Ohio Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Craig W. Butler, Director

September 4, 2015

Notice of Issuance of a Limited Environmental Review and Final Finding of No Significant Impact to All Interested Citizens, Organizations and Government Agencies

City of Columbus
Columbus Department of Public Utilities
Deland Avenue Area Water Line Improvements
FS390274-0193

The purpose of this notice is to advise the public that Ohio EPA has reviewed the referenced project and finds that neither an Environmental Assessment (EA) nor a Supplemental Study (SS) is required to complete the environmental review of the project. Instead, this project meets the criteria for a Limited Environmental Review (LER). These criteria are summarized below in this document and in the attached LER.

This project involves the installation of 12,638 linear feet of replacement water line in the Deland Avenue area. The alignments of the proposed water line will be installed in existing road rights-of-way. The project will benefit the Columbus area by providing improved water service that is safe and reliable for residents and businesses, and will help reduce water system costs by minimizing/eliminating water loss due to leakage from old, failing water mains and by avoiding costly emergency repairs.

The Drinking Water Assistance Fund program requires the inclusion of environmental factors in the decision-making process for project approval. Ohio EPA has done this by incorporating a detailed analysis of the environmental effects of the proposed action in its review and approval process. Environmental information was developed as part of the project plan, as well as through the project plan review process. A subsequent review by this Agency has found that the proposed action does not require the preparation of an EA or an SS.

Our environmental review concluded that because the proposed project is limited in scope and meets all applicable criteria, a Limited Environmental Review is warranted. Specifically, the project entails the replacement of deteriorating waterlines, and is not for the construction of new or expanded facilities. Furthermore, the proposed project:

- Has no significant environmental effect;
- Does not require extensive specific impact mitigation;
- Has no effect on high value environmental resources;
- Is cost effective;
- Is not a controversial action;

- Does not create a new, or relocate an existing discharge to surface or ground waters;
- Does not create a new source of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from an existing water source;
- Will not result in substantial increases in the volume of discharge or the loading of pollutants from an existing source or from new facilities to receiving waters; and
- Will not provide capacity to serve a population substantially greater than the existing population.

The LER presents additional information on the proposed project, its costs, and the basis for our decision. Further information can be obtained by calling or writing the contact person listed on the back of the LER.

Upon issuance of this determination, a loan award may proceed without being subject to further environmental review or public comment, unless information is provided which determines that environmental conditions for the proposed project have changed significantly.

Sincerely,

Jerry Rouch

Jerry Rouch, Assistant Chief
Ohio EPA
Division of Environmental & Financial Assistance
Office of Financial Assistance

Attachment

Cc: Katie Anderson, CDO-DDAGW
Melissa Tucker, Loans and Grants Manager, Columbus Department of Public Utilities
Ken Heigel, OWDA
File

LIMITED ENVIRONMENTAL REVIEW

A. Project Identification

Name: City of Columbus
Deland Avenue Area Waterline Improvements

Address: Greg Davies, Director
Department of Public Utilities
910 Dublin Road
Columbus, Ohio 43215

WRRSP Loan #: FS390274-0193

B. Existing Need

The City of Columbus – Department of Public Utilities – Division of Power and Water (Columbus DPOW) has applied to Ohio EPA's Water Supply Revolving Loan Account (WSRLA) for low-interest financing of a proposed project to install approximately 12,638 linear feet of replacement water line in the Deland Avenue area. The construction of these improvements is a cost-effective way to extend the life of the existing water main system. The WSRLA program requires an environmental review as part of the loan award decision-making process. This document summarizes Ohio EPA's environmental review of the proposed Deland Avenue Area Waterline Improvements project.

