

Location: Village of Lafayette, Ohio

Date Performed: July 1980

Type of Pipe: 8" PVC SDR-35

Depth of Burial: 7 ft. to 16 ft.

Amount of Deflection: greater than 5%

Length of Rerounding: 288 ft.

Attached References:

Plan sheet of project (2 sheets)

Letter from Kohli & Kaliher Associates, dated July 8, 1982, by Henry Hollinger, PE, indicating that after 2 years, the "bedding and trench conditions had been stabilized by the Rerounding™ process and no further deflection should be expected."

Letter from Kohli & Kaliher Associates, dated February 16, 2006, by James Myers, PE, indicating that after approximately 26 years, this pipe still passed a 4% deflection test.

SANITARY SEWERS TO SERVE LAFAYETTE SERVICE AREA LAFAYETTE, OHIO

JUNE 27, 1977

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CONVENTIONAL SIGNS

Property Line	---
Corporation Line	---
Gas Line	---
Fence	---
Edge of Pavement	---
Sidewalk	---
Existing Storm Sewer	---
Proposed Sewer	---
Proposed Force Main	---
Catch Basin	---
Existing Storm Manhole	---
Fire Cistern	---
Proposed Manhole	---
Pump Station	---
Test Boxings	---
Utility Pole	---
Parcel Number	---
Permanent Easement	---
Temporary Easement	---

We, the undersigned, hereby approve and accept these Drawings and Specifications for the construction of Sanitary Sewers to serve the Lafayette Service Area.

Mayor of Lafayette
Kenneth D. ... Date 6-27-77

Lafayette Village Council
... Date 6-25-77

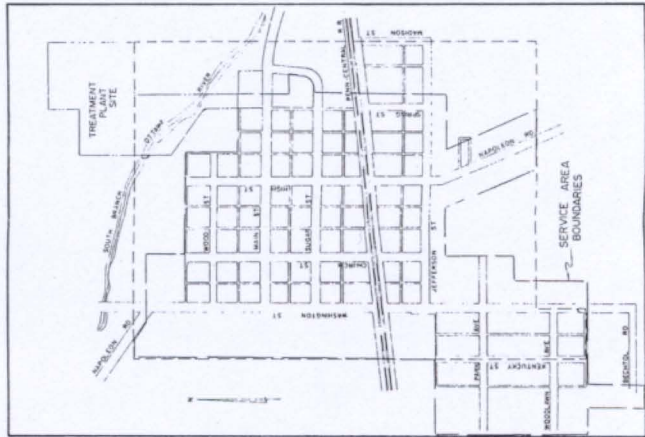
Allen County Commissioners
... Date 6-27-77

Allen County Sanitary Engineer
... Date 6-27-77

Ohio Environmental Protection Agency
By Letter on File Date 8/10/77

Lima-Allen County General Health District
 Date _____

Roof drains, foundation drains, and other clean water connections to this sanitary sewer system are prohibited. Project Record (as-built) Revisions designated Rev. Proj. Rec. (date)



LOCATION MAP
SCALE 1" = 400'

SET NO. _____



PREPARED BY
KOHL AND KALHER ASSOCIATES, LIMITED
 CONSULTING ENGINEERS
 311 EAST MARKET STREET
 LIMA, OHIO

Contractor is to remove and reset backstop. Payment to be included under Item 901.

SANITARY SEWER SYSTEM
KOHLI AND PALMER ASSOCIATES LIMITED

TAP LOCATIONS	Tap No	Distance	M.H.W.	Depth	Length of Lateral
	8500	207.5	4	6.5	24
	8100	35.5	5	5	21.5
	8200	108.5	5	6	18
	8300	4	3.5	6	20
	8400	6.5	3.5	7.5	40
	8500	12.5	3.5	7	22
	8600	11.0	3.6	7.5	15.5
	8700	10.5	3.7	6.5	12
	8800	13.5	3.7	5	12
	8900	13.5	3.7	5	12
	9000	17.2	3.7	2.5	17.2
	9100	11.5	3.8	4.5	20
	9200	5.5	4.3	3.1	3.1
	9300	4.0	4.3	2.9	2.9
	9400	11.8	4.3	4.3	2.9
	9500	32.5	4.3	4.3	2.9

