTLET INTO AN EXISTING DRAINAGE WAY. A RECORD OF ALL FIELD TILE FOR ONSITE DRAIN PIPE ENCOUNTERED SHALL BE KEPT BY THE INSTALLER AND TURNED OVER TO THE PROJECT MANAGER UPON COMPLETION OF THE PROJECT.
- INSTALLER IS REQUIRED TO MAINTAIN A SET OF ISSUED FOR CONSTRUCTION DRAWINGS AND ALL PERMITS AT THE JOB SITE. ANY MODIFICATIONS OR ALTERATIONS TO THE PLANS OR SPECIFICATIONS SHALL BE APPROVED BY THE PROJECT MANAGER.
- INSTALLER IS SOLELY RESPONSIBLE FOR EXECUTION OF HIS/HER WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND SPECIFICATIONS. INSTALLER IS RESPONSIBLE FOR THE CONSTRUCTION METHODS AND TECHNIQUES, SEQUENCES, TIME OF PERFORMANCE, AND ALL SAFETY PRECAUTIONS.
- MINIMUM DEPTH OF BURIAL SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- ALL PIPELINES BEING CROSSED ARE TO BE PROTECTED WITH A MINIMUM OF THREE (3) 4 FEET X 18 FEET WOODEN MATS.
- PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS, FOR OPEN DITCH EXCAVATION, A

- MINIMUM OF TWO FEET OF SEPARATION SHALL BE MAINTAINED BETWEEN ALL CROSSING STRUCTURES. SEPARATION BETWEEN CROSSING STRUCTURES AND PIPELINES THAT ARE INSTALLED VIA DIRECTIONAL DRILLING METHODS IS AT THE DISCRETION OF ENGINEERING.
- DURING BACKFILLING, A SIX INCH CROWN SHALL BE PLACED ON ALL DISTURBED AREAS. COMPACTION REQUIREMENTS SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS.
- FLOWABLE FILL MUST BE USED IN ROADWAY AND WITHIN 3' OF ROADWAY PER DUKE STANDARDS.
- SUE LEVEL B SURVEY ACQUIRED. TOP OF PIPE ELEVATIONS SHOWN FOR KNOWN UTILITY DEPTHS. REMAINING UTILITIES ASSUMED TO HAVE 4 FT. OF COVER. CONTRACTOR TO FIELD VERIFY ALL UTILITY DEPTHS.

CIVIL AND STRUCTURAL NOTES

- ADDITIONAL EXCAVATIONS BELOW FOOTINGS MAY BE NECESSARY TO REACH UNDISTURBED SOIL. SHOULD THIS OCCUR, THE EXCAVATION SHALL BE BROUGHT TO THE BOTTOM OF THE FOOTING ELEVATION WITH COMPACTED SAND FILL MEETING THE REQUIREMENTS OF MODIFIED PROCTOR COMPACTION TEST (ASTM D1557) TO 95% IN SIX INCH LIFTS.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 1" X 1" 45° CHAMFER.
- CONCRETE SHALL BE MIXED AND POURED PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS. TESTING SHALL CONFORM TO ACI 318. INSTALLER TO SUPPLY ALL CONCRETE AND TESTING.
- ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 SPECIFICATION. STEEL REINFORCING BAR SHALL CONFORM TO ASTM A615 GRADE 60 AND WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185. TIE WIRE SHALL CONFORM TO ASTM A82.
- UNSUITABLE OR EXCESS EARTH SPOIL SHALL BE DISPOSED OF AT AN APPROVED WASTE LOCATION. SOIL BEING TRANSPORTED ONTO THE JOB SITE SHALL BE APPROVED BY EITHER THE PROJECT MANAGER OR CONSTRUCTION MANAGER.
- ROCKSHIELD OR SIMILAR COMPANY APPROVED PRODUCT MUST BE INSTALLED BETWEEN ALL PIPE AND FITTINGS THAT COME INTO CONTACT WITH CONCRETE. A LAYER OF NON ABRASIVE MATERIAL SUCH AS FRP SHALL BE INSTALLED BETWEEN ALL PIPE SUPPORTS AND PIPING.
- ALL FIELD BENDING OF REBAR SHALL BE DONE COLD.

SOIL EROSION AND SEDIMENT CONTROL NOTES

- INSTALLER IS TO CONSTRUCT ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES IN SEQUENCE WITH THE PIPELINE CONSTRUCTION, PROVIDE MAINTENANCE AND ASSURE EFFECTIVENESS THROUGHOUT THE DURATION OF THE PROJECT.
- AS PER THE CONSTRUCTION STORMWATER PERMIT REQUIREMENTS OUTLINED IN THE KDEP-KOW KPDES PERMIT NO. KYR100000, AREAS LEFT TEMPORARILY UNDISTURBED OR AT FINAL GRADE WILL BE STABILIZED WITHIN 14 DAYS OF ACTIVITY CESSATION.
- ALL SPOILS INCLUDING ORGANIC SOILS, VEGETATION AND DEBRIS SHALL BE REMOVED FROM THE SITE AND PROPERLY DISPOSED OF IN SUCH A MANNER AS TO NOT ERODE INTO ANY BODY OF WATER OR WETLAND.
- PERIMETER EROSION CONTROLS (E.G. SILT FENCING) SHALL BE PLACED AS PER THE PLANS AND WHERE NECESSARY TO PREVENT SEDIMENT FROM LEAVING THE WORK AREA.
- CATCH-ALL INLET FILTERS ARE REQUIRED AT ALL SEWER INLETS, GRATES AND MANHOLES FOR SEDIMENT CONTROL.
- TOPSOIL STOCKPILES SHALL BE LOCATED TO AVOID EROSION OF SAID STOCKPILE ONTO OFFSITE AREAS.
- ALL ENVIRONMENTAL MEASURES SHALL BE PER PERTINENT DESIGN AND CONSTRUCTION STANDARDS, AS OUTLINED IN SWPPP NARRATIVES AND APPLICABLE STORMWATER PERMITS.
- ALL STREAMS AND WETLANDS WITHIN THE PROJECT WORKSPACE MUST BE MATTED IN AREAS WHERE EQUIPMENT OR VEHICLE ACCESS IS NEEDED. IF A WETLAND OR STREAM IS CROSSED AND THE DECISION IS MADE THAT THE FEATURE DOES NOT NEED TO BE MATTED OVER THE ENTIRETY THEN PERIMETER CONTROLS (E.G. SILT FENCE, FILTER SOCK) MUST BE INSTALLED UP SLOPE FROM THE WATER FEATURE CONTINUOUSLY FROM THE EDGE OF THE WORKSPACE UP TO THE CORNERS OF THE MATTING TO PREVENT SEDIMENT FROM ENTERING THE WATER FEATURE. NOTE THAT THIS REQUIREMENT IS NOT EXPLICITLY LOCATED ON THESE PLANS.
- CONTRACTOR SHALL INSTALL EROSION CONTROL BMPs IN SEQUENCE WITH PIPELINE CONSTRUCTION. NOT ALL CONTROLS NEED TO BE PRESENT SIMULTANEOUSLY. ALL BMPs ARE SHOWN ON THE PLANS FOR LOCATION AND CLARITY, BUT CONTROLS SHALL BE INSTALLED AS PIPELINE CONSTRUCTION PROGRESSES AND IN ACCORDANCE WITH COMPANY INSPECTOR'S DIRECTION.
- ALL SEDIMENT RELEASES BEYOND THE SITE PERIMETER CONTROLS AND SPILLS REGARDLESS OF AMOUNT OR LOCATION ARE TO BE IMMEDIATELY REPORTED TO THE DUKE ENERGY ENVIRONMENTAL FIELD PROFESSIONAL. IF THE DUKE ENERGY ENVIRONMENTAL PROFESSIONAL CANNOT BE REACHED, THE DUKE ENERGY SPILL HOTLINE IS TO BE CALLED AT 1-800-527-3853.
- IN AREAS WHERE IT IS FIELD DETERMINED TO REDUCE WORKSPACE OR IMPACT, EROSION AND SEDIMENT CONTROLS SHALL BE ADJUSTED TO MATCH WORKSPACE BOUNDARIES.

SURVEY INVESTIGATION NOTES:

- BEARINGS AND COORDINATES ARE RELATIVE TO NAD83 KENTUCKY STATE PLANE, NORTH ZONE, US. FOOT. VERTICAL DATUM IS NAVD88.

CATHODIC PROTECTION & AC MITIGATION NOTES:

- CONTRACTOR SHALL PROVIDE AND INSTALL ALL MISCELLANEOUS PARTS TO COMPLETE PROJECT PER CONTRACT DRAWINGS, CONTRACT SPECIFICATIONS, ELECTRICAL CODES, STATE AND LOCAL CODES AND STANDARDS, AND LOCAL ELECTRICAL DISTRIBUTION COMPANY REQUIREMENTS. PARTS INCLUDE, BUT ARE NOT LIMITED TO, WIRING AND MOUNTING MATERIALS, METER SOCKET, DISCONNECT EQUIPMENT, ENCLOSURES, TRANSIENT VOLTAGE SURGE SUPPRESSORS, AC MAIN BUSS TERMINATION, CIRCUIT BREAKERS, AND OTHER ELECTRICAL EQUIPMENT REQUIRED. ACTUAL LENGTH WIRING IS DEPENDENT ON DISTANCE FROM INSTALLATION.

DESIGN NOTES:

- DESIGNED IN ACCORDANCE WITH PHMSA 49 CFR 192 GUIDELINES.
- PIPELINES TO BE CATHODICALLY PROTECTED (SEE DWG PNG-E-043-0001614)
- DESIGN PRESSURES

AM07 PHASE 2 (TRANSMISSION)

- AM07 PHASE 2 DESIGN PRESSURE : 1000 PSIG
- AM07 MAOP: 370 PSIG

UL02 FEED (TRANSMISSION)

- UL02 DESIGN PRESSURE: 1000 PSIG
- UL02 MAOP: 230 PSIG

IP FEED (DISTRIBUTION)

- IP DESIGN PRESSURE: 285 PSIG
- IP MAOP: 30 PSIG

- FOR 24" PIPE, FIELD BEND ALL ANGLES LESS OR EQUAL TO 18 DEGREES. ALL FIELD BENDS REQUIRE 5' TANGENTS, CUT SEGMENTABLE FITTINGS FOR ALL ANGLES ABOVE 18 DEGREES, OR WHERE SPECIFIED.

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PROFESSIONAL ENGINEER STAMP

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						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



AM07 PHASE 2  
GENERAL NOTES  
ERLANGER, KY  
ERLANGER, KY

APPROVED  
June 21, 2023  
KENTUCKY TRANSPORTATION CABINET

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DWG DATE 09/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
<b>PNG -G-043-0001430</b>	<b>C</b>
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**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSATIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / PL	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

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						STATION ID	-		
						CHECKER INITIALS	JMP	05/15/2023	AMP

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**AM07 PHASE 2**  
**ABBREVIATIONS & LEGEND**  
**ERLANGER, KY**  
ERLANGER, KY

SHEET(S) XX OF XX	DWG SCALE	NONE
DWG DATE 09/13/2022	SUPERSEDED	-
DRAWING NUMBER	REVISION	
<b>PNG - G-043-0001431</b>	<b>C</b>	
G/ERLANGER/AM07		

PROFESSIONAL ENGINEER STAMP



**KYTC Division of Maintenance  
Permits Branch  
District 6**



**ENCROACHMENT PERMIT GENERAL NOTES & SPECIFICATIONS**

**YOU MUST NOTIFY KYTC BEFORE BEGINNING ANY WORK IN THE RIGHT-OF-WAY. Failure to alert KYTC of working within the right of way may result in permit revocation.**

Two ways to notify KYTC of your construction start date:

**By Email: [KYTCD6PERMITS@KY.GOV](mailto:KYTCD6PERMITS@KY.GOV)**

*\*must include permit number and county in subject line*

**By Phone: 859-341-2700**

*\*must know permit number and county when calling*

**YOU MUST ALSO NOTIFY KYTC UPON COMPLETION OF WORK WITHIN RIGHT-OF-WAY. Failure to alert KYTC of completion of work may result in withholding release of any associated bonds.**



APPROVED  
JUNE 21, 2023  
KENTUCKY TRANSPORTATION CABINET  
66-2023-005-4-1

Permit No. T06-2023-00544

**I. SAFETY**

**A. General Provisions**

- All signs and control of traffic shall be in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways, latest edition, Part VI, and safety requirements shall comply with the Permits Manual. Federal law requires that traffic control shall be implemented in accordance with MUTCD standards and KYTC's Standard Specifications for Road and Bridge Construction (KYTC SSRBC) under the supervision of a certified Work Zone Traffic Control Supervisor.
- All work necessary in shoulder or ditch line areas of a state highway shall be scheduled to be promptly completed so that hazards adjacent to the traveled way are kept to an absolute minimum.
- No more than one (1) traveled-lane shall be blocked or obstructed during normal working hours. All signs and flaggers during lane closure shall conform to the MUTCD. The traveled-way and shoulders shall be kept clear of mud and other construction debris at all times during construction of the permitted facility. No non-construction equipment or vehicles or office trailers shall be allowed on the right of way during working hours. The right of way shall be left free and clear of equipment, material, and vehicles during non-working hours.
- When necessary to block one (1) traveled-lane of a state highway, the normal working hours shall be as directed by the Department. No lanes shall be blocked or obstructed during adverse weather conditions (rain, snow, fog, etc.) without specific permission from the Department.
- Working hours shall be between 9:00 AM and 3:00 PM. Further date and time restrictions are as follows:

**B. Explosives**

- No explosive devices or explosive material shall be used within state right of way without proper license and approval of the Kentucky Department of Mines and Minerals, Explosive Division.

**C. OSHA**

- Kentucky Occupational Safety and Health Standards for the construction industry, which has the effect of law, states in part: (Page 52, 1926.651, Specific Excavation Requirements) "Prior to opening an excavation, effort shall be made to determine whether underground installations, (sewer, telephone, water, fuel, electric lines, etc.) will be encountered, and if so, where such underground installations are located. When the excavation approaches the estimated location of such an installation, the exact location shall be determined, and when it is uncovered, proper supports shall be provided for the existing installation. Utility companies shall be contacted and advised of proposed work prior to the start of actual excavation."

**D. Archaeological**

- Whenever materials of an archaeological nature are discovered during the course of construction work or maintenance operations, contact shall be made immediately with the Division of Environmental Analysis, which maintains an archaeologist on staff, or with the Office of the State Archaeologist located at the University of Kentucky. Following this consultation, further action shall be decided on a case-by-case basis by the State Highway Engineer or the Transportation Planning Engineer or their designated representative.

**E. Environmental**

- If the activity to which this permit related disturbs one acre or more of land, you must obtain KPDES KYR10 permit. Information can be found at <http://water.ky.gov/permitting/Pages/GeneralPermits.aspx>

**F. Additional Notes**

- The following additional notes apply to this permit:

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**II. UTILITIES**

The permittee shall be responsible for any damage to existing utilities. Any utility modifications or relocations within state right of way necessary, as determined by the Department or by the owner of the utility, shall be at the expense of the permittee and subject to the approval of the Department. Operators of underground utilities in right of way shall be members of Kentucky 811.

All existing manholes and valve boxes shall be adjusted to be flush with finished grade.

All pavement cuts shall be restored per Kentucky Transportation Cabinet standards and specifications.

Any excavation within 3' of edge of pavement will require flowable fill as backfill.

The clear zone requirement shall be met to the extent possible in accordance with the Roadside Design Guide.

Encasement pipe shall conform to current standards for highway crossings in accordance with the Permits Manual. Pipe encasing shall not be required if the pipe crossing is 2" or less.

Aerial crossing of utility lines shall have a minimum clearance from the high point of the roadway to the low point of the line of 24' on fully controlled access highways and 18' on non-fully controlled access highways

Minimum depth for underground Gas and Electric lines is 60" under roadways, ramps, and ditch lines and 42" in all other areas within state right of way. The minimum depth for all other utilities is 42" in all areas.

When steel plates are installed over an open excavation in the roadway, they must be anchored to the pavement and have asphalt applied to all exposed edges and an MUTCD approved sign noting "Road Plates Ahead." KYTC must be notified of the location, date, time, and permit number associated to BOTH the installation and removal of the plate. Failure to do so may result in permit revocation.

Utility poles moved for replacement must be removed in their entirety and the hole left behind must be backfilled.

No poles or anchors shall be installed in a roadside ditch.

**Utility notes specific to fully-controlled access highways ONLY:**

All work necessary within the right-of-way shall be performed behind a temporary fence erected prior to the start of work. The temporary woven wire fence shall be removed immediately upon completion of work on the right-of-way, and the control of access immediately restored to original condition, in accordance with applicable KYTC SSRBC. All vents, valves, manholes, etc., shall be located outside of the right-of-way. Encasement pipe shall extend from right-of-way line to right-of-way line and shall be one continuous run of pipe. The encasement pipe shall be welded at all joints. The boring pit and tail ditch shall extend past the existing toe of slope or bottom of ditch line and shall be a minimum of 42 inches deep. Work in interstate right-of-way requires approval from FHWA (Federal Highway Administration).

Additional notes:

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**APPROVED**  
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**III. DRAINAGE**

- Negative impacts to existing drainage will be the applicant's responsibility to repair in accordance with KYTC SSRBC.
- All pipe shall be laid in a straight alignment, to proper grades, and with all materials and methods of installation including bedding and joint seating. Pipe shall not be covered until inspected by the Department and express permission obtained to make backfill. It is the applicant's responsibility to request inspection.
- All gutter lines at the base of new curbs shall be on continuous grades, and pockets of water along with curbs or in entrance areas or other paved areas within the right-of-way shall not be acceptable.
- All drainage structures and appurtenances (manholes, catch basins, curbing, inlet basins, etc.) shall conform to the Department specifications and shall be constructed in accordance with the KYTC's Standard Drawings.
- Additional notes:

**IV. PAVING**

- No bituminous pavement shall be installed within the right of way between November 15 and April 1, nor when the temperature is below 40 degrees Fahrenheit, without the express consent of the Department. No bituminous pavement shall be installed when the underlying course is wet.
- Paving within the right of way shall be as follows:
  - Base (Type): Match Existing, (Thickness) Match Existing
  - Surface Base (Type) Match Existing, (Thickness) Match Existing
  - Finished Surface (Type) Match Existing, (Thickness) Match Existing
- All materials and methods of construction, including base and subgrade preparation, shall be in accordance with KYTC's Standard Specifications. At least 24 hours notice to the Department is required prior to beginning paving operations.  
 Phone: 859-341-2700 Name: \_\_\_\_\_
- Utility companies performing road cuts must restore the pavement to pre-existing condition. Pictures/videos are recommended to ensure proper placement of signs and lane markers that are temporarily removed for paving operations. In some cases, a pre-work inventory may be requested from the Department.
- Existing pavement and shoulder material shall be removed to accommodate the above paving specifications.
- The finished surface of all new pavement within the right of way shall be true to the required slope and grade, uniform in density and texture, free of irregularities, and equivalent in riding qualities to the adjacent highway pavement or as determined by KYTC.
- To ensure proper surface drainage, the new pavement shall be flush with the edge of existing highway pavement and shall slope away from the existing edge of the pavement as specified in drawings.
- Existing edge of pavement shall be saw-cut to provide a straight and uniform joint for new pavement, and an edge key will be installed in the overlap. An approved joint sealer, in accordance with Kentucky Department of Highways Standard Specifications (latest edition), shall be applied between new and existing pavements.
- Additional notes:

APPROVED  
JUL 25 2023  
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**V. ENTRANCES**

- Encroachment permits issued by KYTC in no way supersede local planning/zoning requirements or subdivision regulations. KYTC has no authority with zoning changes.
- Commercial entrances must be paved to the right-of-way line. Any deviations must be approved by KYTC before installation.
- KYTC can dictate drainage improvement installation during construction or after entrance is at final grade. The permit release does not release the permit applicant from drainage maintenance.
- Signs (ground-mounted and span-mounted), stop bars, crosswalk, and proper lane markings must be in-place before entrance is open for traffic. Lane width modifications must be approved by the Department.
- Guardrail installation must be pre-approved by the Department and installed by a KYTC pre-qualified contractor. Any guardrail that is removed during construction must be returned to the local KYTC maintenance facility.

Additional notes:

**VI. TRAFFIC**

- Any contractor performing work within the vicinity of KYTC roadway lighting or traffic signals, must request locates from the KYTC District 6 Traffic section at least one week before of starting work in the right-of-way.
- Applicant must maintain all KYTC Roadway signage that is impacted by the permitted work. In the event that any signs have to be moved, it is the applicant's responsibility to mark the sign's location before removal and to install the original or new sign per KYTC standards for sign installation.
- Any thermoplastic or striping damaged during the encroachment must be restored in a timely manner per KYTC standards. Stopbars, arrows, and crosswalks must be thermoplastic material, paint is not acceptable. This work must be performed by a KYTC pre-qualified contractor.
- Excavating near a signal, lighting pole, or anchoring facility must be done so that it does not impact the structural integrity of the pole. Any work that requires a temporary support or anchoring must receive prior approval.
- If the scope of the permit involves a signal build or rebuild, it is the applicant's responsibility to apply for power service (and pay monthly electrical bill) as well as request electrical inspection from the KYTC District 6 Traffic section. If the signal modifications require timing or phasing changes this must be requested at least two weeks in advance of the signal's turn-on date. KYTC will not take ownership of permitted signals until the electrical inspection is formally accepted and approved.
- Work which impacts traffic loops requires 48-hour notice to the KYTC District 6 Traffic section at 859-341-2700. Accidental damage of a traffic loop must be reported immediately to KYTC District 6's emergency line at 859-620-2738. Any disturbed traffic loops must be replaced in a timely manner. Traffic loops out of operation for more than five working days will subject the applicant to the cancellation of the permit. Loop repair must be performed by a KYTC pre-qualified contractor.

Additional Notes:

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**VII. SIDEWALK SPECIFICATIONS**

All sidewalk modifications, retrofitting, or installations must meet current ADA guidelines

**A. New Sidewalks**

New sidewalk specifications, dimensions, and designs shall be in accordance with KYTC's latest edition of the Standard Specifications, or with the plans provided on the permit if approved by a KYTC D6 Construction or Permits Engineer.

All materials and methods of construction, including curing, shall be in accordance with KYTC's latest edition of the Standard Specifications.

**B. Existing Sidewalks**

Use of the sidewalk shall not be blocked or obstructed and a usable walkway shall be maintained across the construction area at all times per MUTCD . Sidewalk closures must be approved by the Department before implementation.

The location of ADA ramps (truncated domes/tactile warnings/etc.) will need to be field verified by KYTC before installation.

Any section of sidewalk that becomes damaged shall be entirely replaced to match existing sections.

Additional notes:

**VIII. RIGHT OF WAY RESTORATION**

All disturbed portions of the right of way shall be restored to grass as per Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition). A satisfactory turf, as determined by the Department, shall be established by the permittee prior to release of indemnity. Sodding or seeding shall be as follows:

Slopes 3:1 or Less: 90% Kentucky 31 Tall Fescue and 10% White Dutch Clover at 100 lbs/acre

Slopes Greater than 3:1: 90% Kentucky 31 Tall Fescue and 10% Partridge Pea at 100 lbs/acre

Urban or Residential Areas: 95% Turf Type Fall Fescue Blend and 5% White Dutch Clover at 275 lbs/acre

Two tons of clean straw mulch per acre of seeding.

Prior to seeding, the ground shall be prepared in accordance with Kentucky Department of Highways Standard Specifications for Road and Bridge Construction (latest edition).

Substitutes for sod such as artificial turf, rocked mulch, or paved areas may be acceptable if they are aesthetically pleasing and receive prior approval from KYTC.

All ditch-flow lines and all ditch-side slopes shall be sodded.

Existing concrete right of way markers shall not be disturbed. If damaged in any way, they shall be entirely replaced by the permittee with new concrete markers to match the original markers, in accordance with Kentucky Department of Highways Standard Drawings. Markers that are entirely removed shall be re-established in the proper locations by the permittee and to the satisfaction of the Department.

Additional notes:

APPROVED  
JUNE 21, 2023  
KENTUCKY TRANSPORTATION CABINET  
06-2023-00544

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**IX. RIGHT OF WAY FENCE RESTORATION**

- The replacement fence shall be a height of at least 48 inches and shall be of sufficient density to protect against encroachment.
- The replacement fence shall be a minimum of 1 foot and a maximum of 2 feet outside the right-of-way line
- The fence materials and design shall meet accepted industry standards and be treated as paintable. Durable finish materials such as vinyl are acceptable.
- The permittee shall be required to construct and maintain the replacement fencing to an acceptable level of functionality and state of repair. All work on the fencing shall be performed by access from the private property. Access from the roadway is not allowed.
- The existing fence shall be removed by permittee and stored at the Department's maintenance storage yard for future reuse by the Department, or the Department shall be reimbursed the cost of fencing removed.
- Right of way monuments shall be installed regardless of if replacement fence is installed or not.
- The control of access shall not be diminished as a result of replacement of the fence.
- Additional notes:

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**X. MISCELLANEOUS NOTES**

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**NOTICE TO PERMITTEE**

**THE PERMITTEE AGREES THAT ALL WORK WITHIN THE EXISTING RIGHT OF WAY SHALL BE DONE IN ACCORDANCE WITH THE CURRENT KYTC STANDARD SPECIFICATIONS AND THE PLANS AS APPROVED AND PERMITTED BY AN ENCROACHMENT PERMIT. ANY CHANGES OR VARIANCES MADE AT THE TIME OF CONSTRUCTION WITHOUT WRITTEN APPROVAL FROM THE DEPARTMENT OF HIGHWAYS SHALL BE REMOVED BY THE PERMITTEE AT NO EXPENSE TO THE DEPARTMENT OF HIGHWAYS AND SHALL BE REDONE BY THE PERMITTEE TO CONFORM WITH THE APPROVED PLANS.**

**APPROVED**  
**2023**  
**KENTUCKY TRANSPORTATION CABINET**



KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
 DIVISION OF MAINTENANCE - PERMITS BRANCH

TC 99-208  
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**TYPICAL HIGHWAY BORE DETAIL  
 - FOR FULLY CONTROLLED HIGHWAYS -**

KYTC KEPT #: \_\_\_\_\_

**SECTION 1: HIGHWAY INFORMATION**

COUNTY: KENTON	ROUTE: CRESCENT SPRINGS PIKE	MILE POINT: 0.85	PAVEMENT WIDTH: 31'
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**SECTION 2: UTILITY INFORMATION**

UTILITY TYPE: NATURAL GAS	PIPE TYPE: STEEL X65 PIPE	DIAMETER: 24" OD, 0.5" WT
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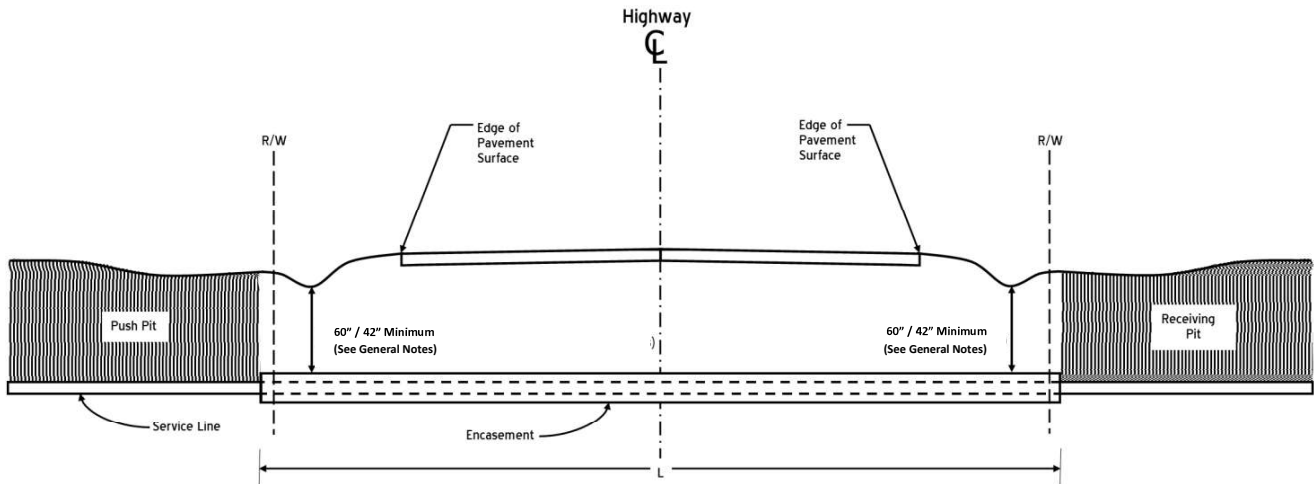
**SECTION 3: ENCASEMENT INFORMATION**

ENCASEMENT TYPE: N/A	DIAMETER: N/A
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**SECTION 4: BORE INFORMATION**

BORE TYPE: AUGER BORE	LENGTH (L): 156'	DIAMETER: 24"
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**SECTION 5: DETAIL FOR FULLY CONTROLLED HIGHWAYS**



**SECTION 6: GENERAL NOTES**

- Push Pit and Receiving Pit shall be backfilled and thoroughly compacted.
- All ditch lines are to remain open at all times and restored to original condition.
- Shape, Seed and Straw all disturbed areas immediately after completing the work.
- Provide traffic control as required to ensure the safety of the traveling public in accordance with the current edition of the *Manual on Uniform Traffic Control Devices*.
- The minimum depth for underground electrical lines under roadways, ramps, and ditch lines and natural gas and petroleum fraction lines is **60"**. The minimum depth for underground electrical lines in all other areas and all other underground utilities is **42"**, unless NESC requires additional depth.
- See [KYTC Permits Manual](#) for all requirements and specifications.

