

EXHIBIT 1
ORDINANCE 5312

TEXT AMENDMENTS

SECTION 2-102 Definitions.

For the purposes of these regulations, certain words and terms are defined within this Code. Any word not defined within this Section or not defined within another Section of the Land Development Code shall be construed in their generally accepted meanings as defined in the most recent publication of the Merriam-Webster Dictionary:

Day Care Center means an individual, agency or organization which regularly provides pre-school through kindergarten instruction or supervision and care on a regular basis for less than twenty-four (24) hours per day for one (1) or more children in a facility other than a detached dwelling, who are not related by blood or marriage to, and who are not the legal wards or foster children of, the supervising adult. The use must be licensed by or registered with the Illinois Department of Children and Family Services in accordance with the Child Care Act of 1969 (225 ILCS 10/1 et. seq.) or the appropriate State agency (Ord. 4880 - 2/3/14).

SECTION 6-104. BULK REGULATIONS.

A. General.

1. All development, except as provided by special use, must conform to the minimum bulk regulations as set out in this Section.
2. No building, structure or land located in the Village shall be used or occupied, and no building or structure shall be erected, moved, reconstructed, extended, enlarged or altered unless in accordance with the minimum lot area, lot width, setback and open space requirements set forth on Table 6-104(A) or as otherwise required by these regulations.
3. No setbacks existing on the effective date of these regulations shall subsequently be reduced below, or further reduced below if already less than the minimum setback requirements set out in Table 6-104(A) for equivalent new construction.
4. No lot shall hereafter be divided into two (2) or more lots unless all lots resulting from such division conform with all applicable minimum lot size requirements of the zoning district in which such lots are located or as otherwise provided in these regulations.
5. (Reserved.)
6. Any lot which was of record at the time of the adoption of these regulations, and which does not meet the requirements for minimum lot width and area set forth on Table 6-

104(A), may be utilized for a use permitted under the zoning district in which the lot is located, provided that the applicable setbacks and other provisions of these regulations are met. (Amd. Ord. 4926 - 9/15/14)

SECTION 6-205.E

- E. **Setbacks.** The following setback standards shall apply in the R-4 District. For square corner lots, the "front" setback shall be considered to be the yard where the main door is located; the other yard shall therefore be considered to be the "corner side" setback.

1. Single-Family Detached Residential Building Setbacks.

a. Front Setbacks.

1. Major or Minor Arterial: Forty-five (45) feet from the property line.
2. Major Collector: Forty (40) feet from the property line.
3. All Other Streets: Thirty (30) feet from the property line.

b. Side Setbacks.

1. Not less than ten (10%) percent of the width of the lot on each side of a principle single family building to the side lot line. Where the width of a lot varies, the average of the lot width at the front setback line and the rear setback line shall be used to make the ten (10%) percent calculation; however no setback shall be less than seven and a half (7.5) feet.
2. Side yards with side loading garages shall be a minimum of twenty (20) feet. The driveway must be a minimum of three (3) feet from the nearest side property line. (Ord. 4738 - 6/18/12)

c. Corner-side Setbacks.

1. Major or Minor Arterial: Thirty-five (35) feet from the property line.
2. Major Collector: Thirty (30) feet from the property line.
3. All Other Streets: Twenty-five (25) feet from the property line.

d. Rear Setbacks.

1. Major or Minor Arterial: Forty-five (45) feet from the property line.

2. Major Collector: Forty (40) feet from the property line.
 3. All Other Streets and Lots: Thirty (30) feet from the property line.
2. **Single-Family Attached and Multi-Family Building Setbacks.** (Amd. Ord. 5126 - 9/19/16)
- a. **Front Setbacks.**
 1. Major or Minor Arterial: Thirty-five (35) feet from the property line.
 2. Major or Minor Collector: Thirty (30) feet from the property line.
 3. All Other Streets: Twenty (20) feet from the property line.
 - b. **Side Setbacks.**
 1. Major or Minor Arterial: Thirty-five (35) feet from the property line.
 2. Major or Minor Collector: Thirty (30) feet from the property line.
 3. All Other Streets: Twenty (20) feet from the property line. (Amd. Ord. 5126 - 9/19/16)
 4. Setbacks that do not abut a street: All single-family attached and multi-family buildings shall maintain a minimum distance of twenty-five (25) feet between the side of the building and any neighboring buildings or property lines.
 - c. **Rear Setbacks**
 1. Major or Minor Arterial: Thirty-five (35) feet from the property line.
 2. All other Streets: Thirty (30) feet from the property line.
 3. Setbacks that do not abut a street: All single-family attached and multi-family buildings shall maintain a minimum distance of thirty (30) feet between the rear of the building and any neighboring buildings or property lines.

SECTION 6-204.C.10. Special Uses. (Planned Developments)

10. Planned Developments that include a site that is or is intended for two or more buildings, or one or more principle use, or one principle building for two or more principle uses.

- a. Residential planned development provided that:
 - 1. Private open space is provided as follows:
 - a. Single family detached units shall have at least 450 square feet of usable, private green space adjacent to each unit with some separation from neighbors' space and with direct access from the unit.
 - b. Townhouses and multi-family units shall have at least two hundred (200) square feet of private open space per unit. Such open space can be located on a patio, deck, balcony, or next to the building or combination thereof.
 - 2. Common Open Space. At least twenty-five (25) percent of the area of the development shall be maintained as common open space.
 - 3. Thirty (30) percent less side or rear setbacks may be permitted for every ten (10) percent of private open space more than the minimum required, provided that the required distance between buildings is maintained and provided that the windows in adjacent buildings are not aligned so as to ensure privacy of the residents;
 - 4. Twenty (20) percent less required private open space may be permitted for every twenty (20) percent of common open space provided beyond the minimum;
 - 5. Density and Bonuses. Except as otherwise provided in this Subsection, the density for dwellings shall not exceed 2.5 dwellings per acre. Density may be increased up to four (4) dwelling units per acre according to the following:
 - a. one (1) unit per acre for every twenty (20) percent (minimum) of common open space is provided in addition to the minimum required; or
 - b. one (1) unit per acre for every 1200 (minimum) linear feet of boulevard treatment of a street; or
 - c. one (1) unit per acre if all other optional bonuses in Subsection (6) are provided.
 - 6. Optional Bonuses. Additional density bonuses may be permitted provided that the applicant provides the following for the proposed development:

- a. Boulevard treatment of a street, including a wide landscaped median strip or island in the middle of a street;
- b. Orientation of buildings that provide views of common open space, forests, valleys, ponds, wetlands and hills;
- c. Buildings oriented for solar heating;
- d. Less than fifty (50) percent of garage doors facing the street or common courtyard;
- e. Garbage enclosures and places for recreational vehicles hidden from view from the street; and
- f. Attractive non-standard, but consistent, style for lampposts and signs, varied pavement treatments, tiles, stones, bricks and mosaics.

(Ord. 4574 – 7/6/10)

SECTION 6-204.5.C.9. Special Uses.

9. Planned Developments that include a site that is or is intended for two or more buildings, or one or more principle use, or one principle building for two or more principle uses.

a. Residential planned development provided that:

1. Private open space is provided as follows:

- a. Single family detached units shall have at least 450 square feet of usable, private green space adjacent to each unit with some separation from neighbors' space and with direct access from the unit.
- b. Townhouses and multi-family units shall have at least two hundred (200) square feet of private open space per unit. Such open space can be located on a patio, deck, balcony, or next to the building or combination thereof.

2. Common Open Space. At least twenty-five (25) percent of the area of the development shall be maintained as common open space.

3. Thirty (30) percent less side or rear setbacks may be permitted for every ten (10) percent of private open space more than the minimum required, provided that the required distance between buildings is maintained and

provided that the windows in adjacent buildings are not aligned so as to ensure privacy of the residents;

4. Twenty (20) percent less required private open space may be permitted for every twenty (20) percent of common open space provided beyond the minimum;
5. Density and Bonuses. Except as otherwise provided in this Subsection, the density for dwellings shall not exceed 2.5 dwellings per acre. Density may be increased up to four (4) dwelling units per acre according to the following:
 - a. one (1) unit per acre for every twenty (20) percent (minimum) of common open space is provided in addition to the minimum required; or
 - b. one (1) unit per acre for every 1200 (minimum) linear feet of boulevard treatment of a street; or
 - c. one (1) unit per acre if all other optional bonuses in Subsection (6) are provided.
6. Optional Bonuses. Additional density bonuses may be permitted provided that the applicant provides the following for the proposed development:
 - a. Boulevard treatment of a street, including a wide landscaped median strip or island in the middle of a street;
 - b. Orientation of buildings that provide views of common open space, forests, valleys, ponds, wetlands and hills;
 - c. Buildings oriented for solar heating;
 - d. Less than fifty (50) percent of garage doors facing the street or common courtyard;
 - e. Garbage enclosures and places for recreational vehicles hidden from view from the street; and
 - f. Attractive non-standard, but consistent, style for lampposts and signs, varied pavement treatments, tiles, stones, bricks and mosaics.

(Ord. 4574 - 7/6/10)

SECTION 6-205.C.11. Special Uses. (Planned Developments)

11. Planned Developments that include a site that is or is intended for two or more buildings, or one or more principle use, or one principle building for two or more principle uses.

a. Residential planned development, provided that:

1. Private open space is provided as follows:

a. Single family detached units shall have at least 450 square feet of usable, private green space adjacent to each unit with some separation from neighbors' space and with direct access from the unit.

b. Townhouses and multi-family units shall have at least two hundred (200) square feet of private open space per unit. Such open space can be located on a patio, deck, balcony, or next to the building or combination thereof.

2. Common Open Space: At least twenty (20) percent of the area of the development shall be maintained as common open space.

3. Thirty (30) percent less side or rear setback may be permitted for every ten (10) percent of private open space more than the minimum required, provided that the required distance between buildings is maintained and provided that the windows in adjacent buildings are not aligned so as to ensure privacy of the residents;

4. Twenty (20) percent less required private open space may be permitted for every twenty (20) percent of common open space provided beyond the minimum;

5. Density for dwellings shall not exceed six (6) units per acre, and the higher end of this limit shall only be considered provided that:

a. one (1) unit per acre for every twenty (20) percent (minimum) of common open space provided in addition to the minimum required; or

b. one (1) unit per acre for every 1200 (minimum) linear feet of boulevard treatment of a street; or

c. one (1) unit per acre if all other optional bonuses set forth in Subsection (6) are provided.

6. Optional Bonuses. Additional density bonuses may be permitted, provided that the applicant provides the following in the proposed development:
 - a. Boulevard treatment of a street, including a wide landscaped medium strip or island in the middle of a street;
 - b. Orientation of buildings that provide views of common open space, forests, valleys, ponds, wetlands and hills;
 - c. Buildings oriented for solar heating;
 - d. Less than fifty (50) percent of garage doors facing the street or common courtyard;
 - e. Garbage enclosures and places for recreational vehicles hidden from view from the street; and
 - f. Attractive non-standard, but consistent, style for lampposts and signs, varied pavement treatments, tiles, stones, bricks and mosaics.

