Inadvertent Release Plan for Horizontal Directional Drilling

1. Horizontal Directional Drill

Horizontal Directional Drilling (HDD) is an alternative to conventional trenched methods and can reduce project impacts if it is done correctly. The Contractor shall take steps to prevent a release of drilling fluid or inadvertent return (IR) by assessing the risk prior to drilling practices, including front-end engineering and design to evaluate the feasibility of a proposed HDD. For the purposes of this document, the term Horizontal Directional Drill and HDD activities refers to any part of the drill process from start to finish including the pilot hole, reaming, back-reaming, and pipe pullback.

1.1 Preparation for HDD Activities

Prior to the start of HDD activities, proper planning should be completed to prepare for an immediate and efficient response should a release of drilling fluid or IR occur. Contractor personnel should participate in planning discussions to review the site and identify areas that may be impacted in the event an IR occurs, such as storm drain inlets, swales, culverts, or other adjacent, on-site, and offsite waterbody or wetland features. Sufficient equipment and materials necessary for IR response must be available on the project site and staged for immediate access along the drill path throughout HDD activities to ensure proper containment and clean up. At a minimum, the following response, containment, and clean up materials must include a vacuum truck onsite (or on call and in close proximity to site) and additional hose, compost/mulch filter sock, sand bags, and personnel to assist with response activities.

1.2 Drilling Fluid Additives

Prior to the use of any drilling fluid additives, the additive must be approved by the NiSource Environmental Group. Proposed drilling fluid additives must meet the requirements of the NSF/ANSI 60 Drinking Water Treatment Chemicals list. Additives determined likely to have a negative impact if released to the environment, either by a regulatory agency in a particular state or region or by the NiSource Environmental Group, will be restricted from use under wetlands, waterbodies or other sensitive areas.

1.3 HDD Inadvertent Return Avoidance and Contingency Plan

1.3.1 Drilling Fluid Monitoring Protocol

Drilling crews and contractor inspection personnel, which are the contractor's resources, shall be responsible for monitoring and detection of any inadvertent releases along the path of the HDD and under all streams, wetlands, or other water-bodies. The most obvious signs of a release are the visible pooling of drilling mud on the surface, a sudden decrease in mud volume returns at the entry site, or loss in drilling mud pump pressure. Drilling and inspection personnel shall monitor the path of the HDD, along with the actual drilling fluid volumes from the pumps and return flow from the borehole.

The HDD rig operator shall record the pertinent drilling conditions and continuously observe and monitor the HDD alignment for evidence of an inadvertent release. The following precautionary measures shall be implemented to avoid the potential for an inadvertent return, in the appropriate combinations, by the contractor if annular pressures are abnormally high or fluid loss is apparent and that a release may have occurred:

- Contractor's on-site personnel will immediately notify Company representative of any significant loss of drilling fluid returns at the rig or entry pit during pilot phase. Drill crews are to stop work and communicate with NRP and Engineering to find a solution to minimize the risk of a potential IR and maintain return flow;
- Dispatch experienced contractor personnel to monitor the area of the drill path;
- Decrease pump pressure;
- Decrease penetration rate;
- Temporarily cease drilling operations and shut down the pump;
- Restart pump and swab the hole to assist in sealing the release;
- With Company written approval, consider modifying the drilling fluid with a change in viscosity and/or circulation additive;
- HDD rig operator will take a sample of the drilling fluid and hold for future analysis;
- HDD operator will take steps to restore drilling fluid circulation in accordance with the HDD Plan; and
- If drilling fluid circulation is not regained, drilling may continue while inspection personnel continue to monitor for any inadvertent releases.

1.3.2 Corrective Action for an Inadvertent Release

Once surface seepage of drilling fluid is detected, the drilling crew shall take immediate corrective action. The only pressure causing the seepage to occur is the pressure from the drilling pumps. Therefore, the most immediate corrective action is to decrease the pump pressure. As soon as surface seepage is detected, the pumps should only be stopped temporarily until the response process has been initiated. Once the containment and clean-up process has begun, the drilling activities may, with Environmental Group approval, immediately resume.