APPROVED  
 DATE 2/1/2023  
 KENTUCKY TRANSPORTATION CABINET  
 C6-2023-005-1-1



KENTUCKY TRANSPORTATION CABINET  
 Department of Highways  
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**TYPICAL HIGHWAY BORE DETAIL  
 - FOR FULLY CONTROLLED HIGHWAYS -**

KYTC KEPT #: \_\_\_\_\_

**SECTION 1: HIGHWAY INFORMATION**

COUNTY: KENTON	ROUTE: I-275	MILE POINT: 81.8 - 82.5	PAVEMENT WIDTH: N/A
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**SECTION 2: UTILITY INFORMATION**

UTILITY TYPE: NATURAL GAS PIPELINE	PIPE TYPE: STEEL	DIAMETER: 24"
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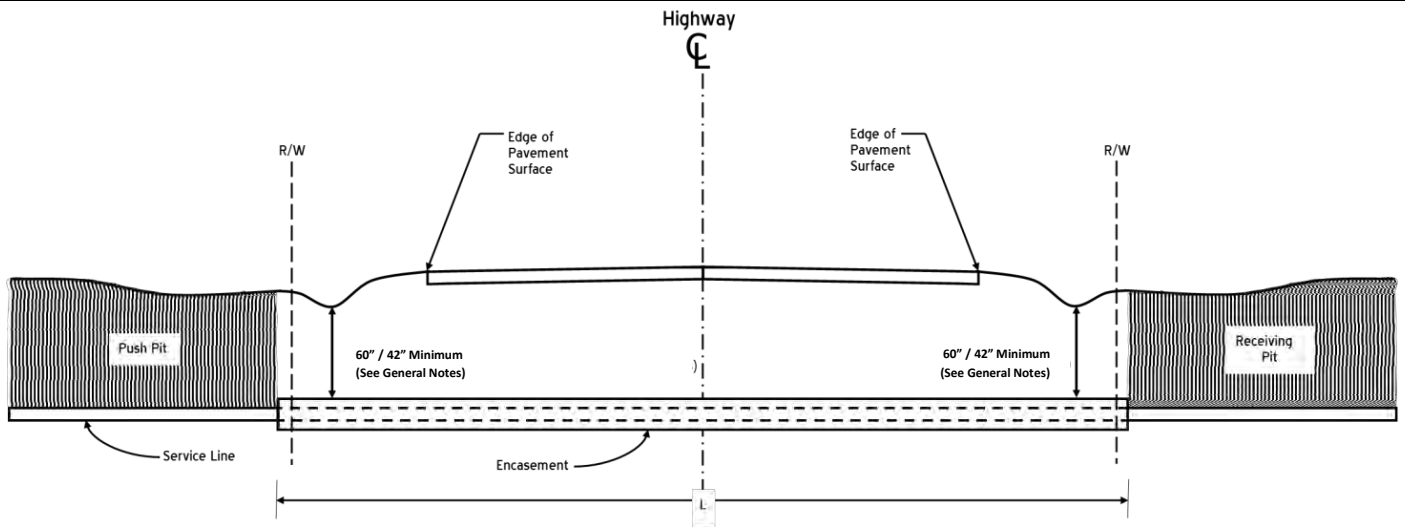
**SECTION 3: ENCASEMENT INFORMATION**

ENCASEMENT TYPE: N/A	DIAMETER: N/A
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**SECTION 4: BORE INFORMATION**


BORE TYPE: HORIZONTAL DIRECTIONAL DRILL	LENGTH (L): 3,587'	DIAMETER: 24"
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**SECTION 5: DETAIL FOR FULLY CONTROLLED HIGHWAYS**



**SECTION 6: GENERAL NOTES**

- Push Pit and Receiving Pit shall be backfilled and thoroughly compacted.
- All ditch lines are to remain open at all times and restored to original condition.
- Shape, Seed and Straw all disturbed areas immediately after completing the work.
- Provide traffic control as required to ensure the safety of the traveling public in accordance with the current edition of the *Manual on Uniform Traffic Control Devices*.
- The minimum depth for underground electrical lines under roadways, ramps, and ditch lines and natural gas and petroleum fraction lines is **60"**. The minimum depth for underground electrical lines in all other areas and all other underground utilities is **42"**, unless NESC requires additional depth.
- See [KYTC Permits Manual](#) for all requirements and specifications.

	KENTUCKY TRANSPORTATION CABINET Department of Highways PERMITS BRANCH	TC 99-1A Rev. 10/2020 Page 1 of 4
<b>APPLICATION FOR ENCROACHMENT PERMIT</b>		

KYTC KEPT #: \_\_\_\_\_

**SECTION 1: APPLICANT CONTACT INFORMATION**

APPLICANT Duke Energy	ADDRESS 139 E 4th St		
EMAIL n/a	CITY Cincinnati	STATE OH	ZIP 45202
CONTACT NAME 1 Josh Pedersen (on behalf of Duke Energy)	EMAIL jmpedersen@burnsmcd.com	PHONE # (913) 645-2713	CELL #
		PHONE # 513-315-8338	CELL #
CONTACT NAME 2 (if applicable) Brad Seiter	EMAIL bradley.seiter@duke-energy.com	PHONE # 513-315-8338	CELL #
		PHONE #	CELL #

**SECTION 2: PROPOSED WORK LOCATION**

ADDRESS Interstate 275	CITY Crestview Hills	STATE Kentucky	ZIP 41017
COUNTY Kenton	ROUTE # I-275	MILE POINT <small>82.5 through ~81.8 (I-275 MP references-not ramp references)</small>	LONGITUDE (X) <small>Entry: W084.5796 Exit: W084.5679</small>
LATITUDE (Y) <small>Entry: N039.028033 Exit: N039.025249</small>			

**ADDITIONAL LOCATION INFORMATION:** includes workspace within KYTC ROW for installation of HDD

**FOR KYTC USE ONLY**

PERMIT TYPE:  Air Right  Entrance  Utilities  Vegetation Removal  Other: \_\_\_\_\_

ACCESS:  Full  Partial  by Permit      LOCATION:  Left  Right  Crossing

**SECTION 3: GENERAL DESCRIPTION OF WORK**

Horizontal Directional Drill (HDD) trenchless installation of 24" steel natural gas pipeline below Interstate 275 entry/exit ramps. No restoration anticipated with installation efforts being trenchless. Anticipated installation approximately 3587' of true length.

(See attached design drawings including plan/profile views of proposed HDD installation PNG-C-043-0001770 through -001773 and Overall Alignment Sheet:PNG-C-043-000179 )

THE UNDERSIGNED APPLICANT(s), being duly authorized representative(s) or owner(s), DO AGREE TO ALL ORIGINAL UNEDITED TERMS AND CONDITIONS ON THE TC 99-1A, pages 1-4.



Digitally signed by John Perkins  
Date: 2023.06.27 13:31:08 -04'00'

**SIGNATURE**

**DATE**

This is not a permit unless and until the applicant(s) receives an approved TC 99-1B from KYTC. This application shall become void if not approved by the cancellation date. The cancellation date shall be a minimum of one year from the date the applicant submits their application.



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## APPLICATION FOR ENCROACHMENT PERMIT

### TERMS AND CONDITIONS

1. The permit, including this application and all related and accompanying documents and drawings making up the permit, remains in effect and is binding upon the Applicant/Permittee, its successors and assigns, as long as the encroachment(s) exists and also until the permittee is finally relieved by the Department of Highways from all its obligations.
2. Applicant shall meet all requirements of the Clean Water Act if the project will disturb one acre or more, the applicant shall obtain a KPDES KYR10 Permit from the Kentucky Division of Water. All disturbed areas shall meet the requirements of the Department of Highway's Standard Specifications, Sections 212 and 213, as amended.
3. **INDEMNITY:**
  - A. **PERFORMANCE BOND:** The permittee shall provide to the Department a performance bond according to the Permits Manual, Section PE-203 as a guarantee of conformance with the Department's Encroachment Permit requirements.
  - B. **PAYMENT BOND:** At the discretion of the department, a payment bond shall be required of the permittee to ensure payment of liquidated damages assessed to the permittee.
  - C. **LIABILITY INSURANCE:** Liability insurance shall be required of the permittee (in an amount approved by the department) to cover all liabilities associated with the encroachment.
  - D. It shall be the responsibility of the permittee, its successors and assigns, to maintain all indemnities in full force and effect until the permittee is authorized to release the indemnity by the Department.
4. A copy of this application and all related documents making up the approved permit shall be given to the applicant and shall be made readily available for review at the work site at all times.
5. Perpetual maintenance of the encroachment is the responsibility of the permittee, its successors and assigns, with the approval of the Department as required, unless otherwise stated.
6. Permittee, its successors and assigns, shall comply with and agree to be bound by the requirements and terms of (a) this application and all related documents making up the approved permit, (b) by the Department's Permits Manual, and (c) by the Manual on Uniform Traffic Control Devices, both manuals as revised to and in effect on the date of issuance of the permit, all of which documents are made a part thereof by this reference. Compliance by the permittee, its successors and assigns, with subsequent revisions to applicable provisions of either manual or other policy of the Department may be made a condition of allowing the encroachment to persist under the permit.
7. Permittee agrees that this and any encroachment may be ordered removed by the Department at any time, and for any reason, upon thirty days written notice to the last known address of the applicant or to the address at the location of the encroachment. The permittee agrees that the cost of removing and of restoring the associated right-of-way is the responsibility of the permittee, its successors and assigns.
8. Permittee, its successors and assigns, agree that if the Department determines that motor vehicular safety deficiencies develop as a result of the installation or use of the encroachment, the permittee, its successors and assigns, shall provide and bear the expenses to adjust, relocate, or reconstruct the facilities, add signs, auxiliary lanes, or other corrective measures reasonably deemed necessary by the Department within a reasonable time after receipt of a written notice of such deficiency. The period within which such adjustments, relocations, additions, modifications, or other corrective measures must be completed will be specified in the notice.
9. Where traffic signals are required as a condition of granting the requested permit or are thereafter required to correct motor vehicular safety deficiencies, as determined by the Department, the costs for signal equipment and installation(s) shall be borne by the permittee, its successors and assigns and the Department in its reasonable discretion and only in accordance with the Department's current policy set forth in the Traffic Operations Manual and Permits Manual. Any modifications to the permittee's entrance necessary to accommodate signalization (including necessary easement(s) on private property) shall be the responsibility of the permittee, its successors and assigns, at no expense to the Department.



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**APPLICATION FOR ENCROACHMENT PERMIT**

10. The requested encroachment shall not infringe on the frontage rights of an abutting owner without their written consent as hereinafter described. Each abutting owner shall express their consent, which shall be binding on their successors and assigns, by the submission of a notarized statement as follows, "I (we), \_\_\_\_\_, hereby consent to the granting of the permit requested by the applicant along Route \_\_\_\_\_, which permit does affect frontage rights along my (our) adjacent real property." By signature(s) \_\_\_\_\_, subscribed and sworn by \_\_\_\_\_, on this date \_\_\_\_\_.
11. The permit, if approved, is subject to the agreement that it shall not interfere with any similar rights or permit(s) previously granted to any other party, except as otherwise provided by law.
12. Permittee shall include documentation which describes the facilities to be constructed. Permittee, its successors and assigns, agree as a condition of the granting of the permit to construct and maintain any and all permitted facilities or other encroachments in strict accordance with the submitted and approved permit documentation and the policies and procedures of the Department. Permittee, its successors and assigns, shall not use facilities authorized herein in any manner contrary to that prescribed by the approved permit. Only normal usage as contemplated by the parties and by this application and routine maintenance are authorized by the permit.
13. Permittee, its successors and assigns, at all times from the date permitted work is commenced until such time as all permitted facilities or other encroachments are removed from the right-of-way and the right-of-way restored, **shall defend, protect, indemnify and save harmless** the Department from any and all liability claims and demands arising out of the work, encroachment, maintenance, or other undertaking by the permittee, its successors and assigns, related or undertaken pursuant to the granted permit, due to any claimed act or omission by the permittee, its servants, agents, employees, or contractors. This provision shall not inure to the benefit of any third party nor operate to enlarge any liability of the Department beyond that existing at common law or otherwise if this right to indemnity did not exist.
14. Upon a violation of any provision of the permit, or otherwise in its reasonable discretion, the Department may require additional action by the permittee, its successors and assigns, up to and including the removal of the encroachment and restoration of the right-of-way. In the event additional actions required by the Department under the permit are not undertaken as ordered and within a reasonable time, the Department may in its discretion cause those or other additional corrective actions to be undertaken and the Department shall recover the reasonable costs of those corrective actions from the permittee, its successors and assigns.
15. Permittee, its successors and assigns, shall use the encroachment premises in compliance with all requirements of federal law and regulation, including those imposed pursuant to Title VI of the Civil Right Act of 1964 (42 U.S.C. § 2000d et seq.) and the related regulations of the U.S. Department of Transportation in Title 49 C.F.R. Part 21, all as amended.
16. Permittee, its successors and assigns, agree that if the Department determines it is necessary for the facilities or other encroachment authorized by the permit to be removed, relocated or reconstructed in connection with the reconstruction, relocation or improvement of a highway, the Department may revoke permission for the encroachment to remain under the permit and may order its removal, relocation or reconstruction by the permittee, its successors and assigns, at the expense of the permittee, except where the Department is required by law to pay any or all of those costs.





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**APPLICATION FOR ENCROACHMENT PERMIT**

17. Permittee agrees that the authorized permit is personal to the permittee and shall remain in effect until such time as (a) the permittee's rights to the adjoining real property to have benefitted from the requested encroachment have been relinquished, (b) until all permit obligations have been assumed by appropriate successors and assigns, and (c) unless and until a written release from permit obligations has been granted by the Department. The permit and its requirements shall also bind the real property to have benefitted from the requested encroachment to the extent permitted by law. The permit and the related encroachment become the responsibility of the successors and assigns of the permittee and the successors and assigns of each property owner benefitting from the encroachment, or the encroachment may not otherwise permissibly continue to be maintained on the right-of-way. (Does not apply to utility encroachments serving the general public.)
18. If work authorized by the permit is within a highway construction project in the construction phase, it shall be the responsibility of the permittee to make personal contact with the Department's Engineer on the project in order to coordinate all permitted work with the Department's prime contractor on the project.
19. This permit is not intended to, nor shall it, affect, alter or alleviate any requirement imposed upon the permittee, its successors and assigns, by any other agency.
20. Permittee, its successors and assigns, agree to contain and maintain all dirt, mud, and other debris emanating from the encroachment away from the surrounding right-of-way and the travel way of the highway hereafter and at all times that its obligations under the permit remain in effect.
21. Before You Dig: The contractor is instructed to call 1-800-752-6007 to reach KY 811, the One-Call system for information on the location of existing underground utilities. The call is to be placed a minimum of two (2) and no more than ten (10) business days prior to excavation. The contractor should be aware that the owners of underground facilities are not required to be members of the KY 811 One-Call Before U-Dig (BUD) service. The contractor must coordinate excavation with the utility owners, including those whom do not subscribe to KY 811. It may be necessary for the contractor to contact the County Clerk to determine what utility companies have facilities in the area.
22. The undersigned Utility acknowledges ownership and control of the facilities proposed to be installed, modified, or extended by the Applicant/Permittee and agrees to be bound by the requirements and terms of this application and all related documents making up the approved permit, by the Department's Permits Guidance Manual, and by all applicable regulations and statutes in effect on the date of issuance of the permit. This information and application is certified correct to the best knowledge and belief of the undersigned Utility.

Duke Energy

UTILITY

John Perkins

NAME (Utility Representative)

SIGNATURE (Utility Representative)

Digitally signed by John Perkins  
Date: 2023.06.27 13:31:46 -04'00'

Sr Engineer

TITLE (Utility Representative)

6-27-23

DATE

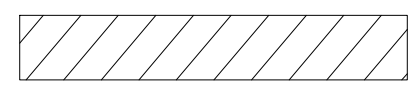

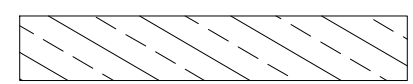

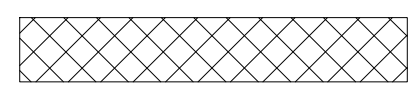









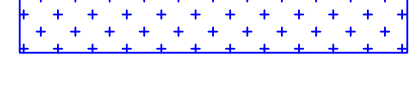





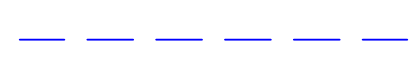





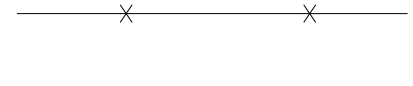

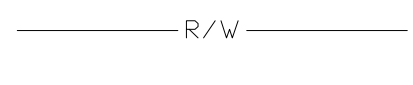

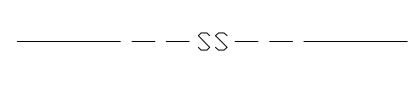
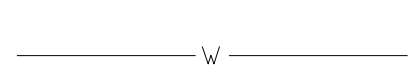



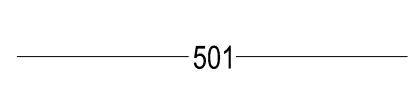

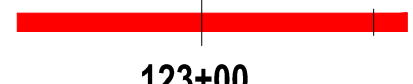
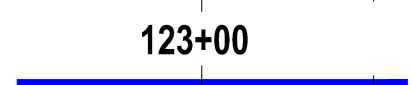

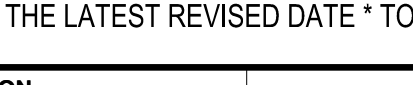

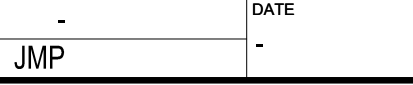



To Submit a Locate Request  
24 Hours a Day, Seven Days a Week:  
Call 811 or 800-752-6007

**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSITIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001346)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / P/L	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**FOR PERMITTING PURPOSES ONLY**

BURNS & MCDONNELL  
ENGINEERING COMPANY, INC.  
STATE LICENSE #43

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REF. DWG(S)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	CNS	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
						PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	JMP	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	-	

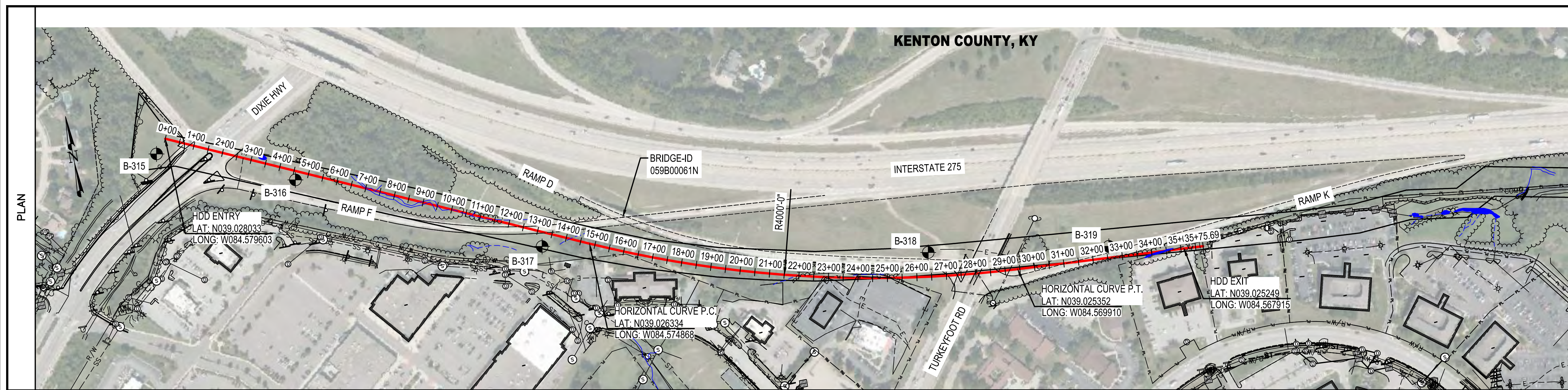


**AM07 PHASE 2**  
**ABBREVIATIONS & LEGEND**  
**ERLANGER, KY**  
ERLANGER, KY

SHEET(S) XX OF XX	DWG SCALE NONE
DWG DATE 09/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
<b>PNG - G-043-0001431</b>	<b>B</b>
ERLANGER/AM07	

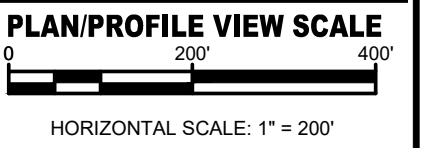
PROFESSIONAL ENGINEER STAMP

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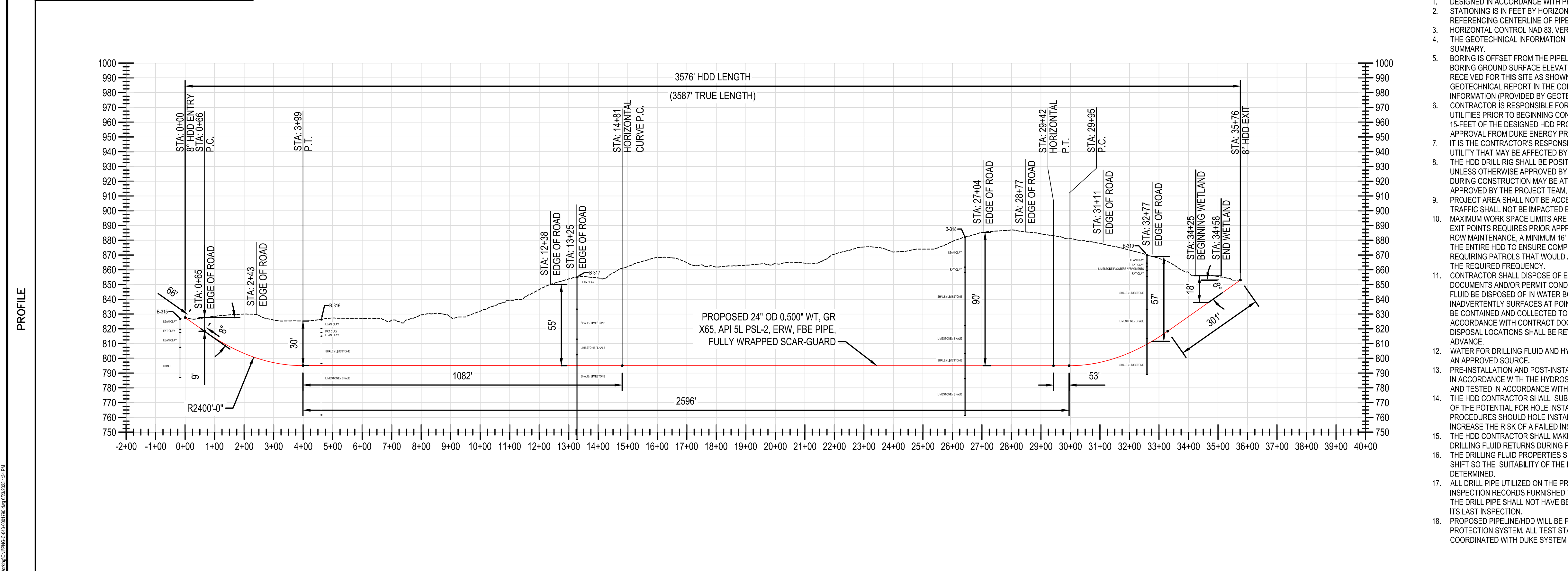


REQUIRED TOLERANCES	
ITEM	TOLERANCE
PILOT HOLE ENTRY LOCATION	NO MODIFICATIONS SHALL BE MADE WITHOUT APPROVAL FROM THE COMPANY ENGINEER. IN THE EVENT THE PILOT HOLE IS ADVANCED FROM EXIT TO ENTRY OR A PILOT HOLE INTERSECT IS PERFORMED, TOLERANCES SHALL BE APPROVED BY COMPANY ENGINEER.
PILOT HOLE EXIT LOCATION	UP TO 20-FEET BEYOND OR 10-FEET SHORT OF THE EXIT STAKE BETWEEN 5-FEET LEFT AND 5-FEET RIGHT OF CENTERLINE.
MINIMUM ALLOWABLE THREE-JOINT COMBINED RADIUS	OVER ANY CONSECUTIVE THREE-JOINT SECTION SHALL NOT BE LESS THAN 1600'.
PILOT HOLE DEPTH	UP TO 2-FEET ABOVE THE DESIGN DRILL PROFILE ALLOWED, UP TO 10-FEET BELOW THE DESIGN DRILL PROFILE ALLOWED.
PILOT HOLE ALIGNMENT	SHALL REMAIN WITHIN 5-FEET LEFT OR RIGHT OF THE HDD ALIGNMENT.
ENTRY ANGLE	UP TO 1° INCREASE FROM THE DESIGNED ENTRY ANGLE; NO DECREASE IN ENTRY ANGLE WILL BE ALLOWED.
EXIT ANGLE	NO INCREASE FROM THE DESIGNED EXIT ANGLE; UP TO 2° DECREASE IN EXIT ANGLE WILL BE ALLOWED.

- INSTALLATION REQUIREMENTS:**
- CONTRACTOR SHALL SUPPLY A PULLBACK LIFTING PROCEDURE, INCLUDING SUPPORT SPACING AND HEIGHT, AS PART OF THEIR FINAL HDD WORK PLAN.
  - CONTRACTOR SHALL ASSESS THE NEED FOR AND SUPPLY APPROPRIATE BALLAST DURING PULLBACK.
  - THE MINIMUM ALLOWABLE RADIUS OF CURVATURE FOR HANDLING AND POSITIONING THE CARRIER PIPE IN PREPARATION FOR PULLBACK OPERATIONS IS 1,200 FEET.
  - THE HDD CONTRACTOR SHALL PROVIDE WITH THEIR HDD WORK PLAN THE MAXIMUM ANTICIPATED PULL FORCE REQUIRED TO INSTALL THE CARRIER PIPE AND THE MAXIMUM ALLOWABLE PULL FORCE THAT CAN BE APPLIED TO THEIR DOWNHOLE TOOLING.
- POST-INSTALLATION REQUIREMENTS:**
- THE HDD CONTRACTOR SHALL BE RESPONSIBLE FOR PRODUCING AND SUBMITTING AN AS-BUILT DRAWING OF THE PILOT HOLE SURVEY DATA WITHIN TWO WEEKS OF THE COMPLETION OF PULLBACK OPERATIONS. THIS SHALL INCLUDE A TABULATION OF THE SUPPORTING AS-BUILT SURVEY DATA USED TO GENERATE THE DRAWING.
  - UPON COMPLETION OF INSTALLATION, A CALIPER PIG SURVEY SHALL BE COMPLETED IN ACCORDANCE WITH CONTRACT DOCUMENTS.



ENTRY ANGLE	EXIT ANGLE	LENGTH OF BORE	TRUE LENGTH
8°	8°	3576'-0"	3587'-0"



- GENERAL NOTES:**
- DESIGNED IN ACCORDANCE WITH PHMSA 49 CFR 192 GUIDELINES.
  - STATIONING IS IN FEET BY HORIZONTAL MEASUREMENT, FOR HDD SURVEY CONTROL, REFERENCING CENTERLINE OF PIPE.
  - HORIZONTAL CONTROL NAD 83. VERTICAL CONTROL ELEV. REF NAVD 88.
  - THE GEOTECHNICAL INFORMATION PROVIDED ON THIS DRAWING IS A GENERAL SUMMARY.
  - BORING IS OFFSET FROM THE PIPELINE CENTERLINE AS SHOWN IN THE PLAN VIEW. BORING GROUND SURFACE ELEVATION WAS PROVIDED WITH THE GEOTECHNICAL DATA RECEIVED FOR THIS SITE AS SHOWN ON THE PROFILE VIEW. REFER TO THE APPLICABLE GEOTECHNICAL REPORT IN THE CONTRACT DOCUMENTS FOR MORE DETAILED INFORMATION (PROVIDED BY GEOTECHNOLOGY LLC, DATED XXX/XX/XXXX).
  - CONTRACTOR IS RESPONSIBLE FOR CALLING KY 811 AND LOCATING ALL UNDERGROUND UTILITIES PRIOR TO BEGINNING CONSTRUCTION. IF ANY UTILITY IS LOCATED WITHIN 15-FEET OF THE DESIGNED HDD PROFILE AND ALIGNMENT, CONTRACTOR SHALL OBTAIN APPROVAL FROM DUKE ENERGY PRIOR TO INITIATING HDD OPERATIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IDENTIFY AND PROTECT ANY FOREIGN UTILITY THAT MAY BE AFFECTED BY THE HDD OPERATIONS.
  - THE HDD DRILL RIG SHALL BE POSITIONED ON THE ENTRY SIDE OF THE CROSSING UNLESS OTHERWISE APPROVED BY THE PROJECT TEAM. THE USE OF DUAL DRILL RIGS DURING CONSTRUCTION MAY BE AT THE DISCRETION OF THE HDD CONTRACTOR, TO BE APPROVED BY THE PROJECT TEAM.
  - PROJECT AREA SHALL NOT BE ACCESSED VIA I-275 OR ITS AFFILIATED ON/OFF RAMP. TRAFFIC SHALL NOT BE IMPACTED BY CONSTRUCTION ACTIVITIES.
  - MAXIMUM WORK SPACE LIMITS ARE DEPICTED. CLEARING BETWEEN THE ENTRY AND EXIT POINTS REQUIRES PRIOR APPROVAL FROM THE ENVIRONMENTAL INSPECTOR, FOR ROW MAINTENANCE. A MINIMUM 16' SHALL BE CLEARED FROM GROUND TO SKY ALONG THE ENTIRE HDD TO ENSURE COMPLIANCE WITH PHMSA PART 192 REGULATIONS REQUIRING PATROLS THAT WOULD ALLOW FOR AERIAL SURVEILLANCE OF THE ROW ON THE REQUIRED FREQUENCY.
  - CONTRACTOR SHALL DISPOSE OF EXCESS FLUID IN ACCORDANCE WITH CONTRACT DOCUMENTS AND/OR PERMIT CONDITIONS. UNDER NO CIRCUMSTANCES SHALL DRILLING FLUID BE DISPOSED OF IN WATER BODIES OR WETLANDS. ANY DRILLING FLUID WHICH INADVERTENTLY SURFACES AT POINTS OTHER THAN THE ENTRY OR EXIT POINTS SHALL BE CONTAINED AND COLLECTED TO THE EXTENT PRACTICAL AND DISPOSED OF IN ACCORDANCE WITH CONTRACT DOCUMENTS AND/OR PERMIT CONDITIONS. ALL DISPOSAL LOCATIONS SHALL BE REVIEWED AND APPROVED BY DUKE ENERGY IN ADVANCE.
  - WATER FOR DRILLING FLUID AND HYDROSTATIC TEST WATER SHALL BE OBTAINED FROM AN APPROVED SOURCE.
  - PRE-INSTALLATION AND POST-INSTALLATION HYDROSTATIC TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE HYDROSTATIC TEST PLAN. TEST WATER SHALL BE SAMPLED AND TESTED IN ACCORDANCE WITH PERMIT REQUIREMENTS.
  - THE HDD CONTRACTOR SHALL SUBMIT WITH THEIR HDD WORK PLAN AN ASSESSMENT OF THE POTENTIAL FOR HOLE INSTABILITY AND THEIR PROPOSED MITIGATION PROCEDURES SHOULD HOLE INSTABILITY IMPACT DRILLING OPERATIONS AND/OR INCREASE THE RISK OF A FAILED INSTALLATION.
  - THE HDD CONTRACTOR SHALL MAKE ALL REASONABLE ATTEMPTS TO MAINTAIN DRILLING FLUID RETURNS DURING PILOT HOLE AND REAMING OPERATIONS. THE DRILLING FLUID PROPERTIES SHALL BE TESTED A MINIMUM OF THREE (3) TIMES PER SHIFT SO THE SUITABILITY OF THE DRILLING FLUID FOR THE GIVEN CONDITIONS CAN BE DETERMINED.
  - ALL DRILL PIPE UTILIZED ON THE PROJECT MUST BE INSPECTED AND DRILL PIPE INSPECTION RECORDS FURNISHED TO DUKE ENERGY PRIOR TO USE ON THE PROJECT. THE DRILL PIPE SHALL NOT HAVE BEEN USED ON ANOTHER PROJECT SUBSEQUENT TO ITS LAST INSPECTION.
  - PROPOSED PIPELINE/HDD WILL BE PROTECTED BY THE EXISTING AM07 CATHODIC PROTECTION SYSTEM. ALL TEST STATIONS INSTALLATIONS AND CP EFFORTS ARE TO BE COORDINATED WITH DUKE SYSTEM INTEGRITY DEPARTMENT.
- PILOT HOLE REQUIREMENTS:**
- AT ALL TIMES THE HDD CONTRACTOR SHALL PROVIDE AND MAINTAIN INSTRUMENTATION TO DOCUMENT AND ACCURATELY LOCATE THE PILOT HOLE. THIS EFFORT SHALL INCLUDE THE USE OF A DOWNHOLE STEERING TOOL AS WELL AS A SECONDARY SURVEY SYSTEM (TRUTRACK, PARATRACK, OR EQUIVALENT). THE HDD CONTRACTOR WILL NOT BE ALLOWED TO DRILL ANY PORTION OF THE PILOT HOLE WITHOUT THE USE OF A SECONDARY SURVEY SYSTEM UNLESS AGREED TO IN ADVANCE BY THE COMPANY OR IN EVENT A GYROSCOPIC STEERING TOOL IS UTILIZED.
  - AFTER SURVEYING THE SECONDARY SURVEY WIRE, THE HDD CONTRACTOR SHALL REPORT ANY LACK OF CLOSURE THAT MAY INDICATE INCORRECTLY LOCATED ENTRY AND/OR EXIT POINTS OR ANY OTHER POTENTIAL DISCREPANCIES WITH THE DESIGN INFORMATION PROVIDED ON THIS DESIGN DRAWING.
  - IN NO CASE WILL THE PILOT HOLE BE ACCEPTABLE IF ITS LOCATION WOULD RESULT IN THE PIPELINE BEING INSTALLED IN VIOLATION OF THE RIGHT-OF-WAY AND PERMIT STIPULATIONS SECTION OF THE CONTRACT, AND FEDERAL, STATE, OR LOCAL PERMIT REQUIREMENTS OR REQUIRED CLEARANCES BETWEEN COMPANY AND FOREIGN OWNED UTILITIES AND STRUCTURES.
  - PRIOR TO REAMING, THE CONTRACTOR SHALL SUBMIT AS-DRILLED DATA AND CALCULATED LOCATION TO THE COMPANY FOR APPROVAL OF THE PILOT HOLE.
- REAMING REQUIREMENTS:**
- AFTER COMPLETION OF THE PILOT HOLE, THE HDD CONTRACTOR SHALL MAINTAIN A CONTINUOUS STRING OF DRILL PIPE DOWNHOLE BETWEEN ENTRY AND EXIT AT ALL TIMES EXCEPT WHEN RE-ESTABLISHING A CONTINUOUS STRING OF DRILL PIPE IN THE EVENT OF A TWIST OFF DOWNHOLE.
  - THE HDD CONTRACTOR SHALL COMPLETE AT A MINIMUM ONE (1) SWAB PASS TO EVALUATE THE CONDITION OF THE HOLE PRIOR TO PULLBACK OPERATIONS. THE HDD CONTRACTOR SHALL MEET WITH DUKE ENERGY AND REVIEW THE DATA COLLECTED DURING THE REAMING AND SWAB PASSES BEFORE PULLBACK OPERATIONS BEGIN.

