

CODIFIED ORDINANCES OF SHEFFIELD VILLAGE

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TITLE ONE – State and Model Codes Adopted

Chap. 1301. Ohio Building Code.

Chap. 1305. Residential Building Code of Ohio.

**CHAPTER 1301
Ohio Building Code**

<p>1301.01 Adoption.</p> <p>1301.02 Purpose.</p> <p>1301.03 Scope.</p> <p>1301.04 Compliance.</p> <p>1301.05 Existing structures.</p>	<p>1301.06 Violations.</p> <p>1301.07 Stop work order.</p> <p>1301.08 Conflict.</p> <p>1301.09 Enforcement.</p> <p>1301.99 Penalty.</p>
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CROSS REFERENCES

See sectional histories for similar State law

Removal of unsafe structures - see Ohio R.C. 715.26(B), 715.261

Power to enact further and additional regulations - see Ohio R.C. 3781.01

Authorization by Board of Building Standards - see Ohio R.C. 3781.12

Enforcement - see Ohio R.C. 3781.03, 3781.031, 3781.10(E), 3781.102, 3781.19

Final jurisdiction - see Ohio R.C. 3781.04

Application - see Ohio R.C. 3781.06, 3781.10(E), 3781.11(A)

Submission of plans - see Ohio R.C. 3791.04

Dead bolt locks in apartment buildings - see Ohio R.C. 3781.103

Smoke detection system for apartments and condominiums - see Ohio R.C. 3781.104

Automatic sprinkler systems - see Ohio R.C. 3781.105, 3791.041 et seq.

Fire suppression systems - see Ohio R.C. 3781.108

Use of public buildings by handicapped persons - see Ohio R.C. 3781.111

Energy conservation - see Ohio R.C. 3781.181, 3781.182, 3781.21

Abandoned service stations - see Ohio R.C. 3791.11 et seq.

Safety standards for refuse containers - see Ohio R.C. 3791.21

1301.01 ADOPTION.

There is hereby adopted by the Municipality, the Ohio Building Code (OBC) and related codes as adopted by the Ohio Board of Building Standards, Department of Industrial Relations, effective March 1, 2005, and as identified and published in Division 4101:1 et seq. of the Ohio Administrative Code (OAC).

1301.02 PURPOSE.

The purpose of the Ohio Building Code is to establish uniform minimum requirements for the erection, construction, repair, alteration, and maintenance of buildings, including construction of industrialized units. Such requirements shall relate to the conservation of energy, safety, and sanitation of buildings for their intended use and occupancy with consideration for the following:

- (a) Performance. Establish such requirements, in terms of performance objectives for the use intended.
- (b) Extent of Use. Permit to the fullest extent feasible, the use of materials and technical methods, devices, and improvements which tend to reduce the cost of construction without affecting minimum requirements for the health, safety, and security of the occupants of buildings without preferential treatment of types or classes of materials or products or methods of construction.
- (c) Standardization. To encourage, so far as may be practicable, the standardization of construction practices, methods, equipment, material and techniques, including methods employed to produce industrialized units.

The rules of the Board of Building Standards and proceedings shall be liberally construed in order to promote its purpose. When the Building Official finds that the proposed design is a reasonable interpretation of the provisions of this Code, it shall be approved. Materials, equipment and devices approved by the Building Official pursuant to Section 118 of the Ohio Building Code shall be constructed and installed in accordance with such approval.
(OBC 101.3)

1301.03 SCOPE.

The provisions of the Ohio Building Code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures. As provided in Section 3791.04(B) of the Ohio Revised Code, no plans or specifications shall be approved or inspection approval given unless the building represented by those plans or specifications would, if constructed, repaired, erected or equipped according to those plans or specifications, comply with Chapters 3781 and 3791 of the Ohio Revised Code and any rules adopted by the Board.

An owner may exceed the requirements of the Ohio Building Code in compliance with Section 102.7 of the Ohio Building Code.

Exceptions:

- (a) Detached one-, and two-, and three-family dwellings and structures incidental to those dwellings which are not constructed as industrialized units shall comply with local residential codes, if any, adopted by the authority having jurisdiction. This exception does not include the energy provisions required in "Chapter 13, Energy Efficiency" of the OBC (see Sections 3781.06, 3781.181 and 3781.182 of the Ohio Revised Code);
- (b) Buildings owned by and used for a function of the United States Government;

- (c) Buildings or structures which are incident to the use for agricultural purposes of the land on which said buildings or structures are located, provided such buildings or structures are not used in the business of retail trade; for the purposes of this section, a building or structure is not considered used in the business of retail trade if fifty percent or more of the gross income received from sales of products in the building or structure by the owner or operator is from sales of products produced or raised in a normal crop year on farms owned or operated by the seller. (See Sections 3781.06 and 3781.061 of the Ohio Revised Code);
- (d) Agricultural labor camps;
- (e) Type A or Type B family day-care homes;
- (f) Buildings or structures which are designed, constructed and maintained in accordance with federal standards and regulations and are used primarily for federal and state military purposes where the U.S. Secretary of Defense, pursuant to 10 U.S.C. Sections 18233(a)(1) and 18237, has acquired by purchase, lease, or transfer, and constructs, expands, rehabilitates, or corrects and equips, such buildings or structures as he determines to be necessary to carry out the purposes of Chapter 1803 of the U.S.C.;
- (g) Manufactured homes constructed under "24 CFR Part 3280", "Manufactured Home Construction and Safety Standards".
(OBC 101.2)

1301.04 COMPLIANCE.

(a) No owner or any other person shall construct, erect, build or equip any building or structure to which the Ohio Building Code is applicable, or make any addition thereto or alteration thereof, except in case of repairs for maintenance without affecting the construction, sanitation, safety or other vital feature of such building or structure, without complying with this chapter, Ohio R.C. Chapters 3781 and 3791 or the Ohio Building Code, or fail to comply with any lawful order issued pursuant thereto.
(ORC 3791.01, 3791.02)

(b) No architect, builder, engineer, plumber, carpenter, mason, contractor, subcontractor, foreman or employee shall violate or assist in violating this chapter, Ohio R.C. Chapters 3781 and 3791 or the Ohio Building Code, or fail to comply with any lawful order issued pursuant thereto.
(ORC 3791.01, 3791.03)

(c) No owner shall proceed with the construction, erection, alteration or equipment of any building to which the Ohio Building Code is applicable until the plans or drawings, specifications, and data have been approved as Ohio R.C. 3791.04 requires, or the industrialized unit inspected at the point of origin. No plans or specifications shall be approved or inspection approval given unless the building represented would, if constructed, repaired, erected, or equipped comply with Chapters 3781 and 3791 of the Ohio Revised Code and any rule made under those chapters. (ORC 3791.04)

1301.05 EXISTING STRUCTURES.

The provisions of Chapter 34 of the Ohio Building Code shall control the alteration, repair, addition, and change of occupancy of any existing structure.

The occupancy of any structure currently existing on the date of adoption of this Code shall be permitted to continue without change provided the alleged occupancy can be shown to have existed for more than two years and there are no orders of the Building Official pending, no evidence of fraud, or no serious safety or sanitation hazard.

Buildings constructed in accordance with plans which have been approved prior to the effective date of this Code are existing buildings.

(OBC 102.6)

1301.06 VIOLATIONS.

(a) Adjudication Orders Required Before Legal Proceedings. Before the Municipality attempts to enforce Chapters 3781 and 3791 of the Ohio Revised Code or any rules adopted pursuant thereto, by any remedy, civil or criminal, it shall issue an adjudication order within the meaning of Sections 119.06 to 119.13 of the Ohio Revised Code or a stop work order as provided in Section 1301.07. Every adjudication order shall:

- (1) Cite the law or rules directly involved and shall specify what appliances, site preparations, additions, or alterations to structures, plans, materials, assemblages or procedures are necessary for the same to comply with Chapters 3781 and 3791 of the Ohio Revised Code.
- (2) Include notice to the party of the procedure for appeal and right to a hearing if requested within thirty days of the mailing of the notice. The notice shall also inform the party that at the hearing he may be represented by counsel, present his arguments or contentions orally or in writing and present evidence and examine witnesses appearing for or against him.

(b) Notice of Violation. The Building Official is authorized to serve a notice of violation or order on the person responsible for the erection, construction, alteration, extension, repair, moving, removal, demolition or occupancy of a building or structure. When the Building Official finds that work or equipment is contrary to approved construction documents and the rules of the Board of Building Standards, the Building Official shall send a notice in writing to the owner of said building or the owner's agent which shall state where and in what respect the work or equipment does not conform to the approved plans for same and the rules of the Board. The notice shall specify a reasonable period of time in which to conform to said plans or the rules of the Board. Before any work may continue on the construction, erection, alteration, or equipment of any building for which the approval is invalid, the owner of the building shall resubmit the plans or drawings and specifications for approval as required under Section 105.3 of the Ohio Building Code.

(c) Prosecution of Violation. Upon the issuance of any order provided for in this section or Section 1301.07, the person receiving an order shall cease work upon the site preparations or structure to be constructed, or in the case of an industrialized unit, the installation of the unit, or shall cease using the appliance, materials, assemblages or manufactured product identified in the order until such time as the appeal provided for in accordance with the provisions of Section 3781.19 of the Ohio Revised Code and all appeals from such hearing have been completed, or the order has been released.

(OBC 113)

1301.07 STOP WORK ORDER.

(a) Authority. Whenever the Building Official finds any work regulated by this Code being performed in a manner contrary to the provisions of this Code or in a dangerous or unsafe manner, the Building Official is authorized to issue a stop work order whenever the Building Official finds, after inspection, that the site preparations or structure to be constructed, or in the case of an industrialized unit, the installation of the unit, or that the use of an appliance, materials, assemblage, or manufactured product does not comply with the provisions of Chapters 3781 and 3791 of the Ohio Revised Code or the rules adopted pursuant thereto. The effect of such an order shall be limited to the matter specified in the order.

(b) Issuance. The stop work order shall be in writing and shall be given to the owner of the property involved, or to the owner's agent and the person doing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order, and the conditions under which the cited work will be permitted to resume.

(c) Unlawful Continuance. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition. Failure to cease work after receipt of a stop work order is hereby declared a public nuisance.
(OBC 114)

1301.08 CONFLICT.

(a) General. Where, in any specific case, different sections of the Ohio Building Code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable.

(b) Other Laws. The provisions of the Ohio Building Code shall not be deemed to nullify any provisions of state or federal law. The Municipality, under Section 3781.01 of the Ohio Revised Code, may make further and additional regulations, not in conflict with Chapters 3781 and 3791 of the Ohio Revised Code or with the rules of the Board of Building Standards. However, under Section 3781.12 of the Ohio Revised Code, approval by the Board of Building Standards of any fixture, device, material, system, assembly or product of a manufacturing process, or method or manner of construction or installation shall constitute approval for their use anywhere in Ohio. The rules of the Board of Building Standards shall supersede and govern any order, standard, or rule of the Division of the Fire Marshal or Industrial Compliance in the Department of Commerce, and Department of Health and of counties and townships, in all cases where such orders, standards or rules are in conflict with the rules of the Board of Building Standards, except that rules adopted and orders issued by the Fire Marshal pursuant to Chapter 3743, of the Ohio Revised Code prevail in the event of a conflict.
(OBC 102)

1301.09 ENFORCEMENT.

(a) In General. The Building Official shall enforce provisions of the rules of the Board of Building Standards and of Chapters 3781 and 3791 of the Ohio Revised Code, relating to construction, arrangement, and the erection of buildings or parts thereof as defined in the rules of the Board in accordance with the certification. The Building Official shall exercise exclusive responsibility for the enforcement of all design and construction requirements found in the Ohio Building Code and in other codes and referenced standards to the extent that the Building Code refers to those documents for design data, facts, figures, requirements, criteria, conditions, measures, and information except as follows:

- (1) Fire. The Fire Marshal or Fire Chief shall enforce all provisions of the rules of the Board relating to fire prevention. For those design and construction requirements and other requirements found in the Fire Prevention Code to which the Building Code refers, to the extent of the reference they shall be enforced by the Building Official.
- (2) Health. The Department of Health, or the boards of health of the City or general health districts the Division of Industrial Compliance of the Department of Commerce, or the Departments of Building Inspection of municipal corporations shall enforce such provisions relating to sanitary construction.
- (3) Engineering. The Department of the City Engineer, in cities having such departments, has complete supervision and regulation of the entire sewerage and drainage system of the City, including the house drain and the house sewer and all laterals draining into the street sewers. Said department shall have control and supervision of the installation and construction of all drains and sewers that become a part of the sewerage system of the City and shall issue all the necessary permits and licenses for the construction and installation of all house drains and house sewers and of all other lateral drains that empty into the main sewers. Such department shall keep a permanent record of the installation and location of every drain and sewerage system of the City.
- (4) Enforcement. This section does not exempt any officer or department from the obligation of enforcing any provision of the rules of the Board.

The Building Official shall have the authority to render interpretations of the Ohio Building Code and to adopt policies and procedures in order to clarify the application of its provisions. Such interpretations, policies and procedures shall be in compliance with the intent and purpose of this code.

(b) Applications and Approvals. The Building Official shall receive applications, require the review of submitted construction documents and issue plan approvals for the erection, and alteration, demolition and moving of buildings and structures, inspect the premises for which such approvals have been issued and enforce compliance with the provisions of this Code.

(c) Notices and Orders. The Building Official shall issue all necessary notices or orders to ensure compliance with this Code. When the Building Official finds that work or equipment is contrary to approved plans therefor and the rules of the Board, the Building Official shall send a notice in writing to the owner of said building or the owner's agent. The notice shall state where and in what respect the work or equipment does not conform to the approved plans for same and the rules of the Board, and specify a reasonable period of time in which to conform to said plans or the rules of the Board.

(d) Inspections. If the plans for the erection, construction, repair, alteration, relocating, or equipment of a building are subject to inspection by the Building Official, under Section 109 of the Ohio Building Code, the Building Official shall cause to be made such inspections, investigations, and determinations as are necessary to determine whether or not the work which has been performed and the installations which have been made are in conformity with the approved plans and to safety and sanitation, except special inspections required under Section 1704 of the Ohio Building Code.

(e) Identification. The Building Department personnel shall show, when requested, proper identification when entering structures or premises in the performance of duties under this Code.

(f) Right of Entry. The Building Official, or Building Official's designee, is authorized to enter a structure or premises at reasonable times to inspect or to perform the duties imposed by this Code, provided that credentials are presented to the occupant and that entry is requested and obtained. Where permission to enter has not been obtained, is denied, or the Building Official has probable cause to believe that there exists in a structure or upon a premises a condition which is a serious hazard the Building Official shall have recourse to the remedies provided by law to secure entry.

(g) Department Records. The Building Official shall keep official records of applications received, certificate of plan approval issued, notices and orders issued, certificate of occupancy, and other such records required by the rules of the Board of Building Standards. Such information shall be retained in the official permanent record for each project. One set of approved construction documents shall be retained by the Building Official for a period of not less than one hundred eighty days from date of completion of the permitted work, or as required by document retention regulations.

(h) Liability. Liability of certified Building Department personnel for any tortuous act will be determined by Ohio courts to the applicable provisions of Chapter 2744 of the Ohio Revised Code.
(OBC 104)

1301.99 PENALTY.

Whoever violates any provision of this chapter or any Code adopted herein or fails to comply with any lawful order issued pursuant thereto is guilty of a misdemeanor of the first degree and shall be fined not more than one thousand dollars (\$1,000) or imprisoned not more than six months or both. Each day during which noncompliance or a violation continues shall constitute a separate offense. The Municipality may institute injunction proceedings in Common Pleas Court to abate the nuisance of failure to cease work after receipt of a stop work order as referred to in Section 1301.07.

**CHAPTER 1305
Residential Building Code of Ohio**

1305.01 Adoption.

1305.03 Conflict.

1305.02 File and distribution copies.

CROSS REFERENCES

Adoption by reference - see Ohio R.C. 731.231

State to enforce industrialized unit regulations - see Ohio R.C. 3781.06,
3781.10

State to establish energy standards for one, two and three-family dwellings -
see Ohio R.C. 3781.181

1305.01 ADOPTION.

The Residential Building Code of Ohio for One, Two, and Three-Family Dwellings, Ohio Administrative Code Section 4101:8, as promulgated by the Ohio Board of Building Standards, shall apply and be enforced within the Village of Sheffield.
(Ord. 2082. Passed 11-27-06.)

1305.02 FILE AND DISTRIBUTION COPIES.

Copies of the Residential Building Code of Ohio adopted herein are on file with the Clerk-Treasurer for inspection by the public. The Clerk-Treasurer also has copies available for distribution to the public at cost.

1305.03 CONFLICT.

Except as otherwise specifically provided for in this chapter, in all other cases of conflict between the Residential Building Code of Ohio and any other municipal ordinance or technical code adopted thereby, the more restrictive provision shall govern.

TITLE THREE - Administration

- Chap. 1323. Inspections.
 Chap. 1327. Registration of Contractors.
 Chap. 1331. Enforcement and Penalties.
 Chap. 1335. Building Permits and Fees.
 Chap. 1339. Subdivision Fees.

**CHAPTER 1323
 Inspections**

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| 1323.01 | Inspection of existing buildings. | 1323.03 | Failure to comply with changes ordered. |
| 1323.02 | Changes ordered by Building Inspector. | 1323.04 | Fees for inspection. |
| | | 1323.99 | Penalty. |

CROSS REFERENCES

- OBBC inspections - see OAC 4101:2-1-31 et seq.
 OBOA inspections - see OBOA Code Sec. 105 et seq.

1323.01 INSPECTION OF EXISTING BUILDINGS.

The Building Inspector shall have authority to inspect, or cause to be inspected, any building or structure within the Village when such building or structure is to be changed or altered as follows:

- (a) Moved, raised, altered or added to.
- (b) Repaired following damage by fire or any other cause.
- (c) When any change in the occupancy or use is to be made.
- (d) When any floor loading is deemed dangerous or any change or addition in the loading of floors is to be made.
- (e) When any change in the doorways, passageways, stairways, fire escapes or exits is to be made.
- (f) When any change in the heating, wiring, gas fitting or plumbing is to be made, other than minor repairs or repairs that do not involve any change in their structural parts.
 (Ord. 341. Passed 6-25-62.)

1323.02 CHANGES ORDERED BY BUILDING INSPECTOR.

The Building Inspector shall have authority, after inspection, to direct such changes in the supports, floors, columns, walls, doorways, fire escapes, etc., as from his or her examination he or she deems necessary to insure the safety of persons, the building or structure or adjoining property. (Ord. 341. Passed 6-25-62.)

1323.03 FAILURE TO COMPLY WITH CHANGES ORDERED.

If the owner, agent or person in possession, charge or control of any building or structure or part thereof fails, neglects or refuses to place such building or structure or part thereof, occupied by him or her or under his or her control, in a safe condition, upon being directed to do so by the Building Inspector, and fails to adopt, within a reasonable time, such measures as have been specified by the Building Inspector, then, and in addition to the penalty provided in Section 1331.99, the Building Inspector may cause such building to be vacated, preventing the use of such building for any purpose whatsoever, until the same is placed in a safe condition by the owner, and if such building or structure is dangerous to adjoining property, the Building Inspector may order or cause such work to be done as may be necessary to remove the existing danger and charge the expense of such operations upon the tax duplicate, as a lien against such property. (Ord. 341. Passed 6-25-62.)

1323.04 FEES FOR INSPECTION.

In the event that a Village Inspector or Building Official is unable to perform an inspection and it is necessary for the Village to hire an inspector for the purpose of performing an inspection required by applicable law, the Village shall be authorized to pay such inspector at the rate of \$30.00 per inspection. (Ord. 2084. Passed 12-11-06.)

1323.99 PENALTY.

(EDITOR'S NOTE: See Section 1331.99 for general Building and Housing Code penalty if no specific penalty is provided.)

CHAPTER 1327
Registration of Contractors

1327.01 Contractor defined.	1327.06 Suspension or revocation of certificates.
1327.02 Certificate of registration required.	1327.07 Certificate fee; effective period.
1327.03 Exemptions.	1327.08 Appeal from decisions of Building Inspector.
1327.04 Application to homeowners.	1327.99 Penalty.
1327.05 Issuance of permits.	

CROSS REFERENCES

Authority to license - see Ohio R.C. 715.27

1327.01 CONTRACTOR DEFINED.

As used in this chapter, “contractor” means any individual, firm, copartnership, corporation, association or other organization, or any combination thereof, who or which, by himself, herself or itself, or by or through others, constructs or remodels any building, structure or appurtenance thereto, or who or which undertakes or offers to undertake, or purports to have the capacity to undertake, or submits a bid, to do so. The term “contractor” also includes subcontractors and specialty contractors whose operations as such are the performance of construction work requiring special skill and whose principal contracting business involves the use of specialized building trades or crafts, such as plumbers, excavators and the like. In the case of corporations, the fee shall be paid and the test herein provided for shall be taken by one of the principal officers of the corporation.
(Ord. 457. Passed 9-12-66.)

1327.02 CERTIFICATE OF REGISTRATION REQUIRED.

No person shall engage in the business or act in the capacity of a contractor, except pursuant to a certificate of registration issued by the Village, unless such person is particularly exempted by other provisions of this chapter.
(Ord. 457. Passed 9-12-66.)

1327.03 EXEMPTIONS.

No provision of this chapter shall be so interpreted as to require registration or certificates of registration for officials or employees of public or municipal utility organizations to engage in the installation, alteration, repair, maintenance or utilization of any device, appliance, installation or appurtenance forming part of the equipment for generation, transmission or distribution of any commodity or service which such public utility organization is authorized by law to furnish or provide. (Ord. 457. Passed 9-12-66.)

1327.04 APPLICATION TO HOMEOWNERS.

No provision of this chapter or regulation adopted under authority of this chapter shall be interpreted to require that the owner of a single- or two-family dwelling shall be registered or hold a certificate of registration to personally perform work upon the premises. However, this exception shall not apply to any person holding himself or herself out to the public as a building contractor, builder or one engaged in any of the building trades for profit. All such work shall be performed by such owner with the assistance of no more than two paid workers whose employment on the particular job shall not constitute the full-time employment of the two paid workers. (Ord. 457. Passed 9-12-66)

1327.05 ISSUANCE OF PERMITS.

No permit required by this Building and Housing Code shall be issued for work to be undertaken by contract except to a registered contractor or except to those persons mentioned in Sections 1347.03 and 1347.04.
(Ord. 457. Passed 9-12-66)

1327.06 SUSPENSION OR REVOCATION OF CERTIFICATES.

The Building Inspector may suspend or revoke any certificate of registration issued hereunder for any of the following reasons:

- (a) Misrepresentation of a material fact by the applicant in obtaining a certificate of registration.
- (b) Use of a certificate of registration in obtaining permits for another.
- (c) Faulty or defective workmanship.
- (d) Departure from or disregard of plans and specifications filed with the application for a permit.
- (e) The noncompliance with or violation of any provision of this Building and Housing Code or of the Zoning Code.
(Ord. 457. Passed 9-12-66.)

1327.07 CERTIFICATE FEE; EFFECTIVE PERIOD.

(a) A certificate of registration shall be issued to an applicant upon payment of a one hundred twenty-five dollar (\$125.00) registration fee and proof of passage by the individual of an examination, to test his or her fitness as a contractor in his or her particular trade, administered by either the City of Lorain or the City of Elyria, or a comparable city, or upon passage of a test administered by the Village. Such certificate of registration and fee incident thereto shall be for a period of one calendar year from January 1 to December 31. It will be necessary on January 1 of each year to obtain a new certificate of registration and to pay a fee of one hundred twenty-five dollars (\$125.00) therefor.

- (b) A certificate of registration shall be issued to an applicant for a subcontractor permit in accordance with the following schedule upon the payment of a fee of fifty dollars (\$50.00):
- (1) Drywall contractor
 - (2) Plastering contractor
 - (3) Concrete
 - (4) Masonry
 - (5) Excavation and sidewalk

- (6) Insulation
- (7) Siding installation
- (8) Others
- (9) Plumbing
- (10) Heating and ventilating
- (11) Electrical

Such certificate of registration and the fee incident thereto shall be for a period of one year from January 1 to December 31. It will be necessary on January 1 of each year to obtain a new certificate of registration and to pay a fee of fifty dollars (\$50.00) therefor.

(c) The Building Inspector is hereby designated the administrative officer who shall collect the fee, issue the certificate, conduct the test or receive proof of passage of a test as aforesaid and enforce the provisions of this chapter.

1327.08 APPEAL FROM DECISIONS OF BUILDING INSPECTOR.

Any revocation or suspension of, or refusal to issue or renew, a certificate of registration, and any other action or determination by the Building Inspector under the provisions of this chapter, may be appealed to the Board of Zoning Appeals.
(Ord. 457. Passed 9-12-66.)

1327.99 PENALTY.

(EDITOR'S NOTE: See Section 1331.99 for general Building and Housing Code penalty if no specific penalty is provided.)

CHAPTER 1331
Enforcement and Penalty

1331.01 Violation of cease and desist.

1331.99 General Code penalty.

CROSS REFERENCES

Enforcement - see Ohio R.C. 3781.03, 3781.031, 3781.10(E),
3781.102, 3781.19

OBBC penalty - see BLDG. 1301.99

OBOA penalty - see BLDG. 1305.04

1331.01 VIOLATION OF CEASE AND DESIST.

No person shall start or continue any work, labor, operation or other act when told to cease and desist by the Building Inspector after being advised that such work is in violation of any provision of this Building Code, including any of the technical codes adopted by reference in this Building Code, or of any Village building ordinance.

1331.99 GENERAL CODE PENALTY.

The owner or owners of any building, structure, wall, platform, staging or flooring, or any part thereof, where anything in violation of this Building Code is done or exists, and any architect, builder, plumber, carpenter, mason or other person who or which may be employed to assist in or on such work, and who violates any of the provisions of this Building Code, or who violates or builds in violation of any detailed statement of specifications or plans submitted and approved thereunder, or any certificate or permit issued thereunder, shall severally for each and every such violation, respectively, be guilty of a misdemeanor of the third degree and shall be fined not more than five hundred dollars (\$500.00) or imprisoned not more than sixty days, or both. The imposition of such penalty for any such violation shall not excuse the violation or permit it to continue, and all persons shall be required to correct or remedy such violations or defects within a reasonable time. A separate offense shall be deemed committed each day during or on which a violation occurs or continues, unless otherwise provided.

CHAPTER 1335
Building Permits and Fees

<p>1335.01 Construction, etc.; permit required; effective period.</p> <p>1335.02 Permit applications.</p> <p>1335.03 Drawings required.</p> <p>1335.04 Survey required.</p> <p>1335.05 Deviations from plans.</p> <p>1335.06 Issuance of permit.</p> <p>1335.07 Minor repairs and alterations.</p> <p>1335.08 County sewerage permit or sewer tap-in permit required.</p>	<p>1335.09 Violations; suspension of work; notice of permit revocation.</p> <p>1335.10 Fee schedule.</p> <p>1335.11 Park fees.</p> <p>1335.12 Reports.</p> <p>1335.13 Exceptions.</p> <p>1335.14 Plan inspection fees.</p> <p>1335.15 Sign permit application and fees.</p> <p>1335.99 Penalty.</p>
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CROSS REFERENCES

Zoning permits - see P. & Z. 1109.02 et seq.

1335.01 CONSTRUCTION, ETC.; PERMIT REQUIRED; EFFECTIVE PERIOD.

Before commencing the erection, construction, installation, enlargement, raising, alteration, repair or removal of any building, structure or wall, or heating, gas fitting, electrical, house drainage, plumbing or elevator work, or any part thereof, in the Village, a person shall first obtain a written permit therefor from the Building Inspector or someone authorized by Council to issue the same. No person shall commence any such work unless a written permit to do so has been obtained. In the event that work authorized by the permit is not commenced and is not actually proceeding within six months of the date of its issuance, the permit shall be void, and the work authorized by it may not be done.

(Ord. 797. Passed 11-13-78.)

1335.02 PERMIT APPLICATIONS.

Application for all permits shall be made in writing to the Building Inspector by any person intending to build, upon blanks furnished by the Building Department. Except for emergency repairs, no permit for the construction of a building in the Village shall be issued by the Building Inspector or his or her assistants until ten days have elapsed after:

- (a) There has been filed a proper application for such permit accompanied by plans of the proposed improvements, which application and plans shall be open for public inspection during business hours during such ten-day period; and
- (b) There has been posted conspicuously by the applicant on the premises proposed to be improved a notice of the filing of such application and plans.

The application shall include a detailed statement in writing, giving the name of the owner or owners of the building or structure, the location and intended use thereof, the street number, if any, the name of the street or alley, the allotment, the subplot number and the estimated cost of the building or structure.

(Ord. 341. Passed 6-25-62.)

1335.03 DRAWINGS REQUIRED.

All applications for permits to erect, enlarge or alter buildings or structures shall include two sets of the following drawings, drawn upon paper or cloth in ink, with all necessary dimensions shown in figures and containing the name of the owner or owners and the maker of the plans:

- (a) A plat plan showing on a suitable scale, with dimensions marked thereon in writing, the location of all buildings or structures for which a permit is required, together with the location of existing buildings or structures within ten feet of the lot lines of the lot upon which the work for which a permit is desired is to be erected.
- (b) Sufficient plans, elevations and cross-sections drawn to a scale of not less than one-fourth of an inch to the foot, to clearly show all details of construction, the framing of floors and roofs, details of trusses and girders, and the size and location of all footings, walls, columns, piers, chimneys, heating apparatus, electric outlets, plumbing fixtures, drains and sewers.

When required by the Building Inspector, the applicant for a permit shall furnish duplicate sets of specifications, which shall contain full and complete information as to the extent and character of the work to be done.

(Ord. 341. Passed 6-25-62.)

1335.04 SURVEY REQUIRED.

(a) Whenever application is made for the erection, raising, enlargement or moving of any building or structure built upon street lines, or the lines of any public property or space, the plat plan required by Section 1335.03(a) shall be accompanied by a map, blueprint or drawing of the survey of the lot upon which the building or structure stands or is to be erected, giving the length of the lot lines and the grades and elevations of the curb, sidewalk, street or public space adjacent to such lot. All locations and elevations shall be arrived at from recorded public bench markers and monuments. Stone monuments or iron stakes shall be used to clearly define the street lines.

(b) Whenever application is made for the erection, enlargement or moving of any building or structure not built upon street lines or the lines of any public property or place, the proper location of the building lot shall be designated by stakes set by a registered surveyor. In the absence of such stakes, the owner shall be required to have the property surveyed by a registered surveyor and properly staked out so that the Building Inspector can determine the proper location of the building on such lot. However, if, in the opinion of the Building Inspector, the same results as mentioned above can be obtained so that he or she can be assured that the location of the building on the lot will not violate any side line or setback requirement, then the above-mentioned survey need not be made.

(Ord. 341. Passed 6-25-62.)

1335.05 DEVIATIONS FROM PLANS.

No person shall make any material change in the construction, design, location and layout of any building or structure during the progress of the erection of the same. If it is desired to make any material change of any class or character, or in any way deviate from the terms of the application, plans and specifications upon which the permit was issued, the notice of such intention to alter or deviate shall be given in writing, together with any plans necessary to show the desired changes, to the Building Inspector, and his or her written assent thereto shall be obtained before such alteration or deviation is made.

(Ord. 341. Passed 6-25-62.)