In the event of an inadvertent release to the surface, the following actions shall be taken:

In general, the contractor shall:

- Contain any drilling fluid that has surfaced;
- Promptly notify Environmental Group representative and Project Manager;
- Reduce or stop circulation pressure and evaluate the circumstances leading to the release; and
- Immediately implement appropriate containment measures.
- The HDD contractor will be required to have the necessary containment and clean-up equipment on-site, at the boring location and readily available for use. At a minimum, a combination of some or all of the following material and equipment should be on site and in ample supply depending on the extent of sensitive areas:

- Compost filter socks (Required)
- Sand bags (Required)
- Vacuum truck and hoses (Required)
- Shovels (Required)
- Push brooms (Required)
- Spill sorbent pads and booms
- Straw bales (certified weed-free)
- Wood stakes
- Silt fence
- Plastic sheeting
- Corrugated plastic pipe
- Centrifugal, trash and sump pumps
- Rubber tired or wide track back hoe
- Bobcat (if needed)
- Storage tanks (if needed)
- Floating turbidity curtain (may be considered for use on large streams)
- Timber (enough to cross 50% of the wetland length need to be readily available)

Inadvertent Release in an Upland Area

If an inadvertent release occurs on the ground surface at an upland location that is inaccessible, the contractor shall:

- Ensure all reasonable measures within the limitations of current technology have been taken to re-establish circulation;
- Continue drilling utilizing a minimal amount of drilling fluid as required to penetrate the formation and/or to maintain a successful pull back; and

- Ensure the release does not migrate into a sensitive environmental area.
- After the HDD installation is complete, perform clean up per the "clean up" section of this document.

If an inadvertent release occurs in an accessible upland location, the contractor shall:

- Evaluate the amount of release to determine if containment structures are warranted and if they will effectively contain the release;
- Promptly implement the appropriate containment measures to contain and recover the release;
- If the release cannot be contained, the operator must suspend drilling operations until appropriate containment is in place; and
- Remove the fluids using either a vacuum truck or by pumping to a location where a vacuum truck is accessible.
- After the HDD installation is complete, perform clean up per the "clean up" section of this document.

Inadvertent Release in Stream, Wetland or Waterbody

If an inadvertent release occurs in an accessible waterbody or wetland location the contractor shall:

- Temporarily suspend the HDD operations and do not resume until NiSource's Natural Resource Permitting (NRP) Representative reviews and approves that the inadvertent release contingency plan has been implemented accordingly.
- Immediately notify the NRP Representative
- Allow the NRP Representative or EI to appropriately quantify the return, document its location, photograph the return, and assess the potential impact to the resource(s),
- With the assistance of the on-site Environmental Inspector or NRP Representative, evaluate the amount of release to determine if containment structures are warranted and if they will effectively contain the release;
- Under the guidance of the on-site EI or NRP Representative, promptly implement appropriate containment measures to contain and recover the release;
- Efforts to contain and recover may result in further disturbance by equipment and personnel and possibly offset the benefit gained in the removal of the release;
- If the amount of release is too small to allow the practical collection from the affected area, the release may be diluted with fresh water or allowed to dry and dissipate naturally;
- Remove the release with a vacuum truck or by pumping to a location where a vacuum truck is accessible;
- In certain situations, a release point can serve as a relief hole where the release is isolated to a specific area and contained. Relief holes are typically used to relieve excess pressure down hole to further reduce the risks of additional inadvertent release. This may include installing pressure relief wells to minimize the impacts of an uncontrolled release. NRP must approve any proposed relief holes and/ or relief wells in streams or wetlands. NRP approval of the location and all conditions necessary to construct relief holes will ensure the proper management of drilling fluids is maintained and environmental impacts are minimized, ensuring that any drill fluid entering these locations will be removed immediately and not allowed to accumulate.

- If the Inadvertent release contingency plan is being deployed accordingly with actions being taken to properly contain and remove the initial release as well as additional releases at this location once the bore continues, -the HDD process can resume only with NRP approval.
- NiSource's NRP Representative will notify the appropriate regulating agencies.
 - Ohio EPA's Spill Hotline (1-800-282-9378)
- In the event- of any of the following conditions, the HDD process cannot resume without approval from the USACE, state agency, and if applicable, the land management agency where the release is taking place-:
 - The release cannot be immediately contained,
 - Is within high quality aquatic resources or stream,
 - Impacts government managed lands.
- After the HDD is complete, perform clean up per the "clean up" section of this document.

If an inadvertent release occurs in an inaccessible waterbody (such as a large stream or river) or wetland location the contractor shall:

- STOP work.
- Immediately notify the NRP Representative and wait for guidance from the Environmental Group before proceeding with bore activities;
- The NRP Representative will attempt to obtain direction from the appropriate regulating agencies to proceed under a specified plan.
- Once further guidance from NRP has been received, proceed as directed.

