

Clean Water Pilot Project

Program Guide

Revised as of March 3, 2015

City of Lakewood
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A. Pilot Project Area. The pilot project area will be bordered by Hilliard Road to the north, Atkins Avenue to the west, Eldred Avenue to the east and Delaware Avenue to the south, and will include the following residential properties:

Parcel No.	Address	Street
313-11-018	2122	Atkins Ave.
313-12-044	2123	Atkins Ave.
313-11-019	2124	Atkins Ave.
313-12-043	2127	Atkins Ave.
313-11-020	2128	Atkins Ave.
313-12-042	2131	Atkins Ave.
313-11-021	2132	Atkins Ave.
313-11-022	2134	Atkins Ave.
313-12-041	2135	Atkins Ave.
313-13-001	2139	Atkins Ave.
313-11-023	2140-42	Atkins Ave.
313-13-002	2143-45	Atkins Ave.
313-11-024	2144	Atkins Ave.
313-13-003	2147-49	Atkins Ave.
313-11-025	2148	Atkins Ave.
313-13-004	2151-53	Atkins Ave.
313-11-026	2152	Atkins Ave.
313-13-005	2155-57	Atkins Ave.
313-11-027	2156	Atkins Ave.
313-11-029	2160	Atkins Ave.
313-13-006	2159-61	Atkins Ave.
313-11-030	2162	Atkins Ave.
313-13-007	2163-65	Atkins Ave.
313-11-031	2166	Atkins Ave.
313-13-008	2167	Atkins Ave.
313-11-032	2170	Atkins Ave.
313-13-009	2171-73	Atkins Ave.
313-13-010	2175	Atkins Ave.

Parcel No.	Address	Street
313-11-033	2176	Atkins Ave.
313-11-034	2178	Atkins Ave.
313-13-011	2179-81	Atkins Ave.
313-11-035	2180	Atkins Ave.
313-13-012	2183	Atkins Ave.
313-11-036	2184-86	Atkins Ave.
313-13-013	2185-87	Atkins Ave.
313-11-037	2188-90	Atkins Ave.
313-13-014	2191	Atkins Ave.
313-11-038	2192	Atkins Ave.
313-13-015	2193	Atkins Ave.
313-11-039	2196-98	Atkins Ave.
313-13-016	2197-99	Atkins Ave.
313-11-040	2200	Atkins Ave.
313-13-017	2203	Atkins Ave.
313-11-041	2204	Atkins Ave.
313-13-018	2205-07	Atkins Ave.
313-11-042	2208-10	Atkins Ave.
313-13-019	2209-11	Atkins Ave.
313-11-043	2212	Atkins Ave.
313-11-044	2214-16	Atkins Ave.
313-13-020	2215	Atkins Ave.
313-13-021	2217-19	Atkins Ave.
313-11-045	2218-20	Atkins Ave.
313-13-022	2221	Atkins Ave.
313-13-074	16611-13	Delaware Ave.
313-13-075	16615-17	Delaware Ave.
313-13-076	16619-21	Delaware Ave.

Parcel No.	Address	Street
313-13-077	16701-03	Delaware Ave.
313-13-025	16706	Delaware Ave.
313-13-078	16707	Delaware Ave.
313-13-024	16708	Delaware Ave.
313-13-079	16711	Delaware Ave.
313-13-023	16712-14	Delaware Ave.
313-11-046	16800	Delaware Ave.
313-11-047	16802-04	Delaware Ave.
313-11-048	16806-08	Delaware Ave.
313-11-049	16810-12	Delaware Ave.
313-11-050	16900-02	Delaware Ave.
313-11-051	16906-08	Delaware Ave.
313-11-052	16914	Delaware Ave.
313-11-053	17002	Delaware Ave.
313-13-042	2178	Eldred Ave.
313-13-055	2183	Eldred Ave.
313-13-041	2184-86	Eldred Ave.
313-13-056	2187	Eldred Ave.
313-13-040	2188-90	Eldred Ave.
313-13-057	2191	Eldred Ave.
313-13-058	2193-95	Eldred Ave.
313-13-039	2194-96	Eldred Ave.
313-13-038	2198-2200	Eldred Ave.

