



# ***2007 ANNUAL REPORT***

*Prepared For The*

***City of Brecksville***



**ROBERT C. KLAIBER, JR., P.E., P.S.**  
**CUYAHOGA COUNTY SANITARY ENGINEER**

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March 28, 2008

The Honorable Jerry N. Hruby  
City of Brecksville  
9069 Brecksville Road  
Brecksville, Ohio 44141

Dear Mayor Hruby:

I respectfully present the 2007 Cuyahoga County Sanitary Engineer's (CCSE) Annual Report for the City of Brecksville for your review.

I am happy to announce that this past year was a noteworthy year for the office. As in years past, the office continues to grow amidst a variety of consistent changes.

This annual report outlines the overall workings of the office, work that was completed within your municipality and operating expenses for the past year. The various projects that were reviewed, approved and implemented throughout the past year are also incorporated. As in the previous report to your community, maps that display areas where system mainlines were cleaned & inspected, construction activity locations, inflow/infiltration study areas, house visits and house lateral connections were cleaned or inspected are attached.

In closing, I am grateful for the opportunity bestowed upon me as your County Sanitary Engineer. I will continue to work hard to meet the varying needs and concerns of your community.



Very truly yours,

Handwritten signature of Robert C. Klaiber, Jr., P.E., P.S.

Robert C. Klaiber, Jr., P.E., P.S.  
Cuyahoga County Sanitary Engineer

cc: Victoria D. McCauley  
Ronald Weidig

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## Mission Statement

***"Our mission is to protect, preserve and promote the public health and welfare of Cuyahoga County residents by managing, maintaining and operating wastewater infrastructure."***

**Robert C. Klaiber, Jr., P.E., P.S.**

### OVERVIEW

The Cuyahoga County Sanitary Engineering Division (CCSE) was established in 1919 to administer the authority vested in the Board of County Commissioners in matters of wastewater, storm water and water supply management. State law extends to the Board of County Commissioners the authority to create and maintain a Sanitary Engineering Division under the supervision of a registered professional engineer. In April 2004, the County Commissioners appointed the County Engineer, Robert C. Klaiber, Jr., P.E., P.S., to assume the additional duties of County Sanitary Engineer.

Mr. Klaiber's focus on needs assessment, engineering feasibility studies, maintenance and repair of aging sewer lines, as well as other infrastructure-related issues, has a direct impact on commercial and residential development, job creation and expanded tax base in the communities served by the Sanitary Engineer.

The Sanitary Engineering Division is a major source of information and guidance that mayors, municipal engineers and service directors rely on when making infrastructure decisions within their community. The Division has considerable experience in the maintenance of sanitary and storm sewer lines, many of which are old and have performed beyond their design life. Moreover, the Division has much expertise with respect to wastewater treatment plants and pump stations.

Engineer Klaiber directs an operation which encompasses 30 communities and maintains nearly 820 miles of sanitary sewers; treats approximately 170 million gallons of wastewater per year; and operates 42 sewage-pumping stations, as well as 3 wastewater treatment plants throughout Cuyahoga County. The Division also has agreements with municipal corporations for the establishment, operation and maintenance of sanitary sewers and facilities. In addition, standards for any system connected to or served by a County owned improvement are established and enforced.

Working in cooperation with the Ohio Environmental Protection Agency (Ohio EPA), the Northeast Ohio Regional Sewer District (NEORS), the City of Cleveland Division of Water and the Cuyahoga County Board of Health, the Division manages a Capital Improvement Program (CIP) used for upgrading or replacing the existing infrastructure and for expanding sewers to unsewered areas. The CIP includes

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information about project type, location, funding, preliminary engineering and final plan development.

All operating funds for the Division are created through fees and assessments. The Division does not receive a subsidy through the County General Fund. It does, however, use the General Fund's bonding capacity.



## GOALS

The goals of the Sanitary Engineering Division are to:

- Reduce the number of flooded basements by decreasing mainline blockage, minimize the infiltration and inflow of storm water in the sanitary system and evaluate structural integrity of the entire sewer system;
- Operate wastewater treatment plants in compliance of National Pollution Discharge Elimination System (NPDES) permit parameters;
- Provide guidelines for new construction through use of *Uniform Standards for Sewerage Improvements*;
- Review and approve new improvement plans; and
- Provide infrastructure needs assessment for communities.

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## **SERVICES PROVIDED**

The Sanitary Engineering Division provides a variety of services that benefit the Greater Cleveland community. The important functions include:

- Engineering
- Capital improvement planning
- Production of maps
- Pump station operation & maintenance
- Sanitary sewer cleaning & maintenance
- Collection of storm sewer maintenance fund
- Laboratory testing
- Construction inspection
- Sewer builder's licenses & permits
- Record keeping (As built plans & test tee locations)
- Geographic information systems (GIS)
- Wastewater treatment plant operation & maintenance

The Division also provides support services in the areas of finance, data processing and record keeping.

