



December 7, 2020

210023

TO: Public Works and Environmental Concerns Committee
FROM: Carl Goldsmith, Director of Public Works *CG*
SUBJECT: Village Board Policy Memoranda Amendment

The staff receives direction on the operation of a number of programs and projects through Village Board Policies. This policy direction applies to numerous grant programs, including the Overhead Sewer Grant. This grant program is designed to provide funding to residents making an investment in their property to reduce the risk of sanitary sewer back-ups. Staff has reviewed these programs and recommends that the Overhead Sewer Grant Program Policy be amended to provide staff greater clarity in reviewing applications.

Village Board Policy 4.C. – Overhead Sewer Grant Program

The current program provides that the Village will fund 75% of the cost of the improvement with a not-to-exceed cap of \$5,000 per property. The current reimbursement schedule is as follows:

- Installation of Check Valve (interior or exterior) = maximum of \$1,000
- Installation of combination gate/check valve = maximum of \$2,000
- Installation of an overhead sewer = maximum of \$5,000

It has recently been identified that the Overhead Sewer Grant Program, which is funded through sewer rates paid to the Village does not specify that participants must be a sewer customer of the Village of Lombard. There are areas of Lombard that receive water through the Village of Lombard, but are sanitary sewer customers of the Flag Creek Water Reclamation District (FCWRD). Customers served by FCWRD pay directly to the District and no compensation is received by the Village. As such, staff is recommending that the Village Board Policy be amended to clarify eligibility for the program. An amended Village Board Policy 4.C. is attached for consideration.

Staff recommends that the Public Works and Environmental Concerns Committee concur with the recommended changes and forwards the amended Village Board Policies to the Village Board for consideration at a future meeting.



VILLAGE OF LOMBARD

VILLAGE BOARD POLICY MEMORANDUM

Subject: Overhead Sewer Grant Program

Section: 4.C.
Dept.: PW/CD
Date: December 7, 2020
Revised: October 1, 1998
November 5, 1998
July 17, 2003
April 19, 2007
June 5, 2008
November 18, 2010
August 15, 2013
January 12, 2021

I. Purpose

Some homes are subject to basement backups because of the "low" sanitary service lines in relation to the Village's mainline sewer. During storms when excessive inflow and infiltration enters the sewer, the mainline sewer may surcharge due to a higher hydraulic grade line causing backups into homes. Overhead sewers (with pumped discharges) reduce this problem. However, retrofitting plumbing systems is expensive which discourages many homeowners from taking corrective action. This grant program is designed to encourage more homeowners to take action resulting in less problems and increased property values. There are several types of backflow control systems that will protect property and are a low-cost alternative to a very expensive storm water separation project.

II. Procedures/Guidelines

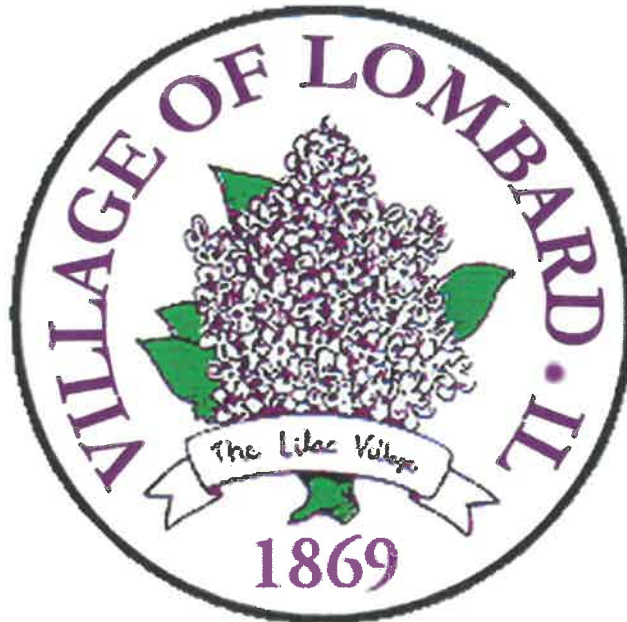
- A. Interested single family or multifamily property owners who can show evidence of sewer backups submit a grant application to the Public Works Department for evaluation and approval .
- B. Approved applicants obtain Village of Lombard plumbing permit; and electrical permit (if applicable) and pay applicable fees.
- C. Applicant installs overhead sewer system; combination gate valves or an external flood ~~or other suitable system control system approved by the Director of Public Works~~ using their own contractor.
- D. Upon completion of the work and approval of a final inspection by the Village, the applicant will pay the total cost of the pre-approved system. The Village shall reimburse property owners up to 75% based upon the following schedule, which is based upon the level of protection afforded by the improvement:
 - Installation of check valve (interior or exterior) - maximum of \$1 ,000
 - Installation of interior combination gate/check valve - maximum of \$2,000