**PRELIMINARY - NOT FOR CONSTRUCTION**

MATERIAL CLASS / MAOP  
BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43

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DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL \*DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \*TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	AREA CODE	-	-	REGIONAL ENGINEER
B	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
						PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	AKT	-	
						STATION ID	XX-X-XX-XXX-XXXX	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP

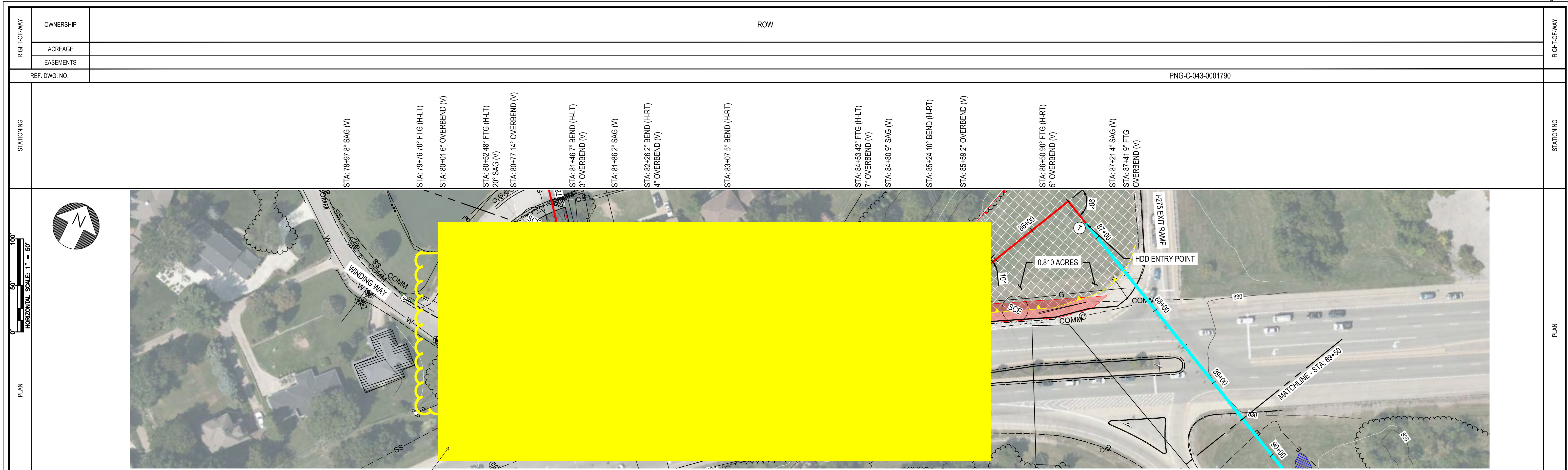


**AM07-PH2  
HDD ALIGNMENT SHEET  
ERLANGER, KY**

REF. DWG(S)	
SHEET(S)	1 OF X
DWG DATE	08/24/2022
DWG SCALE	AS NOTED
DRAWING NUMBER	PNG -C-043-0001790
REVISION	B
C/ERLANGER/AM07	

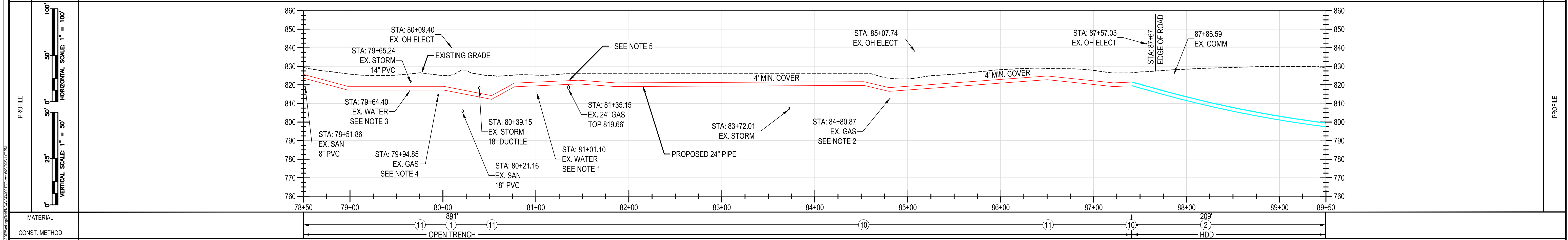
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DIXIE HWY ENROACHMENT PERMITTED SEPARATELY PERMIT # 06-2023-00530

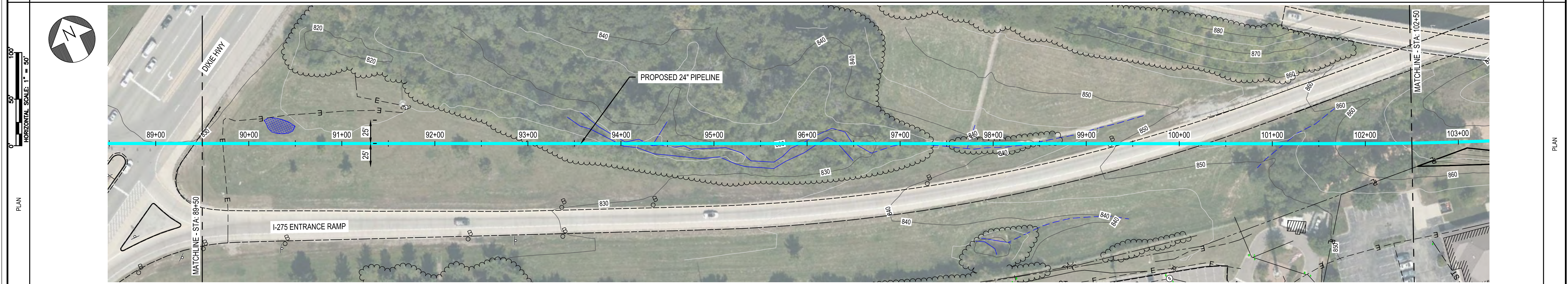
- CONSTRUCTION NOTES:
1. WATER LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 9.1' WITH NO FINDINGS.
  2. GAS LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 10' WITH NO FINDINGS.
  3. WATER LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 8.56' WITH NO FINDINGS.
  4. GAS LINE WAS UNABLE TO BE LOCATED WITH SUBSURFACE INVESTIGATION. CONTRACTOR DUG TO 10.28' WITH NO FINDINGS.
  5. 3.5-FT MINIMUM COVER FROM GRADE TO BE MAINTAINED WHILE CROSSING EXISTING DUKE 24" PIPELINE. CLEARANCE ON EXISTING GAS EXPECTED TO BE APPROXIMATELY 9-INCHES.



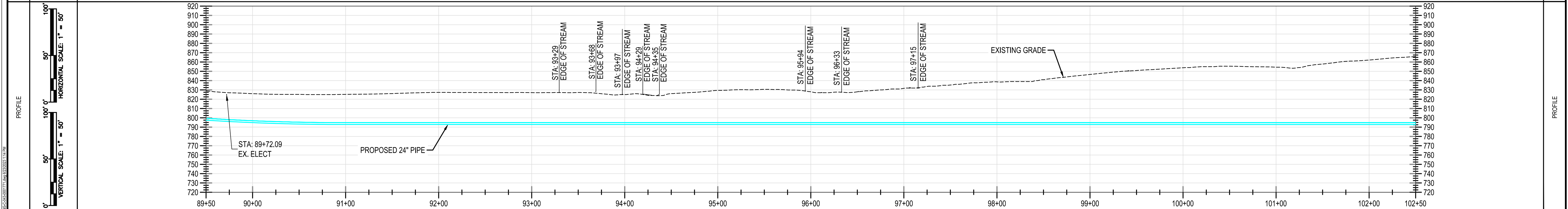
<p>BURNS &amp; MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43</p>	<p>*PROPRIETARY &amp; CONFIDENTIAL *ALL RIGHTS RESERVED *DO NOT SCALE THIS DRAWING *USE DIMENSIONS ONLY DUKE ENERGY &amp; PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS &amp; INFO MANAGEMENT (RIM)</p>	<p>REF. DWG(S) PNG-C-043-0001790</p>																																																																																			
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RIGHT-OF-WAY	OWNERSHIP		RIGHT-OF-WAY
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	EASEMENTS		
REF. DWG. NO.	PNG-C-043-0001790		

STATIONING		STATIONING
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PIPE DATA (SLOPE STATIONING)	STA.	WELD #	JOINT LENGTH (CONV.)	HEAVY
	STA.	WELD #	JOINT LENGTH (CONV.)	



MATERIAL	
CONST. METHOD	HDD
CLASS / MAOP	CLASS 3 / 1000 PSIG

BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43  PROFESSIONAL ENGINEER'S STAMP	*PROPRIETARY & CONFIDENTIAL *ALL RIGHTS RESERVED *DO NOT SCALE THIS DRAWING *USE DIMENSIONS ONLY DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL *DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE *TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)				REF. DWG(S) PNG-C-043-0001790						
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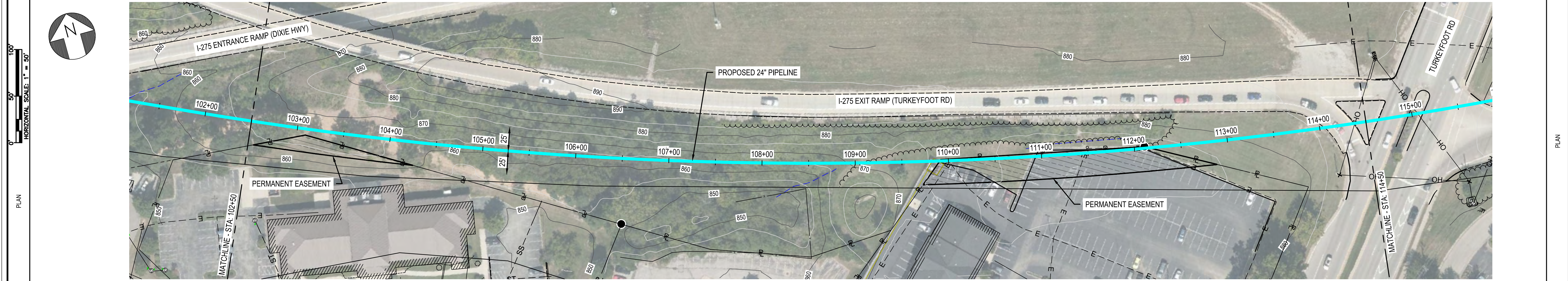
**AM07 PHASE 2  
ALIGNMENT SHEET 9  
ERLANGER, KY**

ERLANGER, KY

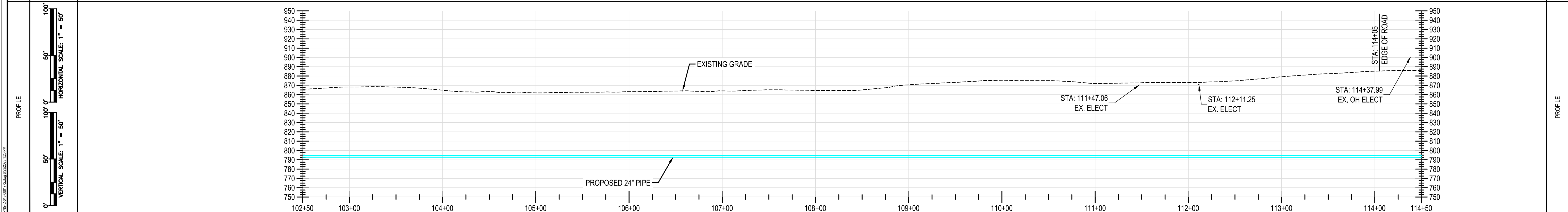
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DWG DATE	09/13/2022	SUPERSEDED	-
DRAWING NUMBER		REVISION	
<b>PNG -C-043-0001771</b>		<b>C</b>	
C:ERLANGER/AM07			

RIGHT-OF-WAY	OWNERSHIP		RIGHT-OF-WAY
	ACREAGE		
	EASEMENTS		
REF. DWG. NO.	PNG-C-043-0001790		

STATIONING		STATIONING
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PIPE DATA (SLOPE STATIONING)	STA.	WELD. f	COV.	JOINT LENGTH	HEAVY
	STA.	WELD. f	COV.		



MATERIAL	
CONST. METHOD	1200 (2) HDD
CLASS / MAOP	CLASS 3 / 1000 PSIG

BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43

DUKE ENERGY & PIEDMONT NATURAL GAS DRAWINGS ARE CONFIDENTIAL \*DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \*TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE, ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO MANAGEMENT (RIM)

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	COPYRIGHT 2019 DUKE ENERGY   Piedmont Natural Gas		





Andy Beshear  
GOVERNOR

**ENERGY AND ENVIRONMENT CABINET**  
**DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

Rebecca W. Goodman  
SECRETARY

300 Sower Boulevard  
Frankfort, Kentucky 40601  
Phone: (502) 564-2150  
Fax: 502-564-4245

Anthony R. Hatton  
COMMISSIONER

**STREAM CONSTRUCTION PERMIT**  
**For Construction In Or Along A Stream**

Issued to: **Duke Energy Kentucky Inc**  
Address: **139 E 4th St**  
**Cincinnati, OH 45202**

Permit effective date: **March 14, 2023**  
Permit expires on: **March 14, 2024**

Permit No.: **32944**

Agency Interest: **102595**  
Activity ID: **APE20230001**

In accordance with KRS 151.250 and KRS 151.260, the Energy and Environment Cabinet approves the application dated **March 14, 2023** for **replacement of 16,368 feet of 24-inch-diameter steel gas pipeline with approximately 17,424 feet (3.3 miles) of 24-inch-diameter pipeline and installation of a new station east of Kenton Lands Road in the floodplain of unnamed tributary of Dry Creek, with general coordinates 39.027998, -84.579816, in Kenton County.**

There shall be no deviation from the plans and specifications submitted and hereby approved unless the proposed change shall first have been submitted to and approved in writing by the Cabinet. This approval is subject to the attached limitations. **Please read these limitations carefully!** If you are unable to adhere to these limitations for any reason, please contact this office prior to construction.

This permit is valid from the standpoint of stream obstruction only. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies. Specifically if the project involves work in a stream, such as bank stabilization, dredging, relocation, or in designated wetlands, a 401 Water Quality Certification from the Division of Water will be required.

This permit is nontransferable and all construction must be completed by the expiration date noted above. Year by year extensions may be requested subject to the requirements of 401KAR 4:060 Section 3 (5) (a) and (b). A request for extension, including the Agency Interest and permit numbers listed above and statement that the scope of the project has not changed can be emailed to [DOWFloodplain@ky.gov](mailto:DOWFloodplain@ky.gov).

Any violation of the Water Resources Act of 1966 as amended is subject to penalties as set forth in KRS 151.990.

If you have any questions regarding this permit, please call Mr. Solitha Dharman at 502-782-6936.

Sincerely,

**David Coe, P.E., Supervisor**  
Floodplain Management Section  
Water Resources Branch  
Division of Water

c: Florence Regional Office  
Brooke Harrison, Burns & McDonnell, agent  
Rob Himes, City of Crestview Hills/Kenton County Floodplain Coordinator  
File



## FINAL CONSTRUCTION REPORT

NAME: Duke Energy Kentucky Inc

PERMIT NO: 32944

AI NO: 102595 Activity ID: APE20230001

**Has all work on this project been completed according to the plans and specifications on file with the Division of Water?**

Yes: \_\_\_\_\_

No: \_\_\_\_\_ **If no, explain. You may include attachments if necessary.**

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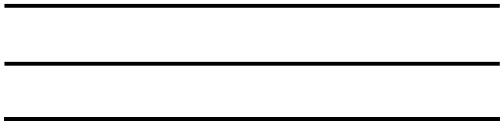
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eMail Instructions

- Copy and paste the Final construction Report text above and your responses into a blank eMail or
- Enter your name, permit number, AI #, activity # and your project completion date/explanation if not complete into a blank eMail.
- Email to [DOWFloodplain@ky.gov](mailto:DOWFloodplain@ky.gov) with subject line of "FCR"

Mailing Instructions

- Fold the top edge of this page to the top edge of this box.
- Fold the bottom edge of the page up to meet the top fold and tape shut.
- Fill out return address portion
- Affix a stamp and mail.



Place  
Stamp  
Here

**Floodplain Management Section  
Division of Water  
300 Sower Boulevard  
Frankfort, KY 40601**

**Stream Construction Permit**  
 Duke Energy Gas Pipeline - Kenton Co  
 Facility Requirements  
 Permit Number: 32944  
 Activity ID No.: APE20230001

Page 1 of 3

**PORT000000002 (AI: 102595: Duke Energy) replacement of 16,368 feet of 24-inch-diameter steel gas pipeline with approximately 17,424 feet (3.3 miles) of 24-inch-diameter pipeline and installation of a new station east of Kenton Lands Road in the floodplain of unnamed tributary of Dry Creek, with general coordinates 39.027998, -84.579816, in Kenton County.:**

**Submittal/Action Requirements:**

---

Condition No.	Condition
S-1	Duke Energy Kentucky Inc. must submit final construction report within 90 days after completion of construction. Duke Energy Kentucky Inc. must notify in writing that the project has been completed in accordance with the approved plans and specifications. A Final Construction Report Form is enclosed. [401 KAR 4:060 Section 6]

**Narrative Requirements:**

---

Condition No.	Condition
T-1	The issuance of this permit by the cabinet does not convey any property rights of any kind or any exclusive privilege. [KRS 151.250 & 401 KAR 4:060]
T-2	This permit is issued from the standpoint of stream obstruction only and does not constitute certification of any other aspect of the proposed construction. The applicant is liable for any damage resulting from the construction, operation, or maintenance of this project. This permit has been issued under the provisions of KRS Chapter 151.250 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal and local agencies. [KRS 151.250]
T-3	A copy of this permit must be available at the construction site. [KRS 151.250]
T-4	Any work performed by or for Duke Energy Kentucky Inc. that does not fully conform to the submitted application or drawings and the limitations set forth in this permit, is subject to partial or total removal and enforcement actions pursuant to KRS 151.280 as directed by the Kentucky Department for Environmental Protection. [KRS 151.280]
T-5	Any design changes or amendments to the approved plans must be submitted to the Division of Water and approved in writing prior to implementation. [KRS 151.250]
T-6	Since City of Crestview Hill/Kenton County participates in the National Flood Insurance Program, a local floodplain permit must be obtained prior to beginning of construction. Upon completion of construction Duke Energy Kentucky Inc. must contact the local permitting agency for final approval of the construction for compliance with the requirements of the local floodplain ordinance. [401 KAR 4:060 Section 9(c)]

**Stream Construction Permit**  
 Duke Energy Gas Pipeline - Kenton Co  
 Facility Requirements  
 Permit Number: 32944  
 Activity ID No.: APE20230001

Page 2 of 3

**PORT000000002 (AI: 102595: Duke Energy) replacement of 16,368 feet of 24-inch-diameter steel gas pipeline with approximately 17,424 feet (3.3 miles) of 24-inch-diameter pipeline and installation of a new station east of Kenton Lands Road in the floodplain of unnamed tributary of Dry Creek, with general coordinates 39.027998, -84.579816, in Kenton County.:**

**Narrative Requirements:**

Condition No.	Condition
T-7	Erosion prevention measures, sediment control measures, and other site management practices shall be designed, installed, and maintained in an effective operating condition to prevent migration of sediment off site. [KRS 224.70-110]
T-8	To avoid secondary adverse impacts, all materials used shall be stable and inert, free from pollutants and floatable objects, and shall meet all appropriate engineering standards. (Inert here means materials that are not chemically reactive and that will not rot or decompose, such as soil, rock, broken concrete or similar materials.). [401 KAR 4:060 Section 7]
T-9	After construction is completed, disturbed area shall be restored as closely as possible to its original location and configuration, and shall be completed without compromising the conveyance capacity of the stream at any time. [401 KAR 4:060]
T-10	All debris and excess material shall be removed for disposal outside of the base floodplain. [401 KAR 4:060]
T-11	Upon completion of construction all disturbed areas shall be seeded and mulched or otherwise stabilized to prevent erosion. [401 KAR 4:060]
T-12	The entry of mobile equipment into the stream channel shall be limited as much as reasonably possible to minimize degradation of the waters of the Commonwealth. [401 KAR 4:060]
T-13	Construction other than as authorized by this permit shall require written approval from the Division of Water. [401 KAR 4:060]
T-14	The existing stream flow shall be maintained at all times during construction using standard flow diversion or pump around methods. Cofferdams or other structures placed in the stream shall be removed immediately if adverse flooding conditions result or if a flooding event is imminent. [401 KAR 4:060 Section 4]

**Stream Construction Permit**  
 Duke Energy Gas Pipeline - Kenton Co  
 Facility Requirements  
 Permit Number: 32944  
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Page 3 of 3

**PORT000000002 (AI: 102595: Duke Energy) replacement of 16,368 feet of 24-inch-diameter steel gas pipeline with approximately 17,424 feet (3.3 miles) of 24-inch-diameter pipeline and installation of a new station east of Kenton Lands Road in the floodplain of unnamed tributary of Dry Creek, with general coordinates 39.027998, -84.579816, in Kenton County.:**

**Narrative Requirements:**

Condition No.	Condition
T-15	The Sub-fluvial crossing must meet the following criteria whichever is applicable: (1) During the construction of the crossing, no material may be placed in the stream or in the flood plain of the stream to form construction pads, coffer dams, access roads, etc., unless prior approval has been obtained from the cabinet. (2) The trench shall be backfilled as closely as possible to the original contour. All excess material from construction of the trench shall be disposed of outside of the flood plain unless the applicant has received prior approval from the cabinet to fill within the flood plain. (3) For subfluvial crossings of erodible channels, there shall be at least thirty (30) inches clear to the top of the pipe or conduit at all points. (4) For subfluvial crossings of nonerodible channels, there shall be at least six (6) inches of clear cover above the top of the pipe or conduit at all points, and the pipe or conduit shall be encased on all sides by at least six (6) inches of concrete. (5) The weight of a pipe and its contents during normal operating conditions at all points must exceed that of an equal volume of water, or the applicant must provide the division with sufficient information to show that the pipe and joints have sufficient strength. [401 KAR 4:050 Section 2]
T-16	The permittee must obtain a Water Quality Certification or a determination that none is required through the Division of Water, Water Quality Section before beginning construction. Contact the Water Quality Certification Supervisor at 401WQC@ky.gov or (502) 564-3410. [KRS 224.16-050 & Clean Water Act Section 401]



**DEPARTMENT OF THE ARMY**  
**U.S. ARMY CORPS OF ENGINEERS, LOUISVILLE DISTRICT**  
**600 DR. MARTIN LUTHER KING JR PL**  
**LOUISVILLE, KY 40202**

May 2, 2023

Regulatory Division  
 North Branch  
 ID No. LRL-2022-01105-cat

Mr. Jeff Schuchter  
 Duke Energy  
 139 East 4th Street  
 Cincinnati, Ohio 45202  
 Jeff.Schuchter@Duke-Energy.com

Dear Mr. Schuchter:

This is in response to a request for authorization submitted on your behalf by Burns and McDonnell (agent) to temporarily discharge 149 cubic yards of fill material into 300 linear feet (0.045 acre) of stream and 0.05 acre of wetland for the installation of a 24-inch diameter natural gas pipeline in Kenton Co., Kentucky (see table below). The information supplied by your agent was reviewed to determine whether a Department of the Army (DA) permit will be required under the provisions of Section 404 of the Clean Water Act.

Water Name	Lat.	Long.	Type	Impact and Discharge Amount	Impact Description
S-1 – UNT Horse Creek	39.02342	-84.55710	Intermittent	50 feet / 0.009 acre 16.2 cubic yards	Open cut trench with temporary timber mat and culvert crossing. Timber mats and culverts will be removed postconstruction.
S-3 – UNT Horse Creek	39.02327	-84.55716	Ephemeral	50 feet / 0.001 acre 2.4 cubic yards	Temporary placement of timber mats for workspace over stream with no culverts or fill within stream. Timber mats will be removed post-construction.
S-5 – UNT Horse Creek	39.02524	-84.56374	Ephemeral	40 feet / 0.001 acre 2.8 cubic yards	Temporary placement of timber mats for workspace over stream with no culverts or fill within stream. Timber mats will be removed post-construction.
S-13 – UNT Dry Creek	39.03056	-84.59265	Ephemeral	20 feet / 0.001 acre 3.7 cubic yards	Open cut trench with timber mat equipment crossing. No culvert placement. Timber mats will be removed post-construction.
S-14 – UNT Dry Creek	39.03086	-84.59172	Ephemeral	20 feet / 0.001 acre 2.2 cubic yards	Open cut trench with timber mat equipment crossing. No culvert placement. Timber mats will be removed post-construction.
S-15 – UNT Dry Creek	39.03138	-84.58865	Perennial	20 feet / 0.002 acre 5.9 cubic yards	Open cut trench with timber mat equipment crossing. No culvert placement. Timber mats will be removed post-construction.
S-16 – UNT Dry Creek	39.03188	-84.59797	Intermittent	50 feet / 0.01 acre 21.1 cubic yards	Open cut trench with temporary timber mat and culvert crossing. Timber mats and culverts will be removed postconstruction.
S-17 – UNT Dry Creek	39.03130	-84.59697	Perennial	50 feet / 0.02 acre 34.6 cubic yards	Open cut trench with temporary timber mat and culvert crossing. Timber mats and culverts will be removed postconstruction.
W-2	39.02212	-84.55680	PSS	0.04 acre 46 cubic yards	Workspace. Temporary placement of timber mats which will be removed post-construction.
W-4	39.02512	-84.56449	PEM	0.01 acre 14 cubic yards	Workspace. Temporary placement of timber mats which will be removed post-construction.
Total Temporary Stream Impacts				300 linear feet / 0.045 acre	
Total Temporary Wetland Impacts				0.05 acre	

Your project includes a discharge of dredged or fill material into waters of the United States associated with the construction, maintenance, repair, and removal of oil and natural gas pipelines and associated facilities. The project is authorized under the provisions of 33 CFR 330 Nationwide Permit (NWP) No. 12, Oil or Natural Gas Pipeline Activities, as published in the Federal Register January 13, 2021. Under the provisions of this authorization, you must comply with the enclosed Terms and General Conditions for NWP No. 12, and the following Special Condition(s):

Special Condition 1: The Permittee shall comply with all conditions of the General Water Quality Certification (WQC) and Conditions for NWP No. 12 issued by the Kentucky Division of Water (KDOW) on December 18, 2020, which are incorporated herein by reference.

Special Condition 2: Tree clearing shall only occur during the unoccupied timeframe (October 15-March 31) to minimize adverse effects to the federally-listed northern long-eared bat and the Indiana bat. If additional forested areas not previously considered in the DA permit application are to be cleared, the Permittee shall notify the Corps and the USFWS in advance of any additional tree clearing to determine if re-initiation of Endangered Species Act consultation is required.

This verification is valid until the NWP is modified, reissued, or revoked. NWP No. 12 will be modified, reissued, or revoked on March 14, 2026. It is incumbent upon you to remain informed of changes to the NWPs. If you commence or are under contract to commence this activity before the date that the relevant NWP is modified or revoked, you will have 12 months from the date of the modification or revocation of the NWP to complete the activity under the present terms and conditions of this NWP. The enclosed Compliance Certification must be submitted to the District Engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later. Please note that we also perform periodic inspections to ensure compliance with our permit conditions and applicable Federal laws. A copy of this letter will be forwarded to your agent and to the KDOW.

If you have any questions, please contact me directly at 502-315-6690 or [Cody.a.Thayer@usace.army.mil](mailto:Cody.a.Thayer@usace.army.mil). Any correspondence on this matter should refer to our ID Number LRL-2022-01105-cat.

Sincerely,



Date: 2023.05.02  
06:48:45 -04'00'

Cody Thayer  
Project Manager, North Branch  
Regulatory Division

Enclosures

**Compliance Certification:**

**Permit Number: LRL-2022-01105-cat**

**Name of Permittee: Duke Energy: Mr. Jeff Schuchter**

**Date of Issuance: May 2, 2023**

Upon completion of the activity authorized by this permit and any mitigation required by this permit, sign this certification and return it to the following address:

U.S. Army Corps of Engineers  
CELRL-RDN  
P.O. Box 59  
Louisville, Kentucky 40201

Please note that your permitted activity is subject to a compliance inspection by an U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, or revocation.