## **SERVICE DELIVERY SYSTEM**

The CCSE provides a variety of sewerage system maintenance options to local communities. Whereas the Northeast Ohio Regional Sewer District maintains the major trunk sewers and wastewater treatment plants, the Division offers services designed to meet and develop community needs. The design and structure of the CCSE allows flexibility in the delivery of services to each community. A service delivery package can range from full-service to partial-service, depending upon the need of the municipality. Available services include:

## **ENGINEERING SERVICES**

- Capital improvement planning
- Plan review and approval of all new sewer improvements within the County sewer districts
- Construction management
- Geographic information systems (GIS)
- Project design
- Engineering analysis (required for operation of facilities and the collection system)
- Operational checks (EPA permit compliance)



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## FACILITIES OPERATION AND INSPECTION

- Operation and maintenance of wastewater treatment plants and pump stations
- Inspection of new wastewater collection and transportation systems within County sewer districts
- Issuance of connection permits
- Issuance of sewer builders' licenses
- Development, implementation and monitoring of safety guidelines
- Laboratory testing of wastewater to determine extent of pollutants and necessary treatment process adjustments

## SEWER MAINTENANCE

- Sanitary sewer maintenance
- Cleaning of mainline sewers in each district
- Videotape inspection of sewers to determine condition of lines
- Smoke & dye testing of systems to identify potential problems and cross-connections
- In-house completion of minor repairs on system as needed
- Cleaning of sewer laterals (from inspection tee to mainline)

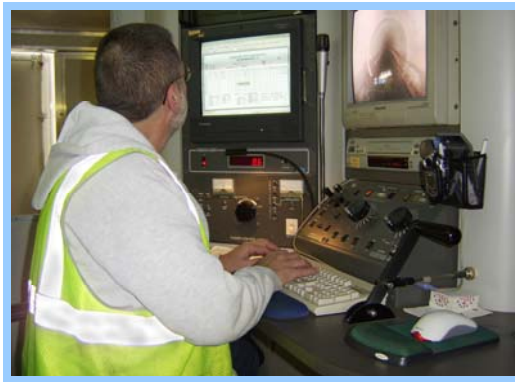


\* Inspection Camera

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## **ADMINISTRATIVE SUPPORT SERVICES**

- Data management/mapping program
  - Geographical and non-geographical information systems (development and implementation)
  - Maps and spatial analysis for design and service management
- Finance management
  - Fiscal oversight of annual operating budget in excess of \$11 million
  - Fiscal oversight of annual capital improvement budget of \$4 million
  - Manage automated cost accounting systems for monitoring and tracking revenues and expenditures
  - Determination and assessment of user fees for 80,000 plus parcels



## **SUMMARY OF SERVICE DELIVERY**

Services provided to full-service communities include engineering, inspection, maintenance and operation of wastewater collection system. In partial service communities, services are provided to the area's tributary to County owned facilities upon request. The Division has met its commitment to users in the following areas:

- Develop financing plan and manage capital construction projects
- Obtain alternate funding grants to offset costs of construction
- Review construction plans in thirty communities
- Develop computerized mapping program to identify the location of sewer systems and structures
- Process an average yearly flow of 466,000 gallons of wastewater
- Laboratory support for wastewater treatment plant parameters; perform approximately 10,072 tests annually
- Maintain approximately 820 miles of sanitary sewers; clean approximately 4,790 house connections annually
- Operate and maintain 42 wastewater pump stations, throughout the County



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## INTERNAL STRUCTURE OF THE DIVISION

### ENGINEERING SECTION

The Engineering Section provides technical services to its customers, including capital project planning, grant and loan administration, design engineering, construction management and inspection of wastewater treatment and conveyance facilities.

This section oversees capital construction projects that include monies in the form of grants obtained from the State of Ohio. Monies for the lining of sewers and repairing, replacing or rehabilitating existing sanitary and storm sewers are also expended. The Division invested funds on repairing, enhancing and/or eliminating wastewater treatment plants and pumping station facilities.

The Engineering Section reviews design plans for approximately sixty-five construction projects per year on behalf of thirty communities.

In addition, the Engineering Section coordinates and processes legislation, maintains files and legal libraries of pertinent federal, state and local laws and renders technical assistance to other sections regarding changes in laws or regulations. Working in cooperation with the Commissioners' legislative representative, it reviews and comments on legislation proposed in the Ohio General Assembly.

