

## OVERHEAD SEWER BACKFLOW PREVENTION VALVE GRANT PROGRAM

### HELP IS AVAILABLE TO RESIDENTS WITH SEWER BACK UP PROBLEMS!

The Glen Ellyn Village Board recently adopted a new program to provide grants to eligible residents who wish to have modifications made to their sanitary plumbing system to minimize the possibility of sewer backups during wet weather. The Village will reimburse a property owner up to \$5,000 or 50% of the cost of installing an approved overhead sewer or backflow prevention valve, whichever amount is less. Participation in, and reimbursement through, this Grant Program is limited to one time only per address.



You may be eligible for partial reimbursement of the cost of improvements designed to minimize sewer back-ups.

This program became effective retroactively on October 13, 2001. Any plumbing modifications made prior to that date are not eligible for grant considerations. Funding will be on a first come, first served basis with initial funding for the fiscal year ending April 30, 2002 at \$100,000. Future funding levels will be set based on an annual review of the program.

### SEWER BACK-UP? CALL THE VILLAGE FIRST!

When experiencing a sewer back-up, residents are urged to call the Village before contacting a sewer or plumbing contractor. Village staff will check the main sewer lines to determine if the source of the problem is the responsibility of the Village or the homeowner and will advise the resident or homeowner of their findings. Contact Public Works at 630-469-6756 7:00 a.m. to 3:30 p.m. Monday through Friday or the Police Department's non-emergency line at 630-469-1187 after hours and on holidays and weekends.



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**Special points of interest:**

- Funds became available on October 13, 2001 to assist residents with sewer back-up problems
- Illegal sump pump connections can overload the sewer system during periods of heavy rainfall

**PUBLIC WORKS DEPARTMENT**  
30 SOUTH LAMBERT ROAD  
GLEN ELLYN, ILLINOIS 60137  
Phone: 630-469-6756  
Fax: 630-469-3128

### HOW DO I FIND A PLUMBING CONTRACTOR?

The following is a list of contractors who have successfully performed work under contract directly with the Village and have indicated that they are willing to give estimates to property owners within the Village who wish to install plumbing modifications to protect their homes against sanitary sewer back-ups.

This list should not be viewed as a recommendation by the Village or a guarantee of the past or future performance of these contractors. The Village suggests that you receive at least three estimates for whatever work needs to be done. Contractors are listed in alphabetical order.

- |                               |              |
|-------------------------------|--------------|
| Armbrust Plumbing             | 630-668-6273 |
| Burlingame Plumbing           | 630-260-9466 |
| John O'Connell Plumbing       | 630-698-0777 |
| Jim Dhamer Plumbing           | 630-964-2222 |
| James Harold Beutjer Plumbing | 630-260-1773 |
| Russ' All Plumbing            | 630-932-8617 |



### AM I ELIGIBLE? HOW DO I GET REIMBURSED?

1. Interested residents must submit a Grant Application to the Public Works Department for evaluation and approval.
2. The applicant must take measures to ensure existing sump pumps, downspouts, foundation drains, area drains, etc. that illegally discharge ground and rain water into the sanitary sewer system are modified to eliminate such discharges.
3. The Village suggests that the applicant obtain *at least three estimates* from licensed plumbers for the installation of an overhead sewer or backflow prevention valve.
4. Once approved, the applicant must obtain a plumbing permit and any other permits which may be applicable from the Village's Planning and Development Department and pay the associated fees.
5. Upon completion of the installation of the overhead sewer system or backflow prevention valve and final inspection by the Village, the applicant will be reimbursed for 50% of the cost of the overhead sewer system or backflow prevention valve or \$5,000, whichever is less. Only work performed after October 13, 2001 will be eligible. Participation in, and reimbursement through, this Program is limited to one time only per address.