Parcel No.	Address	Street
313-13-059	2199-2201	Eldred Ave.
313-13-037	2202-04	Eldred Ave.
313-13-060	2203-05	Eldred Ave.
313-13-036	2206-08	Eldred Ave.
313-13-061	2207-09	Eldred Ave.
313-13-035	2210	Eldred Ave.
313-13-062	2211	Eldred Ave.
313-13-063	2215	Eldred Ave.
313-13-034	2216	Eldred Ave.
313-13-033	2220-22	Eldred Ave.
313-13-064	2221	Eldred Ave.
313-13-065	2223	Eldred Ave.
313-13-032	2224-26	Eldred Ave.
313-13-031	2230	Eldred Ave.
313-13-066	2231	Eldred Ave.
313-13-030	2233-35	Eldred Ave.
313-13-029	2234	Eldred Ave.
313-13-068	2238	Eldred Ave.
313-13-028	2239	Eldred Ave.
313-13-069	2242-44	Eldred Ave.
313-13-070	2245	Eldred Ave.
313-13-026	2249	Eldred Ave.
313-13-067	2250	Eldred Ave.

If your property is not listed above, you are not a part of the pilot project, although work may be occurring near your property and at your neighbors' property.

This area was chosen because it features a unique situation where all houses flow into a single point (the sewer interceptor by Harding Middle School); the homes were built in the same time period and are of similar design; we have very good data of the current state of sewer flows during dry and wet weather; and we can measure before and after flow volumes in a variety of dry weather and wet (storm) weather conditions.

B. Rationale. The rationale for the pilot project is as follows:

- The city's sewer system is plagued with significant inflow and infiltration, complicated by a complex network of separate and combined sewers. This results in sewage overflows to the Rocky River and Lake Erie.
- Lakewood recently entered into an administrative consent order with the U.S. EPA that stipulates the city eliminate all sanitary sewer overflows and basement backups.
- Lakewood recently was issued a renewal of its Ohio EPA NPDES permit dated September 1, 2014 that requires the development of a plan to reduce and eliminate sewage discharges to the environment.
- The majority of rainfall that enters the sanitary sewer system comes from sources on private property. These sources must be systematically removed. Each source is a small portion

of the enormous volume of water that enters the system, so it will take time before the removal of each source will produce a noticeable effect.

- Rain water enters the public sanitary sewer due to the age of the overall system and development in the city. The city needs to find and eliminate as many sources of rain water in its sanitary sewer system as possible.

- The city's sanitary sewers are properly sized for conveying sewage during dry weather. It is only during significant rainfall events that the sanitary and/or combined sewers become overloaded.

- Financing for rehabilitation and corrections on private property is worth analyzing. Costs often exceed normal expectations of what homeowners can absorb.

C. Goals of the Program. The goals of the pilot project are as follows:

- to improve water quality and achieve compliance with the federal Clean Water Act and Ohio law;

- to reduce the volume of surface and subsurface water entering the city's sanitary sewer system;

- to reduce overflows into the Rocky River and Lake Erie;

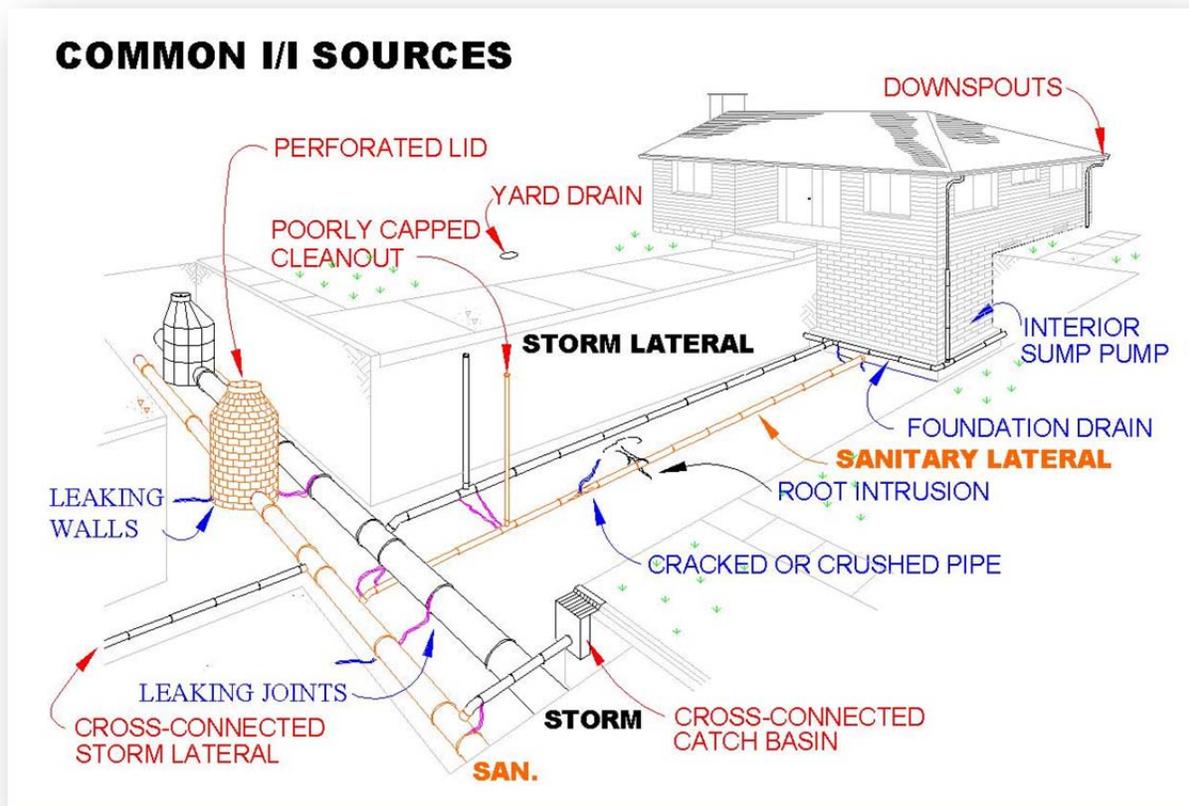
- to reduce the occurrence of basement flooding; and