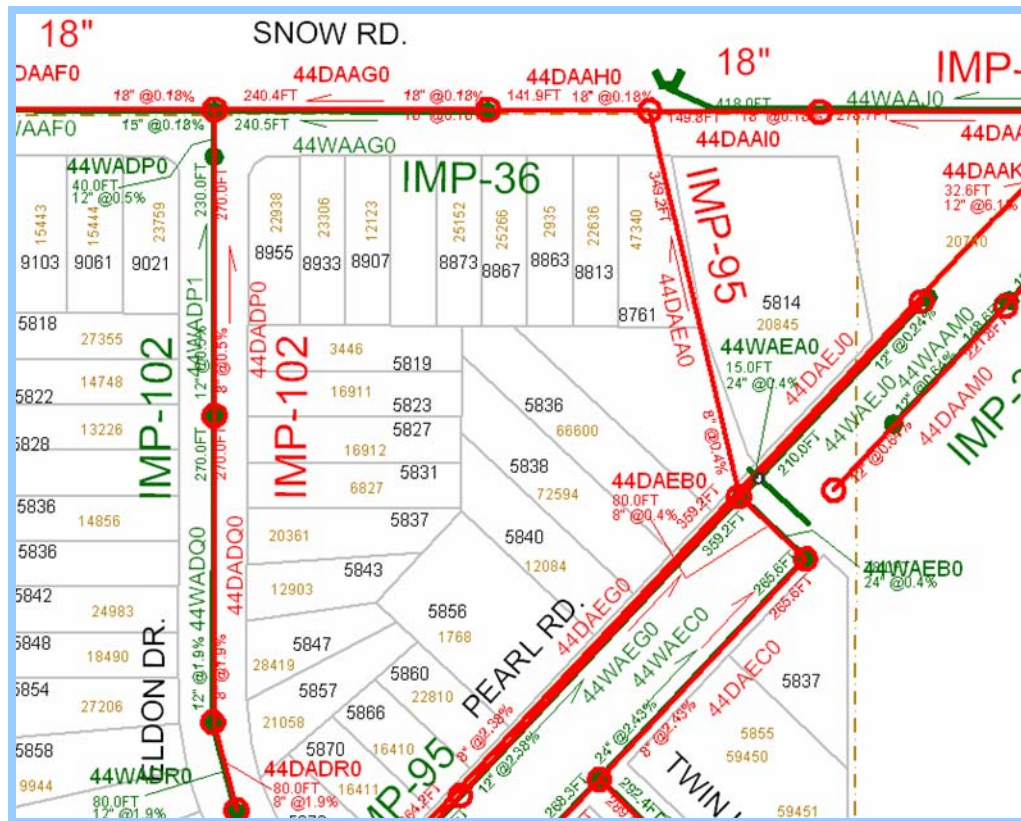


\* Valley Ranch Pump Station

## DATA SECTION/MAPPING PROGRAM

The Data Section provides computer and analytical support to internal end users and communities within the CCSE. It is responsible for the design, implementation and maintenance of geographical map-based and other relational database systems, as well as guiding data acquisition tasks throughout the Division. During the past six years, this section has developed applications to enhance the capabilities of the Division's accounting and personnel methods. This section has established communication links between the County Data Center and the County Auditor's Office to access financial, assessment and real property information.

In addition, the computerized mapping program catalogues the location of sewer systems and performs analysis on spatial data. This ability supports the planning, designing and maintenance of sewer systems, as well as ensuring user fees are appropriately assessed and collected. Furthermore, the mapping program now features attached permits and engineering drawings. In 2007 the Data Section began converting its databases to Oracle in anticipation of providing web-based information in 2008 through Cuyahoga County's CEGIS Enterprise GIS. This information will include real-time tracking capability for the Division's maintenance crews and web-based customer service request and work order applications.



\* GIS Snapshot

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## WASTEWATER TREATMENT PLANTS

The County operates 3 wastewater treatment package plants. These facilities treat 170,000,000 gallons per year. The standards are set for each facility by the Ohio EPA through the National Pollution Discharge Elimination System (NPDES) permit. Permits are renewed with new guidelines set every five years. The support staff consists of wastewater operators licensed by the Ohio EPA who monitor the conditions of the plants and make necessary process adjustments to meet the NPDES permit. The Water Quality Control Laboratory provides the required analytical data for process control and for the monthly operating reports as enforced by the Ohio EPA. The operators have the ability to address minor repairs with a maintenance mechanic staff that handle major repairs. Following the guidelines of its NPDES permit, the County has installed a 50,000 gallon equalization tank towards the elimination of the Echo Hills Treatment Plant in Brecksville.

## PUMP STATIONS

The County operates 42 pumping stations throughout the county. A Supervisory Control and Data Acquisition (SCADA) system monitors 33 of the stations. The system provides alarms and operational status through a central computer that can be accessed from a remote computer. It is our goal to upgrade all County operated pump stations and to expand the SCADA system to all new projects including new pump stations that were installed in Pepper Pike and Gates Mills.



\* Brainard Pump Station

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## **OPERATIONS MAINTENANCE**

The Operations Maintenance area has developed a preventative maintenance program to reduce costs by performing maintenance on and repair/rebuild jobs in-house. The preventative maintenance program has substantially reduced facility downtime by eliminating time-consuming solicitation for outside contractor services. As a result, many potential violations of the NPDES permits have been avoided.

## **CAPACITY MANAGEMENT, OPERATION AND MAINTENANCE PROGRAM**

In December of 2005, Cuyahoga County submitted the self-audit to the U.S. Environmental Protection Agency (U.S. EPA), Region 5 in Chicago. The latest findings as of December of 2006 found 12 of the 30 communities have had their system approved by the U.S. EPA with the only stipulation that any sanitary sewer overflows be reported to the Ohio EPA. In response our agency has enhanced its sanitary sewer overflow procedures and notifications.

## **WATER QUALITY CONTROL LABORATORY**

The Laboratory has expanded over the past thirteen years from its initial wastewater analysis of treatment plants owned and operated by the County. Analysis is also conducted from samples brought to us from the Cuyahoga County Board of Health. These samples range from beaches, lakes, streams and septic systems throughout the County to Phase II Storm Water samples, as mandated by the EPA. The Laboratory is also collaborating with the Cuyahoga County Soil and Water Conservation District to analyze soil samples. This analysis of soils and gardens helps to determine the quantity of fertilizer necessary, thereby reducing the discharge of excess chemicals and nutrients into our waterways. Certification for testing lead paint in homes was accomplished in 2007.

## **INSPECTION/PERMITS**

The Inspection and Permit section operates in 30 suburban municipalities. This section's three major functions are: the licensing of contractors and issuance of permits to construct mainline sanitary/storm sewers, appurtenances and special projects, including wastewater treatment plants and pumping stations; performs inspection and testing of the sewerage construction projects and approve completed projects; maintain the permanent records for sewerage construction projects and provide information for County departments, engineering consulting firms, contractors and the public.