SECTION 6-206.C.7. Special Uses. (Planned Developments)

7. Residential planned development provided that:
 - a. No more than thirty (30) percent of the total dwelling units within the development will be single family detached;
 - b. Private open space is provided as follows:
 1. Single family detached units shall have at least 450 square feet of usable, private green space adjacent to each unit with some separation from neighbors' space and with direct access from the unit.
 2. Townhouses and multi-family attached units shall have at least 200 square feet of private open space per unit. Such open space can be located on a patio, deck, balcony, or next to the building or combination thereof.
 - c. Common Open Space: At least twenty (20) percent of the net area of the development shall be maintained as common open space.
 - d. Thirty (30) percent less side or rear setback may be permitted for every ten (10) percent of private open space more than the minimum required,

provided that the required distance between buildings is maintained and provided that the windows in adjacent buildings are not aligned so as to ensure privacy of the residents;

- e. Twenty (20) percent less required private open space may be permitted for every twenty (20) percent of common open space provided beyond the minimum;
- f. Density and Bonuses. Density and Bonuses. Except as otherwise provided in this Subsection, the density for dwellings shall not exceed four (4) units per acre. Density may be increased up to eight (8) units per acre provided that:
 - 1. one (1) unit per acre for every twenty (20) percent (minimum) of common open space provided in addition to the minimum required;
 - 2. one (1) unit per acre for every 1200 (minimum) linear feet of boulevard treatment of a street;
 - 3. one (1) unit per acre if all other optional bonuses in Subsection (g) are provided;
- g. Optional Bonuses. Additional density bonuses may be permitted, provided that the applicant provides the following in the proposed development:
 - 1. Boulevard treatment of a street, including a wide landscaped median strip or island in the middle of a street;
 - 2. Orientation of buildings that provide views of common open space, forests, valleys, ponds, wetlands and hills;
 - 3. Buildings oriented for solar heating;
 - 4. Less than fifty (50) percent of garage doors facing the street or common courtyard;
 - 5. Garbage enclosures and places for recreational vehicles hidden from view from the street; and
 - 6. Attractive non-standard, but consistent, style for lampposts and signs, varied pavement treatments, tiles, stones, bricks and mosaics.

SECTION 6-308.F. Building and Structure Design.

F. Building and Structure Design.

1. Buildings and structures shall be consistent with the established neighborhood character and with any adjacent residential property.

2. Building materials shall be selected for suitability to the type of buildings and the design in which they are used. Buildings shall use the same materials, or those which are architecturally harmonious, for all building walls and other exterior building components that are wholly or partially visible from public ways.

3. Building materials shall be of durable quality. Inappropriate materials or building methods, and those which will produce inconsistency with the structure and architecture of the building, shall be avoided.

4. Brick or other masonry materials shall be used for all sides of all nonresidential development and shall be installed per Village Building Code specifications. At a minimum:

a. For **single story structures**, anchored brick, stone or similar masonry materials as approved by Development Services Department shall extend from the adjacent grade to the top of the window that is highest on the subject façade, with minor accents allowed in place of masonry subject to meeting building codes.

b. For **two or three-story structures**, anchored brick, stone or similar masonry materials as approved by Development Services Department shall extend from the adjacent grade to the top of each story with minor accents allowed in place of masonry subject to meeting building codes.

c. For **structures four stories or more in height**, anchored brick, stone or similar masonry materials as approved by Development Services Department shall extend from the adjacent grade to the top of the first three (3) stories, with minor accents allowed in place of masonry subject to meeting building codes. Village approved non-masonry materials may be used only on the uppermost story of structures that are four (4) stories or more in height. See Village Code Title 5 Chapter 1 Section 501.3.2 Exception B. for additional requirements.

SECTION 6-305.F.3.f

f. Tree Replacement Standards.

1. Size.

All trees that are four (4) inches in diameter, measured four (4') feet from the ground shall be replaced as detailed in Table 6-305.F.3.f.1 (A) – Native Illinois Tree Replacement Standards or Table 6-305.F.3.f.1 (B) - Non-Native Illinois Tree Replacement Standards pursuant to Village approval.

Table 6-305.F.3.f.1 (A) – Native Illinois Tree Replacement Standards

TREES NATIVE TO ILLINOIS	
CANOPY TREES	
Diameter of Removed Trees	Number of Replacement Trees Required per Every (1) Tree Removed
4" to 12"	2 trees at 2.5" or 1 tree at 4"
13" to 23"	4 trees at 2.5" or 2 trees at 4"
24" or greater	6 trees at 2.5" or 3 trees at 4"
EVERGREEN TREES	
Height of Removed Trees	Number of Replacement Trees Required
6' to 10'	2 trees at 6' or 1 trees at 10'
10' to 14'	4 trees at 6' or 2 trees at 10'
14' or taller	6 trees at 6' or 3 trees at 10'

Table 6-305.F.3.f.1 (B) - Non-Native Illinois Tree Replacement Standards

TREES NON-NATIVE TO ILLINOIS	
CANOPY TREES	
Diameter of Removed Trees	Number of Replacement Trees Required per Every (1) Tree Removed
4" to 12"	1 tree at 2.5"
13" to 23"	2 trees at 2.5" or 1 tree at 4"
24" or greater	3 trees at 2.5" or 2 trees at 4"
EVERGREEN TREES	
Height of Removed Trees	Number of Replacement Trees Required
6' to 10'	2 trees at 6' or 1 trees at 10'
10' to 14'	2 trees at 6' or 1 trees at 10'
14' or taller	3 trees at 6' or 2 trees at 10'

2. Exempt Species.

The species listed in Table 6-305.F.3.f.2 are exempt from tree mitigation requirements.

Table 6-305.F.3.f.2 - Species Exempt From Tree Mitigation Requirements

Species Exempt From Tree Mitigation Requirements
Acer ginnala - Amur Maple
Acer negundo - Box Elder

Acer platanoides - Norway Maple
Acer pseudoplatanus - Sycamore Maple
Acer saccharinum - Silver Maple
Ailanthus altissima - Tree-of-Heaven
Albizia julibrissin - Silktree
Alnus glutinosa - European Alder
Aralia elata - Japanese Angelica Tree
Berberis thunbergii - Japanese Barberry
Betula pendula - European White Birch
Broussonetia papyrifera - Paper Mulberry
Elaeagnus angustifolia - Russian Olive
Elaeagnus umbellata - Autumn Olive
Euonymus alatus - Winged Euonymus
Frangula alnus - Glossy Buckthorn
Fraxinus spp. - Ash
Koelreuteria paniculata - Golden Rain Tree
Ligustrum sinense - Chinese Privet
Lonicera maackii - Amur Honeysuckle
Maclura pomifera - Osage Orange
Morus alba - Mulberry
Paulownia tomentosa - Princess tree
Phellodendron amurense - Amur Corktree
Pinus nigra - Austrian Pine
Pinus sylvestris - Scots Pine
Pinus taeda - Loblolly Pine
Populus alba - White Poplar
Populus deltoides - Cottonwood
Prunus avium - Sweet Cherry
Pyrus calleryana - Callery Pear
Rhamnus spp. - Buckthorn
Robinia pseudoacacia - Black Locust
Salix spp. - Willow
Sorbus aucuparia - European Mountain Ash
Ulmus pumila - Siberian Elm
Viburnum lantana - Wayfaring Tree

3. Trees with a condition rated as 'Poor' or 'Dead' on a tree survey completed by a certified arborist are also exempt from mitigation requirements.

4. The owner of a site with landscaping that is unhealthful (i.e. spaced too closely) may be permitted to plant replacement trees in the parkway or elsewhere in the Village, if approved by Development Services Department.

5. Cash in Lieu.

If required mitigation trees, or any other tree required by Code, cannot be provided on the site, the petitioner shall pay cash in lieu of tree replacement in the amount of \$400 for each two and one-half (2.5) inch caliper deciduous canopy tree or eight (8) foot evergreen tree to the Village's Tree Preservation and Green Infrastructure Account. Such a fee in lieu of mitigation must be approved by the Development Services Department and can only be used when replacement on site is not possible. The quantity of trees requiring mitigation does not count towards a reduction in the quantity of trees or landscaping required by this Section.

The maximum cash in lieu amount for projects less than 10 acres in area is \$50,000. The maximum cash in lieu amount for projects greater than 10 acres in area is \$100,000. Any cash in lieu amount above the set maximum amount will be waived by the Village.

A 10% reduction of Tree Mitigation cash in lieu amount will awarded if said fee is paid in full before or at time of final landscape plan approval.

6. Tree Preservation and Green Infrastructure Account.

The Tree Preservation and Green Infrastructure Account shall be used to support Village-initiated tree planting and green infrastructure projects located on public property within the Village of Orland Park and shall be administered by the Development Services Department. This account shall be used only for tree preservation and green infrastructure projects approved by the Village Board.

7. Tree Preservation Credit.

A credit of \$150 per caliper inch will be applied towards a project's tree mitigation fee for every healthy (fair to good) native tree preserved on site. Preservation credit shall be for the preservation of native Illinois trees only, or as determined by the Development Services Department. A Tree Preservation Credit shall never exceed the tree mitigation fee amount. Adherence to an Village approved Tree Preservation Plan shall be required for projects awarded tree preservation credit. A line item in the amount of the tree preservation credit will be applied to a project's letter of credit, which will be reduced to zero after written verification from a Certified Arborist that the preserved tree(s) are still in good to fair condition at least one year after issuance of a project's certificate of occupancy. Preservation credit shall not be applied towards any other fee other than tree mitigation fees.

SECTION 6-302.I

I. **Outside Storage.** Outside storage shall be located at the rear of the principle building. It shall be screened on all sides. Stored materials, equipment or vehicles shall not exceed the height of the screening, and shall not be visible from any adjacent streets or residential areas.

1. Outside storage of materials, equipment or vehicles essential to the operation of a business, on land other than the lot on which the business is located, shall be considered as a special use if the land is in the MFG Manufacturing District and is on a lot adjacent to and in possession of the same title holder of record as the lot occupied by the business for which the outside storage items are accessory. (Amd. Ord. 5167 – 2/20/17)

2. Outside storage of vehicles essential to the operation of a business, on land other than the lot on which the business is located, shall be considered as part of the Appearance Review process if the land is in the MFG Manufacturing District and is a lot with or without an existing primary use that is owned or leased, in full or in part, by a business establishment granted a special use for Motor Vehicle Sales or Rental or Motor Vehicle Services located within the Village's BIZ General Business District for the purpose of the storage of new or used motor vehicle inventory with the following conditions:

a. The vehicle storage area shall not be open to the public;

b. No signage shall be allowed that advertises the BIZ General Business District business establishment or contents of the vehicle storage area;

c. No vehicle sales, rental, or leasing shall take place on the premises. (See Section 6-208.B and C). (Ord. 3837 - 12/1/03; Amd. Ord. 5017 - 8/17/15; Amd. Ord. 5126 - 9/19/16)

d. **Review** – Landscape and engineering review fees shall be collected per Land Development Code requirements. All engineering review requirements apply. Landscape review requirements are detailed below. All project related fees shall be paid prior to appearance review approval;

e. **Site Plan** – At minimum, the following information shall be provided on proposed site plans:

1. The total number of proposed parking spaces;
2. The hours of operation for the facility;
3. An estimate of frequency of daily ingress/egress of vehicles;
4. The location of an address marker, visible from abutting frontage;
5. The location of proposed vehicle storage area(s), ingress/egress points, a general parking plan for the vehicle storage area, proposed lot coverage and a description of base material to be used;
6. The location of required fence. See below for fence requirements. Plans must include an elevation drawing showing proposed material, dimension, post footing and color details of the fence and entry gate;
7. If an electric gate will be used, include where meter will be located, how electricity will be brought to site and any underground utility details;
8. The location of all required setbacks, as outlined below in Section 6-302.I.2.f.;

9. Any additional information deemed necessary by the Development Services Department for the review of a project.

f. **Screening** – A uniform, 8’ tall wood or vinyl opaque fence shall be installed around the entire vehicle storage area. Vehicles shall not exceed the height of the screening. A 25’ front setback shall apply to all fences abutting a public right of way. A 15’ setback shall apply to all fences not abutting a public right of way;

g. **Landscape** - Parkway tree requirements per Section 6-305 apply to all projects. Foundation landscaping requirements per Section 6-305.D.5.a shall apply to all fences abutting a public right of way. One (1) ornamental tree shall be planted for every 30’ of fence length not abutting a public right of way. No landscape requirements apply to the interior vehicle storage area. Submittal of a Tree Survey and Tree Mitigation Plan is required per Section 6-305.F.3.h. Tree mitigation requirements apply per Section 6-305.F.3.f.

SECTION 6-305.B.2

2. **Responsibility for Compliance.** The following shall comply with all requirements provided in this Section, except where noted:

- a. All new single-family detached dwellings on an individual lot shall only comply with the provisions of 6-305.D.2 Landscape Parkways, Sections 6-305.E Landscape Plan and 6-305.F Maintenance and Preservation, where applicable. (Amd. Ord. 5126 - 9/19/16)
- b. New residential developments;
- c. New non-residential developments;
- d. New mixed-use developments;
- e. New vehicular parking areas;
- f. Modifications to an existing building or site (see Section 6-305.B.3 Modifications);
- g. Any project requiring a Special Use Permit, Map Amendment, or Appearance Review, as determined by the Development Services Department.