1335.06 ISSUANCE OF PERMIT.

When the application, plans and specifications conform to the requirements of this Building and Housing Code and of any other ordinance or ordinances pertaining to buildings or structures, the Building Inspector shall issue or cause to be issued the necessary permit, and one set of such plans and specifications stamped with an official stamp or otherwise marked "Approved" by the Building Inspector shall be returned to the applicant for the use of the contractor or builder. The same stamped plans and specifications upon which approval and permit have been obtained shall be kept on the premises or work until such buildings, structures or work have been completed and the completed buildings, structures or work have been finally inspected and approved by the Building Inspector. All work to be conducted by permit issued therefor shall be done in conformity with the provisions of this Building and Housing Code and any other ordinance or ordinances applicable thereto.

(Ord. 341. Passed 6-25-62.)

1335.07 MINOR REPAIRS AND ALTERATIONS.

It shall not be necessary to obtain a building permit when the total expenditure for labor and material does not exceed one thousand dollars (\$1,000).

1335.08 COUNTY SEWERAGE PERMIT OR SEWER TAP-IN PERMIT REQUIRED.

A permit for a sewerage system approved by the County Board of Health or a tap-in permit to tap into the Village sewerage system must be presented to the Building Inspector as a condition precedent to the issuance by him or her of a building permit.

(Ord. 725. Passed 7-27-76.)

1335.09 VIOLATIONS; SUSPENSION OF WORK; NOTICE OF PERMIT REVOCATION.

When the work for which any building permit was issued is not being constructed in conformity with the plans, specifications or statement upon which such permit was issued, the Building Inspector shall notify the owner or owners or his, her or their agent, in writing, that such work must be suspended forthwith and not again begun until a permit for any changes desired is obtained or until all work is made to conform to the detailed statements, plans, specifications, etc., upon which the permit was issued.

If the owner or owners or his, her or their agents fail to comply with the notice upon service thereof, it shall be the further duty of the Building Inspector to revoke the permit forthwith. Notice that the permit is revoked shall be posted in a conspicuous place on the premises upon which violations of this Building and Housing Code exist, and no person shall perform any work in or about such portion of such structure or building as may constitute a violation or use or allow to be used any such portion of such structure for any purpose.

(Ord. 341. Passed 6-25-62.)

1335.10 FEE SCHEDULE.

The amount of money to be paid for building permits shall be determined by the Building Inspector under the terms of this chapter and shall be noted on the application when approved for the issuance of the permit. The fees shall be paid to the Building Inspector who shall give a receipt therefor and the permit shall be issued to the applicant. The moneys so collected shall be paid to the Clerk-Treasurer daily, and the Clerk-Treasurer shall issue to the Building Inspector the Village receipt for the same, and such moneys shall be credited to the Building Department Fund. The fees to be paid shall be as follows:

(a)	<u>Residential.</u>	
(1)	<u>New structures.</u>	
	A. House/attached garage	\$150.00 plus 10.00 per 100 square foot or fractional part thereof
	B. Electric	125.00 plus 1.50 per 100 square foot
	C. Plumbing	100.00 plus 1.50 per 100 square foot
	D. Heating	75.00
	E. Air conditioning	50.00
	F. Occupancy	25.00
(2)	<u>Alterations and/or additions.</u>	
	A. Building	50.00 plus 10.00 per 100 square foot or fractional part thereof
	B. Electric	75.00 plus 1.50 per 100 square foot or fractional part thereof
	C. Plumbing	75.00 plus 1.50 per 100 square foot or fractional part thereof
	D. Heating (additional)	50.00
	E. Air conditioning (additional)	50.00
	F. Mechanical system alt. (extension of ducting)	50.00
(Ord. 1787. Passed 11-26-01.)		
(3)	<u>Miscellaneous.</u>	
	A. Re-inspection each time (to be paid before occupancy)	35.00
	B. Outbuildings (garages, pole buildings)	100.00 for the first 400 square feet plus 5.00 per 100 square feet over 400 square feet or fractional part thereof
	C. Decks and sheds	25.00
	D. Fences	25.00

E.	Swimming pools	
1.	Above ground (includes electrical)	\$ 75.00
2.	In ground (includes electrical)	150.00
F.	Siding/roofing/windows (each with discretion) gutters/aluminum/vinyl trim	25.00
G.	Electrical service upgrade	75.00
H.	Drives	25.00
I.	Demolition	
1.	Applied for	50.00
2.	Citation	100.00
J.	Foundation/waterproof/tile	
1.	Wall one or more, fee per wall	35.00
2.	Connection at foundation	50.00
K.	Inspection of property grade and drainage	150.00
L.	Review of plot plan	600.00
		(toward hourly fees billed to Village)
	(Ord. 1986. Passed 10-25-04.)	
(b)	<u>Commercial/Industrial</u>	
(1)	<u>New, alterations and/or additions</u>	
A.	Application fee (to be applied if permit issued)	50.00
B.	Plans	
1.	New addition/alteration	250.00 plus 5.00 per 100 square feet or fractional part thereof
2.	Sprinkler	150.00 plus 2.00 per 100 square feet or fractional part thereof
3.	Hood	100.00
4.	Hood suppression	100.00
C.	Building	
1.	New	300.00 plus 10.00 per 100 square feet or fractional part thereof
2.	Alteration	100.00 plus 10.00 per 100 square feet or fractional part thereof
3.	Addition	150.00 plus 10.00 per 100 square feet or fractional part thereof

D.	Electrical (new/alteration/addition)	\$150.00 plus 5.75 per 100 square feet or fractional part thereof
1.	Temporary service	25.00
2.	Fire alarm	250.00 plus 5.00 per device
3.	Security alarm	250.00 plus 5.00 per device
E.	Plumbing (new/alteration/addition)	150.00 plus 4.50 per 100 square feet or fractional part thereof
F.	Heating (new/alteration/addition)	per unit 100.00
G.	Air conditioning (new/alteration/addition)	per unit 100.00
H.	Mechanical system alteration	75.00
1.	New	150.00 plus 5.75 per 100 square feet or fractional part thereof
2.	Alteration/addition	100.00 plus 1.50 per 100 square feet or fractional part thereof
I.	Sprinkler system	
1.	New	200.00 plus 5.00 per 100 square feet or fractional part thereof
2.	Alteration/addition	100.00 plus 1.50 per 100 square feet or fractional part thereof
(2)	<u>Miscellaneous.</u>	
A.	Re-plans examination	150.00
B.	Reinspection	75.00 each time (to be paid before occupancy)
C.	Greenhouses/farm buildings	50.00
D.	Site plans (grading/parking/ drainage/drives/drive pipes)	200.00
E.	Furnace/air conditioning/ water tank replacement	per unit 75.00
F.	Re-roof	50.00
G.	Fence	35.00

H.	Demolition	50.00
	1. Applied for	50.00
	2. Citation	100.00
I.	Electric service charge	75.00
J.	Fireplace	
	1. Masonry construction	50.00
	2. Manufactured type	35.00
K.	Commercial Exhaust Hoods/Fans	75.00 per hood plus plan review
L.	Replace hood/fan/duct	each 75.00
M.	Walk-in Refrigeration Coolers	each 75.00
N.	Commercial Hood Suppression	150.00 plus plan review

(Ord. 2502. Passed 7-27-15.)

(c) Other.

- (1) There shall be a twenty-five dollar (\$25.00) fee paid to the Village for inspections made with less than twenty-four hours notice.
- (2) There shall be a one-hundred-twenty-five dollar (\$125.00) registration fee for general contractors and a fifty dollar (\$50.00) registration fee for subcontractors.
- (3) There shall be a ten dollar (\$10.00) fee paid to the Village for a Zoning Permit.
- (4) There shall be a three hundred and fifty dollar (\$350.00) fee paid to the Village for a Rezoning Permit. (Ord. 1787. Passed 11-26-01.)

(d) Board of Zoning Appeals Hearing Fee. The Board of Zoning Appeals is hereby authorized to require a one hundred dollar (\$100.00) non-refundable application fee for all scheduled hearings requested by applicants for a hearing before said Board. (Ord. 1728. Passed 7-26-99.)

1335.11 PARK FEES.

There shall be established the following park fees for all residential, commercial and industrial zones to generate additional green space and for maintenance of such:

- (a) Residential - for each individual lot, a \$100.00 park fee will be paid into the Park Revenue Fund.
- (b) Residential subdivision - for each residential subdivision development, a \$200.00 per lot park fee will be paid into the Park Revenue Fund.
- (c) Commercial - for each commercial development, a \$1,000.00 per acre, or part thereof, fee will be paid into the Park Revenue Fund. (Sites totaling less than one acre will pay \$750.00).
- (d) Industrial - for each industrial development, a \$1,000.00 per acre, or part thereof, fee will be paid into the Park Revenue Fund. (Sites totaling less than one acre will pay \$750.00).

Fees paid into the Park Revenue Fund are to be paid, in full, prior to beginning work on site. Monies must be receipted-in, on or before receiving any building permits. (Ord. 1618. Passed 12-22-97.)

1335.12 REPORTS.

The Building Inspector shall make monthly and annual reports to the Mayor and to Council, such reports showing the fees received by such Building Inspector during the preceding month and the permits issued by him or her. (Ord. 228. Passed 4-8-57.)

1335.13 EXCEPTIONS.

(a) For the purpose of applying and enforcing the provisions of this Building Code, “farm,” “farms,” and “farm lands” are hereby defined to be land in excess of three acres in area devoted to agricultural purposes.

(b) The provisions of this Building Code, insofar as the same fix fees for permits or inspections, shall not apply to any agricultural buildings or structures, except dwellings or buildings used as such, located or hereafter erected on a farm, farms or farm lands, but before beginning the construction, remodeling or alteration of such buildings or structures, the owner, contractor or builder thereof shall first make application to the Building Inspector for the permit therefor, but no drawings or plans and no fee for a permit or inspection shall be required, except for drawings or buildings used as such, located or hereafter erected on such lands.

1335.14 PLAN INSPECTION FEES.

(a) Where existing ordinances require it, or where the provisions of the Ohio Basic Building Code, as adopted in Section 1301.01, are applicable, there shall be charged a fee for the inspection and processing of plans by the Village Plan Examiner as set forth in Section 1335.10(b)(1)B. (Adopting Ordinance)

(b) The fee for preliminary plan evaluations, or for the special evaluation of products and materials for the purpose of determining conditions of acceptability for compliance with these Codified Ordinances and the Ohio Basic Building Code, shall be forty dollars (\$40.00) per hour.

(c) The fee for each special inspection of the Village Plan Examiner, other than those required in subsection (a) hereof, shall be eighty dollars (\$80.00) per inspection. Requests for special inspections shall be in writing and delivered to the Village Plan Examiner, and the fee shall be paid prior to the inspection. (Ord. 1061. Passed 12-12-88.)

(d) Construction of single family residences must be complete and ready for occupancy within 1 year from the issuance of the building permits. Failure to complete construction within the 1 year time allotted to do so, may subject the contractor to a penalty of \$100.00 per day for each working day over the allotted 1 year time allowance. (Ord. 1782. Passed 9-25-00.)

1335.15 SIGN PERMIT APPLICATION AND FEES.

Application for the permit required by Chapter 1165 shall be made on forms furnished by the Clerk-Treasurer and the fee for such permit shall be:

- (a) Nonelectric signs or illuminated signs, not including electric signs, twenty-five dollars (\$25.00) per sign plus one dollar (\$1.00) per square foot for each side on which a sign is displayed, with a minimum fee of twenty-five dollars (\$25.00).
- (b) Electric signs, fifty dollars (\$50.00) per sign plus five dollars (\$5.00) per square foot for each side on which a sign is displayed, with a minimum fee of fifty dollars (\$50.00). (Ord. 1759. Passed 12-13-99.)

1335.99 PENALTY.

(EDITOR’S NOTE: See Section 1331.99 for general Building Code penalty if no specific penalty is provided.)

CHAPTER 1339
Subdivisions

1339.01 Deposit of fees.

1339.01 DEPOSIT OF FEES.

(a) Deposit of Funds for Residential Development. At the time of filing a plat, plan or application pursuant to the provisions of the Planning and Zoning Code, the developer-subdivider shall deposit with the Clerk-Treasurer the amounts specified in Schedule 1339.01 (a) below. Such funds shall be used to defray the costs incurred by the Village in reviewing the plat, for engineering and legal services and for other services and expenditures required by the provisions of these Subdivision Regulations and the Village Engineer and Law Director are hereby authorized to provide said services. The fees so deposited shall be used to pay the Village Engineer and the Law Director for his or her services in reviewing the plans pursuant to the charges contained in his or her contract with the Village and other costs. In the event that the amount of the deposit is less than the amount incurred by the Village, then the developer-subdivider shall pay to the Clerk-Treasurer the excess of the charge over the amount deposited, when billed, and in any event before the final plat is approved.

SCHEDULE 1339.01(a)

Deposits of Funds for Residential Plat or Plan Review & Assessments

Document Review, Engineering, Legal and Other Costs	Amount
(1) Preliminary Plat	\$750.00 plus \$10.00 per lot
(2) Final plat/construction plans*	\$1,300.00 plus \$50.00 per lot
NOTES TO SCHEDULE 1339.01(a) * Includes streets, subdivision grading, storm drainage facilities, water supply facilities, and sanitary sewerage facilities.	

(b) Deposit of Funds for Non-residential Development. For non-residential developments, the fees specified in Schedule 1339.01(b) shall be deposited with the Clerk-Treasurer. Such funds shall be used to defray the costs incurred by the Village in reviewing the plans, for engineering and legal services and for other services and expenditures required by the provisions of these Subdivision Regulations and the Village Engineer and Law Director are hereby authorized to provide said services. The fees so deposited shall be used to pay the Village Engineer and Law Director for is or her services in reviewing the plans pursuant to the charges contained in his or her contract with the Village and other costs. In the event that the amount of the deposit is less than the amount incurred by the Village, then the developer shall pay to the Clerk-Treasurer the excess of the charge over the amount deposited, when billed, and in any event before the final plans are approved.

SCHEDULE 1339.01(b)

Deposits of Funds for Non-Residential Development Plan Review & Assessments

Document Review, Engineering, Legal and Other Costs	Base Amount
(1) Site plan	\$1,000.00
(2) Construction plans*	\$1,500.00
NOTES TO SCHEDULE 1339.01(b) * Includes streets, subdivision grading, storm drainage facilities, water supply facilities, and sanitary sewage facilities.	

(c) Deposit of Funds for Individual Residential Lot Development. At the time of filing an application for an individual residential building permit pursuant to the provisions of the Building Code, the developer/property owner shall deposit with the Clerk-Treasurer the amount shown in Schedule 1339.01(c) for the purpose of defraying the costs incurred by the Village in reviewing the residential plot plan, for engineering and legal services and for other services and expenditures required by the provisions of these Building and Housing Regulations and the Village Engineer and Law Director are hereby authorized to provide said services. The fees so deposited shall be used to pay the Village Engineer and Law Director for his or her services in reviewing the plan or plans pursuant to the charges contained in his or her contract with the Village and other costs. In the event that the amount of the deposit is less than the amount incurred by the Village, then the developer/property owner shall pay to the Clerk-Treasurer the excess of the charge over the amount deposited, when billed, and in any event before the site plan is issued.

SCHEDULE 1339.01(c)

Deposits of Funds for Individual Residential Lot Plan Review & Assessments

Document Review, Engineering, Legal and Other Costs	Base Amount
(1) Site Plan	\$300.00
(2) Construction plans*	\$300.00
NOTES TO SCHEDULE 1339.01(c) * Includes streets, subdivision grading, storm drainage facilities, water supply facilities, and sanitary sewage facilities.	

(d) Deposit of Funds for Any Other Development or Subdivision of Real Estate. At the time of filing an application for a permit for any other development or subdivision of real estate, the developer/property owner shall deposit with the Clerk-Treasurer the amount shown in Schedule 1339.01(d) for the purpose of defraying the costs incurred by the Village in reviewing the residential plot plan, for engineering and legal services and for other services and expenditures required by the provisions of these Building and Housing Regulations and the Village Engineer and Law Director are hereby authorized to provide said services. The fees so deposited shall be used to pay the Village Engineer and Law Director for his or her services in reviewing the plan or plans pursuant to the charges contained in his or her contract with the Village and other costs. In the event that the amount of the deposit is less than the amount incurred by the Village, then the developer/property owner shall pay to the Clerk-Treasurer the excess of the charge over the amount deposited, when billed, and in any event before the occupancy permit is issued.

SCHEDULE 1339.01(d)
Deposits of Funds for Any other Development or Subdivision
of Real Estate Review & Assessments

Document Review, Engineering, Legal and Other Costs	Base Amount
(1) Site plan	\$500.00
(2) Construction plans*	\$500.00
NOTES TO SCHEDULE 1339.01(d) * Includes streets, subdivision grading, storm drainage facilities, water supply facilities, and sanitary sewage facilities.	

(e) Deposit of Funds for Work to Be Performed in the Public Right-of-way. Prior to any work being performed in the public right-of-way the developer must have written permission from the Village Administrator, who has the authority to direct the Village Engineer to perform inspections pursuant to the terms of the Village Engineer's contract. At the time of requesting written permission to work within the public right-of-way, the developer/property owner shall deposit with the Clerk-Treasurer the amount shown in Schedule 1339.01(e) below for purposes of deferring the costs incurred by the Village and having the Village Engineer perform inspections of the work being performed in the public right-of-way. In the event that the amount of deposit is less than the amount incurred by the Village, then the developer/property owner shall pay the Clerk-Treasurer the excess of the charge over the amount deposited, when billed, and in any event before the final inspection approving the work in the right-of-way is given by the Village Engineer.

SCHEDULE 1339.01(e)
Deposits of Funds for Work to be Performed in the Public Right-of-Way
Review and Assessments

Document Review, Engineering, Legal and Other Costs	Base Amount
(1) Site plan	\$500.00
(2) Construction plans*	\$500.00
NOTES TO SCHEDULE 1339.01(e) * Includes streets, subdivision grading, storm drainage facilities, water supply facilities, and sanitary sewage facilities.	

(Ord. 2287. Passed 9-12-11.)

TITLE FIVE - Building Standards

- Chap. 1343. Height and Area Regulations.
- Chap. 1345. House Numbering.
- Chap. 1347. Materials and Construction.
- Chap. 1349. Unsafe Buildings.
- Chap. 1351. Exterior Maintenance Code.
- Chap. 1353. Flood Damage Reduction.

**CHAPTER 1343
Height and Area Regulations**

1343.01 Schedule of regulations.

CROSS REFERENCES

- Residential districts - see P. & Z. 1137.03 et seq.
- Commercial districts - see P. & Z. 1145.03 et seq.
- Industrial districts - see P. & Z. 1149.03 et seq.

1343.01 SCHEDULE OF REGULATIONS.

(a) In any district, the maximum height of buildings or structures, the minimum dimensions of yards, courts and other open spaces, and the area of lot requirement per family housed thereon, shall be as set forth in the Sheffield Village Planning and Zoning Code.

(b) All buildings constructed for human habitation shall contain the following minimum square feet. The area of the basement or garage shall not be considered floor space for the purpose of this section:

One-story dwelling	1,600 square feet
One and one-half story dwelling	1,200 square feet
Two-story dwelling or colonial with attached garage	1,600 square feet
Split-level dwelling	1,200 square feet
All other dwellings	1,200 square feet

All two-story buildings with unattached garage shall have a minimum of 1,200 square feet on the first floor.
(Ord. 807. Passed 7-23-79.)

(c) Minimum requirements as set forth in subsection (b) hereof shall be met for each unit of a two-family or multiple dwelling, except as provided in subsection (d) hereof. (Ord. 633. Passed 3-19-73.)

(d) In an M-1 Multi-Family District, there shall be the following minimum floor areas of living space:

- | | | |
|-----|------------------------|-------------------|
| (1) | One bedroom dwelling | 800 square feet |
| (2) | Two-bedroom dwelling | 1,000 square feet |
| (3) | Three-bedroom dwelling | 1,200 square feet |
| (4) | Four-bedroom dwelling | 1,350 square feet |
- (Ord. 933. Passed 1-9-84.)

(e) In all districts, the minimum floor space requirement shall be all on the first floor, except as follows:

- (1) In split-level homes, floor space area shall be considered to be foundation area; and
 - (2) In two-family or duplex dwellings, the second floor may be considered, in addition to the first floor, to be floor space area, provided that the ceilings are a minimum height of seven feet, six inches.
- (Ord. 633. Passed 3-19-73.)

**CHAPTER 1345
House Numbering**

- | | |
|---|---|
| <p>1345.01 Conformity with grid system required.</p> <p>1345.02 Assignment of numbers; notice; compliance.</p> <p>1345.03 Display of numbers; digit size and material.</p> | <p>1345.04 Removal and defacing of numbers; compliance.</p> <p>1345.99 Penalty.</p> |
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1345.01 CONFORMITY WITH GRID SYSTEM REQUIRED.

All houses and commercial buildings on all public streets and highways in the Village shall be numbered in accordance with a fixed grid system to be prepared by the Service Department as hereinafter set forth.

1345.02 ASSIGNMENT OF NUMBERS; NOTICE; COMPLIANCE.

The Service Department is hereby authorized and directed to prepare a suitable numbering map of the Village and to assign numbers to all present houses and commercial buildings in accordance with Section 1345.01 and it shall be his or her duty to keep an accurate record of such numbering.

Upon assignment of such number, the Building Inspector shall send a notice by ordinary mail to the owner or occupant of the house or building notifying him or her of the assignment of the number and of his or her duties under Sections 1345.03 and 1345.04.

Any person erecting a house or commercial building in the Village shall, upon making application for a building permit to the Building Inspector, be assigned a number for such house or commercial building and such number assigned by the Building Inspector shall be entered upon his or her record.

All public streets and highways in the Village hereafter dedicated and accepted shall be numbered in accordance with the fixed grid system insofar as is practicable.

1345.03 DISPLAY OF NUMBERS; DIGIT SIZE AND MATERIAL.

Within thirty days after notice of assignment of a number as provided in Section 1345.02, every owner or occupant of any house or commercial building in the Village shall display on the front thereof, and in such manner as to be conspicuous from the street, the assigned number, digits of which shall be not less than three inches in height and one and three quarters inches in width, constructed of such material that they shall be durable and remain bright and conspicuous. (Ord. 240. Passed 1-27-58.)

1345.04 REMOVAL AND DEFACING OF NUMBERS; COMPLIANCE.

No person shall take down or deface any number put up in accordance with this chapter or retain or make use of any number other than the one provided for by this chapter. No owner or occupant shall refuse or neglect to number his or her house or commercial building in accordance with this chapter.
(Ord. 240. Passed 1-27-58.)

1345.99 PENALTY.

(EDITOR'S NOTE: See Section 1331.99 for general Building and Housing Code penalty if no specific penalty is provided.)

CHAPTER 1347
Materials and Construction (Repealed)

EDITOR'S NOTE: Former Chapter 1347 was repealed by Ordinance 2498, passed July 27, 2015.

NOTE: The next printed page is page 37.

CHAPTER 1349
Unsafe Buildings

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|---|---|
| <p>1349.01 Definitions.</p> <p>1349.02 Determination of unsafe building and/or public nuisance; notice to repair or demolish unsafe building or public nuisance; emergency situation.</p> <p>1349.03 Notice to vacate building; notice requirements.</p> | <p>1349.04 Repairs, plans, specifications and permits.</p> <p>1349.05 Appeals; Board of Zoning Appeals.</p> <p>1349.06 Noncompliance; remedy of Village.</p> <p>1349.07 Notification of utilities.</p> <p>1349.99 Penalty.</p> |
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CROSS REFERENCES

Removal of unsafe structures - see Ohio R.C. 715.26 et seq.

1349.01 DEFINITIONS.

As used in this chapter:

- (a) "Owner" means the owner of record of any premises in fee or a lesser estate therein, a mortgagee or vendee in possession, and assignee of the rents, a receiver, an executor, an administrator, a trustee, a lessee, a tenant or any other person in control of a building or his, her, or its duly authorized agents. Any person representing the owner shall be bound to comply with the provisions of this chapter to the same extent as if he or she were the owner.
- (b) "Public Nuisance" means any fence, wall, garage, shed, house, building, structure, tree, pole, smokestack, excavation, basement, cellar, well, cistern or sidewalk subspace, or part thereof, which by reason of the condition in which the same is permitted to be or remain, may endanger the health, life, limb or property of, or cause any hurt, harm, inconvenience, discomfort, damage or injury to, any one or more persons in the Village in any one or more of the following particulars:
- (1) By reason of being detrimental to the general health of the community;
 - (2) By reason of being a fire hazard;
 - (3) By reason of being unsafe for occupancy or use on, in, upon, about or around such premises; or
 - (4) By reason of continued vacancy, thereby resulting in lack of reasonably or adequate maintenance of structures and grounds and causing deterioration and a blighting influence on nearby properties, thereby depreciating the enjoyment and use of properties in the immediate vicinity to such an extent that it is harmful to the community..

- (c) As used in this chapter, "unsafe building" means any building or structure that:
- (1) Is structurally unsafe, unsound, or insecure;
 - (2) Is not provided with adequate means of ingress or egress;
 - (3) Constitutes a fire hazard;
 - (4) Is dangerous to human life or limb; or
 - (5) Is a hazard to human safety or health by reason of being dilapidated, abandoned or inadequately repaired and maintained.
- (d) All such buildings and structures are hereby declared to be public nuisances and shall be abated by repair or demolition. (Ord. 2070. Passed 7-10-06.)

1349.02 DETERMINATION OF UNSAFE BUILDING AND/OR PUBLIC NUISANCE; NOTICE TO REPAIR OR DEMOLISH UNSAFE BUILDING OR PUBLIC NUISANCE; EMERGENCY SITUATION.

(a) Whenever the Building Inspector suspects the existence of an unsafe building and/or public nuisance, he or she shall promptly cause it to be inspected. Should the Inspector find that an unsafe building or public nuisance does exist, he or she shall promptly notify the Fire Chief or his or her duly authorized agents. The Fire Chief shall cause to be inspected such unsafe building and/or public nuisance. Written reports of such inspection and of the findings of the Fire Chief with respect to the existence of the unsafe building and/or public nuisance shall be filed with the Inspector.

(b) Should both the Inspector and the Fire Chief or their duly authorized agents concur that an unsafe building and/or public nuisance exists, the Inspector shall cause photographs of such nuisance to be made and shall file and keep in his or her office the written reports of the findings of the aforesaid officials. The Inspector shall serve a written notice upon the owner of the building or structure or public nuisance, either by personally giving the notice to the owner or by mailing it to the owner by certified mail addressed to the owner at his last known address or to the address to which tax bills are sent, stating that the building or structure is unsafe and listing the repairs or alterations which must be made in order to make it safe. The notice shall require the owner either to complete the specified repairs and alterations, within ninety (90) days of the date of the notice, or to demolish and remove the building or structure within one hundred and five (105) days of the date of the notice.

(c) In the event of an emergency situation compelling immediate action to protect the public health and safety, the Building Inspector may order the repairs and alterations or demolition completed within a shorter time. The Building Inspector shall have the authority to determine what constitutes such an emergency.

(d) Any Owner receiving a notice pursuant to this section may request and shall be granted a hearing as to whether an unsafe building and/or public nuisance exists and as to any other matter covered in such notice, in accordance with the provisions of Codified Ordinance Section 1349.05 hereof. (Ord. 2070. Passed 7-10-06.)

1349.03 NOTICE TO VACATE BUILDING; NOTICE REQUIREMENTS

(a) The notice required in Section 1478.02 may also require that the building or structure be vacated by a certain date and not reoccupied until the specified repairs and alterations are completed and approved by the Building Inspector. The notice to vacate the building or structure shall be served by the Building Inspector upon any persons living in or using the property and shall specify the date by which the building or structure is to be vacated. After giving such notice, no person shall use or occupy the building or structure or any portion thereof until the provisions of this chapter and the orders of the Building Inspector have been complied with.

(b) For purposes of this Chapter, notice shall be served either personally or by leaving a copy at the usual place of residence, if such place of residence is outside of the County, by United States certified mail with return receipt requested. If service of such written notice is not performed by any of the hereinbefore described methods, then the Building Inspector shall cause such notice to be published in a newspaper of general circulation in the Village, once each week for two consecutive weeks, and shall further cause a copy of the aforesaid notice to be left with the person, if any, in possession of the premises in which it is alleged such public nuisance exists, or if there is no person in possession thereof, he or she shall cause a copy of the notice to be posted on such premises. The Inspector shall cause a return of service in the form of an affidavit to be made by the person who served it, which affidavit shall set forth the name and address of the person served, the manner of service and the date thereof. (Ord. 2070. Passed 7-10-06.)

1349.04 REPAIRS, PLANS, SPECIFICATIONS AND PERMITS.

(a) Upon being served notice, the owner may make immediate application in writing or in person to the Building Inspector for a special building permit to undertake the repairs or replacement of items found to constitute a public nuisance.

(b) Adequate plans and specifications, as required by the Inspector covering such repairs or replacements, shall be furnished by such owner to the Inspector within fifteen days after receipt of notice, or within such additional time as the Inspector deems necessary to complete plans and specifications, not, however, to exceed ninety days.

(c) The Inspector shall, upon approval of such plans and specifications, cause a special building permit to be issued to the owner. The special building permit issued by the Inspector shall be for a period of thirty days, and within such thirty days the owner shall effect and complete such repairs and/or replacements, or the Inspector may grant an extension to the permit if the owner shows reason or cause for the requested extension which will more readily effect such repairs and/or replacements. (Ord. 585. Passed 3-8-71.)

(d) When it appears to the Building Inspector that the building or structure is safe and that the requirements of the notice prescribed in Section 1349.02 have been complied with, he shall issue a certificate that the building is safe, and if a notice to vacate has been issued, he shall recall the notice and allow the building or structure to be used. (Ord. 2070. Passed 7-10-06.)

1349.05 APPEALS; BOARD OF ZONING APPEALS.

The owner may, within ten days after completion of service of notice, make a demand in writing to the Building Inspector for a hearing on the question of whether in fact a public nuisance exists. The hearing shall be held within ten days following receipt of such written demand, and at least two days notice in writing of such hearing shall be given to such owner. The hearing shall be conducted by the Board of Zoning Appeals. All members of the Board must concur that a public nuisance exists before enforcement of abatement is carried out. A copy of the decision of such Board shall be promptly served upon the owner in the manner provided for in Section 1349.03. (Ord. 585. Passed 3-8-71.)

1349.06 NONCOMPLIANCE; REMEDY OF VILLAGE.

(a) If an unsafe building or a public nuisance is not abated within the period set forth in the notice and as required by this Chapter or within the period set forth in the special building permit issued by the Building Inspector, or within such additional time as the Board Of Zoning Appeals may grant, the Inspector shall be authorized, at any time thereafter, to enter upon such premises and abate the unsafe building and/or public nuisance by demolition and removal of the building or structure or by taking any such action as may be required. No Owner shall refuse entry to the Inspector.

(b) In abating such unsafe building or public nuisance, the Inspector may call upon any department, division or bureau of the Village for whatever assistance may be necessary or may, by private contract, obtain the abatement thereof, and the cost of such private contract shall be paid for from funds specifically authorized by Council in order to abate such unsafe buildings and/or nuisances.

(c) In abating such unsafe building or public nuisance, the Inspector may go to whatever extent necessary to complete the abatement of the same, and the cost of the abatement shall be recovered from the Owner by the following procedure:

- (1) The Owner shall be billed directly by certified mail for the cost of the abatement; the bill for the cost of the abatement shall be paid within sixty days after receipt of the bill.
- (2) If costs are not recovered, then the Village shall cause the cost of the abatement to be levied as an assessment and recovered in accordance with Ohio Revised Code 715.261. The cost of the abatement (repairs or demolition) shall be certified by the Village Clerk/Treasurer to the Lorain County Auditor, and the cost shall be a lien upon the property and shall be collected as other taxes. (Ord. 2070. Passed 7-10-06.)