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## SEWER MAINTENANCE

The Sewer Maintenance section provides a full-service program to clean, evaluate, maintain structural integrity, videotape and perform construction on the sanitary and storm sewers. The general program consists of cleaning all sanitary sewers every three years and televising all sanitary sewers every six years. This is well within the NEORSD's "best management practices" guidelines. The Division cleaned 4,790 house connections this past year. The goal is to reduce basement flooding through inflow/infiltration reduction, reduce blocked mains, clean service connections and maximize sewer capacity.

The Sanitary Engineering Division has an ongoing sewer flow-metering program. The in-sewer meters are primarily used to compare normal dry day flows to wet weather flows in sanitary main lines. The meters are also used to measure wastewater flows coming into treatment plants and water flows in storm sewers. Through the use of the flow meters, the Division can isolate areas affected by excessive volumes of clean runoff into the sanitary sewer system. Meters can detect extraneous water from illegal downspout connections or from rainwater infiltrating through the ground and into sanitary sewers through bad pipe joints and cracked or broken pipe.



\* Jet Truck

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## **FINANCE SECTION**

The Finance Section provides support services to various units within the Sanitary Engineering Division. Automated cost accounting programs and systems ensure accurate tracking and monitoring of expenditures, revenues, rate structures and other data that provide planning for capital projects and operational budgets. All systems and programs are operated under generally accepted accounting principles.

The Finance Section oversees an annual operating budget in excess of \$11 million and an annual capital improvement budget of \$4 million. The capital improvement plan is administered by this section and revenues, as well as expenditures, are approved and monitored for each individual improvement. This section is responsible for accounts receivable, accounts payable, cost accounting, inventory control, vehicle inventory management, capital project financing, purchase of supplies and equipment and determination and assessment of users fees.

## **CONCLUSION**

In addition to providing a broad range of services, the Cuyahoga County Sanitary Engineer, Robert C. Klaiber, Jr., P.E., P.S., has implemented projects designed to improve effectiveness and service efficiency. The CCSE emphasizes its commitment to its mission to serve the communities of Cuyahoga County. Goals and projects have been carried out in line with this mission. The purchase of more efficient equipment, better preventative maintenance practices, along with staff training and development, have resulted in greater productivity. The implementation of improved accounting methods assures that current and future costs and receipts will be financially accountable to the communities. It is the CCSE's continued commitment to provide the most effective level of water pollution control, within the limits of available resources, to the municipalities and townships of Cuyahoga County.





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## **APPENDIX DESCRIPTION\***

The following appendices contain a variety of reports representing the services provided to communities in 2007.

The CCSE follows a manhole-to-manhole, sewer segment-based accounting method for Jet Cleaning and TV Inspection maintenance services. The first two reports contain listings of the collection system, (sanitary and combination sewers) cleaned and inspected for the year by street.

The following report discloses the more significant projects submitted and reviewed by the Permit and Engineering sections during the year for your community. Smaller review services such as house connections or ongoing, intermittent review of large multi-phase projects spanning several years of development are not shown on this report.

The final appendices are from the Finance and Billing section. These reports provide a breakdown of operating expenses, capital project costs contracted for the community, as well as additional services including house visits, inflow/infiltration studies and construction activity.

A hardcopy map is enclosed showing areas where collection system mainlines were Jet cleaned and TV inspected, construction crew activity locations, house visits and if house lateral connections needed to be cleaned or inspected. The CD provided contains a PDF file of the map, which can be copied for distribution. Adobe Corporation's free reader software is required and can be downloaded from [www.adobe.com](http://www.adobe.com).

\* Please note: These appendix reports are provided only to communities for which the specific service is provided by CCSE. For example, if regularly scheduled mainline cleaning service is not provided for your community, a map was not produced. Similarly, if project review or capital project management services are not provided to your community, then there is no corresponding report. Certain communities are provided limited maintenance on county improvement mainlines and/or facilities only.



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# Section A-1

## Community Streets Cleaned\*

\* No service provided if section is blank

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# COLLECTION SYSTEM JET CLEANING 2007

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STREET	SEGMENTS	FOOTAGE
<b>BRECKSVILLE</b>		
ARLINGTON AVENUE	5	950
BARKLEIGH CIRCLE	1	146
BARR EASE.	1	205
BARR ROAD	15	4655
BEECHWOOD DRIVE	6	1397
BEECHWOOD EASE.	1	162
BOXELDER DRIVE	4	682
BRADFORD	10	1707
BRECKSVILLE EASE.	13	2233
BRECKSVILLE ROAD	34	6985
CAMBRIDGE COURT	1	307
CAMBRIDGE DRIVE	7	1551
CARRIAGE HILL DRIVE	10	2228
CARRIAGE HILL EASE.	4	715
CASTLE COURT	1	320
CEDAR STREET	2	202
CHAFFEE COURT	3	841
CHAPEL HILL DRIVE	5	1369
CHAPEL HILL OVAL	1	203
CHAUTAUQUA EASE.	2	309
CHAUTAUQUA TRAIL	3	539
CHEROKEE	8	1658
CHESTNUT CIRCLE	1	210
CHESTNUT EASE.	3	542
COMPASS POINT DRIVE	6	1512
CRABTREE	7	1121
CRABTREE EASE.	3	509
CRANBROOK DRIVE	7	1701
CRANE CREEK PARKWAY	3	845
CRESTVIEW DRIVE	6	866
CRINKLEROOT CLEARING	2	493