1.3.3 Containment of Drilling Fluid Release

Immediately following detection of an inadvertent release, the containment and clean-up operations shall take place. For releases on land, the contractor shall use straw bales, silt fence or compost filter sock, sand bags, and earth berms to prevent fluid from migrating or flowing from the immediate area. If the volume released is too small for containment measures or, if the release occurs in an environmentally sensitive area where the release containments may cause additional damage, the method of removal will be determined by the NRP Representative.

If there is a threat to a sensitive resource or to public safety, HDD drilling activities shall cease immediately until a plan to proceed is agreed upon.

In cases where the inadvertent release is within open water or flooded wetlands, it may be impractical or impossible to contain and remove the release. The contractor should attempt to remove the surface release using a wand (i.e. a perforated plastic pipe attached to a suction hose). Methods and measures taken in these instances shall be at the direction of the NRP Representative.

Clean-Up

Clean-up shall commence after the release is contained. Clean-up shall include removal of all visible drilling fluids located in the accessible area. Removal methods will vary based on the volume of the release and site conditions. Removal may include vacuum trucks, loader and track hoe buckets, small pumps, shovels and buckets. If the release occurs in a sensitive area, the

method of removal will be determined by the Company representative. Mechanized equipment shall not enter any sensitive area without the NRP representative first receiving prior approval from a permitting agency, with the exception of an event that poses a threat to public health or safety.

Potential for secondary impacts from the clean-up activities shall be evaluated and weighed against the proposed cleanup activities. The following clean-up measures are considered appropriate:

- Releases will be cleaned up by hand using shovels, buckets, and soft bristled brooms to minimize damage to existing vegetation;
- Fresh water washes may be employed if deemed beneficial and feasible by NRP Representative;
- Containment structures will be pumped out and the ground surface scraped to minimize loss of topsoil or damage to adjacent vegetation;
- Small collection pumps may be necessary to remove released fluids;
- Vacuum trucks may be used to collect and remove drilling fluids as needed;
- Recovered materials will be collected in appropriately labeled containers for temporary storage prior to removal from site;
- Recovered drilling fluid will be recycled or disposed of at an approved upland location or disposal facility. No recovered drilling fluid will be disposed of in streams, aquatic resources or storm drains;

All containment structures will be removed.

1.4 Disposal of Drilling Fluid

Disposal of drilling fluid will follow the guidance outlined in Section 4, Spoils Management.

2. Spoils Management

The contractor is responsible for the proper management of spoils from the project site in accordance with federal, state and local regulations. There are various requirements for managing spoils material in different states, and the contractor is expected to understand and follow those requirements.

If the contractor manages spoils on-site, the contractor is responsible to ensure the on-site management process meets all federal, state, and local requirements. Additionally, if the contractor removes spoils from a site, the contractor is responsible for ensuring the disposal site, and, where applicable, the transporter, meets all federal, state, and local requirements.

NiSource will require project-specific information regarding where any spoils might be disposed of and may investigate those contractor-selected spoils management sites for compliance with federal, state, and local requirements. NiSource may disapprove a site based on its failure to meet a federal, state, or local requirement, but NiSource does not certify compliance or provide approval for any contractor-selected spoils management site.

If unanticipated soil conditions are encountered, in which the excavation material may appear to be impacted (i.e. suspicious appearance or smell), the contractor is required to call the NiSource

Environmental Response hotline at (219) 648-4434 immediately before proceeding with work. The NiSource Environmental Group will determine how to manage the impacted spoils to ensure that the contractor follows all federal, state, and local requirements.





Engineering & Design

Cultural Resource Desktop Review

Central Columbus Project

Colliers Engineering & Design Project Number: 21004202A

September 20, 2023

Prepared for:

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1.0 PURPOSE OF DOCUMENT

Colliers Engineering & Design (CED) was contracted by NiSource Inc. (NiSource) to perform a cultural resource background review for the Central Columbus Project (Project) in Columbus, Franklin County, Ohio. This background review and desktop assessment has been prepared in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966. This regulation requires project proponents to consider a project's effects on historic properties depending on potential permitting requirements and/or funding sources. The purpose of the document is to outline any previously recorded cultural resources that may be impacted by the proposed Project in support of NiSource's compliance with Section 106 of the NHPA. The goal is also to provide information for project planning and development, as well as estimates on possible future work that may be required for regulatory compliance. A cultural resources survey was not conducted as an element of this research.