Re. Proj. Rec. 11-20-80
Per 11-27-81
Per 11-27-81
Per 1-17-81
Per 2-17-81

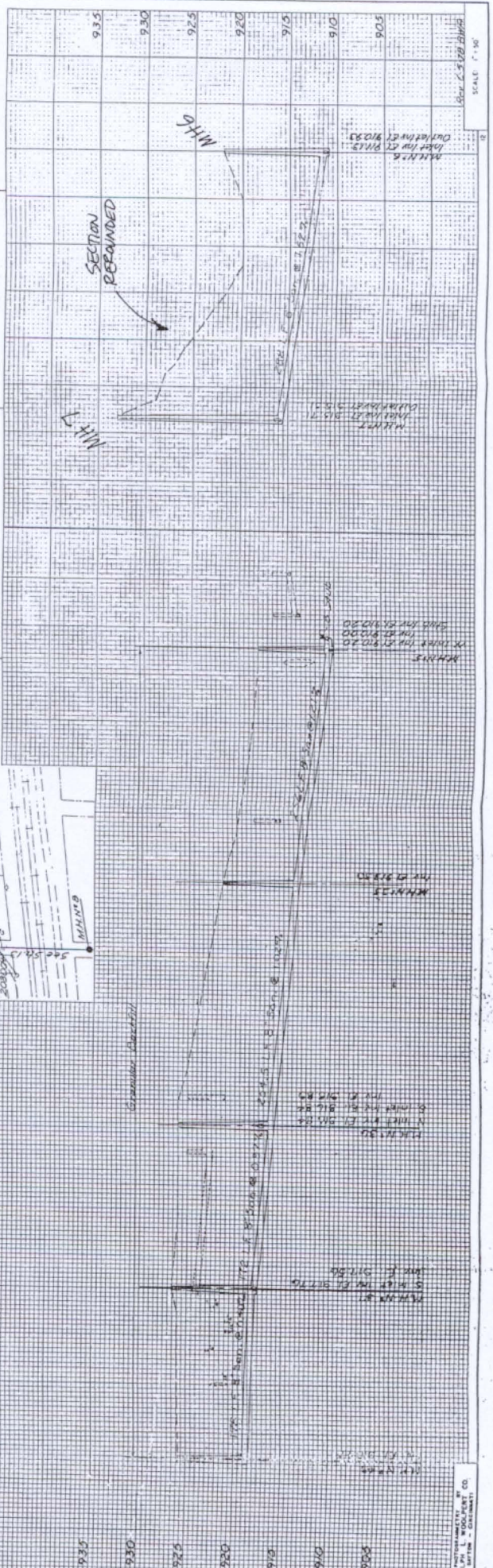
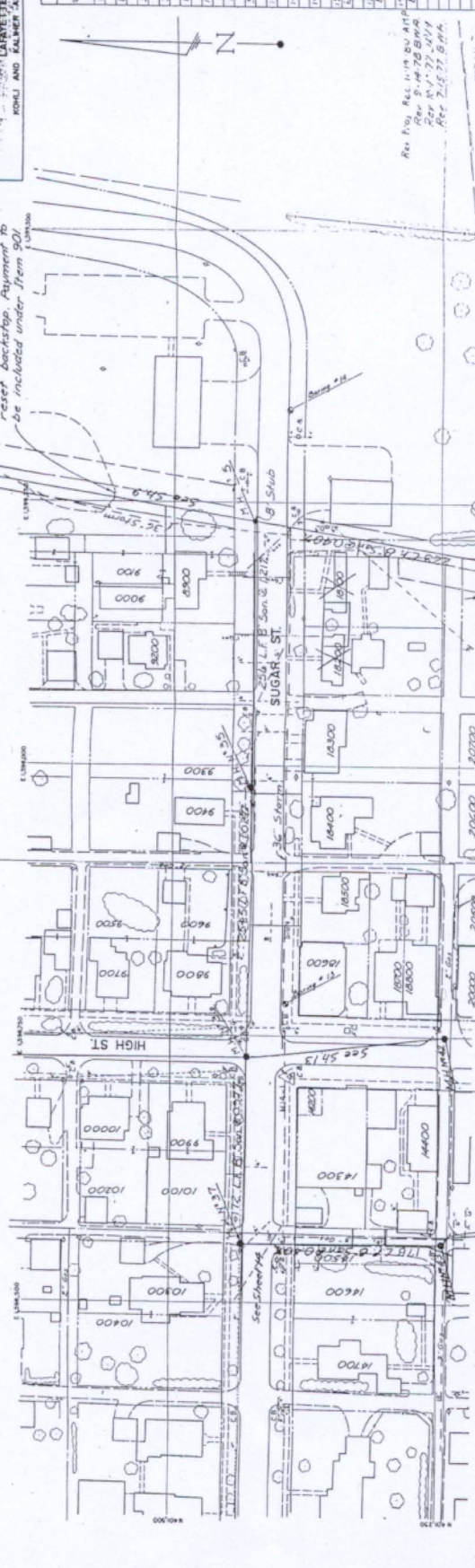
Bench Mark N917 - Spike in 20' Maple
face of Cornerstone of Town Hall
Elev. 927.48

