



FAX TRANSMITTAL

Officers

Kent D. Downey, P.E., L.S.
William E. Hall, P.E.
Steven W. Jones
Dave Richter, P.E., L.S.
Craig E. Burgess, A.I.A.
B. Keith Bryant, P.E.

Planner

Devin L. Stettler, A.I.C.P.

Architects

Paul A. Summers, A.I.A.
Donald L. Cassell, A.I.A.

Engineers

Jerry D. Ritchie, P.E.
Christopher R. Pope, P.E.
Allen R. Egilmez, P.E.
Scott G. Murray, P.E.
Kurt E. Fowerbaugh, P.E.
Andrew T. Wolka, P.E.
Jon E. Clodfelter, P.E.
Michael A. Rowe, P.E.
Steve Passey, P.E.
Darryl P. Wineinger, P.E.
Elizabeth W. Phillips-Jones, P.E.
Todd V. Taylor, P.E.

To: IDEM Office of Enforcement Fax: (317) 233-5968

Attn: Mr. Paul Cluxton Phone: (317) 232-8432

From: Keith Bryant, PE Date: 10/23/03

Re: Bicknell, Indiana WWTP (Agreed Pages: 3 (incl. cover sheet)
Order Case No. 2001-10806-W)

CC:

Remarks:

You will find attached the equipment list referenced in our October 17, 2003 letter to your office.

If you have any questions, feel free to contact our office.

Thank you.

OFFICE

1625 N. Post Road
Indianapolis, IN 46219
Phone: 317-895-2585
Fax: 317-895-2596
E-mail: info@ucea.com
Web: www.ucea.com

QUOTATION

Preiser Scientific

SCIENTIFIC INSTRUMENTS AND LABORATORY SUPPLIES

1500 Algonquin Parkway
Louisville, KY 40210-2308
Telephone: 502/636-3307
WATTS - 800/6262856
FAX -502/635-5377
E-mail: preiser@aye.net

QUOTE NO: JD03-101301

DATE: October 13, 2003

NOTE: Please refer to quotation number when ordering.

ATTN: Jim Hubbard
Bicknell Wastewater Treatment Plant

ACCOUNT NO:

Bicknell, IN

PH: 812-735-3080

FX: 812-735-5133

E-mail:

In response to your inquiry, we are pleased to quote as follows:

QTY	CATALOG NO	DESCRIPTION	PRICE	UNIT	EXTENDED
1	91-2654-10	ORION 0720AO PH/MV/TEMP METER WITH 8102BNU COMB. ELECTROCE BENCHTOP	1210.00	EA	1210.00
1	RBS-A465-30	AMMONIA PH ISA ADJUSTING 1LT RED BIRD	48.40	EA	48.40
1	RBS-A193-29	AMMONIA STD. 100ppm AS AMMONIA 500ML RED	13.50	EA	13.50
1	RIA-812-43	AMMONIA STD. 10ppm AS AMMONIA 500ML RICCA (SHORT SHELF LIFE)	24.50	EA	24.50
1	RBS-A420-29	AMMONIA ELECTRODE FILL SOLN. 500ML RED BIRD	12.85	EA	12.85
1	HAH-1891-49	AMMONIA STD. 1 ppm AS AMMONIA, (Short Shelf Life)	22.45	EA	22.45
1	91-2646-50	AMMONIA ELECTRODE, BNC, ASI	255.00	EA	255.00
1	20-6680-01	OVEN, QUINCY 1000	305.00	EA	305.00
6	90-2302-74	150ml BEAKER	3.00	EA	18.00
1	11-7940-88	100ml GRADUATED CYLINDER	15.00	EA	15.00

Preiser Scientific, Inc.

Quote No: JD03-101301

1	10-5178-16	WASH BOTTLE	18.50	EA	18.50
1	92-1392-01	STIRRING PLATE	197.00	EA	197.00
1	90-2145-01	VIBRATION DAMPNER	484.00	EA	484.00
4	22-2608-49	STIR BARS 1 1/4 X 5/16"	3.05	EA	12.20
1	92-1435-30	STIR BAR RETREIVER, 12"	8.00	EA	8.00
1	BAN-100A	ELECTRODE ARM	57.90	EA	57.90
1	14-5000-05	EXACT-TEMPE THERMOMETER, INCUBATOR	36.38	EA	36.38
1	14-5000-06	EXACT-TEMPE THERMOMETER, OVEN	36.38	EA	36.38
1	91-3830-02	SAFETY PIPET BULB	12.25	EA	12.25
2	91-3790-20	VOLUMETRIC PIPET, 3ml	7.00	EA	14.00
TOTAL					\$
SUBJECT TO CHANGE WITHOUT NOTICE AFTER TEN DAYS					

F.O.B. SHIPPING POINT

Delivery STOCK to 21 DAYS, ARO

Terms NET 30 DAYS

Respectfully submitted

Preiser Scientific, Inc.