SECTION 6-305.E.3.a

a. A **preliminary landscape plan** must be submitted at the initiation of all development petitions, unless otherwise noted. A **final landscape plan** must be submitted to the Development Services Department in conjunction with final engineering submittals. The Development Services Department may require landscape plans to be submitted earlier if deemed critical to the review of the overall proposal. A digital copy must accompany all landscape plan submittals.

SECTION 6-305.D.8.7 Stormwater Management Area Landscape.

7. An “as -built” landscape plan of all stormwater management areas is required before acceptance by the Village including but not limited to topographic information, planting limits and normal and high water level elevations, or any additional information requested by the

Village. Additional information may be required, as determined by the Development Services Department.

SECTION 6-305.E.6.b.1

1. Table 6-305.E.6.b (A) – Plant Diversity Requirements details the necessary maximum and minimum percentage of plant species diversity based on the total quantity of plant species per plant type. Plant types include, but are not limited to, shade trees, evergreen trees, ornamental trees, shrubs, perennials and ornamental grasses. Minor deviations from plant diversity requirements may be permitted, as determined by the Development Services Department.

SECTION 6-305.E.6.a

6. Landscape Material Requirements.

a. **Plant Sizes.** Minimum sizes for plant materials for all projects at time of installation shall be as follows:

1. Evergreen or deciduous shrubs: minimum eighteen (18) to twenty-four (24) inches in height, varieties normally measured by spread shall be a minimum of twenty- four (24) inches in spread;
2. Deciduous shade trees: minimum two and one-half (2.5) inches caliper, balled and burlapped (B&B), measured six (6) inches above the ground, all shade trees shall have a central leader. Smaller caliper trees (e.g. 1.5") are permitted in naturalized landscape areas, or as determined by the Development Services Department;
3. Ornamental trees: clump form shall be a minimum six (6) feet in height or have a minimum trunk size of two inches (2) caliper;
4. Evergreen trees: minimum six (6) feet in height and (B&B) when installed; and
5. Ornamental grasses, perennials and climbing vines shall be specified as a minimum container size of one (1) gallon unless otherwise approved by the Development Services Department.

Table 6-305.E.6.a (A) – Plant Size Requirements

Table 6-305.E.6.a(A) - Plant Size Requirements		
Plant Type	Minimum Plant Size	Minimum Plant Width
Deciduous Shade Tree	2.5' Caliper*	n/a
Ornamental Tree	6' OR 2" Caliper	n/a
Evergreen Tree	6'	n/
Evergreen/Deciduous Shrub	18" to 24"	24"
Ornamental Grass, Perennials, Vines	1 Gallon	n/a

* Smaller caliper trees (e.g. 1.5”) are permitted in naturalized landscape areas, or as determined by the Development Services Department.

SECTION 5-112.E.9.e.

3. Landscape Plan Review and Inspections. All preliminary landscape plans submitted to the Village in conjunction with single family and multifamily developments over two (2) units and with all non-residential developments, or for any other required landscape plans as detailed in Section 6-305 Landscape and Tree Preservation, shall be reviewed by the Plan Commission, Committee and Board of Trustees before Village approval. All final landscape plans shall incorporate conditions of approval of the Board approved preliminary landscape plan, and shall be reviewed and receive final approval from the Development Services Department upon recommendation of approval by the Village landscape consultant, if applicable.

Upon installation of required landscaping, the developer or property owner shall contact the Development Services Department to schedule a landscape inspection, which will initiate the landscape inspection process. All landscaping shall be inspected for proper installation and compliance with the approved landscape plan and any associated documentation, including hydro-period analyses or M&M Plans. A minimum of three (3) years of consecutive naturalized landscape area inspection approvals shall be attained before Village approval and acceptance of any stormwater management area. A minimum of one (1) year of site landscape approvals shall be attained before a letter of credit reduction can be requested. No letter of credit release shall be issued until a final landscape inspection approval has been granted by the Development Services Department. The fees charged to the Village by its landscaping consultant for landscape plan review shall be paid by the petitioner to the Village at the time of petition. Fees charged to the Village by its landscaping consultant for inspections of installed landscaping shall be paid by the petitioner to the Village by the applicant before final letter of credit release.

SECTION 6-212.E.3.

3. Street Facing Building Facades.

The addition of windows along building facades are attractive, allow pedestrian views and daylight to the inside of the building, especially on street facing building facades.

- a. Each street facing non-residential building façade on the ground floor shall be at least 35% transparent between four (4) feet and eight (8) feet from adjacent grade. Each façade shall be calculated independently.
- b. The bottom of any window used to satisfy these transparency requirements may not be more than four (4) feet above adjacent grade.
- c. Adjacent grade shall be measured from within two (2) feet of the facade.
- d. Upper levels are also strongly encouraged to maximize windows wherever possible.

SECTION 6-205.1.E.4. Uses not Permitted in Building Setbacks along Streets.

~~g. The architectural design of the building elevations facing the street should have the appearance of a primary façade and include transparency in the form of full or clerestory windows.~~

SECTION 6-207.F.4. Uses Not Permitted in Building Setback Areas along streets.

~~g. The architectural design of the building elevations facing the street should have the appearance of a primary façade and include transparency in the form of full or clerestory windows.~~

SECTION 6-208.F.4. USES NOT PERMITTED IN BUILDING SETBACK AREAS ALONG STREETS.

~~g. The architectural design of the building elevations facing the street should have the appearance of a primary façade and include transparency in the form of full or clerestory windows.~~

SECTION 6-210.F.4. Uses Not Permitted in Building Setback Areas along streets.

~~g. The architectural design of the building elevations facing the street should have the appearance of a primary façade and include transparency in the form of full or clerestory windows.~~

SECTION 6-211.F.3. Uses Not Permitted in Building Setback Areas along streets.

~~g. The architectural design of the building elevations facing the street should have the appearance of a primary façade and include transparency in the form of full or clerestory windows.~~

SECTION 6-212.E.2. Uses Not Permitted in Building Setback Areas along streets.

~~i. The architectural design of the building elevations facing the street should have the appearance of a primary façade and include transparency in the form of full or clerestory windows.~~

SECTION 6-308.F.15 Building and Structure Design.

15. Except for single family residential homes, the architectural design of street facing building facades shall have the appearance of a primary façade and include transparency in the form of full or clerestory windows.

SECTION 6-304. TEMPORARY USES

- A. **Temporary Use Permit Required.** Unless expressly provided to the contrary in this Section, no temporary use shall be established or maintained unless a temporary use permit evidencing the compliance of such use with the provisions of this Section has first been issued by the Building Department.
- B. **Use Limitations.** Temporary uses are subject to the specific regulations and time limits that follow, and to other applicable regulations of the district in which the use is located:
1. Any temporary use, together with any principle use, shall not jointly exceed the land use density or intensity that is applicable in the district in which it is located.
 2. No signs in connection with the temporary use shall be permitted except in accordance with Section 6-307 of these regulations.
 3. The temporary use shall operate only during the hours and dates specified in the permit.
 4. Off-street parking that will reasonably be required for such temporary use shall be provided if the Building Department determines that the use would otherwise unreasonably reduce the amount of off-street parking spaces available for nearby permanent uses. The operator of the temporary use shall be responsible for guiding patrons to such parking lots.
 5. No temporary use shall be permitted unless the Orland Park Fire Protection District and Police Department and the Village Health Official have first certified that such use will result in no additional on-site or off-site threat to the public health, safety and welfare.
 6. No temporary lighting shall be installed without an electrical permit issued by the Village Building Director.
 7. The site of the temporary use shall be cleared of all debris at the termination of the event. A cash bond for an amount deemed appropriate by the Village Manager shall be posted with the Building Department or a signed contract with a disposal firm shall be required to ensure that the site is cleared of debris.
- C. **Permitted Temporary Uses.** The following uses are some of the temporary uses permitted in the Village:
1. **Carnivals and Circuses.**
 - a. Permitted in any district, provided that such use obtains the prior approval of the Village Manager.

- b. The maximum length of the permit shall be fifteen (15) days.
- c. No structure or equipment shall be located within three hundred feet (300') of any residential structure. Such use need not comply with the height or setback requirements of Section 6-104 of these regulations, except that structures or equipment shall not be located within the sight triangle as provided in Section 6-104 of these regulations.
- d. The person responsible for the operation of any such carnival or circus shall provide the Village Manager in advance of the event date with the information as required.

2. **Christmas Tree Sales.**

- a. Permitted in any district, provided that such use receives specific prior approval by the Village Manager.
- b. The maximum length of such permit shall be sixty (60) days.
- c. Display of Christmas trees are exempt from the setback requirements of Section 6-104 of these regulations, except that no tree shall be displayed within the sight triangle, as provided in Section 6-104(E).
- d. The person responsible for the operation of such Christmas tree sales shall provide the Village Manager in advance of the date of such operation with information as required.

3. **Contractor's Offices and Construction Equipment Sheds.**

- a. Permitted in any district where the use is accessory to a construction project. No contractor's office or equipment shed shall contain sleeping or cooking accommodations, except as necessary to accommodate security personnel.
- b. The maximum length of the permit shall be one (1) year, but may be renewed by the Building Department for a period not to exceed the duration of the construction project.
- c. Any contractor's office or equipment shed shall be removed upon completion of the construction project.

4. **House, Apartment, Garage and Yard Sales.**

- a. Permitted in any residential district, provided that such sale is limited to the personal possessions of the owner-occupants of the dwelling unit and their neighbors.
- b. House, apartment, garage and yard sales are not to exceed a three (3) consecutive day period.
- c. No residence shall conduct more than three (3) such sales in a twelve (12) month period.
- d. No temporary use permit is required for such uses.

5. Indoor and Outdoor Arts and Crafts Shows.

- a. Permitted in any district provided that such use receives the prior approval of the Village Manager.
- b. The maximum length of the permit shall be three (3) days.
- c. The person responsible for the operation of such show shall provide the Village Manager in advance of the event date with information as required.

6. Non-residential Seasonal Outdoor Storage.

- a. Permitted on parcels that have a minimum area of 25,000 square feet and a minimum road frontage of 250 feet. Storage containers shall be set back a minimum of thirty (30) feet from the nearest street right-of-way.
- b. A drawing of the location of the storage container(s) must accompany any request for seasonal outdoor storage.
- c. The maximum length of the permit shall be three (3) months in any single year.
- d. Not more than ten percent (10 %) of the required parking spaces may be used for the seasonal outdoor storage containers.

(Ord. 4125 - 4/17/06)

7. Real Estate Offices.

- a. Permitted in any district accessory to any new development. Such offices shall not be used as a residence, and shall not contain any sleeping or cooking accommodations unless a model home is used as a temporary sales office. All such offices shall comply with the current Illinois Accessibility Code and the Illinois Plumbing Code. (Ord. 3354 - 4/17/00)

- b. The maximum length of a permit issued by the Building Department shall be one (1) year, but the permit may be renewed throughout the sales or leasing period by action of the Village Board upon application made no less than one month prior to the termination of the then-current permit period. Village Board action to renew a permit shall state the length of the renewal period and whether further renewals will be considered. (Ord. 3354 - 4/17/00)
- c. If the temporary sales office is in a trailer or similar temporary structure, a letter of credit shall be provided prior to the issuance of a permit, in an amount not less than \$5,000.00 to assure the removal of the trailer or similar temporary structure, disconnection of any utilities which were connected thereto, and storage of the trailer after removal. Storage costs shall be assessed at \$100.00 per day. The letter of credit shall be in a form similar to that provided in Section 5-112 (b) of this Land Development Code, and shall expire not less than 60 days after the end of the permit period or any renewal period granted. (Ord. 3354 - 4/17/00)
- d. No such office shall be used as the general office or headquarters of any real estate. (Ord. 3354 - 4/17/00)

8. Residential Outdoor Storage and Dumpsters.

- a. Allowed for a single thirty (30) day period within a calendar year unless associated with a building permit.
- b. Must be placed on private driveways.