<b>STREET</b>	<b>SEGMENTS</b>	<b>FOOTAGE</b>
CROSSWINDS EASE.	2	666
DAISY AVENUE	6	1090
DAVENTREE DRIVE	3	665
DAVENTREE EASE.	3	670
DAVIDSON DRIVE	1	296
DEER PATH	2	511
DEER PATH EASE.	3	734
DEER RUN	14	3068
DUNBAR	7	1074
DUNBAR EASE.	2	394
EAST POINT CIRCLE	1	139
EAST POINT EASE.	1	343
EDGERTON ROAD	3	1020
ELM STREET	8	1454
ENGLISH DRIVE	5	806
FARVIEW OVAL	2	331
FARVIEW ROAD	11	2862
FAWN LANE	2	529
FOREST	9	1485
FOREST EASE.	3	540
FORGE DRIVE	4	741
FORGE EASE.	2	424
FROST	1	167
GATEWOOD DRIVE	5	1126
GLEN COE DRIVE	4	1177
GLEN DRIVE	5	792
GLEN EAGLE DRIVE	5	1334
GLEN FOREST DRIVE	5	453
GLENHOLLOW COURT	2	404
GLENWOOD TRAIL	7	1864
GREENBRIER DRIVE	7	1582
GREYSTONE PARKWAY	20	4579
HAROLD EASE.	2	282
HAWTHORNE DRIVE	4	1115

<b>STREET</b>	<b>SEGMENTS</b>	<b>FOOTAGE</b>
HICKORY RIDGE DRIVE	9	1788
HIGHLAND DRIVE	17	5400
HIGHLAND EASE.	6	1604
HINCKLEY CIRCLE	2	458
HOLLIS	12	2218
HOLLIS COURT	1	171
HOLLYTHORN DRIVE	3	788
HUNTING DRIVE	7	1494
HUNTING EASE.	1	285
IROQUOIS TRAIL	4	1079
KINGS COURT	3	720
KNIGHTS WAY	5	1075
KNOLLS	2	381
LAKE FOREST DRIVE	6	1155
LAKE PARK DRIVE	6	1065
LAUREL	6	1410
LAWN PARK DRIVE	6	1506
LLOYD DRIVE	3	650
LOG CABIN COURT	4	699
LOG CABIN EASE.	2	250
LOOKOUT DRIVE	3	726
MALLARD DRIVE	5	858
MARKET PLACE WEST	1	110
MEADOW	1	182
MEADOW EASE.	3	431
MERCER	9	1338
MERCER EASE.	2	530
MILL EASE.	5	906
MILL ROAD	35	8447
MILLER EASE.	2	624
NORTH COURT	1	294
NORTH POINT CIRCLE	1	116
OAKES ROAD	33	8385
OAKHURST CIRCLE	1	298

<b>STREET</b>	<b>SEGMENTS</b>	<b>FOOTAGE</b>
OLD ORCHARD DRIVE	13	1986
OLD QUARRY	11	2418
OLD QUARRY EASE.	1	125
OTTAWA DRIVE	2	607
OXFORD TRAIL	8	1946
PARTRIDGE TRAIL	6	1457
PERSHING DRIVE	4	1147
PIN TAIL DRIVE	5	898
PINE VIEW OVAL	2	384
PIONEER'S POINT	1	244
POTOMAC DRIVE	1	316
PROVINCE	2	339
PROVINCE EASE.	10	1904
QUAIL DRIVE	6	898
QUEENS WAY	8	1611
RED OAKS DRIVE	2	485
RIDGEWOOD LANE	4	890
RIVERVIEW ROAD	4	376
ROBIN	6	1182
ROCKLEDGE DRIVE	8	1633
ROCKLEDGE EASE.	2	418
ROSEMONT DRIVE	2	594
SANCTUARY EASE.	1	214
SENECA DRIVE	2	386
SENECA EASE.	2	444
SENTINEL DRIVE	9	2159
SENTINEL EASE.	1	150
SETTLERS PASSAGE	18	3921
SHENANDOAH EASE.	5	1257
SHERWOOD TRAIL	7	1791
SILVER CREEK	1	324
SOMERSET DRIVE	4	795
SOUTH COURT	1	369
SOUTHPOINT PARKWAY	7	1976



<b>STREET</b>	<b>SEGMENTS</b>	<b>FOOTAGE</b>
SPEARHEAD DRIVE	4	962
ST. BASIL EASEMENT	1	190
STOVER	3	717
SUNNYDALE DRIVE	12	3167
SUNRISE EASE.	1	166
SUNRISE TRAIL	1	240
SWEETWATER DRIVE	7	1970
TAMARACK TRAIL	11	2236
TANAGER TRAIL	26	5102
THORNTREE DRIVE	5	730
THORNTREE EASE.	16	1600
TIMBER EASE.	4	690
TIMBER TRAIL	24	4487
TUDOR CIRCLE	1	310
VALLEYBROOK DRIVE	12	2840
VERA DRIVE	8	2033
VERA EASE.	2	538
WALLINGS ROAD	8	2474
WARBLER'S ROOST	6	1109
WEISE ROAD	1	156
WEST SNOWVILLE EASE.	3	655
WEST SNOWVILLE ROAD	22	5041
WESTVIEW DRIVE	26	7045
WESTWOOD DRIVE	6	1083
WHITACRE CIRCLE	1	271
WHITEWOOD EASE.	1	137
WHITEWOOD ROAD	19	4109
WIESE EASE.	2	445
WIESE ROAD	12	3554
WILLOW COURT	1	324
WINDSTREAM COURT	2	379
WINDSWEPT DRIVE	6	1120
WOODBRIIDGE LANE	1	363