Questions?  
Call Public Works at  
(630) 469-6756



*"Interested applicants must submit a Grant Application to the Public Works Department for evaluation and approval."*



*“Today’s building codes require that plumbing in the basement levels of homes be part of what is called an overhead sewer system”*

## WHAT IS THE PURPOSE OF THIS PROGRAM?

This program is designed to offer financial support to residents who decide to install plumbing modification to protect an individual home from the problems caused by sanitary sewer back-up. During very intense storm events, the sanitary sewer system which carries sanitary waste from residences can become overloaded. The sanitary sewer system is not completely watertight. Groundwater can enter the sewer system through cracks and joints. Also, sump pumps, driveway drains, downspouts, foundation drains, and defective sewer service lines may illegally divert ground and rain water into the sewer. The addition of this extra amount of water into the sanitary sewer system can cause sewage to back up into the lower levels of residences.

The Village annually makes improvements to eliminate rain and ground water from entering the sewer system. These efforts include televising sewer mains to find the sources of problems and then repairing or replacing them. The Village also maintains an aggressive program to clean existing sewers so that capacities are not reduced by debris and roots which can impede flow. However, it is virtually impossible to eliminate all rain and ground water intrusion from the private property sources described in the preceding paragraph.

Even after measures have been taken to eliminate extraneous flows into a sanitary service collection system, certain residences will remain more susceptible to sewer back-ups during intense storm events than others because of minor elevation differences between the residence’s internal plumbing system and the Village’s sanitary sewer system. The grant program is designed to provide assistance to resident homeowners who wish to install an overhead sewer or backflow prevention valve to minimize the possibility of sewer back-ups.

## WHAT IS A BACKFLOW PREVENTION VALVE?

A backflow prevention valve is a gate-type or check-type backwater valve typically installed within a small basin or manhole inserted into a home’s sewer service line in the front yard. This valve prevents sewer back-ups when closed. Although this option may be cheaper than overhead plumbing and eliminates the need to modify interior plumbing, there are some potential disadvantages that must be taken into consideration. The house plumbing cannot be used while the valve is closed unless the valve is part of an automated system that has an ejector pump. The valve must also be accessible for servicing because they require periodic inspections and maintenance to be dependable. Figure 3 shows the location of a typical backwater valve.

## WHAT IS AN OVERHEAD SEWER?

Figure 1 depicts a cross-sectional view showing an older type home connected to a sanitary sewer system at a time when the sanitary sewer system has become surcharged or overloaded during an intense storm event. Note that the high or surcharged level of sanitary sewage in the manhole in the street is higher than the plumbing outlets (in this case a floor drain and washtub) in the basement of the home. Since water flows by gravity to the lowest level, sanitary sewage would back up into the basement of this home with this type of plumbing configuration.

The plumbing system in homes generally built after 1970 are configured differently than the older home depicted in Figure 1. The 1970 and later building codes require plumbing in the basement levels of homes to be part of what is called an overhead sewer system. Figure 2 shows the modifications which must be made to convert an older-type plumbing system to an overhead sewer system. This system involves a sump pit, an ejector pump, and a watertight sewer line which generally runs under the first-floor floor joists. The sump pit collects the wastewater from the house and the ejector pump pumps it to the overhead sewer. The wastewater then flows by gravity through the private sanitary sewer service line from the home to the Village-owned community sewer. Generally speaking, if the first floor is higher than the rest of the building, it can drain by gravity and doesn’t need to connect into the ejector system. The height of the overhead sewer and the ejector pump and its backflow check valve prevents sewage from backing up into the basement or crawlspace of the home. Installation of a separate storm sump pump for footing foundation drains may also be required.



*“..consult with a licensed plumber to determine the most appropriate modification for your home.”*

## IS THERE ANTHING ELSE I CAN DO TO PREVENT SEWER BACK-UPS?

Residents with unfinished basements who experience only marginal back-up problems may be able to utilize easier and less expensive solutions such as plugs or standpipes in drains to protect their homes against sewer back-ups. We suggest that you consult with a licensed plumber to determine the most appropriate modifications for your home. It should also be noted that the Village’s Grant program only pertains to the installation of overhead sewers or backflow prevention valves.