- Installation of an overhead sewer, modified overhead and exterior pumping flood control systems - maximum of \$5,000
- E. The funds available for this program shall be identified in the annual Capital Improvement Program. This policy shall be subject to availability of funds.
- F. As part of the Overhead Sewer Grant Program requirements, property owners MUST disconnect all illegal connections to the sanitary/combined sewer system as defined in Section 50.026 of the Lombard Village Code. Property owners may apply for a Clear Water Disconnect Grant per Village Board Policy 4.E.
- G. Only one grant award will be made per address.
- H. Applicant shall comply with all program requirements as set forth in the Overhead Sewer Grant Program application.
- I. Eligible applicants must be directly connected to the Village of Lombard's sanitary or combined sewer system.
- J. Eligible applicants must pay sewer rates to the Village of Lombard.

III. **Legislation/Documentation**

- A. Minutes of Public Works Committee meeting of January 13, 1998
- B. Minutes of Board of Trustees Committee of the Whole meeting of February 12, 1998
- C. Minutes of Board of Trustees meeting of March 5, 1998
- D. Minutes of Public Works Committee of September 8, 1998
- E. Minutes of Board of Trustees meeting of October 1, 1998
- F. Minutes of Public Works Committee of October 13, 1998
- G. Minutes of Board of Trustees meeting of November 5, 1998
- H. Minutes of Public Works Committee of July 8, 2003
- I. Minutes of Board of Trustees meeting July 17, 2003
- J. Minutes of Public Works Committee meeting of April 10, 2007
- K. Minutes of Board of Trustees meeting of April 19, 2007
- L. Minutes of Public Works Committee of May 13, 2008
- M. Minutes of Board of Trustees meeting of June 5, 2008
- N. Minutes of Board of Trustees meeting November 18, 2010
- O. Minutes of Public Works Committee of July 9, 2013

Village of Lombard



OVERHEAD SEWER REIMBURSEMENT PROGRAM

IN ORDER TO QUALIFY FOR THE VILLAGE OF LOMBARD OVERHEAD SEWER COST SHARING PROGRAM:

The perimeter drain tile and any other source of storm water must be disconnected from the Village sanitary or combined sewer. Installation of a sump pit and sump pump is required. The sump pump is to discharge the storm water onto the ground, to the front or rear of the property. Or, the sump pump discharge may be connected to the storm sewer in the street via underground pipe, SDR 26 PVC minimum 6" diameter in Village right-of-way. If additional storm water is being conveyed (such as rear yard drain or downspouts) then use a 6" diameter pipe SDR 26 throughout.

(Note: This requirement is not applicable if a proper sump pit for perimeter drain tile already exists.)

OVERHEAD SEWER PROGRAM

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OVERHEAD SEWER PROGRAM

What is it?

The Overhead Sewer Reimbursement Program was established to provide financial assistance to homeowners who desire to protect their home from flooding during a heavy rain event. Eligible homeowners may qualify for a 75% cost sharing, to install a preapproved system which can protect their basements from sewer back-up.

How does the Overhead Sewer work?

Typically, homes which have experienced sewer back-ups and flooded basements during a heavy rain event have a gravity type sewer (Exhibit A). The existing sewer underneath the basement floor drains to the sewer in the street by gravity. When the Village sanitary sewers become overloaded the gravity type sewer is subject to back-up.

Changing the basement plumbing to an Overhead Sewer (see Exhibit B on page 6) can protect the basement from back-ups. Basically the plumbing in the basement gets re-plumbed and directed to an ejector pit. The ejector pit lifts the sewage up and overhead, then down to about mid-height of the basement wall, where it exits the foundation wall to the outside of the building. Once outside, there is a steep slope section of pipe where it continues to the lateral line and then to the Village sewer. If the Village sewer backs-up, the homeowner is better protected as the water will most likely only back-up into the steep slope area of the pipe, and not into the house.

Is there anything else I should know?

Yes, in order to qualify for this program, the proposed Overhead Sewer remedy provided by your plumber must accomplish several things.