Bench Mark N916 - Northeast corner
of top low step at 121 Sugar St.
Elev. 918.08

Bench Mark N915 - Spike in 20' Maple
at High and Sugar Sts.
Elev. 926.50

Bench Mark N914 - Southwest
corner Jefferson and High Sts.
Elev. 933.11

Bench Mark N913 - Spike in 20' Maple
at High and Sugar Sts.
Elev. 926.50





KOHLI & KALIHER ASSOCIATES, LIMITED
CONSULTING ENGINEERS & SURVEYORS

311 EAST MARKET, LIMA, OHIO 45801 PH. 419-227-1135

July 30, 1982

TO: PVC SANITARY SEWER PIPE USERS

Prepared by: Henry C. Hollinger, Project Manager construction of
SANITARY SEWERS TO SERVE LAFAYETTE,
OHIO

This letter will report upon a test which is a part of a continuing effort to determine deflection and stability in the use of PVC Plastic Sewer Pipe ASTM D-3034, SDR35.

On November 21, 1979, 288 feet of 8 inch PVC Pipe was constructed between manholes 6 and 7 as a part of a sewer project to serve the Village of Lafayette, Ohio. The depth of this section of sewer varied from 7-1/2 feet to 16 feet.

On February 13, 1980 an air test was performed of this section and a 3.5 PSI was maintained. However this section failed to pass the 5% mandrel test. On July 17, 1980 the contractor authorized Williams Testing to reround this section and it was documented for further testing. After the rerounding it was air tested again and there was no change in the test.

Approximately two years later a mandrel test was performed and a 3% test passed indicating the pipe, bedding and trench conditions had been stabilized by the rerounding process and no further deflection should be expected.

KOHLI AND KALIHER ASSOCIATES, LIMITED

By Henry C. Hollinger
Henry C. Hollinger

HCH/sjh

Members

H.C. HOLLINGER, P.E. R.F. GRIMES, P.E. J.R. MYERS, P.E. T.A. METZGER, P.S.

Associates

B.C. PLUMB, P.S. D.J. BLAIR, P.E.



KOHLI & KALIHHER ASSOCIATES, INC.
ENGINEERS AND SURVEYORS
Founded 1946 - O.C. Kohli (1902-1960) - S.E. Kaliher (1910-1969)

419-227-1135
Fax: 419-227-4674
kk@KohliKaliher.com
www.KohliKaliher.com
2244 Baton Rouge Ave., Lima, Ohio 45805

February 16, 2006

Richard L. Williams, President
Williams Testing, Inc.
9180 Parker Road
Harrod, OH 45850

**RE: Performance of Rerounding Process
at Lafayette, Ohio**

Dear Mr. Williams:

288 lf of 8" PVC sanitary sewer conforming with ASTM D3034 SDR 35 and located between manholes numbered 6 and 7 was installed in November 1979. This section failed to pass the 5% deflection test in February, 1980.

This section was rerounded in July, 1980 and passed the 5% deflection test. Approximately 2 years later, the section passed a 3% deflection test.

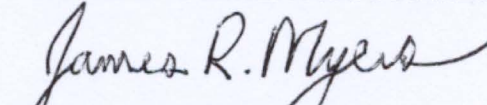
On February 15, 2006, a 7.37 inch diameter eleven rail go-no-go mandrel was easily pulled through the section of sewer. Using the base inside diameter of 7.665 inches as specified in the Handbook of PVC Pipe published by Uni-Bell PVC Pipe Association, the section passed a 4% deflection test.

On February 16, 2006, a 7.50 inch diameter eleven rail go-no-go mandrel was pulled through the section of pipe. The mandrel became wedged at one location approximately 8 feet downstream of manhole #7. Except for the one location, the section of pipe passed a 2.0% deflection test.

Approximately 26 years after rerounding the section of pipe passed a 4% deflection test and except for one location passed a 2% deflection test.

Sincerely,

KOHLI & KALIHHER ASSOCIATES, INC.


James R. Myers, P.E., P.S.

JRM/dr

File