

CITY ENGINEER



2004 Annual Report

ANNUAL STREET PROGRAM COVERS 16 MILES

This year's overlay, patching, crack sealing, and concrete repair projects covered over 16 miles, approximately 7.1 % of the City's 236 miles of streets.

CRACK SEALING PROGRAM

Dave O'Mara was awarded the contract to seal cracks on streets throughout the city. Sealing cracks in city streets increases pavement life allowing a longer time between more intense street maintenance such as overlay. O'Mara placed 17 tons of material to seal cracks on 24.6 lane miles of City street. The cost for this preventative maintenance was \$40,860. Crack sealing costs an average of \$3320 per mile of street.

MISCELLANEOUS REPAIRS

Milestone Contractors repaired concrete streets in Carya Square. Milestone removed and replaced 802 syds. of concrete street, installed 731' of underdrains, installed 12 new accessible ramps, replaced 17 syds. of sidewalk, and reconstructed one inlet. The project cost was \$50,387

OVERLAY REPAIRS

Milestone Contractors was awarded a contract for street repairs that included 293 syds of patching, 3325' of under drain installation, and various other drainage repairs. Addressing these problems before overlaying the streets will extend the pavement life and mitigate the need to cut into newly paved streets. Overlay repairs were bid with overlay program this year. The total cost is reported below.

OVERLAY PROGRAM

Milestone Contractors was awarded the City's annual overlay project with a low bid of \$236,356 (includes overlay repairs). As part of the overlay project, Milestone raised manholes,

water valves, detector housings, and installed thermoplastic pavement markings. Milestone placed 3690 tons of asphalt on 3.5 miles of City streets. To overlay a one mile stretch of City street 24 feet wide by 1 inch in depth costs \$30,588.80.

CONCRETE STREET REPAIRS

Concrete street repairs were made in Chapel Bluff, Riverview Acres, Parkside Addition, Everroad Park West, and Sandy Hook. Milestone Contractors was awarded the project



Milestone Contractors finish a concrete street repair

with a low bid of \$265,195. Milestone removed and replaced 6475 syds of concrete street and installed 17 new accessible ramps

ACCESSIBLE RAMPS

In a continuing effort to bring our walkways into compliance with the Americans with Disabilities Act, the city quoted two separate accessible ramp projects. Milestone contractors was awarded the Phase I project with a low quote of \$44,250. Milestone installed 59 ramps and replaced 69.5 syds. of sidewalk. Meshberger Construction was awarded the Phase II project with a low quote of \$28,280. Meshberger installed 47 ramps and replaced 81.9 syds. of sidewalk.

1072 FEET OF PIPE ADDED TO STORM SEWER

The City awarded contracts totaling \$121,791. for miscellaneous drainage repairs and improvements in 2004. Through City contracts, 1072 linear feet of pipe were added to Columbus' storm sewer system. In addition to the new pipe, 4 new inlets were installed. The existing storm sewer system is aging and requires maintenance to avoid failures. Several repairs were made this year including 4 inlets, 2 drywells, 1 manhole, and 26 feet of pipe.

TAYLOR ROAD STORM SEWER

York Construction and Excavation was awarded the contract to complete phase II of the Taylor Road Storm Sewer project. This is the final phase of a project to provide flood relief to Sandy Hook Lake. The project includes the installation of 670 ft. of 24" HDPE storm sewer pipe, 4 catch basins, 2 manholes, and 100' of ancillary storm sewer line. With the further development of the Columbus Crossing shopping center, the Columbus Plan Commission and Columbus City



York Construction installs storm sewer along Taylor Rd.

Council required the developer to bond for a walk from US 31 to end of their property near South drive. In 2005 the City Engineer's office will bid a public works project to include these improvements and connect the walk on South Drive. The sidewalk project and work completed with phase I and II of the Taylor Road storm

sewer project will provide continuous pedestrian access from 15th Street to US 31. Future plans to improve US 31 include sidewalks that will tie into these projects.

13TH AND IOWA STREET

A vertical grade problem and inadequate number of storm drains is causing storm water to pond at the intersection of 13th and Iowa Streets. The solution is to install two new inlets and a new manhole to tie into the existing storm sewer line in 13th Street. Meshberger Construction was awarded the quote to complete these improvements. This project was quoted with other miscellaneous storm sewer repairs including work at Shoreview Court, Ridgeview Court, Cherry Street, McKinley Street, Union Street, Flat Rock Drive, Pearl Street, Rockyford Road, and Meadowridge Drive. Meshberger will complete the repairs and improvements for \$31,000

DRAINAGE MAINTENANCE

Each year, a number of drainage structures fail throughout the City. In the older sections of town, structures made of brick or concrete block with mortar joints have been in service for decades without failure. Eventually, time and the elements compromise the joints and the soil surrounding them slowly seeps into the structure creating a sink hole. This is usually the first indication of a problem. Some newer structures can be repaired, but most of the older brick and mortar structures need to be replaced. In 2004 the City spent nearly \$20,000 for this type of maintenance.

A type of preventative maintenance being pursued is the installation of underdrains. Underdrains are perforated pipes that are installed under the edge of the roadway. They are designed to keep the ground water away from the pavement. Wet sub-grade makes the pavement susceptible to freeze/thaw failure. In 2004, over 2000 feet of underdrains were installed

WALK WORKS 2004

Walk Works, the City's sidewalk replacement program, was established in 1991 to encourage property owners to replace unsafe, deteriorated sidewalks and to build new sidewalks. The program has facilitated the replacement of more than eight miles of sidewalks in the last twelve years. This year the City reimbursed property owners \$10 per foot of sidewalk after it was replaced and inspected.