1349.07 NOTIFICATION OF UTILITIES.

Before a building can be demolished or removed, the owner shall notify all utilities having service connections within the building. A permit to demolish or remove a building shall not be issued until a release is obtained from the utilities stating that their respective service connections and appurtenant equipment, such as meters and regulators, have been removed or sealed and plugged in a safe manner.

(Ord. 585. Passed 3-8-71.)

1349.99 PENALTY.

(EDITOR'S NOTE: See Section 1331.99 for general Building and Housing Code penalty if no specific penalty is provided.)

CHAPTER 1351
Exterior Maintenance Code

1351.01	Definitions.	1351.04	Application of other laws.
1351.02	Appearance of exterior of premises and structures.	1351.05	Responsibility for compliance.
1351.03	Enforcement; authority of Zoning Administrator; notice of violations; corrections.	1351.99	Penalty.

CROSS REFERENCES

Ohio Building Code - see BLDG. Ch. 1301
OBOA Dwelling Code - see BLDG. Ch. 1305

1351.01 DEFINITIONS.

As used in this chapter:

- (a) "Accessory structure" means a structure on the same lot with and of a nature customarily incidental and subordinate to the principal structure.
- (b) "Building" means a structure that is permanently affixed to the land, having one or more floors and a roof, being bounded either by open spaces or lot lines, and which is used as a shelter or enclosure for persons, animals and/or property. This term shall be used synonymously with "structure" unless otherwise noted, and shall be construed as if followed by the words "parts or parts thereof".
- (c) "Deterioration" means the conditions or appearance of a building or part thereof, characterized by holes, breaks, rot, crumbling, cracking, peeling, rusting or other evidence of physical decay, neglect or lack of maintenance.
- (d) "Dwelling" means a structure designed for occupancy as a residence by one or more families, each living independently in a separate dwelling unit.
- (e) "Exposed to public view" means any premises or any part thereof, or any building or any part thereof, which may be viewed by the public, or any member thereof from a sidewalk, street, alleyway. Or open air parking lot, or from the area of any adjoining or neighboring premises normally used as part of the habitable portion of such premises.
- (f) "Exterior of the premises" means those portions of a building that are exposed to public view and the open space of any premises outside of any building erected thereon.

- (g) "Immediate neighborhood" means an area separated by no appreciable space and specifically denoting a limited number of properties in a very close space relationship to each other, such as properties located within the same block.
- (h) "Infestation" means the presence of insects, rodents, vermin or other pests on the premises that constitute a health hazard.
- (i) "Naturally wooded area" means an area of a yard which has been or is trying to be returned to its natural state as part of a landscaping plan to be approved by the Zoning Administrator.
(Ord. 1916. Passed 5-12-03.)

1351.02 APPEARANCE OF EXTERIOR OF PREMISES AND STRUCTURES.

(a) Residential. The exterior of the premises, the exterior of dwelling structures and the condition of accessory structures shall be maintained so that the appearance of the premises and all building thereon shall reflect a level of maintenance in keeping with the residential standards of the immediate neighborhood so that the appearance of the premises and structures shall not constitute a blighting factor for the adjoining property owners nor an element leading to the progressive deterioration and downgrading of the immediate neighborhood with the accompanying diminution of property values, including the following:

- (1) Storage of commercial and industrial materials and equipment. There shall not be stored for more than thirty days equipment and materials relating to commercial or industrial uses, unless permitted under Chapter 521.
(Ord. 1916. Passed 5-12-03.)
- (2) Landscaping. Premises shall be maintained. Lawns, hedges and bushes shall be kept from becoming overgrown and unsightly (i.e., covering windows, choking out other plants, untrimmed, etc.) where exposed to public view and where the same constitute a blighting factor depreciating adjoining property and impairing the good residential character of the immediate neighborhood. Grass shall not be let to grow higher than twelve inches. The height of grass does not apply to a naturally wooded area.
(Ord. 2249. Passed 10-11-10.)
- (3) General maintenance. The exterior of every structure or accessory structure, including fences, shall be maintained in good repair, and all surfaces thereon shall be kept painted where necessary for the purpose of preservation and appearance, or surface coated with a protective coating or treated to prevent rot and decay. The same shall be maintained free of broken windows, crumbling stone or brick, peeling paint or other condition reflective of deterioration or inadequate maintenance to the end that the property itself may be preserved, safety and fire hazards eliminated and adjoining properties and the immediate neighborhood protected from blighting influences. All parts of all premises shall be maintained so as to prevent infestation.

(b) Nonresidential. The exterior of the premises and the condition of accessory structures shall be maintained so that the appearance of the premises and all building thereon shall reflect a level of maintenance in keeping with the standards of the immediate neighborhood so that the appearance of the premises and structures shall not constitute a blighting factor for adjoining property owners nor an element leading to the progressive deterioration and downgrading of the immediate neighborhood with the accompanying diminution of property values, including the following: (Ord. 1916. Passed 5-12-03.)

- (1) Landscaping. Premises shall be maintained. Lawns, hedges and bushes shall be kept from becoming overgrown and unsightly (choking other plants, covering windows, dead branches, trash and papers in and around plantings, etc.) where exposed to public view and where the same constitute a blighting factor depreciating adjoining property. Grass shall not be let to grow higher than twelve inches. (Ord. 2249. Passed 10-11-10.)
- (2) Business fronts. All business fronts shall be kept in good repair, painted where required, and not constitute a safety hazard or nuisance. In the event repairs to a business front become necessary, such repairs shall be made with the same or similar materials used in the construction of the business front in such a manner as to permanently repair the damage area or areas.
- (3) Maintenance of signs and billboards. See Sheffield Village Codified Ordinance Section 1165.09.
- (4) Awnings and marquees. Any awning or marquee and its accompanying structural members which extend over any street, sidewalk or other portion of any premises shall be maintained in good repair and shall not constitute a nuisance or safety hazard. In the event such an awning or marquee is not properly maintained in accordance with this paragraph, it shall, together with its supporting members, be removed forthwith. In the event such awnings or marquees are made of cloth, plastic or similar materials, such cloth and plastic, where exposed to public view shall be maintained in good condition and shall not show evidence of weathering, discoloration, ripping, tearing or other holes. Nothing herein shall be construed to authorize an encroachment in streets, sidewalks or other parts of the public domain.
- (5) All parts of all premises shall be maintained so as to prevent infestation. (Ord. 1916. Passed 5-12-03.)

(c) Foreclosed Property. In addition to all other provisions of this Chapter 1351, if the owner or person having charge of any premises within the Village, whether residential or non-residential, which is in foreclosure, fails to comply with any notice provided for herein or fails to prohibit the existence of such public nuisance, the Village shall have the authority to take whatever action is necessary to correct the violation, including, but not limited to, enter upon any public or private property and contracting for or otherwise furnishing labor and materials necessary to correct the violation. The work the Village will do or have done is limited to minor exterior non-structural repairs. All such expenses and costs shall be paid out of Village funds appropriated therefor, and the Village shall thereafter report such expenses to the County Auditor and such amounts shall thereupon be entered upon the tax duplicate and be a lien upon such lands from and after the date of the entry thereon and shall be collected as other taxes and returned to the Village when so collected. (Ord. 2372. Passed 2-25-13.)

1351.03 ENFORCEMENT; AUTHORITY OF ZONING ADMINISTRATOR; NOTICE OF VIOLATIONS; CORRECTIONS.

The Zoning Administrator shall be the Property Maintenance Officer and shall examine or cause to be examined any building, structure or portion thereof reported to be in violation of this chapter, and if the same is found to be in violation of this chapter, the Zoning Administrator shall give to the owner of such building or structure written notice stating the action to be taken and the reasons for the same. The notice for landscaping violations shall require the owner of the property to correct the violation within five (5) days. The notice, for all violations other than landscaping, shall require the owner, within thirty (30) days, to contract for or begin repairs or improvements. Repairs or improvements shall be completed within an additional thirty days. The Zoning Administrator shall, with good cause shown, extend the time for completion. The time extension shall not exceed one year. (Ord. 2249. Passed 10-11-10.)

1351.04 APPLICATION OF OTHER LAWS.

This chapter is to be read in conjunction with Section 521.15 and Section 1113.03 of the Codified Ordinances of the Village of Sheffield and other provisions of the Building and Housing Code of the Village of Sheffield.

(Ord. 1916. Passed 5-12-03.)

1351.05 RESPONSIBILITY FOR COMPLIANCE.

The owner, agent, operator, firm or corporation having a legal or equitable interest in the property, and as recorded in the official records of the State, County or Municipality as holding title to the property, including the guardian of the estate of such person, if ordered to take possession or manage the real property by a court, shall be responsible for compliance with all the provisions of this chapter, except where the responsibility therefor is specifically placed elsewhere.

(Ord. 1916. Passed 5-12-03.)

1351.99 PENALTY.

Whoever violates any of the provisions of this chapter shall be fined not more than one hundred dollars (\$100.00) for a first violation. For a second or subsequent violation such person is shall be fined not more than five hundred dollars (\$500.00).

(Ord. 1916. Passed 5-12-03.)

**CHAPTER 1353
Flood Damage Reduction**

1353.01	General provisions.	1353.04	Use and development standards for flood hazard reduction.
1353.02	Definitions.	1353.05	Appeals and variances.
1353.03	Administration.	1353.06	Enforcement.

CROSS REFERENCES

Floodplain Overlay District - see P. & Z. Ch. 1169

1353.01 GENERAL PROVISIONS.

(a) Statutory Authorization. Article XVIII, Section 3, of the Ohio Constitution grants municipalities the legal authority to adopt land use and control measures for promoting the health, safety, and general welfare of its citizens. Therefore, the Council of Village of Sheffield, State of Ohio, does ordain as follows.

(b) Findings of Fact. The Village of Sheffield has special flood hazard areas that are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base. Additionally, structures that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss. In order to minimize the threat of such damages and to achieve the purposes hereinafter set forth, these regulations are adopted.

(c) Statement of Purpose. It is the purpose of these regulations to promote the public health, safety and general welfare, and to:

- (1) Protect human life and health;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;

- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (6) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to protect property and minimize future flood blight areas;
- (7) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions;
- (8) Minimize the impact of development on adjacent properties within and near flood prone areas;
- (9) Ensure that the flood storage and conveyance functions of the floodplain are maintained;
- (10) Minimize the impact of development on the natural, beneficial values of the floodplain;
- (11) Prevent floodplain uses that are either hazardous or environmentally incompatible; and
- (12) Meet community participation requirements of the National Flood Insurance Program.

(d) Methods of Reducing Flood Loss. In order to accomplish its purposes, these regulations include methods and provisions for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities;
- (2) Requiring that uses vulnerable to floods, including facilities, which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- (4) Controlling filling, grading, dredging, excavating, and other development which may increase flood damage; and,
- (5) Preventing or regulating the construction of flood barriers, which will unnaturally divert flood, waters or which may increase flood hazards in other areas.

(e) Lands to Which These Regulations Apply. These regulations shall apply to all areas of special flood hazard within the jurisdiction of the Village of Sheffield as identified in subsection (f) hereof, including any additional areas of special flood hazard annexed by Village of Sheffield.

(f) Basis for Establishing the Areas of Special Flood Hazard. For the purposes of these regulations, the following studies and/or maps are adopted:

- (1) Flood Insurance Study Lorain County, Ohio and Incorporated Areas and Flood Insurance Rate Map Lorain County, Ohio and Incorporated Areas both effective August 19, 2008.

- (2) Other studies and/or maps, which may be relied upon for establishment of the flood protection elevation, delineation of the 100-year floodplain, floodways or delineation of other areas of special flood hazard.
- (3) Any hydrologic and hydraulic engineering analysis authored by a registered Professional Engineer in the State of Ohio which has been approved by the Village of Sheffield as required by Section 1353.04(c), Subdivisions and Large Scale Developments.

Any revisions to the aforementioned maps and/or studies are hereby adopted by reference and declared to be a part of these regulations. Such maps and/or studies are on file at the 4820 Detroit Road and/or 4480 Colorado Avenue Sheffield, Ohio.

(g) Abrogation and Greater Restrictions. These regulations are not intended to repeal any existing ordinances (resolutions) including subdivision regulations, zoning or building codes. In the event of a conflict between these regulations and any other ordinance (resolution), the more restrictive shall be followed. These regulations shall not impair any deed restriction covenant or easement but the land subject to such interests shall also be governed by the regulations.

(h) Interpretation. In the interpretation and application of these regulations, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and,
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes. Where a provision of these regulations may be in conflict with a state or Federal law, such state or Federal law shall take precedence over these regulations.

(i) Warning and Disclaimer of Liability. The degree of flood protection required by these regulations is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man made or natural causes. These regulations do not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damage. These regulations shall not create liability on the part of the Village of Sheffield, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damage that results from reliance on these regulations or any administrative decision lawfully made thereunder.

(j) Severability. Should any section or provision of these regulations be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole, or any part thereof other than the part so declared to be unconstitutional or invalid. (Ord. 2136. Passed 6-9-08.)

1353.02 DEFINITIONS.

Unless specifically defined below, words or phrases used in these regulations shall be interpreted so as to give them the meaning they have in common usage and to give these regulations the most reasonable application.

- (a) Accessory Structure: A structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal structure.
- (b) Appeal: A request for review of the floodplain administrator's interpretation of any provision of these regulations or a request for a variance.
- (c) Base Flood: The flood having a one percent chance of being equaled or exceeded in any given year. The base flood may also be referred to as the 1% chance annual flood or one hundred (100) year flood.
- (d) Base (100-Year) Flood Elevation (BFE): The water surface elevation of the base flood in relation to a specified datum, usually the National Geodetic Vertical Datum of 1929 or the North American Vertical Datum of 1988, and usually expressed in Feet Mean Sea Level (MSL). In Zone AO areas, the base flood elevation is the natural grade elevation plus the depth number (from 1 to 3 feet).
- (e) Basement: Any area of the building having its floor subgrade (below ground level) on all sides.
- (f) Development: Any manmade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.
- (g) Enclosure Below the Lowest Floor: See "Lowest Floor."
- (h) Executive Order 11988 (Floodplain Management): Issued by President Carter in 1977, this order requires that no federally assisted activities be conducted in or have the potential to affect identified special flood hazard areas, unless there is no practicable alternative.
- (i) Federal Emergency Management Agency (FEMA): The agency with the overall responsibility for administering the National Flood Insurance Program.
- (j) Fill: A deposit of earth material placed by artificial means.
- (k) Flood or Flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - (1) The overflow of inland or tidal waters, and/or
 - (2) The unusual and rapid accumulation or runoff of surface waters from any source.
- (l) Flood Hazard Boundary Map (FHBM): Usually the initial map, produced by the Federal Emergency Management Agency, or U.S. Department of Housing and Urban Development, for a community depicting approximate special flood hazard areas.
- (m) Flood Insurance Rate Map (FIRM): An official map on which the Federal Emergency Management Agency or the U.S. Department of Housing and Urban Development has delineated the areas of special flood hazard.
- (n) Flood Insurance Risk Zones: Zone designations on FHBM's and FIRM's that indicate the magnitude of the flood hazard in specific areas of a community. Following are the zone definitions:
 - (1) Zone A: Special flood hazard areas inundated by the 100-year flood; base flood elevations are not determined.

- (2) Zones A1-30 and Zone AE: Special flood hazard areas inundated by the 100-year flood; base flood elevations are determined.
 - (3) Zone AO: Special flood hazard areas inundated by the 100-year flood; with flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths are determined.
 - (4) Zone AH: Special flood hazard areas inundated by the 100-year flood; flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations are determined.
 - (5) Zone A99: Special flood hazard areas inundated by the 100-year flood to be protected from the 100-year flood by a Federal flood protection system under construction; no base flood elevations are determined.
 - (6) Zone B and Zone X (shaded): Areas of 500-year flood; areas subject to the 100-year flood with average depths of less than 1 foot or with contributing drainage area less than 1 square mile; and areas protected by levees from the base flood.
 - (7) Zone C and Zone X (unshaded): Areas determined to be outside the 500-year floodplain.
- (o) Flood Insurance Study (FIS): The official report in which the Federal Emergency Management Agency or the U.S. Department of Housing and Urban Development has provided flood profiles, floodway boundaries (sometimes shown on Flood Boundary and Floodway Maps), and the water surface elevations of the base flood.
- (p) Flood Protection Elevation: The Flood Protection Elevation, or FPE, is the base flood elevation plus 2 feet of freeboard. In areas where no base flood elevations exist from any authoritative source, the flood protection elevation can be historical flood elevations, or base flood elevations determined and/or approved by the floodplain administrator.
- (q) Floodway:
- (1) A floodway is the channel of a river or other watercourse and the adjacent land areas that have been reserved in order to pass the base flood discharge. A floodway is typically determined through a hydraulic and hydrologic engineering analysis such that the cumulative increase in the water surface elevation of the base flood discharge is no more than a designated height. In no case shall the designated height be more than one foot at any point within the community.
 - (2) The floodway is an extremely hazardous area, and is usually characterized by any of the following: Moderate to high velocity flood waters, high potential for debris and projectile impacts, and moderate to high erosion forces.
- (r) Freeboard: A factor of safety usually expressed in feet above a flood level for the purposes of floodplain management. Freeboard tends to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, obstructed bridge openings, debris and ice jams, and the hydrologic effect of urbanization in a watershed.
- (s) Historic structure: Any structure that is:
- (1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listings on the National Register;

- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; or
 - (3) Individually listed on the State of Ohio's inventory of historic places maintained by the Ohio Historic Preservation Office.
- (t) Hydrologic and hydraulic engineering analysis: An analysis performed by a professional engineer, registered in the State of Ohio, in accordance with standard engineering practices as accepted by FEMA, used to determine flood elevations and/or floodway boundaries.
- (u) Letter of Map Change (LOMC): A Letter of Map Change is an official FEMA determination, by letter, to amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, and Flood Insurance Studies. LOMCs are broken down into the following categories:
- (1) Letter of Map Amendment (LOMA): A revision based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map and establishes that a specific property is not located in a special flood hazard area.
 - (2) Letter of Map Revision (LOMR): A revision based on technical data that, usually due to manmade changes, shows changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. One common type of LOMR, a LOMR-F, is a determination concerning whether a structure or parcel has been elevated by fill above the base flood elevation and is, therefore, excluded from the special flood hazard area.
 - (3) Conditional Letter of Map Revision (CLOMR): A formal review and comment by FEMA as to whether a proposed project complies with the minimum National Flood Insurance Program floodplain management criteria. A CLOMR does not amend or revise effective Flood Insurance Rate Maps, Flood Boundary and Floodway Maps, or Flood Insurance Studies.
- (v) Lowest floor: The lowest floor of the lowest enclosed area (including basement) of a structure. This definition excludes an "enclosure below the lowest floor" which is an unfinished or flood resistant enclosure usable solely for parking of vehicles, building access or storage, in an area other than a basement area, provided that such enclosure is built in accordance with the applicable design requirements specified in these regulations for enclosures below the lowest floor.
- (w) Manufactured home: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include a "recreational vehicle". For the purposes of these regulations, a manufactured home includes manufactured homes and mobile homes as defined in Chapter 3733 of the Ohio Revised Code.
- (x) Manufactured home park: As specified in the Ohio Administrative Code 3701-27-01, a manufactured home park means any tract of land upon which three or more manufactured homes, used for habitation are parked, either free of charge or for revenue purposes, and includes any roadway, building, structure, vehicle, or enclosure used or intended for use as part of the facilities of the park. A tract of land that is subdivided and the individual lots are not for rent or rented, but are for sale or sold for the purpose of installation of manufactured homes on the lots, is not a manufactured home park, even though three or more manufactured homes are parked thereon, if the roadways are dedicated to the local government authority.

- (y) National Flood Insurance Program (NFIP): The NFIP is a Federal program enabling property owners in participating communities to purchase insurance protection against losses from flooding. This insurance is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods. Participation in the NFIP is based on an agreement between local communities and the Federal government that states if a community will adopt and enforce floodplain management regulations to reduce future flood risks to all development in special flood hazard areas, the Federal government will make flood insurance available within the community as a financial protection against flood loss.
- (z) New construction: Structures for which the "start of construction" commenced on or after the initial effective date of the Village of Sheffield Flood Insurance Rate Map, June 18, 1980, and includes any subsequent improvements to such structures.
- (aa) Person: Includes any individual or group of individuals, corporation, partnership, association, or any other entity, including state and local governments and agencies. An agency is further defined in the Ohio Revised Code Section 111.15 as any governmental entity of the state and includes, but is not limited to, any board, department, division, commission, bureau, society, council, institution, state college or university, community college district, technical college district, or state community college. "Agency" does not include the general assembly, the controlling board, the adjutant general's department, or any court.
- (bb) Recreational vehicle: A vehicle which is (1) built on a single chassis, (2) 400 square feet or less when measured at the largest horizontal projection, (3) designed to be self-propelled or permanently towable by a light duty truck, and (4) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- (cc) Registered Professional Architect: A person registered to engage in the practice of architecture under the provisions of sections 4703.01 to 4703.19 of the Ohio Revised Code.
- (dd) Registered Professional Engineer: A person registered as a professional engineer under Chapter 4733 of the Ohio Revised Code.
- (ee) Registered Professional Surveyor: A person registered as a professional surveyor under Chapter 4733 of the Ohio Revised Code.
- (ff) Special Flood Hazard Area: Also known as "Areas of Special Flood Hazard", it is the land in the floodplain subject to a one percent or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency on Flood Insurance Rate Maps, Flood Insurance Studies, Flood Boundary and Floodway Maps and Flood Hazard Boundary Maps as Zones A, AE, AH, AO, A1 30, and A99. Special flood hazard areas may also refer to areas that are flood prone and designated from other federal state or local sources of data including but not limited to historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

- (gg) Start of construction: The date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of a building.
- (hh) Structure: A walled and roofed building, manufactured home, or gas or liquid storage tank that is principally above ground.
- (ii) Substantial Damage: Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- (jj) Substantial Improvement: Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures, which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include:
- (1) Any improvement to a structure that is considered "new construction,"
 - (2) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified prior to the application for a development permit by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
 - (3) Any alteration of a "historic structure," provided that the alteration would not preclude the structure's continued designation as a "historic structure".
- (kk) Variance: A grant of relief from the standards of these regulations consistent with the variance conditions herein.
- (ll) Violation: The failure of a structure or other development to be fully compliant with these regulations. (Ord. 2136. Passed 6-9-08.)

1353.03 ADMINISTRATION.

(a) Designation of the Floodplain Administrator. The Village Administrator is hereby appointed to administer and implement these regulations and is referred to herein as the Floodplain Administrator.

(b) Duties and Responsibilities of the Floodplain Administrator. The duties and responsibilities of the Floodplain Administrator shall include but are not limited to:

- (1) Evaluate applications for permits to develop in special flood hazard areas.
- (2) Interpret floodplain boundaries and provide flood hazard and flood protection elevation information.

- (3) Issue permits to develop in special flood hazard areas when the provisions of these regulations have been met, or refuse to issue the same in the event of noncompliance.
- (4) Inspect buildings and lands to determine whether any violations of these regulations have been committed.
- (5) Make and permanently keep all records for public inspection necessary for the administration of these regulations including Flood Insurance Rate Maps, Letters of Map Amendment and Revision, records of issuance and denial of permits to develop in special flood hazard areas, determinations of whether development is in or out of special flood hazard areas for the purpose of issuing floodplain development permits, elevation certificates, variances, and records of enforcement actions taken for violations of these regulations.
- (6) Enforce the provisions of these regulations.
- (7) Provide information, testimony, or other evidence as needed during variance hearings.
- (8) Coordinate map maintenance activities and FEMA follow-up.
- (9) Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas identified by FEMA, must meet the development standards of these regulations.

(c) Floodplain Development Permits. It shall be unlawful for any person to begin construction or other development activity including but not limited to filling; grading; construction; alteration, remodeling, or expanding any structure; or alteration of any watercourse wholly within, partially within or in contact with any identified special flood hazard area, as established in Section 1353.01(f), until a floodplain development permit is obtained from the Floodplain Administrator. Such floodplain development permit shall show that the proposed development activity is in conformity with the provisions of these regulations. No such permit shall be issued by the Floodplain Administrator until the requirements of these regulations have been met.

(d) Application Required. An application for a floodplain development permit shall be required for all development activities located wholly within, partially within, or in contact with an identified special flood hazard area. Such application shall be made by the owner of the property or his/her authorized agent, herein referred to as the applicant, prior to the actual commencement of such construction on a form furnished for that purpose. Where it is unclear whether a development site is in a special flood hazard area, the Floodplain Administrator may require an application for a floodplain development permit to determine the development's location. Such applications shall include, but not be limited to:

- (1) Site plans drawn to scale showing the nature, location, dimensions, and topography of the area in question; the location of existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing.
- (2) Elevation of the existing, natural ground where structures are proposed.
- (3) Elevation of the lowest floor, including basement, of all proposed structures.

- (4) Such other material and information as may be requested by the Floodplain Administrator to determine conformance with, and provide enforcement of these regulations.
 - (5) Technical analyses conducted by the appropriate design professional registered in the State of Ohio and submitted with an application for a floodplain development permit when applicable:
 - A. Floodproofing certification for non-residential floodproofed structure as required in Section 1353.04(e).
 - B. Certification that fully enclosed areas below the lowest floor of a structure not meeting the design requirements of Section 1353.04(d)(5) are designed to automatically equalize hydrostatic flood forces.
 - C. Description of any watercourse alteration or relocation that the flood carrying capacity of the watercourse will not be diminished, and maintenance assurances as required in Section 1353.04(i)(3).
 - D. A hydrologic and hydraulic analysis demonstrating that the cumulative effect of proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood by more than one foot in special flood hazard areas where the Federal Emergency Management Agency has provided base flood elevations but no floodway as required by Section 1353.04(i)(2).
 - E. A hydrologic and hydraulic engineering analysis showing impact of any development on flood heights in an identified floodway as required by Section 1353.04(i)(1).
 - F. Generation of base flood elevation(s) for subdivision and large-scale developments as required by Section 1353.04(c).
- (e) Review and Approval of a Floodplain Development Permit Application.
- (1) Review.
 - A. After receipt of a complete application, the Floodplain Administrator shall review the application to ensure that the standards of these regulations have been met. No floodplain development permit application shall be reviewed until all information required in Section 1353.03(d) has been received by the Floodplain Administrator.
 - B. The Floodplain Administrator shall review all floodplain development permit applications to assure that all necessary permits have been received from those federal, state or local governmental agencies from which prior approval is required. The applicant shall be responsible for obtaining such permits as required including permits issued by the U.S. Army Corps of Engineers under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act, and the Ohio Environmental Protection Agency under Section 401 of the Clean Water Act.

- (2) Approval. Within thirty (30) days after the receipt of a complete application, the Floodplain Administrator shall either approve or disapprove the application. If an application is approved, a floodplain development permit shall be issued. All floodplain development permits shall be conditional upon the commencement of work within one (1) year. A floodplain development permit shall expire one (1) year after issuance unless the permitted activity has been substantially begun and is thereafter pursued to completion.

(f) Inspections. The Floodplain Administrator shall make periodic inspections at appropriate times throughout the period of construction in order to monitor compliance with permit conditions.

(g) Post-Construction Certifications Required. The following as-built certifications are required after a floodplain development permit has been issued:

- (1) For new or substantially improved residential structures, or nonresidential structures that have been elevated, the applicant shall have a Federal Emergency Management Agency Elevation Certificate completed by a registered surveyor to record as-built elevation data. For elevated structures in Zone A and Zone AO areas without a base flood elevation, the elevation certificate may be completed by the property owner or owner's representative.
- (2) For all development activities subject to the standards of Section 1353.03(j)(1), a Letter of Map Revision.

(h) Revoking a Floodplain Development Permit. A floodplain development permit shall be revocable, if among other things, the actual development activity does not conform to the terms of the application and permit granted thereon. In the event of the revocation of a permit, an appeal may be taken to the Appeals Board (Variance Board for Counties) in accordance with Section 1353.05 of these regulations.

(i) Exemption from Filing a Development Permit. An application for a floodplain development permit shall not be required for:

- (1) Maintenance work such as roofing, painting, and basement sealing, or for small nonstructural development activities (except for filling and grading) valued at less than \$5,000.
- (2) Development activities in an existing or proposed manufactured home park that are under the authority of the Ohio Department of Health and subject to the flood damage reduction provisions of the Ohio Administrative Code Section 3701.
- (3) Major utility facilities permitted by the Ohio Power Siting Board under Section 4906 of the Ohio Revised Code.
- (4) Hazardous waste disposal facilities permitted by the Hazardous Waste Siting Board under Section 3734 of the Ohio Revised Code.
- (5) Development activities undertaken by a federal agency and which are subject to Federal Executive Order 11988 - Floodplain Management.

Any proposed action exempt from filing for a floodplain development permit is also exempt from the standards of these regulations.

(j) Map Maintenance Activities. To meet National Flood Insurance Program minimum requirements to have flood data reviewed and approved by FEMA, and to ensure that the Village of Sheffield flood maps, studies and other data identified in Section 1353.01(f) accurately represent flooding conditions so appropriate floodplain management criteria are based on current data, the following map maintenance activities are identified:

(1) Requirement to submit new technical data.

A. For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. These development proposals include:

1. Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries;
2. Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area;
3. Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and
4. Subdivision or large scale development proposals requiring the establishment of base flood elevations in accordance with Section 1353.04(c).

B. It is the responsibility of the applicant to have technical data, required in accordance with Section 1353.03(j)(1), prepared in a format required for a Conditional Letter of Map Revision or Letter of Map Revision, and submitted to FEMA. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.

C. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for:

1. Proposed floodway encroachments that increase the base flood elevation; and
2. Proposed development which increases the base flood elevation by more than one foot in areas where FEMA has provided base flood elevations but no floodway.

D. Floodplain development permits issued by the Floodplain Administrator shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to Section 1353.03(j)(1).

(2) Right to submit new technical data. The Floodplain Administrator may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing by the Mayor of Village of Sheffield, and may be submitted at any time.

- (3) Annexation/detachment. Upon occurrence, the Floodplain Administrator shall notify FEMA in writing whenever the boundaries of the Village of Sheffield have been modified by annexation or the community has assumed authority over an area, or no longer has authority to adopt and enforce floodplain management regulations for a particular area. In order that the Village of Sheffield Flood Insurance Rate Map accurately represent the Village of Sheffield boundaries, include within such notification a copy of a map of the Village of Sheffield suitable for reproduction, clearly showing the new corporate limits or the new area for which the Village of Sheffield has assumed or relinquished floodplain management regulatory authority.
- (k) Data Use and Flood Map Interpretation. The following guidelines shall apply to the use and interpretation of maps and other data showing areas of special flood hazard:
 - (1) In areas where FEMA has not identified special flood hazard areas, or in FEMA identified special flood hazard areas where base flood elevation and floodway data have not been identified, the Floodplain Administrator shall review and reasonably utilize any other flood hazard data available from a federal, state, or other source.
 - (2) Base flood elevations and floodway boundaries produced on FEMA flood maps and studies shall take precedence over base flood elevations and floodway boundaries by any other source that reflect a reduced floodway width and/or lower base flood elevations. Other sources of data, showing increased base flood elevations and/or larger floodway areas than are shown on FEMA flood maps and studies, shall be reasonably used by the Floodplain Administrator.
 - (3) When Preliminary Flood Insurance Rate Maps and/or Flood Insurance Study have been provided by FEMA:
 - A. Upon the issuance of a Letter of Final Determination by the FEMA, the preliminary flood hazard data shall be used and replace all previously existing flood hazard data provided from FEMA for the purposes of administering these regulations.
 - B. Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall only be required where no base flood elevations and/or floodway areas exist or where the preliminary base flood elevations or floodway area exceed the base flood elevations and/or floodway widths in existing flood hazard data provided from FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.
 - (4) The Floodplain Administrator shall make interpretations, where needed, as to the exact location of the flood boundaries and areas of special flood hazard. A person contesting the determination of the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in Section 1353.05, Appeals and Variances.
 - (5) Where a map boundary showing an area of special flood hazard and field elevations disagree, the base flood elevations or flood protection elevations (as found on an elevation profile, floodway data table, established high water marks, etc.) shall prevail.