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STREET	SEGMENTS	FOOTAGE
<b>Total For Community</b>	<b>964</b>	<b>211,208.00</b>

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# Section A-2

## Community Streets Inspected\*

\* No service provided if section is blank

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# COLLECTION SYSTEM TV INSPECTION 2007

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STREET	SEGMENTS	FOOTAGE
<b>BRECKSVILLE</b>		
BEECHWOOD DRIVE	4	935
BEECHWOOD EASE.	1	164
BOXELDER DRIVE	4	680
BRECKSVILLE ROAD	4	555
CARRIAGE HILL DRIVE	1	255
CHAFFEE COURT	2	344
CHAPEL HILL DRIVE	2	593
CHAPEL HILL OVAL	1	207
COMPASS POINT DRIVE	7	1453
COVEWOOD COURT	1	260
CRANBROOK DRIVE	10	2448
CRESTVIEW DRIVE	4	590
DEER RUN	12	2655
EDGERTON ROAD	3	425
ELM STREET	2	358
FARVIEW ROAD	5	905
FORGE DRIVE	1	85
GATEWOOD DRIVE	11	2625
GLEN FOREST DRIVE	1	260
GLEN FOREST EASE.	1	130
GLENHOLLOW COURT	2	400
GLENWOOD TRAIL	7	1773
GREYSTONE PARKWAY	4	1197
HIGHLAND DRIVE	1	400
HUNTING DRIVE	5	1240
KINGS COURT	3	720
KNOLLS	2	383
LAKE FOREST DRIVE	6	1305
LAKE PARK DRIVE	5	695
LAUREL	6	1415
LAWN PARK DRIVE	6	1495

<b>STREET</b>	<b>SEGMENTS</b>	<b>FOOTAGE</b>
MAIDSTONE DRIVE	2	356
MARKET PLACE WEST	1	107
OAKES ROAD	27	6011
ORIANNA STREET	2	414
OXFORD TRAIL	8	1960
PINE VIEW EASE.	2	445
PINE VIEW OVAL	3	417
PRINCESS COURT	1	391
PROVINCE	8	1536
PROVINCE EASE.	10	1718
QUAIL DRIVE	4	485
RIVERCREST DRIVE	2	256
RIVERVIEW ROAD	1	94
ROBIN	6	960
ROSEMONT DRIVE	2	600
ROYALTON ROAD	2	122.3
SOMERSET DRIVE	2	620
SOUTHPOINT PARKWAY	1	175
TANAGER TRAIL	2	389
VERA DRIVE	1	75
VERA EASE.	3	655
WEST SNOWVILLE EASE.	1	221
WESTVIEW DRIVE	4	1126
WESTWOOD DRIVE	6	1105
WINDSWEPT DRIVE	2	359
<b>Total For Community</b>	<b>227</b>	<b>47,547.30</b>

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# Section A-3

## Projects Status\*

\* No service provided if section is blank

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## CCSE PROJECT REVIEWS

MUNICIPALITY BRECKSVILLE

PROJECT 07-014 MILL CREEK SUBDIVISION

STAGE 1 MILL CREEK

Review Date	Approved	Revise	Comments
06-APR-07	N	N	STAGE SUBMITTED

PROJECT 07-018 AKZO NOBEL-FOGG BRECKSVILLE

STAGE 1 AKZO NOBEL 6101 WEST SNOWVILLE RD

Review Date	Approved	Revise	Comments
17-MAY-07	N	N	STAGE SUBMITTED
23-MAY-07	N	N	Awaiting a call from Nick to discuss the project.
25-MAY-07	N	N	Waiting on Plumbing Plans and Design Calcs (San. and Stm.).
01-JUN-07	N	N	Still waiting on plumbing plans and design calculations. Message left for Nick Poelking 6/01/2007.
04-JUN-07	Y	N	None

PROJECT 07-025 APPLIED MEDICAL TECHNOLOGIES

STAGE 1 APPLIED MEDICAL TECHNOLOGIES

Review Date	Approved	Revise	Comments
18-OCT-06	N	Y	Submittal is 10/16/2006 not 6/19/2007
19-JUN-07	N	N	STAGE SUBMITTED
20-JUN-07	Y	N	None

PROJECT 07-026 CARUSSO'S COFFEE

STAGE 1 CARUSSO'S COFFEE

Review Date	Approved	Revise	Comments
20-JUN-07	N	N	STAGE SUBMITTED
27-JUN-07	N	Y	storm and sanitary sewers only .
05-JUL-07	Y	N	None

PROJECT 07-030 GREENHAVEN PARKWAY REHABILITATION

STAGE 1 GREENHAVEN PARKWAY REHABILITATION

Review Date	Approved	Revise	Comments
03-JUL-07	N	N	STAGE SUBMITTED
10-JUL-07	N	N	2 SETS
19-FEB-08	N	N	1 SET OF REVISIONS; 1 DRAINAGE MAP; 1 DRAINAGE CALC..
20-FEB-08	Y	N	ROBERT KLAIBER; APPROVAL
22-FEB-08	N	N	4 SETS OF PLANS; APPROVED BY ALL ENGINEERS; IN FULL.