2.0 INTRODUCTION

2.1 PROJECT DESCRIPTION

The Project proposes to install approximately 4.2 miles (6.76 kilometers [km]) of 20-inch-high pressure steel main line pipeline.

2.2 PROJECT LOCATION

The Project area originates at the intersection of Denune Ave and Parkwood Ave and terminates at the intersection of W Tulane Rd and E Tulane Rd in Columbus, Franklin County, Ohio. The Project is depicted on the *Northwest Columbus and Northeast Columbus*, Ohio US Geological Survey (USGS) 7.5-minute topographic map quadrangles.

2.3 EXISTING CONDITIONS AND VICINITY CHARACTERISTICS

The Project area consists mostly of suburban neighborhoods with a few commercial buildings and a very small, wooded area on the easternmost side. The Project area has been subject to heavy disturbance from residential and commercial construction activities for many years. The Project area is bordered on all sides by further residential and commercial development.



3.0 ENVIRONMENTAL BACKGROUND

3.1 Physiography and Geology

The Project area is in the Loamy, High Lime Till Plains ecoregion of the Eastern Corn Belt Plains physiographic province of Ohio. The Loamy, High Lime Till Plains ecoregion covers most of southwestern Ohio all the way through central Indiana. This ecoregion is flat to rolling and has outwash plains and terminal moraines glacial features. Soils are loamy on lime-rich glacial till. The Project area is underlain by Wisconsinan glacial deposits consisting of mostly loam. Most of the forests have been cleared for agriculture and now the area is utilized mostly for soybean, corn, and livestock production (Woods, et al. 1998).

The Project is underlain by the Ohio Shale geological formation. The Ohio Shale geological formation consists of mudstone, siltstone and very fine-grained sandstone that ranges from reddish-brown to purple. There are also sand filled burrows two to five meters thick bordering the formation. Shale and sandstone also make up a majority of the valley's lowlands and ridges. Diabase layers underline the main formation of the region (Slucher et. al 2006).

3.2 TOPOGRAPHY AND SOILS

The Natural Resources Conservation Service (NRCS) Soil Survey for Franklin County, Ohio available on the Web Soil Survey, identifies four (4) soil types underlying the Project area (**Table 1**). Soils range from somewhat poorly drained to moderately well drained (NRCS 2022).

Soil Symbol	Soil Name	Slope %	Drainage	Landform
BfA	Bennington-Urban land complex	0-2	Somewhat poorly drained	Ground moraines, end moraines
CbB	Cardington-Urban land complex	2-6	Moderately well drained	Ground moraines, end moraines
CbC	Cardington-Urban land complex	6-12	Moderately well drained	Ground moraines, end moraines
Ut	Udorthents-Urban land complex	2-12		

Table 1. Soil Types in the Project area



4.0 CULTURAL RESOURCE DESKTOP REVIEW

The following information was gathered as part of the desktop review to identify previously recorded cultural resources within a 0.5-mile (0.80-km) radius of the Project area. The background review consisted of a cultural resources and literature review of the Project area. A CED archaeologist reviewed the online database hosted by the Ohio History Connection (OHC), the State Historic Preservation Office (SHPO) of Ohio, for any previously recorded surveys, historic or prehistoric sites, and cemeteries located in or near the Project. Site files, relevant maps, and National Register of Historic Places (NRHP) locations were also examined. Aerial photographs, topographic maps, and the NRCS Web Soil Survey were also examined for historical and environmental information related to the Project area.

4.1 PREVIOUSLY CONDUCTED CULTURAL RESOURCE SURVEYS

The background review revealed that two (2) previous archaeological surveys have been conducted in portions of the Project area. One was a Phase I Cultural Resources Survey of NiSource's Proposed Ackerman Road 20-inch Natural Gas Pipeline Project in the City of Columbus, Franklin County, Ohio conducted in 2012, and the second one was "Results of the Ongoing Phase I Archaeological Survey of Proposed Railroad Construction of Connections Between Conrail & Norfolk Southern Lines in Erie, Franklin, & Ottawa, & Two Proposed Railroad Yard Expansions in Cuyahoga, Huron & Seneca Counties, Ohio" conducted in 1997. Several surveys have also been conducted within a 0.5-mile (0.8-km) radius of the Project area (OHC 2023) (**Table 2**).