(Ord. 4574 - 7/6/10; Amd. Ord. 4880 - 2/3/14)
(Ord. 3070-10/20/97)

9. Seasonal Outdoor Sales.

- a. Permitted on parcels that have a minimum area of twenty five thousand (25,000) square feet and a minimum road frontage of two hundred fifty (250) feet. Sales area, including tents, produce stands, and all other structures, shall be set back a minimum of thirty (30) feet from the nearest right-of-way of any street or highway.
- b. A drawing of the event location must accompany any request for outdoor sales.
- c. The maximum length of the permit shall be for a six (6) month period in any single calendar year.

- d. Not more than ten (10) percent of the required parking spaces may be used for the outdoor sales structures.
- e.

10. Temporary Hiring Offices.

- a. Permitted in any district where the use is accessory to a non-residential construction project. Such offices shall not be used as a residence, and shall not contain any sleeping or cooking accommodations. All such offices shall comply with the Illinois Accessibility Code and Illinois Plumbing Code.
- b. The maximum length of a permit issued by the Building Department shall be 45 days from the date Occupancy is granted.
- c. If the temporary hiring office is in a trailer or similar temporary structure, the trailer or structure shall be removed upon completion of the construction project and before a Conditional or Full Certificate of Occupancy is issued.
- d. If the temporary hiring office is in a trailer or similar temporary structure, a bond shall be provided prior to the issuance of a permit, in an amount not less than \$5,000.00 to assure the removal of the trailer or similar temporary structure, disconnection of any utilities which were connected thereto, and storage of the trailer after removal. Storage costs shall be assessed at \$100.00 per day. The bond shall expire not less than 60 days after the end of the permit period or any renewal period granted.
- e. No such office shall be used as a primary office headquarters.

11. Temporary Sales.

- a. For existing onsite businesses, temporary sales of items including flowers, food, novelties, sidewalk sales, tent sales and special promotions shall be permitted in any district, provided that all sales are conducted at least thirty (30) feet from the right-of-way of any street or highway, and do not interfere with traffic. (Ord. 4574 - 7/6/10)
- b. A drawing of the event location must accompany request for outdoor sales.
- c. Permit application is required.
- d. The maximum length of a permit will be three (3) days.
- e. Permits are limited to one (1) per calendar month.

- f. In the event food is prepared for outside consumption, an inspection is required by the Village health inspector.
- g. Not more than ten (10) percent of the required parking spaces may be used for outdoor sales structure.

(Ord. 4695 - 12/19/11)

12. Temporary Shelter.

- a. When a natural disaster renders any residence unfit for habitation, the temporary use of a mobile home or recreational vehicle located on the parcel is permitted during the rehabilitation or construction of a new residence.
- b. The maximum length of the permit shall be six (6) months, but may be extended by the Building Department.
- c. The temporary shelter shall be removed from the parcel after an occupancy permit has been issued for the new or rehabilitated residence.

13. Temporary Storage Units.

- a. **Permitted Units.** Temporary storage units that are not specifically regulated by Sections 1 through 10 of this section may be allowed subject to the following:
 - 1. The maximum total unit size shall be 768 cubic feet for residential zoning districts and a maximum of 1,000 cubic feet per 10,000 square feet of existing principle building area for non-residential zoning districts. A maximum unit height of eight (8) feet above grade shall be allowed in all zoning districts;
 - 2. Units shall be located on private property with a minimum lot line setback of five (5) feet from any lot line;
 - 3. The maximum time allowed for a temporary storage unit shall be 30 days from the day of placement on the site;
 - 4. Residential waste collection/ garbage enclosures are regulated by the Village Code (See 6-2-2-4 and 6-2-2-5);
 - 5. Paper recycling containers/ paper retrievers are permitted for governmental uses and schools.
- b. **Prohibited Units.** The following temporary storage units are prohibited:

1. Temporary storage units for materials that emit noxious odors or hazardous substances;
2. Temporary storage units in outdoor areas used for the collection of clothing, small household items, books, toys, hygienic materials, food, biohazards and other similar miscellaneous products and items;

(Ord. 4574 - 7/6/10)

14. Tents and Canopies.

- a. Tents in excess of 200 square feet and canopies in excess of 400 square feet require permits for non-residential uses as an ancillary use to a permitted, accessory or special use permit. Tents for non-residential uses less than the above area thresholds do not require permits. Tents for residential uses are allowed and do not require a permit.
- b. The maximum length of the permit shall be ten (10) days, or two (2) days longer than the allowable period for the principle use, where such tent is incidental to the primary use.
- c. No permit may be issued to the same person/business more than three (3) times in a twelve (12) month period. (Ord. 4880 - 2/3/14)

SECTION 6-209 Review Process for Certificates of Appropriateness

G. Review Process for Certificate of Appropriateness

The Certificate of Appropriateness review process is designed to protect historic properties from insensitive or non-conforming alterations and to ensure new buildings are compatible in design with older buildings in the Old Orland Historic District. The process for Certificates of Appropriateness is outlined in Section 5-101 of the Land Development Code (5-101.C and 5-101.D) and shall follow the requirements outlined in Section 5-110 of the Land Development Code pertaining to Landmarks. (Ord. 4940 - 11/3/14)

The tables below outline the Certificate of Appropriateness review and approval process for the three categories of buildings in the OOH District and landmarks and are followed by descriptions of the terms used. Once the required review and approval is obtained, building permits must be procured from the Village before the proposed work begins.

Table 6-209.G.1

Table 6-209.G.2

1. Contributing Structures.

Any building that reinforces the historic, cultural or architectural significance of the Historic District, and retains a significant portion of its architectural or design integrity. Contributing Structures in the Old Orland Historic District are identified in Map 1 of this section.

2. Landmarks .

Any building listed on the Local Register of Significant Places in Section 5-110 of the Land Development Code, which reinforces the historic, cultural or architectural significance of Orland Park.

3. Non-Contributing Structure.

Any building that does not reinforce the historic, cultural or architectural significance of the Historic District.

4. New Construction.

The construction of a freestanding structure on any developable lot, including new construction that involves additions to existing buildings.

5. Major Change.

Substantial change to the exterior appearance of a structure, or any change to the impervious coverage on the site, including but not limited to: New Construction or additions, including new decks visible from the right-of-way, porches, driveways etc.; Demolition of any contributing structure or any part of a contributing structure; Relocation of buildings; Significant alteration/ removal of historical or architectural features. (Ord. 4738, 6/18/12)

All changes considered “Major” by the Development Services Department shall require a Public Notice prior to the Plan Commission meeting, as defined in the following tables.

6. Minor Change.

Changes that do not have a substantial impact on the exterior appearance of the structure or site, including alteration, addition or removal of exterior architectural elements such as doors, windows, fences, skylights, siding, exterior stairs, roofs, tuck-pointing etc.

7. Routine Maintenance.

Includes repair or replacement of exterior elements where there is no change in the design, materials, or appearance of the structure or property such as gutters and downspouts, drive-ways etc. Landscape changes for gardens, planting beds, new trees, outdoor lighting for single family homes etc. will be considered as routine maintenance.

8. Determination of Type of Change.

Any proposed changes to existing buildings and sites in the Old Orland Historic District will be considered a Major Change, a Minor Change or Routine Maintenance per the determination of the Development Services Department on a case by case basis, applying the above definitions.

(Ord. 4940 - 11/3/14)

9. Pre-Concept Meeting and Historic Preservation Resident Handbook

Prior to applying for a Certificate of Appropriateness, an owner in the Historic District or of a landmark building must meet with the Development Services Department to discuss project scope, the appropriateness of any changes to a site or a building and the impending application of a petition. Development Services Department staff will provide new petitioners with a copy of the Historic Preservation Resident Handbook and a general overview of the requirements and policies related to the Old Orland Historic District and to Landmark Buildings.

10. Compliance.

Failure to comply with the codes, requirements and policies of the Village may result in the removal of any inappropriate materials, designs or other changes made during the course of an approved project at the petitioner's expense. The Development Services Department shall notify a petitioner via certified mail when work is non-compliant and upon notification the petitioner shall have one (1) week to remove non-compliant materials, designs or other changes. Upon the discretion of the Development Services Department, if the non-compliance is not rectified within five (5) business days, a citation may be issued to the petitioner, who shall be fined not less than \$100 and not more than \$500 per day of non-compliance.

H. Demolition Standards and Permits.

1. Criteria for Demolition.

A demolition permit from the Village is required for any proposal to demolish, partially demolish, or relocate any landmark or contributing structure within the Old Orland Historic District.

a. For Contributing Structures and Landmarks .

A Certificate of Appropriateness for Demolitions must be granted prior to the issuance of the demolition permit. The process for obtaining a Certificate of Appropriateness for Demolition is outlined in - and shall follow - Sections 5-101 and 5-110 of the Land Development Code.

b. For Non-Contributing Structures .

A Certificate of Appropriateness for Demolitions is not required, and petitioners may apply directly to the Development Services Department for a demolition permit.

c. Exceptions.

The petitioner may procure a demolition permit directly from the Village for landmarks or contributing structures if the following conditions apply:

1. The building is an immediate danger to the health, safety or welfare of the occupants or that of the general public; and/ or
2. The building is structurally unstable and cannot be safely occupied.

Both conditions must be confirmed by the Development Services Department prior to the issuance of the permit.

2. Demolition Standards .

a. For All Proposals Requiring a Certificate of Appropriateness for Demolition .

The petitioner must respond in writing to all of the following Demolition Standards and submit to the Development Services Department with the completed Certificate of Appropriateness application:

1. That the building or structure is not structurally sound;
2. That the property in question cannot yield a reasonable return if the building or structure were retained; and
3. That the cost of repair of the building or structure exceeds the value of the land and the building, thus creating an economic hardship for the owner.
4. That a historic landmark survey has been conducted and documents the historical and architectural significant of the building or site per Section 5-110.E.2.c.

b. The Petitioner is Responsible .

The petitioner is responsible for submitting adequate documentation for each of the responses, as determined by the Development Services Department.

(Ord. 4940 - 11/3/14)

SECTION 6-409.E. Basic Design Standards.

4. **Natural Stream Channels.** Natural stream channels that are designated by the Board of Trustees for the Village of Orland Park shall be retained in lieu of either constructed open channels or enclosed storm sewer pipes. Natural stream channels shall be regulated by provisions in Section 6-411 and Section 6-412 of these regulations.

18. **Storm Water Detention Facilities.**

o. Within the minimum twenty-five foot (25') setback from an artificial detention/retention basin, a maintenance vehicle access area shall be provided at least eight (8) feet wide not exceeding a two percent (2%) cross slope.

SECTION 6-412. LOCAL STREAM AND WATERBODY PROTECTION.

D. **Development Activity in, and Minimum Setback from Streams, Lakes and Ponds.**

1. No development (except as provided in subsection 2) may occur within the minimum setback area identified on the Village's Natural Stream Channel and Water Body Map, as adopted by the Board of Trustees and as amended from time to time, and in no case shall be less than fifty (50) feet from a natural watercourse or waterbody, as measured from the top of bank of the perennial stream, the centerline of an intermittent stream, or the ordinary high water mark of a lake or pond, or twenty-five (25) feet for an artificial detention/retention basin, as measured from the high water level. (Ord. 2746 – 6/5/95 & Ord. 3070 – 10/20/97; Amd. Ord. 5221 – 9/18/17)
2. The following activities are permitted within the minimum setback area only if, as a practical matter, they cannot be located outside the setback area. Such modification shall be approved only after preparation of a report prepared by a qualified professional and approved by the Director of Development Services. The report shall note that the modification will not adversely affect water quality; destroy, damage, or disrupt a significant habitat area; adversely affect drainage and/or stormwater retention capabilities; lead to unstable earth conditions; create erosion hazards or be materially detrimental to any other property in the area of the subject property or to the Village as a whole, including the loss of open space or scenic vistas: (Amd. Ord. 5167 – 2/20/17)

I. **Vegetation and Revegetation.**

1. To minimize erosion, stabilize the streambank, protect water quality, keep nutrients out of the water, maintain water temperature at natural levels, preserve fish and wildlife habitat, screen man-made structures, and preserve aesthetic values of the natural stream, lake or pond, a natural vegetation strip shall be maintained along the edge of the natural watercourse or waterbody. Within required setbacks from a natural watercourse or waterbody, a natural vegetation strip shall extend landward twenty-five (25) feet, as measured from the top of bank of the perennial stream, the centerline of an intermittent stream, ~~or~~ the ordinary high water

mark of a lake or pond. Refer to the Stormwater Management Area Landscape in Section 6-305 for vegetation requirements adjacent to artificial detention/retention basins.