- (l) Substantial Damage Determinations.
- (1) Damages to structures may result from a variety of causes including flood, tornado, wind, heavy snow, fire, etc. After such a damage event, the Floodplain Administrator shall:
- A. Determine whether damaged structures are located in special flood hazard areas;
 - B. Conduct substantial damage determinations for damaged structures located in special flood hazard areas; and
 - C. Make reasonable attempt to notify owners of substantially damaged structures of the need to obtain a floodplain development permit prior to repair, rehabilitation, or reconstruction.
- (2) Additionally, the Floodplain Administrator may implement other measures to assist with the substantial damage determination and subsequent repair process. These measures include issuing press releases, public service announcements, and other public information materials related to the floodplain development permits and repair of damaged structures; coordinating with other federal, state, and local agencies to assist with substantial damage determinations; providing owners of damaged structures materials and other information related to the proper repair of damaged structures in special flood hazard areas; and assist owners of substantially damaged structures with Increased Cost of Compliance insurance claims. (Ord. 2136. Passed 6-9-08.)

1353.04 USE AND DEVELOPMENT STANDARDS FOR FLOOD HAZARD REDUCTION.

The following use and development standards apply to development wholly within, partially within, or in contact with any special flood hazard area as established in Section 1353.01(f) or 1353.03(k)(1):

- (a) Use Regulations.
- (1) Permitted uses. All uses not otherwise prohibited in this section or any other applicable land use regulation adopted by Village of Sheffield are allowed provided they meet the provisions of these regulations.
- (2) Prohibited uses.
- A. Private water supply systems in all special flood hazard areas identified by FEMA, permitted under Section 3701 of the Ohio Revised Code.
 - B. Infectious waste treatment facilities in all special flood hazard areas, permitted under Section 3734 of the Ohio Revised Code.
- (b) Water and Wastewater Systems. The following standards apply to all water supply, sanitary sewerage and waste disposal systems not otherwise regulated by the Ohio Revised Code:
- (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems;
 - (2) New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and,

- (3) On-site waste disposal systems shall be located to avoid impairment to or contamination from them during flooding.
- (c) Subdivisions and Large Developments.
- (1) All subdivision proposals shall be consistent with the need to minimize flood damage and are subject to all applicable standards in these regulations;
 - (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
 - (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
 - (4) In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all subdivision proposals and other proposed developments containing at least 50 lots or 5 acres, whichever is less.
 - (5) The applicant shall meet the requirement to submit technical data to FEMA in Section 1353.03(j)(1)A.4. when a hydrologic and hydraulic analysis is completed that generates base flood elevations as required by Section 1353.04(c)(4).
- (d) Residential Structures.
- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Where a structure, including its foundation members, is elevated on fill to or above the base flood elevation, the requirements for anchoring and construction materials resistant to flood damage are satisfied.
 - (2) New construction and substantial improvements shall be constructed with methods and materials resistant to flood damage.
 - (3) New construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - (4) New construction and substantial improvement of any residential structure, including manufactured homes, shall have the lowest floor, including basement, elevated to or above the flood protection elevation. Where no flood protection elevation data exists, the structure shall have the lowest floor, including basement, elevated at least two feet above the highest adjacent natural grade.
 - (5) New construction and substantial improvements, including manufactured homes, that do not have basements and that are elevated to the flood protection elevation using pilings, columns, posts, or solid foundation perimeter walls with openings sufficient to allow unimpeded movement of flood waters may have an enclosure below the lowest floor provided the enclosure meets the following standards:

- A. Be used only for the parking of vehicles, building access, or storage; and
 - B. Be designed and certified by a registered professional engineer or architect to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters; or
 - C. Have a minimum of two openings on different walls having a total net area not less than one square inch for every square foot of enclosed area, and the bottom of all such openings being no higher than one foot above grade. The openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
- (6) Manufactured homes shall be affixed to a permanent foundation and anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Methods of anchoring may include, but are not limited to, use of over the top or frame ties to ground anchors.
 - (7) Repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and is the minimum necessary to preserve the historic character and design of the structure, shall be exempt from the development standards of this subsection.
 - (8) In AO Zones, new construction and substantial improvement shall have adequate drainage paths around structures on slopes to guide floodwaters around and away from the structure.
- (e) Nonresidential Structures.
- (1) New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet the requirements of subsection (d)(1) - (3) and (5) -(7).
 - (2) New construction and substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, including basement, elevated to or above the level of the flood protection elevation; or, together with attendant utility and sanitary facilities, shall meet all of the following standards:
 - A. Be dry floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water to the level of the flood protection elevation;
 - B. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
 - C. Be certified by a registered professional engineer or architect, through the use of a Federal Emergency Management Agency Floodproofing Certificate, that the design and methods of construction are in accordance with subsection (e)(2)A. and B.
 - (3) Where no flood protection elevation data exists, the structure shall have the lowest floor, including basement, elevated at least two feet above the highest adjacent natural grade.

- (f) Accessory Structures. Relief to the elevation or dry floodproofing standards may be granted for accessory structures containing no more than 600 square feet. Such structures must meet the following standards:
- (1) They shall not be used for human habitation;
 - (2) They shall be constructed of flood resistant materials;
 - (3) They shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters;
 - (4) They shall be firmly anchored to prevent flotation;
 - (5) Service facilities such as electrical and heating equipment shall be elevated or floodproofed to or above the level of the flood protection elevation; and
 - (6) They shall meet the opening requirements of subsection (d)(5)C.
- (g) Recreational Vehicles. Recreational vehicles must meet at least one of the following standards:
- (1) They shall not be located on sites in special flood hazard areas for more than 180 days, or
 - (2) They must be fully licensed and ready for highway use, or
 - (3) They must meet all standards of subsection (d).
- (h) Above Ground Gas or Liquid Storage Tanks. All above ground gas or liquid storage tanks shall be anchored to prevent flotation or lateral movement resulting from hydrodynamic and hydrostatic loads.
- (i) Assurance of Flood Carrying Capacity. Pursuant to the purpose and methods of reducing flood damage stated in these regulations, the following additional standards are adopted to assure that the reduction of the flood carrying capacity of watercourses is minimized:
- (1) Development in floodways.
 - A. In floodway areas, development shall cause no increase in flood levels during the occurrence of the base flood discharge. Prior to issuance of a floodplain development permit, the applicant must submit a hydrologic and hydraulic analysis, conducted by a registered professional engineer, demonstrating that the proposed development would not result in any increase in the base flood elevation; or
 - B. Development in floodway areas causing increases in the base flood elevation may be permitted provided all of the following are completed by the applicant:
 1. Meet the requirements to submit technical data in Section 1353.03(j)(1);
 2. An evaluation of alternatives, which would not result in increased base flood elevations and an explanation why these alternatives are not feasible;
 3. Certification that no structures are located in areas that would be impacted by the increased base flood elevation;
 4. Documentation of individual legal notices to all impacted property owners within and outside the community, explaining the impact of the proposed action on their property; and
 5. Concurrence of the Mayor of Village of Sheffield and the Chief Executive Officer of any other communities impacted by the proposed actions.

- (2) Development in riverine areas with base flood elevations but no floodways.
- A. In riverine special flood hazard areas identified by FEMA where base flood elevation data are provided but no floodways have been designated, the cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the base flood elevation more than 1.0 (one) foot at any point. Prior to issuance of a floodplain development permit, the applicant must submit a hydrologic and hydraulic analysis, conducted by a registered professional engineer, demonstrating that this standard has been met; or,
- B. Development in riverine special flood hazard areas identified by FEMA where base flood elevation data are provided but no floodways have been designated causing more than one foot increase in the base flood elevation may be permitted provided all of the following are completed by the applicant:
1. An evaluation of alternatives which would result in an increase of one foot or less of the base flood elevation and an explanation why these alternatives are not feasible;
 2. Subsection (i)(1)B., items 1. and 3.-5.
- (3) Alterations of a watercourse. For the purpose of these regulations, a watercourse is altered when any change occurs within its banks. The extent of the banks shall be established by a field determination of the "bankfull stage." The field determination of "bankfull stage" shall be based on methods presented in Chapter 7 of the USDA Forest Service General Technical Report RM-245, Stream Channel Reference Sites: An Illustrated Guide to Field Technique or other applicable publication available from a Federal, State, or other authoritative source. For all proposed developments that alter a watercourse, the following standards apply:
- A. The bankfull flood carrying capacity of the altered or relocated portion of the watercourse shall not be diminished. Prior to the issuance of a floodplain development permit, the applicant must submit a description of the extent to which any watercourse will be altered or relocated as a result of the proposed development, and certification by a registered professional engineer that the bankfull flood carrying capacity of the watercourse will not be diminished.
- B. Adjacent communities, the U.S. Army Corps of Engineers, and the Ohio Department of Natural Resources, Division of Water, must be notified prior to any alteration or relocation of a watercourse. Evidence of such notification must be submitted to the Federal Emergency Management Agency.
- C. The applicant shall be responsible for providing the necessary maintenance for the altered or relocated portion of said watercourse so that the flood carrying capacity will not be diminished. The Floodplain Administrator may require the permit holder to enter into an agreement with Village of Sheffield specifying the maintenance responsibilities. If an agreement is required, it shall be made a condition of the floodplain development permit.

- D. The applicant shall meet the requirements to submit technical data in Section 1353.03(j)(1)A.3. when an alteration of a watercourse results in the relocation or elimination of the special flood hazard area, including the placement of culverts.
(Ord. 2136. Passed 6-9-08.)

1353.05 APPEALS AND VARIANCES.

- (a) Appeals Board Established.
- (1) The Floodplain Appeals Board shall hereby be appointed as the Board of Zoning Appeals as established by the Village of Sheffield Zoning Code.
 - (2) Records of the Appeals Board shall be kept and filed in 4820 Detroit Road and/or 4480 Colorado Avenue Sheffield, Ohio.
- (b) Powers and Duties.
- (1) The Appeals Board shall hear and decide appeals where it is alleged there is an error in any order, requirement, decision or determination made by the Floodplain Administrator in the administration or enforcement of these regulations.
 - (2) Authorize variances in accordance with subsection (d) of these regulations.
- (c) Appeals.
- (1) Any person affected by any notice and order, or other official action of the Floodplain Administrator may request and shall be granted a hearing on the matter before the Appeals Board provided that such person shall file, within 14 days of the date of such notice and order, or other official action, a brief statement of the grounds for such hearing or for the mitigation of any item appearing on any order of the Floodplain Administrator's decision. Such appeal shall be in writing, signed by the applicant, and be filed with the Floodplain Administrator. Upon receipt of the appeal, the Floodplain Administrator shall transmit said notice and all pertinent information on which the Floodplain Administrator's decision was made to the Appeals Board.
 - (2) Upon receipt of the notice of appeal, the Appeals Board shall fix a reasonable time for the appeal, give notice in writing to parties in interest, and decide the appeal within a reasonable time after it is submitted.
- (d) Variances. Any person believing that the use and development standards of these regulations would result in unnecessary hardship may file an application for a variance. The Appeals Board shall have the power to authorize, in specific cases, such variances from the standards of these regulations, not inconsistent with Federal regulations, as will not be contrary to the public interest where, owing to special conditions of the lot or parcel, a literal enforcement of the provisions of these regulations would result in unnecessary hardship.
- (1) Application for a variance.
 - A. Any owner, or agent thereof, of property for which a variance is sought shall make an application for a variance by filing it with the Floodplain Administrator, who upon receipt of the variance shall transmit it to the Appeals Board.

- B. Such application at a minimum shall contain the following information: Name, address, and telephone number of the applicant; legal description of the property; parcel map; description of the existing use; description of the proposed use; location of the floodplain; description of the variance sought; and reason for the variance request.
- (2) Notice for public hearing. The Appeals Board shall schedule and hold a public hearing within thirty (30) days after the receipt of an application for a variance from the Floodplain Administrator. Prior to the hearing, a notice of such hearing shall be given in one (1) or more newspapers of general circulation in the community at least ten (10) days before the date of the hearing.
- (3) Public hearing.
- A. At such hearing the applicant shall present such statements and evidence as the Appeals Board requires. In considering such variance applications, the Appeals Board shall consider and make findings of fact on all evaluations, all relevant factors, standards specified in other sections of these regulations and the following factors:
1. The danger that materials may be swept onto other lands to the injury of others.
 2. The danger to life and property due to flooding or erosion damage.
 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
 4. The importance of the services provided by the proposed facility to the community.
 5. The availability of alternative locations for the proposed use that are not subject to flooding or erosion damage.
 6. The necessity to the facility of a waterfront location, where applicable.
 7. The compatibility of the proposed use with existing and anticipated development.
 8. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area.
 9. The safety of access to the property in times of flood for ordinary and emergency vehicles.
 10. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
 11. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

- B. Variances shall only be issued upon:
 - 1. A showing of good and sufficient cause.
 - 2. A determination that failure to grant the variance would result in exceptional hardship due to the physical characteristics of the property. Increased cost or inconvenience of meeting the requirements of these regulations does not constitute an exceptional hardship to the applicant.
 - 3. A determination that the granting of a variance will not result in increased flood heights beyond that which is allowed in these regulations; additional threats to public safety; extraordinary public expense, nuisances, fraud on or victimization of the public, or conflict with existing local laws.
 - 4. A determination that the structure or other development is protected by methods to minimize flood damages.
 - 5. A determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 - C. Upon consideration of the above factors and the purposes of these regulations, the Appeals Board may attach such conditions to the granting of variances, as it deems necessary to further the purposes of these regulations.
- (4) Other conditions for variances.
- A. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
 - B. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items in subsection (d)(3)A.1. to 11. have been fully considered. As the lot size increases beyond one half acre, the technical justification required for issuing the variance increases.
 - C. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (e) Procedure at Hearings.
- (1) All testimony shall be given under oath.
 - (2) A complete record of the proceedings shall be kept, except confidential deliberations of the Board, but including all documents presented and a verbatim record of the testimony of all witnesses.
 - (3) The applicant shall proceed first to present evidence and testimony in support of the appeal or variance.
 - (4) The Administrator may present evidence or testimony in opposition to the appeal or variance.

- (5) All witnesses shall be subject to cross-examination by the adverse party or their counsel.
- (6) Evidence that is not admitted may be proffered and shall become part of the record for appeal.
- (7) The Board shall issue subpoenas upon written request for the attendance of witnesses. A reasonable deposit to cover the cost of issuance and service shall be collected in advance.
- (8) The Board shall prepare conclusions of fact supporting its decision. The decision may be announced at the conclusion of the hearing and thereafter issued in writing or the decision may be issued in writing within a reasonable time after the hearing.

(f) Appeal to the Court. Those aggrieved by the decision of the Appeals Board may appeal such decision to the Lorain County Court of Common Pleas, as provided in Chapter 2506 of the Ohio Revised Code. (Ord. 2136. Passed 6-9-08.)

1353.06 ENFORCEMENT.

(a) Compliance Required.

- (1) No structure or land shall hereafter be located, erected, constructed, reconstructed, repaired, extended, converted, enlarged or altered without full compliance with the terms of these regulations and all other applicable regulations which apply to uses within the jurisdiction of these regulations, unless specifically exempted from filing for a development permit as stated in Section 1353.03(i).
- (2) Failure to obtain a floodplain development permit shall be a violation of these regulations and shall be punishable in accordance with subsection (c) hereof.
- (3) Floodplain development permits issued on the basis of plans and applications approved by the Floodplain Administrator authorize only the use, and arrangement, set forth in such approved plans and applications or amendments thereto. Use, arrangement, or construction contrary to that authorized shall be deemed a violation of these regulations and punishable in accordance with subsection (c) hereof.

(b) Notice of Violation. Whenever the Floodplain Administrator determines that there has been a violation of any provision of these regulations, he shall give notice of such violation to the person responsible therefore and order compliance with these regulations as hereinafter provided. Such notice and order shall:

- (1) Be put in writing on an appropriate form;
- (2) Include a list of violations, referring to the section or sections of these regulations that have been violated, and order remedial action, which, if taken, will effect compliance with the provisions of these regulations;
- (3) Specify a reasonable time for performance;
- (4) Advise the owner, operator, or occupant of the right to appeal;
- (5) Be served on the owner, occupant, or agent in person. However, this notice and order shall be deemed to be properly served upon the owner, occupant, or agent if a copy thereof is sent by registered or certified mail to the person's last known mailing address, residence, or place of business, and/or a copy is posted in a conspicuous place in or on the dwelling affected.

- (c) Penalty; Equitable Remedies.
- (1) Whoever violates or fails to comply with any of the provisions of this chapter, including violations of and noncompliance with conditions and safeguards established in connection with conditions, is guilty of a misdemeanor of the fourth degree and shall be fined not more than two hundred fifty dollars (\$250.00) or imprisoned for not more than thirty days, or both, for each offense. A separate offense shall be deemed committed each day during or on which a violation or noncompliance occurs or continues.
 - (2) Nothing in subsection (c)(1) hereof shall be deemed to prevent the Village from taking such other lawful action as is necessary to prevent or remedy any violation or noncompliance.
(Ord. 2136. Passed 6-9-08.)

TITLE SEVEN - Subdivision Grade and Improvement Standards

- Chap. 1357. General Standards and Conditions.
- Chap. 1359. Excavation, Foundation and Backfill.
- Chap. 1361. Street Paving.
- Chap. 1363. Sidewalk, Curbs and Gutters.
- Chap. 1365. Water Line Construction.
- Chap. 1367. Sanitary and Storm Sewers.
- Chap. 1369. Sewer Treatment Plant.
- Chap. 1371. Manholes and Catch Basins.
- Chap. 1373. Material Testing.
- Chap. 1375. Storm Water Management; Sediment and Erosion Control Regulations; Illicit Discharge and Connections.

CHAPTER 1357 General Standards and Conditions

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| 1357.01 Improvements. | 1357.10 Accident prevention. |
| 1357.02 Approved drawings. | 1357.11 Sanitary convenience. |
| 1357.03 Inspection and testing of materials. | 1357.12 Inspection of work. |
| 1357.04 Notice of starting work. | 1357.13 Protection of work. |
| 1357.05 Supervision. | 1357.14 Work in bad weather. |
| 1357.06 Materials and workmanship. | 1357.15 Cost of services. |
| 1357.07 Contract bond. | 1357.16 Final tests. |
| 1357.08 Liability insurance. | 1357.17 Clean-up and final inspection. |
| 1357.09 Labor. | 1357.18 Final acceptance. |
| | 1357.19 Yard lights. |

CROSS REFERENCES

- Lot numbering and revision - see Ohio R.C. 711.02 et seq.
- Cornerstones and permanent markers - see Ohio R.C. 711.03, 711.14
- Improvements - see Ohio R.C. 711.101

1357.01 IMPROVEMENTS.

Approval of the final plat is contingent on evidence that the improvements as required have been made or will be made by the developer, as provided herein. All improvements, including storm and sanitary sewers, water supply, sidewalks, pavements and street and lot grades, shall be built in accordance with Village standard plans and specifications with the approval of the Village Engineer, and plans thereof proposed shall be submitted by the registered civil engineer.

- (a) Streets.
- (1) Design. Maximum allowable grades and minimum requirements for vertical and horizontal curves and for intersections shall conform to the standards and requirements of the Village Engineer.
 - (2) Pavements. The minimum widths of pavement required shall be as follows:
 - A. Concrete with curb, twenty-six feet.
 - B. Asphalt with curb, twenty-six feet.
 - (3) Names. The naming of streets and their classification as streets, avenues or courts shall conform to the Village's adopted street naming system.
- (b) Water System.
- (1) Wherever water can reasonably be provided from a public water main, water connections shall be made available for each lot within the subdivision and shall be of such size and design as designated by the Water Department furnishing the water supply.
 - (2) A written agreement shall be made and entered into with the Water Department and the Village Service Department in question for the installation of such water mains, services and fire plugs as deemed necessary or required in accordance with Village standards to properly serve the proposed allotment. The agreement shall state the work to be done, the portion to be financed by the developer, the charges to be made by the Water Department for its portion of the work and, if refunds are to be made, the terms for reimbursing the developer for the portion of the work financed by him or her.
- (c) Storm Drainage. Grading shall be done and drainage structures shall be installed to the extent and type as may be required by the Village Engineer.
- (d) Gas and Electric Utilities.
- (1) All utilities should be placed in the ground before any pavement is constructed in the proposed streets.
 - (2) Electric poles and lines should be placed in a utilities easement next to the street right-of-way.
- (e) Bond for Improvement and Fees.
- (1) In lieu of the completion of the improvements as specified prior to the approval of the final plat, the developer shall give a full construction performance bond executed by a surety or sureties satisfactory to the fiscal officers of the Village, or a certified check, guaranteeing the completion of the improvements within six months or a reasonable period of time as fixed by the Planning Commission. This bond or check shall be in an amount equal to the cost of completing the improvements, as estimated by the Village Engineer. If not completed as agreed upon, the bond shall be forfeited and the money collected, which money shall be used only to complete the specified utilities. The money collected from the bond shall be used for no other purpose. Upon completion of the improvements, the developer shall give to the Village bond in such amount as fixed by Council to secure the maintenance and repair of the improvements for one year from and after acceptance. This bond shall be accompanied by an affidavit stating that all bills for material and labor have been paid on these improvements.

- (2) The developer shall pay to the Clerk-Treasurer a fee as set forth in Section 1339.01 for each lot shown on the preliminary plat at the time of filing of such plat with the Planning Commission, which fee shall cover the cost of preliminary engineering and inspection expense. The fee shall be paid to the Clerk-Treasurer before the mylar is signed and filed.
- (f) Deposit. At such time as the plat is approved by the Planning Commission and Council, there shall be deposited by the developer a sum as set forth in Section 1339.01 per lot, from which shall be paid the cost of engineering and inspection of the development, and upon completion of the development and acceptance by the Village any excess of such deposit over and above the actual expenses shall be refunded to the developer.
(Ord. 331. Passed 3-12-62; Ord. 736. Passed 11-8-76.)

1357.02 APPROVED DRAWINGS.

All work shall be executed in strict conformity with the approved drawings and these specifications and the contractor shall do no work without proper drawings and instructions. Standard drawings on file in the Village shall be used on all contract work.
(Ord. 352. Passed 10-22-62.)

1357.03 INSPECTION AND TESTING OF MATERIALS.

Attention is directed to the material tests required. All laboratory tests shall be made by a testing laboratory employed by the contractor and approved by Council. The cost of tests shall be paid by the contractor, and he or she shall furnish all materials to be tested and incidental materials and labor required at the site in connection with the tests at no cost to the Village.
(Ord. 352. Passed 10-22-62.)

1357.04 NOTICE OF STARTING WORK.

The contractor shall notify the Engineer twenty-four hours before starting work at the site of his or her intention to do so. In case of a temporary suspension of work, he or she shall give a similar notice before resuming work.
(Ord. 352. Passed 10-22-62.)

1357.05 SUPERVISION.

The contractor shall give his or her personal supervision to the work or have at the site of the work at all times a competent foreman, superintendent or other representative satisfactory to the Engineer and having authority to act for the contractor.
(Ord. 352. Passed 10-22-62.)

1357.06 MATERIALS AND WORKMANSHIP.

All workmanship, equipment, materials and articles incorporated in the work shall be new and of the best grade of their respective kinds for the purpose. The contractor shall furnish to the Village, for its approval, the name of manufacturers of machinery, mechanical or other equipment, which he or she contemplates installing, together with their performance capacities and other pertinent information. If not otherwise provided, materials or work called for shall be furnished and performed in accordance with well known established practice and standards recognized by architects, engineers and the trades.

When required by these specifications, or when called for by the Village, the contractor shall furnish the Village, for its approval, full information concerning the materials or articles which he or she contemplates incorporating in the work. Samples of materials shall be submitted for approval when so directed.

All materials and workmanship shall be guaranteed by the contractor and the surety for a period of one year from the date of final acceptance, and this guarantee must be covered in the surety bond for the work.

(Ord. 352. Passed 10-22-62.)

1357.07 CONTRACT BOND.

The contractor will be required to furnish a bond for the faithful performance of the contract in a sum not less than 100 percent of the total price of the completed work, such bond to be that of an approved surety company, to the satisfaction of the Solicitor. Agents of bonding companies which write bonds for the performance of contract work shall furnish power of attorney, bearing the seal of the company, evidencing such agent's authority to execute the particular type of bond to be furnished and evidencing also the right of the surety company to do business in the State. A copy of this proof shall be attached to each copy of the contract.

The bond shall be purchased through a surety company with a local agent upon whom service of process can be made.

In the even of failure of surety or co-surety, the contractor shall immediately furnish a new bond, as required herein.

(Ord. 352. Passed 10-22-62.)

1357.08 LIABILITY INSURANCE.

The contractor shall carry public liability and contractor's protective public liability insurance for personal injury in a minimum amount of one-hundred-thousand dollars (\$100,000) for one person and three-hundred-thousand dollars (\$300,000) for more than one person.

The contractor shall carry property damage and contractor's protective property damage insurance in the minimum amount of fifty-thousand dollars (\$50,000) for one accident and one-hundred-thousand dollars (\$100,000) for all accidents.

Should any part of the work covered by the contract, involving work at the site of the project, be sublet, the contractor shall furnish satisfactory proof of insurance of the character and in the amount deemed necessary and required by Council, to provide insurance protection which, in the aggregate, will be equal to that specified for the principal contractor if no work were sublet, such insurance to be written in the name of the subcontractor to cover the work to be performed by him or her and his or her employees.

Should any part of the work covered by the contract, involving work at the site of the project, be sublet, the principal contractor shall carry both public liability and property damage and protective and contingent public liability and contingent property damage insurance in addition to the separate public liability and property damage insurance required to be carried by the subcontractor.

The contractor shall furnish Council with satisfactory proof of carriage of the insurance required, and neither he or she nor any subcontractor shall commence work until such proofs have been submitted and the insurance approved by Council.

1357.09 LABOR.

The contractor shall employ none but competent and skilled workmen and foremen in the conduct of work on a project. The Engineer shall have the authority to order the removal from the work of any contractor's employees who refuse or neglect to obey any of his or her instructions relating to the carrying out of the provisions and intent of these specifications, or who is incompetent, unfaithful, abusive, threatening or disordering in his or her conduct, and any such person shall not again be employed on the project.

(Ord. 352. Passed 10-22-62.)

1357.10 ACCIDENT PREVENTION.

Precaution shall be exercised at all times for the protection of persons, including employees, and property. The safety provisions of applicable laws and building and construction codes shall be observed. Machinery, equipment and all hazards shall be guarded, or hazards eliminated, in accordance with the safety provisions of the Manual of Accident Prevention in Construction, published by the Associated General Contractors of America, to the extent that such provisions are not in contravention of applicable law.

The contractor shall put up and maintain such barriers and supply such watchmen as will effectively prevent accidents and, in addition, during night hours he or she shall put up and maintain sufficient lights and flares to warn and safeguard the public against accidents. The contractor, in executing the work on the project, shall not unnecessarily impede or interfere with traffic on public highways or streets, and the Village is to be the sole judge as to what constitutes unnecessary interference with traffic or as to what constitutes a hazard in traffic. The contractor shall confer with and keep the Police and Fire Departments fully informed as to streets which are to be closed to traffic for construction purposes.

(Ord. 352. Passed 10-22-62)

1357.11 SANITARY CONVENIENCE.

The contractor shall provide and maintain on the construction site at all times suitable sanitary facilities for use of those employed on the project, without committing any public nuisance. Pit-type toilets shall be of proper design and fly-tight. All toilet facilities shall be subject to approval of the County Department of Health.

(Ord. 352. Passed 10-22-62.)

1357.12 INSPECTION OF WORK.

The Village shall at all times have access to the work wherever and whenever it is in preparation or progress, and the contractor shall provide proper facilities for such access and inspection.

The Village shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected, and rejected materials shall be removed from the premises. If the contractor does not correct the condemned work and remove rejected materials within a reasonable time fixed by written notice, the Village may remove them and charge the expense to the contractor. All materials to be incorporated in the work, all labor performed, all tools, appliances and methods used shall be subject to inspection and approval or rejection by the Village. If the Village points out to the contractor or his or her foreman or authorized agent any neglect or disregard of these specifications, such neglect or disregard shall be remedied and further defective work shall be at once discontinued, but the right of final acceptance or rejection of the work will not be waived by reason thereof, not by any other act of the Village.

Should it be considered necessary or advisable by the Village at any time before final acceptance of the entire work, or at any other time, to make an examination of work already completed by removing or tearing out the same, the contractor shall, on request, promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any material respect due to the fault of the contractor, he or she shall defray all the expense of such examination and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the approved drawings or these specifications, the actual cost of labor and materials necessarily involved in the examination and replacement, plus fifteen percent, will be paid to the contractor by the Village.

The presence of the Village or its inspector shall in no way relieve the contractor of the responsibility of furnishing good material and good workmanship. The inspection and supervision of the work by the Village is intended to aid the contractor in applying labor, materials and workmanship in compliance with the approved drawings and these specifications. Such inspection and supervision, however, shall not operate to release the contractor from any of his or her obligations under these specifications.

(Ord. 352. Passed 10-22-62.)

1357.13 PROTECTION OF WORK.

The contractor shall continuously maintain adequate protection on all his or her work from damage and shall protect the Village and adjacent property from injury arising in connection with his or her work. The contractor shall be responsible for any and all damage to property, public or private, that may be caused by his or her operations in the performance of his or her work, and the contractor shall defend any suit that may be brought against himself or herself and/or the Village on account of damage inflicted by his or her operations and shall pay any judgements awarded to cover such damage.

(Ord. 352. Passed 10-22-62.)

1357.14 WORK IN BAD WEATHER.

No construction work shall be done during stormy, freezing or inclement weather, except as can be done satisfactorily and in a manner to secure first class construction throughout, and then only subject to permission of the Village.

(Ord. 352. Passed 10-22-62.)

1357.15 COST OF SERVICES.

The contractor shall be required to pay the established rates for water and electricity obtained from the Village. Large quantities of water for slushing or jetting trenches, filling mains or other operations shall be drawn only at night, or at times specifically authorized by the Village.

(Ord. 352. Passed 10-22-62.)

1357.16 FINAL TESTS.

After completion of the work performed on the project, the contractor shall make any and all tests required by these specifications or by State regulations to determine complete and faithful completion with all provisions of the approved plans or these specifications.

(Ord. 352. Passed 10-22-62.)

1357.17 CLEAN-UP AND FINAL INSPECTION.

The contractor shall, at the completion of the work, remove all his or her rubbish from and about the work and all his or her tools and equipment, scaffolding and surplus materials, and shall leave the completed work clean and ready for use. When requested by the Village, the contractor shall, in the case of sewer and water main and other subsurface construction, remove sheeting, clean up the area, restore the subgrade and/or pavement, place back topsoil and seed areas, etc., for individual sections of the work as they are completed rather than upon completion of the project.