I hereby certify that the work authorized by the above referenced permit has been completed in accordance with the terms and conditions of the said permit, and required mitigation was completed in accordance with the permit conditions.

\_\_\_\_\_  
Signature of Permittee

\_\_\_\_\_  
Date



COORDINATING AGENCY

Mr. Mike Heyn  
Kentucky Energy & Environment Cabinet  
Division of Water  
300 Sower Boulevard, 3<sup>rd</sup> Floor  
Frankfort, Kentucky 40601  
401wqc@ky.gov

AGENT

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# 2021 Nationwide Permit Summary

US Army Corps  
of Engineers  
Louisville District ®

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## No. 12. Oil or Natural Gas Pipeline Activities

(NWP Final Rule, 86 FR 2744)

Activities required for the construction, maintenance, repair, and removal of oil and natural gas pipelines and associated facilities in waters of the United States, provided the activity does not result in the loss of greater than 1/2-acre of waters of the United States for each single and complete project.

*Oil or natural gas pipelines:* This NWP authorizes discharges of dredged or fill material into waters of the United States and structures or work in navigable waters for crossings of those waters associated with the construction, maintenance, or repair of oil and natural gas pipelines. There must be no change in pre-construction contours of waters of the United States. An "oil or natural gas pipeline" is defined as any pipe or pipeline for the transportation of any form of oil or natural gas, including products derived from oil or natural gas, such as gasoline, jet fuel, diesel fuel, heating oil, petrochemical feedstocks, waxes, lubricating oils, and asphalt.

Material resulting from trench excavation may be temporarily sidecast into waters of the United States for no more than three months, provided the material is not placed in such a manner that it is dispersed by currents or other forces. The district engineer may extend the period of temporary side casting for no more than a total of 180 days, where appropriate. In wetlands, the top 6 to 12 inches of the trench should normally be backfilled with topsoil from the trench. The trench cannot be constructed or backfilled in such a manner as to drain waters of the United States (e.g., backfilling with extensive gravel layers, creating a french drain effect). Any exposed slopes and stream banks must be stabilized immediately upon

completion of the utility line crossing of each waterbody.

*Oil or natural gas pipeline substations:* This NWP authorizes the construction, maintenance, or expansion of substation facilities (e.g., oil or natural gas or gaseous fuel custody transfer stations, boosting stations, compression stations, metering stations, pressure regulating stations) associated with an oil or natural gas pipeline in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not result in the loss of greater than 1/2-acre of waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters of the United States to construct, maintain, or expand substation facilities.

*Foundations for above-ground oil or natural gas pipelines:* This NWP authorizes the construction or maintenance of foundations for above-ground oil or natural gas pipelines in all waters of the United States, provided the foundations are the minimum size necessary.

*Access roads:* This NWP authorizes the construction of access roads for the construction and maintenance of oil or natural gas pipelines, in non-tidal waters of the United States, provided the activity, in combination with all other activities included in one single and complete project, does not cause the loss of greater than 1/2-acre of non-tidal waters of the United States. This NWP does not authorize discharges of dredged or fill material into non-tidal wetlands adjacent to tidal waters for access roads. Access roads must be the minimum width necessary (see Note 2, below). Access roads must be constructed so that the length of the road minimizes any adverse effects on waters of the United

States and must be as near as possible to pre-construction contours and elevations (e.g., at grade corduroy roads or geotextile/gravel roads). Access roads constructed above pre-construction contours and elevations in waters of the United States must be properly bridged or culverted to maintain surface flows.

This NWP may authorize oil or natural gas pipelines in or affecting navigable waters of the United States even if there is no associated discharge of dredged or fill material (see 33 CFR part 322). Oil or natural gas pipelines routed in, over, or under section 10 waters without a discharge of dredged or fill material may require a section 10 permit.

This NWP authorizes, to the extent that Department of the Army authorization is required, temporary structures, fills, and work necessary for the remediation of inadvertent returns of drilling fluids to waters of the United States through sub-soil fissures or fractures that might occur during horizontal directional drilling activities conducted for the purpose of installing or replacing oil or natural gas pipelines. These remediation activities must be done as soon as practicable, to restore the affected waterbody. District engineers may add special conditions to this NWP to require a remediation plan for addressing inadvertent returns of drilling fluids to waters of the United States during horizontal directional drilling activities conducted for the purpose of installing or replacing oil or natural gas pipelines.

This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the oil or natural gas pipeline activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures,

work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After construction, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

**Notification:** The permittee must submit a pre-construction notification to the district engineer prior to commencing the activity if: (1) a section 10 permit is required; (2) the discharge will result in the loss of greater than 1/10-acre of waters of the United States; or (3) the proposed oil or natural gas pipeline activity is associated with an overall project that is greater than 250 miles in length and the project purpose is to install new pipeline (vs. conduct repair or maintenance activities) along the majority of the distance of the overall project length. If the proposed oil or gas pipeline is greater than 250 miles in length, the pre-construction notification must include the locations and proposed impacts (in acres or other appropriate unit of measure) for all crossings of waters of the United States that require DA authorization, including those crossings authorized by an NWP would not otherwise require pre-construction notification. (See general condition 32.) (Authorities: Sections 10 and 404)

**Note 1:** Where the oil or natural gas pipeline is constructed, installed, or maintained in navigable waters of the United States (i.e., section 10 waters) within the coastal United States, the Great Lakes, and United States territories, a copy of the NWP verification will be sent by the Corps to the National Oceanic and Atmospheric Administration (NOAA), National Ocean Service (NOS), for charting the oil or natural gas pipeline to protect navigation.

**Note 2:** For oil or natural gas pipeline activities crossing a single waterbody more than one time at separate and distant locations, or multiple waterbodies at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP

authorization. Oil or natural gas pipeline activities must comply with 33 CFR 330.6(d).

**Note 3:** Access roads used for both construction and maintenance may be authorized, provided they meet the terms and conditions of this NWP. Access roads used solely for construction of the oil or natural gas pipeline must be removed upon completion of the work, in accordance with the requirements for temporary fills.

**Note 4:** Pipes or pipelines used to transport gaseous, liquid, liquescent, or slurry substances over navigable waters of the United States are considered to be bridges, and may require a permit from the U.S. Coast Guard pursuant to the General Bridge Act of 1946. However, any discharges of dredged or fill material into waters of the United States associated with such oil or natural gas pipelines will require a section 404 permit (see NWP 15).

**Note 5:** This NWP authorizes oil or natural gas pipeline maintenance and repair activities that do not qualify for the Clean Water Act section 404(f) exemption for maintenance of currently serviceable fills or fill structures.

**Note 6:** For NWP 12 activities that require pre-construction notification, the PCN must include any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings that require Department of the Army authorization but do not require pre-construction notification (see paragraph (b)(4) of general condition 32). The district engineer will evaluate the PCN in accordance with Section D, "District Engineer's Decision." The district engineer may require mitigation to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see general condition 23).

#### Nationwide Permit General Conditions

**Note:** To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as

applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. **Navigation.** (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. **Aquatic Life Movements.** No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody,

including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to

ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such

designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species

Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the

potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will

notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has

been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters.

Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2)).

and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to

reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.



26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed

their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

\_\_\_\_\_  
(Transferee)

\_\_\_\_\_  
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be

addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a “USACE project”), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification. (a) *Timing*. Where required by the terms of the NWP, the prospective permittee must

notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the

district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) *Contents of Pre-Construction Notification:* The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of

wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or

designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the "study river" (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) *Form of Pre-Construction Notification:* The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) *Agency Coordination:* (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The

district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

#### **2021 District Engineer's Decision**

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will

result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to

the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP

activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

#### **2021 Further Information**

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.

4. NWP's do not authorize any injury to the property or rights of others.

5. NWP's do not authorize interference with any existing or proposed Federal project (see general condition 31).

#### 2021 Nationwide Permit Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water's surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-

linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

**Non-tidal wetland:** A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

**Open water:** For purposes of the NWP, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

**Ordinary High Water Mark:** The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

**Perennial stream:** A perennial stream has surface water flowing continuously year-round during a typical year.

**Practicable:** Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

**Pre-construction notification:** A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation

that the activity is authorized by nationwide permit.

**Preservation:** The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

**Re-establishment:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

**Rehabilitation:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

**Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

**Riffle and pool complex:** Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

**Riparian areas:** Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

**Shellfish seeding:** The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

**Single and complete linear project:** A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

**Single and complete non-linear project:** For non-linear projects, the term “single and complete project” is defined as 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete

non-linear project must have independent utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle

due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a “water of the United States.” If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

## 2021 KENTUCKY REGIONAL GENERAL CONDITIONS

These regional conditions are in addition to, but do not supersede, the requirements in the Federal Register (See volume 86, date January 13, 2021, pp 2867-2874 for the text of Section C, General Conditions).

Notifications for all Nationwide Permits (NWP) shall be in accordance with General Condition No. 32.

1. For activities that would result in a loss of Outstanding State or National Resource Waters (OSNRWs), Exceptional Waters (EWs), Coldwater Aquatic Habitat Waters (CAHs) and waters with Designated Critical Habitat (DCH) under the Endangered Species Act for the NWP listed below, a Pre-Construction Notification (PCN) will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWP for impacts to these waters.

NWP 3 (Maintenance)

NWP 4 (Fish and Wildlife Harvesting, Enhancement, and Attraction Devices and Activities)

NWP 5 (Scientific Measurement Devices)

NWP 6 (Survey Activities)

NWP 12 (Oil or Natural Gas Pipeline Activities)

NWP 13 (Bank Stabilization)

NWP 14 (Linear Transportation Projects)

NWP 15 (U.S. Coast Guard Approved Bridges)

NWP 16 (Return Water from Upland Contained Disposal Areas)

NWP 17 (Hydropower Projects)

NWP 18 (Minor Discharges)

NWP 19 (Minor Dredging)

NWP 20 (Response Operations for Oil or Hazardous Substances)

NWP 22 (Removal of Vessels)

NWP 23 (Approved Categorical Exclusions)

NWP 25 (Structural Discharges)

NWP 30 (Moist Soil Management for Wildlife)

NWP 32 (Completed Enforcement Actions)

NWP 33 (Temporary Construction, Access, and Dewatering)

NWP 36 (Boat Ramps)

NWP 41 (Reshaping Existing Drainage Ditches)

NWP 51 (Land-Based Renewable Energy Generation Facilities)

NWP 57 (Electric Utility Line and Telecommunications Activities)

NWP 58 (Utility Line Activities for Water and Other Substances)

2. In addition to the notification and agency coordination requirements in the NWP, for impacts greater than 0.25 acres in all "waters of the U.S." for the NWP listed below, a PCN will be required to the Corps. The Corps will coordinate with the appropriate resource agencies (see attached list) on these NWP:



NWP 3 (Maintenance)  
 NWP 14 (Linear Transportation Projects)

3. Nationwide Permit No. 14 – Linear Transportation Projects.

- (a) New road alignments or realignments are limited to a permanent loss of 500 linear feet of intermittent or perennial stream length or the stream bed acreages listed in the table below at each crossing. Road crossings with permanent losses greater than 500 linear feet of intermittent or perennial stream or the stream bed acreages listed in the table below associated with new alignments or realignments will be evaluated as an individual permit (i.e., a Letter of Permission or Standard Permit).

Table of Acreages at Varying Stream Widths for 500 Linear Feet of Impact	
Stream Width (Feet)	Acres of Stream at Varying Widths for 500 Linear Feet of Stream
1	0.011
2	0.023
3	0.034
4	0.046
5	0.057
6	0.069
7	0.080
8	0.092
9	0.103
10	0.115

- (b) In addition to the notification requirements contained in NWP 14, the permittee must submit a PCN to the district engineer prior to commencing the activity for the permanent loss of greater than 300 linear feet of stream bed or the stream bed acreages listed in the table below. (See General Condition 32 and the definition of "loss of waters of the United States" in the Nationwide Permits for further information.)

Table of Acreages at Varying Stream Widths for 300 Linear Feet of Impact	
Stream Width (Feet)	Acres of Stream at Varying Widths for 300 Linear Feet of Stream
1	0.007
2	0.014
3	0.021
4	0.028
5	0.034
6	0.041
7	0.048
8	0.055
9	0.062
10	0.069

4. Notification in accordance with General Condition 32 is required to the Corps for all activities located in the following Section 10 waterways, to include the portion of their tributaries below the Ordinary High Water Mark or navigation pool, or otherwise subject to inundation, by the Section 10 waterway:

- Mississippi River
- Ohio River
- Licking River
- Kentucky River
- Salt River
- Green River
- Cumberland River
- Tennessee River
- Big Sandy River (from mouth to Louisa, KY)

5. All applications and requests should be submitted electronically. To submit applications or other requests electronically, all documents should be saved as a PDF document, and then submitted as an attachment in an email to the following email address:

[CELRL.Door.To.The.Corps@usace.army.mil](mailto:CELRL.Door.To.The.Corps@usace.army.mil)

Your email should include the following:

- a) Subject Line with the name of the applicant, type of request, and location (County and State). Example: RE: Doe, John, DA Permit Application, Jefferson County, KY
- b) Brief description of the request and contact information (phone number, mailing address, and email address) for the applicant and/or their agent.

c) Project Location: Address and Latitude/Longitude in decimal degrees (e.g. 42.927883, -88.362576).

All forms that require signature must be digitally signed or signed manually, scanned and then sent electronically.

Electronic documents must have sufficient resolution to show project details. In order to have the highest quality documents, the original digital documents should be converted to PDF rather than providing scanned copies of original documents.

The electronic application and attached documents must not exceed 10 megabytes (10MB).

6. For all activities, the applicant shall review the U.S. Fish and Wildlife Service's IPaC website: <http://ecos.fws.gov/ipac> to determine if the activity might affect threatened and/or endangered species or designated critical habitat. If federally-listed species or designated critical habitat are identified, a PCN in accordance with General Condition 18 and 32 would be triggered and the official species list generated from the IPaC website must be submitted with the PCN.

Further information:

Outstanding State or National Resource Water (OSNRWs), Exceptional Waters (EWs), and Coldwater Aquatic Habitat Waters (CAHs) are waters designated by the Commonwealth of Kentucky, Natural Resources and Environmental Protection Cabinet. The list can be found at the following link: <http://eppcapp.ky.gov/spwaters/>

Designated Critical Habitat (DCH) under the Endangered Species Act is determined within the Commonwealth of Kentucky by the U.S. Fish and Wildlife Service. The current list of Kentucky's Threatened, Endangered, and Federal Candidate Species can be found at the following link: <http://www.fws.gov/frankfort/EndangeredSpecies.html>

Information on Pre-Construction Notification (PCN) can be found at NWP General Condition No. 32 in the Federal Register (See volume 86, date January 13, 2021, pp 2867-2874 for the text of Section C, General Conditions).

**COORDINATING RESOURCE AGENCIES**

Chief, Wetlands Regulatory Section  
U.S. Environmental Protection Agency  
Region IV  
Atlanta Federal Center  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

Supervisor  
U.S. Fish & Wildlife Service  
JC Watts Federal Building, Room 265  
330 West Broadway  
Frankfort, Kentucky 40601

Supervisor  
401 Water Quality Certification  
Kentucky Division of Water  
300 Sower Boulevard, 3<sup>rd</sup> Floor  
Frankfort, KY 40601

Commissioner  
Department of Fish and Wildlife Resources  
#1 Sportsman's Lane  
Frankfort, KY 40601

Executive Director and State Historic Preservation Officer  
Kentucky Heritage Council  
410 High Street  
Frankfort, KY 40601



ANDY BESHEAR  
GOVERNOR

REBECCA W. GOODMAN  
SECRETARY

**ENERGY AND ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION**

ANTHONY R. HATTON  
COMMISSIONER

300 SOWER BOULEVARD  
FRANKFORT, KENTUCKY 40601

**General Certification--Nationwide Permit (NWP) 2021**

<b>NWP 12 – Oil or Natural Gas Pipeline Activities</b>
<b>NWP 57 – Electrical Utility Line and Telecommunications Activities</b>
<b>NWP 58 – Utility Line Activities for Water and Other Substances</b>

This General Certification is issued **December 18, 2020** in conformity with the requirements of Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C. §1341), as well as Kentucky Statute KRS 224.16-050.

For this General Certification and all General Certifications of Nationwide Permits (NWP), the term 'surface water' is defined pursuant to 401 KAR Chapter 10, Section 1(72): Surface Waters means those waters having well-defined banks and beds, either constantly or intermittently flowing; lakes and impounded waters; marshes and wetlands; and any subterranean waters flowing in well-defined channels and having a demonstrable hydrologic connection with the surface. Lagoons used for waste treatment and effluent ditches that are situated on property owned, leased, or under valid easement by a permitted discharger are not considered to be surface waters of the Commonwealth.

As required by 40 CFR Part 121 – State Certification of Activities Requiring a Federal License or Permit, all conditions include a statement explaining why the condition is necessary to assure that any discharge authorized under the general permit will comply with water quality requirements and a citation to federal, state, or tribal law that authorizes the condition. The statements and citations are included with each condition. The statements are written entirely at the end of the certification under the section *Statements of Necessity*.

Agricultural operations, as defined by KRS 224.71-100(1) conducting activities pursuant to KRS 224.71-100 (3), (4), (5), (6), or 10 are deemed to have certification if they are implementing an Agriculture Water Quality Plan pursuant to KRS 224.71-145.

The Commonwealth of Kentucky hereby certifies under Section 401 of the Clean Water Act (CWA) that it has reasonable assurances that applicable water quality standards under Kentucky Administrative Regulations Title 401, Chapter 10, established pursuant to Sections 301, 302, 303, 306 and 307 of the CWA, will not be violated for the activities covered by the above listed Nationwide Permits, provided that the conditions in



**General Certification--Nationwide Permit 12, 57, and 58****Page 2**

this General Certification are met. Activities that do not meet the conditions of this General Certification require an Individual Section 401 Water Quality Certification.

1. Activities occurring within surface waters assessed by the Kentucky Division of Water as designated Outstanding State Resource Waters, National Resource Waters, Cold Water Aquatic Habitat, Exceptional Waters, or identified as candidate Outstanding State Resource Waters or candidate Exceptional Waters are not authorized under this General Certification and require an Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(1), Section 1(2), & Section 1(3); and 401 KAR 10:031, Section 4(2) & Section 8]

2. Activities impacting surface waters assessed by the Kentucky Division of Water as impaired for warm water or cold water aquatic habitat where the parameter or source is related to habitat\* are not authorized under this General Certification and require an Individual Certification. [Statement B and citations KRS 224.70-110 and 401 KAR 10:031, Section 2 & Section 4]

\*These include waters impaired by the parameter 'habitat assessment', 'combined biota/habitat bioassessment' or any parameter from the parameter group 'habitat alterations, and/or waters where the parameter identified as a cause of impairment has a source from the source group 'habitat impacts'.

3. Activities impacting surface waters assessed by the Kentucky Division of Water as full support for warm water or cold water aquatic habitat are not authorized under this General Certification and require an Individual Certification. [Statements A and B and citations KRS 224.70-110 and 401 KAR 10:031, Section 2 & Section 4]

4. The activity will not occur within surface waters identified as perpetually-protected mitigation sites (e.g., deed restriction or conservation easement). [Statement C and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3); and 40 C.F.R. 230.97]

5. Activities with cumulative temporary and permanent impacts greater than 1/2 acre of wetland or 300 linear feet of surface waters are not authorized under this General Certification and require an Individual Certification. This General Certification shall not apply to projects where multiple Nationwide Permits are issued for individual crossings which are part of a single, larger utility projects. Cumulative impacts include utility line crossings, permanent or temporary access roads, headwalls, associated bank stabilization areas, substations, pole or tower foundations, maintenance corridor, and staging areas. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

6. For a single crossing, impacts from the construction and maintenance corridor in surface waters shall not exceed 50 feet of bank disturbance. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

**General Certification--Nationwide Permit 12, 57, and 58****Page 3**

7. Stream impacts under Conditions 5 and 6 of this certification are defined as the length of bank disturbed. For utility line crossings and roads, only one bank length is used in calculation of the totals. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
8. This General Certification is limited to the crossing of surface waters by utility lines. This certification does not authorize the installation of utility lines in a linear manner within the stream channel or below the top of the stream bank. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
9. Stream relocation, realignment, straightening, and/or widening are not authorized under this General Certification and require an Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
10. Any crossings must be constructed in a manner that does not impede natural water flow. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
11. Blasting of stream channels, even under dry conditions, is not allowed under this General Certification and require and Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
12. Utility lines trenched parallel to the stream shall be located at least 50 feet from an intermittent or perennial stream, measured from the top of the stream bank. Construction within the 50 foot buffer may be authorized if avoidance and minimization efforts are shown and adequate methods are utilized to prevent soil from entering the stream. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
13. Utility line stream crossings shall be constructed by methods that maintain flow and allow for dry excavation. Water pumped from the excavation shall be contained and allowed to settle prior to re-entering the stream. Excavation equipment and vehicles shall operate outside of the flowing portion of the stream. Spoil material from the excavation shall not be allowed to enter the flowing portion of the stream. [Statement A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
14. The activities shall not result in any permanent changes in pre-construction elevation contours in surface waters or stream dimension, pattern or profile. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
15. Utility line activities which impact wetlands shall not result in conversion of the area to non-wetland status. [Statement A and citations KRS 224.70-110, 401 KAR

**General Certification--Nationwide Permit 12, 57, and 58****Page 4**

- 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
16. Clearing of forested wetlands for the installation or maintenance of utility lines is not authorized under this certification. [Statement A and citations 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
  17. Surface water impacts covered under this General Certification and undertaken by those persons defined as an agricultural operation under the Agricultural Water Quality Act must be completed in compliance with the Kentucky Agricultural Water Quality Plan (KAWQP). [Statements A and F and citations KRS 224.71-145(1), 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
  18. The use of creek rock for bank stabilization; grouted rip-rap; unformed, poured grout; unformed, poured concrete; poured asphalt; or asphalt pieces is not authorized under this General Certification and requires an Individual Certification. Poured concrete or grout will be authorized under this General Certification when contained by tightly sealed forms or cells. Equipment shall not discharge waste washwater into surface waters at any time without adequate wastewater treatments. [Statement A and citations 401 KAR 10:030, Section 1(3)(b) & 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
  19. New stormwater detention/ retention basins constructed in surface waters or modifications to stormwater detention/ retention basins resulting in the reduction in reach or that cause impairment of flow of surface waters are not authorized under this General Certification and require an Individual Certification. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
  20. Erosion and sedimentation pollution control plans and Best Management Practices (BMPs) must be designed, installed, and maintained in effective operating condition at all times during construction activities so that violations of state water quality standards do not occur. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
  21. Sediment and erosion control measures, such as check-dams constructed of any material, silt fencing, hay bales, etc., shall not be placed within surface waters, either temporarily or permanently, without prior approval by the Kentucky Division of Water's Water Quality Certification Section. If placement of sediment and erosion control measures in surface waters is unavoidable, design and placement of temporary erosion control measures shall not be conducted in such a manner that may result in instability of streams that are adjacent to, upstream, or downstream of the structures. All sediment and erosion control devices shall be removed and the natural grade restored within the completion timeline of the activities. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]



**General Certification--Nationwide Permit 12, 57, and 58****Page 5**

22. Measures shall be taken to prevent or control spills of fuels, lubricants, or other toxic materials used in construction from entering surface waters. [Statements A and D and citations. [KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
23. Removal of riparian vegetation shall be limited to that necessary for equipment access. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
24. To the maximum extent practicable, all in-stream work under this certification shall be performed under low-flow conditions [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
25. Heavy equipment (e.g. bulldozers, backhoes, and draglines), if required for this project, should not be used or operated within the stream channel. In those instances in which such in-stream work is unavoidable, then it shall be performed in such a manner and duration as to minimize turbidity and disturbance to substrates and bank or riparian vegetation. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
26. Any fill shall be of such composition that it will not adversely affect the biological, chemical, or physical properties of the receiving waters and/or cause violations of water quality standards. If rip-rap is utilized, it should be of such weight and size that bank stress or slump conditions will not be created because of its placement. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
27. If domestic water supply intakes are located downstream that may be affected by increased turbidity and suspended solids, the permittee shall notify the operator when such work will be done prior to construction. [Statement E and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
28. Should evidence of stream pollution or jurisdictional wetland impairment and/or violations of water quality standards occur as a result of this activity (either from a spill or other forms of water pollution), the Kentucky Division of Water shall be notified immediately by calling (800) 928-2380. [Statement A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
29. The Kentucky Division of Water requires submission of a formal application for any federal applicant that is not required to submit a Preconstruction Notification that would typically be required of any non-federal applicant. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

**General Certification--Nationwide Permit 12, 57, and 58****Page 6**

30. The Kentucky Division of Water may require submission of a formal application for an Individual Certification for any project that has been determined to likely have a significant adverse effect upon water quality or degrade surface waters so that existing uses of the water body or downstream waters are precluded. [Statement A and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]
31. If the final issued General Permit for Nationwide Permit # 12, 57, or 58 changes significantly, the Division of Water may opt to deny certification for this permit. [Statements A and D and citations KRS 224.70-110, 401 KAR 10:030, Section 1(3)(b) & Section 1(4)(b); and 401 KAR 10:031, Section 2 & Section 4]

## Statements of Necessity:

- A. This condition is necessary to protect waters categorized under the anti-degradation policy to protect the designated and existing uses and to maintain the associated water quality criteria necessary to protect these water resources.
- B. This condition is necessary to protect existing uses and the level of water quality necessary to protect those existing uses shall be assured in impaired water.
- C. This condition is necessary for long-term protection of compensatory mitigation sites.
- D. This condition is necessary to provide for the prevention, abatement, and control of all water pollution and to conserve water resources for legitimate uses, safeguard from pollution the uncontaminated waters, prevent the creation of any new pollution, and abate any existing pollution.
- E. This condition is necessary to protect domestic water supply use.
- F. This condition is necessary to evaluate, develop, and improve best-management practices in conservation plans, compliance plans, and forest stewardship management plans; establish statewide and regional agriculture water quality plans; and otherwise promote soil and water conservation activities that protect surface waters from the adverse impacts of agriculture operations within the Commonwealth.

**Violation of Kentucky state water quality standards may result in civil penalties and remediation actions.**

For assistance contact the Kentucky Division of Water, Water Quality Certification Section by email ([401WQC@ky.gov](mailto:401WQC@ky.gov)) or by phone (502)-564-3410.



# ERLANGER

PUBLIC WORKS

**PUBLIC WORKS DEPARTMENT**

PHONE: 859.727.7998

**APPLICATION:** R.O.W. ENCROACHMENT PERMIT IN THE CITY OF ERLANGER

DATE: 05/16/2023 START DATE: 02/2024 COMPLETED DATE: 10/2024

LOCATION: Crescent Springs Rd (Auger Bore) & Riggs Ave (Auger Bore)

SCHEDULED WORK WITH WRITTEN PERMISSION & REQUIRED INSPECTIONS

EMERGENCY WORKED WITH VERBAL PERMISSION-8:00AM TO 5:00PM

EMERGENCY WORKED WITHOUT PERMISSION-5:00 PM TO 8:00 AM /WEEKENDS

APPLICANT: Duke Energy Kentucky, INC

ADDRESS: 139 E 4th Street, Cincinnati, OH PHONE #: 513-315-8338 (Contact Person)

CONTACT PERSON: John Perkins

OPENING(S) LENGTH: Pit excavation limits shown on plans WIDTH: Auger bore underneath Crescent Springs Rd & Riggs Ave No excavated impact to either road.

PROJECT: AM07 PH2 Natural Gas Pipeline Replacement

PURPOSE: Improve existing infrastructure in the Northern Kentucky/Cincinnati area.

**STREET CUTS:**

ASPHALT  BRICK  CONCRETE  UNIMPROVED  OTHER

**NON-STREET CUTS:**

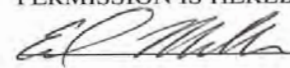
UNIMPROVED  CONCRETE SDWK.  SOD  BRICK SDWK.  CONC. DRIVEWAY ( )

OTHER \_\_\_\_\_

**APPLICANT MUST CONTACT PUBLIC WORKS DEPARTMENT FOR REQUIRED INSPECTIONS 24 HOURS IN ADVANCE.**

**ALL STREET REPLACEMENTS MUST CONFORM TO THE CITY OF ERLANGER STANDARDS.**

PERMISSION IS HEREBY GRANTED TO OPEN STREET AS INDICATED ABOVE.