SECTION 6-305.8 LANDSCAPE AND TREE PRESERVATION.

8. Stormwater Management Area Landscape.

b. Requirements.

3. Within the minimum twenty-five (25) foot setback from an artificial detention/retention basin, a minimum fifteen (15) foot wide naturalized landscape area is required above all retention and detention pond high water levels in order to slow runoff, filter pollutants, recharge aquifers and enhance water quality. Within the naturalized landscape area, a maintenance vehicle access area shall be provided around the pond, at least-eight (8) feet wide not exceeding a two percent (2%) cross slope and shall remain open and accessible for maintenance purposes, planted with native low-growing plant materials or as a recreational/maintenance trail. The balance of the naturalized landscape area, not exceeding a five percent (5%) cross slope, shall include naturalized landscaping, as detailed below in Section 6-305.D.8.b.4. See also Section 2-102 Definitions "Naturalized Landscaping".

SECTION 6-302.C.33 ACCESSORY STRUCTURES AND USES.

33. Sheds and Storage Buildings: May be permitted in rear setbacks so long as they are:

- a. Limited to one (1) per lot and not exceeding two hundred (200) square feet. Sheds and storage buildings exceeding (100) square feet for non-residential uses must be constructed with primary material that match the principle structure; (Ord. 2462 – 10/18/93)
- b. Located off easements, at least five (5) feet from the lot lines and do not obstruct storm water flow; and no closer than ten (10) feet to the principle building; and
- c. Do not exceed fifteen (15) feet in height to the highest point of the roof. The height of a shed shall not exceed the height of the top of the roof of the principle structure of the parcel on which it is located.

SECTION 1-104. REVIEW FEES.

All applications for development approval submitted to the Village under these regulations shall be accompanied by the payment of a fee as determined by the Board of Trustees from time to time to defray the costs incurred by the Village in reviewing the application. In addition to the fees set by the Board, all applicants for development approval shall reimburse the Village for reasonable costs incurred as a result of the application's review by a legal, engineering, landscape or other special consultant, provided that the applicant is notified of the need to retain such special consultant and agrees to such retention. Payment of these fees shall be paid in full by the Petitioner prior to issuance of a Certificate of Occupancy, unless otherwise noted.

Payment of these fees shall still be required to be paid in full by the Petitioner if or when a project is withdrawn, denied or terminated, and shall be paid immediately upon the Village notification to the Petitioner that said fees are due.

SECTION 5-101.B. Petitions, Applicability, and Plan Review

B. Petitions, Applicability, and Plan Review

1. **Petitions.** All development and redevelopment in the Village of Orland Park requires the submittal of a petition or application to the Development Services Department for the purpose of establishing a public record and beginning the process for the Departmental Review. Petition/ Application forms are obtained from the Development Services Department in Village Hall. For more information on the role of the Development Services Department see Section 5-101.K. In the instance that this Code requires certain distances within a regulation, the measurements shall be made to the property line, unless the measurement is defined otherwise within such regulation or unless interpreted differently by Staff based on the intent of the regulation.

SECTION 6-201.F

F. **Lot Coverage.** There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

1. **Base.** Allows up to twenty percent (20%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of seventy-five percent (75%) of the lot shall be green space.
2. **Plus.** Allows an additional five percent (5%) from base lot coverage by permit. Seventy percent (70%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
3. **Premium.** Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of sixty-five percent (65%) of the lot shall be green space. A lot shall be

permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:

- a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
4. **Special**. Allows up to seventy percent (70%) lot coverage by right to non-residential land uses. A minimum of thirty percent (30%) of the lot shall be green space.

SECTION 6-202.F

F. **Lot Coverage**. There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

1. **Base**. Allows up to thirty percent (30%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of sixty-five percent (65%) of the lot shall be green space.
2. **Plus**. Allows an additional five percent (5%) from base lot coverage by permit. A minimum of sixty percent (60%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);

- b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
- 3. **Premium.** Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of fifty-five percent (55%) of the lot shall be green space. A lot shall be permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
- 4. **Special.** Allows up to seventy percent (70%) lot coverage by right to non-residential land uses. A minimum of thirty percent (30%) of the lot shall be green space.

SECTION 6-203.F

F. **Lot Coverage.** There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

- 1. **Base.** Allows up to thirty percent (30%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of sixty-five percent (65%) of the lot shall be green space. An additional 3% lot coverage

allowance is provided for single family homes with side-loaded garages (38% by right/ 62% green space).

2. **Plus.** Allows an additional five percent (5%) from base lot coverage by permit. A minimum of sixty percent (60%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
3. **Premium.** Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of fifty-five percent (55%) of the lot shall be green space. A lot shall be permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
4. **Special.** Allows up to seventy percent (70%) lot coverage by right to non-residential land uses. A minimum of thirty percent (30%) of the lot shall be green space.

SECTION 6-203.5.F

F. **Lot Coverage**. There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

1. **Base**. Allows up to thirty percent (30%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of sixty-five percent (65%) of the lot shall be green space. An additional 3% lot coverage allowance is provided for single family homes with side-loaded garages (38% by right/ 62% green space).
2. **Plus**. Allows an additional five percent (5%) from base lot coverage by permit. A minimum of sixty percent (60%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
3. **Premium**. Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of fifty-five percent (55%) of the lot shall be green space. A lot shall be permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);

- e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.

Special. Allows up to seventy percent (70%) lot coverage by right to non-residential land uses. A minimum of thirty percent (30%) of the lot shall be green space

SECTION 6-204.F

F. **Lot Coverage.** There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

1. **Base.** Allows up to thirty-five percent (35%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of sixty percent (60%) of the lot shall be green space. An additional 3% lot coverage allowance is provided for single family homes with side-loaded garages (43% by right /57% green space).
2. **Plus.** Allows an additional five percent (5%) from base lot coverage by permit. A minimum of fifty-five percent (55%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
3. **Premium.** Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of fifty percent (50%) of the lot shall be green space. A lot shall be permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;

- c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
4. **Special**. Allows seventy percent (70%) lot coverage by right to non-residential land uses. A minimum of thirty percent (30%) of the lot shall be green space.

SECTION 6-204.5

F. **Lot Coverage**. There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

- 1. **Base**. Allows up to thirty-five percent (35%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of sixty percent (60%) of the lot shall be green space. An additional 3% lot coverage allowance is provided for single family homes with side-loaded garages (43% by right /57% green space).
- 2. **Plus**. Allows an additional five percent (5%) from base lot coverage by permit. Fifty-five percent (55%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
- 3. **Premium**. Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of fifty percent (50%) of the lot shall be green space. A lot shall be permitted

at Premium grade when it can demonstrate the permanent installation of at least two of the following:

- a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
4. **Special**. Allows seventy percent (70%) lot coverage by right to non-residential land uses. Thirty percent (30%) of the lot shall be green space.

SECTION 6-205.F

F. **Lot Coverage**. There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

1. **Base**. Allows up to forty percent (40%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of fifty-five percent (55%) of the lot shall be green space. For single family attached and multi-family residential uses, sixty percent (60%) lot coverage is allowed by right. A minimum of forty percent (40%) of such lots shall be green space.
2. **Plus**. Allows an additional five percent (5%) from base lot coverage by permit. A minimum of fifty percent (50%) of the lot shall be green space. For single family attached and multi-family residential uses, Plus grade is not an option. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:

- a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
- 3. **Premium.** Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of forty-five percent (45%) of the lot shall be green space. For single family attached and multi-family residential uses, Premium grade is not an option. A lot shall be permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
- 4. **Special.** Allows up to seventy percent (70%) lot coverage by right to non-residential land uses. A minimum of thirty percent (30%) of the lot shall be green space.

SECTION 6-206.G (RSB Residential and Supporting Business District)

F. **Lot Coverage.** There are three (3) grades of residential lot coverage: Base, Plus, and Premium. A fourth grade, Special, is reserved for non-residential uses such as places of worship and/or institutional uses. The following regulations shall permit lots to move between grades—to increase or decrease lot coverage at will—so long as they meet the following performance criteria associated with each grade. Lot coverage includes the area of a lot covered by building, pavement, storm water storage, and other impervious elements.

1. **Base**. Allows up to sixty percent (60%) lot coverage by right for the principle structures and pavement, plus an additional 5% for an accessory structure. A minimum of thirty-five percent (35%) of the lot shall be green space.
2. **Plus**. Allows an additional five percent (5%) from base lot coverage by permit. A minimum of thirty percent (30%) of the lot shall be green space. A lot shall be permitted at Plus grade when it can demonstrate the permanent installation of one of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. Five percent (5%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - c. Five percent (5%) impervious pavement reduction and replacement with approved pervious pavement surface area.
3. **Premium**. Allows an additional ten percent (10%) from base lot coverage by permit. A minimum of twenty-five percent (25%) of the lot shall be green space. A lot shall be permitted at Premium grade when it can demonstrate the permanent installation of at least two of the following:
 - a. A rain sensor system for lawn irrigation (if applicable);
 - b. The installation of one type of renewable energy system that supplements at least 10% of household power consumption and installed in compliance with Section 6-314 of these regulations;
 - c. One (1) dry well per Section 6-302.H.1.k of these regulations that can capture at least 50% of site storm water generation. The capacity of dry well shall be at least 50% of impervious area times 1-inch (50% impervious area x 1inch);
 - d. Ten percent (10%) turf grass reduction and replacement with an equal percentage in rain garden area or naturalized landscape area (see Section 6-305.F.2.c);
 - e. Ten percent (10%) pavement reduction and replacement with approved pervious pavement surface area.
4. **Special**. Allows eighty percent (80%) lot coverage by right to non-residential land uses and mixed-uses. Twenty percent (20%) of the lot shall be green space.

SECTION 6-411. SOIL EROSION AND SEDIMENTATION CONTROL.

A. **Purpose.** The purpose of this Section is to **conserve the land, water, air and other natural resources within the Village by establishing requirements for the control of erosion and sedimentation.**

B. **Objectives.** The following guidelines shall apply for the planning, implementing, monitoring and maintenance of all development activity within the Village which disturbs stabilized soil allowing erosion and sedimentation to occur:

1. Development shall be related to the topography and soils of the site so as to create the least potential for erosion. Areas of steep slopes where high cuts and fills may be required shall be avoided wherever possible, and natural contours shall be followed as closely as possible.
2. **Natural watercourses, existing trees, and conservation areas shall be retained and protected from erosion and sedimentation so that natural features and functions are maintained.** Areas immediately adjacent to natural watercourses and which are planned to be left undisturbed shall be left undisturbed for a minimum of **fifty (50) feet** from the natural water course, **as measured from the bank of the perennial stream, the centerline of an intermittent stream, or the ordinary high water mark of a lake or pond, or twenty-five (25) feet for an artificial detention/retention basin, as measured from the high water line level,** whenever possible, and shall be governed by the regulations in Section 6-412.
3. The smallest practical area of land should be exposed for the shortest practical time during development. **Sediment control measures shall be installed prior to the commencement of any land disturbance.**
4. **Disturbed areas shall be stabilized with temporary or permanent measures within seven (7) calendar days following the end of disturbance activities.**
5. **Perimeter protection, sediment basins, debris basins, desilting basins, or silt traps or filters shall be installed, and shall be maintained to remove sediment from run-off waters from land undergoing development and from undeveloped land.**
6. **Provision shall be made to stabilize stormwater management systems that are functioning throughout construction. Temporary or permanent stabilization measures shall be installed at time of construction.**
7. **Proper storm sewer inlet and outlet protection shall be in place and maintained throughout construction until permanent stabilization of the development has been completed.**
8. Provisions shall be made for **the temporary or permanent stabilization of soil stockpiles within seven (7) days of placement. Perimeter controls shall be placed around the**

base of the stockpile immediately. Stockpiles shall be graded to a safe slope within six (6) months of deposit. Weeds and other vegetation above eight inches (8") tall shall be cut back as needed. (Ord. 2570 - 5/2/94)

~~8.9.~~ Provision shall be made for the control of the deposit of sediment and debris from the development site onto streets, alleys and sidewalks at the end of each work day, or if a hazardous condition develops. (Ord. 2570 - 5/2/94)

10. All construction ingress and egress points shall have a stabilized construction entrance installed and maintained until permanent stabilization of the development has been completed.