All sewers, conduits, pipes and appurtenances and all tanks, pump wells, chambers, buildings and other structures shall be thoroughly clean and all needed repairs completed. Any undue leakage of water into the structures, such as to make the work, in the opinion of the Village, fall short of first class work, shall be promptly corrected by the contractor. The Village will not give its final approval and acceptance of the work until after the final inspection is made and the work is found to be satisfactory.

(Ord. 352. Passed 10-22-62.)

1357.18 FINAL ACCEPTANCE.

The project shall be deemed as having been finally accepted for maintenance by the Village when Council, by formal resolution, accepts the work.

(Ord. 352. Passed 10-22-62.)

1357.19 YARD LIGHTS.

Contractors or any home builders shall erect yard lights in each front yard of each new home erected in newly established subdivisions.

The lights shall be located six feet from the back inside edge of the sidewalk (that is, the edge nearest the center of the property) on a post eight feet in height (which includes that part of the post located in the ground) and located six feet from the edge of the driveway of the property.

(Ord. 1303. Passed 6-13-94.)

CHAPTER 1359
Excavation, Foundation and Backfill

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| <p>1359.01 Compliance required.</p> <p>1359.02 Safety precautions during excavation.</p> <p>1359.03 Maintenance of excavations.</p> <p>1359.04 Preparation of excavations.</p> <p>1359.05 Backfilling and seeding.</p> <p>1359.06 Clearing and care of surface materials.</p> <p>1359.07 Trench excavations.</p> <p>1359.08 Structure excavations.</p> <p>1359.09 Excavation for roadways, pavements and sidewalks.</p> <p>1359.10 Rock excavation.</p> <p>1359.11 Protection of excavations; sheeting and bracing.</p> | <p>1359.12 Protection against water.</p> <p>1359.13 Unauthorized excavations.</p> <p>1359.14 Additional excavations.</p> <p>1359.15 Foundations.</p> <p>1359.16 Steel sheet piling.</p> <p>1359.17 Disposal of excavated material.</p> <p>1359.18 Backfilling.</p> <p>1359.19 Embankments and fills.</p> <p>1359.20 Short tunnel construction.</p> <p>1359.21 Placing of topsoil and grading.</p> <p>1359.22 Seeding.</p> <p>1359.23 Restoration of paved surfaces.</p> <p>1359.24 Grading.</p> |
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CROSS REFERENCES

- Excavation liability - see Ohio R.C. 723.49 et seq.
Excavations - see S.U. & P.S. Ch. 919
Excavation and subgrade - see BLDG. 1363.02

1359.01 COMPLIANCE REQUIRED.

All labor, materials, equipment, tools and services required for the making of all excavations, the maintenance and protection of all excavated trenches or areas, the preparation of foundations, the placing of all backfill, embankments and topsoil and the seeding of finished areas required on a project shall be furnished, installed and carried out in compliance with the following specifications.

(Ord. 352. Passed 10-22-62.)

1359.02 SAFETY PRECAUTIONS DURING EXCAVATION.

Excavation shall include the clearing of the site of the work and the loosening, loading, removing, transporting and disposing of all materials, wet or dry, necessary to be removed to construct all work included in the project to the lines, grades and locations shown on the drawings.

Necessary arrangements shall be made by the contractor with all persons, firms and corporations owning or using any poles, pipes, tracks or conduits, etc. affected by the construction on the project to maintain and protect such facilities during construction, with the cost of any such protection to be paid by the contractor. In the event that any existing gas pipes, water pipes, conduits, sewers, tile drains or poles are blocked or interfered with by the excavation required on the project, the contractor shall maintain them in continuous operation and restore them to the same condition as they were prior to the start of construction on the project.

Excavation material shall not be placed on grass plots unless there is no other suitable place to put it. Excavated material shall be placed on pavements or sidewalks only with the explicit approval of the Engineer.

Sidewalks and pavement must in no case be blocked or obstructed by excavated material, except on the authorization of the Engineer, and then only when adequate temporary provisions have been made for a satisfactory temporary passage of pedestrians and vehicles. Adequate bridging and planked crossings must be provided and maintained across all open trenches for pedestrians and vehicles. Barriers, lights, flares and watchmen shall be provided and maintained by the contractor at all trenches, excavations and embankments at no additional compensation, as provided in Chapter 1357.

(Ord. 352. Passed 10-22-62.)

1359.03 MAINTENANCE OF EXCAVATIONS.

The contractor shall furnish and install all temporary sheeting, shoring, timbering and bracing required to maintain the excavation in a condition to permit the safe and efficient installation of all items of contract work. The contractor shall, further, at his or her own expense, shore up or otherwise protect all fences, buildings, walls, walks, curbs or other property adjacent to any excavation which might be disturbed during the progress of the work. The contractor shall be held liable for any damage which may result to neighboring property from excavation or construction work.

Sheeting, shoring, timbering and bracing for open trenches and excavations shall be ordered left in place by the Village when, in its opinion, such is necessary for the protection of the work, the public or the adjacent property. The contractor shall further do all draining, ditching, diking, pumping, bailing and well pointing required to maintain a dry excavation.

(Ord. 352. Passed 10-22-62.)

1359.04 PREPARATION OF EXCAVATIONS.

When excavations are opened up, if, in the opinion of the Engineer, the materials in place are not adequate for structural stability of the completed work, the Engineer may order the contractor to carry the excavation to an additional depth and/or furnish and place concrete cradles, sand or gravel refill and/or timber and piling foundations.

(Ord. 352. Passed 10-22-62.)

1359.05 BACKFILLING AND SEEDING.

The contractor shall do the backfilling of all trenches and excavations adjacent to all pits and structures, shall do the grading and shaping of fill around completed structures, shall bring the site of the work to the finished grades established on the drawings, shall place all embankments, shall furnish and place topsoil and shall seed all finished surfaces.

Excavated material which has been placed on grass plots, sidewalks or pavements shall be carefully removed to avoid injury to the underlying materials with the last twelve inches removed by hand shovel. Any grass, sidewalks or pavements damaged by the storage or removal of such excavated material shall be removed and replaced in first-class condition.

(Ord. 352. Passed 10-22-62.)

1359.06 CLEARING AND CARE OF SURFACE MATERIALS.

The sites of all excavations and embankments shall first be cleared of all trees, except those designated by the Engineer to be saved, stumps, brush, rubbish or other surface material, which shall be removed and disposed of in a manner satisfactory to the Engineer. All topsoil, loam and similar material covering the areas to be excavated shall be removed and kept separate and compactly piled for use in resurfacing as may be directed. All trees and shrubbery designated by the Engineer to be saved shall be adequately protected by boxes in a manner approved by the Engineer.

(Ord. 352. Passed 10-22-62.)

1359.07 TRENCH EXCAVATIONS.

All trench excavations must be of sufficient width and depth for properly constructing the sewers, water mains, conduits or other structures in the manner and of the size specified, and for removing any material which the Engineer may deem unsuitable for foundations.

The trenches must be of sufficient width, within limitations hereinafter established, to admit ample room within the limits of the excavation, for the placing of sheeting and bracing should sheeting and bracing be necessary to secure the protection of the work.

The bottom of all excavation shall have as closely as possible the shape and dimensions of the outside of the pipe or masonry to be installed.

When pipe (sewer or water) of the bell and spigot type is to be installed in the trench, bell holes of sufficient depth shall be dug across the bottom of the trench to accommodate the bell and to permit adequate caulking.

Where pipe sewers are to be installed in the trench, the width of the trench at the top of the pipe to be installed shall not exceed four-thirds of the external diameter of the sewer, plus eight inches.

When it is necessary in sewer construction to sheet the trench, the maximum allowable trench width herein specified shall be measured between the inside facing of the sheeting.

If the width of the trench in sewer construction as excavated, measured at the top of the pipe to be installed, exceeds the maximum allowable width herein specified, the contractor shall furnish and install a concrete cradle to the section shown on the drawings, in compliance with the specifications hereinafter stated. The provisions of this paragraph shall apply unless specifically excepted for certain sections of sewers to be installed in shallow cut.

The minimum allowable trench width at the top of the pipe on all pipeline construction, in order to allow proper tamping, shall be not less than the outside diameter of the pipe, plus eight inches.

(Ord. 352. Passed 10-22-62.)

1359.08 STRUCTURE EXCAVATIONS.

Excavations for structures shall be made to the depth and dimensions necessary for the proper installation of all structures detailed on the drawings. Care shall be taken that the foundation areas of the structure are not excavated below grade, except in rock excavation, as hereinafter defined.

(Ord. 352. Passed 10-22-62.)

1359.09 EXCAVATION FOR ROADWAYS, PAVEMENTS AND SIDEWALKS.

Excavation for roadways, pavements and sidewalks shall be made in accordance with the lines, grades and cross-sections shown on the drawings. Unstable and unsuitable materials found existing in the subgrade of the improvement shall be excavated and removed and replaced with a stable material, satisfactory to the Engineer.

(Ord. 352. Passed 10-22-62.)

1359.10 ROCK EXCAVATION.

Wherever the word "rock" appears in these specifications, it shall be interpreted to mean any material geologically in place and of a hardness which corresponds to the hardness of the transparent variety of calcite. Other materials shall not be classed as rock, although it may be more economical to remove the same by blasting. Boulders will not be classified as rock unless they are equal to or larger than one cubic yard.

Should rock be encountered in the excavation, it shall be removed by blasting or otherwise. Where blasts are made, the excavation shall be carefully covered with suitable brush, timber or matting to prevent danger to life and property. The contractor shall secure all permits required by law for blasting operations and any additional hazard insurance required; the cost of such permits and insurance to be borne by the contractor. The contractor shall strip the rock of overburden, such stripping to be done in sections. No blasting shall be done by the contractor until he or she has notified the Engineer.

Materials classified as rock in these specifications, if encountered, shall be excavated to not less than three inches below the grade of the bottom of structures and six inches below the bottom of pipes or conduit to be installed, unless specifically shown on the drawings to be removed to a greater depth. After such rock is removed, the excavation shall be backfilled with sand or gravel acceptable to the Engineer and consolidated to place the top surface at the grade established on the drawings for the bottom of the structure, pipe or conduit.

(Ord. 352. Passed 10-22-62.)

1359.11 PROTECTION OF EXCAVATIONS; SHEETING AND BRACING.

All trenches and other excavations shall be properly sheeted and braced to furnish working conditions which are safe and acceptable to the Engineer and to prevent damage and delay to the work. Side slopes shall be such that material will not slide into the bottom. Where masonry is built directly against the sides or bottom of the excavations, the final trimming shall be done just before the concrete is placed.

To secure the protection of the work, the contractor must furnish and put in place, at his or her own expense, braces, timber, sheeting, steel sheeting, etc., as may be necessary for the safety of the work, the public or adjacent property.

The sheeting and bracing shall be removed as the work progresses in such a manner as to prevent the caving in of the sides of the excavation or any damage to the masonry. While being drawn, all vacancies left by the sheeting and bracing shall be carefully filled with fine sand and rammed by special tools, or puddled as directed by the Engineer.

The owner may order the sheeting and bracing left in place when, in its opinion, it is necessary for the protection of the work, the public or adjacent property.

Lumber used for permanent sheeting may consist of any species which will satisfactorily stand driving. It shall be sawn or hewn with square corners and shall be free from worm holes, loose knots, wind shakes, decayed or unsound portions or other defects which might impair its strength or tightness. Minimum thickness shall be two-inch nominal. Lumber for bracing shall be No. 2 common yard lumber on timber in less than six-inch sizes and common structural grade on timbers six inches and over in thickness. Temporary supports must in all cases be removed by the contractor at his or her own expense after, or concurrently with, the completion of the permanent structure.

(Ord. 352. Passed 10-22-62.)

1359.12 PROTECTION AGAINST WATER.

The contractor shall do all ditching, pumping, well pointing and bailing, build all drains and do all other work necessary to keep the excavation clear of ground water, sewage or storm water during the progress of the work and until the finished work is safe from injury.

Where the excavation is wet sand and suitable construction conditions cannot be obtained by other methods, the contractor shall install and operate, at no additional compensation, a pumping system connected with well points, so as to drain the same effectually. No masonry or pipe shall be laid in water, and water shall not be allowed to rise over masonry until concrete or mortar has set at least forty-eight hours. All water pumped or drained from the work shall be disposed of in a manner satisfactory to the Engineer without damage to adjacent property or to other work under construction. Necessary precautions shall be taken to protect all construction against flooding. (Ord. 352. Passed 10-22-62.)

1359.13 UNAUTHORIZED EXCAVATIONS.

Whenever the excavation is carried beyond the lines and grades shown on the drawings, or given by the Engineer, the contractor shall, at his or her own expense, refill all such excavated space with such material and in such a manner as may be directed. Beneath and around concrete structures, space excavated without authority shall be thoroughly compacted when refilling or, if deemed necessary by the Engineer, shall be refilled with concrete. (Ord. 352. Passed 10-22-62.)

1359.14 ADDITIONAL EXCAVATIONS.

If the materials encountered in any excavation are not suitable for structural foundations, or, if necessary to go an additional depth or width from that designated on the drawings to provide proper bearing for pipe or masonry, or to construct pile or plank foundations, the contractor shall make such additional excavations outside the regular limits of the work as may be directed by the Engineer.

(Ord. 352. Passed 10-22-62.)

1359.15 FOUNDATIONS.

Whenever the ground is sufficiently firm and unyielding, the masonry or pipes shall be laid directly on the bottom of the excavation and, in the case of pipes, if the foundation is good earth, it shall be pared or molded to give a full support to the lower half of each pipe.

When so designated on the drawings or ordered by the Engineer, excavated areas shall be strengthened for foundation purposes by furnishing and placing crushed rock or gravel refill, timber cradles, timber piling or a combination of these materials. Crushed rock or gravel to stabilize a foundation shall have a minimum size of one inch and a maximum size of two and one-half inches, well graded between these limits. The minimum thickness of a layer installed shall be eight inches.

Timber cradles shall be fabricated and placed to the details shown on the drawings or as ordered by the Engineer. Lumber for planking, timbering or bracing shall be No. 2 common yard lumber for timber in size less than six-inch nominal, and common structural grade for timbers over six inches nominal. Minimum planking thickness shall be two-inch nominal. All cradle lumber and planking shall be sawn or hewn with square corners and shall be free from worm holes, loose knots, wind shakes, decayed or unsound portions or other defects which might impair their strength or tightness. All lumber and timber shall be subject to inspection and approval by the Engineer before it is incorporated in the finished work.

When so designated on the drawings or ordered by the Engineer, the contractor shall furnish and place piling foundations. Piling shall be driven in a manner acceptable to the Engineer. The contractor is hereby advised to purchase piling so designated or ordered only after a test pile or piles have been placed. When piling is required, the contractor, when ordered by the Engineer, shall furnish and place test piles in a location designated by the Engineer. The bearing value of driven piles shall be computed on the basis of the Engineering News Record Formula.

For piling not shown on the drawings, piling shall be supplied and driven to the bearing value designated by the Engineer. When so ordered by the Engineer, the contractor shall furnish and place framework and loading for an actual test load on the pile. (Ord. 352. Passed 10-22-62.)

1359.16 STEEL SHEET PILING.

When so designated on the drawings or ordered by the Engineer, the contractor shall furnish and drive interlocking steel sheet piling at the locations and to the depths as shown on the drawings or as ordered by the Engineer.

All piles shall be new piles, unless specifically modified in the project specifications, made of open hearth steel sheet, conforming to the latest standard specifications of the American Society for Testing Materials for Structural Steel, Serial Designation A-7, except for the following requirements: the minimum ultimate tensile strength shall be 70,000 pounds per square inch, and the phosphorous or sulphur content shall not exceed 0.06 percent. When copper steel is called for in the project specifications or ordered by the Engineer, copper content shall not be less than 0.20 percent. The minimum percent of an elongation in eight inches shall be 1,400,000 divided by the tensile strength. Bend test specimens shall stand being bent cold through 180 degrees around a pin, the diameter of which is equal to twice the thickness of the specimen, without cracking on the outside of the bent portion. The type, dimensions and properties of the steel sheeting shall be as stated in the project specifications.

Equipment and methods used for driving the interlocking steel sheet piling shall be subject to the approval of the Engineer. Strong guide timbers or framing composed of such timbers shall be used to hold the piles in line and to prevent rupture of the interlocks while being driven. A protecting cap shall be used in driving, and the hammer shall be of suitable size and shape. Combination water and air jets may be used to make the driving easier when so approved by the Engineer. Piles may be driven in pairs and shall be driven to line and grade progressively from the start. A tolerance of 0.1 of a foot, plus or minus, in line and grade will be allowed. Piling shall be driven plumb in all directions or with a slight backward inclination along the line of piles. Excavation performed, when authorized in order to facilitate the driving of steel piling, shall be backfilled and compacted, as hereinbefore specified. Driving of piles will not be permitted within 500 feet of concrete being placed or less than twenty-four hours old, nor within 200 feet of concrete less than seven days old.

Damaged piles, or piles in any respect improperly driven, shall be pulled and satisfactorily replaced by the contractor at no cost to the owner. Should continued driving on any pile result in battering the head so that it must be cut off in order to continue driving, the piles shall be so driven that the bottom of the pile is at the established grade, and the contractor shall supply and weld in place a length of pile equal to the length cut off to make up the total required length. (Ord. 352. Passed 10-22-62.)

1359.17 DISPOSAL OF EXCAVATED MATERIAL.

Excavated material shall be deposited so as to interfere as little as possible with the execution of the whole work or its several parts, and in such a manner that for each purpose the most suitable material may be placed in its final position, but not in a manner to interfere with the satisfactory carrying out of the work. Such material as cannot be placed in its final position in fills and embankments shall be removed to a temporary soil bank, from which it shall later be taken and placed in embankments or fills. Unsuitable and surplus excavated material not incorporated in the improvement shall be disposed of by the contractor at his or her own expense. (Ord. 352. Passed 10-22-62.)

1359.18 BACKFILLING.

No frozen material shall be used for backfilling. All backfilling on pipe and conduit installations shall be placed by hand and tamped in thin layers for a depth of at least eight inches above the top of the pipe or conduit. Only select material, free from stones larger than two inches, shall be used for this purpose. The material shall be placed in layers not exceeding four inches in depth, and each layer shall be thoroughly tamped and compacted to a point eight inches above the top of the pipe. No rock or other hard substance shall be placed in contact with the pipe or conduit. The remainder of the backfill can be placed mechanically and to a height slightly above the original elevation of the ground.

Backfilling around masonry structures shall be deposited in thin layers thoroughly compacted.

Backfilling under paved areas shall consist of porous material tamped in place. Any surplus material from excavation remaining at the completion of the work on the contract shall be removed and disposed of by the contractor.
(Ord. 352. Passed 10-22-62.)

1359.19 EMBANKMENTS AND FILLS.

Before any embankment or fill is placed, the entire area shall be cleared, as previously specified. If the embankments and fills are being constructed during the winter time, snow and ice shall be removed from the area. The site shall be thoroughly plowed before any of the fill is placed to insure a proper bonding of the materials.

So far as it is practicable, each layer of material shall extend the entire length and width of the embankment or fill. Layers shall be not more than six inches in thickness when in loose condition and shall be thoroughly compacted by sheepsfoot roller or other approved means before the next layer is started.

Where shown on the drawings or when directed by the Engineer, embankments and fills shall be further compacted by jetting or water soaking. When completed, the embankment shall be of the size, elevation and cross-section shown on the drawings.
(Ord. 352. Passed 10-22-62.)

1359.20 SHORT TUNNEL CONSTRUCTION.

(a) Timbered Sections. Excavation in short tunnels made beneath existing structures and/or under existing pavements or sidewalks, for the installation of pipe or conduits, shall be of sufficient size, height and width to permit the installation of the pipe and/or conduits, to permit proper bracing of the tunnel section and to permit ample room for the prosecution of the work and safety of the workmen.

If rock, as defined in Section 1359.10, is encountered in short tunnel sections, it shall be removed and disposed of as specified in Section 1359.10.

Timbers used for support of tunnels shall be of good quality, reasonably straight grained and free from knots or other defects. All timbers shall, when placed for the support of the roof and sides of the tunnel, be fitted and wedged into place.

Cap and leg type of timbering, with sets not necessarily abutting, or longitudinal timbering, supported by vertical ribs, can be used, if the ground conditions warrant. If, however, in the opinion of the Engineer, ground conditions do not warrant this type of timbering, then there shall be installed a complete box or cant-type timber set, including necessary spreaders, cleats, sills and braces, with adjacent sets abutting.

All timbering, once installed in short tunnels, shall remain in place.

Pipe installed within short tunnel sections shall be in accordance with the governing general specifications for the type and kind of pipe involved.

Bell holes for B & S Sewer or Water Pipe shall be provided within the tunnel, if the type of timbering used does not involve the use of sills. If sills or flooring are used as part of the tunnel timbering, then all bell and spigot pipe shall be laid through the tunnel on blocking, and the space between the bottom of the pipe and the floor of the tunnel shall be thoroughly filled with sand.

Backfilling of all short pipe and conduit tunnels shall be made with fine sand, thoroughly rammed or flushed into place.

If shown on the drawings or designated in the project specifications, backfill shall be one-three-five concrete, or of the mix as designated in the project specifications.

(b) Jacked Sections. Jacked-in pipe lines beneath existing structures, pavements and railroad tracks shall be in accordance with the specifications contained in this subsection.

The size of the pipe to be jacked shall be as shown on the drawings and/or as designated in the project specifications. No pipe smaller than thirty-six inches in diameter shall be jacked into place. Pipe material may be either corrugated iron pipe or reinforced concrete pipe, as designated in the project specifications.

Corrugated metal pipe shall be fabricated from corrugated galvanized sheets, number eight gauge U.S.S. with the base metal made by the open hearth process. Rivets shall be made of the same material as the base metal, thoroughly galvanized. The base metal sheets shall be galvanized on both sides by the hot dip process at the rate of not less than two ounces per square foot of metal or one ounce on each side.

The corrugated pipe shall be especially fabricated for a jacking installation, with sections fabricated for field riveting. The pipe shall be furnished in lengths to suit the contractor. However, the sections should be as long as is possible for the contractor to conveniently handle and install.

Reinforced concrete pipe shall be of the tongue and groove type, conforming to the Standard Specifications for Reinforced Concrete Sewer Pipe, A.S.T.M. Designation C75, unless otherwise shown on the drawings and/or designated in the project specifications.

Adjoining sections of corrugated iron pipe shall be field riveted. Joints in reinforced concrete pipe shall be made with cement mortar and jute from the inside. Pipe shall be jacked-up grade.

A suitable approach trench shall be opened, adjacent to the top of the slope of the embankment. The approach trench shall be long enough to accommodate the length of pipe units to be placed and wide enough to provide sufficient working room. Guide timbers or rails for keeping the pipe on line and grade shall be installed in the bottom of the trench and heavy timber backstop supports installed at the rear of the trench to take the thrust of the jacks.

A timber bearing or pushing frame shall be built and furnished to fit or match the end of the pipe to be jacked, so that the pressure of the jacks will be evenly distributed over the end of the pipe. Two hydraulic jacks of sufficient power shall be used to apply pushing or jacking pressure.

Excavation shall be carried on from inside the pipe, eight to twelve inches ahead of the lead pipe. Excavation at the top and sides shall be approximately one inch greater than the outside periphery of the pipe. Bottom excavation shall be accurately cut to line and grade.

Once jacking operations are started, the work shall be carried on in successive shifts until completed, this to guard against the freezing of the line due to settlement and compaction of surrounding soil.

If the jacked-in pipe is to be used as a liner for an additional pipe or conduit, such additional pipe or conduit shall be laid and backfilled through the jacked-in pipe, in the manner previously specified in subsection (a) hereof, except as follows: water pipe installed in jacked-in pipe beneath railroad tracks shall not be backfilled.

If shown on the drawings, manholes of a size to accommodate the outside diameter of the jacked-in pipe shall be constructed on the two ends of the section or, in lieu thereof, the ends shall be suitably bricked off.

(Ord. 352. Passed 10-22-62.)

1359.21 PLACING OF TOPSOIL AND GRADING.

On all areas designated in the project specifications to be seeded, the backfills, fills and embankments shall be brought to a subgrade level six inches below finished grade.

When subgrades have settled, topsoil shall be deposited and spread to a finished depth of at least six inches and finely raked, ready for seeding.

If the backfill, fill or embankment material is sand, a four-inch layer of clay furnished by the contractor at his or her expense shall be spread over the subgrade in two layers, and each layer thoroughly mixed into the sand subgrade by disk harrows. After the clay has been mixed with the sand subgrade, leveled and smoothed, topsoil shall be deposited and spread to a finished depth of at least two inches and finely raked, ready for seeding.

Topsoil and clay backfilling shall be taken from excavations made for structures and pipe lines, if suitable soils are encountered. Otherwise, all clay and topsoil shall be secured by the contractor from other sources.

(Ord. 352. Passed 10-22-62.)

1359.22 SEEDING.

On areas to be seeded, at least forty-eight hours before the sowing of any seed, commercial fertilizer at the rate of 800 pounds per acre shall be uniformly spread over the topsoil by a mechanical spreader and mixed into the soil for a depth of two inches. The areas shall then be lightly raked or harrowed until the surface of the finished grade is smooth, loose and pulverized.

Grass seed shall then be sown by a mechanical seeder, operating in two directions, and lightly raked into the surface and rolled once with a light hand roller. The seeded areas shall be thoroughly watered with a fine spray in such a manner as not to wash out the seed. The contractor shall use care in raking not to destroy the finish grade, nor to disturb the uniform distribution of the seed. Sowing of seed shall be done only within the seasons extending from August 15 to October 15, and from April 1 to June 1, unless otherwise approved by the Engineer.

Grass seed shall consist of and be sown at the rate of eighty pounds of Kentucky blue grass, twenty pounds of red top, twenty pounds of white clover and twenty pounds of farm rye per acre. Oats shall be substituted for rye if seed is sown in the spring. One slopes steeper than three to one, the seeded areas shall be covered by a light covering of straw, approximately one-fourth inch in depth. The seeded area shall be watered, maintained and patched as necessary until the contractor's work is completed and he or she leaves the site.

(Ord. 352. Passed 10-22-62.)

1359.23 RESTORATION OF PAVED SURFACES.

In all streets or parts of streets that are paved or macadamized, all the backfilling shall consist of porous material and be well compacted. After the trench has been backfilled to the required height, then the subgrade for the new paving shall be further compacted by rolling the backfill at paving subgrade elevation. The pavement shall then be relaid carefully and thoroughly to the section and of the materials originally placed, and to the satisfaction of the Engineer.

When requested by the Engineer, the contractor shall clean up and restore the pavement or subgrade in sections upon completion of any given section of sewer or water main and not upon final completion of all the sewers or water mains.

When the work is completed, all surplus material, rubbish, etc., shall be removed and the surface of each street disturbed by construction under the contract shall be left in as good condition as it was before the commencement of the work, and it shall be promptly and regularly maintained in such condition during a period of one year after the acceptance of the work.

(Ord. 352. Passed 10-22-62.)

1359.24 GRADING.

(a) Changes; Permit Required. No person shall cause the grade of a lot or tract of land in the Village to be increased by filling, or decreased by excavation, so that the flow of water is altered from that existing before any filling or excavating, without first securing written approval from the Engineer. Such filling or excavating shall be done only to the extent recommended by the Engineer with such culverting, tiling or ditching as approved to provide necessary drainage. (Ord. 512. Passed 12-9-68.)

(b) Permit Application; Inspection by Engineer. If a person desires to make a change in the grade of any land in the Village, he or she shall present to the Engineer a written application requesting permission to make such change, enclosing therewith a plat of the land involved reflecting the evaluations before and after the change in grade, and shall set forth the method of collecting surface water so as to protect the adjacent property, the type of materials to be used and the methods by which the materials will be used. A deposit of twenty-five dollars (\$25.00) shall be made at the time the application is made to cover the costs of the services of the Engineer. Should the Engineer's fee exceed twenty-five dollars (\$25.00), the applicant shall pay an amount in addition to the twenty-five dollars (\$25.00) to equal the fee of the Engineer before a permit is issued, effective upon the signature of the Mayor.

Upon receipt of the application, the Engineer shall view the premises and determine if the proposed change in grade provides for property collection of surface water so as to protect the adjoining property. If the same is acceptable, the Mayor shall issue a written permit to the applicant. Upon completion of the change in grade of the premises involved, the applicant shall notify the Engineer in writing and the Engineer shall inspect the premises to determine if the change of grade has been performed in accordance with the plans previously submitted to him or her.

A change of grade must be completed within one year of the issuance of the permit. If the work is not completed within one year, the landowner must make an application to review the permit and meet all requirements set forth in this section.

(Ord. 1208. Passed 7-13-92.)

(c) Authority of Solicitor to Bring Civil Action to Restore Grade. The Solicitor is hereby authorized to take any civil action necessary to have the real property restored to its original grade whenever the drainage of any property is changed in violation of Section 1359.24. (Ord. 1212. Passed 9-14-92.)

**CHAPTER 1361
Street Paving**

1361.01 Portland cement concrete pavement.

1361.02 Asphaltic concrete pavement.

1361.01 PORTLAND CEMENT CONCRETE PAVEMENT.

(a) Description. This item shall consist of a single wearing course or pavement, with or without integral curb and gutter as called for in the detailed specifications, composed of Portland cement concrete and constructed to the line, grade and cross-section called for on the plans on the accepted, prepared subgrade, subbase or completed and accepted base course, or old pavement, of the materials, by the methods and conforming to the specifications and requirements as prescribed under Item 452 Plain Portland Cement Concrete Pavement and other pertinent sections of the State of Ohio Department of Transportation Construction and Material Specifications, as amended, namely Item 451, excluding reinforcing steel, and Item 499 Concrete.

(b) Construction. Standard detailed drawings for construction of concrete paved streets, curbs and gutters, as produced by the Bureau of Location and Design of the Ohio Department of Transportation, are on file in the Village Hall.

(c) No traffic shall be allowed on a newly poured street for a minimum of five days.

(d) No concrete streets will be permitted to be installed after November 1 or when the temperature is below 40 degrees, unless written approval is given both by the Village Engineer and Village Administrator. (Ord. 1835. Passed 5-14-01.)

1361.02 ASPHALTIC CONCRETE PAVEMENT.

(a) In General. All labor, materials, equipment and tools necessary for the construction of all asphaltic concrete pavement shall be furnished and placed in compliance with Item 401 (Plant Mix Pavement – General) of the Ohio Department of Transportation Construction and Material Specifications.

(b) Description. Item 401 shall consist of one or more courses of compacted asphaltic concrete constructed on the approved base, or approved existing pavement, in accordance with the methods and conforming to the specifications and requirements described in Items 402, 403, 404 and/or 412, (Asphalt Concrete) of the Ohio Department of Transportation Construction and Material Specifications, except as hereinafter modified, and in conformity with the lines, grades and other details shown on the plans, finished and ready for acceptance.

The asphalt concrete, when laid, shall have a minimum finished compacted thickness of six and one-half inches and shall be placed in three courses. The base course shall be per Item 301 placed to a compacted thickness of three inches. The second course shall be per Item 402 placed to a compacted thickness of two inches. The surface course shall be per Item 404 placed to a compacted thickness of one and one-half inches.

(c) Base. The base course shall not consist of Item 304 (Aggregate Base) consisting of a compacted finished thickness of six inches, conforming to the Ohio Department of Transportation Construction and Material Specifications.

(d) Subgrade. Cleaning, rolling and other subgrade preparation shall be in conformance with Section 200 (Earthwork) of the Ohio Department of Transportation Construction and Material Specifications.