  
( SIGNED )

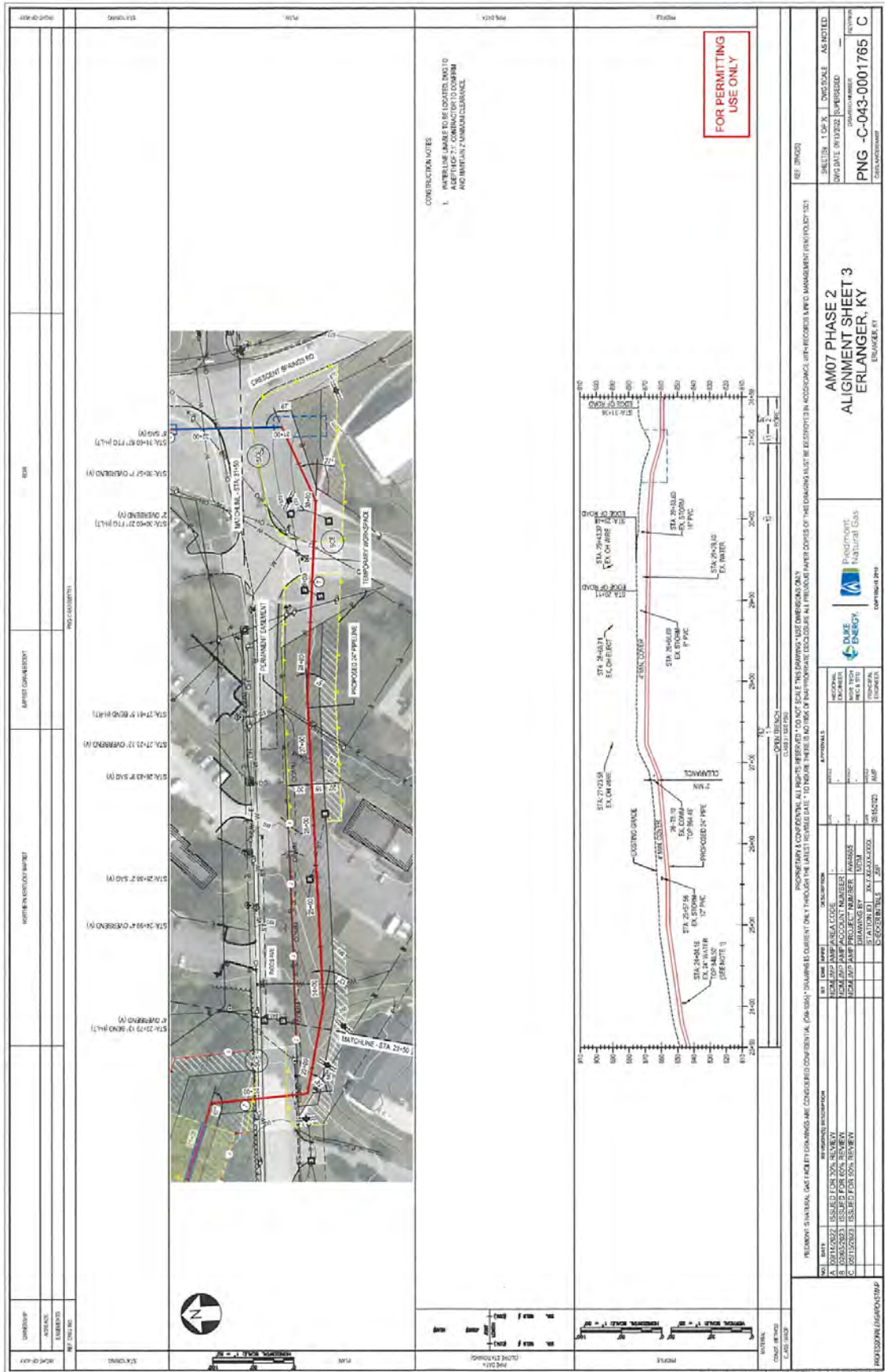
6/7/23  
( DATE )

0206072023  
( PERMIT # )

**SEE ATTACHED DESIGN DRAWINGS FOR REFERENCE.  
\*\*THESE ARE NOT CONSTRUCTION DRAWINGS\*\***

*Note: This Permit covers the Riggs Ave. Portion only, Crescent Springs Rd. is a KYTC Road.*

A Kentucky Certified City



CONSTRUCTION NOTES

1. ALL DIMENSIONS TO BE LOCATED AND TO ADHERE TO: CONSTRUCTION DIMENSIONS AND NOT TO EXCEED CLEARANCE.

FOR PERMITTING USE ONLY

REF: 214000  
 SHEET NO. 1 OF 3  
 DATE: 04/13/2023  
 PROJECT: AM07 PHASE 2  
 DRAWING NO.: PNG-C-043-0001765  
 SCALE: AS NOTED

AM07 PHASE 2  
 ALIGNMENT SHEET 3  
 ERLANGER, KY



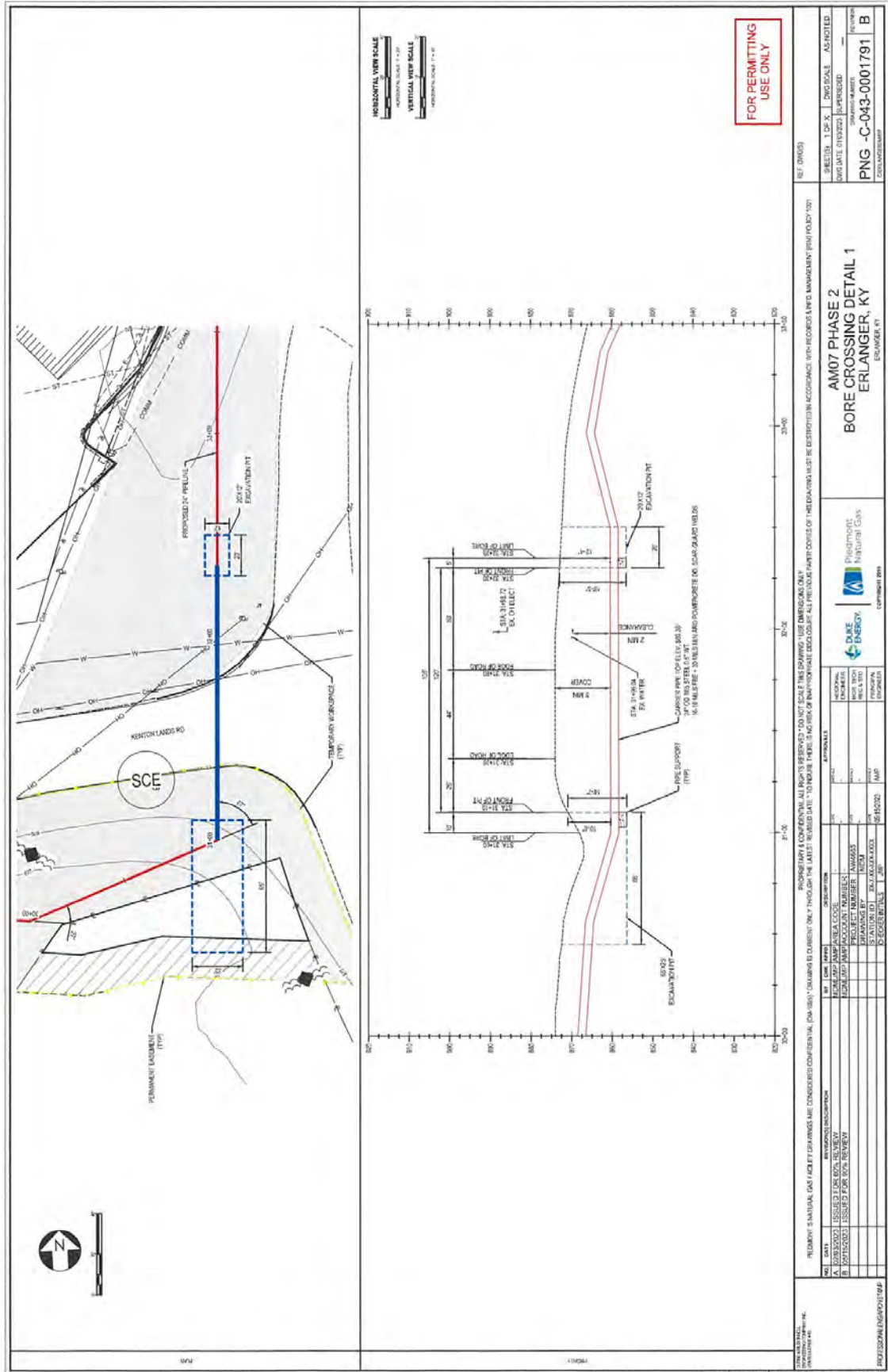
NO.	DATE	DESCRIPTION	BY	CHKD
A	02/14/2023	ISSUED FOR 30% REVIEW		
B	03/05/2023	ISSUED FOR 60% REVIEW		
C	04/13/2023	ISSUED FOR 90% REVIEW		

NO.	DATE	DESCRIPTION	BY	CHKD
1	04/13/2023	ISSUED FOR PERMITTING		

REVISIONS: 1. ISSUED FOR PERMITTING  
 2. ISSUED FOR PERMITTING  
 3. ISSUED FOR PERMITTING

PROFESSOR/REGISTERED PROFESSIONAL ENGINEER  
 STATE OF KY. REG. NO. 12345  
 CONTRACT NO. 2023-00210





FOR PERMITTING  
USE ONLY

**HORIZONTAL VIEW SCALE**  
 1" = 100'  
**VERTICAL VIEW SCALE**  
 1" = 10'

REV	DATE	DESCRIPTION
1	08/05/23	ISSUED FOR PERMITTING
2	08/05/23	ISSUED FOR PERMITTING

AM07 PHASE 2  
 BORE CROSSING DETAIL 1  
 ERLANGER, KY



NO.	DATE	BY	CHKD BY	DESCRIPTION
A	08/05/2023	J. L. [Signature]	[Signature]	ISSUED FOR PERMITTING
B	08/05/2023	J. L. [Signature]	[Signature]	ISSUED FOR PERMITTING

NO.	DATE	BY	CHKD BY	DESCRIPTION
A	08/05/2023	J. L. [Signature]	[Signature]	ISSUED FOR PERMITTING
B	08/05/2023	J. L. [Signature]	[Signature]	ISSUED FOR PERMITTING

PROFESSIONAL ENGINEER/REG.  
 STATE OF KY. REG. NO. 10000

FOR PERMITTING USE ONLY





# ERLANGER

PUBLIC WORKS

**PUBLIC WORKS DEPARTMENT**

PHONE: 859.727.7998

**APPLICATION: R.O.W. ENCROACHMENT PERMIT IN THE CITY OF ERLANGER**

DATE: 03/29/2023 START DATE: First Quarter 2024 COMPLETED DATE: Third Quarter 2024

LOCATION: Riggs Ave (Open Cut)

SCHEDULED WORK WITH WRITTEN PERMISSION & REQUIRED INSPECTIONS

EMERGENCY WORKED WITH VERBAL PERMISSION-8:00AM TO 5:00PM

EMERGENCY WORKED WITHOUT PERMISSION-5:00 PM TO 8:00 AM /WEEKENDS

APPLICANT: Duke Energy Kentucky, INC

ADDRESS: 139 E 4th Street, Cincinnati, OH PHONE #: 513-315-8338 (Contact Person)

CONTACT PERSON: John Perkins

OPENING(S) LENGTH: Riggs Ave (100') WIDTH: 5'

PROJECT: AM07 PH2 Natural Gas Pipeline Replacement

PURPOSE: Improve existing infrastructure in the Northern Kentucky/Cincinnati area.

**STREET CUTS:**

ASPHALT  BRICK  CONCRETE  UNIMPROVED  OTHER

**NON-STREET CUTS:**

UNIMPROVED  CONCRETE SDWK.  SOD  BRICK SDWK.  CONC. DRIVEWAY ( )  
OTHER \_\_\_\_\_

**APPLICANT MUST CONTACT PUBLIC WORKS DEPARTMENT FOR REQUIRED INSPECTIONS 24 HOURS IN ADVANCE.**

**ALL STREET REPLACEMENTS MUST CONFORM TO THE CITY OF ERLANGER STANDARDS.**

PERMISSION IS HEREBY GRANTED TO OPEN STREET AS INDICATED ABOVE.

*Ed Perkins*  
( SIGNED )

2/7/23  
( DATE )

0106072023  
( PERMIT # )

**SEE ATTACHED DESIGN DRAWINGS FOR REFERENCE.  
\*\*THESE ARE NOT CONSTRUCTION DRAWINGS\*\***

*A Kentucky Certified City*

*Note: This permit is for street cut in R.O.W. only.*









# ERLANGER

PUBLIC WORKS

**PUBLIC WORKS DEPARTMENT**

PHONE: 859.727.7998

**APPLICATION: R.O.W. ENCROACHMENT PERMIT IN THE CITY OF ERLANGER**

DATE: 05/16/2023 START DATE: 02/2024 COMPLETED DATE: 10/2024

LOCATION: Hulbert Ave (Open Cut)

SCHEDULED WORK WITH WRITTEN PERMISSION & REQUIRED INSPECTIONS

EMERGENCY WORKED WITH VERBAL PERMISSION-8:00AM TO 5:00PM

EMERGENCY WORKED WITHOUT PERMISSION-5:00 PM TO 8:00 AM /WEEKENDS

APPLICANT: Duke Energy Kentucky, INC

ADDRESS: 139 E 4th Street, Cincinnati, OH PHONE #: 513-315-8338 (Contact Person)

CONTACT PERSON: John Perkins

OPENING(S) LENGTH: Hulbert Ave (175') WIDTH: 5'

PROJECT: AM07 PH2 Natural Gas Pipeline Replacement

PURPOSE: Improve existing infrastructure in the Northern Kentucky/Cincinnati area.

**STREET CUTS:**

ASPHALT  BRICK  CONCRETE  UNIMPROVED  OTHER

**NON-STREET CUTS:**

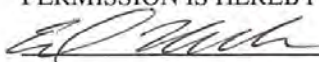
UNIMPROVED  CONCRETE SDWK.  SOD  BRICK SDWK.  CONC. DRIVEWAY ( )

OTHER \_\_\_\_\_

**APPLICANT MUST CONTACT PUBLIC WORKS DEPARTMENT FOR REQUIRED INSPECTIONS 24 HOURS IN ADVANCE.**

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PERMISSION IS HEREBY GRANTED TO OPEN STREET AS INDICATED ABOVE.



( SIGNED )

6/7/23

( DATE )

0306072023

( PERMIT # )

**SEE ATTACHED DESIGN DRAWINGS FOR REFERENCE.  
\*\*THESE ARE NOT CONSTRUCTION DRAWINGS\*\***





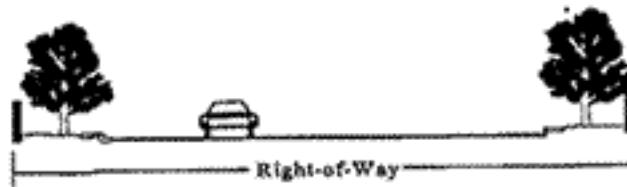
## City of Crestview Hills, Kentucky Encroachment Permit Information

### What is an encroachment permit?

An encroachment permit is written permission to excavate or otherwise encroach within the City of Crestview Hills' public road right-of-way. A permit may be granted to a public utility, contractor or an individual. Permits are issued by the City of Crestview Hills for any work within the City's boundaries.

### What is the road right-of-way?

The road right-of-way is the full width of land owned or controlled by the City of Crestview Hills, upon which the traveled way is constructed, and which usually extends considerably beyond the edge of pavement (or traveled way) to the boundaries of the adjacent private properties.



### When are encroachment permits needed?

In addition to excavations, permits must be obtained for tree planting and removal, utility work, driveway installations, placement of any structures, construction of street improvements and drainage facilities, or generally for any type of work conducted within the public road right-of-way.

### What is the purpose of an encroachment permit?

Encroachment permits provide necessary regulation of the encroachment process to safeguard the public interest in the roadway facility, minimize street cuts, help ensure the roadway longevity, and to ensure continuing safety and convenience for the traveling public.

### What is the authority for Encroachment Permits?

Encroachment permits are required pursuant to City of Crestview Hills Ordinance No. 2018-11-01, which establish regulations specifically pertaining to right-of-way and govern the placement and maintenance of certain facilities that are used to provide utility or similar services. The ordinance also establishes penalties for working without a permit and for a violation of any terms of the permit.

### What is the process for obtaining an encroachment permit?

An application describing the proposed work must be completed, signed, and turned into the City of Crestview Hills for review and processing. One set of construction plans or drawings, if available, must be submitted along with the application. There is a small fee for reviewing and processing the application form. The fee amount depends on the type of work being performed with a maximum of \$50.00. Most permits are issued within 3 – 5 working days.

### Where can permits be obtained?

Permits can be obtained at City of Crestview Hills' City Building, 50 Town Center Blvd., Crestview Hills, Kentucky, 41017, the City's website [www.crestviewhills.com](http://www.crestviewhills.com), or by calling 859-341-7373 during normal business hours.



# RIGHT-OF-WAY ENCROACHMENT PERMIT APPLICATION

50 Town Center Boulevard, Crestview Hills, KY 41017

Phone: 859-341-7373 | Fax: 859-341-6993 | Email: encroachmentpermits@crestviewhills.com

Name of Utility Company (if applicable): Duke Energy Kentucky, INC

Name of Entity Applying for Permit: Burns & McDonnell

Contact Person: John Perkins

Address: 139 E 4th St Cincinnati OH 45202  
Number Street Name City State ZIP

Phone Number(s): 513-315-8338  
Cell Work & Ext/Direct Line Fax  
 Email: john.perkins@duke-energy.com  
Email

Name of Entity doing the work at site: TBD

*(Please attach copy of the Occupational License for Entity doing work)*

On Site Contact: TBD

Name Phone Email

Location of Encroachment Activity: Within Centre View Blvd, near 721 Centre View Blvd. (see attached)

Description of Proposed Work: Execute open cut installation of 24" steel natural gas pipeline within Centre View Blvd near the curb line of the east bound lane.

*\*Please attach any detailed plans and additional project descriptions*

Duration of Excavation Start: Spring 2024 End: Spring/Early Summer 2024

Estimated Restoration Complete Date Restoration to be completed summer 2024

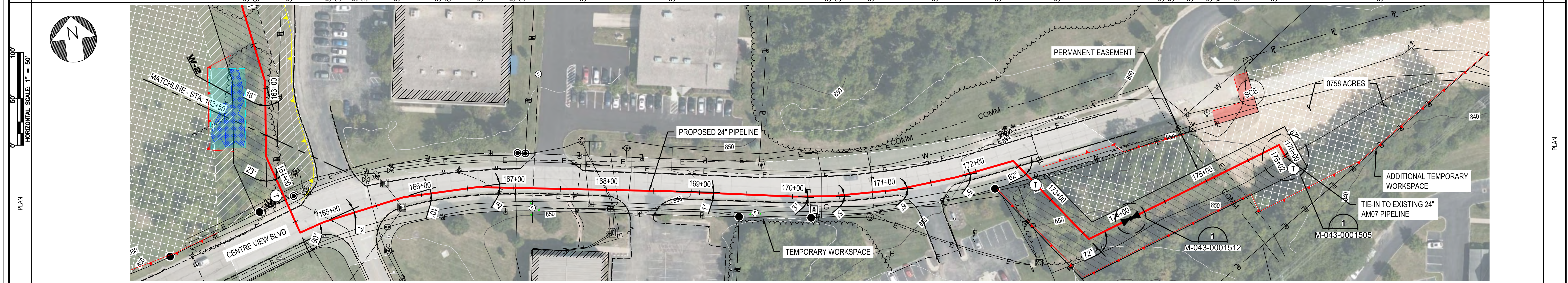
List Approximate Size of Each Type of Cut: 24" diameter pipe installed in approximate 5' wide excavated trench for a length of 800 ft within Centre View Blvd.

<b>Billing Information:</b> (If different than above) Name: _____ Address: _____ _____ Direct Phone: _____ Email: _____	<b>Permit Fees (Complete ALL that apply):</b> Street Cut (\$50 x <u>X</u> ) \$ _____ Sod Cut (\$15 x ___) \$ _____ Bore Cut (\$20 x ___) \$ _____ Sidewalk/Bike Path Cut (\$20 x ___) \$ _____ Blocking Street (\$15 x ___) \$ _____ TOTAL (Note: Max Fee is \$50 per permit) \$ _____
--	--

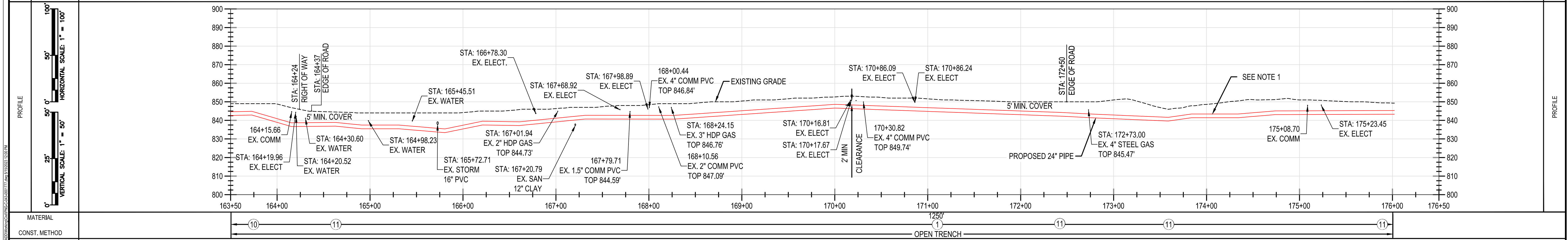
<b>OFFICIAL USE ONLY</b>	<b>Permit Number:</b> _____
Approved as submitted: <input type="checkbox"/> Yes <input type="checkbox"/> No      Approved with conditions: <input type="checkbox"/> Yes <input type="checkbox"/> No Denied: <input type="checkbox"/> Yes <input type="checkbox"/> No Is City Inspection of restoration required? <input type="checkbox"/> Yes <input type="checkbox"/> No Fee Paid: <input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, Check Number: _____	
_____ City Official	_____ Date

RIGHT-OF-WAY	OWNERSHIP	DB SOLUTIONS1, LLC	THIRD WAVE INVESTMENTS, LLC	RIGHT-OF-WAY
	ACREAGE			
	EASEMENTS			
REF. DWG. NO.				

STATIONING	STA: 163+72.23° FTG (H-LT) 9° OVERBEND (V) STA: 164+15.9° SAG (V) STA: 164+63.90° FTG (H-LT) 3° OVERBEND (V) STA: 164+91.7° BEND (H-RT) 3° SAG (V) STA: 165+31.12° OVERBEND (V) STA: 165+81.10° BEND (H-RT) 8° SAG (V) STA: 166+21.6° OVERBEND (V) STA: 166+61.9° BEND (H-RT) 3° SAG (V) STA: 167+31.3° OVERBEND (V) STA: 168+27.2° SAG (V) STA: 170+00.3° BEND (H-RT) 3° OVERBEND (V) STA: 170+41.5° BEND (H-LT) STA: 171+10.6° BEND (H-LT) STA: 171+78.5° BEND (H-LT) STA: 172+42.62° FTG (H-RT) STA: 173+59.72° FTG (H-LT) 5° SAG (V) STA: 173+84.4° OVERBEND (V) STA: 174+09.24° ISOLATION VALVE STA: 174+34.2° SAG (V) STA: 174+74.2° OVERBEND (V) STA: 175+87.87° FTG (H-RT)	STATIONING
------------	---	------------



PIPE DATA (SLOPE STATIONING)	STA. WELD # (CONV.) STA. WELD # (CONV.) JOINT LENGTH (CONV.) HEAVY JOINT # HEAVY	CONSTRUCTION NOTES: 1. CONTRACTOR TO MAINTAIN AN ELEVATION OF 843.4' FROM STA. 173+84 TO 174+34 FOR ISOLATION VALVE INSTALLATION.	FOR PERMITTING USE ONLY
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MATERIAL	CLASS 3 / 1000 PSIG			CONST. METHOD	OPEN TRENCH	
BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43 PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED * DO NOT SCALE THIS DRAWING * USE DIMENSIONS ONLY PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) * DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE * TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001 REF. DWG(S)						
NO. DATE REVISION(S) DESCRIPTION A 09/14/2022 ISSUED FOR 30% REVIEW B 02/03/2023 ISSUED FOR 60% REVIEW C 05/15/2023 ISSUED FOR 90% REVIEW		BY CHK APPD DESCRIPTION MDM JMP AMP AREA CODE MDM JMP AMP ACCOUNT NUMBER MDM JMP AMP PROJECT NUMBER AW4685 DRAWING BY MDM STATION ID XX-X-XX-XXX-XXXX CHECKER INITIALS JMP		APPROVALS REGIONAL ENGINEER MGR TECH REC & STD PRINCIPAL ENGINEER		SHEET(S) 1 OF X DWG DATE 09/13/2022 SUPERSEDED DRAWING NUMBER PNG -C-043-0001777 REVISION C C/ERLANGER/AM07

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### AM07 PHASE 2 ALIGNMENT SHEET 15 ERLANGER, KY

ERLANGER, KY

AS NOTED

REVISION

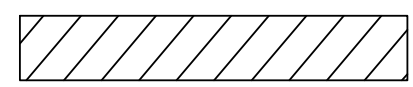






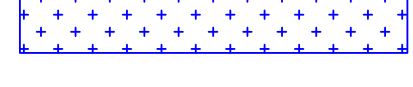







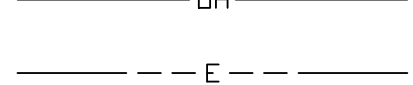


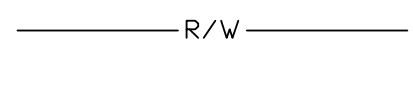



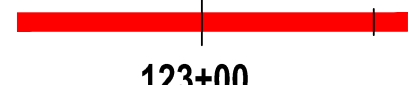
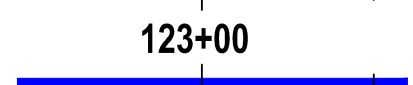

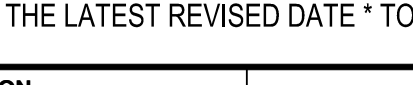
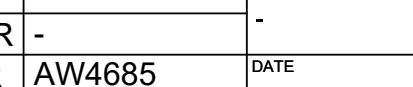
**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSITIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / P/L	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

**FOR PERMITTING  
USE ONLY**

BURNS & MCDONNELL  
ENGINEERING COMPANY, INC.  
STATE LICENSE #43

PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO ENSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

REF. DWG(S)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	CNS	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	JMP	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



**AM07 PHASE 2  
ABBREVIATIONS & LEGEND  
ERLANGER, KY**

SHEET(S) XX OF XX	DWG SCALE NONE
DWG DATE 09/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
<b>PNG - G-043-0001431</b>	<b>C</b>
GIERLANGER/AM07	

PROFESSIONAL ENGINEER'S STAMP

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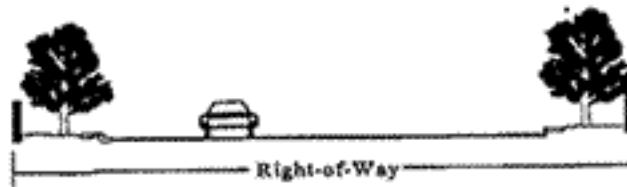
## City of Crestview Hills, Kentucky Encroachment Permit Information

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# RIGHT-OF-WAY ENCROACHMENT PERMIT APPLICATION

50 Town Center Boulevard, Crestview Hills, KY 41017

Phone: 859-341-7373 | Fax: 859-341-6993 | Email: encroachmentpermits@crestviewhills.com

Name of Utility Company (if applicable): Duke Energy Kentucky, INC

Name of Entity Applying for Permit: Burns & McDonnell

Contact Person: John Perkins

Address: 139 E 4th St Cincinnati OH 45202  
Number Street Name City State ZIP

Phone Number(s): 513-315-8338

Cell Work & Ext/Direct Line Fax  
john.perkins@duke-energy.com

Email TBD

Name of Entity doing the work at site: TBD

(Please attach copy of the Occupational License for Entity doing work)

On Site Contact: TBD

Name Phone Email  
Near 2781 Chancellor Dr, Crestview Hills, KY 41017 (see attached)

Location of Encroachment Activity: Near 2781 Chancellor Dr, Crestview Hills, KY 41017 (see attached)

Description of Proposed Work: Execute auger bore installation under Chancellor Dr of 24" steel gas pipeline. Open trench install of 24" pipe within Chancellor Dr for 500'.

\*Please attach any detailed plans and additional project descriptions

Duration of Excavation Start: Spring 2024 End: Summer 2024

Estimated Restoration Complete Date: Restoration to be completed immediately following installation. Permanent surface restoration to be completed once crew is out of area.

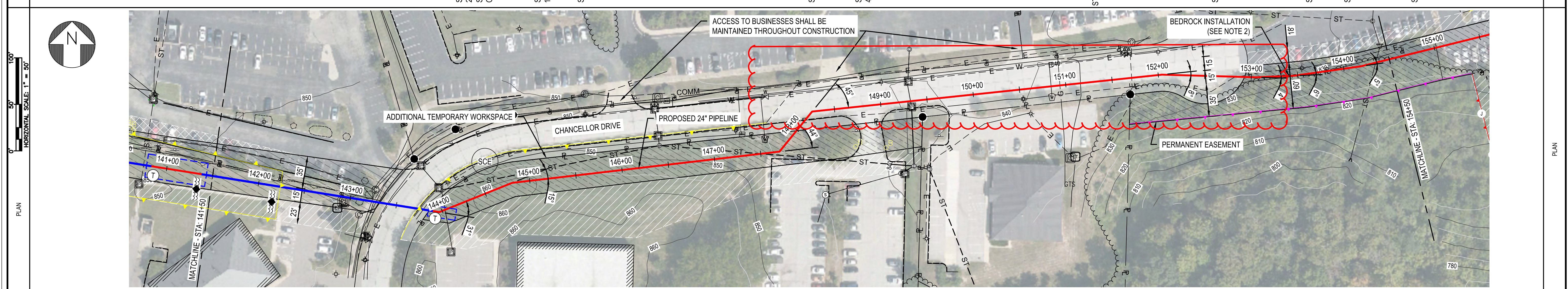
List Approximate Size of Each Type of Cut: 24" diameter pipe installed in approximate 3' wide excavated trench for a length of 500 ft within Chancellor Dr. Bore underneath Chancellor Dr, excavation limits shown in attached drawings.

<b>Billing Information:</b> (If different than above) Name: _____ Address: _____ _____ Direct Phone: _____ Email: _____	<b>Permit Fees (Complete ALL that apply):</b> Street Cut (\$50 x <u>X</u> ) \$ _____ Sod Cut (\$15 x _____) \$ _____ Bore Cut (\$20 x _____) \$ _____ Sidewalk/Bike Path Cut (\$20 x _____) \$ _____ Blocking Street (\$15 x _____) \$ _____ TOTAL (Note: Max Fee is \$50 per permit) \$ _____
--	--

<b>OFFICIAL USE ONLY</b>	<b>Permit Number:</b> _____
Approved as submitted: <input type="checkbox"/> Yes <input type="checkbox"/> No                      Approved with conditions: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Denied: <input type="checkbox"/> Yes <input type="checkbox"/> No	
Is City Inspection of restoration required? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Fee Paid: <input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, Check Number: _____	
_____ City Official	_____ Date

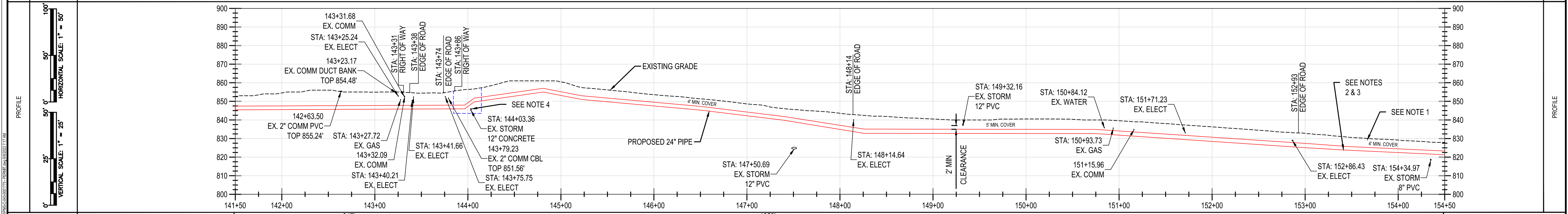
RIGHT-OF-WAY	OWNERSHIP	R.L. HAVENS PROPRIETIE, LLC.	ROW	S.T. ELIZABETH MEDICAL	ROW	THOMAS MORE HEMMER II, LTD	RIGHT-OF-WAY
	ACREAGE						
	EASEMENTS						
	REF. DWG. NO.						