Table 2. The Housing conducted calcular resource surveys within 0.5 mile (0.5 km/ of the Project area.				
Project Name	Investigating Firm	Date of Survey	Distance to Project Area	
Archaeological Survey of Proposed Interstate 315 - (Columbus & Worthington) Franklin County, Ohio	Ohio Department of Transportation	1976	634.22-Meter N (2080.77-ft)	
An Archaeological Literature Review and Survey: Proposed Olentangy River Bicycle Path in the City of Columbus, Clinton Township, Franklin County, Ohio	ASC Group, Inc.	1990	357.78-Meter S (1173.8-ft)	
Phase I Cultural Resources Survey of NiSource's Proposed Ackerman Road 20-inch Natural Gas Pipeline Project in the City of Columbus, Franklin County, Ohio	URS Corp., Cincinnati	2012	Intersects	
Phase I Archaeological Survey of Proposed Railroad Construction of Connections Between Conrail & Norfolk Southern Lines in Erie, Franklin, & Ottawa, & Two Proposed Railroad Yard Expansions in Cuyahoga, Huron & Seneca Counties, Ohio	ASC Group, Inc.	1997	Intersects	

Table 2. Previously conducted cultural resource surveys within 0.5 mile (0.8 km) of the Project area.

4.2 PREVIOUSLY RECORDED CULTURAL RESOURCES

Based on the review, there are no archaeological sites or above-ground historic resources documented within the Project area; however, there are multiple cultural resources documented within a 0.5-mile (0.8-km) radius of Project area (OHC 2023) (**Table 3**).



OHI/OAI Number	Name of Resource	Date of Significance/ Temporal	Address
FR0200	Archaeological Site	Prehistoric	N/A
FR0201	Archaeological Site	Prehistoric	N/A
FR0202	Archaeological Site	Prehistoric	N/A
FR0204	Archaeological Site	Prehistoric	N/A
FR0205	Archaeological Site	Prehistoric	N/A
FR0802	Archaeological Site	Prehistoric	N/A
FR0801	Archaeological Site	Prehistoric and Historic	N/A
FR0803	Archaeological Site	Historic	N/A
FR2874	Archaeological Site	Prehistoric	N/A
FRA0167010	Historic Structure	1910	191 W Delhi Ave Columbus, OH
FRA0167310	Clinton Theatre	1927	3377-3381 N High St Columbus, OH
FRA0712110	Clinton Elementary School	1922	10 Clinton Heights Ave Columbus, OH
FRA0165410	Clinton School	1910	10 Clinton Heights Ave Columbus, OH
FRA0167610	Historic Structure	1910	65 E North Broadway Columbus, OH
FRA0166910	Como Ave Methodist Episcopal	1916	29 E Como Ave Columbus, OH
FRA0165910	Harold Scott House	1910	3119 N High St Columbus, OH
FRA0166010	Clinton Chapel	1938	3100 N High St Columbus, OH
FRA0166213	Posey Prop	1915	57 E Weber Rd Columbus, OH
FRA0166113	Shockey House	1915	83 E Weber Rd Columbus, OH
NR-06000361	Coe, Truman & Sylvia Bull, House	1880-1885	75 E Lakeview Ave Columbus, OH 43202
NR-15000323	Graham, AB, House	1938-1960	159 Clinton Heights Ave Columbus, OH 43202
FRA0003813	Olentangy Amusement Park Site	1939	2800 N High St Columbus, OH
FRA0947310	Patrick & Coleen Berry House	1954	567 E North Broadway Columbus, OH
FRA0947610	Almanza & Elta McCreight House	1928	577 E North Broadway Columbus, OH

Table 3. Previously recorded cultural resources within 0.5 mile (0.8 km) of the Project area.