First, the perimeter draitile and any other source of storm water must be disconnected from the sanitary sewer. Installation of a sump pit and pump is required. The sump pump is to discharge the storm water onto the ground, to the front or rear of the property. Or, the sump discharge may be connected to the storm sewer in the street via underground pipe, SDR 26 PVC minimum 6" diameter in the Village right-of-way. If additional storm water is being conveyed (such as a rear yard drain or downspouts) then use a 6" dia. pipe SDR 26 throughout. (Note: This requirement is not applicable if a proper sump pit for perimeter draitile already exists.)

Secondly, an overhead sewer needs to be installed per Exhibit B. The plumber needs to provide two sets of drawings which communicate all of the work being performed. A detailed and itemized invoice for all work being performed is required to be submitted to the Village for review, for Village cost sharing.

Are other backflow systems eligible for the Overhead Sewer Reimbursement Program?

Yes, although the overhead sewer provides the highest level of protection from backflow, the Village does approve other types of systems at varying levels of reimbursement.

The Modified Overhead Sewer connects all of the lower level fixtures to an ejector pit however, instead of raising the outgoing sewer pipe as it goes through the foundation, the ejector pit pumps up and down into the gravity pipe. This work provides a high level of protection without penetrating the foundation wall or disturbing the landscaping. Like the overhead sewer, the plumbing fixtures on the above grade levels can be used during a storm. However, the lower level fixtures cannot be used during a power outage.

A dual check valve/gate valve is also eligible for reimbursement. (Exhibit C) This is a lower cost alternative but requires regular maintenance to insure the flap on the check valve closes tightly to prevent backflow. The gate valve provides redundant protection however you need to be home to operate it and does require periodic maintenance to insure operation when needed. The house plumbing cannot be used during a storm when the valve is closed to prevent basement flooding.

An external flood control system is installed outside the home. All of the sewerage flows through the system through check valves which close to prevent backflow. When the Village sewers are full, the sewerage is pumped into the sewer lateral under pressure. This system provides a high level of protection but requires electric to be installed outside the home and is a large structure that should be periodically cleaned.

An exterior check valve installed in a clean out on the outgoing sewer lateral (commonly known as a Clean & Check) is also eligible for reimbursement. Two additional clean outs are required for access to rod the sewer service on either side of the check valve since a plumber cannot rod through it. This is a lower cost alternative but requires regular maintenance to insure the flap on the check valve closes tightly to prevent backflow. Unlike the interior combination check/gate valve, there is no manual valve to close should the check valve fail. The house plumbing cannot be used during a storm when the valve is closed to prevent basement flooding.

Install at least one “clean-out”, outside of the house, with the exception of the exterior check valve which requires two “clean-outs”. Furthermore, there are certain costs which are eligible for Village Cost Sharing and others that are not.

Eligible costs are as follows:

- Cost of location, excavation and exposure of the house lateral sewer line including the support of existing structures for re-connection of a new overhead sewer to the existing lateral.
- Cost of a new sump pit, ejector pump and associated electrical and plumbing work needed to lift sanitary drainage from basement plumbing fixtures to an overhead sewer.
- Cost of trenching and concrete floor repairs.
- Cost of grass seeding to restore disrupted grass/lawns.
- Additional dedicated electrical circuit for new ejector pump.
- Applicable permit fees.
- Installation of storm water sumps or associated piping pits or materials (*Applicants may be eligible for the Clear Water Disconnect Reimbursement to fund a portion of the required disconnections*).