STATIONING	STA: 143+97.31' FTG (H-LT) 20' SAG (V) STA: 144+07.17' FTG OVERBEND (V)	STA: 144+81.15' BEND (H-RT) 10' OVERBEND (V)	STA: 145+22.3' SAG (V)	STA: 147+70.44' BEND (H-LT)	STA: 148+26.45' BEND (H-RT) 4' SAG (V)	STA: 150+75.2' OVERBEND (V)	STA: 152+04.8' BEND (H-RT)	STA: 153+05.4' BEND (H-LT)	STA: 153+46.6' BEND (H-LT)	STA: 154+18.5' BEND (H-LT)	STATIONING
------------	--	---	------------------------	-----------------------------	---	-----------------------------	----------------------------	----------------------------	----------------------------	----------------------------	------------



PIPE DATA (SLOPE STATIONING)	STA. WELD #	STA. WELD #	JOINT LENGTH (CON.)	HEAVY JOINT LENGTH (CON.)	CONSTRUCTION NOTES:
					<p>1. IN THE AREAS SPECIFIED IN NOTE 2, MINIMUM COVER SHALL BE THE GREATER VALUE OF THE FOLLOWING TWO OPTIONS:</p> <p>1.1. 4-FT COVER FROM NATURAL GRADE</p> <p>1.2. CROWN OF PIPE EMBEDDED 1-FT BELOW DETERMINED BEDROCK.</p> <p>2. CROWN OF PIPE SHALL BE EMBEDDED 1' BELOW BEDROCK IN THE FOLLOWING AREAS: STA. 152+75 THRU 154+00</p> <p>3. PIPE PROFILE SHOWN IS ESTIMATED BASED ON GEOTECHNICAL BORINGS AND REPORT. ACTUAL INSTALLATION DEPTH IS SUBJECT TO CHANGE BASED ON FIELD VERIFIED DEPTH TO BEDROCK.</p> <p>4. CONTRACTOR TO BE RESPONSIBLE FOR REMOVING, TEMPORARILY REROUTING, AND REPLACING STORM DRAIN PIPING LOCATED WITHIN BORE PIT.</p>

FOR PERMITTING USE ONLY



MATERIAL	24"	1053"
CONST. METHOD	BORE	OPEN TRENCH
CLASS / MAOP		CLASS 3 / 1000 PSIG

BURNS & MCDONNELL ENGINEERING COMPANY, INC. STATE LICENSE #43  
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 REF. DWG(S)

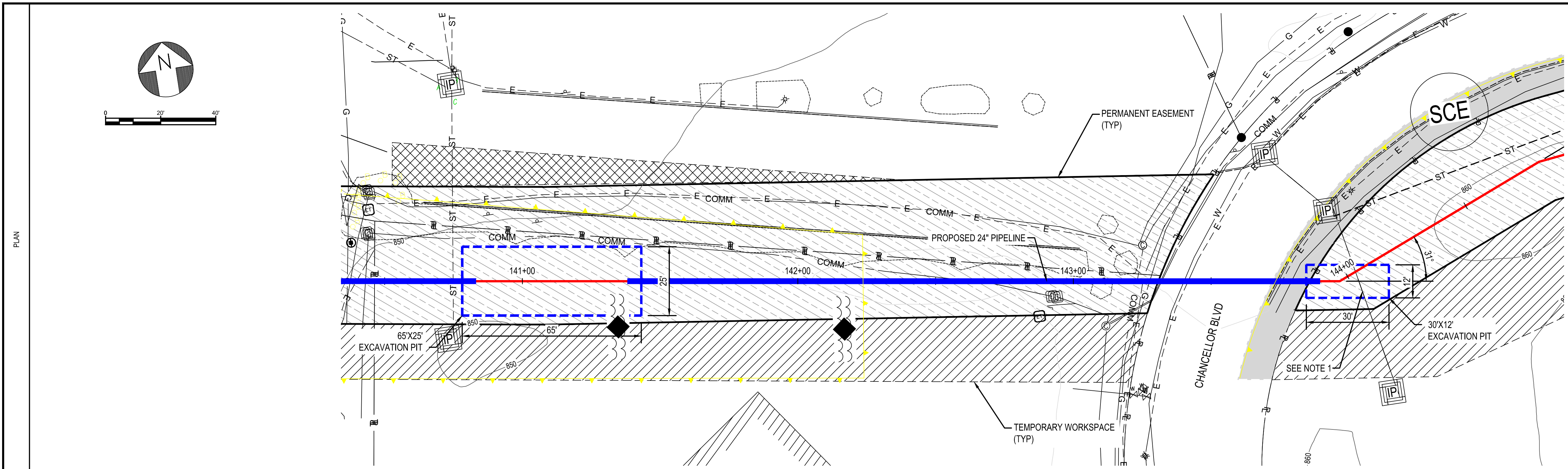
NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% REVIEW	MDM	JMP	AMP	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	AMP	JMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	MDM		
						STATION ID	XX-X-XX-XXX-XXXX		
						CHECKER INITIALS	JMP	05/15/2023	AMP



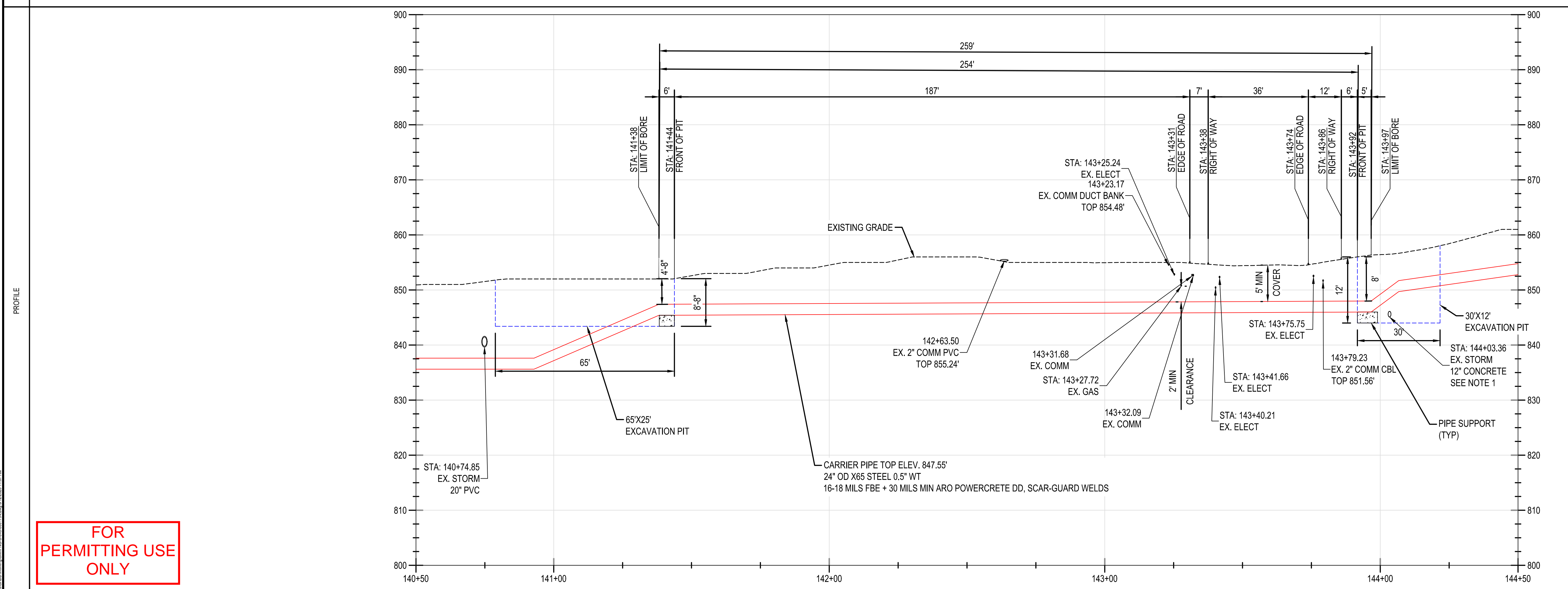
**AM07 PHASE 2  
ALIGNMENT SHEET 13  
ERLANGER, KY**

SHEET(S)	1 OF X	DWG SCALE	AS NOTED
DWG DATE	09/13/2022	SUPERSEDED	-
DRAWING NUMBER	PNG -C-043-0001775		
REVISION	C		

PROFESSIONAL ENGINEER STAMP



CONSTRUCTION NOTES:  
1. CONTRACTOR TO BE RESPONSIBLE FOR REMOVING, TEMPORARILY REROUTING, AND REPLACING STORM DRAIN PIPE LOCATED WITHIN BORE PIT



**HORIZONTAL VIEW SCALE**  
0 20' 40'  
HORIZONTAL SCALE: 1" = 20'

**VERTICAL VIEW SCALE**  
0 10' 20'  
HORIZONTAL SCALE: 1" = 10'

FOR PERMITTING USE ONLY

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PIEDMONT'S NATURAL GAS FACILITY DRAWINGS ARE CONSIDERED CONFIDENTIAL (OM-1095) \* DRAWING IS CURRENT ONLY THROUGH THE LATEST REVISED DATE \* TO INSURE THERE IS NO RISK OF INAPPROPRIATE DISCLOSURE ALL PREVIOUS PAPER COPIES OF THIS DRAWING MUST BE DESTROYED IN ACCORDANCE WITH RECORDS & INFO. MANAGEMENT (RIM) POLICY 1001

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION
A	02/03/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	AREA CODE -
B	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER -

APPROVALS		REGIONAL ENGINEER
DATE	INITIALS	
DATE	INITIALS	MGR TECH REC & STD
DATE	INITIALS	PRINCIPAL ENGINEER
05/15/2023	AMP	

PROJECT NUMBER	AW4685
DRAWING BY	MDM
STATION ID	XX-X-XX-XXX-XXXX
CHECKER INITIALS	JMP

AM07 PHASE 2  
BORE CROSSING DETAIL 4  
ERLANGER, KY

ERLANGER, KY

REF. DWG(S)	
SHEET(S) 1 OF X	DWG SCALE AS NOTED
DWG DATE 01/03/2023	SUPERSEDED
DRAWING NUMBER	REVISION
PNG -C-043-0001794	B
C/ERLANGER/AM07	

PROFESSIONAL ENGINEER'S STAMP

**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSITIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / P/L	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

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REF. DWG(S)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	CNS	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	JMP	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



**AM07 PHASE 2**  
**ABBREVIATIONS & LEGEND**  
**ERLANGER, KY**  
ERLANGER, KY

SHEET(S) XX OF XX	DWG SCALE NONE
DWG DATE 09/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
<b>PNG - G-043-0001431</b>	<b>C</b>
ERLANGER/AM07	

PROFESSIONAL ENGINEER'S STAMP

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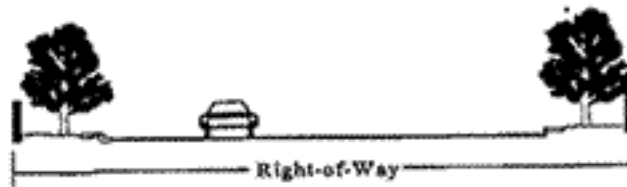
## City of Crestview Hills, Kentucky Encroachment Permit Information

### What is an encroachment permit?

An encroachment permit is written permission to excavate or otherwise encroach within the City of Crestview Hills' public road right-of-way. A permit may be granted to a public utility, contractor or an individual. Permits are issued by the City of Crestview Hills for any work within the City's boundaries.

### What is the road right-of-way?

The road right-of-way is the full width of land owned or controlled by the City of Crestview Hills, upon which the traveled way is constructed, and which usually extends considerably beyond the edge of pavement (or traveled way) to the boundaries of the adjacent private properties.



### When are encroachment permits needed?

In addition to excavations, permits must be obtained for tree planting and removal, utility work, driveway installations, placement of any structures, construction of street improvements and drainage facilities, or generally for any type of work conducted within the public road right-of-way.

### What is the purpose of an encroachment permit?

Encroachment permits provide necessary regulation of the encroachment process to safeguard the public interest in the roadway facility, minimize street cuts, help ensure the roadway longevity, and to ensure continuing safety and convenience for the traveling public.

### What is the authority for Encroachment Permits?

Encroachment permits are required pursuant to City of Crestview Hills Ordinance No. 2018-11-01, which establish regulations specifically pertaining to right-of-way and govern the placement and maintenance of certain facilities that are used to provide utility or similar services. The ordinance also establishes penalties for working without a permit and for a violation of any terms of the permit.

### What is the process for obtaining an encroachment permit?

An application describing the proposed work must be completed, signed, and turned into the City of Crestview Hills for review and processing. One set of construction plans or drawings, if available, must be submitted along with the application. There is a small fee for reviewing and processing the application form. The fee amount depends on the type of work being performed with a maximum of \$50.00. Most permits are issued within 3 – 5 working days.

### Where can permits be obtained?

Permits can be obtained at City of Crestview Hills' City Building, 50 Town Center Blvd., Crestview Hills, Kentucky, 41017, the City's website [www.crestviewhills.com](http://www.crestviewhills.com), or by calling 859-341-7373 during normal business hours.



# RIGHT-OF-WAY ENCROACHMENT PERMIT APPLICATION

50 Town Center Boulevard, Crestview Hills, KY 41017

Phone: 859-341-7373 | Fax: 859-341-6993 | Email: encroachmentpermits@crestviewhills.com

Name of Utility Company (if applicable): Duke Energy Kentucky, INC

Name of Entity Applying for Permit: Burns & McDonnell

Contact Person: John Perkins

Address: 139 E 4th St Cincinnati OH 45202  
Number Street Name City State ZIP

Phone Number(s): 513-315-8338  
Cell Work & Ext/Direct Line Fax  
 Email: john.perkins@duke-energy.com  
Email

Name of Entity doing the work at site: TBD  
*(Please attach copy of the Occupational License for Entity doing work)*

On Site Contact: TBD  
Name Phone Email

Location of Encroachment Activity: Along Rossmoyne Ave, near 127 Rossmoyne Ave. (see attached)

Description of Proposed Work: Execute open cut installation of 24" steel natural gas pipeline through Rossmoyne Ave right of way.

*\*Please attach any detailed plans and additional project descriptions*

Duration of Excavation Start: Spring 2024 End: Summer 2024

Estimated Restoration Complete Date Restoration to be completed summer 2024

List Approximate Size of Each Type of Cut: 24" diameter pipe installed in approximate 5' wide excavated trench for a length of approximately 2,100 ft

<b>Billing Information:</b> (If different than above) Name: _____ Address: _____ _____ Direct Phone: _____ Email: _____	<b>Permit Fees (Complete ALL that apply):</b> Street Cut (\$50 x <u>X</u> ) \$ _____ Sod Cut (\$15 x ___) \$ _____ Bore Cut (\$20 x ___) \$ _____ Sidewalk/Bike Path Cut (\$20 x ___) \$ _____ Blocking Street (\$15 x ___) \$ _____ TOTAL (Note: Max Fee is \$50 per permit) \$ _____
--	--

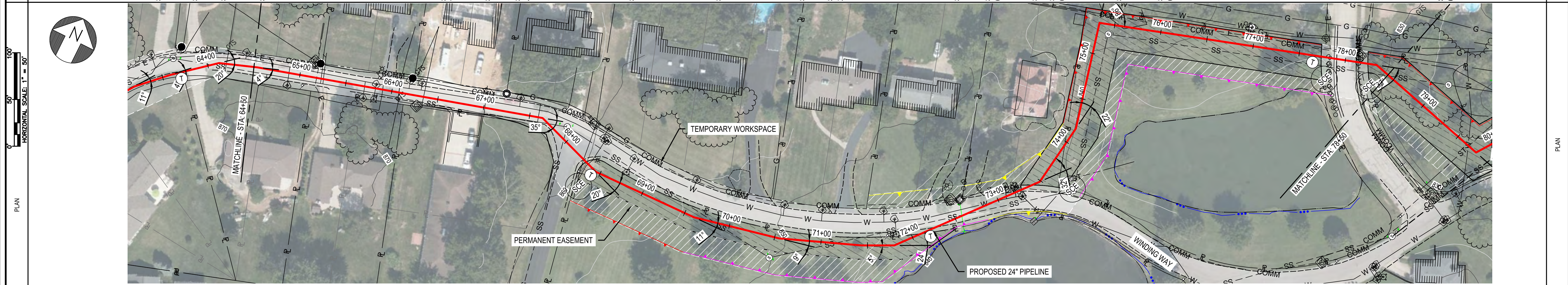
<b>OFFICIAL USE ONLY</b>	<b>Permit Number:</b> _____
Approved as submitted: <input type="checkbox"/> Yes <input type="checkbox"/> No      Approved with conditions: <input type="checkbox"/> Yes <input type="checkbox"/> No Denied: <input type="checkbox"/> Yes <input type="checkbox"/> No Is City Inspection of restoration required? <input type="checkbox"/> Yes <input type="checkbox"/> No Fee Paid: <input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, Check Number: _____	
_____	_____
<i>City Official</i>	Date





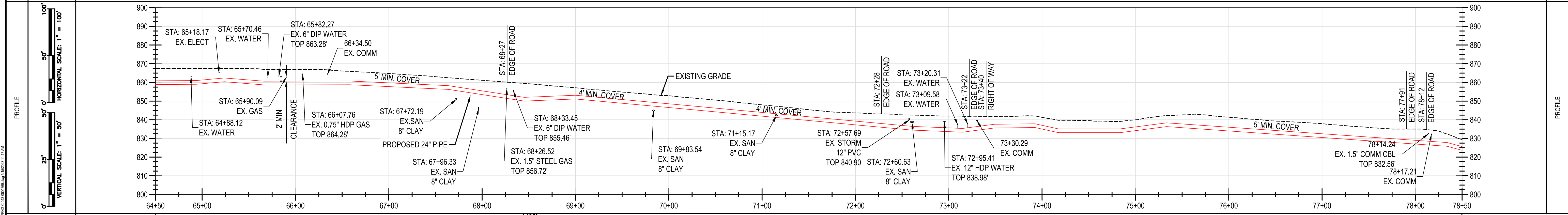
RIGHT-OF-WAY	OWNERSHIP	KENTON COUNTY COOPERATIVE	UNION LIGHT, HEAT AND POWER COMPANY
	ACREAGE		
	EASEMENTS		
REF. DWG. NO.			

STATIONING	STA: 64+54.4° BEND (H-RT) STA: 64+94.2° SAG (V) STA: 65+24.5° OVERBEND (V) STA: 65+66.2° SAG (V) STA: 67+64.35° FTG (H-LT) STA: 68+08.11° SAG (V) STA: 68+45.20° FTG (H-LT) STA: 69+61.11° BEND (H-LT) STA: 70+55.9° BEND (H-LT) STA: 71+44.5° BEND (H-LT) STA: 71+79.24° FTG (H-LT) STA: 73+10.10° SAG (V) STA: 73+49.32° FTG (H-LT) STA: 73+92.6° OVERBEND (V) STA: 74+18.22° FTG (H-LT) STA: 74+83.4° SAG (V) STA: 75+33.88° FTG (H-RT) STA: 78+34.33° FTG (H-RT)	STATIONING
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PIPE DATA (SLOPE STATIONING)	STA.	WELD	f	JOINT LENGTH	HEAVY
	STA.	WELD	f	(CONV.)	(CONV.)

FOR PERMITTING  
USE ONLY



MATERIAL	10	10	10	10	11	10
CONST. METHOD	OPEN TRENCH					
CLASS / MAOP	CLASS 3 / 1000 PSIG					

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NO.	DATE	REVISION DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
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B	01/04/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	MDM		
						STATION ID	XX-X-XX-XXX-XXXX	DATE	05/15/2023
						CHECKER INITIALS	JMP	INITIALS	AMP

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**AM07 PHASE 2  
ALIGNMENT SHEET 7  
ERLANGER, KY**

REF. DWG(S)

SHEET(S)	1 OF X	DWG SCALE	AS NOTED
DWG DATE	09/13/2022	SUPERSEDED	-
DRAWING NUMBER		REVISION	
<b>PNG -C-043-0001769</b>		<b>C</b>	

C:\ERLANGER\AM07

PROFESSIONAL ENGINEER STAMP

**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSITIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / PL	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

**FOR PERMITTING  
USE ONLY**

BURNS & MCDONNELL  
ENGINEERING COMPANY, INC.  
STATE LICENSE #43

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REF. DWG(S)

NO.	DATE	REVISION(S) DESCRIPTION	BY	CHK	APPD	DESCRIPTION	DATE	INITIALS	APPROVALS
A	09/14/2022	ISSUED FOR 30% DESIGN	MDM	JMP	CNS	AREA CODE	-	-	REGIONAL ENGINEER
B	02/03/2023	ISSUED FOR 60% DESIGN	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% DESIGN	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	JMP	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



**AM07 PHASE 2  
ABBREVIATIONS & LEGEND  
ERLANGER, KY**

SHEET(S)	XX OF XX	DWG SCALE	NONE
DWG DATE	09/13/2022	SUPERSEDED	-
DRAWING NUMBER		REVISION	
<b>PNG - G-043-0001431</b>		<b>C</b>	
GIERLANGER/AM07			

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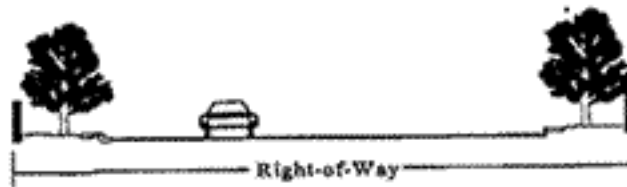
## City of Crestview Hills, Kentucky Encroachment Permit Information

### What is an encroachment permit?

An encroachment permit is written permission to excavate or otherwise encroach within the City of Crestview Hills' public road right-of-way. A permit may be granted to a public utility, contractor or an individual. Permits are issued by the City of Crestview Hills for any work within the City's boundaries.

### What is the road right-of-way?

The road right-of-way is the full width of land owned or controlled by the City of Crestview Hills, upon which the traveled way is constructed, and which usually extends considerably beyond the edge of pavement (or traveled way) to the boundaries of the adjacent private properties.



### When are encroachment permits needed?

In addition to excavations, permits must be obtained for tree planting and removal, utility work, driveway installations, placement of any structures, construction of street improvements and drainage facilities, or generally for any type of work conducted within the public road right-of-way.

### What is the purpose of an encroachment permit?

Encroachment permits provide necessary regulation of the encroachment process to safeguard the public interest in the roadway facility, minimize street cuts, help ensure the roadway longevity, and to ensure continuing safety and convenience for the traveling public.

### What is the authority for Encroachment Permits?

Encroachment permits are required pursuant to City of Crestview Hills Ordinance No. 2018-11-01, which establish regulations specifically pertaining to right-of-way and govern the placement and maintenance of certain facilities that are used to provide utility or similar services. The ordinance also establishes penalties for working without a permit and for a violation of any terms of the permit.

### What is the process for obtaining an encroachment permit?

An application describing the proposed work must be completed, signed, and turned into the City of Crestview Hills for review and processing. One set of construction plans or drawings, if available, must be submitted along with the application. There is a small fee for reviewing and processing the application form. The fee amount depends on the type of work being performed with a maximum of \$50.00. Most permits are issued within 3 – 5 working days.

### Where can permits be obtained?

Permits can be obtained at City of Crestview Hills' City Building, 50 Town Center Blvd., Crestview Hills, Kentucky, 41017, the City's website [www.crestviewhills.com](http://www.crestviewhills.com), or by calling 859-341-7373 during normal business hours.



# RIGHT-OF-WAY ENCROACHMENT PERMIT APPLICATION

50 Town Center Boulevard, Crestview Hills, KY 41017

Phone: 859-341-7373 | Fax: 859-341-6993 | Email: encroachmentpermits@crestviewhills.com

Name of Utility Company (if applicable): Duke Energy Kentucky, INC

Name of Entity Applying for Permit: Burns & McDonnell

Contact Person: John Perkins

Address: 139 E 4th St Cincinnati OH 45202  
Number Street Name City State ZIP

Phone Number(s): 513-315-8338  
Cell Work & Ext/Direct Line Fax  
 Email: john.perkins@duke-energy.com  
Email

Name of Entity doing the work at site: TBD

*(Please attach copy of the Occupational License for Entity doing work)*

On Site Contact: TBD

Name Phone Email

Location of Encroachment Activity: Across Woodpoint Dr, near 111 Woodspoint Dr. (see attached)

Description of Proposed Work: Execute open cut installation of 24" steel natural gas pipeline across Woodspoint Dr right of way.

*\*Please attach any detailed plans and additional project descriptions*

Duration of Excavation Start: Spring 2024 End: Summer 2024

Estimated Restoration Complete Date Restoration to be completed summer 2024

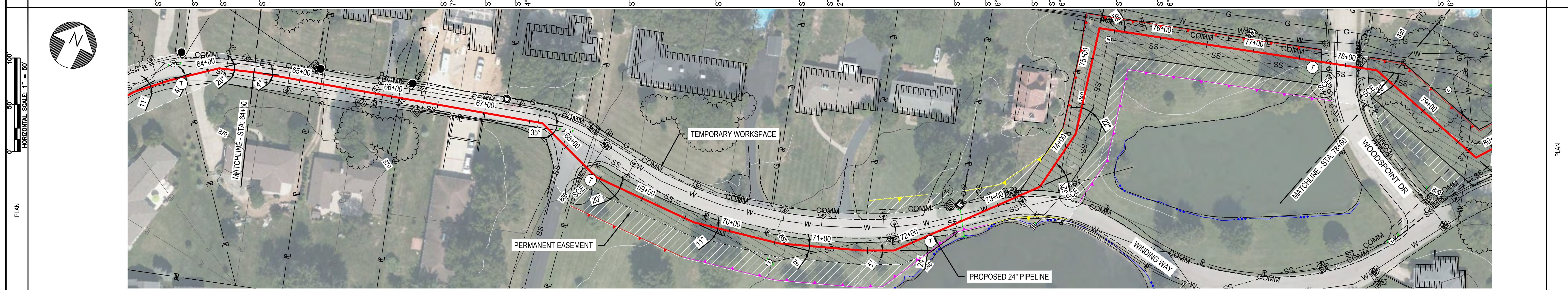
List Approximate Size of Each Type of Cut: 24" diameter pipe installed in approximate 5' wide excavated trench for a length of 50 ft perpendicular across Woodspoint Dr.

<b>Billing Information:</b> (If different than above) Name: _____ Address: _____ _____ Direct Phone: _____ Email: _____	<b>Permit Fees (Complete ALL that apply):</b> Street Cut (\$50 x <u>X</u> ) \$ _____ Sod Cut (\$15 x ___) \$ _____ Bore Cut (\$20 x ___) \$ _____ Sidewalk/Bike Path Cut (\$20 x ___) \$ _____ Blocking Street (\$15 x ___) \$ _____ TOTAL (Note: Max Fee is \$50 per permit) \$ _____
--	--

<b>OFFICIAL USE ONLY</b>	<b>Permit Number:</b> _____
Approved as submitted: <input type="checkbox"/> Yes <input type="checkbox"/> No      Approved with conditions: <input type="checkbox"/> Yes <input type="checkbox"/> No Denied: <input type="checkbox"/> Yes <input type="checkbox"/> No Is City Inspection of restoration required? <input type="checkbox"/> Yes <input type="checkbox"/> No Fee Paid: <input type="checkbox"/> Yes <input type="checkbox"/> No      If yes, Check Number: _____ _____ City Official <span style="float: right;">_____</span> Date	

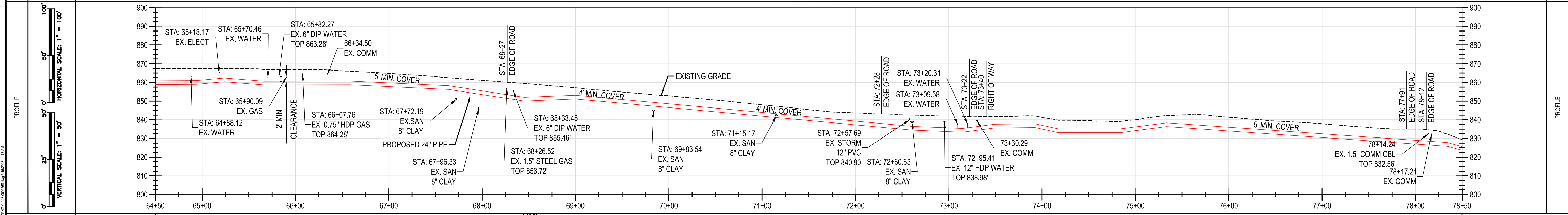
RIGHT-OF-WAY	OWNERSHIP	KENTON COUNTY COOPERATIVE	UNION LIGHT, HEAT AND POWER COMPANY
	ACREAGE		
	EASEMENTS		
REF. DWG. NO.			

STATIONING	STA: 64+54.4° BEND (H-RT) STA: 64+94.2° SAG (V) STA: 65+24.5° OVERBEND (V) STA: 65+66.2° SAG (V) STA: 67+64.35° FTG (H-LT) 7° OVERBEND (V) STA: 68+08.11° SAG (V) STA: 68+45.20° FTG (H-LT) 4° OVERBEND (V) STA: 69+61.11° BEND (H-LT) STA: 70+55.9° BEND (H-LT) STA: 71+44.5° BEND (H-LT) STA: 71+79.24° FTG (H-LT) 2° SAG (V) STA: 73+10.10° SAG (V) STA: 73+49.32° FTG (H-LT) 6° OVERBEND (V) STA: 73+92.6° OVERBEND (V) STA: 74+18.22° FTG (H-LT) 6° SAG (V) STA: 74+83.4° SAG (V) STA: 75+33.88° FTG (H-RT) 6° OVERBEND (V) STA: 78+34.33° FTG (H-RT) 6° OVERBEND (V)	STATIONING
------------	--	------------



PIPE DATA (SLOPE STATIONING)	STA.	WELD	f	JOINT LENGTH	HEAVY
	STA.	WELD	f	(CONV.)	(CONV.)

**FOR PERMITTING USE ONLY**



MATERIAL	10	10	10	10	11	10
CONST. METHOD	OPEN TRENCH					
CLASS / MAOP	CLASS 3 / 1000 PSIG					

PROPRIETARY & CONFIDENTIAL ALL RIGHTS RESERVED \* DO NOT SCALE THIS DRAWING \* USE DIMENSIONS ONLY  
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B	01/04/2023	ISSUED FOR 60% REVIEW	MDM	JMP	AMP	ACCOUNT NUMBER	-	-	MGR TECH REC & STD
C	05/15/2023	ISSUED FOR 90% REVIEW	MDM	JMP	AMP	PROJECT NUMBER	AW4685	-	PRINCIPAL ENGINEER
						DRAWING BY	MDM		
						STATION ID	XX-X-XX-XXX-XXXX	DATE	05/15/2023
						CHECKER INITIALS	JMP	INITIALS	AMP

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**AM07 PHASE 2  
ALIGNMENT SHEET 7  
ERLANGER, KY**

ERLANGER, KY

REF. DWG(S)

SHEET(S)	1 OF X	DWG SCALE	AS NOTED
DWG DATE	09/13/2022	SUPERSEDED	-
DRAWING NUMBER		REVISION	
<b>PNG -C-043-0001769</b>		<b>C</b>	
C:\ERLANGER\AM07			

PROFESSIONAL ENGINEER STAMP

**GENERAL RESTRICTIONS**

1. STAY IN ROW/EASEMENTS OR WITHIN PREDETERMINED WORKSPACE AREAS.
2. ONLY USE DESIGNATED POINTS OF ACCESS AS APPROVED BY DUKE.
3. NO DIGGING, WORK, OR STORAGE WITHIN 25' OF POWER LINE OR EQUIPMENT INCLUDING GUY WIRES, EXCEPT AT CROSSINGS OF POWER RIGHT OF WAY DESIGNATED ON PLANS.
4. ANY DOT CROSSING NOTIFICATIONS TO BE MADE AS DICTATED BY THE PERMIT OR STATE DOT PERMIT.
5. INSTALLER IS RESPONSIBLE FOR KNOWING LOCATION OF ALL ENVIRONMENTALLY SENSITIVE AREA RESTRICTIONS PERTAINING TO THIS PROJECT.