11. Sediment filtering devices shall be used for all dewatering activities.

12. All waste including building materials and construction debris shall be placed in the appropriate receptacles.

13. Onsite pollutants such as building materials, building products, landscape materials, sanitary waste, fueling, and cleaning and maintenance areas shall be appropriately managed to minimize and discharge.

14. Site development shall be in accordance with other Village ordinances and State law, and it shall not decrease the normal capacity of a flood plain by adding fill unless compensatory capacity is provided elsewhere.

15. Erosion prevention measures in site development shall be implemented in phases on a time schedule so as to more effectively control potential conditions associated with the seasons (i.e., run off from the melting of snow).

C. Soil Erosion Control Plan and Permit Requirements.

1. Plan Requirements. A Soil Erosion and Sedimentation Control Plan shall be submitted with the Final Engineering Plans to be reviewed and approved by the Development Services Department. For single lots in established subdivisions a Soil Erosion and Sedimentation Control Plan shall be submitted for review and approval with the Building Permit Set and approved by the Development Services Department. The plan set shall include all of the guidelines outlined in Section 6-411.B. that pertain to the specific site conditions.

2. Letter of Credit Requirements. When a Letter of Credit is required for the development, the erosion control measures approved in the Final Engineering plans shall be included in the Letter of Credit total. The amount of money earmarked for the erosion control measure will be held until final stabilization of the project is complete or until an

authorized agent of the Development Services Department has approved a reduction or release.

3. Permit Requirements. Implementation of the approved Soil Erosion and Sedimentation Control Plan is required prior to the issuance of any Foundation Permits.

Except as otherwise provided in this Section, no person shall commence or perform any grading, stripping, excavating, or filling of land without having first **installed the erosion and sedimentation control measures outlined in the approved Final Engineering Plan set or Building Permit set.**

4. Exceptions. A soil erosion control plan and permit shall not be required for any of the following:

- a. Agricultural use of land, including farming, the implementation of conservation measures included in a farm conservation plan approved by the Soil and Water Conservation District and community garden plans.
- b. Construction of conservation measures including, but not limited to, sod waterways, terraces, grade stabilization structures, berms and swales.

5. Application for Permit. When development activity is planned and there are no soil erosion control plans, application for a soil erosion control plan permit shall be made by the owner of the property or his authorized agent to the **Development Services Department** on a form furnished for that purpose. Each application shall include certification that any ~~(5/94)~~ land clearing, construction, or development involving the movement of earth shall be in accordance with the plans approved upon issuance of the permit. Each application shall include a certification by an Illinois registered professional engineer that the contour lines, current and proposed, and other technical contents of the plans are valid. When development is proposed as a part of a building permit for a part of the site, the applications may be combined, provided, that the information required under this Section is submitted with the engineering drawings required for the building permit.

Each application shall be accompanied by the following:

- a. the name and address of the developer and owner;
- b. The name, address and telephone number of any design consulting firm or engineer;
- c. Identification of person(s) or entity which will have legal responsibility for maintenance or erosion control structures and measures after development is completed;
- d. A vicinity sketch showing site acreage, site boundary lines, utilities and buildings presently located on the site, drains and roads on and within 1/2 mile of the site, intermittent and perennial streams and water bodies downstream within 1/2 mile of the site, and a legend and scale;

- e. Proposed use of the site, including present development and planned utilization; areas of excavation, grading, and filling; proposed contours, finished grades, and street profiles; provisions for storm drainage, including the control of accelerated runoff, with a drainage area map and computations; existing trees and wooded areas; kinds and locations of utilities; and areas and acreage proposed to be paved, covered, sodded or seeded, vegetatively stabilized, or left undisturbed;
- f. An erosion and sedimentation program showing or describing all the erosion and sedimentation control measures necessary to meet the objectives of this Section throughout all phases of construction and necessary to meet the objectives at the completion of development of the site. The program may include erosion structures, temporary and permanent vegetation and other conservation measures; and
- g. The proposed phasing of development of the site, including stripping and clearing, rough grading and construction, and final grading and landscaping. Phasing should identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, and the sequence of clearing, installation of temporary sediment control measures, installation of storm drainage, paving streets and parking areas, and establishment of permanent vegetative cover.

The Village Engineer may waive specific requirements for the content of submission upon written finding that the information submitted is sufficient to show that the work will comply with the objectives and principles of this Section and the standards contained in the Handbook incorporated by Subsection (E)(1).

4. **Time Schedules.** In the event a site developer is unable to meet the phasing time schedules as contained in either the approved site development plans or the site development permit, the site developer shall submit, prior to missing the time schedule, an addendum to any plans or permit application stating in the addendum that scheduling will not be met and what, if any, additional measures will be taken.

D. **Fees.** Fees for site development permits, when required by this Section, shall be determined by the Village in accordance with Section 1-104 of these regulations.

E. **Operation Standards and Requirements.**

1. **Handbook Adopted by Reference.** The procedures and standards set out in the *Illinois Urban Manual, as amended, and the Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control, as amended*, shall be applicable to all **developments**.

2. **Inspections.** Plans for grading work shall be maintained at the site during grading. In order to obtain the necessary grading inspections, the permittee shall notify the **Development**

Services Department at least two (2) full working days before the following inspection is to be made:

- a. Rough Grading: When all rough grading has been completed; and
 - b. Final Inspection: When all work, including installation of all drainage and other structures and required planting, has been completed.
3. **Responsibility.** The permittee shall not be relieved of responsibility for damage to persons or property otherwise imposed by law, and the Village or its officers or agents shall not be made liable for such damage, by (1) the issuance of a permit under this section, (2) compliance with the provisions of that permit or with conditions attached to it by the Village, (3) failure of Village officials to observe or recognize hazardous or unsightly conditions, (4) failure of Village officials to recommend denial of or to deny a permit, or (5) exemptions from the permit requirements of this section.
4. **Special Precautions.** If at any stage of the grading of any development site the Village Engineer determines by inspection that the nature of the site is such that further work authorized by an existing permit is likely to imperil any property, public way, watercourse or drainage structure, the Village Engineer may require, as a condition of allowing the work to be done, that such reasonable special precautions be taken as is considered advisable to avoid the likelihood of such peril. "Special precautions" may include, but shall not be limited to, a more level exposed slope, construction of additional drainage facilities, berms, terracing, compaction, cribbing, or installation of plant materials for erosion control. Said special precautions shall, as much as possible, reflect the standards contained in the Handbook.
- b. On large operations or where unusual site conditions prevail, the Village Engineer or his designee may specify the timing of grading or may require that the operations be conducted in specific stages so as to insure completion of protective measures or devices prior to the advent of seasonal rains. Said specifications or requirements shall, as much as possible, reflect the standards contained in the Handbook.
5. **Coordination with Local Stream and Water Body Protection.** Except as allowed by the standards outlined in Section 6-412, no grading or removal of top soil shall be allowed in the minimum setback area defined on the Village's Natural Stream Channel and Water Body Map (Exhibit 2).
6. **Major Amendments of the Site Development or Erosion and Sedimentation Control Plans.** Major amendments of the site development or erosion and sedimentation control plans shall be submitted to the **Development Services Department** and shall be processed and approved or disapproved in the same manner as the original plans. Field modifications of a minor nature may be authorized by the **Development Services Department** by written authorization to the permittee.

F. **Expiration of Permit.** Each permit shall expire and become null and void if the work authorized by such permit has not been commenced within six (6) months, or work is not completed by a date which shall be specified in the permit; except that the Director of Development **Services** may, if the permittee presents satisfactory evidence that unusual difficulties have prevented work being commenced or completed within the specified time limits, grant a reasonable extension of time if written application is made before the expiration date of the permit.

G. **Effect on Other Permits.** The granting of a permit under the provisions of this Section shall in no way affect the owner's responsibility to obtain the approval required by any other statute, ordinance, or regulation of any state agency or subdivision thereof, or to meet other Village ordinances and regulations.

SECTION 6-410. WATER SUPPLY

A. General.

1. All development shall include provisions for the construction of water distribution facilities complete with valves, fire hydrants, and other appurtenances designed in accordance with this Section. As a minimum, the water distribution system shall provide a service connection(s) at the approximate mid-point of the front property line of each individual lot or parcel within the development. Where more than one building is located or planned on one lot or parcel of property, or when water main construction is required on the property for fire protection, the proposed construction shall also include all water main construction and appurtenances within the lot or parcel except service lines.

2. Specification references made herein for manufactured materials such as pipe, hydrants, valves and fittings refer to designation of the American Water Works Association (AWWA) or of the American National Standards Institute (ANSI). Water distribution systems shall be constructed in accordance with the "Standard Specifications for Water and Sewer Main Construction in Illinois," latest edition, unless otherwise modified in this Section.

B. Basic Design Standards.

1. System Extension.

a. Extension to the water distribution system shall form a complete network extension or a part of a complete network extension that includes all primary mains, secondary mains, and gridiron mains, complementing the existing distribution system network.

b. Primary mains are those mains that form the arterial portion of the system. Primary mains under construction within a development are further defined as mains that are sixteen (16) inches or larger. Primary mains within or adjacent to a development shall be sized and located in accordance with the Comprehensive Water System Study of the Village, latest

edition. Secondary mains shall be sized, looped, and spaced as required for fire flows and shall have a minimum diameter of eight (8) inches.

c. Gridiron mains shall form a grid to supply water to the local fire hydrants and service lines. Gridiron mains shall have a minimum diameter of eight (8) inches. Dead end water mains shall not be allowed.

d. The proposed system extensions shall be arranged so that the service interruptions caused by a break in any main will be limited to twenty (20) residential units or one thousand (1000) feet in all non-residential areas. The maximum number of valves for a shutdown shall be three (3); four (4) may be allowed in unique cases with the approval of the Village.

e. Developer shall be required to extend water distribution system as determined by Village Engineer.

2. **Maximum Day Consumption.** For purposes of water main design, maximum day consumption for water main design shall be based on the following table:

<u>Maximum Day Type of Establishment</u>	<u>Unit</u>	<u>Consumption Gal/day/unit*</u>
Retail	(> 100,000 sq. ft.)	105
Retail	(< 100,000 sq. ft.)	65
Office	Person (1 shift)	50
Industrial	Person (1 shift)	75
Restaurant	Meal Served	15
Theater	per Seat	10
Hotel	per Guest	210

* Quantities are exclusive of process water requirements which must be estimated and added.

For other than residential developments, when the details of the development are not known, maximum day consumption and fire flow may be estimated by the Village Engineer. Such estimate shall not relieve the owner or developer of the responsibility of providing adequate main capacity for any and all future needs within the development.

3. **Head Losses.** Head losses in relation to velocity in water mains shall be computed using the Hazen-Williams formula:

$$V = .318 (C)(R)^{0.63}(S)^{0.54}$$

Where V = Velocity, in units of feet per second

C = 100

R = Hydraulic radius, in units of feet

S = Hydraulic gradient, in units of feet per foot

4. **Main Capacity.** Primary mains, secondary mains, and gridiron mains shall be sized to provide sufficient capacity to deliver the required fire flow plus the consumption at the maximum daily rate to all areas served by the proposed construction.