John Dailey, Sales Representative

CC: Ann Glass

Shane Floyd (United Consulting Engineers 317-895-2596)

Contact below for sump pump
inspection:

Bicknell, Indiana
Wastewater Treatment Plant

812-735-3080
812-735-3559 (812) 735-3301
City Hall Fax: (812) 735-3316

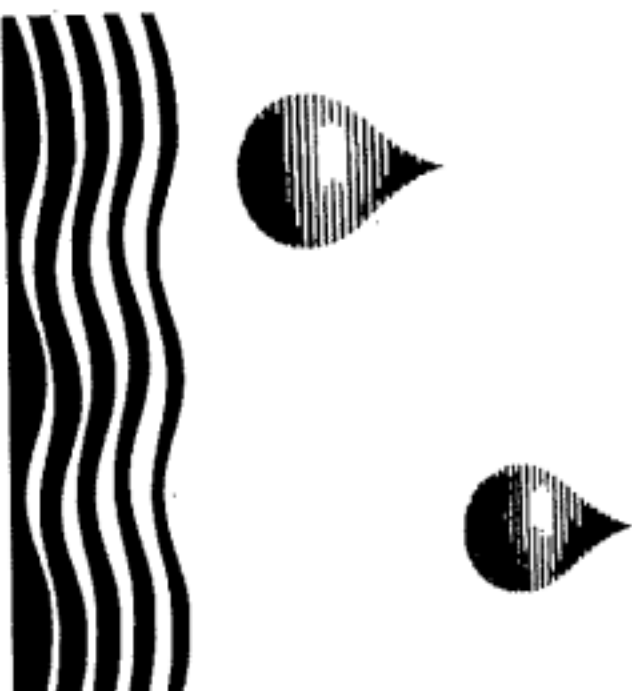
BICKNELL INDIANA

Inflow and Infiltration Elimination Program

Clear water entering our sanitary sewer
costs all of us money and reduces the
efficiency of our wastewater plant.

For technical questions or comments
on known areas or points where clear
water is entering the sanitary sewer
system, call:

Don Larson: 1-800-289-1177



Because of continuing problems with overloaded sanitary sewers and treatment plant, Bicknell is inspecting the sewer system in your neighborhood. This inspection will reveal the primary sources of inflow and infiltration that are causing the problems.

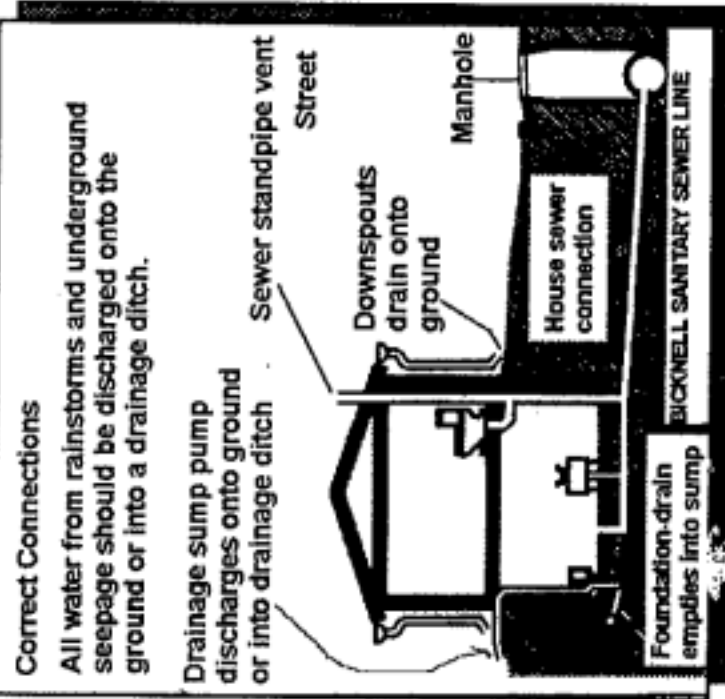
What are inflow and infiltration?

Inflow and infiltration are terms used to describe the ways that groundwater and stormwater (rain water) enter the sanitary sewer system.

Inflow is water that is dumped into the sewer system through improper connections, such as downspouts and groundwater sump pumps. (Sump pumps that pump only laundry water or other sanitary wastes are not a problem.)

Infiltration is groundwater that enters the sewer system through leaks in the pipe.

All of this water is called "clear water" (although it may be dirty) to distinguish it from sanitary sewage.



Why is this water a problem?

Clear water belongs in storm sewers or on the surface of the ground, and not in the sanitary sewers. When clear water gets into the sanitary sewers, it must be moved and treated like sanitary wastes. Too much clear water often causes sewer backups and overflows when it rains.

What is a sanitary sewer?

A sanitary sewer is a pipe located in the street or easement that is designed solely to transport wastewater from sanitary fixtures inside your house or place of business. Sanitary fixtures include toilets, sinks, bathtubs, showers and lavatories.

What is a storm sewer?