**ABBREVIATIONS**

APPROX.	APPROXIMATE
B.C.	BUOYANCY CONTROL
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
COMM	COMMUNICATIONS
CP	CATHODIC PROTECTION
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
E	EASTING
EA	EACH
EL / ELEV	ELEVATION
EX	EXISTING
FLC	FOREIGN LINE CROSSING
FM	FORCE MAIN
FT	FEET
FTG	FITTING
H / HORIZ	HORIZONTAL
HDD	HORIZONTAL DIRECTIONAL DRILL
H-LT	HORIZONTAL LEFT TURN
H-RT	HORIZONTAL RIGHT TURN
IN / INV	INVERT
JAB	JACK AND AUGER BORE
L	LENGTH
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
N	NORTHING
N.T.S.	NOT TO SCALE
O.C.	ON CENTER
OC	OPEN CUT
O.D.	OUTSIDE DIAMETER
PCC	PORTLAND CEMENT CONCRETE
PIV	POST INDICATOR VALVE
P / P/L	PROPERTY LINE
PSI	POUNDS PER SQUARE INCH
PVC	POLY VINYL CHLORIDE
R	RADIUS
RD	ROAD
R/W / ROW	RIGHT-OF-WAY
RCP	REINFORCED CONCRETE PIPE
SD	STORM DRAIN
SS	SANITARY SEWER
SSD	SOLID STATE DECOUPLER
STA	STATION
TOP	TOP OF PIPE
TWS	TEMPORARY WORKSPACE
T.C.E.	TEMPORARY CONSTRUCTION EASEMENT
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
UGT	UNDERGROUND TELEPHONE/COMMUNICATIONS
V / VERT	VERTICAL
W	WIDTH
W.T.	WALL THICKNESS
X-ING	CROSSING

**LEGEND**

	PROPOSED TEMPORARY WORKSPACE (OPEN TRENCH).		POTHOLE LOCATION
	PROPOSED PERMANENT EASEMENT		BORING LOCATION
	ADDITIONAL TEMPORARY WORKSPACE (PIPE STRING AREA)		FLUSH PIPELINE MARKER
	PROPOSED ROW ENCROACHMENT WORKSPACE		ABOVE GRADE PIPELINE MARKER
	CONSTRUCTION MATTING		MILE MARKER
	TRENCH PLUG		LARGE WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	SLOPE BREAKER		SMALL WATERWAY CROSSING BMP (SEE ENV DETAIL PNG-C-043-0001809)
	DELINEATED WETLAND		J-HOOK
	FEMA 100 YEAR FLOOD AREA		INLET PROTECTION
	ACCESS PATH		ROCK DITCH CHECK
	STREAM		FILTER SOCK CHECK DAM
	DITCH		SOIL STOCK PILE
	TREE LINE		CONSTRUCTION ENTRANCE
	EX. COMMUNICATION LINE		TEST STATION (SEE EQUIPMENT SCHEDULES ON PNG-E-043-0001614)
	EX. OVERHEAD LINE		PIPELINE RETIREMENT, ABANDONED IN PLACE.
	EX. ELECTRIC LINE		EXISTING PIPELINE REPLACEMENT
	FENCE		
	EX. GAS LINE		
	RIGHT-OF-WAY		
	RAILROAD		
	EX. SANITARY SEWER		
	EX. STORM WATER LINE		
	EX. WATER LINE		
	PROPERTY LINE		
	FILTER SOCK RUN ON / RUNOFF PROTECTION		
	SILT FENCE RUN ON / RUNOFF PROTECTION		
	SUPER SILT FENCE RUNOFF PROTECTION		
	EX. MAJOR CONTOUR		
	EX. MINOR CONTOUR		
	PROPOSED MAJOR CONTOUR		
	PROPOSED MINOR CONTOUR		
	BUOYANCY CONTROL		
	PROPOSED GAS LINE		
	HORIZONTAL DIRECTIONAL DRILL		
	AUGER BORE		
	EXCAVATION PIT		

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STATE LICENSE #43

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						DRAWING BY	JMP	-	
						STATION ID	-	-	
						CHECKER INITIALS	JMP	05/15/2023	AMP



**AM07 PHASE 2  
ABBREVIATIONS & LEGEND  
ERLANGER, KY**

SHEET(S) XX OF XX	DWG SCALE NONE
DWG DATE 09/13/2022	SUPERSEDED
DRAWING NUMBER	REVISION
<b>PNG - G-043-0001431</b>	<b>C</b>
GIERLANGER/AM07	

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GOVERNOR

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**KENTUCKY HERITAGE COUNCIL**  
**THE STATE HISTORIC PRESERVATION OFFICE**

**MICHAEL E. BERRY**  
SECRETARY

**JACQUELINE COLEMAN**  
LT. GOVERNOR

410 HIGH STREET  
FRANKFORT, KENTUCKY 40601  
(502) 564-7005  
[www.heritage.ky.gov](http://www.heritage.ky.gov)

**CRAIG A. POTTS**  
EXECUTIVE DIRECTOR &  
STATE HISTORIC  
PRESERVATION OFFICER

December 22, 2022

Bradley Seiter  
Senior Project Manager  
Duke Energy  
139 East 4<sup>th</sup> Street  
Cincinnati, OH 45202

Re: *Phase I Archaeological Survey of the Duke Energy AM07 Pipeline Replacement Project (Phase 2), Kenton County, Kentucky* by Douglas Kullen

Dear Mr. Seiter,

Thank you for your recent submission of the above referenced technical report. We understand that Duke Energy Kentucky, Inc. (Duke) proposes upgrades along the local gas distribution system in Erlanger and Crestview Hills, in Kenton County. We understand that the lead federal agency is anticipated to be the U.S. Army Corps of Engineers. The area of potential effects (APE) included all potential areas of ground disturbance: a linear preferred route corridor, a linear alternate route corridor, linear access road routes, workspaces, and laydown areas. Burns and McDonnell Engineering Company, Inc. conducted a Phase I archaeological survey of the APE in October of 2022.

We accept the archaeology report without revision. We understand that a Phase I archaeological survey was conducted over 51.1 acres of land, and that methods included pedestrian survey. The vast majority of the APE was found to be disturbed. Where necessary, "soil checks," quick, unscreened soil excavations, were performed to confirm disturbance. No archaeological sites were identified during this investigation. No above-ground impacts are anticipated from the project activities. We would concur with a determination of *No Historic Properties Affected* for this undertaking.

In the unlikely event that human remains are found during construction for this project, work should cease immediately, and the county coroner and the Kentucky Heritage Council should be



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Re: *Phase I Archaeological Survey of the Duke Energy AM07 Pipeline Replacement Project  
(Phase 2), Kenton County, Kentucky* by Douglas Kullen

contacted. Should project plans change or should there be any future concerns or questions regarding cultural resources in the vicinity of this project area, please do not hesitate to contact Patti Hutchins of my staff via email at [patricia.hutchins@ky.gov](mailto:patricia.hutchins@ky.gov).

Sincerely,



Craig A. Potts,  
Executive Director and  
State Historic Preservation Officer

KHC # 220476

CP/peh

cc: Philip Mink, OSA, [pbmink2@uky.edu](mailto:pbmink2@uky.edu)

Douglas Kullen, Burns and McDonnell, [dkullen@burnsmcd.com](mailto:dkullen@burnsmcd.com)



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ANDY BESHEAR  
GOVERNOR

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**KENTUCKY HERITAGE COUNCIL**  
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SECRETARY

JACQUELINE COLEMAN  
LT. GOVERNOR

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FRANKFORT, KENTUCKY 40601  
(502) 564-7005  
[www.heritage.ky.gov](http://www.heritage.ky.gov)

CRAIG A. POTTS  
EXECUTIVE DIRECTOR &  
STATE HISTORIC PRESERVATION OFFICER

April 20, 2023

Bradley Seiter  
Senior Project Manager  
Duke Energy  
139 East 4th Street  
Cincinnati, OH 45202

RE: *Phase I Archaeological Survey of a Segment of the Duke Energy AM07 Pipeline Replacement Project (Phase 4), Campbell County, Kentucky* by Douglas Kullen

Dear Mr. Seiter,

Thank you for your recent submission of the above referenced technical report. We understand that Duke Energy Kentucky, Inc. (Duke) proposes replacement of or upgrades to their existing AM07 pipeline in Highland Heights and Cold Spring, in Campbell County. We understand that the lead federal agency is anticipated to be the U.S. Army Corps of Engineers. The area of potential effects (APE) included the entirety of a survey corridor for the proposed pipeline route. Burns and McDonnell Engineering Company, Inc. conducted a Phase I archaeological survey of the APE in February of 2023.

We accept the archaeology report without revision. We understand that a Phase I archaeological survey was conducted over 7.3 acres of land, and that methods included pedestrian survey and shovel testing. No archaeological sites were identified during this investigation. No above-ground impacts are anticipated from the project activities. Our office would concur with a determination of **No Historic Properties Affected** for this undertaking.

In the unlikely event that human remains are found during construction for this project, work should cease immediately, and the county coroner and the Kentucky Heritage Council should be contacted. Should project plans change or should there be any future concerns or questions regarding cultural resources in the vicinity of this project area, please contact Patti Hutchins of my staff at [Patricia.Hutchins@ky.gov](mailto:Patricia.Hutchins@ky.gov).

Sincerely,

Craig Potts  
Executive Director and  
State Historic Preservation Officer

KHC# 230752

CP: peh

e-cc: Douglas Kullen, Burns and McDonnell, [dkullen@burnsmcd.com](mailto:dkullen@burnsmcd.com)  
Philip Mink, OSA, [pbmink2@uky.edu](mailto:pbmink2@uky.edu)



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## KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES

**Rich Storm**  
Commissioner

#1 Sportsman's Lane  
Frankfort, Kentucky 40601  
Phone (502) 564-3400  
Fax (502) 564-0506

**Brian Clark**  
Deputy Commissioner

**Gabe Jenkins**  
Deputy Commissioner

November 17, 2022

Burns & McDonnell  
Attn. Brooke Harrison  
530 West Spring Street, Suite 200  
Columbus, OH 43215

RE: Project Review Request, AM07 Phase 2 Pipeline Replacement Project

Dear Ms. Harrison:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for information regarding the subject project. Based on our review of the information provided we appreciate and concur with your recommendation to clear trees during the fall and winter months to avoid direct impacts to the Little Brown Bat, *Myotis lucifugus*. We have no additional comments or concerns regarding your assessment of the additional state listed species.

I hope this information is helpful to you, if you have questions or require additional information, please call me at 502-892-4472.

Sincerely,

A handwritten signature in black ink that reads 'Doug Dawson'.

Doug Dawson  
Environmental Section Chief



## KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES

**Rich Storm**  
Commissioner

#1 Sportsman's Lane  
Frankfort, Kentucky 40601  
Phone (502) 564-3400  
Fax (502) 564-0506

**Brian Clark**  
Deputy Commissioner

**Gabe Jenkins**  
Deputy Commissioner

May 16, 2023

Burns & McDonnell  
Attn. Brooke Harrison  
530 West Spring Street, Suite 200  
Columbus, OH 43215

RE: Project Review Request, AM07 Phase 4 Pipeline Replacement Project

Dear Ms. Harrison:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for information regarding the subject project. Based on our review of the information provided we appreciate and concur with your recommendation to clear trees during the fall and winter months to avoid direct impacts to the Little Brown Bat, *Myotis lucifugus*. We have no additional comments or concerns regarding your assessment of the additional state listed species.

I hope this information is helpful to you, if you have questions or require additional information, please call me at 502-892-4472.

Sincerely,

A handwritten signature in black ink that reads "Doug Dawson".

Doug Dawson  
Environmental Section Chief

**From:** [Mcdill, Pamela L](#)  
**To:** [Harrison, Brooke](#)  
**Subject:** Re: [EXTERNAL] RE: FWS 2022-0081807; Duke AM07 Phase 2 Pipeline Replacement Project; Kenton Co., KY  
**Date:** Monday, November 28, 2022 1:54:57 PM

---

Hi Brooke,

Thank you for the quick response. Yes, we would appreciate it if we would receive the concurrence request from the USACE, but I am happy to provide some early coordination comments.

Everything looks good for the gray bat, and please defer to my last email regarding the Indiana bat and NLEB.

Regarding listed mussel species, I think Josiah was unable to reach an effect determination for mussels using the Kentucky State-wide determination key because the proposed Action will disturb the channel or bank of a perennial or intermittent stream. If there will be no impacts to any perennial streams (and because BMPs will be implemented), we would have no concerns with a 'no effect' or 'may affect, not likely to adversely affect' (NLAA) determination for these species. If there will be perennial stream impacts but the habitat is not suitable for listed mussels, we would also have no concerns with a 'no effect' or 'NLAA,' but please provide more photographs of the perennial stream to support this.

As long as all of the appropriate information is submitted and we do not have to request any additional information, this should help speed the process along with the USACE. Thank you again for the coordination. Please don't hesitate to reach out with any more questions.

Thank you,

*Pam McDill (she/her)*  
*Fish and Wildlife Biologist*  
*U.S. Fish & Wildlife Service*  
*Kentucky Ecological Services Field Office*  
*330 W. Broadway, Room 265*  
*Frankfort, KY 40601*  
*Cell:* [REDACTED]  
*Email:* [REDACTED]

**NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.**

---

**From:** Harrison, Brooke [REDACTED]  
**Sent:** Monday, November 28, 2022 12:11 PM  
**To:** Mcdill, Pamela L [REDACTED]

**Subject:** [EXTERNAL] RE: FWS 2022-0081807; Duke AM07 Phase 2 Pipeline Replacement Project; Kenton Co., KY

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Hi Pam,

The project will require a USACE NWP which I plan to submit by mid-December 2022. I earlier correspondence with Josiah Maine you had requested we submit a USFWS IPAC to complete correspondence hence my submittal. We can hold off on finalizing correspondence and let the USACE complete during the permit phase, but the USACE typically requests that the consultants initiate early agency consultation to start the process and speed things up.

Thanks for the clarification on the probable absence and calls.

Let me know how you would like to proceed.

Sincerely,

**Brooke Harrison** \ Burns & McDonnell

Project Manager \ Environmental Services

o

\ M

\ [burnsmcd.com](mailto:burnsmcd.com)

530 W. Spring St, Suite 200, Columbus, OH 43215

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---

**From:** Mcdill, Pamela L

**Sent:** Monday, November 28, 2022 11:38 AM

**To:** Harrison, Brooke

**Subject:** FWS 2022-0081807; Duke AM07 Phase 2 Pipeline Replacement Project; Kenton Co., KY

Good morning Brooke,

The Kentucky Field Office is currently reviewing the above-referenced project information, and it looks like the project may require permitting or authorization from the USACE. If this is the case, the USACE will be the lead federal action agency, and the federal permit issued by the USACE is what triggers Section 7 of the Endangered Species Act.

Due to time constraints and short-staffing, we are requesting that you contact the USACE regarding the above-referenced project, and the USACE will come to us to request

consultation so that we don't review the same project twice. You are welcome to cc me on any correspondence with the USACE. If this project has already been assigned a project manager, just let me know.

FYI, in the concurrence request document, a determination of 'no effect' was made for the Indiana bat and northern long-eared bat; however, our office determined that the survey is acceptable for *probable* absence (not absence) of these species. All that to say, our office would support a 'may affect, not likely to adversely affect' determination for these species. Please clarify this in your request to the USACE.

If there will be no USACE authorization for this project, just let me know, and also advise on the determination for the Indiana bat and northern long-eared bat.

Thank you for your coordination,

*Pam McDill (she/her)*  
*Fish and Wildlife Biologist*  
*U.S. Fish & Wildlife Service*  
*Kentucky Ecological Services Field Office*  
*330 W. Broadway, Room 265*  
*Frankfort, KY 40601*  
Cell: [REDACTED]  
Email: [REDACTED]

**NOTE: This email correspondence and any attachments to and from this sender is subject to the Freedom of Information Act (FOIA) and may be disclosed to third parties.**

**From:** [Maine, Josiah J](#)  
**To:** [Harrison, Brooke](#); [Lane, Steve](#)  
**Subject:** FW: [EXTERNAL] Acoustic Bat Survey Report for the Duke AM07 Phase 2 Project  
**Date:** Wednesday, August 10, 2022 3:43:56 PM

---

Please see the USFWS concurrence with the survey results for AM07 Phase 2 below.

## Josiah Maine

Burns & McDonnell

Staff Environmental Scientist

O

\ M

\ [burnsmcd.com](mailto:burnsmcd.com)

9400 Ward Parkway \ Kansas City, MO 64114

---

**From:** Armstrong, Mike [REDACTED]  
**Sent:** Wednesday, August 10, 2022 2:40 PM  
**To:** Maine, Josiah J [REDACTED]  
**Cc:** McDill, Pamela L [REDACTED]  
**Subject:** Fw: [EXTERNAL] Acoustic Bat Survey Report for the Duke AM07 Phase 2 Project

Afternoon Josiah.

I have reviewed the subject P/A bat acoustic survey report and find it to be acceptable for probable absence of Indiana and northern long-eared bats in the project area. Please be aware that my approval of these survey results is not a section 7(a)(2) concurrence and does not authorize implementation of any part of the proposed action or remove the applicant from the permitting requirements that may be required by other State and federal agencies. Additional coordination with our office may be necessary. Please contact your project manager (Pam McDill) if you have additional questions.

Thanks,  
Mike

Mike Armstrong  
Southeast Region Bat Recovery Biologist  
U.S. Fish & Wildlife Service  
Kentucky Field Office  
330 W. Broadway, Room 265  
Frankfort, KY 40601  
Cell: [REDACTED]

**\*\*Check us out at <https://www.fws.gov/office/kentucky-ecological-services>**

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**From:** Maine, Josiah J [REDACTED]

**Sent:** Wednesday, August 10, 2022 10:37 AM

**To:** Armstrong, Mike [REDACTED]

**Cc:** Mcdill, Pamela L [REDACTED]; Couch, Zach L (FW) [REDACTED]; Harrison, Brooke [REDACTED]; Lane, Steve [REDACTED]

**Subject:** [EXTERNAL] Acoustic Bat Survey Report for the Duke AM07 Phase 2 Project

**This email has been received from outside of DOI - Use caution before clicking on links, opening attachments, or responding.**

Mike,

Please see the attached Acoustic Bat Survey Report for the Duke AM07 Phase 2 Pipeline Replacement Project in Kenton County, Kentucky for your review. If you have any questions or concerns, please let me know.

Thanks,

**Josiah Maine**

Burns & McDonnell

Staff Environmental Scientist

o [REDACTED] \ M [REDACTED]

[REDACTED] \ [burnsmcd.com](http://burnsmcd.com)

9400 Ward Parkway \ Kansas City, MO 64114



**From:** [Mcdill, Pamela L](#)  
**To:** [Harrison, Brooke](#)  
**Cc:** [Armstrong, Mike](#)  
**Subject:** FWS 2023-0051662; Duke Energy AM07 Phase 4 Pipeline; Campbell Co., KY  
**Date:** Friday, April 21, 2023 4:08:29 PM

---

Good afternoon Brooke,

The Kentucky Field Office is currently reviewing the above-referenced project information received by our office on March 14, 2023, and we are following up.

The proposed project occurs within potential Indiana bat and northern long-eared bat (NLEB) habitat. You have advised us that an acoustic presence/absence survey will be conducted for the Indiana bat and NLEB. Please be advised that the current acoustic Survey Guidance does not apply to the gray bat. Please submit your survey plan to our office prior to conducting it. Please send it to Mike Armstrong, cc'd on this email, and you are welcome to include me as well.

Once the survey has been conducted, and the report has been reviewed and accepted by our office, I will draft a response letter for the entirety of the project (depending on the results of the survey). If you have any questions, please don't hesitate to reach out.

Thank you,

*Pam McDill (she/her)*  
*Fish and Wildlife Biologist*  
*U.S. Fish & Wildlife Service*  
*Kentucky Ecological Services Field Office*  
*330 W. Broadway, Room 265*  
*Frankfort, KY 40601*  
Cell: [REDACTED]  
Email: [REDACTED]

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## KENTUCKY DEPARTMENT OF FISH & WILDLIFE RESOURCES

**Rich Storm**  
Commissioner

#1 Sportsman's Lane  
Frankfort, Kentucky 40601  
Phone (502) 564-3400  
Fax (502) 564-0506

**Brian Clark**  
Deputy Commissioner

**Gabe Jenkins**  
Deputy Commissioner

May 16, 2023

Burns & McDonnell  
Attn. Brooke Harrison  
530 West Spring Street, Suite 200  
Columbus, OH 43215

RE: Project Review Request, AM07 Phase 4 Pipeline Replacement Project

Dear Ms. Harrison:

The Kentucky Department of Fish and Wildlife Resources (KDFWR) has received your request for information regarding the subject project. Based on our review of the information provided we appreciate and concur with your recommendation to clear trees during the fall and winter months to avoid direct impacts to the Little Brown Bat, *Myotis lucifugus*. We have no additional comments or concerns regarding your assessment of the additional state listed species.

I hope this information is helpful to you, if you have questions or require additional information, please call me at 502-892-4472.

Sincerely,

A handwritten signature in black ink that reads 'Doug Dawson'.

Doug Dawson  
Environmental Section Chief

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

APPLICATION OF DUKE ENERGY KENTUCKY, INC.	)	
FOR A CERTIFICATE OF PUBLIC CONVENIENCE	)	CASE NO.
AND NECESSITY AUTHORIZING THE PHASE TWO	)	2023-00210
REPLACEMENT OF THE AM07 PIPELINE	)	

---

**DIRECT TESTIMONY OF**  
  
**NEIL M. MOSER**  
  
**ON BEHALF OF**  
  
**DUKE ENERGY KENTUCKY, INC.**

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June 28, 2023

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**I. INTRODUCTION AND PURPOSE**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Neil M. Moser and my business address is 4720 Piedmont Row  
3 Drive, Charlotte, North Carolina 28210.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as General  
6 Manager - Engineering, Planning, & Pipeline Integrity on behalf of Duke Energy  
7 Corporation's (Duke Energy) Natural Gas Business Unit (NGBU). The NGBU  
8 organization is responsible for the safe operation of all natural gas assets owned  
9 and operated by Duke Energy and affiliated companies of Duke Energy, including  
10 Duke Energy Kentucky, Inc. (Duke Energy Kentucky or Company). Further,  
11 DEBS provides various administrative and other services to Duke Energy  
12 Kentucky and other affiliated companies of Duke Energy.

13 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND  
14 AND PROFESSIONAL EXPERIENCE.**

15 A. I received a Bachelor of Science Degree in Mechanical Engineering from North  
16 Carolina State University in 1996. I am a Registered Professional Engineer in the  
17 State of North Carolina. I began my career at Piedmont Natural Gas, now a  
18 subsidiary of Duke Energy, in 1996 and have held a variety of positions of  
19 increasing responsibility with Engineering and Operations. In 2022, I assumed my  
20 current role as General Manager – Engineering, Planning, & Pipeline Integrity.

21

1 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS GENERAL**  
2 **MANAGER – ENGINEERING, PLANNING, & PIPELINE INTEGRITY.**

3 A. I am responsible for leading the design, engineering, technical support, system  
4 planning, transmission integrity management, distribution integrity management,  
5 corrosion control, and damage prevention teams that work to facilitate safe,  
6 reliable, and efficient natural gas delivery, investment prioritization, and  
7 compliance with all state and federal natural gas regulations for the Natural Gas  
8 Business Unit within Duke Energy.

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**  
10 **PUBLIC SERVICE COMMISSION?**

11 A. No.

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
13 **PROCEEDING?**

14 A. My testimony provides a brief overview of Duke Energy Kentucky and its natural  
15 gas operations. I provide a summary of the Company's request in this proceeding  
16 for a Certificate of Public Convenience and Necessity (CPCN) for the  
17 construction of the second phase of its AM07 Pipeline Replacement Program  
18 (Phase Two). In doing so, I discuss the need for, and reasonableness of, our  
19 proposal to replace the existing AM07 pipeline by constructing a new 13.7 mile in  
20 length, twenty-four-inch, pipeline and associated facilities. Phase Two of the  
21 AM07 Replacement includes replacement of approximately 3.25 miles of existing  
22 pipeline.

**II. OVERVIEW OF DUKE ENERGY KENTUCKY**

1 **Q. PLEASE GENERALLY DESCRIBE DUKE ENERGY KENTUCKY'S**  
2 **OPERATIONS.**

3 A. Duke Energy Kentucky is a regulated utility operating company that provides  
4 retail electric services in five counties and natural gas service in seven counties in  
5 northern Kentucky. Duke Energy Kentucky's local business office is in Erlanger,  
6 Kentucky, with the main business office in Cincinnati, Ohio. Duke Energy  
7 Kentucky serves a relatively densely populated territory that, though not heavily  
8 industrialized, includes a fairly diverse mix of customers.

9 Duke Energy Kentucky currently provides natural gas distribution service  
10 to approximately 100,000 customers in Boone, Bracken, Campbell, Gallatin,  
11 Grant, Kenton, and Pendleton Counties in northern Kentucky. The Company also  
12 owns, operates, and maintains approximately 1,490 miles of mains on our natural  
13 gas distribution system. Duke Energy Kentucky's gas and electric service  
14 territories encompass approximately 563 and 700 square miles, respectively.

15 Duke Energy's Gas Operations business is organized into the following  
16 functional groups: construction and maintenance, gas engineering, gas supply,  
17 integrity management, performance and compliance management, and our service  
18 delivery organization. These functional groups are designed to ensure the safe,  
19 reliable, and economic supply of natural gas services to Duke Energy Kentucky's  
20 customers. Gas Operations employs approximately 400 individuals who manage  
21 the day-to-day operations of both the Kentucky and Ohio businesses.

1           Additionally, Gas Operations has approximately 400 contract employees to assist  
2           in our mission.

**III.   DUKE ENERGY KENTUCKY’S APPLICATION**  
**TO CONSTRUCT A PIPELINE**

3   **Q.   PLEASE DESCRIBE THE AM07 PIPELINE AND WHY IT MUST BE**  
4   **REPLACED.**

5   A.   AM07 is the primary artery that transports natural gas from upstream suppliers to  
6   Duke Energy Kentucky’s natural gas delivery system. The existing AM07  
7   pipeline extends approximately sixteen miles to the Ohio River and supports  
8   natural gas delivery throughout the Duke Energy Kentucky natural gas delivery  
9   system via connected pipelines.

10 **Q.   PLEASE EXPLAIN WHY THE AM07 PIPELINE MUST BE REPLACED.**

11 A.   Replacement of many sections of AM07 is required under recent updates to  
12   federal regulations issued by the Pipeline and Hazardous Materials Safety  
13   Administration (PHMSA). Specifically, the Company must take action to comply  
14   with the new pipeline safety regulation, “Pipeline Safety: Safety of Gas  
15   Transmission Pipelines: MAOP Reconfirmation, Expansion of Assessment  
16   Requirements, and Other Related Amendments” (New Transmission Rule). The  
17   New Transmission Rule went into effect July 2020 mandating Operators to  
18   review and reconfirm transmission pipeline Maximum Allowable Operating  
19   Pressure (MAOP). The Company must properly adhere to Integrity Management  
20   requirements within PHMSA’s New Transmission Rule as well as other relevant  
21   regulations, specifically, Subpart L §192.607, Verification of Pipeline Materials  
22   Properties and Attributes, Subpart L §192.624, Maximum allowable operating



1 pressure reconfirmation, Subpart M §192.710, Transmission lines: Assessments  
2 outside of high consequence areas, and Subpart O, Gas Transmission Pipeline  
3 Integrity Management. These regulations are driving our need to replace sections  
4 of the AM07.

5 The AM07 pipeline was constructed in the 1950's, in accordance with  
6 industry standards at the time. Today, AM07 is of a vintage where the materials  
7 are no longer industry standard. The majority of AM07 was constructed with A.  
8 O. Smith (AOS) pipe. AOS pipe has a long history of failures due to hard spots in  
9 the pipe body along with failures on the longitudinal seam. The AOS pipe used to  
10 construct the AM07 pipeline was installed in 1956.

11 Subpart O of CFR Part 192 further states that the appropriate methods  
12 must be used to assess threats that are active on covered pipeline segments. AM07  
13 contains segments of AOS pipe with active manufacturing, construction, and Low  
14 Frequency Electric Resistance Weld (LF-ERW) threats that can only be assessed  
15 via in-line inspection (ILI) or pressure test. These threats must be assessed via in-  
16 line inspection or pressure tested at a maximum of every seven years.

17 The AM07 pipeline is not "piggable," meaning it cannot accommodate an  
18 ILI tool and be assessed for active threats on the pipeline such as corrosion,  
19 manufacturing, fabrication, and construction defects. Finally, many of the records  
20 that exist do not meet current PHMSA standards for traceable, verifiable, and  
21 complete records. Given these factors, the Company believes that the safest, most  
22 reliable, and most cost-effective path is to replace the current pipeline so that it is  
23 ILI capable going forward.

1           The AM07 replacement must be completed by 2029 which is the next  
2 regulatory required assessment date. Accordingly, Duke Energy Kentucky has a  
3 present need to replace certain sections of its AM07 pipeline, totaling  
4 approximately 13.7 miles, and associated regulator stations through its Northern  
5 Kentucky territory over the next several years, to comply with PHMSA  
6 regulations.

7 **Q. PLEASE SUMMARIZE THE FUTURE PHASES OF THE AM07**  
8 **REPLACEMENT AND ESTIMATED TIMING OF THEIR**  
9 **CONSTRUCTION.**

10 A. The Company anticipates the 13.7-mile AM07 Replacement to occur in five  
11 phases with final completion in 2027. The Company started construction in early  
12 2023 for this first phase and anticipates the final phase commencing in 2026 for  
13 full in-service by September 2027. The current estimated scope of the five phases  
14 of the AM07 Replacement are summarized as follows:

<b>PHASE</b>	<b>Est. Miles Replaced</b>	<b>Est. in-service date</b>	<b>Estimated Cost of Construction</b>
1	2.0	December 2023	\$42,600,000
2	3.2	September 2024	\$49,300,000
3	3.6	September 2025	\$47,210,100
4	2.2	September 2026	\$32,101,000
5	2.7	September 2027	\$30,388,000
<b>TOTAL</b>	<b>13.7</b>		<b>\$201,599,100</b>

1 **Q. PLEASE BRIEFLY SUMMARIZE DUKE ENERGY KENTUCKY'S**  
2 **APPLICATION AND THE RELIEF REQUESTED IN THIS**  
3 **PROCEEDING.**

4 A. Duke Energy Kentucky is requesting the Commission issue a CPCN to begin  
5 construction of Phase Two. In total, the Phase Two project impacts approximately  
6 3.25 miles of natural gas pipeline. Although Duke Energy Kentucky has already  
7 been approved for the first phase of this five-phase project and is seeking  
8 approval for the second phase in this proceeding, subsequent phases will all  
9 follow this process, on an approximate annual basis, with separate CPCN requests  
10 for each phase.