**PROJECT 07-034 CALVIN DR. STORM SEWER REPLACEMENT**

**STAGE 1 CALVIN DR. STORM SEWER REPLACEMENT**

Review Date	Approved	Revise	Comments
18-JUL-07	N	N	STAGE SUBMITTED
27-JUL-07	N	Y	<p>"The following review comments were sent to the design engineer (City Engineer copied) 7/27/07:</p> <ol style="list-style-type: none"> <li>1. Clarify whether the station/offset information is being referenced from the project baseline or the Calvin Drive centerline.</li> <li>2. The note which indicates that the project baseline and the Calvin Drive centerline intersects at baseline Station 0 04.35 appears incorrect.</li> <li>3. There does not appear to be sufficient horizontal monumentation/plan information to establish the Calvin Drive centerline or the project baseline.</li> <li>4. Shift the bore pit/catch basin further to west to ensure no encroachment onto subplot 19 occurs during the boring operation or future maintenance on the sewer.</li> <li>5. Add a note that all slurry generated from the boring operation shall be confined within the limits of the R.O.W./easement areas and then be collected and removed by the contractor. Otherwise, letters of permission from adjacent landowners accepting the discharge of slurry will be required.</li> <li>6. Clarify through a note that the setup of pipe during the horizontal boring operations should be confined within the limits of the R.O.W./easement areas. This requirement may be problematic. If it is not possible to satisfy this requirement, a temporary easement/work agreement from adjacent property owners should be obtained.</li> <li>7. The plans notes call for the use of HDPE SDR 32.5 pipe for use in the 12<math>\phi</math> line to be installed via horizontal boring. We deem this wall thickness to be too thin for this installation method; use HDPE DR 11 pipe instead.</li> <li>8. Replace the Storm Wye-Branch and Connection Detail shown on sheet 3/3 with Uniform Standard Detail 10/27 (include drawing frame and title block).</li> <li>9. Replace the Storm Sewer Trench Detail shown on sheet 3/3 with Uniform Standard Detail 11/27 (include drawing frame and title block).</li> <li>10. Replace the Storm Manhole Detail shown on sheet 3/3 with Uniform Standard Detail 4/27 (include drawing frame and title block).</li> <li>11. Replace the proposed Storm Basin at Sta. 2 25 with a manhole with an open grate top.</li> <li>12. Make clear in the notes that the Uniform Standards for Sewerage Improvements will take precedence over the ODOT CMS.</li> <li>13. Under the note labeled <math>\phi</math>Construction and Material Specifications<math>\phi</math> on Sheet 3/3, include the County Sanitary Engineer (along with the City Engineer) as the governing authority in resolving any conflicts or defects.</li> <li>14. Plan approval from the City Engineer will be needed prior to approval from the County Sanitary Engineer.</li> <li>15. Provide copies of existing and proposed easements in the project area."</li> </ol>
03-AUG-07	N	Y	<ol style="list-style-type: none"> <li>1. Include the completed sanitary and storm sewer data sheets and calculation sheets from Part 6 of the Uniform Standards for Sewerage Improvements. Provide stormwater management/detention calculations. These calculations shall be sealed by a Professional Engineer.</li> <li>2. Provide a drainage area map.</li> <li>3. Show the elevations at the connection point of the existing sanitary laterals which are being utilized. These existing laterals shall be televised to assess their condition. This tape shall be made available to the Sanitary Engineer's Office prior to tying into these existing laterals.</li> <li>4. Existing sewer laterals which are not being utilized must be plugged and sealed.</li> <li>5. Provide pipe profiles for proposed sanitary lines.</li> <li>6. Straight lateral runs over 150<math>\phi</math> in length will require a cleanout.</li> <li>7. The installation and testing of storm and sanitary sewers on this project will be governed by the Uniform Standards for Sewerage Improvements. Modify the plan</li> </ol>

Review Date	Approved	Revise	Comments
			<p>notes to reflect this fact. Eliminate all reference to the ODOT CMS for sewer work.</p> <p>8. Provide calculations for sizing of the oil interceptor.</p> <p>9. Replace the Storm Sewer Trench Detail shown on sheet C-7 with Uniform Standard Detail 11/27 (include drawing frame and title block).</p> <p>10. Replace the Utility Cleanout Detail shown on sheet C-7 with Uniform Standard Detail 17/27 (include drawing frame and title block).</p> <p>11. Provide Uniform Standard Detail 4/27 (include drawing frame and title block) to govern manhole installation on this project. Eliminate references to ODOT MH-3 in the plans.</p> <p>12. Eliminate bends in the outlet pipe from detention area #1 or provide manholes.</p> <p>13. A PTI from the Ohio EPA and 8<math>\frac{1}{2}</math> pipe will be required for any line carrying the sewage from two separate buildings.</p> <p>14. Plan approval from the City Engineer will be needed prior to approval from the County Sanitary Engineer."</p>
13-AUG-07	Y	N	None