A storm sewer is a pipe designed to carry rainwater away. Storm sewers are normally much larger than sanitary sewers because they are designed to carry much larger amounts of flow. Drainage ditches and swales perform the same function in many neighborhoods.

What is an improper connection to the sanitary sewer system?

An improper connection permits water from sources other than sanitary fixtures and floor drains to enter the sanitary sewer system. That water should be going to the storm sewer and streams or allowed to soak into the ground without entering the sanitary sewer.

What are different types of improper sanitary connections?

Some examples of improper connections include downspouts, groundwater sump pumps, foundation drains, drains from window wells and drains from driveways.

Where should the water from downspouts, groundwater sump pumps, and/or other clear water sources be directed?

Modern subdivisions have diverted this water to storm sewers or aboveground drainage ditches.

Why is it important for everyone to remove improper connections?

Removing improper connections will significantly reduce the flow of clear water to the sanitary sewer system. This will reduce the possibility of basement flooding due to overloaded sanitary sewers and decrease the cost of treatment.

How can overloaded sanitary sewers cause basement flooding?

An overloaded sewer flows at a higher level than normal. If the home has sanitary fixtures or floor drains that are below this higher, overload level, water can flow backward through the sanitary sewer lines into the basement.

Do improper connections really contribute large amounts of clear water to the sanitary sewer system?

Yes, and here's why: An eight-inch sanitary sewer can handle domestic wastewater flow from up to 200 homes, but only four sump pumps, operating at full capacity, will overload this same eight-inch line.

How does Bicknell identify the sources of clear water entering the sanitary sewer system?

There are three major methods; television inspection, smoke testing, and flow monitoring.

By guiding portable television cameras through the sewer pipes, Bicknell can detect many of the sources of clear water entering the sewers.

By filling the sanitary sewer line with smoke and watching where it emerges, Bicknell can detect many more sources of clear water. The smoke is kept from entering buildings by the drain traps required on all sanitary fixtures and drains. It will emerge from the sewer standpipe vents on the roofs of buildings — and from improper connections such as downspouts. It may also emerge from holes in the ground that lead to leaks in sewer lines.

To monitor flow, Bicknell crews insert special measuring devices into the sewer lines. If the flow increases during rainstorms, it's a sure sign of inflow and possibly infiltration.

What happens when you detect a leak or an improper connection?

If the leak is in the public sewer line, Bicknell will repair it.

If the source of the clear water is in a private line entering the public sewer, Bicknell will notify the property owner. The property owner should consult with a licensed plumber to determine the source of the inflow or infiltration and to have the problem corrected. Bicknell will conduct a follow-up inspection within one year. If the problem has not been corrected, the State Plumbing Inspector will be notified and will conduct a thorough inspection of the property.

What can a property owner do to minimize sewer backups?

- Consult with a licensed plumber to review your particular plumbing system.
- Consider the installation of a backwater check valve in the basement sewer line.
- Consider the installation of a removable standpipe in the basement floor drain.
- Consider the installation of a standpipe extension or a removable pipe cap on the washing machine drain pipe.

Bicknell does not recommend the use of blowup or expansion type pipe plugs for drains. The pressure in the sewer pipe can blow them out.

I've never had basement flooding due to a sewer backup. Why should I remove my improper connections?

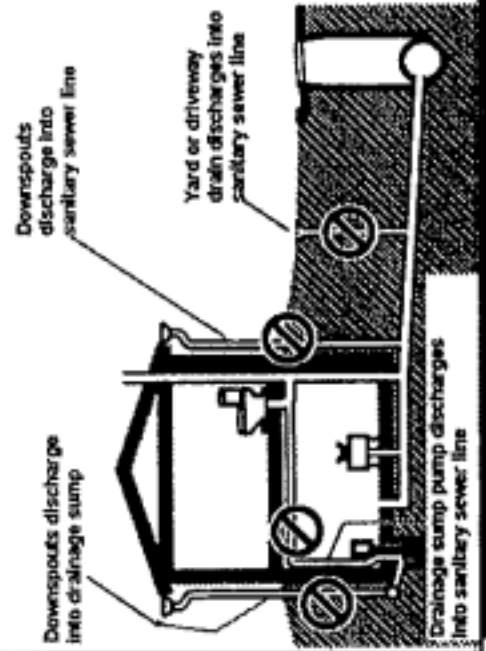
If your plumbing pumps or drains clear water into the sanitary sewer, it may well be the cause of flooding in your neighbor's basement. It may also cause the sewer to overflow, polluting the storm drains and streams.

Does the requirement to remove improper connections pertain only to certain sewer service areas?

No. U.S. Environmental Protection Agency regulations require Bicknell, as well as other local governments and independent authorities, to stop the intrusion of clear water into all sanitary sewers.

Improper Connections

All water from rainstorms and underground seepage should be discharged onto the ground or into a drainage ditch. Some of the common improper connections are shown here.



Basement Flooding

When the sanitary sewers are overloaded, the water level in the manholes and the sewers rises. When it rises above the level of the basement floor, the sewers can back up and flood the basement.