- to develop a source-control program that considers the financial impact on the residents and technical effectiveness as the city looks toward future citywide programs, corrections and compliance initiatives.

D. Authority for the Program. The city is operating under the resolution establishing the pilot program in 2015. Under Chapters 901, 913 and 917 of the Codified Ordinances, the city may inspect, sample, test and order correction of all instances of improper sewer connections from private property to the city's sewer system, and the infiltration of storm water into the sanitary sewers on private property. The city may also require that all storm water goes from homes to the storm system, and all sanitary water goes from homes to the sanitary system. The pilot program will permit the city and homeowners to make necessary corrections on private property without having to impose some of the more difficult penalty provisions, such as injunctive relief, prosecution and the like, upon affected homeowners.

E. Scope of the Program. The city has engaged its own employees and contractors to conduct physical inspection and testing of sewer connections on properties included in the pilot program. They will access each basement and yard after arranging a time with you. They will attempt to video existing conditions in the pipes leading to and from your home. They will inventory all sewer connections, identify design options for the correction of any violations, and arrange for and conduct corrections of those violations. Some common inflow and infiltration sources to be addressed in the pilot program are illustrated in the following diagram:

COMMON I/I SOURCES



The correction work includes activities that are directly attributable to the removal of clean water sources to the sanitary sewers and may include removal of dirty water to storm sewers. **Examples of correction work** may include installation of:

- a sump pump receptacle (sometimes referred to as a crock) to act as a storage well for water from the foundation (footer) drain;
- a sump pump or ejector pump in sumps or crocks located in the basement or exterior of the house;
- a water-pressure-driven backup sump pump or battery powered backup sump pump;
- downspout diverters or splash pads;
- sanitary and storm lateral pipes to replace existing pipes or to reconnect clean water sources to the storm sewer;
- liners in existing pipes to stop leaking into the pipe;
- upgrades to the house electrical system to support installation of pumps including wiring of a receptacle for the sump pump;
- revisions to the house plumbing system to support installation of a sump pump including installation of new sump-pump discharge piping;

- hangers, braces, supports, staples and other systems for routing and securing plumbing and electrical systems;
- redirecting floor drains to sanitary connection; and/or
- other corrections required to properly complete the project performed at the discretion of the city.

Corrections may require:

- open trenching or where feasible, trenchless construction methods;
- exterior excavation around selected portions of the house foundation;
- cutting and removal of concrete basement slabs and any associated floor covering;
- cutting and removal of sidewalks, driveways, patios, and other exterior hard surfaces;
- removal of plant materials and salvaging (where feasible) or replacing same with like plant materials;
- temporary alterations to irrigation systems;
- drilling, cutting or otherwise creating openings for electrical and plumbing work;
- cutting and repair of exterior foundation walls to allow redirection of foundation (footer) drains to the sump pump receptacle, and redirection of lateral sewer lines;
- localized water proofing of new exterior foundation walls;
- surveying, isolating and removing asbestos containing floor covering or insulation if there is the potential for creating air born asbestos fibers;
- air quality testing; and/or
- other appropriate industry standard methods of construction required to properly complete the project performed at the discretion of the city.

Corrections will not include improving any system, surface, structure, object, or facility not necessary to remove sources of clean water from the sanitary sewer system including:

- waterproofing old construction;
- replacing floor coverings other than those directly disturbed by construction;
- wall coatings and/or paint other than required to attempt to match new work with old construction;
- upgrading facilities not associated with the intent of the program;
- replacing dead, diseased or dangerously rotted plant material; or
- any activity considered purely decorative.