OHI/OAI Number	Name of Resource	Date of Significance/ Temporal	Address
FRA0947810	LE & Ella Gross House	1931	583 E North Broadway Columbus, OH
FRA0948010	Lemuel & Juanita DeForest House	1929	589 E North Broadway Columbus, OH
FRA0948210	Ed & Inez Gibson House	1936	599 E North Broadway Columbus, OH
FRA0948410	William Robbers House	1936	605 E North Broadway Columbus, OH
FRA0948510	Frank & Florence Pote House	1939	615 E North Broadway Columbus, OH
FRA0940613	Todd & Hair House	1952	555 Olentangy St Columbus, OH
FRA0940513	Fisher House	1952	553 Olentangy St Columbus, OH
FRA0940413	Fowkes House	1950	549 Olentangy St Columbus, OH
FRA0940313	Dheel House	1926	547 Olentangy St Columbus, OH
FRA0936413	Glen Echo Ravine Culvert	1910	Glen Echo Ravine at RR tracks Columbus, OH
Multiple	Historic Houses	Multiple	2680-2612 N 4th St (all even #'s) Columbus, OH
Multiple	Historic Houses	Multiple	2604-2574 N 4th St (all even #'s) Columbus, OH
FRA0937913	James L Geygan House	1925	2538 N 4th St Columbus, OH
Multiple	Historic Houses	Multiple	2539-2517 N 4th St (All odd #'s) Columbus, OH
Multiple	Historic Houses	Multiple	2500-2502- 2474-2476 N 4th St (all even #'s) Columbus, OH
FRA0534213	Steward & Silver Cement Block	1915	527 E Hudson St Columbus, OH
Multiple	Historic Houses	Multiple	506-526 E Tompkins St (all even #'s) Columbus, OH
Multiple	Historic Houses	Multiple	2464-2422 N 4th St (all even #'s) Columbus, OH
Multiple	Historic Houses	Multiple	513-515 E Tompkins Ave (all odd #'s) Columbus, OH
FRA0937813	Fleming Deal House	1910	527 E Tompkins Ave (rear) Columbus, OH



OHI/OAI Number	Name of Resource	Date of Significance/ Temporal	Address
Multiple	Historic Houses	Multiple	514-522 Clinton Ave (all even #'s) Columbus, OH
FRA0134413	Miller Property	1899	453 E Hudson St Columbus, OH
Multiple	Historic Houses	Multiple	2514-2430 Summit St (all even #'s) Columbus, OH
Multiple	Historic Houses	Multiple	2515-2431 1/2 Summit St (all odd #s) Columbus, OH
FRA0153813	Hale Property	1911	2570 Summit St Columbus, OH
NR-97001241	Glen Echo Historic District	1910-1943	Roughly bounded by Glen Echo Ravine, Big Four RR tracks, Indianola Ave, & Hudson St
FRA0155313	Finn House	1911	2625 N Summit St Columbus, OH
FRA0155213	Gregg House	1910	411 Arcadia Ave (and 2630 Glen Echo) Columbus, OH
FRA0152913	Walsh House	1920	416 Glen Echo Circle Columbus, OH
2500698	Bridge	1921	3.22 miles north of IR 670
FRA1033513	Columbus Fire Station 13	1957	309 Arcadia Ave Columbus, OH
FRA0151213	Bernler House	1939	308 Cliffside Dr Columbus, OH
NR -89000175	Hamilton, Gilbert H., House	1927	290 Cliffside Dr Columbus, OH 43211
FRA0153313	Glen Echo United Presbyt	1930	220 Cliffside Dr Columbus, OH
FRA0150913	Historic Structure	1895	2584-2586 Dayton St Columbus, OH
FRA0156613	Zissis House	1905	2600 Medary Ave Columbus, OH
FRA0151013	O'Harra Rental House	1899	235-237 E Duncan St (2610 Medary) Columbus, OH
FRA0152513	Welshans House	1899	195 E Duncan St Columbus, OH
NR-87000984	North High School	1923	100 Arcadia Ave Columbus, OH
FRA0156413	Pfeiffer Rental House	1880	2673 Adams Ave Columbus, OH
FRA0156513	Marie Ranke Rental House	1880	2667 Adams Ave



OHI/OAI Number	Name of Resource	Date of Significance/ Temporal	Address
			Columbus, OH
Multiple	Historic Houses	Multiple	2682-2636 Findley Ave Columbus, OH
FRA0761013	Lang House	1910	2643 Findley Ave Columbus, OH
FRA0761313	Sayre/Waltzer/Snook/Stultz	1925	2651 Findley Ave Columbus, OH
FRA0153513	Hayden House	1940	96-98 E Dodridge St Columbus, OH
FRA0154113	McConnell House	1899	74 E Dodridge St Columbus, OH
FRA0151413	Harness House	1899	57 E Dodridge St Columbus, OH
FRA0152813	Historic Structure	1899	37 E Dodridge St Columbus, OH
FRA0154313	Burkepile Rental House	1876	2695 East Ave Columbus, OH
FRA0154213	Harness House	1875	45 E Arcadia Ave Columbus, OH
FRA0370313	Bilikam General Store	1880	2662-2664 N High St Columbus, OH
FRA0370213	Gray Nook Restaurant	1920	2657-2659 N High St Columbus, OH
FRA0006813	Ramlow Block/Crosby Drugs	1891	2659-2661 N High St Columbus, OH
NR-10000828	North Columbus Commercial Historic District	N/A	N/A
FRA0430513	Barber Shop	1865	17 W Dodridge St Columbus, OH
Multiple	Historic Houses	Multiple	44-110 W Dodridge St Columbus, OH
Multiple	Historic Houses	Multiple	2684-2709 Neil Ave Columbus, OH
Multiple	Historic Houses	Multiple	69-49 North St Columbus, OH
FRA0768713	Prosser-Yoder House	1937	2683-2685 Neil Ave Columbus, OH
FRA0166710	Historic Structure	1937	224 E California Ave Columbus, OH
FRA0166610	Historic Structure	1910	259 Walhalla Rd Columbus, OH