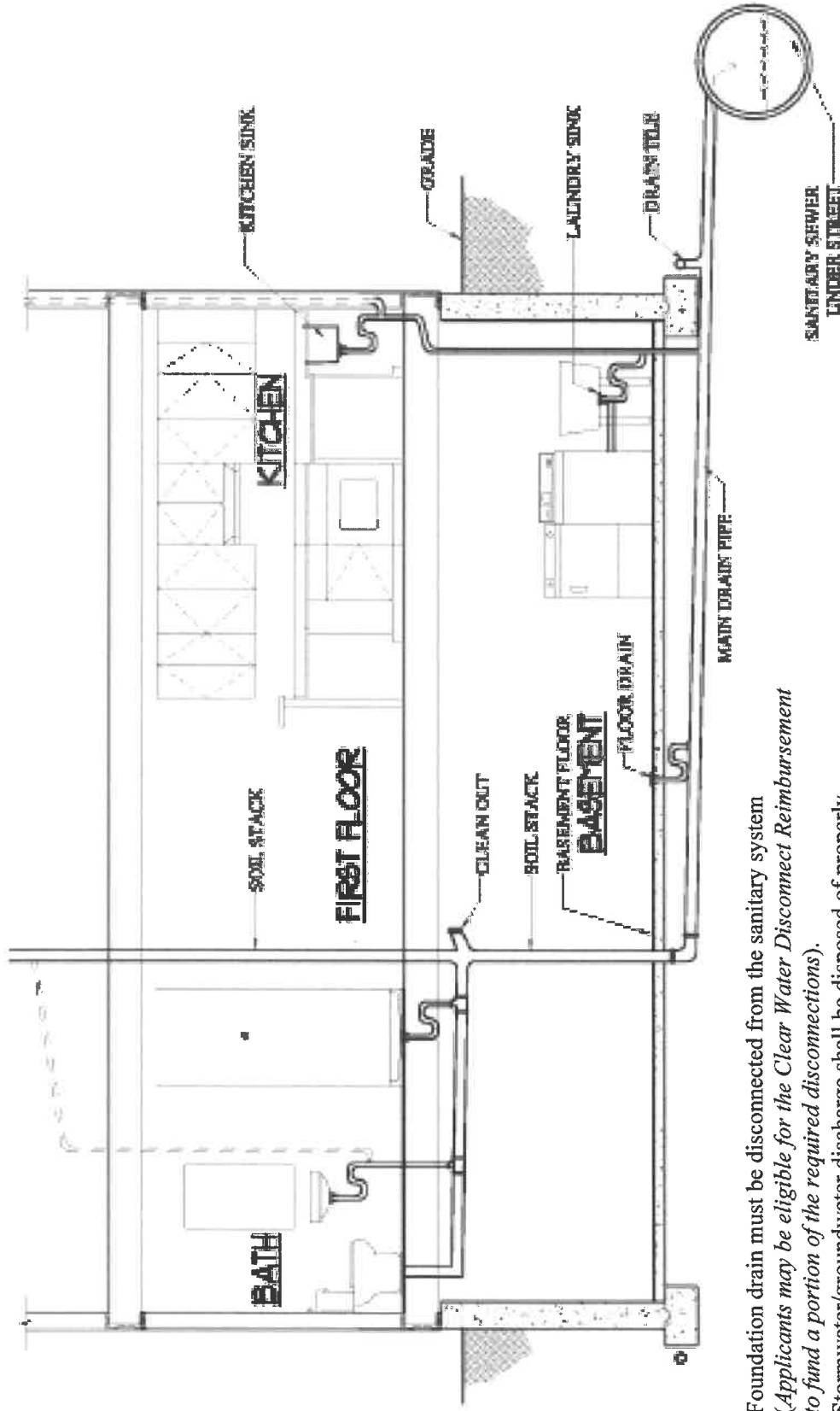
**** Use of Check Valve (Cautions)***

Check valves installed in sewer lines sometimes become clogged with debris and fail to close completely. When this happens, the valve will not stop the sewage completely. For this reason, a valve should not be depended upon completely, and the valve should always remain accessible for service and repair. Remember that when a check valve is installed in a house sewer, the house plumbing cannot be used during a storm when the valve is closed to prevent basement flooding.

Non-Eligible Costs:

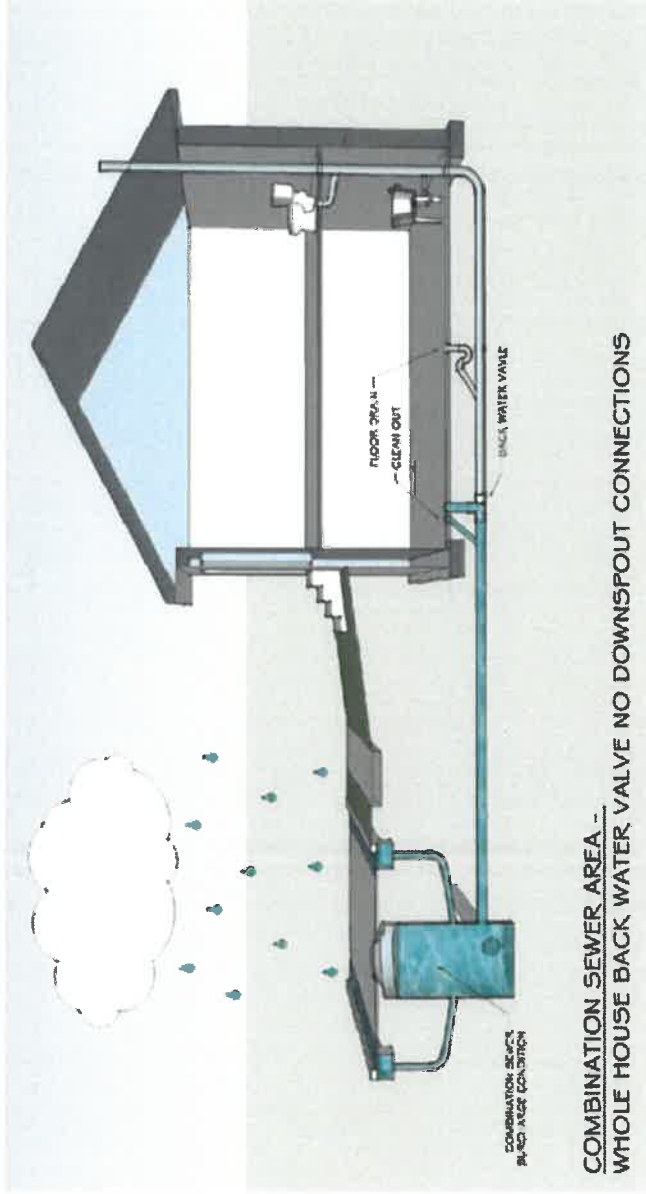
- Removal and Replacement of interior walls and finishes.
- Use of materials not meeting the requirements of the Village's guide specifications or Village Codes.
- Ancillary homeowner improvements not necessary to provide sanitary sewer back-up protection of the basement and related permit costs.
- Planting or replacement of new landscaping (bushes, trees, sod, fences, walls, driveways, etc.)
- New electrical panels and/or upgrading the house electrical supply in addition to the dedicated electrical circuit for the ejector pump.

EXHIBIT A: EXAMPLE OF A TYPICAL GRAVITY DRAINAGE SYSTEM (BEFORE)

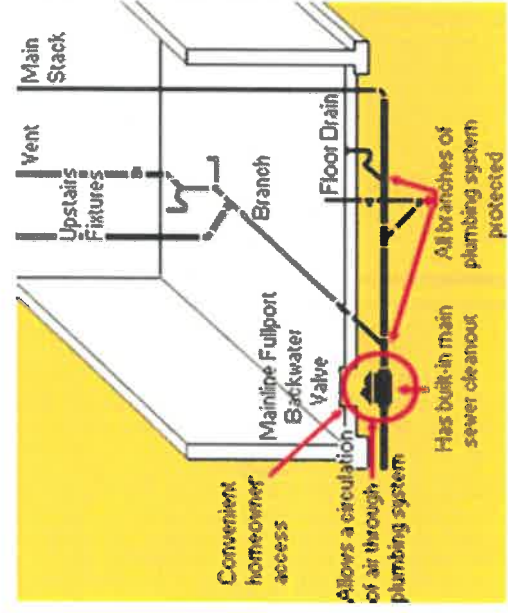


- Foundation drain must be disconnected from the sanitary system (Applicants may be eligible for the Clear Water Disconnect Reimbursement to fund a portion of the required disconnections).
- Stormwater/groundwater discharge shall be disposed of properly
- In some homes, the basement wash tub, floor drains and kitchen plumbing may discharge into an exterior catch basin located behind or alongside the building.
- Some homes may also have a foundation drain with a gravity connection to a sump pump in the basement.

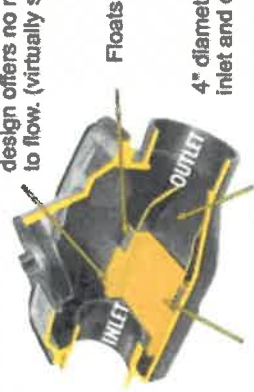
EXHIBIT B: EXAMPLE OF AN INSTALLATION OF A CHECK VALVE



**COMBINATION SEWER AREA -
WHOLE HOUSE BACK WATER VALVE NO DOWNSPOUT CONNECTIONS**



"Fullport" normally-open design offers no restriction to flow. (virtually self-cleaning)



4" diameter DWV inlet and outlet.

Gate automatically rises upon reversal flow isolating entire plumbing system from backflow.

Flow channels on gate body divert sewage from inlet to outlet preventing sewage buildup.