The City of Columbus operates a water treatment and distribution system that serves the City and most of Franklin County, and includes three water treatment plants, 26 pump stations, 37 water storage tanks, and 3,617 miles of water lines. The City delivers over 50 billion gallons of water a year to 1.1 million people in Columbus and in 20 contracting communities. The source of Columbus' drinking water includes rivers, creeks, reservoirs and wells. Greater Columbus water customers receive water from one of three water treatment plants (WTPs): the Hap Cremean treatment plant that takes water from Hoover Reservoir and serves The Ohio State University and northern residents; the Dublin Road water plant that serves western and southwestern residents using water from Griggs and O'Shaughnessy reservoirs; and the Parsons Avenue water plant that draws water from wells and serves residents in the southeast. The maximum treatment capacities at these plants are 125 million gallons per day (MGD) at the Hap Cremean WTP, 65 MGD at the Dublin Road WTP, and 50 MGD at the Parsons Avenue WTP, respectively. An additional 26 million gallons of ground level and 52.8 million gallons of elevated storage are available in the water distribution system.

To stay current and provide a reliable source of water to all customers, Columbus DOPW has periodically studied its water system to determine needs. In the mid-1990s, the City embarked on such an analysis. This effort resulted in the 1999 *Master Plan*, which focused on the overall distribution system. A separate study, *Water Beyond 2000*, evaluated the future water supply needs with respect to necessary improvements at the WTPs and reservoirs. Most recently, in May 2012, the city issued the *Water Distribution System Master Plan* final report.

The *Water Distribution System Master Plan* was completed to determine the system

improvements required to provide the appropriate quantity and quality of finished water at the appropriate pressure to Columbus DOPW customers over the next 15 years. A water distribution system model analysis was used to determine present day system vulnerabilities, including transmission mains with excess velocity and head loss, areas of the system with low pressure during maximum demands, and areas of the system with high pressure during average day demands.

The *Water Distribution System Master Plan* also evaluated the Water Distribution System Rehabilitation and Replacement Program. The goal of this evaluation was to adopt a performance based approach to the water main rehabilitation and replacement program consistent with best practices and aligned with the on-going asset management implementation across the Columbus Department of Public Utilities. This DOPW water distribution system analysis included all water mains of 16-inch diameter and smaller. Specific outcomes of the water main rehabilitation and replacement program development included service level development, system characterization, water main condition, criticality and risk, and water main rehabilitation and replacement techniques. A version of the Deland Avenue Area Waterline project was presented in this plan.

The Columbus Department of Finance and Management, in consultation with other administrative departments and City Council, analyzes and recommends project prioritization for the City's five-year capital improvements program and capital improvements budget. The Deland Avenue Area Waterline project is discussed in the 2015-2020 Capital Improvement Program, Capital Improvement Project Number 690236-100059. The purpose of the project is to construct necessary improvements to the water distribution system in the Deland Avenue Area. The improvements will replace or rehabilitate mains that have high break histories and require frequent maintenance. This project includes replacing or rehabilitating the 8-inch and 12-inch diameter water mains within the project area.

See the figures below for a general project location map (Figure 1), a more specific project location map (Figure 2) and a project detail map (Figure 3).