OHI/OAI Number	Name of Resource	Date of Significance/ Temporal	Address
FRA0844313	Crestview Junior High School	1914	251 E Weber Rd
	, 0		Columbus, OH
FRA0941013	Short House	1939	589 E Weber Rd Columbus, OH
			589 Tibet Rd
FRA0940913	Gawlikowski House	1946	Columbus, OH
FRA0940813	Robson House	1922	578 E Tulane Rd Columbus, OH
FRA0940713	Landis House	1948	577 E Tulane Rd Columbus, OH
FRA1033611	Columbus Fire Station 16	1953	1130 Weber Rd Columbus, OH
FRA0308311	Historic Structure	1910	1676 Manchester Ave Columbus, OH
FRA1053611	Historic Structure	1925	2741 Cleveland Ave Columbus, OH
FRA1053811	Historic Structure	1930	2750 Cleveland Ave Columbus, OH
FRA1053711	Historic Structure	1940	2742 Cleveland Ave Columbus, OH
FRA1025611	IGA and Strip Mall	1940	2682-92 Westerville Rd Columbus, OH
FRA0260212	Schrock House	1834	2422 Sunbury Rd Columbus, OH
FRA0165713	Colonial Cany Shoppe	1939	2923-2931 N High St Columbus, OH
FRA0383413	White Castle Restaurant	1951	2725 N High St Columbus, OH
FRA0165613	The Elmwood	1915	149 E Kelso Rd Columbus, OH
FRA0864813	HL Brickels House	1921	238 Crestview Rd Columbus, OH
FRA0166610	Historic Structure	1910	259 Walhalla Rd Columbus, OH
FRA0429810	Porshinsky Apartments	1930	3211 Indianola Ave
FRA1045311	Como School	1957	2989 Reis Ave Columbus, OH
Multiple	Multiple	Multiple	513-515 E Tompkins Ave Columbus, OH
Multiple	Multiple	Multiple	2500-2458 N 4 th Street
Multiple	Multiple	Multiple	506-524 E Tomkins Street



OHI/OAI Number	Name of Resource	Date of Significance/ Temporal	Address
FRA0534213	Steward & Silver Cement Block	1915	527 E Hudson St Columbus, OH
Multiple	Multiple	Multiple	547-555 Olentangy St Columbus, OH
FRA1017111	New Salem Baptist Church	1951	2956 Cleveland Ave Columbus, OH
FRA1053411	Historic Structure	1940	2572 Cleveland Ave Columbus, OH
FRA1053311	1695-1697 Minnesota Avenue	1930	1695-1697 Minnesota Ave Columbus, OH
Multiple	Multiple	Multiple	2533-2557 Cleveland Ave Columbus, OH
FRA0308311	Historic Structure	1910	1676 Manchester Ave Columbus, OH
FRA1038511	Ohio Townhouses Family Apartments	1974	2775 Brentnell Rd Columbus, OH
FRA0711711	East Linden Elementary School	1911	2500 Perdue Rd Columbus, OH
N/A	Clinton Chapel-Webster Cemetery	1825	3100 N High St Columbus, OH
N/A	Mifflin Cemetery	N/A	2142 Mock Road. West of Sunbury Road. Near Woodland Avenue. East of Parkwood Avenue
N/A	Old Union-Union	1806	East of Ackerman and Olentangy River Road

4.3 HISTORIC TOPOGRAPHIC MAPS AND AERIAL IMAGERY

Historical topographic maps and aerial photography revealed existing suburban housing near the Project area since the mid-twentieth century (USGS 1954, 1955, 1964, 1965a, 1965b, 1995a, 1995b, 2010a, 2010b; Nationwide Environmental Title Research [NETR] 2022a, b, c, and d). The vicinity has remained mainly developed land with large areas of gridded residential structures that gradually increased over time from the 1960s to the present (NETR 2022a-d).