Cutaway view of our Model # 4963 main line full port back water valve

EXHIBIT C: EXAMPLE OF AN INSTALLATION OF A COMBINATION CHECK/GATE VALVE

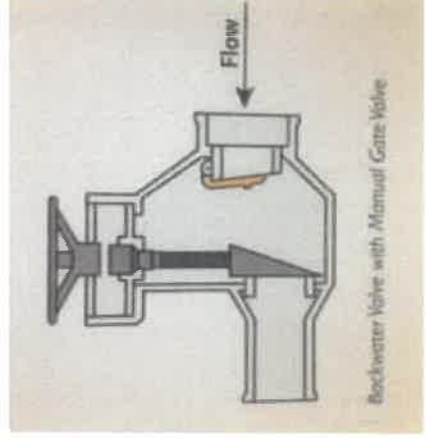
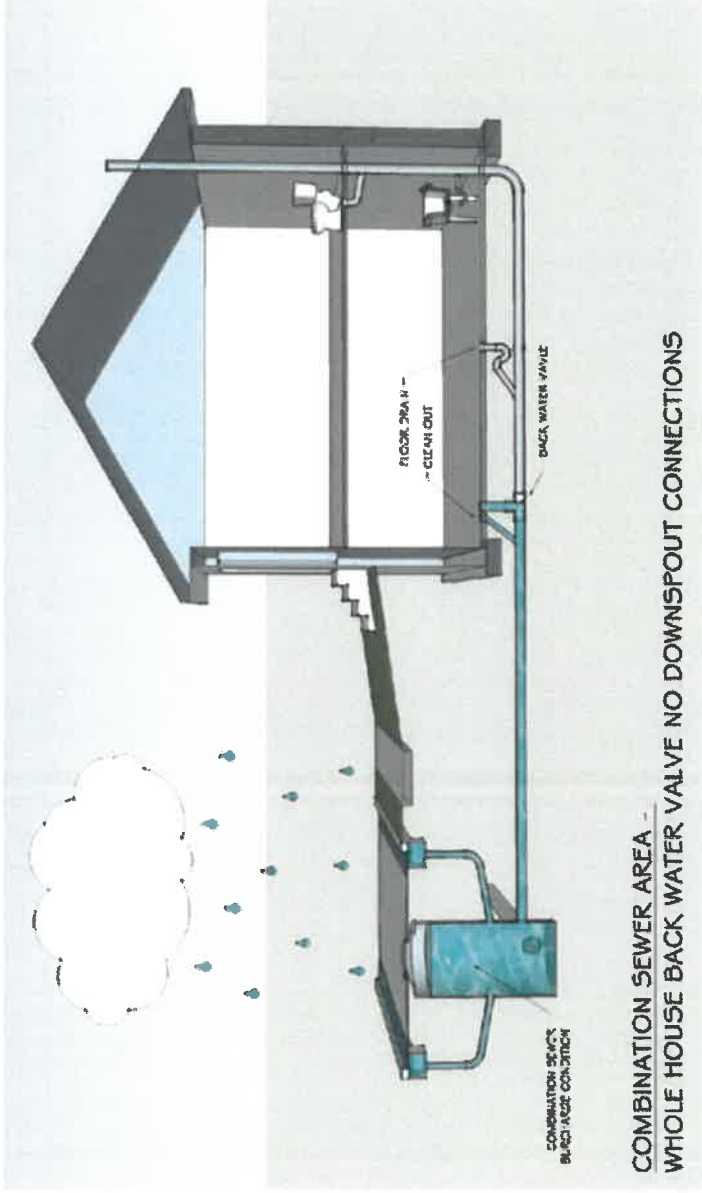