Walk Works 2004 replaced 2750 linear feet of concrete sidewalk across 34 lots. In addition to the *Walk Works* program, other walks and paths were installed with Engineering Department support. Workers from the City Garage made repairs to walk and curb on City maintained property, and installed 3 accessible ramps. 300' of sidewalk and 400' of curbing were replaced at the car scape lot at 6th & Franklin and 1st Street southeast of City Hall.

INDOT PROJECTS

The Indiana Department of Transportation continues to develop the State sponsored improvement projects in the Columbus Area.

INDOT is currently acquiring rights-of-way for the US 31 project, which is scheduled to begin construction in 2005. The project includes 4 travel lanes with a center turn lane, new concrete curb and gutter, new storm sewer, new sidewalk, interconnected signal equipment, and two new bridges.

State Street is scheduled for improvements between Marr Road and Mapleton Street. The improvements include 4 travel lanes with a center turn lane, sidewalk replacement, realignment of Mapleton/Pence Street, new traffic signals at Marr, Gladstone, and Mapleton, and new left turn lanes at intersections. These improvements are scheduled for contract in 2006.

Improvements to State Road 11 are scheduled for 2006. INDOT plans to add a center left turn lane from the State Road 46 intersection to Road 200 South. The improvements are projected to provide an acceptable level of service and reduce the number of rear end accidents.

PROJECTS IN DEVELOPMENT

The City is in the process of purchasing rights-of-way for an improvement project for Rockyford Road designed by AECON, Inc. The improvements will be from Duffer Drive to Marr Road. Improvements include a four lane section with curb and gutter, storm sewer, pedestrian trail, and intersection realignment. If right-of-way can be secured in a timely manner, the project will be let in 2005.

Also under development are improvements to 17th Street from Central Avenue to US 31. Improvements include 4 travel lanes, sidewalk, curb and gutter, storm sewers, and dedicated bicycle lanes. Plans prepared by Strand Associates are currently at INDOT for design review. After design approval the right-of-way process will begin. Construction is projected to begin in 2006.

Road 200 South between State Road 11 and 150 West is scheduled for improvements. Improvements will include a dual left turn lane, curb and gutter, and storm sewer. Plans are currently being prepared by Janssen & Spaans Engineering for field check submittal to INDOT. Construction is projected to begin in 2007.

City Engineering Staff

Steve Ruble	City Engineer
Steve Rucker	Assistant City Engineer
Randy Sims	Senior Engineering Technician
Rebecca Douglas	Technician
Patricia Whitson	Technician
Jason Perry	Technician

NPDES PERMIT

In continued efforts to acquire a National Pollutant Discharge Elimination System (NPDES) phase II storm water permit for the City, the Engineering staff, along with staff from various other City departments, is working with consultant DLZ. DLZ has been hired to provide technical assistance to the City to comply with complex regulations of the rule.

To obtain this permit, the City must prepare a Storm Water Quality Management Plan (SWQMP).

NPDES Permit Milestones

- 11/4/03** – Part A submission - **Complete**
- 5/2/04** – Part B submission - **Complete**
- 2/2/05** – Part C submission
- 2/2/05** – Public Education and Outreach Program Development Certification submission
- 2/2/05** – Public Involvement and Participation Program Development Certification submission
- 2/2/05** – Illicit Discharge Plan and Regulatory Mechanism Certification submission
- 2/2/05** – Construction Site Program Plan and Regulatory Mechanism Certification submission
- 2/2/05** – Operations Pollution Prevention Program Development Certification submission
- 2/2/06** – Operational and Maintenance Plan Certification submission

The permitting and certification process is designed to improve storm water quality in communities with populations greater than 10,000.

Potentially affected departments within the City include: Engineering, Planning, City Services, City Utilities, Parks & Recreation, and even Aviation.

COLUMBUS MPO

Much has been accomplished by the Columbus Area Metropolitan Planning Organization (CAMPO) in 2004. Statements of Work were adopted for both Fiscal Year 2004 and 2005. The Statement of Work outlines all of the planning activities for the year. An interim Transportation Improvement Plan (TIP) was adopted. The TIP outlines all programmed improvement projects on a 3 year horizon. A Memorandum of Understanding (MOU) was reached between CAMPO, INDOT, and the local transit system to outline responsibilities for the planning and programming process. Personnel policies were adopted by the CAMPO Policy Board in anticipation of adding full time staff for the MPO.

CAMPO POLICY BOARD

Voting Members

Mayor, City of Columbus
President, Columbus City Council
President, City of Columbus Plan Commission
Chairman, Town Council of Edinburgh
President, Bartholomew County Council
President, Bartholomew County Plan Commission
Chairman, Bartholomew County Commissioners

Non-voting Ex-officio Members

Chairman, Johnson County Commissioners
Chairman, Shelby County Commissioners
Indiana Department of Transportation
Federal Highway Administration
Federal Transit Administration

At their August 24, 2004 meeting, the Columbus City Council approved resolutions creating a Department of Metropolitan Planning and a revision to the Salary Ordinance to allow the acquisition of staff for the MPO. At the time of this report, interviews have been held for the MPO Manager position, and the search committee is currently in negotiations with its lead candidate.