5.0 SUMMARY AND RECOMMENDATIONS

The Project proposes to install approximately 4.2 miles (6.76 km) of 20-inch-high pressure steel main line pipeline. The Project area originates at the intersection of Denune Ave and Parkwood Ave and terminates at the intersection of W Tulane Rd and E Tulane Rd in Columbus, Franklin County, Ohio. The Project is depicted on the *Northwest Columbus* and *Northeast Columbus, Ohio* US Geological Survey (USGS) 7.5-minute topographic map quadrangles.

A Cultural Resource desktop review was conducted for the Project consisting of a compilation of known aboveground historic resources, archaeological sites, and previously conducted cultural resources surveys. There are no above-ground historic resources or subsurface archaeological sites within the Project area; however, there are over one hundred previously recorded cultural resources within a 0.5-mile (0.8-km) radius. These results are depicted in **Appendix B**.

Based on the information provided and the results of this desktop assessment, it is CED's opinion that the previously documented resources in the immediate vicinity indicate a moderate to high probability for encountering archaeological sites within or adjacent to the Project area. However, as proposed, the Project will not require any federal permitting and does not have any other federal nexus that would trigger the need for Section 106 review. CED respectfully submits these findings to NiSource for their information. This background review and assessment was conducted in support of NiSource's compliance with Section 106 of the NHPA.



6.0 REFERENCES

Nationwide Environmental Title Research (NETR)

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- 2022b 1963 Aerial Imagery. Available online: https://www.historicaerials.com/viewer, accessed April 2022.
- 2022c 1971 Aerial Imagery. Available online: https://www.historicaerials.com/viewer, accessed April 2022.
- 2022d 1985 Aerial Imagery. Available online: https://www.historicaerials.com/viewer, accessed April 2022.

Natural Resources Conservation Service (NRCS)

2022 US Department of Agriculture, Natural Resources Conservation Services. Electronic document, http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm, accessed January 2022.

Ohio History Connection (OHC)

2023 Online mapping system. Ohio History Connection. https://www.ohiohistory.org/preserving-ohio/statehistoric-preservation-office/online-mapping-system/, accessed May 2023.

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2006 Bedrock geologic map of Ohio: Ohio Division of Geological Survey Map BG-1, version 6.0, scale 1:500,000.

US Geological Survey (USGS)

- 1954 Topographic Map of Northeast Columbus, Ohio 1:24000. Available online: https://ngmdb.usgs.gov/topoview/, accessed April 2022.
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- 1964 Topographic Map of Northeast Columbus, Ohio 1:24000. Available online: https://ngmdb.usgs.gov/topoview/, accessed April 2022.
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- 1965b Topographic Map of Northwest Columbus, Ohio 1:24000. Available online: https://ngmdb.usgs.gov/topoview/, accessed April 2022.
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- 2010b Topographic Map of Northwest Columbus, Ohio 1:24000. Available online: https://ngmdb.usgs.gov/topoview/, accessed April 2022.



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Appendix Appendix A | Project Location Map





Appendix B | Cultural Resources Background Map







Appendix C | SHPO Concurrence Letter



In reply refer to 2023-FRA-58599

August 8, 2023

Jared Webb Campos EPC, LLC 401 N. Front St. Columbus, Ohio 43215

Dear Mr. Webb:

RE: NiSource NCHP Central Phase I Distribution, Columbus, Franklin County, Ohio

This is in response to the receipt of correspondence, on July 25, 2023, regarding the proposed gas distribution line installation at the above location in Franklin County, Ohio. The comments of the Ohio Historic Preservation Office are submitted in accordance with the provisions of Section 106 of the National Historic Preservation Act of 1966, as amended.

Based on the information submitted, it is my opinion that the proposed undertaking will have no effect on properties listed in or eligible for listing in the National Register of Historic Places. No further coordination is required unless the project changes or archaeological remains are discovered during the course of the project. In such a situation, this office should be contacted as per 36 CFR 800.13.

Please be advised that this is a Section 106 decision. This review decision may not extend to other SHPO programs. If you have any questions, please contact me at (614) 298-2000, or by email at <u>nyoung@ohiohistory.org</u>. Please note the Ohio SHPO now accepts electronic-only submissions for state and/or federal review under Section 106 and ORC 149.53. Please send your submissions to <u>section106@ohiohistory.org</u>. We have also updated our <u>Survey Report Submission Standards</u>.

Sincerely,

Mathon Q. young

Nathan J. Young, Project Reviews Manager Resource Protection and Review

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