5. **Required Fire Flow and Pressure.** A separate fire flow report shall be prepared that indicates that at selected locations, and at any other locations that may be selected by the Village Engineer, the fire flows required, in excess of maximum daily consumptive demands, will be supplied using a "C" factor of 100, ignoring fittings, and with a minimum residual hydrant pressure of twenty (20) psi. Required fire flow shall be computed as detailed in the "Guide for Determination of Required Fire Flow," latest edition, published by the Insurance Service Office. Watermains shall be sized and set at grades to provide ISO fire protection flow rates. The developer shall bear the cost of the flow studies. Flow tests are to be performed to verify compliance w/ the guide.

Single-Family Residential	1500	GPM @ 25 PSI
Multi-Family Residential	2500	GPM @ 25 PSI
Commercial - Industrial	3500	GPM @ 25 PSI

6. **Fire Hydrant Spacing.**

a. Fire hydrants shall be installed so that the near corner of all construction on the site that could burn will not be further than one hundred fifty (150) feet from a fire hydrant, and the maximum distance between fire hydrants shall be 350 ft. Fire hydrants shall be provided so as to provide the required fire flows to structures as described in the "Fire Suppression Rating Schedule," latest edition, published by the Insurance Service Office. Six (6) inch main extensions serving hydrants shall not be more than ten (10) feet long. Where water transmission lines or offsite water lines are installed in existing right-of-ways or in existing easements, hydrants must be installed at six hundred (600) foot intervals.

b. Fire hydrants shall be placed on private property when the Fire Chief determines that fire hydrants are at too great a distance to provide proper protection for multi-family, commercial or industrial properties. Easements shall be provided for all hydrants on private property.

c. Fire hydrants shall be placed within one hundred (100) feet of all sprinkler and or standpipe siamese connections provided on buildings unless otherwise directed by the Fire District because of existing or proposed circumstances.

7. **Valve Spacing.** A sufficient number of valves shall be provided so that a break or other failure will not affect more than twenty (20) residential units or one thousand (1000) feet of main in nonresidential areas. All valves 3" and larger must be installed in valve vaults.

C. **Material Specifications and Details.** All water distribution system elements shall conform to the following specifications:

1. **Ductile Iron Pipe.**

- a. Pipe class thickness - ANSI A21.50 (AWWA C150), minimum thickness, Class 52
- b. Pipe - ANSI A21-51 (AWWA C151)
- c. Pipe lining - ANSI A21.4 (AWWA C104)
- d. Fittings - ANSI 21.10 (AWWA C110)
- e. Joints - mechanical and push-on, ANSI A21.11 (AWWA C111)
- f. Polyvinyl wrapping of all watermain is required.
- g. All tees, elbows, bends and reducers, shall utilize Megalugs© for joint restraints. Megalugs (joint restraints) shall be required to be installed in addition to concrete thrust blocks.

2. **Valves.**

- a. Twelve (12) inch and smaller - iron body East Jordan Flowmaster RW (resilient wedge), non-rising stem gate valves, counter clockwise to open, AWWA C515
- b. Fourteen (14) inch and larger - iron body, rubber seat, butterfly valve, Class 150B, counter clockwise to open, AWWA C504
- c. Joint end - mechanical, AWWA C111

3. **Fire Hydrants.** (Exhibit No. WM-06.)

- a. East Jordan Iron Works, Inc. Watermaster 5BR250 with brass liner, painted Safety yellow. AWWA C502.
- b. Valve size, 5 1/4-inch, counter clockwise to open.

- c. Nozzles, 2 at 2 1/2-inch, 1 at 4 1/2-inch, with threads conforming to National Standard Specifications.
- d. Frangible section (breakaway type) with the break line flange located one (1) inch above finished grade.
- e. Hydrant to be installed with MJ swivel Tee with swivel MJ Gland. Auxiliary to be attached to fire hydrant and utilize six (6) anodized cap sacrificial nuts.
- f. Hydrant Marker – Roden style.

4. **Hydrant Valve Box (Exhibit No. WM-06).**

- a. East Jordan 8550 Series
- b. Lid embossed "WATER"
- c. Must include Valve Box Stabilizer – Alberico Plastic or Adapter II Rubber.

5. **Air Release Valves.** Apco, type 200A, 2-inch or Valvematic.

6. **Corporation Stops.** (Exhibit No. WM-08). Mueller H15000, 1-inch minimum, AWWA C800

7. **Service Pipe.**

- a. Copper tube, 2-inch and smaller, ASTM B88, Type K (base minimum on number of fixtures)
- b. Ductile Iron, larger than 2-inch, conform to Section C(1) above.

8. **Curb Stop.**

- a. Copper service, Mueller H-15154 as denoted in Exhibit No. WM-08.

9. **Curb Box.**

- a. Copper service, Mueller H-10302 or H-10304 as denoted in Exhibit No. WM-08.
- b. Ductile iron service, 4-inch and larger, conform to Section C(12) below.

10. **Concrete Thrust Restraints.**

- a. Horizontal reactions - thrust restraints at all tees, plugged ends, hydrants, and bends between 11 1/4 degrees and 90 degrees shall conform to Exhibit No. WM-10.
- b. Vertical reactions - the engineer shall submit individual designs for each location and comply with AWWA C600, Section 3.8.
- c. Material - precast or poured Class X concrete.
- d. Where undisturbed earth is not available or not likely to be available to back up pressure type concrete thrust blocks, the engineer shall specify tie rods with or without anchor type concrete thrust blocks and submit design data for such specifications. Care shall be taken when pouring concrete so that the mix will not interfere with access to joints or with hydrant drainage. All tees, elbows, bends and reducers, shall utilize Megalugs® for joint restraints. Megalugs (joint restraints) shall be required to be installed in addition to concrete thrust blocks.

11. **Casing Pipes.** Steel Pipe – 0.375" minimum thickness, bituminous coated, casing spacers are stainless steel, casing is to be sealed at both ends with a masonry cap and made water-tight.

12. **Valve Vaults.** (Exhibit Nos. WM-01 and WM-02).

- a. Precast reinforced concrete - ASTM C478 and ASTM C443.
- b. Size: For -, 8", - and smaller diameter valves, valve vaults shall have a 60" inside diameter; for pressure connections and valves -10" and larger in diameter, valve vaults shall have a minimum 72" inside diameter or as required by the village engineer.
- c. Adjustment: No more than two (2) precast concrete adjusting rings with six (6) inch maximum height adjustment shall be allowed. Rubber adjusting rings shall be used for structures in pavement.

13. **Castings.**

- a. Manhole frame and cover – EJ (East Jordan Iron Works, Inc.) 1022Z1 and 1020A HD embossed WATER and VILLAGE OF ORLAND PARK with a lid design as denoted on Exhibit No. WM-03.
- b. Manhole steps, EJ (East Jordan Iron Works, Inc.). #8518. 406.

14. **Crushed Granular Bedding.** (Exhibit No. WM-11). Crushed gravel or crushed stone course aggregate -ASTM C33, Size No. 67.

15. **Carrier Pipe.**

PVC pipe - AWWA C900, minimum thickness equal to SDR26, push-on type joints.

b. Other pipes - conforming to water main standards of this Section.

D. **Installation Requirements.**

1. **Environmental Protection Agency Permit.** Water system design and construction shall in all respects be in accordance with the regulations of the Environmental Protection Agency, State of Illinois. No construction shall commence until a copy of a permit from this agency is filed with the Village.

2. **Installation.** The installation of water mains and appurtenances, including services, shall conform to the requirements of this Section and shall conform to AWWA C600.

E. **Water Service Line.**

1. **Installation and Location.** A water service line is a water pipe connected at the water main by a brass corporation stop or a ductile iron fitting. Such pipe is extended horizontally at right angles with the water main to the front line of a lot or single building which it is to serve. The service pipe shall be provided with a brass curb stop or gate valve at the mid-point between the curb and the sidewalk unless otherwise specified by the Village Engineer. A cast iron curb box shall be installed over curb stops. A valve vault shall be provided for gate valves – three (3) inches and larger. All water service lines shall be located at the approximate center of each lot at a minimum depth of five (5) feet. A water service curb box that falls within a hard service area shall be relocated.

2. **Meters.**

a. All meters shall be installed in a habitable area and shall be accessible for inspection and serviceable by the Village.

b. All meters shall be per Village standard as determined by the Director of Development Services. Meter size shall be determined by the Director of Development Services. All meters less than 1.5" shall be installed by the Village. All meters greater than 1-1/2" shall be installed by a plumbing contractor at his expense. All meter installation shall comply with Village's codes and inspections. Residential meters shall have an AWWA approved ball valve at both ends. Both ball valves shall have female threads to accept male ends of meter couplings. Spread design shall be so only the meter and meter couplings will be between the two (2) valves. (Ord. 2680 - 3/18/96)

c. All 1" meter settings shall have an AWWA approved ball valve at both sides. Both valves shall have female threads to accept male ends of meter couplings. Spread design shall allow only the meter and meter couplings to be between the two (2) valves.

- d. All 1 1/2" meter settings shall have an AWWA approved ball valve at both sides. Both valves shall have male threads to accept female meter unions. Spread design shall allow only the meter and meter coupling unions to be between the two (2) valves.
- e. All 2" and larger meter settings shall receive flanged type meters per Village standard. A high quality brass ball valve shall be located immediately adjacent to companion flanges. (Ord.2860 - 3/18/96)
- f. All meter settings of 3 inch size and larger will be equipped with a by-pass system that shall be metered. (Ord.2860 - 3/18/96)
- g. All meter settings require a remote reading device that is external to the meter location. Conduit or thinwall is required when necessary to facilitate installation and maintenance of the reading device. Conduit shall be placed so the reading device will be mounted near the gas meter, 18" to 36" above foundation. (Ord.2860 - 3/18/96)
- h. At all water meter settings, an electrical jumper wire shall be installed so the meter may be removed without breaking continuity, or interfering with the maintenance of the metering equipment. The wire size shall be equal to, or greater than the neutral conductor of the largest service supplied to the building by the electric service provider. Ground wires should be located to service side of meter wherever possible.
- i. All special meter applications, including sprinkler systems, - back flow preventers, and fire systems, shall require special review and authorization by the Director of Development Services and Director of Public Works. (Ord.2860 - 3/18/96)

3. **Back Flow Prevention.** Back flow prevention devices should be required in conformance with other applicable Village regulations.

4. **Water Service Connection Requirements.**

a. **Residential and Commercial.**

- 1. Each individual residential unit, except as noted below in 4.a.2, shall have a separate metered water service to each unit. The service line shall be individually tapped into the water main and extended into the unit without passing through the property of another unit. Location and placement of wiring conduit shall be determined by the Village Plumbing Inspector and installed by the contractor.
- 2. Multi-floor residential buildings can be served by one (1) adequately sized water service line into a meter room. Inside the meter room, the service shall be manifolded to accept one (1) meter per unit served and one (1) meter for any common purpose water use. The manifold shall be constructed similarly to a single meter setting with padlock type valving device as

approved by the Village Plumbing Inspector. A single meter for the entire building may be allowed in unique cases with the approval of the Director of Development Services and Director of Public Works.

3. Commercial, Industrial and Office type buildings shall be served by one (1) adequately sized water service line into a meter room. If the units are individually owned (not leased or rented), inside the meter room, the service shall be manifolded to accept one (1) meter per unit served and one(1) meter for nay common water purpose. The manifold should be constructed similarly to a single meter setting with padlock type valving device as approved by the Village Plumbing Inspector. If the building is singularly owned (units leased or rented) only one (1) adequately sized meter will be allowed.

4. The meter room shall be accessible from a public area and constructed solely for water meter housing. A separate conduit shall be installed by the electrical contractor from each meter to a common point area on the building exterior. Location and placement of the wiring shall be determined by the Village Plumbing Inspector.

F. **Fire Service Line.** All fire sprinklers shall be connected to the water system through a single water service line constructed in accordance with the requirements in this Section and separated inside the building prior to meter.

G. **Water Main Protection.** All water main, storm sewer and sanitary sewer construction shall meet the requirements of this Section.