(e) Construction. Refer to the standard drawings of the Bureau of Location and Design of the Ohio Department of Transportation on file at the Village Hall.
(Ord. 1288. Passed 1-10-94.)

CHAPTER 1363
Sidewalks, Curbs and Gutters

1363.01 Compliance required.	1363.06 Protection and curing.
1363.02 Excavation and subgrade.	1363.07 Requirements for smoothness.
1363.03 Forms.	1363.08 Defective work.
1363.04 Placing and finishing.	1363.09 Concrete reinforcement.
1363.05 Expansion joints.	

1363.01 COMPLIANCE REQUIRED.

All labor, material, equipment and tools necessary for the construction of all concrete sidewalks shall be furnished and placed in compliance with the following specifications:

- (a) Walks, curbs and combined curbs and gutters shall consist of air-entrained Portland cement concrete, constructed in one course on a prepared subgrade in compliance with the following specifications and in conformity with the lines, grades, thickness and cross-section shown on the drawings.
- (b) Residential sidewalks shall be four inches thick.
- (c) Residential sidewalks across drives shall be six inches thick.
- (d) Driveway approaches shall be six inches thick.
- (e) Business district sidewalks across drives shall be seven inches thick.
- (f) The contractor shall procure and pay for all permits, licenses and bonds necessary for the prosecution of the work and/or required by Municipal regulations and laws.
- (g) Before placing concrete, a twenty-four hour written notice must be given to the Engineer of the intention to pour concrete and approval by the Engineer must be given for lines, grades and subgrades before placing such concrete.
- (h) Concrete materials, proportioning, mixing and placing shall comply with the specifications for Items 608 and 609 of the State of Ohio Department of Transportation Construction and Material Specifications, as amended, except as modified by these specifications. The concrete shall have a minimum twenty-eight day strength of 4,000 psi for one cylinder, and a minimum twenty-eight day strength of 4,000 psi for an average of three cylinders. Making and curing of test cylinders and testing of specimens shall be per A.S.T.M. C31 and C39. Concrete shall be proportioned to give the necessary workability and to give a slump of two to four inches. Air-entrainment shall not be less than four percent nor more than seven percent. Maximum water content shall be 5.5 gal/sack. Minimum cement shall be 6.5 sacks per cubic yard of concrete.
(Ord. 352. Passed 10-22-62.)

- (i) The pavement shall consist of eight inches of Portland cement concrete with steel reinforcing meeting the standards of Item 451 – Reinforced Portland Cement Pavement of the State of Ohio Department of Transportation, and shall be constructed upon a four-inch compacted layer of slag screenings or granulated slag insulation course placed upon the prepared subgrade in accordance with the specifications of the State of Ohio Department of Transportation. Curb drain shall be either four-inch vitrified pipe or rigid plastic pipe along with premium porous backfill.

1363.02 EXCAVATION AND SUBGRADE.

Unstable and unsuitable materials, such as earth containing organic material or cinders, found existing in the subgrade of the improvement, shall be excavated and removed and replaced with a suitable material satisfactory to the Engineer. The contractor shall do all ditching, pumping and bailing, build all drains and do all other work necessary to keep the excavation clear of ground water or storm water during the progress of the work and until the finished work is safe from injury.

Whenever the excavation is carried beyond the lines of grade shown on the drawings or given by the Engineer, the contractor shall, at his or her expense, refill all such excavated space with such material and in such a manner as may be directed. No frozen materials shall be used for backfilling. All backfill material shall be placed in layers not exceeding four inches in depth, and each layer shall be thoroughly packed in and compacted.

The subgrade shall be tamped or rolled until thoroughly compacted, shall be constructed true to line, grade and cross-section and shall be prepared sufficiently wide to accommodate the forms. Embankments shall be made not less than six inches wider on each side than the walk to be installed.

(Ord. 352. Passed 10-22-62.)

1363.03 FORMS.

Side forms shall be lumber with a nominal width of not less than two inches by four inches, or of steel of equal rigidity, for walks and aprons. Forms for curbs or combined curbs and gutters shall be approved by the Engineer. They shall be held securely in place by stakes or braces, with the top edges true to line and grade. The forms for street sidewalks shall be so set that the slab will have a fall of one-inch vertical to four feet horizontal, from the edge nearest the property line toward the edge farthest from the property line. Forms for the sidewalk aprons shall be set so that the slab will have a uniform fall between the sidewalk proper to the curb grade. (Ord. 352. Passed 10-22-62.)

1363.04 PLACING AND FINISHING.

The subgrade or subbase shall be adequately moistened just before the concrete is placed. The concrete shall be placed three-fourths of an inch higher than the finished slab, tamped until all voids are removed and free mortar appears on the surface, thoroughly spaded along the edges, struck off to the true grade and finished to a true and even surface with suitable trowels and floats. The surface shall be divided by grooves constructed at right angles to the center line of the sidewalk. These grooves shall extend to one-quarter the depth of the sidewalk, shall not be less than one-eighth inch nor more than one-quarter inch in width and shall have the edge rounded. No slab shall be longer than six feet nor less than four feet, unless otherwise approved by the Engineer. The contractor may divide the surface of the sidewalks by sawing the joints. All exposed edges of concrete walk, curb, and gutter shall be edged with an edging tool having a one-quarter inch to one-half inch radius except as shown on the drawings.

(Ord. 352. Passed 10-22-62.)

1363.05 EXPANSION JOINTS.

Expansion joints not less than one-half inch thick shall be placed at intervals of about fifty feet in the sidewalks and curb and gutter. Expansion joints one-half inch thick shall be provided between the sidewalk and all structures such as light standards, valve-boxes, traffic poles, etc., which extend through the sidewalk or curb or gutter. Expansion joints shall be placed wherever sidewalks or curbs or gutters abut against concrete driveways, concrete pavements and/or concrete walks, as directed by the Engineer.

(Ord. 352. Passed 10-22-62.)

1363.06 PROTECTION AND CURING.

All forms shall be oiled prior to placing the concrete. All exposed surfaces of concrete shall be protected against wash by rain.

Waterproof membrane curing compound shall be white membrane curing material and shall be placed in accordance with Section 451.10 of the State of Ohio Department of Transportation Construction and Material Specifications, as amended.

(Ord. 352. Passed 10-22-62.)

1363.07 REQUIREMENTS FOR SMOOTHNESS.

The tops of all curbs and the gutters of all combined curbs and gutters shall be tested during construction, and after removal of the forms, with a ten-foot straight edge, and all variations which exceed one-eighth inch in a ten-foot length shall be satisfactorily corrected. The back of all curbs and the back of the curb and the face of the gutter for combined curbs and gutters shall be checked for line by a fifty-foot stringline, and all variations from line which exceed one-quarter of an inch in a fifty-foot length shall be satisfactorily corrected.

(Ord. 352. Passed 10-22-62.)

1363.08 DEFECTIVE WORK.

Any concrete work not formed as shown on the drawings, or for any reason out of alignment or level or which shows a defective surface, or is not installed in conformance with these specifications, shall be considered as not conforming with the intent of these specifications and shall be removed from the job by the contractor at his or her expense, unless the Village grants permission to patch the defective area. Permission to patch any such area shall not be considered a waiver of the Village's right to require complete removal of the defective work if the patching does not, in its opinion, satisfactorily restore the quality of the concrete and the appearance of the concrete. Concrete so ordered removed, but not removed within a reasonable period stated in writing to the contractor, shall be removed by the Village and the expense incurred shall be charged to the contractor.

(Ord. 352. Passed 10-22-62.)

1363.09 CONCRETE REINFORCEMENT.

Reinforcing wire mesh and/or steel rod will be used wherever deemed necessary by the Engineer.

(Ord. 352. Passed 10-22-62.)

CHAPTER 1365
Water Line Construction

1365.01	Cast-iron water pipe and fittings.	1365.13	Installation of valve chambers.
1365.02	Gate valves and valve boxes.	1365.14	Installation of fire hydrants.
1365.03	Valve chambers.	1365.15	Anchorage of bends, tees and plugs.
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CROSS REFERENCES

Compulsory water connections - see Ohio R.C. 729.06

Water regulations - see S.U. & P.S. Ch. 939

1365.01 CAST-IRON WATER PIPE AND FITTINGS.

(a) All water pipes and fittings shall be of a pattern and character of a superior quality of iron, tough and even grain, free from cracks, sand holes or defects of any nature.

(b) All cast-iron water pipes and fittings shall be given a cement mortar lining at the point of manufacture. The lining shall conform to the American Standard Specifications, A 21.4-1952, and all subsequent amendments.

(c) All cast-iron pipe and fittings shall conform to the following specifications of the United States of American Standards Institute

A 21.6 American Standard Specifications for Cast Iron Pipe Centrifugally Cast in Metal Molds, for Water or Other Liquids.

A 21.8 American Standard Specifications for Cast Iron Pipe Centrifugally Cast in Sand-Lined Molds, for Water or Other Liquids.

A 21.10 American Standard Specifications for Short-Body Cast Iron Fittings.

A 21.11 American Standard Specifications for a Mechanical Joint for Cast Iron Pressure Pipe and Fittings.

Fittings over twelve inches in size which are not covered by the above specifications shall conform to the specifications and dimensions shown in the Handbook of Cast Iron Pipe, published by the Cast Iron Pipe Research Association.

(d) All pipe and fittings shall be Class 52 and designed for a working pressure of not less than 150 psi.

(e) Cast-iron pipe and fittings shall have mechanical-type joints similar to the U. S. Joint, the American Cast Iron Pipe Company's Doublex Simplex Joint, the Clow National "C.N." Joints or their equal. Gaskets shall be of rubber with a duck-tip or other equally effective protection against uneven distortion of the gasket. Cadmium-plated bolts shall be used having a minimum tensile strength of 50,000 psi.

(f) In lieu of mechanical joints as specified above, the contractor shall be permitted to furnish joints of a type commonly known as "Bell-Tite," "Tite-on," "Fast-Tite" or an approved equal. Pipe shall be furnished with a groove cast into the inside diameter of the bell for receiving and securing a rubber gasket ring. The pipe shall be joined by inserting the spigot end into the "Bell-Tite" opening and sealed by using a solid rubber gasket ring especially designed for this purpose. The joint must withstand 150 psi working pressure. The entire joint shall be made in accordance with the recommendations of the pipe manufacturer. Mixing the two types of approved joints on any one project will not be permitted. The contractor must use one type of joint throughout the entire project. The only exception is that all hydrants shall have mechanical-type joints.

(g) Wherever changes in line and grade of the main, as shown on the drawings, are not standard fitting deflections, the contractor will be permitted to use an approved combination of standard fittings and small deflections in the adjoining lengths of pipe (not to exceed a maximum of one-half inch joint openings).

(h) Pipe to be installed with air cocks or drains shall be cast with bosses thereon, drilled and tapered for two-inch connections and plugged in the shop with cast-iron threaded plugs before shipment.

(i) Whenever it becomes necessary to cut a length of pipe, it shall be done in a manner to leave a smooth end at right angles to the axis of the pipe. No payment will be made for the unused portion of the pipe.

(j) All water pipe and special castings, after thorough cleaning, shall be coated outside with a suitable asphaltum or other approved impervious preparation applied at a temperature of 300 degrees Fahrenheit. Pipe shall be handled in such a manner that a minimum amount of damage to the coating will result. All cast-iron pipe or fittings, the coating of which has been damaged in shipping or handling, shall have the damaged portion well cleaned and painted with three field coats of Inertol 50 or Bitumastic 50, or their equal, before placing in the work. The contractor shall also coat all exposed parts of nuts and bolts, as above specified, after the pipe has been laid and before backfilling has been placed. All field coatings shall be furnished by the contractor and no extra payment will be received for this work. Pipe shall not be dropped or bumped against pipe or other objects on the ground when unloading.

(k) Lugged pipe shall be used where “tied distances” are shown on the alignment drawing. High strength cast-iron tee head bolts, hex nuts and glands shall be furnished and used to make these connections. The bolts will be cadmium-plated and have a tensile strength of 50,000 psi.

(l) Closure pieces shall be accurately measured and cut in the field and installed using solid-type, long pattern sleeves as shown or as required.

(m) All cast-iron pipe and fittings shall be suitably marked to denote the manufacturer, class, date, weight and other elements of identification.

(n) Extra fittings shall include furnishing and installing any fittings that are not shown on the plans. The Engineer shall have the authority to approve of and order extra fittings to be incorporated into the work, and the contractor, when so ordered, shall furnish and install these fittings. Extra fittings shall comply in all respects to these specifications. No special castings shall be accepted the weight of which is less than Class “D,” standard weight, by more than ten percent. The contractor will be paid the contract price for all standard fittings. All castings, upon which a price is not fixed by contract, shall be paid for at the contract price per pound. The weight of extra fittings shall be construed to mean the weight of the body casting only, and such weight may be determined by actually weighing the fittings or it may be taken from the table of weights as shown in the Handbook of Cast Iron Pipe, published by the Cast Iron Pipe Research Association. The contract price for special castings shall be additional to the measurement of pipe line, which measurement shall be continuous and inclusive of all special castings on such line.

(o) All flanged pipe shall have American Standard Class 125 flanges and shall be faced and drilled to American 1928 Standard drilling, unless special drilling is called for. Where tap or stud bolts are required, the flanges shall also be tapped.

(p) No material shall be used in the work until it has been inspected and approved on the site of the work. No broken, cracked, imperfectly coated or lined, or otherwise unsatisfactory pipe shall be used in the work. All pipe and fittings rejected by the Inspector shall be promptly removed from the site and not again offered for use. When requested by the Engineer, any or all materials entering into the construction shall be tested by a reputable local testing laboratory at the contractor’s expense. Such inspection or test shall not relieve the contractor of any of his or her obligations in this respect, and any defective material or workmanship which may have passed the Engineer or inspector shall be at all times liable to rejection when discovered until the final completion and adjustment of the contract covering the work.

(q) The manufacturer of any of the materials covered in these specifications shall furnish a sworn statement that the inspections and tests required by the appropriate American Standard Specifications, as listed in subsection (c) hereof, have been made and performed and that the material is in compliance with the same.

(Ord. 352. Passed 10-22-62.)

1365.02 GATE VALVES AND VALVE BOXES.

(a) The contractor shall furnish and install all gate valves, valve-boxes and valve chambers as called for on the plans. Valves shall conform in all respects with American Water Works Association Specifications C-500 for Gate Valves for Ordinary Water Works Service. The valves shall be R.D. Wood or an approved equal.

(b) All gate valves three inches and larger shall be of the iron-body bronze-mounted type and shall have a nonrising bronze stem, shall open by turning clockwise and shall be operated by a two-inch square operating nut. Nuts shall have an arrow and the word "OPEN" cast thereon to indicate the direction of turning to open the valve. The valve ends shall be mechanical joint or "Bell-Tite" joint type.

(c) All gate valves three inches to sixteen inches in size shall be of the "double disc parallel seat" or "double disc inclined seat" type. All gate valves twenty inches and over in size shall be of the "double disc parallel seat" type. The discs on all valves over three inches in size shall be forced to their seats after the valves are closed by wedges or another acceptable device.

(d) All two-inch gate valves, or smaller, shall be of the best quality brass or bronze, double disc parallel seat, nonrising stem, with screw ends and shall open by turning clockwise.

(e) All twenty-inch and twenty-four inch gate valves shall be provided with four-inch bypass valves, and all thirty-inch to forty-eight inch valves, inclusive, shall be provided with six-inch bypass valves located below the center of the valves.

(f) All gate valves sixteen inches and under shall be constructed to work vertically. Gate valves twenty inches and larger in size shall be constructed to work horizontally.

(g) The manufacturer of the valves to be used shall furnish a sworn statement that the inspections and tests required by the A.W.W.A. Specification C-500 have been made and performed and that the valves furnished comply with that specification in all respects.

(h) Gate valves two inches to twelve inches in size, inclusive, shall be installed with valve boxes of appropriate length and design. Gate valves fourteen inches in size and larger shall be installed in valve chambers.

(i) Valve-boxes shall be Buffalo-Type, either two or three piece, cast-iron, with a five and one-quarter screw-type shaft. Each box shall be complete with a lid with the word "WATER" cast thereon. Boxes furnished shall be Eddy Company, catalog number F-2450, or equal. The lids furnished shall be Eddy Company, catalog number F-2494, or equal. Valve-box bases shall conform to the size of the valves.

(j) Air cocks or air vent valves shall be two inches in size and may be Darling Company, No. 1081, Farman Brass Works, No. W-4695, or their equal.
(Ord. 352. Passed 10-22-62.)

1365.03 VALVE CHAMBERS.

(a) Valve chamber bases shall be constructed of formed concrete having a twenty-eight day compressive strength of 3,000 psi.

(b) The walls of the valve chamber shall be made of No. 2 shale brick laid radially in header courses. No broken brick shall be used except in closures and to chink in the exterior radial joints. The top of the valve chamber shall be drawn in and domed concentrically about the vertical axis of the valve chamber to receive the manhole frame casting. The top of the manhole casting and lid shall be set to the exact elevation as called for on the plans. If exact elevations are not given, then the top of the casting and the lid shall be made flush with the existing ground.

(c) Cast-iron manhole frames shall be Neenah Foundry Company, catalog number R-1370, complete with Type B lids. Lids shall be furnished with the words "WATER VALVE" cast thereon in letters at least two inches in height.

(d) Mortar for joints shall consist of one part Portland cement and two parts of a clean, course mason sand by volume.

(e) Each valve in the valve chamber shall be supported by a formed concrete pad using 3,000 psi concrete as shown on the plans. Concrete support pads shall be placed after the valves are completely in place and at least seven days prior to hydrostatic testing.

(Ord. 352. Passed 10-22-62.)

1365.04 FIRE HYDRANTS.

(a) Hydrants shall be designed and manufactured in accordance with American Water Works Association Specifications C-502 for Fire Hydrants for Ordinary Water Works Service, the latest revision.

(b) Hydrants furnished shall be as manufactured by Mueller Centurion Safety Flange (first line quality) or an approved equal.

(c) Hydrants shall have a compression-type shut-off with four and one-half inch diameter minimum valve opening. The inlet pipe connection to the hydrant base shall be a six-inch mechanical joint end. Bury length shall be five feet, six inches, or as called for on the plans, or as directed.

(d) Each hydrant shall be provided with two two-and-one-half inch hose nozzles and one four-inch pumper nozzle. Hose nozzles shall have National Standard fire-hose thread, and pumper nozzle thread shall conform to municipal standards. The outer end of all nozzle threads shall be terminated by the "Higbee Cut" on full thread. All nozzle caps shall be provided with gaskets.

(e) Operating nuts and nozzle cap nuts shall be National Standard pentagonal-type, measuring one and one-half inches from flat to point. Hydrants shall open by turning the operating nut counter-clockwise. An arrow and the word "OPEN" shall be cast in relief on the top of the hydrant to indicate the direction of opening.

(f) All hydrants shall be equipped with a stuffing box located below the operating threads so as to shield the threads from water while the hydrant is in use. The nozzle or head section of the hydrant shall be a separate casting from the barrel and shall be so designed that the nozzle or head section of the hydrant may be revolved 360 degrees simply by loosening, not removing, the swivel flange bolts. The bottom section of the flange above the ground line must not be an integral part of the barrel.

(g) The outside of all hydrants above the ground line shall be furnished shop-painted with red barrel, white top hydrant enamel. (A.O.)

(h) All new fire hydrants must have a STORZ fitting at the time it is installed.
(Ord. 2500. Passed 7-27-15.)

1365.05 SAND BACKFILL.

Sand shall be a natural bank sand, graded from fine to course, and free from lumps, cinders, ashes, organic matter or other objectionable material. It shall not contain more than ten percent by weight of loam and clay and shall all pass a one-half inch screen. The material is to be approved by the Engineer.

(Ord. 352. Passed 10-22-62.)

1365.06 SPECIAL BACKFILL.

Special backfill shall be crushed limestone, gravel or slag meeting the standards of the State of Ohio Department of Transportation Construction and Material Specifications, as amended. If the Engineer deems it necessary, he or she may hire a local reputable testing laboratory to test the material to be furnished, and the cost of this test shall be paid by the contractor.

(Ord. 352. Passed 10-22-62.)

1365.07 ASBESTOS CEMENT PIPE AND FITTINGS.

(a) Materials. Asbestos cement pressure pipe shall be Class 150 and shall conform to American Water Works Standard Specifications, W.W.W.A. C-40053 T. All couplings shall conform to the same standards.

Pipe assembly shall be equal to "Ring-Tite" as manufactured by Johns-Manville. Certification of manufacturer's tests, including hydrostatic, flexure and three-edge bearing tests shall be furnished to the owner. Each pipe shall carry the Underwriters' Laboratory label of approval.

(b) Construction. The manufacturer shall furnish, without charge, the services of an installation instructor who is employed by the manufacturer as a competent and experienced construction man for this type of water main and who will assist the contractor in employing the proper methods for this type of construction.

The contractor shall comply with the manufacturer's specifications in the construction of the asbestos cement pipe line except that the bedding and backfilling of pipe shall be made in accordance with the enclosed specifications for cast-iron pipe.

The enclosed specifications for cast-iron pipe shall apply to this type of material and construction, except as noted above.
(Ord. 352. Passed 10-22-62.)

1365.08 GENERAL WATER LINE CONSTRUCTION.

(a) All water pipe shall be laid to the required lines and grade, with fittings, valves and hydrants at the proper locations, with the joints centered and spigots shoved home and with all valve and hydrant stems plumb.

(b) All necessary lines and grades shall be given to the contractor by the Engineer within a reasonable length of time after notice by the contractor of the time and place he or she intends to work.

(c) All stakes, once set by the Engineer, must be protected by the contractor, and, if it is necessary to reset and regrade any stakes which have been disturbed, the contractor shall pay to the Village Administrator all such costs.

(d) The contractor shall furnish all labor and material to set grade bars every fifty feet. Each pipe shall be laid at each end to line and grade using a line drawn between the grade bars.

(e) Unless otherwise indicated on the plans, all water pipe shall be laid to a depth of four feet measured from the established grade line to the top of the pipe.

(f) The contractor, at his or her own expense, shall determine the location of existing subsurface structures within the limits of the water line trench by such explorations and excavations as may be necessary after he or she has made a thorough examination of all existing records.

(g) The operation of all valves on existing mains for making connections, tests or for any other cause, shall be done by the Village Administrator. The contractor shall give sufficient notice to the Village Administrator so that the work may be done with the minimum of inconvenience to the public and delay to the contractor.

(h) In order to protect persons and property, adequate barricades, construction signs, torches, red or amber lanterns and guards as required shall be placed and maintained by the contractor during progress of construction work and until it is safe for traffic to use the trenched street or highway. The work shall be conducted so that the least interference with traffic will result. The contractor shall provide suitable bridges over open trenches at street intersections and driveways.

(Ord. 352. Passed 10-22-62.)

1365.09 TRENCH EXCAVATION AND PREPARATION.

(a) The minimum width of the trench shall be eighteen inches and, for water pipe ten inches or larger, at least one foot greater than the diameter of the pipe. The maximum clear width of the trench shall not be greater than two feet wider than the diameter of the pipe being laid, except by consent of the Engineer.

(b) Wherever necessary to prevent caving, excavations in sand, gravel, sandy soil or other unstable material shall be adequately sheeted and braced. Where sheeting and bracing are used, the trench width shall be adjusted accordingly. Trench sheeting shall remain in place until pipe has been laid, tested for defects, repaired if necessary and the backfill around it compacted to a depth of at least one foot over the top of the pipe.

(c) The use of excavating machinery will be permitted except in such places where operation of the same will cause damage to trees, buildings or structures either above or below ground; in this case, hand methods will be employed.

(d) With the exception of crossing State highways, all work must be done in open trenches. Tunneling, boring or forcing will not be allowed without a special permit from the Engineer. The excavated material must be placed in such a manner as not to interfere with the work, obstruct driveways or sidewalks or interfere with proper drainage.

(e) The contractor shall, when so ordered by the Inspector, construct tight bulkheads across the trench and provide suitable pumps to remove any water which may be encountered or which may be accumulated in the trench. In no case shall trench water be permitted to rise upon or flow through the water main under construction.

(f) In open watercourses, ditches or pipes encountered during the progress of the work, the contractor shall at his or her own expense provide for the protection and securing of an unobstructed flow in such courses or pipes and shall repair any damage that may be done by reason of the new constructions.

(g) Blasting for excavation will be permitted only after securing written permission from the Village Administrator, who shall fix the time during which blasting may be done and determine what protective measures are necessary to insure the safety of adjacent property. The contractor shall be solely responsible for any damage resulting from blasting even though he or she has secured the above permit. The contractor's method of blasting must also conform to State laws and any local ordinances.

(h) The contractor shall remove all pavements, road surfaces, curbing, driveways and sidewalks within the lines of excavation. The contractor shall make all cuts by channeling machine, hand operated pneumatic tools or by other such methods as will furnish a clean cut in the pavement and base without undue shattering. All concrete curbing, driveways or sidewalks shall be broken up and removed by the contractor. All such work as above designated shall be done at the contractor's expense, unless otherwise specified.

(Ord. 352. Passed 10-22-62.)

1365.10 LAYING CAST-IRON PIPE.

(a) All pipe and fittings shall be carefully lowered into the trench by means of derricks, ropes or other suitable equipment so as to prevent damage to the pipe or fitting. Before lowering and while suspended, the pipe shall be inspected for defects and rung with a light hammer to detect cracks. Any defective, damaged or unsound pipe or fittings shall be rejected and replaced with a sound pipe or fitting by the contractor at his or her own expense. The rejected material shall be removed from the job and never again offered for use. All dirt or foreign material shall be removed from the pipe before being lowered into the trench, and the pipe shall be kept clean during and after laying.

(b) The spigot end shall be centered in the bell, the pipe shoved into position and brought to true alignment and grade and secured there by tamping sand around the pipe except at the bell hole. Proper joints then shall be made by following manufacturer's recommendations.

(c) Where necessary to deflect pipe from a straight line, either vertical or horizontal, the degree of deflection shall be as approved by the Engineer.

(d) Whenever it is necessary to cut pipe, it shall be done in a neat and workmanlike manner without damage to the pipe, leaving the end smooth and at right angles to the axis of the pipe. No payment will be made for the portion of the pipe that is cut off and not used in the line.

(e) At times when pipe laying is not in progress, the open ends shall be closed by some approved means and no trench water shall be permitted to enter the pipe at any time.

(f) Bells shall face the direction of laying except that on steep grades they shall face uphill.
(Ord. 352. Passed 10-22-62.)

1365.11 LINE VALVES.

Line valves shall be set at the exact locations as shown on the plans. All valves shall be of a design and construction that meets the approval of the Engineer.
(Ord. 352. Passed 10-22-62.)

1365.12 INSTALLATION OF VALVE BOXES.

(a) An approved type of valve-box shall be set over every gate valve that is twelve inches or less in size.

(b) Granular material shall be furnished and placed as backfill around each valve-box. The granular material shall be composed of gravel, broken slag or stone graded from coarse to fine, all passing a two-inch screen, and free from dust, clay or loam sufficient in amount to render it unusable. The granular material shall be placed in such a manner that it completely surrounds the valve-box for a minimum distance of nine inches and shall extend from the top of the box to a depth of not less than thirty inches as measured for the top of the valve-box. Valve-boxes shall be set as per manufacturer's specifications.

(c) Special care shall be exercised in backfilling around each valve-box to prevent displacement of the box. When the backfilling operation has been completed, the box shaft shall be plumb and centered over the valve operating nut, with the top of the box at the elevation called for on the plans or as determined by the Engineer.

(d) The valve-box shall be cleaned of all stones and debris that may have lodged inside it during the construction period.
(Ord. 352. Passed 10-22-62.)

1365.13 INSTALLATION OF VALVE CHAMBERS.

(a) Chamber walls shall be laid up with full mortar bed in accordance with the details shown on the plans. Joints on the interior surface shall be struck.

(b) The entire outer surface of the chamber shall be plastered with a coating of mortar not less than one-half inch thick.

(c) Brick shall not be laid on the formed concrete base until it has set properly. Brick shall not be laid in water nor shall water be permitted to come in contact with the masonry until the mortar has thoroughly set.

(d) The valve shall be protected from mortar drippings and the entire interior of the chamber shall be cleaned of excess mortar and debris before the chamber shall be classed as being completed.

(e) Premolded expansion material shall be placed between the pipe and the masonry walls wherever pipe passes through the masonry walls.
(Ord. 352. Passed 10-22-62.)

1365.14 INSTALLATION OF FIRE HYDRANTS.

(a) Each hydrant shall be connected to the main pipe with a six-inch cast iron branch line controlled by an independent six-inch gate valve.

(b) All hydrants shall stand plumb with the pumper nozzle pointing directly toward the curb and the hose nozzles at an angle of forty-five degrees therefrom.

(c) The hydrant shall be set to conform with the established grade. The top of the frost casing on the hydrant shall be at least four inches above grade.

(d) Drainage shall be provided at the base of each hydrant by excavating and filling around the hydrant elbow with crushed slag or stone of one inch to two inches in diameter to a point at least six inches above the waste opening on the hydrant. At least one cubic yard of stone or slag shall be used for each hydrant.

(e) The base of the hydrant shall be well braced against unexcavated earth at the end and both sides of the trench with six-inch by six-inch timber struts resting against planks and sledged into position. An alternative method shall be to tie the hydrant to the main pipe with suitable rods and clamps.

(f) The hydrants must be thoroughly cleaned of dirt and foreign matter before setting.
(Ord. 352. Passed 10-22-62.)

1365.15 ANCHORAGE OF BENDS, TEES AND PLUGS.

(a) Concrete reaction or thrust backing shall be applied on all pipe lines eight inches larger in size at all tees, plugs, caps and bends whose deflection is twenty-two and one-half degrees or more. This backing shall be so placed that joints will be accessible for repairs.

(b) Reaction of thrust backing shall be 3,000 psi concrete and it shall be placed between solid ground and the fitting to be anchored.

(c) The area of bearing required on the pipe and on the ground in each instance shall be determined by the Engineer.

(d) Movement of the fittings listed above shall be prevented by the use of suitable steel rods and clamps as approved by the Engineer and the owner.
(Ord. 352. Passed 10-22-62.)

1365.16 PLUGGING DEAD ENDS.

Standard plugs shall be inserted into the bell ends of pipes, tees, crosses and caps jointed to spigot ends of pipes and fittings and secured with clamps as called for on the plans.
(Ord. 352. Passed 10-22-62.)

1365.17 PROCEDURE FOR STANDARD BACKFILL.

(a) An approved sand shall be used around and to a depth of the top of all water lines. The entire trench shall be filled with the sand for a distance of six inches under the pipe to a plane equal to the top of the pipe.

(b) A layer of fine earth backfill shall be used between the sand layer mentioned above and a plane two feet above the top of the pipe.

(c) The regular excavated material may be used to fill the remaining trench depth provided that such backfill is free of slag, cinders, ashes, broken concrete, large stones or other objectionable materials.

(d) Backfilled areas shall be dressed and maintained in a level and smooth condition. All areas where settlement occurs subsequent to the initial backfill shall be promptly backfilled and redressed throughout the life of the contract.

(e) Frozen material shall never be used for backfilling nor shall any backfilling be placed on frozen material.

(f) Backfilling shall not be done in freezing weather without express permission of the Engineer.

(g) The backfill includes all backfilling, ramming, puddling or rolling, as required, the regrading of adjacent disturbed areas, the replacing of drains and other surface and subsurface structures, the placing and maintaining of temporary sidewalks and driveways, furnishing suitable backfill material, reseeding or sodding lawns and ditches, replacing trees and shrubbery damaged by the contractor and all appurtenant work incidental thereto.
(Ord. 352. Passed 10-22-62.)