If your property is within the original pilot-study area and you have already made, at your expense, corrections to your sewer system after notice of the pilot study was provided in February 2014, the city may consider, on a case-by-case basis depending on a number of factors, awarding a credit against your water and sewer charges. This would be determined after the city has had an opportunity to determine a scope of work at your property.

F. Ownership of Corrections. When work is completed, you will own all property, devices and materials used to correct problems. Any general or specific warranties or other benefits owned by the city will be transferred, to the extent possible, to you. You will be responsible for future operation and maintenance including but not limited to all necessary electrical and power supply costs. The city will not be responsible for the corrections or any property, devices and materials used for the corrections. The payment of financial assistance by the city under this program shall not be deemed to give rise to any liability on the part of the city for work performed by a contractor or any other person.

G. Payment for Corrections; Financing. Once the evaluations are complete, and scope of work per property is determined, the following is the city's financial participation in the corrections to be made on your property:

- The city will provide you, as the homeowner, notice of the cost of correction with an itemized list of the corrections to be made. The notice will be made either by certified mail or residence service at the affected property. You can opt in and use the city's contractor for the corrections to be made after the notice is made. You will have 30 days to opt in, on a form approved by the city, after receipt of the notice.

- ***If you opt in***, the city will pay for 100 percent for initial property correction at your home. It is estimated the total cost of correction at most parcels will not exceed \$7,500. Work at some homes may cost much less; work at others may cost much more.

- If you opt in, you will be responsible to repay the city just 10 percent of the cost of any correction per parcel. You will have the opportunity to set up a payment plan for no more than 10 years at 0 percent interest. Amounts due under the payment plan will be added to your water and sewer bill. Your failure to make a scheduled payment will result in the balance being assessed to your property tax bill. The city may consider, on a case-by-case basis depending on a number of factors, awarding a full or partial credit for any repayment obligation or against your water and sewer charges based upon sewer corrections you may have already made, at your expense, after notice of this pilot study was provided in February 2014.

- If you contest the necessity of the corrections contemplated by the city, you will have 30 days from the date you receive notice within which to appeal to the city's Board of Building Standards and Building Appeals. Applications for appeals to the board cost \$25 and must be submitted with the city's Division of Housing and Building and the board will hear your appeal in accordance with Article XIV of the city's charter and any applicable rules and regulations.

- ***If you fail to opt in*** within 30 days of receiving notice of the corrections, you must begin to correct the identified sewer connection issues within 90 days, failing which the city may enforce the penalty provisions of Chapters 901, 913 and 917 of the Codified Ordinances or take

other actions allowable by any applicable code. All necessary permits must be pulled for such work and you must bear the full expense of the corrections. If you fail to opt in, you must complete the work undertaken be completed by December 1, 2015, failing which the city may enforce the penalty provisions of Chapters 901, 913 and 917 of the Codified Ordinances or take other actions allowable by any applicable code, including abating the nuisance conditions on your property and assessing the cost to the property.

H. Conditions of Financial Assistance. Any sanitary sewer customer participating in this program must be the owner of the property, and as a condition to receiving the assistance, you must agree on the opt-in form to the following:

- ***Inspection.*** The city, on reasonable notice, may inspect the corrections at any time.
- ***Maintenance and Repair.*** You will operate and maintain the corrections and timely complete any repairs or replacement of the corrections.
- ***Discharge Modifications Prohibited.*** You will not modify the sump pump discharge (if applicable) in any manner that would directly or indirectly contribute foundation drain flow and clear water flow to the sanitary sewer system.
- ***Agreement Runs with the Land.*** You will agree that these conditions run with the property and may be recorded by the city; and that the city may maintain a record or database of properties governed by the agreement.

I. After the Project is Completed. Without written permission of the city, you will not be permitted to alter the plumbing or connection to the sanitary sewer system after the corrections are made, subject to the penalty provisions found within Chapters 901, 913 and 917 of the Codified Ordinances or other applicable law. If the city determines after the project is completed there is a modification of the system that permits clean water to enter the sanitary sewer, or a failure to maintain or replace a failed sump pump or other equipment that would allow an indirect or direct connection to the sanitary sewer system, or such other cause may allow a direct or indirect connection, the city may require further corrections by the property owner.

J. Contact Information. For more information, please contact the city's Division of Engineering at (216) 529-6692 or engineering@lakewoodoh.net, or visit the city's website at www.onelakewood.com/cleanwaterpilot.