**PROJECT 07-042 FITZWATER ROAD**

**STAGE 1 FITZWATER ROAD**

Review Date	Approved	Revise	Comments
29-AUG-07	N	N	STAGE SUBMITTED
20-SEP-07	N	Y	<p>"1. Include a drainage area map and the completed storm sewer design calculation sheet from Part 6 of the Uniform Standards for Sewerage Improvements.</p> <p>2. Add a note that materials, installation, and testing of the storm sewer shall be in accordance with the Uniform Standards for Sewerage Improvements.</p> <p>3. It appears that there is a long section of proposed storm sewer which will have less than 4<math>\frac{1}{2}</math> of horizontal clearance to the existing waterline. We advise that Cleveland Water be contacted about this condition.</p> <p>4. Replace the manhole detail shown on sheet 23/28 with Uniform Standard Detail 4/27 (include drawing frame and title block).</p> <p>5. Provide a trench detail for proposed storm sewers using Uniform Standard Detail 11/27 (include drawing frame and title block).</p> <p>6. Include a detail for pavement replacement above the storm sewer trench. Uniform Standard Detail 12/27 may be used for this purpose.</p> <p>7. Show limits of the proposed easement for the storm sewer outfall. Provide a copy of the executed easement documents to this office.</p> <p>8. Plan approval from the City Engineer will be needed prior to approval from the County Sanitary Engineer."</p>

**PROJECT 07-051 ECHO HILLS**

**STAGE 1 ECHO HILLS FLOW EQUALIZATION BASIN**

Review Date	Approved	Revise	Comments
19-SEP-07	N	N	STAGE SUBMITTED
12-OCT-07	Y	N	5 BOOKLETS & 5 SETS; CHUCK ALTHOFF

**STAGE 2 ECHO HILLS SEWER FORCE MAIN AND PUMP STATION**

Review Date	Approved	Revise	Comments
24-SEP-07	N	N	STAGE SUBMITTED
24-SEP-07	Y	N	ROBERT KLAIBER; APPROVAL
28-FEB-08	N	N	6 SETS OF SHOP DRAWINGS

**PROJECT 07-053 CLEAR CHOICE****STAGE 1 CLEAR CHOICE**

Review Date	Approved	Revise	Comments
21-SEP-07	N	N	STAGE SUBMITTED
27-SEP-07	Y	N	Will need storm and sanitary design .

**PROJECT 07-068 EDGERTON REGIONAL****STAGE 1 EDGERTON REGIONAL**

Review Date	Approved	Revise	Comments
03-DEC-07	N	N	STAGE SUBMITTED

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# Section A-4

## **Service Program\***

\* No service provided if section is blank

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City of Brecksville

<u>Type</u>	<u>Community Total</u>
Sanitary Sewers	424,599 Feet
Manholes	1,987 (Approximately)

2007 Service Program

<u>Program</u>	<u>2007 Activity</u>
1) High Pressure Cleaning*	214,945 Feet
2) House Service	369 Calls
3) Television Inspection*	61,020 Feet
4) Construction Activities	165 Jobs
5) Smoke and Dye Testing	112 Tests
6) Construction Permits Issued (Commercial)	5
(Residential)	27
7) Plan Review	9 Plan(s)
8) Capital Projects	7,181 Feet (New Sewer Lines Inspected)

\*Information includes footages for sanitary (collection system) and storm sewers.

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# Section A-5

## **Community Operating Expenses**

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City of Brecksville

2007 Operating Expenses

<u>Activity</u>	<u>Cost</u>
1. Maintenance of Sanitary Sewerage Systems	\$819,434.00
2. Pump Station Operation and Maintenance	\$136,109.00
3. Waste Water Treatment Plant Maintenance	\$288,199.00
4. Engineering and Inspection	\$138,900.00
5. Capital Expenses (see next page if any)	\$221,772.00
6. Sanitary Overhead	\$32,181.00
<b>Total Expenses:</b>	<b>\$1,636,595.00</b>

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# Section A-6

## Community Capital Expenses

\* No service provided if section is blank

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City of Brecksville

2007 Capital Expenses

<b>Windward Hills Sanitary Repair</b>	<b>\$ 15,766</b>
<b>Ashlawn Sanitary Repair</b>	<b>\$ 26,493</b>
<b>URS Engineering Services – Echo Hills</b>	<b>\$ 101,416</b>
<b>Echo Hills WWTP Elimination</b>	<b>\$ 78,097</b>
<b>Total Capital Expenses:</b>	<b><u>\$ 221,772</u></b>

# Contact Information

## Address

Cuyahoga County Sanitary Engineering  
6100 West Canal Road  
Valley View, Ohio 44125

## Web Address

[www.sanitaryeng.cuyahogacounty.us/](http://www.sanitaryeng.cuyahogacounty.us/)

## Phone Numbers

### Administration

(216) 443-8215

### Dispatch

(216) 443-8201

### Sanitary Engineer

Robert C. Klaiber, Jr., P.E., P.S.

### Chief of Staff

Kevin F. Payne

### Chief Deputy Engineer

Stanley D. Kosilesky, P.E.

### Fiscal Officer

Michael W. Chambers, CPA

### Chief Engineer

William Schneider, P.E.  
(216) 443-8205

### Sewer Maintenance

John Neff  
(216) 443-8219

### Environmental Services

Ann McCready-Gliha  
(216) 443-8203

### Construction

Gary Green  
(216) 443-8225

### Facility Manager & Safety

Thomas Regas  
(216) 443-8234

### Inflow & Infiltration

Jimmy Moore  
(216) 443-8229

### Fiscal

Edward Premen  
(216) 443-8237

### Inspection

James Johnson  
(216) 443-8208

### Laboratory Services

Suzanne Britt  
(216) 443-8278

### House

James Swedyk  
(216) 443-8227

### Management Information Systems

Leon Ozebek  
(216) 443-8238

### Sewer Jetting

Guy Swindell  
(216) 443-8226

### Treatment Plant Operations

Robert Martz  
(216) 443-8222

### Televised Inspection

Richard Apanaites  
(216) 443-8224