1365.18 PROCEDURE FOR SPECIAL BACKFILL.

(a) The contractor under this section shall furnish all the materials for and shall properly place and compact crushed slag, crushed stone or crushed gravel backfill over the water mains and structures where they cross under roads or any other location where future settlement of backfill must be avoided.

(b) Special backfill shall be used wherever it is specified to be used or as shown on the plans.

(c) The backfill shall be placed in six-inch layers and compacted. The material shall be as stipulated in Section 1365.06.

(d) The special backfill shall completely fill the ditch from the sand layer over the top of the pipe (as specified in Section 1365.17) to the subgrade line of all pavements and to the ground line if no pavement exists.

(e) All provisions of Section 1365.17 shall apply that are not in direct contradiction to any of the provisions of this section.
(Ord. 352. Passed 10-22-62.)

1365.19 CLEANING RIGHT-OF-WAY.

(a) Upon completion of backfilling, or before completion if so ordered by the Engineer, the contractor shall remove from the site of the work all surplus material, tools, equipment and construction sheds.

(b) All surplus excavated material shall be removed and deposited upon lands abutting the improvement if such fill is requested by the property owners. If no filling of abutting property is desired, the contractor shall dispose of such surplus excavation wherever he or she can arrange for rights to fill.

(c) The street and all environments shall be left clean and in as good repair or better than they were before the work was begun.
(Ord. 352. Passed 10-22-62.)

1365.20 REPAIR OF PAVEMENT, CURBING AND SIDEWALK.

(a) All pavements, road surfaces, sidewalks, driveways or curbs which were in place before the work was started shall be replaced in the same manner as the original installation, or as specified by the Engineer, and the cost of such replacement shall be borne by the contractor unless otherwise specified.

(b) All road surfaces, walks and driveways that had a hard surface material other than blacktop or concrete shall be replaced with a material meeting the requirements of Item 310 of the State of Ohio Department of Transportation Construction and Material Specifications, as amended. The material will be placed in layers and shall be thoroughly compacted. Road surfaces shall be compacted by means of an approved roller weighing not less than ten tons.
(Ord. 352. Passed 10-22-62.)

1365.21 HYDROSTATIC TESTING.

(a) All pipe lines shall be given a hydrostatic test at a test pressure of 200 psi for 3 hours, or 150 psi for 24 hours, employing one of the methods specified herein.

(b) Testing plugs or caps shall be furnished and installed for testing completed sections of cast-iron pipe and fittings.

(c) Before the test pressure is applied, care shall be taken to insure the removal of air in the line at the high points and to see that all caps, plugs and exposed portions of the line are securely braced.

(d) The contractor shall supply all necessary equipment, tools and labor to properly conduct the test. All testing shall be under the direction of the Village Administrator.

(e) Water for filling the test section will be supplied by the Village to the contractor for an appropriate charge.

(f) After the line has been brought up to the test pressure, it shall be held at this pressure for a period of at least one hour. The quantity of make-up water needed to maintain the line at the test pressure shall be accurately measured to determine the amount of leakage. The leakage for twenty-four hours shall be taken as the quantity of water added in the one-hour period multiplied by twenty-four.

(g) During the test period, all joints shall be visually inspected for leakage.

(h) If the leakage exists, the contractor shall locate and repair the leaks and again test the pipe. This process shall be continued until the leakage has been eliminated.

(i) After a pipe has been satisfactorily tested, the contractor shall drain the same. In cold weather, this draining must be done immediately after the test is finished.

1365.22 DISINFECTING MAINS.

(a) After hydrostatic testing, the new line shall be thoroughly flushed and drained. The main shall be flushed through the hydrants or by some other approved means. Each valved section of new pipe shall be flushed and chlorinated independently.

(b) After flushing and draining, the pipe shall be filled again at a slow rate and chlorine shall be added in such a manner as to insure uniform mixing and distribution of the chlorine with the water. Chlorine shall be added at such rates as to give a minimum chlorine dosage of fifty parts per million available chlorine. Chlorine shall be admitted into the line through corporation cocks. Chlorine used as a disinfecting agent may be either liquid chlorine or an anhydrous calcium hypochlorite compound such as "HTH" or an approved equal. Liquid chlorine shall be applied through a suitable chlorine feeding machine and injection nozzle. Anhydrous calcium hypochlorite shall be fed as a solution using a suitable injection pump.

(c) The pipe line shall be completely filled with chlorine solution and shall remain in the pipe line for a period of twenty-four hours.

(d) Following the twenty-four hour disinfecting period, the line shall be thoroughly flushed until the replacement water throughout the entire length of the line shall, upon test both chemically and bacteriologically, be proven equal to the quality of water in the existing system. (Ord. 352. Passed 10-22-62.)

1365.23 CURB CONNECTIONS.

The connection shall be blocked up with stone, brick or concrete to insure a firm support for such connection and to resist all settlement in backfilling. The blocking shall be held in place by fine, dry earth firmly tamped around same.

Where excavation is in sand, clay or light earth, the water curb connections must be laid in a trench separate from any sewer lines.

Where excavation is in rock or shale, the water curb connection may be laid in the same trench which contains the sewer line, providing that a space of at least two feet is provided between respective center lines of water connection and sewer materials, and an eighth-inch shelf is provided on which to lay the water curb connection, such shelf to be at least two feet higher in elevation than the sewer line.

The water curb connection will be placed in the exact location as called for on the plans and will run between the water main and a point three feet beyond the curb line.

At the point three feet beyond the curb line, a shut off valve shall be connected, mounted on a blocking of stone, brick or concrete to resist settlement.

A curb box shall be mounted over the gate valve in such fashion as to be centered over the operating nut and be plumb with the top of the box at the finished grade of the tree lawn.
(Ord. 352. Passed 10-22-62.)

1365.24 FINAL REPAIRS.

Four months after final measurements are taken, the Engineer shall make an examination of all surfaces where water mains have been constructed and shall note any depressions due to breakage, settlement, washouts or any other causes that may be attributed to the construction of the water main.

Upon written order of the Engineer, the contractor shall again go over the work and repair breaks, fill depressions, remove any surplus that has previously been left upon the trenches or make any other repairs, replacements or alterations which are necessary to place the work in first class condition.

(Ord. 352. Passed 10-22-62.)

1365.25 SPECIAL REQUIREMENTS.

(a) The contractor shall remove and replace all pavement within the lines of excavation. The term pavement shall mean a hard surface for either streets or driveways. After the backfill has been completed, the contractor shall furnish, place and maintain, wherever a pavement has been removed, a temporary surface which will provide a safe and passable roadway until the final pavement has been completed.

(b) All final repaving or surfacing shall be done in accordance with the specifications of the plans, or as may be required by the Ohio Department of Transportation, or as directed by the Engineer. The final repaving shall be done with the same type of material as that removed or, if such is not available or satisfactory for any reason, then with a type of material and construction that is satisfactory to the Engineer.

(Ord. 352. Passed 10-22-62.)

CHAPTER 1367
Sanitary and Storm Sewer Piping

1367.01 Compliance required.	1367.08 Backfilling.
1367.02 Materials.	1367.09 Embankment.
1367.03 Excavations.	1367.10 Restoration of surface of paved streets.
1367.04 Lines and grades.	1367.11 Responsibility.
1367.05 Pipe laying.	1367.12 Tests.
1367.06 Pipe joints.	
1367.07 Connections.	

CROSS REFERENCES

Compulsory sewer connections - see Ohio R.C. 729.06
Sewer regulations - see S.U. & P.S. Ch. 941

1367.01 COMPLIANCE REQUIRED.

All labor, materials, equipment, tools and services required for the furnishing and installation of all sewers installed on existing street rights-of-way to be dedicated to public use and/or to be maintained by the Village shall be furnished and installed in compliance with this chapter.

(Ord. 352. Passed 10-22-62.)

1367.02 MATERIALS.

(a) A standard strength clay sewer pipe shall conform to the latest A.S.T.M. specifications, serial designation C-13.

(b) Extra strength clay sewer pipe shall conform to the latest A.S.T.M. specifications, serial designation C-200.

(c) Standard strength reinforced concrete sewer pipe shall conform to the latest A.S.T.M. specifications, serial designation C-75, Table I, and shall not be used for sanitary sewers.

(d) Standard strength reinforced concrete culvert pipe shall conform to the latest A.S.T.M. specifications, serial designation C-76, Table I, and shall not be used for sanitary sewers.

(e) Extra strength reinforced concrete culvert pipe shall conform to the latest A.S.T.M. specifications, serial designation C-76, Table II. Pipe sizes under fifteen inches internal diameter shall not be used for sanitary sewers. Pipe sizes fifteen inches and larger in internal diameter may be used for sanitary sewers only by written consent of the Village Engineer.

(f) Galvanized corrugated metal pipe, structural plate pipes, arches and pipe arches shall conform to the latest specifications of the American Association of State Highway Officials. Metal pipe shall not be used for sanitary sewers.

(g) Rubber or neoprene or similar special composition joints as described under Section 1367.06 shall be used for all sanitary sewer mains.

(h) All sewers shall be installed in the sizes and to the lines and grades shown on the approved drawings. The type and specification of pipe to be furnished and installed in each location shall be as designated on the approved drawings. All excavations, maintenance of excavations, preparation of foundations, placing of backfill and embankment on sewer construction shall be carried out in compliance with the specifications for excavations, Section 1367.03, and as supplemented in this chapter.

(i) All sewers and appurtenances of whatever type of description shall be constructed in an approved manner to the complete satisfaction of the Village and to provide a satisfactory operating improvement. All sewer pipe or other material rejected by the Village as not being in conformance with the requirements of these specifications shall be removed from the site of the work by the contractor as soon as it is rejected and replaced by material which does comply. Any rejected material not so removed may be broken or rendered impossible for use by the Village, and no compensation will be allowed the contractor for such rejected material so broken or destroyed by the Village.

(Ord. 352. Passed 10-22-62.)

1367.03 EXCAVATIONS.

(a) The ground shall be excavated in open trenches of sufficient width and depth to provide sufficient room within the limits of excavation, or lines of sheeting and bracing, for the proper construction of the sewer and its appurtenances, as shown on the approved drawings. The excavation of the trench shall not advance more than 200 feet ahead of the completed masonry and pipe work except where, in the opinion of the Village, it is necessary to drain wet ground. Where trench excavation is carried ahead of the contemplated masonry and pipe work, the elevation of the bottom of the trench shall be continually checked, to the satisfaction of the Engineer. In clay or dirt excavation, the bottom of the excavation shall be at least $D/4$ and a minimum of four inches below the sewer invert. This space shall be backfilled and compacted to pipe grade with granular material, well graded with a minimum of voids. The minimum size of such granular material shall be retained on a No. 8 sieve and the maximum size shall pass a three-quarter inch sieve. After placing the pipe, additional granular material shall be placed in the trench and compacted halfway up the pipe barrel. The remainder of the sides and a depth of twelve inches over the top of the pipe shall be filled with carefully compacted material. Excavation made below that herein required shall be backfilled only with the aforementioned granular material, well compacted.

(b) Bell holes of sufficient depth to insure an even bearing on the main body of the pipe and to provide sufficient room for the making of the joint shall be formed in the bottom of the trench whenever bell and spigot pipe are being laid.

(c) Rock excavation, as defined in these specifications, if encountered, shall be removed to not less than six inches below the bottom of the sewer or masonry work. Irregularities of the rock and the cut, below grade, shall be refilled only with sand or fine gravel well rammed into place and firmly compacted.

(d) Where pipe sewers are built, the width of the trench at the top of the pipes shall not exceed four-thirds the internal diameter of the sewer plus eight inches, provided that a greater width may be permitted by the Engineer when it is necessary to sheet the trench. There shall be at least four inches clear space on each side of the pipe to permit tamping when sheeting is used. Tunnels for pipe sewers beneath existing structures, pavements, sidewalks and railroad tracks, where shown on the approved drawings or where allowed per written authorization of the Engineer, shall be installed in compliance with the specifications for short tunnels.

(e) Sheeting and bracing shall be placed in the ditch as may be necessary for the safety of the work and the public, for the protection of the workmen, adjacent properties and for the proper installation of the work. Sheeting and/or bracing shall be progressively removed as the backfill is placed in such a manner as to prevent the caving-in of the sides of the trench or excavation and to prevent damage to the work. Sheeting which is placed for the protection of the public, adjacent properties or structures shall not be removed until the backfill has been placed and thoroughly tamped. While being drawn, all vacancies left by this sheeting shall be carefully filled with sand free from silt, rammed into place, puddled or otherwise firmly compacted. Sheeting and/or bracing shall be left in place if so ordered by the Engineer.

(f) Where designated on the approved drawings or when ordered by the Engineer, crushed rock or gravel refill, concrete cradle or encasement, timber cradle, piling or a combination thereof shall be furnished and installed. After the trench has been opened and to grade, it shall be examined by the Engineer who shall determine whether or not it is satisfactory for pipe laying or if it is necessary to stabilize the base, install concrete cradles or drive piling. Any pipe laid in a trench that has not been examined and approved by the Engineer is done so at the contractor's own risk. Where deemed necessary by the Engineer, a soil test shall be made as hereinafter specified. Crushed rock or gravel used to stabilize a trench bottom or to provide an under-drain shall have a minimum size of one inch and a maximum of two and one-half inches well graded between the above limits. The minimum thickness of the layer installed shall be six inches, and the balance of the material must have sufficient amounts of graded crushed stone or coarse sand to fill all voids between rock fragments.

(g) When sewer invert or cradle is to be placed on any material which will run or move when wet, sheeting must be employed during construction to keep adequate side supports on each side of the sewer trench so that the weight of the cradle and/or sewer will not tend to cause the bottom material to run to each side of the excavation. In extremely fluid materials, at the direction of the Engineer, wood sheeting shall be used and left in place. In this case, the concrete cradle shall extend the entire width between the sheeting. Concrete for concrete cradle shall be volume proportioned not less than one part Portland cement, three parts of fine aggregate and five parts of coarse aggregate, with only enough water added to make a workable mix.
(Ord. 352. Passed 10-22-62.)

1367.04 LINES AND GRADES.

(a) Line and grade stakes shall be set on the natural ground surface. Three batter boards, a top line and grade pole shall be used to transfer the line and grade to the bottom of the ditch, unless some other method of checking the inner lower grade and line is approved by the Engineer in writing. The contractor must test the ditch or grade of the top line and sewer and will be held responsible for the correct flow of sewers. In every case, the contractor must install on the batter lines an accurate line level to test the downward grade of the pipe in the direction of flow.

(b) The contractor shall provide and maintain on the work at all times a gauge rod of sufficient length of reach from the invert of the sewer pipe being laid to the top line strung on the three batter boards. The gauge rod shall be graduated and numbered each foot of its entire length. The gauge rod shall be equipped with either a plumb line or two spirit levels, and the utmost care must be used to insure a truly vertical gauge rod at the time the reading is taken and the pipe is being set.

(Ord. 352. Passed 10-22-62.)

1367.05 PIPE LAYING.

(a) Each pipe shall be laid on an even, firm bed so that no uneven strain will come to any part of the pipe. Particular care shall be exercised to prevent the pipes bearing on the sockets. Bell holes for bell and spigot pipe shall be dug at each point as hereinbefore specified. Each pipe shall be laid in conformity with the line and grade stakes and in the presence of the Inspector. The bell-end of the pipe shall be laid upgrade.

(b) The interior of the sewer shall, as the work progresses, be cleaned of all dirt, jointing material and superfluous materials of every description. On small pipe sewers where cleaning after layout may be difficult, a swab or drag shall be kept inside the pipe line and pulled forward past each joint immediately after its completion.

(c) All pipe shall be completely shoved home. On pipe of the tongue and groove type, thirty inches in diameter and larger, pressure must be applied to the center of each pipe as it is laid by a winch and cable or other mechanical means properly set and operated to insure that the tongue is all the way home in the socket and that the sewer joint is of uniform size throughout the circumference of the pipe.

(Ord. 352. Passed 10-22-62.)

1367.06 PIPE JOINTS.

In all jointing operations, the trench must be dewatered when joints are made and kept dewatered until sufficient time has elapsed to assure efficient hardening of the jointing material. Bell and spigots or tongue and groove ends of the pipe shall first be wiped clean before actual jointing operations are started. The type of joint to be installed in each location of the several following types specified shall be as specifically designated in the project specifications.

- (a) Cement, Mortar and Jute Joints. Joints between consecutive pipes shall be made with jute and Portland cement mortar composed of one part Portland cement and two parts of fine aggregate. Fine aggregate shall be clean, graded, torpedo sand, free from any foreign matter.

Where pipe is being laid in wet sand or in other locations where it is considered by the Engineer to be necessary, the contractor shall use one-third natural cement and two-thirds Portland cement in lieu of 100 percent Portland cement in preparing the joint mortar.

Jute shall be of the best quality tarred manilla yarn and of a size to fit the details of the pipe joint.

One bell and spigot pipe or variations thereof, plastic mortar shall be spread in the bottom one-third of the bell of the pipe previously laid. A closely twisted gasket of jute of proper thickness and of sufficient length to span around the pipe and lap at the top shall then be squeezed into the mortar. The spigot of the next pipe shall then be entered and shoved home. After the pipe has been thoroughly bedded to line and grade, the jute gasket shall be caulked into the annular space with a suitable caulking tool in such manner as to seal the joint against leakage. The remainder of the space shall be completely filled with plastic mortar beveled off with the outside of the pipe. The joint in pipes thirty inches or larger in diameter shall also be pointed and smoothed from the inside after the pipe has been laid.

On pipe sewers of the tongue and groove type, the jointing material, plastic, mortar and jute, shall be placed on the edges of the upper half of the tongue of the pipe to be laid and the lower half of the socket of the pipe previously laid, the pipe then aligned, forced home and graded. Sufficient mortar shall be placed on each pipe so that the space between the two pipes shall tend to become filled by the sliding action of the beveled surfaces of the adjacent tongue and socket when the pipe is forced into place. Jute shall then be caulked in both the entire inside and top three-quarters of the outside of the joint recesses, wherever sufficient space within the joint recesses permits. A thin edged caulking tool or trowel shall be used for this purpose. All voids in both the inside and outside shall be completely filled with mortar and the inside shall be troweled smoothly. The finished joint shall not be greater than one inch in width.

Where deemed advisable by the owner, calcium chloride, in an amount not to exceed ten percent of cement, shall be added to the mortar used for jointing purposes at no additional compensation.

- (b) Bituminous Joints, Mastic Type. Joints between consecutive pipes shall be made with jute and a bituminous pipe joint compound. Jute shall be as hereinafter specified for cement joints. The bituminous joint filler shall be made from asphalt, liquefiers, mineral fillers and fibers and shall be free from moisture. The filler shall be such that it shall have positive adhesion to pipe surfaces and shall be water, acid, and alkali-resistant. It shall be plastic and workable with a trowel and of a composition which will not result in a plastic flow of the material at temperatures up to eighty degrees Fahrenheit.

The filler shall be applied with a trowel to the annular spaces of the bell of the socket and spigot of the pipes and the joints shall be made up in the manner hereinbefore specified for cement joints.

- (c) Bituminous Joints, Poured Type. Joints between consecutive bell and spigot pipe shall be made with dry jute and a bituminous jointing compound, poured into place. The bituminous compound shall be such that it will flow freely at 250 degrees Fahrenheit, with a melting point of not less than 200 degrees Fahrenheit, and shall harden to a consistency that will not result in a plastic flow at eighty degrees Fahrenheit.

The bell and spigot of pipes to be jointed together shall first be painted with a bituminous prime coat to insure adherence of the poured filler to the sides of the pipe. With pipe at grade and butted, the dry jute shall be caulked into position in such a manner as to leave a uniform space all around. The joint shall be made in one pour.

- (d) Die Cast Tapered Type. Joints shall be consecutive bell and spigot pipe and shall be made by fitting the sewer pipe with an approved die-cast tapered-type joint, which shall be made by fitting the spigot and socket of the pipe with collars of a bituminous compound having a melting point of 240-270 degrees Fahrenheit and a penetration of four to seven at seventy-seven degrees Fahrenheit.

A line or ring of the bituminous compound shall be die-cast into the socket of the pipe and around the spigot of the pipe, of such size and dimension that, when the spigot is shoved firmly into the socket portion of the pipe, care must be taken not to distort such bituminous linings and rings. All pipe shall be dry and clean when lining and collars are cast. No pipe shall be used if either the collar or lining shows any void or unfilled space.

When laying the pipes, the lining and collar shall first be painted with a bituminous solvent, which shall cause their surfaces to become plastic or sticky, and when the pipes are shoved firmly together, the joint material shall unite and, incidental to diffusion of the solvent, congeal and become one homogenous body.

- (e) Rubber or Special Composition Joints. Rubber or neoprene or similar special composition joints may be used in tongue and groove-type and bell and spigot-type pipe joints. The gaskets shall consist of a special ring in the bell and/or on the spigot according to the manufacturer's design, fabricated out of a special composition or rubber specifically designed to resist the hardening action of the sulphur compound in sewage and to prevent disintegration from sewage or water over long periods.

Bituminous and rubber gasket jointing material and joints shall be made up in strict conformance with the manufacturer's recommendations and directions.

If the type of rubber joint material furnished requires an application of rubber cement, bituminous or other coating to insure a water-tight joint, this coating material shall be furnished and applied.

The type of joint and jointing materials proposed to be used by the contractor, together with reference on a similar installation, shall be submitted to the Engineer for approval. No sewer shall be laid or installed until approval of the joint and jointing materials has been received from the Engineer
(Ord. 352. Passed 10-22-62.)

1367.07 CONNECTIONS.

(a) The junction of two or more sewers shall be made in strict conformance with the drawings. New sewer connections with old existing sewers shall be made within a manhole. Where a manhole exists, at a point of connection of new and old sewers, it shall be repainted, and any loose bricks or blocks in the walls of the old existing manhole shall be relaid. Where no old manhole exists at the point of connection, a new manhole shall be constructed of the size and type shown on the drawings.

(b) Connections of new sewers to existing sewers, when encountered in construction and not shown on the drawings, shall be made where ordered by the Engineer. Such connections shall be made within a manhole, except for house sewer and drain connections.

(c) When connections are made with sewers carrying sewage or water, special care must be taken that no part of the work is built under water. A flume or dam must be installed and pumping maintained, if necessary, to keep the new work in the dry until completed and concrete or mortar has been set up.

(d) Junctions for future sewer connections indicated on the drawings shall be bricked off at the ends or otherwise sealed off in a manner approved by the Engineer.

(e) The plans shall indicate the approximate location of house sewer and/or drain connection openings to be provided in the main sewers. The exact location shall be as directed by the Engineer during construction.

(f) Unless otherwise shown on the drawings, all sewer connection openings on bell and spigot pipe shall be "Y" branches, with the spur set on the barrel of the pipe at an angle of either sixty degrees or forty-five degrees, with an outlet six inches in diameter.

(g) Unless otherwise shown on the drawings, sewer connection openings on concrete pipe of the tongue and groove-type shall be cased in the upper one-quarter of the pipe. The shape, size and dimensions of the opening shall be that corresponding to the bell end of a standard sewer pipe six inches in internal diameter.

(h) All openings shall be closed with a vitrified tile or mortar disk, securely held in place with Portland cement mortar, with oakum placed to fill the space between the periphery of the disk and the bell to prevent the bell from breaking when the disk is removed.

(i) When sidewalks are available opposite the sewer being constructed, the contractor shall notch the street side of the walk directly opposite each opening left in the sewer for connection to building drains. Where walks are not available for each marking, the contractor shall place a hardwood stake on the property line directly opposite each opening left in the sewer. The hardwood stake shall be topped with a brass marker labeled "Sewer." Also, the contractor shall locate and keep a record of all opening locations by measurement to the nearest downstream manhole. Such record shall be delivered to the Engineer monthly during the progress of the work. The hardwood stake shall extend from the opening to the top of the ground.
(Ord. 352. Passed 10-22-62.)

1367.08 BACKFILLING.

(a) The contractor shall not backfill sewers above the top of the pipe until the sewer elevations, gradient, alignment and the pipe joints have been checked, inspected and approved by the Engineer.

(b) Unless otherwise directed, all trenches and excavations shall be backfilled as soon as the joints have acquired a suitable degree of hardness, and the work shall be prosecuted expeditiously after it has been commenced.

(c) All pipe sewers as soon as laid shall have the space between the pipe and the bottom and sides of the trench packed full with sand or selected material by hand and thoroughly tamped with a shovel, hoe or light tamper, as fast as placed, up to the level of the top of the pipe. The filling shall be carried up evenly on both sides. Care shall be taken that no rock, frozen material or other hard substances are placed in contact with the pipe. In areas where clean, fine and dry sand is used for backfill to the top of the pipe, tamping will not be required.

(d) The pipe shall then be covered by hand to a depth of at least twenty-four inches with clean, dry earth. The material shall be placed in layers not exceeding four inches in depth and each layer thoroughly tamped and compacted, with at least one man tamping for each man depositing material in the trench.

(e) Material for backfilling the space between the pipe and the bottom and sides of the trench, and for covering to a depth of two feet, shall be clean, dry earth free from stones larger than two inches, frozen material or other hard substances, except for conditions hereinafter defined.

(f) The remainder of the trench shall be backfilled by using the material originally excavated from the ditch, except for conditions hereinafter defined, to a height slightly above the original elevation of the ground. Backfilling shall not be left unfinished more than 300 feet behind the completed masonry or pipe work.

(g) No heavy rock shall be dropped into the trench nor placed within three feet of the sewer pipe. In depositing rock in the sewer trench, care must be taken that the rock does not injure the structure. All spaces between pieces of rock shall be filled with earth to insure there being no voids. A sand or concrete backfill will be required for all pipe sewers laid in tunnel.

(h) All voids existing between the outside of the pipe and the limits of the tunnel excavation and lining shall be filled with sand free of silt, thoroughly rammed or flushed into place, or with concrete composed of one part Portland cement, three parts of fine aggregate and five parts of coarse aggregate thoroughly packed into place. Concrete shall be in accordance with that hereinbefore specified for use in concrete cradles.

(i) Sewers constructed in open cut across any existing pavements and sidewalks shall be backfilled with fine porous material tamped into place, unless the material excavated is suitable for backfilling in the opinion of the Engineer.

(j) One that part of the sewer that is constructed under unpaved areas in the streets, alleys, driveways, parking areas or other ornamental grounds, the backfilling shall be compacted by jetting with water, after which all depressions formed shall be filled to a point slightly above the original elevation of the top of the ditch.

(k) All surplus excavated material which is not used in backfilling shall be loaded and disposed of by the contractor.

(l) Any settlement of the backfill below the original ground surface shall be remedied by the contractor for a period of one year after final completion and acceptance upon receipt of written notice from the Village.
(Ord. 352. Passed 10-22-62.)

1367.09 EMBANKMENT.

(a) The sewers shall in all cases be covered with earth to a depth of not less than four feet or as shown on the drawings, and where the trenches do not furnish sufficient material the contractor shall supply such deficiency.

(b) If additional filling beyond four feet is required to be placed over a sewer for its protection, the contractor shall furnish and spread earth, free from animal or vegetable matter, in such a manner and in sufficient quantity so that, after it is thoroughly compacted, the embankment will be of uniform grade and cross-section and of the dimensions shown on the drawings. Such filling shall have a width extending at least two feet outside of the sewer on both sides.
(Ord. 352. Passed 10-22-62.)

1367.10 RESTORATION OF SURFACE OF PAVED STREETS.

(a) In all sidewalks, driveways, streets or parts of streets that are paved or macadamized, all the backfilling shall be well-compacted by jetting. After the trench has been backfilled and jetted to the required height, the subgrade for the new paving shall be further compacted by rolling the backfill at paving subgrade elevation. The pavement shall then be relaid carefully and thoroughly to the section and of the materials specified. If not specified, then the replacement shall be to the section and of the materials originally placed and to the satisfaction of the Engineer.

(b) When the work is completed, all surplus material, earth, rubbish, etc., shall be removed and that portion of the surface of each street disturbed by construction shall be left in as good condition as it was before the commencement of the work, and it shall be promptly and regularly maintained in such condition during a period of one year after the acceptance of the work.

(Ord. 352. Passed 10-22-62.)

1367.11 RESPONSIBILITY.

(a) Sewers must be built so as to remain true to line and grade. The inclining grade of the bottom of the sewer after completion shall be such that, after flooding, the flood water will drain off so that no remaining puddle of water will be deeper than one-half of an inch on pipe larger than thirty-six inches internal diameter or smaller and three-quarters of an inch on pipe larger than thirty-six inches internal diameter. Any section of pipe that does not comply with the specifications at any time previous to final acceptance of the work shall be replaced or relaid.

(b) The contractor will be held strictly responsible that all parts of the work shall bear the load of the backfill. If cracks one-hundredth of an inch develop in the pipe within one year from the date of final acceptance of the work, the contractor will be required to replace at his or her expense all such cracked pipe. To this end, the contractor is advised to purchase pipe under a guarantee from the manufacturer, guaranteeing proper service of sewer pipe under conditions established by the plans, specifications and local conditions at the site of the work.
(Ord. 352. Passed 10-22-62.)

1367.12 TESTS.

(a) It shall be the intention of these specifications to secure a sewer system with a minimum amount of infiltration. Maximum allowable infiltration shall be 200 gallons per mile per inch of diameter for sanitary sewer per twenty-four hour day at any time, and 500 gallons per mile per inch of diameter for storm sewers per twenty-four hour day at any time. The joints shall be tight, and visible leakage in the joints or leakage in excess of that specified above shall be repaired at the contractor's expense by any means found to be necessary.

(b) To check the amount of infiltration, the contractor shall furnish, install and maintain a V-notch shape crested weir in wood frame, tightly secured at the low end of each sewer lateral and at locations on the main sewers directed by the Engineer. The Engineer will check the infiltration by measuring the flow over such weirs. When infiltration is demonstrated to be within the allowable limits, the contractor shall remove such weirs.

(c) All sewers will also be tested with a flow of water before acceptance by the owner. Any sewer which does not show the velocity calculated by the Engineer based on its size, type and gradient, shall be dug out and, if such sewer when uncovered is found to be not in accord with drawings and specifications, the contractor shall bear the expense of such digging up and relaying. If found to be installed in conformance with the drawings, the Village will bear the expense. Sewers must be straight between manholes and will be tested for straightness by flashing a light from manhole to manhole, by tamping or by other suitable means.
(Ord. 352. Passed 10-22-62.)

CHAPTER 1369
Sewage Treatment Plants

1369.01 Requirements.

1369.01 REQUIREMENTS.

(a) Sewage treatment plants shall be designed to provide adequate treatment for the area to be serviced. The maximum capacity shall be 250 G.P.D. per capita and the minimum shall be 130 G.P.D. per capita.

(b) The location and elevation shall be approved by the Village and shall be such as to provide for disposal of effluent.

(c) The site shall be of a large area for future expansion and the plant shall be of the expandable type.

(d) The site shall include access paved roads, a parking area, fencing, lighting, seeding and protective shrubbing.

(e) Toilet and office facilities shall be provided in the plant.

(f) An aerobic digestion-type plant is preferred. The digestion unit is to be designed for the capacity of the plant. Final settling tanks shall be designed for four hours of detention. The tanks shall include all electrical and mechanical equipment, including a chlorinator, a comminutor, a wet well and a lift station if necessary for grade.

(Ord. 352. Passed 10-22-62.)