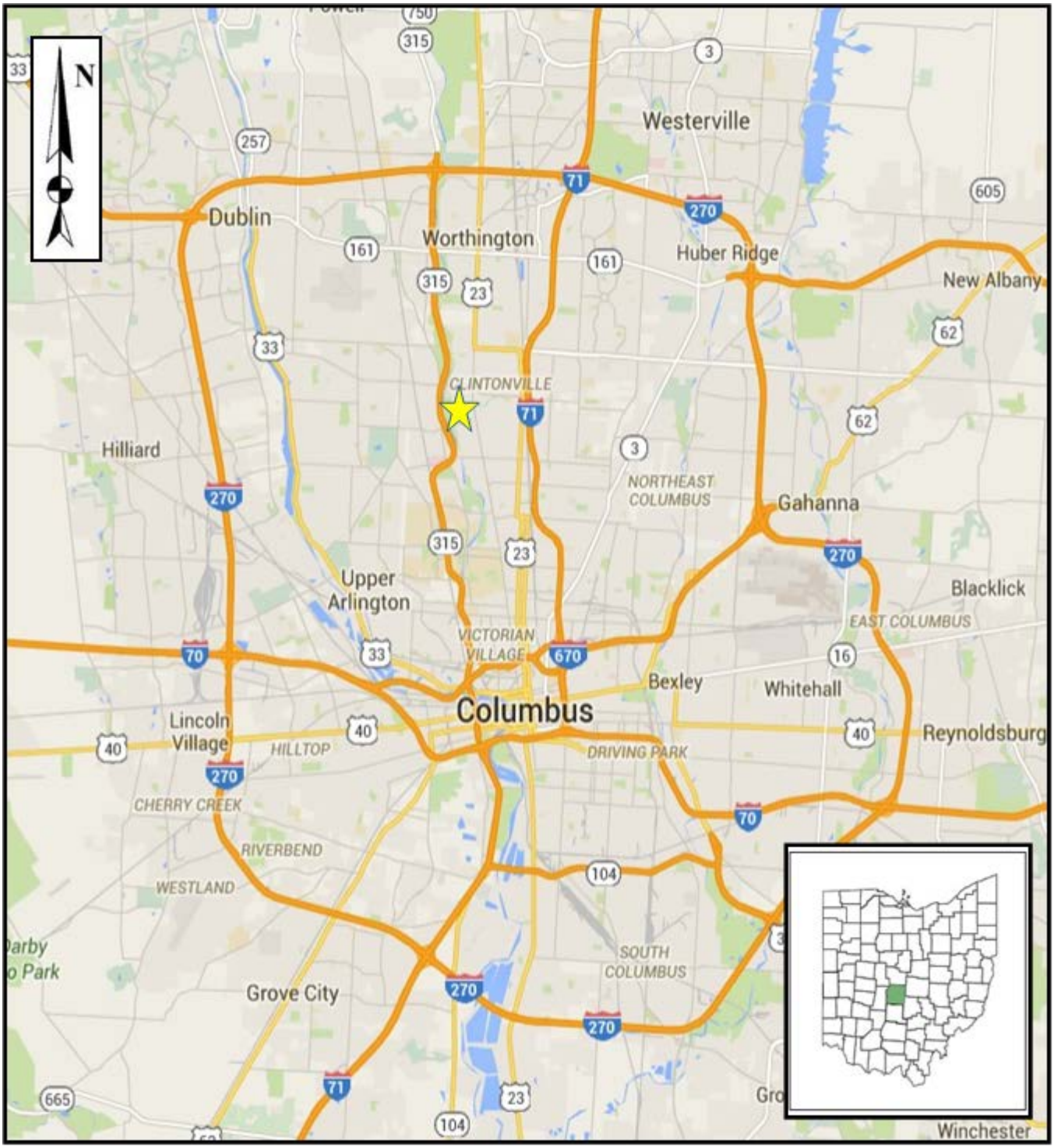

Figure 1. General Project Location Map

Figure 2. Project Location Map

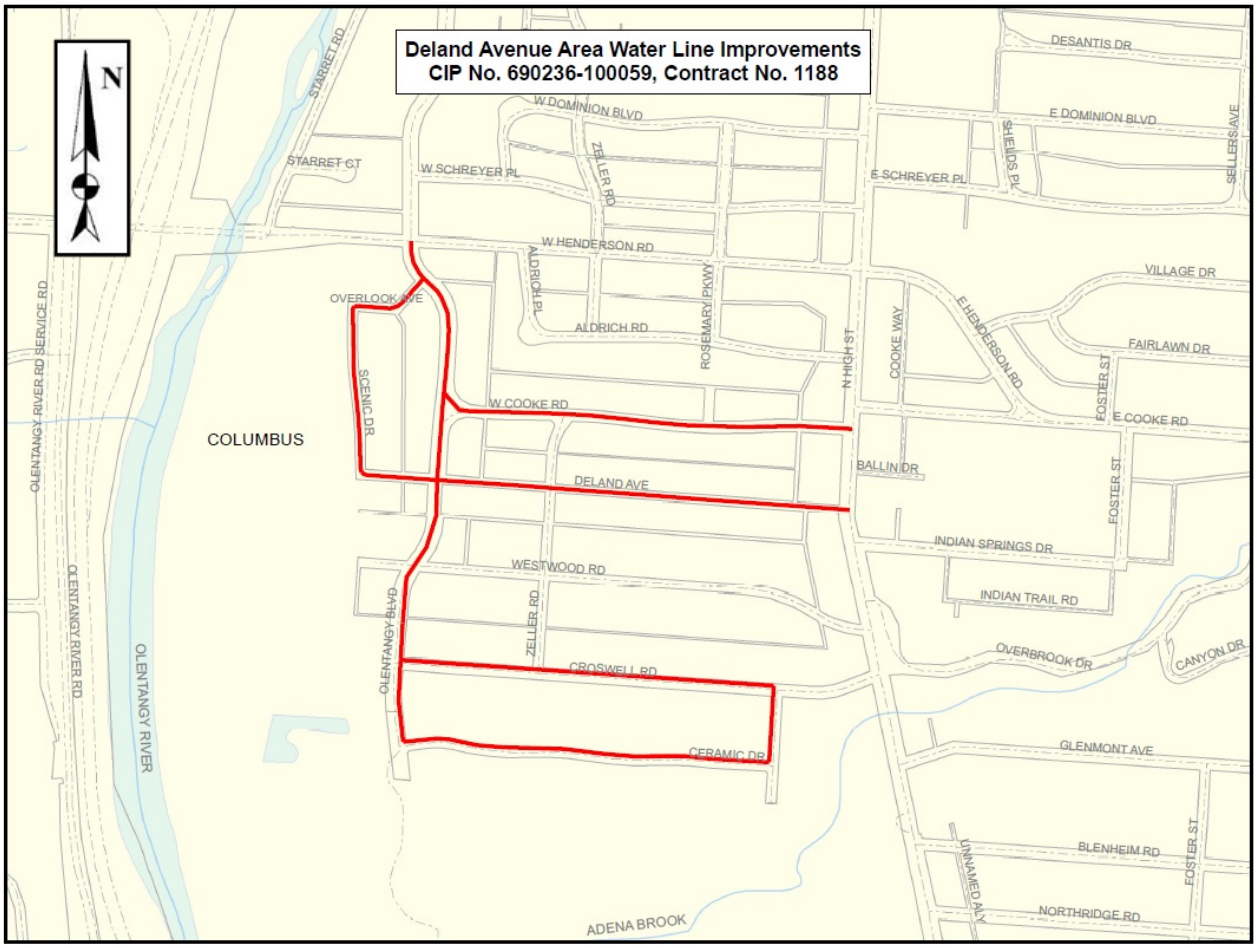

Figure 3. Project Detail Map

C. Project Description

This project includes the construction of 12,638 linear feet of new water line, broken down as follows: 322 linear feet of 6-inch diameter ductile iron pipe, 10,127 linear feet of 8-inch diameter ductile iron pipe and 2,189 linear feet of 12-inch diameter ductile iron pipe that will replace the existing water lines. The project also includes new fire hydrant and valve installation, abandonment of existing water lines and transferring water service connections in the Deland Avenue Area. Replacing the lines will improve flow and water quality; eliminate smaller mains that are a source of regular maintenance and poor fire flow; and replace water mains that require repeated repairs. The current estimated design life of the new ductile iron pipe is 100 years or greater. New copper service lines will also be installed. The existing conditions of the site will allow for open-cut construction.

D. Estimated Project Costs

The estimated project cost for the City of Columbus Deland Avenue Area Waterline Improvements project is $3,000,000, all of which is expected to be funded through the WSRLA. Columbus qualifies for the WSRLA standard, below-market interest rate, which is adjusted quarterly (on January 1, April 1, July 1, and October 1) prior to loan award, and, for loans awarded through September 30th, 2015, is fixed at 2.29% for a 20-year loan. Compared to the

market rate of 3.54%, a total savings of approximately $455,600 will be realized by financing through the WSRLA.

The WSRLA loan will be repaid through revenue generated by the Columbus user charge system. The current user charge rates have been in effect since January 1, 2015. Based on the current user charge rates, the average residential customer, using an assumed 7,480 gallons per month (3,000 cubic feet per quarter) would pay a quarterly bill of $107.18. It is not anticipated the proposed project will necessitate an increase in the user charge system. This quarterly rate translates to an average annual residential expenditure of $428.72. Thus, the average annual expenditure for finished water in Columbus represents 1% of the median household income for a city of Columbus resident (the annual average charge for water service as a percentage of the 2007-2011 American Community Survey 5-Year Estimates), which is generally considered to be affordable.