11 **Q. PLEASE FURTHER DESCRIBE THE CONSTRUCTION FOR PHASE**  
12 **TWO THAT IS PROPOSED IN THIS APPLICATION.**

13 A. Duke Energy Kentucky is proposing to abandon a portion of the existing AM07  
14 pipeline in place and will construct a new 24-inch steel natural gas transmission  
15 line within new right-of-way from the I-75 crossing east to a point approximately  
16 3.25 miles downstream along AM07.

17 **Q. PLEASE FURTHER EXPLAIN THE NEED FOR THE AM07**  
18 **REPLACEMENT PROJECT.**

19 A. In addition to the aforementioned PHMSA compliance issues previously  
20 mentioned, the AM07 Replacement will also improve safety and reliability to the  
21 main portion of the Company's natural gas delivery system in Northern Kentucky.  
22 Although Duke Energy Kentucky has been able to meet customer needs with safe  
23 and reliable natural gas service, the Company must properly assess for the threats

1 on each pipeline, in order to continue providing safe and reliable service. Under  
2 the New Transmission Rule, natural gas companies that do not have the necessary  
3 traceable, verifiable, and complete records for facilities must take action to either  
4 pressure test, perform ILI, or replace the pipe.

5 The 1956 vintage pipe within the AM07 pipeline does not have traceable,  
6 verifiable, and complete pressure test records. Because the majority of AM07 is  
7 comprised of 1956 vintage pipe with active manufacturing and construction  
8 threats, the Company must take action to address these threats to comply with  
9 these regulations.

10 **Q. WHY IS THE COMPANY REPLACING THE AM07 INSTEAD OF**  
11 **PERFORMING THE ILI OR PRESSURE TESTING?**

12 A. AM07 is incapable of ILI as the 1950's construction standards did not  
13 contemplate that technology. Pressure testing of the AM07 is not possible. AM07  
14 acts as a backbone to the Company's natural gas delivery system. Pressure testing  
15 requires taking the line out of service. Taking the AM07 pipeline out of service  
16 would result in widespread delivery blackouts across the Company's entire  
17 natural gas delivery system and would take thousands of customers out of service  
18 for an extended period of time and would require significant inspections and  
19 relights across the Company's entire natural gas footprint.

20 Retrofitting the existing pipeline to accommodate ILI would require a  
21 significant capital cost and would require significant amounts of temporary  
22 liquified natural gas (LNG) being injected into the system. Doing so would also  
23 take this line out of service for an extended period of time (minimum two months)

1 to perform the test, not including any additional time necessary to conduct any  
2 repairs that are identified as necessary. This presents a significant reliability risk  
3 that the work would not be completable during the summer months and before the  
4 winter heating season.

5 Likewise, pressure testing is not a feasible alternative. Excavation work  
6 would be required in order to separate the sections of pipe being tested from the  
7 remainder of the mainline and regulating stations that must be left in service. In  
8 addition, pipeline features that would prevent the passage of cleaning and drying  
9 pigs would need to be replaced in order for the pressure test to be conducted. Any  
10 failures that may occur during pressure testing would need to be excavated and  
11 repaired. The cost of a hydrotest on a seven-year cycle, excluding inflation, is  
12 approximately \$15 million per test. This would not include any costs for repairing  
13 deficiencies or risks of the repairs not being able to be completed in time for the  
14 winter heating seasons.

15 The Company reviewed the different methodologies that can be used to  
16 confirm the MAOP of the pipeline and determined from both an integrity  
17 perspective as well as an MAOP reconfirmation perspective it would be most  
18 prudent to replace the pipeline with new pipe constructed from modern materials  
19 that can be inspected via ILI going forward. Replacing aging infrastructure with  
20 new pipe constructed from modern materials allows the Company to continue to  
21 provide safe and reliable service while allowing the replacement pipeline to be  
22 designed and constructed to allow passage of ILI tools for future inspections.

1 **Q. PLEASE DESCRIBE THE BENEFITS OF THE PROJECT.**

2 A. This new AM07 pipeline will provide additional reliability to Duke Energy  
3 Kentucky's natural gas delivery system by replacing aging infrastructure which is  
4 incapable of accommodating an ILI tool with new pipe constructed from modern  
5 materials allowing the Company to continue to provide safe and reliable service.  
6 The new pipeline will be designed and constructed for safe passage of ILI tools  
7 allowing the Company to continue providing safe natural gas service for current  
8 and future customers. This new infrastructure will support continued growth in  
9 the Company's northern Kentucky service area.

10 **Q. DO YOU BELIEVE THE PROJECT IS REASONABLE AND**  
11 **NECESSARY?**

12 A. Yes. This project is necessary to comply with CFR Part 192 Subparts L, M, and  
13 O, specifically with regards to Subpart L §192.607, Verification of Pipeline  
14 Materials Properties and Attributes, Subpart L §192.624, Maximum allowable  
15 operating pressure reconfirmation, Subpart M §192.710, Transmission lines:  
16 Assessments outside of high consequence areas, and Subpart O, Gas Transmission  
17 Pipeline Integrity Management. The project is reasonable insofar as it both meets  
18 compliance requirements and increases safety and system reliability by replacing  
19 the line with new, modern, inspectable pipe.

20

1 **Q. WILL THE PROJECT INTERFERE WITH ANY OTHER UTILITY'S**  
2 **OPERATIONS.**

3 A. No, the Project will not interfere with any other utility's operations. The location  
4 of the AM07 replacement is within areas Duke Energy Kentucky is already  
5 supplying natural gas.

6 **Q. WILL THE PROJECT DUPLICATE THE FACILITIES THAT DUKE**  
7 **ENERGY KENTUCKY ALREADY HAS IN PLACE?**

8 A. No. This project is designed and necessary to replace the existing AM07 Pipeline  
9 that does not meet new PHMSA requirements. The existing non-compliant  
10 pipeline will be removed from service and abandoned. Therefore, there is no  
11 wasteful duplication.

12 **Q. WHAT IS THE ESTIMATED TOTAL COST OF THE AM07 PROJECT?**

13 A. Duke Energy Kentucky witness Bradley A. Seiter supports the estimated cost of  
14 construction and the ongoing cost of operation in his direct testimony. In  
15 summary, Phase Two is estimated to cost \$49.3 million, with the updated total  
16 project cost, all phases, at approximately \$201.6 million.

17 **Q. IS THE COMPANY'S INVESTMENT IN THE PROJECT REASONABLE**  
18 **IN RELATION TO THE SERVICE THAT NEW FACILITIES WILL**  
19 **PROVIDE?**

20 A. Yes.

#### IV. CONCLUSION

21 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

22 A. Yes.





**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

APPLICATION OF DUKE ENERGY KENTUCKY, INC.	)	
FOR A CERTIFICATE OF PUBLIC CONVENIENCE	)	CASE NO.
AND NECESSITY AUTHORIZING THE PHASE TWO	)	2023-00210
REPLACEMENT OF THE AM07 PIPELINE	)	

---

**DIRECT TESTIMONY OF**  
**BRADLEY A. SEITER**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC.**

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June 28, 2023

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Attachment:

CONFIDENTIAL BAS-1 – Detailed Cost Breakdown of Project

**I. INTRODUCTION AND PURPOSE**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Bradley A. Seiter. My business address is 139 East Fourth Street,  
3 Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Senior Project  
6 Manager for Duke Energy Kentucky, Inc. (Duke Energy Kentucky or the  
7 Company) and affiliated natural gas utilities. DEBS provides various administrative  
8 and other services to Duke Energy Kentucky and other affiliated companies of  
9 Duke Energy Corporation (Duke Energy).

10 **Q. PLEASE BRIEFLY DESCRIBE YOUR EDUCATIONAL BACKGROUND**  
11 **AND PROFESSIONAL EXPERIENCE.**

12 A. I earned a Bachelor of Science in Civil Engineering from the University of  
13 Kentucky in 2011. In 2016, I earned a Master's in Business Administration from  
14 Northern Kentucky University. In 2018, I obtained my license as a Professional  
15 Engineer in the Commonwealth of Kentucky. I began my career with Duke Energy  
16 Kentucky in 2013 as a customer project coordinator. My responsibilities included  
17 managing gas and electric projects to bring service to new customers, as well as gas  
18 main extension projects and primary electric feeds. In 2015, I moved to Gas  
19 Engineering and assumed the position of project engineer, where my  
20 responsibilities included the design of gas mains, street improvements, pressure  
21 improvements, maximum allowable operating pressure (MAOP) verification  
22 projects, and other gas engineering-related projects. In this role, I was responsible

1 for managing all projects through construction, including field support. In 2017, I  
2 transitioned into the role of Project Manager in the Natural Gas Major Projects  
3 group. My primary responsibilities include management of large infrastructure  
4 projects on our high-pressure distribution and transmission pipeline system. I  
5 oversee the entire scope of the project, as well as schedule and budget. In 2020, I  
6 began my current role as Senior Project Manager.

7 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS SENIOR**  
8 **PROJECT MANAGER.**

9 A. I am responsible for managing the execution of major projects within the natural  
10 gas business unit in Ohio and Kentucky. My role includes leading a project team of  
11 subject matter experts within the Company and facilitating coordination of project  
12 activities while providing oversight of the scope, schedule, and budget. I ensure the  
13 projects comply with the Company's requirements for project management best  
14 practices and provide reporting to senior management.

15 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**  
16 **PUBLIC SERVICE COMMISSION?**

17 A. Yes. Most recently I provided testimony in support of the Company's Certificate  
18 of Public Convenience Application for Phase One of its AM07 natural gas pipeline  
19 replacement project (AM07 Replacement) in Case No. 2022-00084.

20 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**  
21 **PROCEEDING?**

22 A. The purpose of my testimony is to discuss and support Duke Energy Kentucky's  
23 request for approval of a CPCN to commence construction of the second phase of

1 its AM07 natural gas pipeline replacement project (Phase Two). I describe how  
2 Duke Energy Kentucky will implement and execute the AM07 Replacement,  
3 including, but not limited to, supporting the construction maps, plans, and  
4 specifications. I also support the estimated costs of the construction and the ongoing  
5 cost of operation for the pipeline project.

## II. OVERVIEW OF THE PROJECT

6 **Q. PLEASE BRIEFLY DESCRIBE THE AM07 PIPELINE.**

7 A. AM07 is the primary artery that transports natural gas from upstream suppliers,  
8 extending sixteen miles to the Ohio River, and supports natural gas delivery  
9 throughout the Duke Energy Kentucky natural gas delivery system via connected  
10 pipelines. The AM07 pipeline was constructed in the 1950's, in accordance with  
11 existing regulations at the time. Today, AM07 is of a vintage where the materials  
12 are no longer industry standard. Duke Energy Kentucky needs to replace certain  
13 sections of its AM07 pipeline, totaling approximately 13.7 miles, and associated  
14 regulator stations through its Northern Kentucky territory over the next few years  
15 to comply with PHMSA regulations.

16 **Q. PLEASE DESCRIBE THE COMPANY'S PROPOSAL FOR THE PHASE**  
17 **TWO AM07 REPLACEMENT.**

18 A. Duke Energy Kentucky witness Mr. Moser summarizes the total AM07  
19 Replacement project in his direct testimony. For Phase Two of the AM07  
20 Replacement that is the subject of this Application, Duke Energy Kentucky is  
21 proposing to replace approximately 3.25 miles of section of AM07 directly east of  
22 the current AM07 section that is currently being replaced via Phase One. The

1 approximately 3.25 miles of this 24-inch section will be replaced with new, industry  
2 standard material that will comply with PHMSA regulations as detailed by Mr.  
3 Moser.

4 **Q. WILL THE NEW PIPELINE BE PHYSICALLY LOCATED IN PUBLIC**  
5 **RIGHTS-OF-WAY OR IN PRIVATE EASEMENTS?**

6 A. Duke Energy Kentucky anticipates approximately 75 percent of Phase Two will be  
7 located in private easements that will be obtained with the approval of this  
8 Application. Where private easements are not feasible, the Company will locate the  
9 Project within existing public rights-of-way.

10 **Q. WILL THE COMPANY NEED TO OBTAIN ANY PERMITS FOR**  
11 **CONSTRUCTION OF THE PROJECT?**

12 A. Yes. Duke Energy Kentucky will have to obtain the following permits/approvals to  
13 complete the Project:

- 14 a) Kentucky Transportation Cabinet permit to cross state and federal roads  
15 and to install the pipeline inside road right-of-way;
- 16 b) Energy and Environmental Protection Cabinet - Division of Water,  
17 Application for a Permit to Construct Along or Across a Stream for  
18 stream and floodplain crossings (Stream Crossing Permit);
- 19 c) US Army Corp Section 404 General Nationwide Permit #12 (including  
20 Section 7 Threatened and Endangered Species Act of 1973 and Section  
21 106 National Historic Preservation Act of 1966 clearances);
- 22 d) City of Crestview Hills and City of Erlanger encroachment permit to  
23 cross jurisdictional roads;

- 1 e) Coordination with the Kentucky Heritage Council (KHC) regarding
- 2 cultural resources, including cultural resource investigations/digs and
- 3 potential viewshed impacts to architectural resources along the project
- 4 route;
- 5 f) Coordination with the U.S. Fish and Wildlife Service (USFWS) and
- 6 Kentucky Department of Fish and Wildlife Resources (KDFWR) with
- 7 respect to federal and state endangered, threatened and otherwise
- 8 protected species;
- 9 g) Sanitation District No. 1 Grading Permit; and
- 10 h) KDOW Construction Storm Water Permit KYR10.

11 Duke Energy Kentucky has applied for each of the above listed permits except for  
12 items (g) and (h), which will be applied for following approval of this CPCN as  
13 those permits are required immediately before actual construction occurs. There  
14 has been no indication that the permit applications will not be approved. The  
15 Company's permits and coordination documents/reports for cultural resources are  
16 attached as Exhibits 2(a) through (f) of the Application. The Company will  
17 supplement the application as the remaining permit approvals are received.

18 **Q. HAS THE COMPANY DEVELOPED CONSTRUCTION**  
19 **SPECIFICATIONS TO BE USED IN THE PROJECT?**

20 A. Yes. Exhibit 3 to the Application contains, among other things, maps depicting the  
21 location of the proposed Project along the Company's natural gas delivery system,  
22 engineering plans, drawings, and the construction specifications for the Project.  
23 Exhibit 3 shows the connection of the new route to the existing delivery system,

1 the design of the Project and proposed route for the new 24-inch steel pipeline. Due  
2 to the sensitive nature of gas utility infrastructure, Confidential Exhibit 3 is being  
3 provided under petition for confidential treatment.

4 **Q. IS THE DESIGN OF THE PROJECT SUBSTANTIALLY COMPLETE?**

5 A. Yes. Duke Energy Kentucky has submitted stamped engineering drawings for the  
6 Project depicting the design and route for the Project in Exhibit 3. The route is based  
7 upon best available information at this time, acknowledging that Duke Energy  
8 Kentucky must still complete negotiations and acquisitions for private easements  
9 where applicable along the route. The Company anticipates that there may be minor  
10 deviations in the estimated length and location of the pipe due to not wanting to  
11 interfere with trees, fences, power poles, sewers, water mains, municipal right of  
12 way issues, and in accordance with any restrictions in acquired easements that are  
13 yet to be determined.

14 **Q. PLEASE DESCRIBE HOW THE PROJECT WILL BE CONSTRUCTED.**

15 A. The new pipeline will be constructed in accordance with Duke Energy Kentucky's  
16 work specifications, standards, and procedures. Exhibit 3 contains these work  
17 specifications. The Company and contractor crews are qualified to perform the  
18 work in accordance with design specifications prior to installing any facilities.  
19 Duke Energy Kentucky personnel will provide oversight to any contractor crews  
20 installing facilities on the Company's behalf.

21 **Q. PLEASE BRIEFLY DESCRIBE HOW THE COMPANY WILL EXECUTE**  
22 **AND COMPLETE CONSTRUCTION UNDER THE PROJECT.**



1 A. Duke Energy Kentucky will use both Company and contractor crews where  
2 appropriate to complete this project. If contractor crews are deployed, awarding of  
3 contracts will be accomplished through a bidding process similar to that the  
4 Company has successfully employed in prior construction projects, such as UL60  
5 Pipeline. Duke Energy Kentucky will use industry standard equipment, materials,  
6 and designs to construct the pipeline in accordance with the work specifications.

7 **Q. WHAT IS THE ESTIMATED TIMELINE FOR CONSTRUCTION OF THE**  
8 **PROJECT?**

9 A. The estimated timeline is dependent upon the approval of the project. Duke Energy  
10 Kentucky has developed the below timeline with key milestones to ensure the Phase  
11 Two of the AM07 Replacement is completed in time to comply with PHMSA  
12 requirements as explained by Mr. Moser. This schedule is based upon the Company  
13 receiving CPCN approval by Winter of 2023, to allow sufficient time to make  
14 necessary procurements, easement acquisitions and commence construction in the  
15 spring of 2024. The entire project is projected to be complete by December 31,  
16 2024.

**Estimated Project Schedule**

January 2022	Design began
April 2022	Field Surveys
August 2022	Began easement discussions Apply for permits
October 2022	Order Long lead item materials
May 2023	Design substantially complete
September 2023	Design complete Bid for construction
4th quarter 2023	Anticipated CPCN Approval
December 2023	Award construction contract
March 2024	Construction begins
December 2024	Construction complete*

\* Assumes no delays in outstanding approvals/permitting.

1   **Q.   WHAT IS THE ESTIMATED COST OF CONSTRUCTION FOR PHASE**  
 2   **TWO?**

3   A.   The current estimated project cost is approximately \$49.3 million dollars as detailed  
 4   in the chart below. Please refer to Confidential Attachment BAS-1 which shows a  
 5   detailed cost breakdown of the various areas of cost associated with the project. A  
 6   summary of the costs is as follows:

<b>Task</b>	<b>Total</b>
Design	\$2.5M
Land	\$4.1M
Construction	\$38.8M
Materials	\$3.9M
	<b><u>\$49.3 M</u></b>

7   The current estimated costs of the AM07 replacement is approximately \$201.6  
 8   million. This estimate includes inflationary costs that the Company has experienced  
 9   during Phase One due primarily to higher than initially estimated easement and

1 right-of way acquisition costs, increases in labor and materials expenses for  
2 contractors, and inflation due to supply chain constraints.<sup>1</sup>

3 **Q. HOW WAS THAT ESTIMATE DERIVED?**

4 A. This Class 4 (-30%/+50%) estimate is based on the pricing Duke Energy Kentucky  
5 has already received for design services and anticipated expenses for easement  
6 acquisition and construction (labor and materials). Duke Energy Kentucky  
7 compared these figures other recently completed projects and it is confident in the  
8 estimate being provided.

9 **Q. WHAT IS THE ESTIMATED ONGOING COST OF OPERATION OF THE**  
10 **NEW PIPELINE ONCE CONSTRUCTED?**

11 A. The Company anticipates that there will be minimal (<\$10,000 per year)  
12 incremental operational and maintenance expense (O&M) associated with the  
13 ongoing operation of the new pipeline except for required periodic inspections  
14 and/or testing. The Company does not anticipate that operations & maintenance  
15 (O&M) expense will be different to maintain the new pipeline than it is to maintain  
16 the old pipeline. The Company does not track O&M by project. The Company  
17 only tracks O&M by FERC account number, and these costs are recorded to FERC  
18 Account 863.

### **III. FILING REQUIREMENTS SPONSORED BY WITNESS**

19 **Q. PLEASE DESCRIBE THE FILING REQUIREMENTS CONTAINED IN**  
20 **THE COMPANY'S APPLICATION FOR A CERTIFICATE OF PUBLIC**

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<sup>1</sup> See Case No. 2022-0084, Post Case Correspondence Letter, June 14, 2023 explaining increased costs for Phase One.

1           **CONVENIENCE AND NECESSITY THAT YOU ARE SPONSORING AND**  
2           **SUPPORTING.**

- 3    A.    I sponsor data that is responsive to the filing requirements in accordance with 807  
4           KAR 5:001:
- 5           • Exhibits 2(a) through (f), Section 15(2)(b): permits required for  
6           construction; and
  - 7           • Exhibit 3; Section 15(2)(c), Section 15(2)(d)(1)-(2), and Section 15(2)(e):  
8           Full description of the proposed location, route, or routes, including a  
9           description of the manner in which the facilities will be constructed,  
10          drawings, and map of the construction area, and work specifications.

**IV.    CONCLUSION**

11   **Q.    WERE EXHIBITS 2 AND 3 TO THE COMPANY’S APPLICATION AND**  
12           **CONFIDENTIAL ATTACHMENT BAS-1 PREPARED BY YOU OR**  
13           **UNDER YOUR DIRECTION AND CONTROL?**

14    A.    Yes.

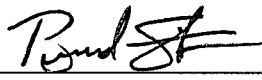
15   **Q.    DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

16    A.    Yes.

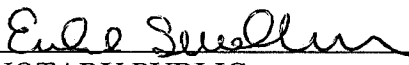
**VERIFICATION**

STATE OF OHIO                    )  
  )     SS:  
COUNTY OF HAMILTON        )

The undersigned, Bradley A. Seiter, Sr. Project Manager, being duly sworn, deposes and says that he has personal knowledge of the matters set forth in the foregoing testimony, and that it is true and correct to the best of his knowledge, information, and belief.

  
\_\_\_\_\_  
Bradley A. Seiter Affiant

Subscribed and sworn to before me by Bradley A. Seiter on this 30<sup>th</sup> day of June, 2023.

  
\_\_\_\_\_  
NOTARY PUBLIC

My Commission Expires: July 8, 2027



EMILIE SUNDERMAN  
Notary Public  
State of Ohio  
My Comm. Expires  
July 8, 2027

**COMMONWEALTH OF KENTUCKY**  
**BEFORE THE PUBLIC SERVICE COMMISSION**

In the Matter of:

APPLICATION OF DUKE ENERGY KENTUCKY, INC.	)	
FOR A CERTIFICATE OF PUBLIC CONVENIENCE	)	CASE NO.
AND NECESSITY AUTHORIZING THE PHASE TWO	)	2023-00210
REPLACEMENT OF THE AM07 PIPELINE	)	

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**DIRECT TESTIMONY OF**  
**LISA D. STEINKUHL**  
**ON BEHALF OF**  
**DUKE ENERGY KENTUCKY, INC.**

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June 28, 2023

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**I. INTRODUCTION AND PURPOSE**

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Lisa D. Steinkuhl, and my business address is 139 East Fourth Street,  
3 Cincinnati, Ohio 45202.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am employed by Duke Energy Business Services LLC (DEBS) as Director Rates  
6 & Regulatory Planning for Duke Energy Kentucky, Inc., (Duke Energy Kentucky  
7 or Company) and Duke Energy Ohio, Inc. DEBS provides various administrative  
8 and other services to Duke Energy Kentucky and other affiliated companies of  
9 Duke Energy Corporation (Duke Energy).

10 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND**  
11 **PROFESSIONAL EXPERIENCE.**

12 A. I received a Bachelor's Degree in Mathematics from Western Kentucky University  
13 in Bowling Green, Kentucky. After completing my Bachelor's Degree, I received  
14 a Post Baccalaureate Certificate in Professional Accountancy from the University  
15 of Southern Indiana in Evansville, Indiana. I became a Certified Public Accountant  
16 (CPA) in the State of Ohio in 1993. After receiving my Post Baccalaureate  
17 Certificate in 1988, I was employed by public accounting firms. I was hired by  
18 Cinergy Services, Inc., the predecessor of DEBS, in 1996, as a tax accountant. I  
19 held various positions with Cinergy Services, Inc., including responsibilities in  
20 Regulated Business Financial Operations, Commercial Business Asset  
21 Management, and Budgets and Forecasts. I joined the Rates Department in April  
22 2006 as a Lead Rates Analyst, was promoted to Rates & Regulatory Manager in



1 January 2014 and Utility Strategy Director in May 2018. I have held my current  
2 position as Director, Rates & Regulatory Planning since March 2022.

3 **Q. PLEASE SUMMARIZE YOUR RESPONSIBILITIES AS DIRECTOR,**  
4 **RATES AND REGULATORY PLANNING.**

5 A. As Director, I am responsible for the preparation of financial and accounting data  
6 used in Duke Energy Ohio and Duke Energy Kentucky retail rate filings and  
7 changes in various other rate recovery mechanisms, along with filings with the  
8 Federal Energy Regulatory Commission (FERC).

9 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE KENTUCKY**  
10 **PUBLIC SERVICE COMMISSION?**

11 A. Yes.

12 **Q. WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS**  
13 **PROCEEDING?**

14 A. The purpose of my testimony is to discuss the financial aspects of the Company's  
15 request for a Certificate of Public Convenience and Necessity (CPCN) to replace  
16 the second phase of its AM07 transmission line, I also sponsor Exhibit 1 to the  
17 Application.

## II. DISCUSSION

18 **Q. PLEASE PROVIDE A BRIEF SUMMARY OF THE PROJECT AND ITS**  
19 **PURPOSE.**

20 A. As Duke Energy Kentucky witness, Bradley A. Seiter explains in his direct  
21 testimony, Duke Energy Kentucky is proposing to replace approximately 3.25  
22 miles of section of the AM07 pipeline directly east of the current AM07 section

1 that is currently being replaced via Phase One. The approximately 3.25 miles of  
2 this 24-inch section will be replaced with new, industry standard material that will  
3 comply with PHMSA regulations.

4 **Q. PLEASE EXPLAIN HOW THE COMPANY IS FUNDING THE COST OF**  
5 **CONSTRUCTION FOR THE PROJECT.**

6 A. In response to 807 KAR 5:001, Section 15(2)(e), the Company is proposing to  
7 finance the construction through continuing operations and, if necessary, through  
8 debt issuances.

9 **Q. WHAT IS THE PROJECTED COST OF THE PROJECT?**

10 A. As explained by Mr. Seiter, the second phase of the AM07 pipeline replacement  
11 project is estimated to cost approximately \$49.3 million. That sum comprises:

<b>Task</b>	<b>Total (in millions)</b>
Design	\$ 2.5
Land	\$ 4.1
Construction	\$38.8
Material	\$ 3.9
	<b><u>\$49.3</u></b>

12 The overall project is estimated to cost approximately \$201.6 million spread out  
13 over five phases.

14 **Q. WHAT IS THE PROJECTED ONGOING COST OF OPERATION OF THE**  
15 **PROJECT ONCE COMPLETED?**

16 A. The Company anticipates that there will be minimal (<\$10,000 per year)  
17 incremental operational and maintenance expense (O&M) associated with the  
18 ongoing operation of the new pipeline except for required periodic inspections  
19 and/or testing. The Company does not anticipate that ongoing O&M expense will

1 be different to maintain the new pipeline than it is to maintain the old pipeline.  
2 Moreover, the Company does not anticipate any incremental ongoing O&M  
3 savings from base rates as a result of this project. As explained by Company witness  
4 Neil M. Moser, the Company must continue to conduct periodic inspections of  
5 these newly constructed facilities in accordance with applicable Federal  
6 Regulations. Installing this new pipeline is intended to result in lower incremental  
7 expense than what would otherwise occur if the Company deployed different, and  
8 more expensive and risky strategies to address the AM07 integrity issues.

9 **Q. PLEASE EXPLAIN HOW THE PIPELINE WILL BE TREATED FROM AN**  
10 **ACCOUNTING PERSPECTIVE.**

11 A. The Project is nearly all capital in nature because it is adding new facilities to serve  
12 our natural gas customers and improve the reliability of the delivery system. The  
13 costs will be accumulated in FERC account 107 (Construction Work in Progress)  
14 during construction and will accrue Allowance for Funds Used During  
15 Construction (AFUDC). Once completed, the Project will be placed in service  
16 (initially to FERC account 106-Completed Construction not Classified) where it  
17 will begin being depreciated like any other asset that is used and useful.

18 There will be an immaterial impact to the Company's ongoing O&M in  
19 terms of incremental cost of operation. The Company only tracks O&M by FERC  
20 account number, not by specific project, and these costs are recorded to FERC  
21 Account 863.

1 **Q. WHAT IS THE ESTIMATED IN-SERVICE DATE OF EACH PHASE?**

2 A. The project will be placed in service in five phases. Expected in-service dates for  
3 each phase is below:

PHASE	Est. Miles Replaced	Est. in-service date
1	2.0	December 2023
2	3.2	September 2024
3	3.6	September 2025
4	2.2	September 2026
5	2.7	September 2027
<b>TOTAL</b>	13.7	

4 **Q. PLEASE EXPLAIN HOW THE COMPANY WILL RECOVER ITS COSTS**  
5 **OF CONSTRUCTION.**

6 A. The Company plans to recover its costs of the AM07 pipeline replacement project  
7 through the Pipeline Modernization Mechanism (Rider PMM) that was approved  
8 in Case No. 2021-00190. In accordance with the settlement approved by the  
9 Commission in that proceeding, the Company made its first Rider PMM filing on  
10 August 1, 2022 for Phase One. The Rider will be adjusted annually for capital  
11 placed into service following the test year in Case No. 2021-00190. The Rider will  
12 use forecasted 13-month average plant in-service balances for purposes of  
13 calculating the annual revenue requirement. Per the terms of the settlement, the rate  
14 base included in the rider filing will not include Construction Work In Process  
15 (CWIP) and plant in-service will include Allowance for Funds Used During  
16 Construction (AFUDC) consistent with rate base calculations included in the  
17 Company's base rate case filings. The Company will make annual Rider PMM  
18 adjustment filings on or before July 1st each year, with rates to be implemented the  
19 following January. Consistent with the Commission's recent Order in Case No.

1 2022-00229, Rider PMM rates for the calendar year 2024 will be calculated on a  
2 per ccf charge. Rider PMM is subject to an annual revenue requirement cap of no  
3 more than a 5 percent increase in natural gas revenues per year.

4 **Q. WILL THE ESTIMATED \$202 MILLION IN CAPITAL COSTS FOR THE**  
5 **PROJECT HAVE AN IMMEDIATE IMPACT ON CUSTOMER RATES?**

6 A. No, not immediately.

7 **Q. PLEASE EXPLAIN.**

8 A. Because the project will be constructed in phases and placed in service over several  
9 years, the rate impact will be spread out over those years. Based on current  
10 projections the Company expects customer rates to increase each year as shown  
11 below:

12	2023	0.5%
13	2024	4.5%
14	2025	3.7%
15	2026	3.1%
16	2027	2.0%
17	2028	1.2%

**III. FILING REQUIREMENTS SPONSORED BY WITNESS**

18 **Q. PLEASE LIST AND DESCRIBE THE FILING REQUIREMENT AND**  
19 **EXHIBIT TO THE APPLICATION THAT YOU ARE SPONSORING.**

20 A. I am the sponsor of Exhibit 1.

21 **Q. PLEASE EXPLAIN EXHIBIT 1.**

22 A. Exhibit 1 is the financial statement for month ending March 31, 2023 as required

1 by 807 KAR 5:001, Section 12.

IV. CONCLUSION

2 **Q. WAS EXHIBIT 1 PREPARED UNDER YOUR DIRECTION AND**  
3 **CONTROL?**

4 A. Yes.

5 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

6 A. Yes.