CHAPTER 1371
Manholes and Catch Basins

1371.01 Compliance required.
1371.02 Materials.

1371.03 Construction.

1371.01 COMPLIANCE REQUIRED.

All labor, materials, equipment, services and tools required for the furnishing and installation of all manholes and catch basins required on the project shall be furnished and installed in compliance with the following specifications and standard drawings.

- (a) Manholes and catch basins required shall be constructed at the locations and to the details shown on the contract drawings.
- (b) Manhole and catch basin sidewalls shall be constructed of monolithic concrete or precast concrete rings unless specifically allowed to be constructed of concrete block or brick.
- (c) The type and weight of the cast-iron frame and covers to be furnished and installed on manholes and catch basins shall be as shown on the drawings. Manholes and catch basins, including cast-iron frames and covers, shall conform to standard drawings on file in the Village Hall.
(Ord. 352. Passed 10-22-62.)
- (d) All sanitary sewer manhole covers shall be bolted with stainless steel bolts and be water tight.

1371.02 MATERIALS.

All materials incorporated in the manholes and catch basins shall be furnished in compliance with the following specifications:

- (a) Concrete and reinforcing steel shall conform to the general specifications of Chapter 1361.
- (b) Concrete blocks shall be formed in curved molds to fit the contract drawing diameter of the manhole or catch basin. Blocks shall comply with the standard specifications of the American Society for Testing and Materials for concrete masonry units, Serial Designation C139.
- (c) Brick for sidewalls shall conform with Grade MA of the standard specifications of the American Society for Testing and Materials for sewer brick, serial designation C32.

- (d) Mortar used in laying up manhole or catch basin sidewalls of concrete block, brick or precast concrete rings, and for plastering catch basins, shall be composed of one part Portland cement, two parts clean torpedo sand, with ten percent hydrated lime.
- (e) Frames and covers shall be fabricated of close-grained gray iron, conforming to the requirements of the standard specifications of the American Society for Testing and Materials, Serial Designation A48, Class No. 20. Castings shall be smooth, true to pattern and free from projections, sand holes or blow holes, accurately cast to provide true and even bearing. The frames and covers shall be of a design conforming to the details on the drawings or to the standards of the Village, of a weight for each location not less than that shown on the drawings.
- (f) Manhole steps or rungs shall be fabricated of cast-iron to the design and section shown on the drawings and approved by the Engineer.
- (g) Sewer pipe is to be laid through manholes where the top section is to be broken out after the manhole is constructed. It shall be of the same specifications as designated for the sewer pipe on the sewer line on which the manhole is to be constructed. The drop pipe assembly, including the pipe and fittings, the outlet trap on catch basins and the inlet sewers to manholes or catch basins shall be of the same specifications as designated to be supplied for the main sewer lines.
(Ord. 352. Passed 10-22-62.)

1371.03 CONSTRUCTION.

- (a) All excavation, foundations and backfill shall be carried out in compliance with the general specifications for excavations, Chapter 1359.
- (b) Forms for use in the construction of concrete sidewall shall be either of wood or metal. Metal forms shall be of such thickness that the forms will remain true to shape.
- (c) The concrete shall be placed in the forms immediately after mixing, in layers not exceeding twelve inches, sufficiently spaded and rodded to insure a good finish, free from honeycomb and other defects.
- (d) Concrete block masonry shall be constructed in horizontal courses with vertical joints broken.
- (e) Brick masonry shall be constructed in horizontal courses with a header course every sixth course.
- (f) Concrete block and brick sidewalls shall be laid with full mortar joints. Joints on interior walls shall be struck smooth.
- (g) Concrete block and brick manholes and catch basins from the base to the bottom of the cone shall be plastered with a mortar coat one-half inch thick, with a mortar of the same consistency and of the same ingredients specified for use in sidewalls. Manholes shall be plastered on the outside, catch basins on the inside.
- (h) Precast concrete rings shall be laid with full mortar joints, the mortar to be as above specified.

(i) An additional inlet pipe, placed through the manhole or catch basin sidewalls, shall extend through the walls a sufficient distance to allow connections on the outside. Such pipes shall be struck smooth on the inside in line with the inside wall of the manhole. The manhole masonry shall be carefully constructed around all pipes, so as to prevent leakage along the outer surfaces.

(j) Frame castings shall be set in full mortar beds on the top of the masonry.
(Ord. 352. Passed 10-22-62.)

CHAPTER 1373
Material Testing

1373.01 Testing procedure.

1373.02 Tests required.

CROSS REFERENCES

Inspection and testing of material - see BLDG. 1357.03

1373.01 TESTING PROCEDURE.

All materials and certain specified equipment incorporated in the contract shall be subject to inspection and test as follows:

- (a) All tests except as noted shall be made by an independent established testing laboratory, employed and paid by the contractor. The laboratory selected is to be approved by the owner before being definitely retained by the contractor. Samples at the mill or factory shall be taken by a representative of the testing laboratory. Samples of construction materials from the site of the work, such as sand, gravel, concrete cylinders, pipe, etc., for which laboratory tests are required, shall be taken, assembled or prepared on the site of the work by representatives of the testing laboratory or by a competent employee of the contractor subject to the approval of the Engineer. Any necessary containers, shipping boxes or crates shall be supplied by the testing laboratory or the contractor. The testing laboratory or the contractor shall pay all costs of transporting samples to the laboratory. The contractor shall furnish, without additional charge, all material that may reasonably be required for testing purposes. Visual tests of all materials and slump tests of concrete required under the following schedule will be made by the Engineer without cost to the contractor.
- (b) Payment for tests shall be made by the contractor. The tests to be made, the number of samples and acceptance and rejection shall be based on the standards and tentative standards of the American Society for Testing and Materials, unless otherwise noted. Two signed copies of test reports on testing laboratory forms or letterhead shall be delivered to the Engineer as soon as available. Wherever in the following tabulation the letters A.S.T.M. are used, they shall be interpreted to mean the latest standard specifications of the American Society for Testing and Materials.
(Ord. 352. Passed 10-22-62.)

1373.02 TESTS REQUIRED.

(a) Cement. Tests shall be made on the entire cement requirements on car samples or bin (sealed) samples.

Sampling and the number of tests shall be performed in compliance with A.S.T.M. specifications, Serial Designation C183. The following outlined tests shall be performed in compliance with the A.S.T.M. specifications serial designation listed.

<u>Test</u>	<u>A.S.T.M. Serial Designation</u>
Fineness	C115
Autoclave Expansion	C151
Time of Setting	C191
Compression Strength	C109
Tensile Strength	C190
Air Content	C185

Chemical analysis tests shall not be required unless specifically designated.

(b) Sand. Standard tests shall be made in advance of concreting per A.S.T.M. C33 and A.S.T.M. C40 on each fine aggregate proposed to be used. Other tests being satisfactory, the aggregate may be used pending results of thirty-eight day mortar strength tests. Tests shall also be made as the work progresses on each 1,000 cubic yards of fine aggregate for concrete to assure uniformity.

(c) Gravel and Stone. Standard tests shall be made in advance of concreting on each grading of each course aggregate proposed to be used, per A.S.T.M. C33-46, P. 7, 8, 9, 10, 11 and 12. However, the requirements of P. 11 may be omitted for gravel and crushed stone if evidence is furnished showing that the material has been subjected for a period of at least five years to essentially the same conditions of service and exposure as the structure in which the material is to be used. Tests shall also be made as the work progresses on each 1,000 cubic yards of coarse aggregate for concrete to assure uniformity.

(d) Concrete. Advance tests of the concrete shall be made in accordance with A.S.T.M. C31. Four standard six-inch compression cylinders, two to be tested at seven days and two at twenty-eight days, per A.S.T.M. C39, shall be made with the proportioning and materials proposed to be used in the major part of the project. The slump should not be less than the greatest slump expected to be used in the structure. The tests made on the aggregates (subsection (c) hereof) may be made a part of these tests if suitably referenced on the reports which shall be issued at seven to twenty-eight days. These tests shall be repeated, if necessary, because of changes in materials or unsatisfactory results.

During the progress of the work, and for each different mix of concrete, a set of two standard six-inch concrete cylinders shall be made and tested, where from twenty-five to 100 yards of concrete are placed during each and every day's operation. An additional set of cylinders shall be made for each 100 cubic yards or major fraction thereof over and above the first 100 cubic yards. The cylinders of each set shall be molded from the same sample of concrete and tested at seven days, or at least twenty-eight days, as may be specially designed. Sampling of concrete for test purposes shall be per A.S.T.M. C172. Making and curing of test cylinders shall be per A.S.T.M. C31. Testing of specimens shall be per A.S.T.M. C39.

Where twenty-five or more cubic yards of concrete are placed, and as necessary to maintain desired consistency of the concrete, a slump test shall be made per A.S.T.M. C143. Not less than one such test shall be made for each fifty cubic yards of concrete placed at one operation. Such test shall also be made on each sample of concrete used in fabricating test specimens.

(e) Brick for Manholes, Catch Basins and Valve Basins. Where fifty M or under are required, visual inspection at the site shall be made to determine conformance with A.S.T.M. C32.

Where more than fifty M are required, tests shall be made by an independent laboratory. Sampling and testing shall be made as per A.S.T.M. C67 to determine conformance with A.S.T.M. C32.

(f) Brick (Building). Tests shall be made by an independent laboratory for each fifty M delivered, including the first sampling and testing per A.S.T.M. C67 for conformance with brick specified per A.S.T.M. C62.

(g) Concrete Block for Manholes, Catch Basins and Valve Basins. Where ten M or under are required, visual inspection at the site shall be made to determine conformance with A.S.T.M. C139.

Where more than ten M are required, tests by an independent laboratory shall be made. Sampling and testing shall be made per A.S.T.M. C140 to determine conformance with A.S.T.M. C139.

(h) Building Stone. Visual inspection on the site shall be made. Tests by an independent laboratory per A.S.T.M. C97, C99, C100 and C170 shall be made when specified in the project specifications.

(i) Vitrified Sewer Pipe. Where the total quantity required on the contract, including all pipe sizes, is less than 1,000 feet, visual inspection at the site to determine conformance with A.S.T.M. C13 and C200 shall be made.

Where the total quantity required on the contract, including all pipe sizes, is more than 1,000 feet, tests by an independent laboratory per A.S.T.M. C13 and C200 shall be made.

(j) Concrete Sewer Pipe. Where the total quantity required on the contract, including all pipe sizes, is less than 1,000 feet, visual inspection at the site shall be made to determine conformance with A.S.T.M. C14.

Where the total quantity required on the contract, including all pipe sizes, is more than 1,000 feet, tests by an independent laboratory per A.S.T.M. C14 shall be made.

(k) Reinforced Concrete Sewer and Culvert Pipe. Where the total quantity required on the contract, including all pipe sizes, is less than 1,000 feet, visual inspection at the site shall be made to determine conformance with A.S.T.M. C75, C76 and the general specifications for such pipe, included herewith.

Where the total quantity required on the contract, including all pipe sizes, is more than 1,000 feet, tests by an independent laboratory shall be made to determine conformance with A.S.T.M. C75 and C76 and the general specifications for such pipe, included herewith..

(l) Reinforced Concrete Sewer and Culvert Pipe Made on Site. All tests shall be made by an independent laboratory to determine conformance with A.S.T.M. C75, C76 and the general specifications for such pipe, included herewith.

Standard six-inch test cylinders shall be made as previously specified under subsection (d) hereof, modified as follows: a minimum of two test cylinders shall be made for each so-called "run" of pipe made, regardless of concrete yardage involved.

(m) Reinforcing. Inspection and tests shall be made by an independent laboratory to determine conformance with the specifications.

(n) Structural Steel and Miscellaneous Steel and Metal. Where less than fifty tons are required, field inspection for rust, dimensions, riveting, welding, painting, etc., shall be made.

Where more than fifty tons are required, certified copies of mill tests on steel used in fabrication and shop inspection by an independent laboratory shall be given to show conformance with A.S.T.M. A7, as revised, and with the general specifications for structural steel and miscellaneous metal work.

(o) Cast-Iron Pipe and Fittings. If less than 200 tons are required on the contract, each piece of pipe shall bear the manufacturer's serial number and shall be certified by the manufacturer to have met the requirements of the government standard specifications. Also, each pipe shall be visually inspected in the field for specification conformance.

Inspection and laboratory tests at the source shall be made by an independent testing laboratory to determine conformance with the general specifications for cast-iron pipe and fittings and inside piping, including herewith, if more than 200 tons are required.

(p) Roofing. A manufacturer's certificate of inspection and guarantee shall be furnished as set forth in the general specifications for insulation and roofing.

(q) Prestressed Concrete Cylinder Pipe. Cement, sand, gravel, stone and concrete shall be tested as specified in subsections (a), (b), (c), and (d) hereof. Tests by an independent testing laboratory shall be made on cylinder steel, and bar and wire reinforcing.

(r) Noncylinder Prestressed Concrete Pipe. Cement, sand, gravel, stone and concrete shall be tested as specified in subsections (a), (b), (c), and (d) hereof. Tests by an independent testing laboratory shall be made on bar and wire reinforcing.

(s) Equipment. Equipment shall be tested as called for in the project specifications. (Ord. 352. Passed 10-22-62.)

CHAPTER 1375
Storm Water Management; Sediment and Erosion
Control Regulations; Illicit Discharge and Connection

1375.01 Purpose; intent.	1375.12 Watercourse protection.
1375.02 Definitions.	1375.13 Notification of spills.
1375.03 Applicability.	1375.14 Enforcement.
1375.04 Responsibility for administration.	1375.15 Appeal of notice of violation.
1375.05 Severability.	1375.16 Enforcement measures after appeal.
1375.06 Minimum standards.	1375.17 Cost of abatement of the violation.
1375.07 Discharge prohibitions.	1375.18 Injunctive relief.
1375.08 Suspension of MS4 access.	1375.19 Compensatory action.
1375.09 Industrial or construction activity discharges.	1375.20 Violations deemed a public nuisance.
1375.10 Monitoring of discharges.	1375.21 Remedies not exclusive.
1375.11 Requirement to prevent, control, and reduce storm water pollutants by the use of best management practices.	1375.99 Penalty.

1375.01 PURPOSE/INTENT.

The purpose of this chapter is to provide for the health, safety, and general welfare of the citizens of Sheffield Village, through the regulation of non-storm water discharges to the storm drainage system to the maximum extent practicable as required by federal and state law. This chapter establishes methods for controlling the introduction of pollutants into the municipal separate storm sewer system (MS4) in order to comply with requirements of the National Pollutant Discharge Elimination System (NPDES) permit process. The objectives of this chapter are:

- (a) To regulate the contribution of pollutants to the municipal separate storm sewer system (MS4) by storm water discharges by any user.
 - (b) To prohibit illicit connections and discharges to the municipal separate storm sewer system.
 - (c) To establish legal authority to carry out all inspection, surveillance and monitoring procedures necessary to ensure compliance with this chapter.
- (Ord. 2128. Passed 4-14-08.)

1375.02 DEFINITIONS.

For the purposes of this chapter, the following shall mean:

- (a) "Village Administrator" includes the Village Service Department and employees or designees of the Village of Sheffield.
- (b) "Best Management Practices (BMPs)" means schedules of activities, prohibitions of practices, general good housekeeping practices, pollution prevention and educational practices, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants directly or indirectly to storm water, receiving waters, or storm water conveyance systems. BMPs also include treatment practices, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw materials storage.
- (c) "Clean Water Act" means the Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), and any subsequent amendments thereto.
- (d) "Construction activity" means activities subject to NPDES construction permits. These include construction projects resulting in land disturbance of one acre or more. Such activities include, but are not limited to, clearing and grubbing, grading, excavating, and demolition.
- (e) "Hazardous materials" means any material, including any substance, waste, or combination thereof which, because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial present or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
- (f) "Illegal discharge" means any direct or indirect non-storm water discharge to the storm drain system, except as exempted in Section 1375.07.
- (g) "Illicit connections". An illicit connection is defined as either of the following: Any drain or conveyance, whether on the surface or subsurface, which allows an illegal discharge to enter the storm drain system, including, but not limited to, any conveyances which allow any non-storm water discharge including sewage, process wastewater and wash water to enter the storm drain system, and any connections to the storm drain system from indoor drains and sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by the Village Engineer or any drain or conveyance connected from a commercial or industrial land use to a storm drain system which has not been documented in plans, maps or equivalent records and/or approved by an authorized enforcement agency.
- (h) "Industrial activity" means activities subject to NPDES industrial permits as defined in 40 CFR, Section 122.26(b)(14).
- (i) "National Pollutant Discharge Elimination System (NPDES) storm water discharge permit" means a permit issued by EPA (or by a state under authority delegated pursuant to 33 U.S.C. 1342(b)) that authorizes the discharge of pollutants to waters of the United States, whether the permit is applicable on an individual, group or general area-wide basis.
- (j) "Non-storm water discharge" means any discharge to the storm drain system that is not composed entirely of storm water.
- (k) "Person" means any individual, association, organization, partnership, firm, corporation or other entity recognized by law and acting as either the owner or the owner's agent.

- (l) "Pollutant" means anything which causes or contributes to pollution. Pollutants may include, but are not limited to, the following: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, so that the same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.
- (m) "Premises" means any building, lot, parcel of land, or portion of land, whether improved or unimproved, including adjacent sidewalks and parking strips.
- (n) "Storm drainage system" means publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to, any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.
- (o) "Storm water" means any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.
- (p) "Storm water pollution prevention plan" means a document which describes the best management practices and activities to be implemented by a person or business to identify sources of pollution or contamination at a site, and the actions to eliminate or reduce pollutant discharges to storm water, storm water conveyance systems, and/or receiving waters to the maximum extent practicable.
- (q) "Wastewater" means any water or other liquid, other than uncontaminated storm water, discharged from a facility.
(Ord. 2128. Passed 4-14-08.)

1375.03 APPLICABILITY.

This chapter shall apply to all water entering the storm drainage system generated on any developed or undeveloped lands unless explicitly exempted by an authorized enforcement agency.
(Ord. 2128. Passed 4-14-08.)

1375.04 RESPONSIBILITY FOR ADMINISTRATION.

The Village Administrator shall administer, implement and enforce the provisions of this chapter. Any powers granted or duties imposed upon the Village Administrator may be delegated in writing by the Village Administrator to persons or entities acting in the beneficial interest of or in the employ of the Village.
(Ord. 2128. Passed 4-14-08.)

1375.05 SEVERABILITY.

The provisions of this chapter are hereby declared to be severable. If any provision, clause, sentence, or paragraph of this chapter, or the application thereof to any person, establishment or circumstances shall be held invalid, such invalidity shall not affect the other provisions or application of this chapter.
(Ord. 2128. Passed 4-14-08.)

1375.06 MINIMUM STANDARDS.

The standards set forth herein and promulgated pursuant to this chapter are minimum standards; therefore, this chapter does not intend or imply that compliance by any person will ensure that there will be no contamination, pollution, or unauthorized discharge of pollutants. (Ord. 2128. Passed 4-14-08.)

1375.07 DISCHARGE PROHIBITIONS.

(a) Prohibition of Illegal Discharges. No person shall discharge or cause to be discharged into the municipal storm drainage system or watercourses, any materials, including but not limited to pollutants or waters containing any pollutants, that cause or contribute to a violation of applicable water quality standards, other than storm water. The commencement, conduct or continuance of any illegal discharge to the storm drain system is prohibited, except as described as follows.

(b) The following discharges are exempt from discharge prohibitions established by this chapter:

- (1) Water line flushing or other potable water sources, landscape irrigation or lawn watering, diverted stream flows, rising ground water, ground water infiltration to storm drains, uncontaminated pumped ground water, foundation or footing drains (not including active groundwater dewatering systems), crawl space pumps, air conditioning condensation, springs, non-commercial washing of vehicles, natural riparian habitat or wetland flows, swimming pools (if dechlorinated - typically less than one PPM chlorine), fire fighting activities, and any other water source not containing pollutants.
- (2) Discharges specified in writing by the Village Administrator as being necessary to protect public health and safety.
- (3) Dye testing. However, a verbal notification is required to be given to the Village Administrator prior to the time of the test.
- (4) The prohibition shall not apply to any non-storm water discharge permitted under an NPDES permit, waiver, or waste discharge order issued to the discharger and administered under the authority of the Federal Environmental Protection Agency, provided that the discharger is in full compliance with all requirements of the permit waiver, or order and other applicable laws and regulations, and provided that written approval has been granted for any discharge to the storm drain system.

(c) Prohibition of Illicit Connections.

- (1) The construction, use, maintenance or continued existence of illicit connections to the storm drainage system is prohibited.
- (2) This prohibition expressly includes, without limitation, illicit connections made in the past, regardless of whether the connection was permissible under law or practices applicable or prevailing at the time of connection.
- (3) A person is considered to be in violation of this chapter if the person connects a line conveying sewage to the MS4, or allows such a connection to continue. (Ord. 2128. Passed 4-14-08.)

1375.08 SUSPENSION OF MS4 ACCESS.

(a) Suspension Due to Illicit Discharges in Emergency Situations. The Village Administrator may, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge, which presents or may present imminent and substantial danger to the environment, or to the health or welfare of persons, or to the MS4 or waters of the United States. If the violator fails to comply with a suspension order issued in an emergency, the Service Director may take such steps as deemed necessary to prevent or minimize damage to the MS4 or waters of the United States or to minimize danger to persons.

(b) Suspension Due to the Detection of Illicit Discharge. Any person discharging to the MS4 in violation of this chapter may have their MS4 access terminated if such termination would abate or reduce an illicit discharge. The Village Administrator will notify such person of the proposed termination of its MS4 access. Such person may petition the authorized enforcement agency for a hearing for reconsideration. It shall be a violation of this section if a person reinstates MS4 access to premises terminated pursuant to this section, without the prior approval of the authorized enforcement agency. (Ord. 2128. Passed 4-14-08.)

1375.09 INDUSTRIAL OR CONSTRUCTION ACTIVITY DISCHARGES.

Any person subject to an industrial or construction activity NPDES storm water discharge permit shall comply with all provisions of such permit. Proof of compliance with said permit may be required in a form acceptable to the Village Administrator prior to the allowing of discharges to the MS4. (Ord. 2128. Passed 4-14-08.)

1375.10 MONITORING OF DISCHARGES.

(a) Applicability. This section applies to all facilities that have storm water discharges associated with industrial activity, including construction activity.

(b) Access to Facilities.

- (1) The Village Administrator shall be permitted to enter and inspect facilities under this section as often as may be necessary to determine compliance with this section. If a discharger has security measures in force which require proper identification and clearance before entry into its premises, the discharger shall make the necessary arrangements to allow access to representatives of the authorized enforcement agency.
- (2) Facility operators shall allow the Village Administrator ready access to all parts of the premises for the purposes of inspection, sampling, examination and copying of record that must be kept under the conditions of an NPDES permit to discharge storm water, and the performance of any additional duties as defined by state and federal law.
- (3) The Village Administrator shall have the right to set up on any permitted facility, such devices as are necessary in his opinion to conduct monitoring and/or sampling of the facility's storm water discharge.
- (4) The Village Administrator has the right to require the discharger to install monitoring equipment as necessary. The facility's sampling and monitoring equipment shall be maintained at all times in a safe and proper operating condition by the discharger at its own expense. All devices used to measure storm water flow and quality shall be calibrated to ensure their accuracy.

- (5) Any temporary or permanent obstruction to safe and easy access to the facility to be inspected and/or sampled shall be promptly removed by the operator at the written or oral request of the City Engineer and shall not be replaced. The costs of clearing such access shall be borne by the operator.
- (6) Unreasonable delay in allowing the Village Administrator access to a permitted facility is a violation of a storm water discharge permit and of this chapter. A person who is the operator of a facility with an NPDES permit to discharge storm water associated with industrial activity commits an offense if the person denies the authorized enforcement agency reasonable access to the permitted facility for the purpose of conducting any activity authorized or required by this chapter.
- (7) If the Village Administrator has been refused access to any part of the premises from which storm water is discharged, and he/she is able to demonstrate probable cause to believe that there may be a violation of this chapter, or that there is a need to inspect and/or sample as part of a routine inspection and sampling program designed to verify compliance with this chapter, or any order issued hereunder, or to protect the overall public health, safety, and welfare of the community, then the authorized enforcement agency may seek issuance of a search warrant from any court of competent jurisdiction. (Ord. 2128. Passed 4-14-08.)

1375.11 REQUIREMENT TO PREVENT, CONTROL, AND REDUCE STORM WATER POLLUTANTS BY THE USE OF BEST MANAGEMENT PRACTICES.

The Village Administrator will adopt requirements identifying Best Management Practices (BMPs) for any activity, operation, or facility which may cause or contribute to pollution or contamination of storm water, the storm drain system, or waters of the U.S. The owner or operator of a commercial or industrial establishment shall provide, at their own expense, reasonable protection from accidental discharge of prohibited materials or other wastes into the municipal storm drain system or watercourses through the use of these structural and non-structural BMPs. Further, any person responsible for a property or premise, which is, or may be, the source of an illicit discharge, may be required to implement, at said person's expense, additional structural and non- structural BMPs to prevent the further discharge of pollutants to the municipal separate storm sewer system. Compliance with all terms and conditions of a valid NPDES permit authorizing the discharge of storm water associated with industrial activity, to the extent practicable, shall be deemed compliance with the provisions of this section. These BMPs shall be part of a storm water pollution prevention plan (SWPP) for compliance with requirements of the NPDES permit. (Ord. 2128. Passed 4-14-08.)

1375.12 WATERCOURSE PROTECTION.

Every person owning property through which a watercourse passes, or such person's lessee, shall keep and maintain that part of the watercourse within the property free of trash, debris, excessive vegetation, and other obstacles that would pollute, contaminate or significantly retard the flow of water through the watercourse. In addition, the owner or lessee shall maintain existing privately-owned structures within or adjacent to a watercourse, so that such structures will not become a hazard to the use, function, or physical integrity of the watercourse. (Ord. 2128. Passed 4-14-08.)

1375.13 NOTIFICATION OF SPILLS.

Notwithstanding other requirements of law, as soon as any person responsible for a facility or operation, or responsible for emergency response for a facility or operation, has information of any known or suspected release of materials which are resulting or may result in illegal discharges or pollutants discharging into storm water, the storm drain system or waters of the U.S., said person shall take all necessary steps to ensure the discovery, containment and cleanup of such release. In the event of such a release of hazardous materials, said person shall immediately notify emergency response agencies of the occurrence via emergency dispatch services. In the event of a release of non-hazardous materials, said person shall notify the Village Administrator in person or by phone or facsimile no later than the next business day. Notifications in person or by phone shall be confirmed by written notice addressed and mailed to the Village Administrator within three business days of the phone notice. If the discharge of prohibited materials emanates from a commercial or industrial establishment, the owner or operator of such establishment shall also retain an on-site written record of the discharge and the actions taken to prevent its recurrence. Such records shall be retained for at least three years.
(Ord. 2128. Passed 4-14-08.)

1375.14 ENFORCEMENT.

(a) Notice of Violation. Whenever the Village Administrator finds that a person has violated a prohibition or failed to meet a requirement of this chapter, the Village Administrator may order compliance by written notice of violation to the responsible person. Such notice may require without limitation:

- (1) The performance of monitoring, analyses, and reporting;
- (2) The elimination of illicit connections or discharges;
- (3) That violating discharges, practices, or operations shall cease and desist;
- (4) The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property; and
- (5) Payment of a fine to cover administrative and remediation costs; and
- (6) The implementation of source control or treatment BMPs.

(b) If abatement of a violation and/or restoration of affected property is required, the notice shall set forth a deadline within which such remediation or restoration must be completed. Said notice shall further advise that, should the violator fail to remediate or restore within the established deadline, the work may be performed by a designated governmental agency, or a contractor and the expense thereof shall be charged to the violator.
(Ord. 2128. Passed 4-14-08.)

1375.15 APPEAL OF NOTICE OF VIOLATION.

Any person aggrieved by a determination of Village Administrator may appeal such determination to the Stormwater Committee. Such appeal must be made in writing to the Secretary of the Committee and filed with and received by the Secretary within fifteen days from the mailing date of the notice of violation. Such written appeal must state the reasons for appeal. Within thirty days of the filing of such appeal, the Stormwater Committee shall hear the appeal. Resolution of appeal shall be in accordance with the Stormwater Committee appeal procedure.
(Ord. 2128. Passed 4-14-08.)

1375.16 ENFORCEMENT MEASURES AFTER APPEAL.

If the violation has not been corrected pursuant to the requirements set forth in the notice of violation, or, in the event of an appeal, within seven days of the decision of the Stormwater Committee upholding all or part of the decision of the Village Administrator, then representatives of the Village may enter upon the subject private property and are authorized to take any and all necessary measures to abate the violation and/or restore the property to bring it in compliance with law. It shall be unlawful for any person, owner, agent or person in possession of any premises to refuse to allow the government agency or designated contractor to enter upon the premises for the purposes set forth above. (Ord. 2128. Passed 4-14-08.)

1375.17 COST OF ABATEMENT OF THE VIOLATION.

Within thirty days after abatement of the violation, the owner of the property will be notified of the cost of abatement, including administrative costs. The property owner may file a written protest with the Village Administrator objecting to the amount of the assessment within fourteen days of receipt of the notice of the costs of abatement. If the amount due is not paid within a timely manner, as determined by the decision of the municipal authority, or by the expiration of the time in which to file an appeal, the charges shall become a special assessment against the property and shall constitute a lien on the property for the amount of the assessment. In addition to the property owner, any other person violating any of the provisions of this chapter for which abatement action is required to be and is taken by the Village shall be liable to the Village by reason of such violation. The liability shall be paid in no more than twelve equal payments. Interest at the rate of eight percent (8%) per annum shall be assessed on the balance beginning on the 31st day following completion of the abatement by the Village. (Ord. 2128. Passed 4-14-08.)

1375.18 INJUNCTIVE RELIEF.

It shall be unlawful for any person to violate any provision, or fail to comply with any of the requirements of this chapter. If a person has violated or continues to violate the provisions of this chapter, the authorized enforcement agency may petition for a preliminary or permanent injunction restraining the person from activities which would create further or continuing violations, or compelling the person to perform abatement or remediation of the violation and any other appropriate legal or equitable relief. (Ord. 2128. Passed 4-14-08.)

1375.19 COMPENSATORY ACTION.

In lieu of, or in addition to, enforcement proceedings, penalties, and remedies authorized by this chapter, the authorized enforcement agency may impose upon a violator alternative compensatory or remedial actions, such as storm drain stenciling, attendance at compliance workshops, creek cleanup, or any other remedial action appropriate to achieve compliance with this chapter. (Ord. 2128. Passed 4-14-08.)

1375.20 VIOLATIONS DEEMED A PUBLIC NUISANCE.

In addition to the enforcement processes and penalties provided, any condition caused or permitted to exist in violation of any of the provisions of this chapter is considered a threat to public health, safety, and welfare, and is declared and deemed a nuisance, and may be summarily abated or restored at the violator's expense, and/or a civil action to abate, enjoin, or otherwise compel the cessation of such nuisance may be taken. (Ord. 2128. Passed 4-14-08.)

1375.21 REMEDIES NOT EXCLUSIVE.

The remedies listed in this chapter are not exclusive of any other remedies available under any applicable federal, state or local laws. Any and all remedies shall be cumulative. The Village may recover its reasonable attorney's fees, court costs and other expenses associated with enforcement of this chapter, including sampling and monitoring expenses. (Ord. 2128. Passed 4-14-08.)

1375.99 PENALTY.

Any person found guilty of violating any provision of this chapter shall be guilty of a misdemeanor of the third degree. Each day that a violation continues to exist shall be deemed a separate offense. (Ord. 2128. Passed 4-14-08.)