EXHIBIT D: EXAMPLE OF AN INSTALLATION OF AN OVERHEAD SEWER

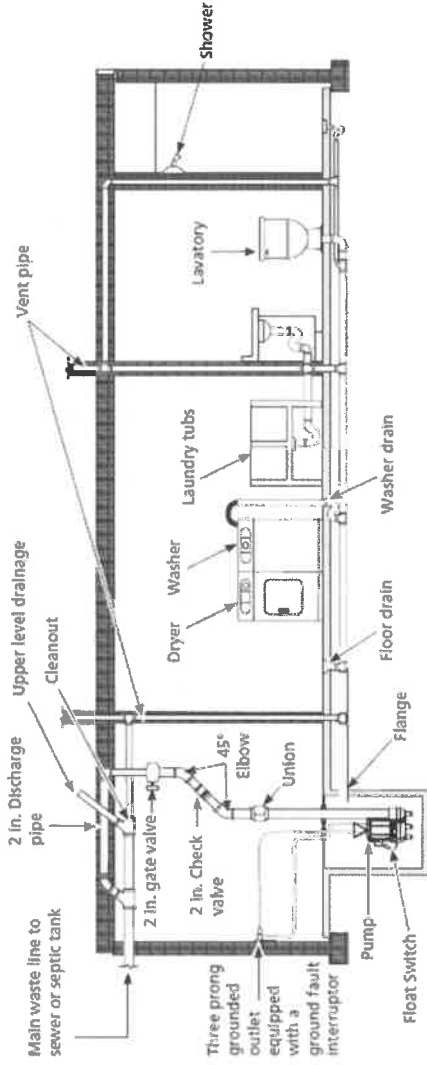
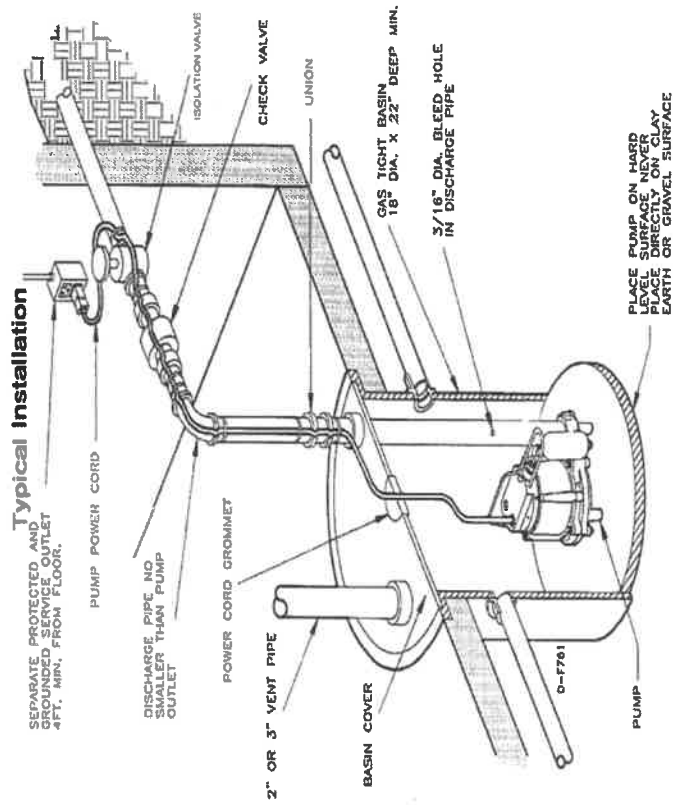


Figure 4 - Typical Installation



GENERAL PLUMBING NOTES

1. In order to qualify for the Overhead Sewer Program Cost Sharing: The perimeter drain tile and other sources of storm water must be disconnected from the sanitary sewer. (*Applicants may be eligible for the Clear Water Disconnect Reimbursement to fund a portion of the required disconnections*). Installation of a sump pit is required to discharge the storm water on the ground (front or back) or make a direct connection to the storm sewer in the street.
2. Use SDR 26 ASTM 2241 for Sewer Pipe.
3. Where manufactured pipe joints cannot be utilized or where dissimilar materials are joined, “non-shear” type couplings shall be used for connections.
4. Connections of SDR 26 laterals to VCP / SDR 26 PVC sanitary sewer main or CP storm sewer shall be made with a stainless-steel band and gasketed saddle connection.
5. Disconnect abandoned basement floor drains/sewer outside of building foundation / slab and cap with the use of brick and hydraulic cement.
6. All floor drains must be vented.
7. PVC pipe for drain waste and vent is permitted for use above ground and is permitted underground and under the slab inside the building.
8. The overhead sewer must penetrate the foundation wall before it starts its steep slope.
9. Provide a clean-out just outside of the building.
10. The Contractor shall restore all interior and exterior surfaces disturbed due to excavation in-kind.
11. The application shall include a detailed description of exterior extent of work.
12. The installation of exterior check valves must include the installation of a clean out on the private side of the valve, as well as a clean out at the property line. Such installations must meet all Village of Lombard specifications.

APPLICATION INSTRUCTIONS

STEP 1: Submit an application for the Overhead Sewer Reimbursement Program with two plumbing estimates which detail the scope of work to the Public Works Department. Also, complete the following forms:

- **Overhead Sewer Application** (page 8)
- **Letter of Agreement** (page 10)

Submit the drawings, proposal & forms to the Public Works Department at 1051 S. Hammerschmidt Avenue.