E. Project Schedule

Construction loan award – September 2015
Completion of Construction – October 2017

F. Public Notification

The City's capital improvements budget and capital improvements plan are posted annually on the City of Columbus' website https://columbus.gov/Templates/Detail.aspx?id=546. Additionally, the City maintains an interactive mapping tool online called "My Neighborhood" http://myneighborhood.columbus.gov/. "My Neighborhood" provides City of Columbus residents with quick and easy access to pertinent information about city services and facilities.

The public has the opportunity to review the legislation approving the funds for the project, prior to City Council Meetings, which are held nearly every Monday beginning at 5:00 P.M. in City Hall. All meetings are open to the public. These meetings can be observed in one of three ways:

- By attending the City Council meeting. Those wishing to address City Council at these meetings are welcome to do so.
- On CTV, where local residents subscribing to basic cable television can watch the City Council Meetings live or rebroadcast.
- In streaming video format.

Ohio EPA will post a copy of this Limited Environmental Review decision and Finding of No Significant Impact on our website at: epa.ohio.gov/defa/ofa.aspx under the "What's New" tab in the "WSRLA Documents Available for Review and Comment" list. Supporting documentation for the LER decision is also available for public inspection upon request from the contact person listed at the end of this report.

G. Planning Information

The Division of Environmental and Financial Assistance has reviewed the facilities planning information for the proposed project in consideration of potential direct, indirect and cumulative short- and long-term environmental impacts.

No opposition to the project is known at this time.

H. Application of Limited Environmental Review Criteria

Ohio EPA conducts environmental reviews of all projects prior to WSRLA financing. Our State Environmental Review Process contains a special set of project review procedures for projects that do not have the potential to "individually, cumulatively over time, or in conjunction with other Federal, State, local, or private actions have a significant adverse effect on the quality of the human environment." Such projects may qualify for a Limited Environmental Review. The proposed project meets the project type criteria for an LER; namely, the project involves repair or functional replacement of existing drinking water facilities. Furthermore, the project meets the other qualifying criteria for an LER; specifically, the proposed project:

- **will have no significant adverse environmental effect**, as sensitive resources such as floodplains, wetlands, riparian areas, prime or unique agricultural lands, aquifer recharge zones, archaeological or historically significant sites, or threatened or endangered species are not present in the project area;

- **does not require extensive specific impact mitigation**, as the proposed project involves the replacement of existing water mains located in residential road rights-of-way where the roads will be restored to their pre-project grade and condition;

- **will have no adverse effect on high value environmental resources**, as the project area includes highly developed residential neighborhoods, with asphalt roads, manicured lawns and numerous existing utilities, so no high value environmental resources are present there;

- **is not a controversial action**, as users' rates will not be increased as a result of this project, nor will any adverse impacts to environmental resources likely occur. Further, Ohio EPA is unaware of any public opposition to the project;

- **is cost-effective,** as replacement of the water mains will ensure continuous potable drinking water supply to residents located in the project area at a reasonable cost by targeting those water mains most in need of repair;

- **does not create new, or relocate existing, discharges to surface or ground waters; and will not result in substantial increases in the volume of discharge or the loading of pollutants from an existing source or from new facilities to receiving waters,** since the proposed project does not involve a point source discharge or the treatment of wastewater flows, where such issues might be of concern;

- **will not create new sources of water withdrawals from either surface or ground waters, or significantly increase the amount of water withdrawn from an existing source; nor will it provide capacity to serve a population substantially greater than the existing population**, as the project scope is limited to replacing existing water mains.

The planning activities for the project have identified no potentially significant short-term or long-term adverse impacts on the quality of the human environment or on sensitive resources. Implementation of appropriate construction mitigation measures is required by the contract specifications, and construction activity will be limited to the existing, previously-disturbed road rights-of-way. The project will benefit the Columbus area by providing improved water service

that is safe and reliable for residents and businesses, and will help reduce water system costs by minimizing/eliminating water loss due to leakage from old, failing water mains and by avoiding costly emergency repairs.

I. Contact Person

For further information, please contact:

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Columbus, Ohio 43216-1049

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