Upon completion of the work and approval of a final inspection by the Village, the applicant will pay the total cost of the pre-approved system. The Village shall reimburse property owners up to 75% based upon the following schedule, which is based upon the level of protection afforded by the improvement:

- **Installation of check valve (interior or exterior) – maximum of \$1,000**
- **Installation of interior combination gate/check valve – maximum of \$2,000**
- **Installation of an overhead sewer, modified overhead and exterior pumping flood control systems – maximum of \$5,000**

A representative from the Village may need to do an on-site inspection of your home.

STEP 2: After being deemed eligible, hire a plumber. Have the plumber prepare drawings and provide a written proposal which details the scope of work. The application and drawings will be reviewed by the Building Division and will either be approved as noted or returned for revisions. When the application and drawings receive approval, the permit will be issued and the plumber can start the work.

STEP 3: The plumber needs to contact the Building Division to schedule normal inspections during the course of work and at completion for a final inspection.

STEP 4: After the work has been inspected and approved, the homeowner must pay the full amount to the plumber and then submits the following to the Public Works Department to get reimbursed:

- Completed Request for Disbursement Form.
- The approved Application
- The signed Letter of Agreement
- A copy of a paid & itemized invoice from the plumber who did the work.
- Copies of the cancelled check(s) (both sides) or credit card receipts identifying that the homeowner paid for the work.

STEP 5: **“WAIT”** – The homeowner will receive the Village’s reimbursement check in the mail approximately three (3) weeks after **all of the required paperwork** is submitted to the Public Works Department.

Overhead Sewer Reimbursement Program

Application

Name: _____ Address: _____

Phone Number: _____ (Where you can be reached between 8:00am - 4:30pm)

How many sewage backups have occurred in the past 12 months? _____

How many sewage backups have occurred since you moved into this home? _____

Approximate dates of backups: _____

What caused the backups (if known)? _____

Plumbing Contractor's Name: _____ phone # _____

Are your downspouts connected to the Village's sanitary sewer system? Yes No

Are your downspouts connected to the Village's storm sewer system? Yes No

Does your home have an outside catch basin? Yes No

Does your home have exterior foundation perimeter drain tile? Yes No

Please check all the plumbing fixtures that are present in the basement of your home.

_____ Floor Drain _____ Shower or Tub _____ Lavatory

_____ Laundry Sink or Wash Basin _____ Ejector Pump _____ Toilet

_____ Sump Pump: Does it discharge to Front, Rear, Sideyard? Or is it connected to the Storm Sewer or sanitary sewer in street? (Circle one)

The cost estimate for the proposed work is: \$ _____

The homeowner is responsible to pay the first 25% of the actual total costs. The Village will then reimburse up to a maximum of \$5,000.

The above information is true and correct to the best of my knowledge: _____

Signature of Applicant

The reimbursement must be approved by a Public Works official and any necessary permits must be acquired prior to starting work.

Approved for a total project cost of: \$ _____

Utilities Superintendent

Date

Director of Public Work

Date

OVERHEAD SEWER PROGRAM

REQUEST FOR REIMBURSEMENT FORM

Name: _____

Address: _____

Phone: (home) _____ (work/cell) _____

Date plumbing work was completed: _____

Plumbing permit number issued: _____

Plumbing contractor who performed work: _____

Total cost of eligible expenses: \$ _____

Owner Certification

I, _____ am the homeowner of the premises indicated above and I certify that all of the information contained on this Request for Reimbursement Form is true and accurate to the best of my knowledge.

Signature

Date

Building Division Certification

As an authorized agent of the Village of Lombard, I certify that I have reviewed all the necessary paperwork associated with above mentioned Overhead Sewer Program Permit, and found them in compliance with the provisions of the Program as well as all applicable Village Codes, and Final Inspections have been satisfactorily passed.

Signature

Date

Public Works Department Certification

As an authorized agent of the Village of Lombard who administers the Overhead Sewer Program, I certify that I have reviewed all the necessary paperwork associated with above mentioned Overhead Sewer Program Application & Permit, and found them in compliance with the provisions of the Program. Therefore, I recommend the reimbursement amount be paid.

Signature

Date

Total amount of reimbursement approved (75% of eligible expenses not to exceed category maximum)

\$ _____ Installation of check valve (interior or exterior) – maximum of \$1,000

\$ _____ Installation of interior combination gate/check valve – maximum of \$2,000

\$ _____ Installation of an overhead sewer, modified overhead and exterior pumping flood control systems – maximum of \$5,000