1. **Horizontal Separation.**

a. A water main shall be laid at least ten (10) feet horizontally from any existing or proposed storm or sanitary sewer line.

b. Should local conditions prevail which would prevent a lateral separation of ten (10) feet, a water main may be laid closer than ten (10) feet to a storm or sanitary sewer provided the main is laid in a separate trench or on an undisturbed earth shelf located to one side of the sewer and at such an elevation that the bottom of the water main is a least eighteen (18) inches above the top of the sewer. In such cases, water main shall be laid with as much horizontal clearance for sewer as possible.

c. If it is impossible to obtain proper horizontal and vertical separation as stipulated in Subsections (a) or (b) above, both the water main and the length of sewer between adjacent manholes shall be constructed of push-on or mechanical-joint ductile iron pipe, or pre-stressed concrete pipe and shall be pressure-tested to assure water tightness before backfilling.

2. **Vertical Separation.**

a. Whenever a water main must cross house sewers, storm drains, or sanitary sewer, the water main shall be laid at such an elevation that the bottom of the water main is eighteen (18) inches above the top of the drain or sewer. This vertical separation shall be maintained for that portion of the water main located within ten (10) feet, horizontally, of any sewer or drain crossed. Said ten (10) feet is to be measured at the normal distance from the water main to the drain or sewer.

b. Where conditions exist that the minimum vertical separation set forth in a subsection above cannot be maintained, or it is necessary for the water main to pass under a sewer or drain, one of the following two measures must be taken:

1. The water main shall be installed within a PVC carrier pipe and the carrier pipe shall extend on each side of the crossing until the normal distance from the water main to the sewer or drain line is at least ten (10) feet.

2. The involved sewer or drain shall be constructed from manhole to manhole with "O" ring pipe conforming to ASTM 361 or other pipe material which would conform to water main standards.

H. **Construction Requirements.**

1. **Excavation.**

a. The trench shall be excavated so that the water main shall have a minimum of five (5) feet six (6) inches of cover. The trench for the pipe shall be excavated at least twelve (12) inches wider than the external diameter of the pipe but not wider than the widths denoted on Exhibit No. WM-11.

b. Bell holes of sufficient depth shall be provided across the bottom of the trench to accommodate the bell of the pipe, to provide sufficient room for joint making and to insure uniform bearing for the pipe.

c. Where a firm foundation is not found to exist for the bottom of the trench at the required depth due to soft, spongy or other unsuitable soil, such unsuitable soil shall be removed for the full width of the trench or tunnel and replaced with well compacted unwashed gravel or an equal substitute, or crushed stone if such compacted material proves unsatisfactory. Where rock in either ledge or boulder formation is encountered, it shall be removed below grade and replaced with a well-compacted cushion of unwashed gravel having a thickness under the pipe of not less than eight (8) inches.

2. **Sheeting and Bracing.**

Sheeting and bracing shall be used in the excavation area as may be necessary for the safety of the work and the public, for the protection of the workmen and to prevent damage to adjacent properties.

b. Sheeting shall not be removed until the backfill has been placed and thoroughly compacted.

3. **Laying Water Main.**

a. The contractor shall keep the trench free from water while the water main is being placed and until the pipe joint has been sealed to the satisfaction of the Village Engineer.

b. Adequate provision shall be made for the safety, storage and protection of all water pipe prior to actual installation in the trench. Care shall be taken to prevent damage to the pipe castings and coating, both inside and out. Provisions shall be made to keep the inside of the pipe clean throughout its storage period and to keep mud and/or other debris from being deposited therein. All pipes shall be thoroughly cleaned on the inside before placement of the pipe. Proper equipment shall be used for the safe handling, conveying and laying of the pipe. All pipes shall be carefully lowered into the trench, piece by piece, by means of a derrick, ropes, or other suitable tools or equipment, in such manner as to prevent damage to water main materials and protective coatings and linings. Under no circumstances shall water main materials be dropped or dumped into the trench.

c. In making joints, all portions of the joining materials and the socket and spigot ends of the joining pipe shall be wiped clean of all foreign materials. The actual assembly of the jointing shall be in accordance with the manufacturer's installation instructions and/or as directed by the Village Engineer. During construction, until jointing operations are complete, the open ends of all pipes shall be at all times protected and sealed with temporary watertight plugs.

d. Polyvinyl encasement shall be installed around ductile iron pipe with a minimum overlap of 12" at each joint and sealed with approved polyvinyl compatible adhesive tape.

4. **Pipe Cutting.**

a. The cutting of pipe for inserting valves, fittings or closure pieces shall be done in a neat and workmanlike manner without damage to cement lining and so as to leave a smooth end at right angles to the axis of the pipe.

b. When machine cutting is not available for cutting pipe twenty (20) inches in diameter or larger, the electric-arc cutting method shall be permitted, using a carbon or steel rod. Only qualified and experienced workmen shall be allowed to perform this work.

c. The flame cutting of pipe by means of an oxyacetylene torch shall not be allowed.

5. **Trench.**

- a. The trench bottom shall be flat and shall provide full bearing of the length of the pipe.
- b. Thrust blocks shall be used to prevent movement at all bends, tees, caps, valves and hydrants.
- c. Backfilling of the trench shall be accomplished by careful replacement of the excavated material after the pipe and the bedding material have been installed. Any pipe installed within two (2) feet of a pavement edge or curb and gutter shall be backfilled to the top of the trench with granular material in compliance with Illinois Department of Transportation Standard Specifications for Road and Bridge Construction.

6. **Fire Hydrant.**

- a. Fire hydrants shall be placed as specified on engineering plans. All hydrants shall stand plumb, their pumper nozzle pointing normal to the road. They shall conform to the established grade, with the breakaway flange being between 1 to 5 inches above finished grade. All nozzles shall be at sufficient height above finished grade to provide free rotation of a standard hydrant wrench free and clear of any obstructions.
- b. A drainage pit two (2) feet in diameter and two (2) feet deep shall be excavated below each hydrant and filled completely with a minimum of one cubic yard of 1" river rock under and around the bowl of the hydrant and to a level six (6) inches above the waste opening. No hydrant drainage pit shall be connected to a sewer.
- c. Hydrant leads are not allowed for extending the setback unless approved by the Director of Development Services and the Director of Public Works.
- d. Barrel extensions shall be provided as needed in order to provide sufficient height above finished grade to provide free rotation of a standard hydrant wrench free and clear of any obstructions and to provide a minimum 18" height above finished grade to the break-a-way flange. An extension shall not exceed a maximum of 3 feet.
- e. Front of hydrant shall be no closer than three (3) feet to back of curb.

7. **Water Main Installation.** During water main installation, to make a closure between two pipe ends, or between pipe end fittings, or between pipe end and valve, short lengths shall be used with proper connections or couplings. Repair sleeves shall not be used to make closures during new construction.

8. **Dewatering.** Where water is encountered in the trench, it shall be removed during pipe-laying and jointing operations. Trench water shall not be allowed to enter the pipe at any time.

9. **Connections to Existing Mains.** All connections to the Village water distribution system shall be made under full water service pressure unless otherwise approved by the Director of Development Services and the Director of Public Works at locations approved by the Director of Public Works.

I. **Pressure Test.**

1. As part of the construction, the water mains shall be pressure tested in accordance with this Section.

2. All newly laid pipes shall be subjected to a hydrostatic pressure of one hundred fifty (150) pounds per square inch. Duration of each pressure test shall be for a period of not less than two (2) hours. Each valved section of pipe shall be filled with water and the specified test pressure shall be applied by means of a pump connected to the pipe. Before applying the specified test pressure, all air shall be expelled from the pipe. All leaks shall be repaired until tight. Any cracked or defective pipes, fittings, valves, or hydrants discovered in consequence of this pressure test shall be removed and replaced and the test repeated until satisfactory results are obtained.

3. All testing shall be done before the installation of service lines. Suitable means shall be provided for determining the quantity of water lost by leakage under the specified test pressure. Allowable leakage shall not be greater than that computed as follows:

$$L = \frac{(N) (D) (P)}{7400}$$

L = Allowable leakage in gallons per hour

N = number of joints in length of pipeline tested

D = Nominal diameter of the pipe in inches

P = Average test pressure during leakage test in pounds per square inch gauge.

Leakage is defined as the quantity of water required to be supplied to the newly laid pipe necessary to maintain the specified leakage test pressure.

J. **Preliminary Flushing.** Prior to chlorination, the main shall be flushed as thoroughly as possible with the water pressure and outlets available. Flushing shall be done after the pressure test is made. Because such flushing removes only the lighter solids, it cannot be relied upon to remove heavy material allowed to get into the main during pipe placement. If no hydrant is installed at the end of the main, a tap should be provided large enough to affect a velocity in the main of at least two and one-half (2 1/2) feet per second.

K. **Disinfection.**

1. The preferred point of application of the chlorinating agent shall be at the beginning of the pipeline extension or any valved section of it and through a corporation stop in the top of the newly laid pipe. The injector for delivering the chlorine-gas into the pipe should be supplied from a tap on the pressure side of the gate valve controlling the flow into the pipeline extension.
2. Water from the existing distribution system or other source of supply shall be controlled so as to flow slowly into the newly laid pipeline during the application of chlorine-gas. The rate of chlorine mixture flow shall be in such proportion to the rate of water entering the pipe that the chlorine dose applied to the water entering the newly laid pipe shall be at least fifty (50) ppm, or enough to meet the requirements during the retention period. This may require as much as one hundred (100) ppm of chlorine in the water left in the line after chlorination.
3. Valves shall be manipulated so that the strong chlorine solution in the line being treated shall not flow back into the line supplying the water.
4. Treated water shall be retained in the pipe long enough to destroy all spore-forming bacteria. This retention period shall be at least twenty-four (24) hours. After the chlorine-treated water has been retained for the required time, the chlorine residual at the pipe extremities and at other representative points should be at least 25 ppm.
5. In the process of chlorinating newly laid pipe, all valves or other appurtenances shall be operated while the pipeline is filled with the chlorinating agent.
6. All water mains shall be disinfected and tested according to the requirements of the "Standards for Disinfecting Water Mains," AWWA C601, and as required by this Section. All disinfection, as required by this Section, shall be performed by an independent firm exhibiting experience in the methods and techniques of this operation, and shall be approved by the Village Engineer.

L. **Final Flushing and Testing.**

1. Following chlorination, all treated water shall be thoroughly flushed from the newly laid pipeline at its extremities until the replacement water, throughout its length shall, upon test, be approved as safe water by the Village Engineer. This quality of water delivered by the new main should continue for a period of at least two (2) full days as demonstrated by laboratory examination of samples taken from a tap located and installed in such a way as to prevent outside contamination. Samples should never be taken from an unsterilized hose or from a fire hydrant because such samples seldom meet current bacteriological standards.
2. After disinfecting and flushing, a minimum of two (2) water samples shall be collected by the contractor on two successive days, with notice given, so that the collection may be witnessed by the Village Engineer. Bacteriological sampling and analysis of the samples shall be performed by a laboratory approved by the Illinois Department of Public Health and the Village

Engineer. Should the initial treatment result in an unsatisfactory bacterial test, the procedure shall be repeated until satisfactory results are obtained. The contractor or developer shall pay for the sampling and analysis. Results of the analysis shall be transmitted by the laboratory directly to the Village Engineer. Test results shall indicate the date the sample was collected, the date the analysis was made, the exact locations at which samples were taken, the firm submitting the sample, and the project at which the samples were collected. Sufficient samples shall be collected in order to insure that the system is bacteriologically safe.

3. Village of Orland Park to operate valve.

M. **Exhibits.** Exhibits below are typical specifications of water main standards that shall be applied to any improvements required by these regulations.

Insert Exhibit B

N. **Acceptance of Water Supply.**

1. Once the water supply system has been completed according to the specifications set forth in this Section, the Director of Public Works shall, upon the request of the developer, inspect the system and prepare a list of items for repair (punch list). The list shall be given or sent to the developer and when repairs have been made, the Director of Public Works shall accept the system for operational use only. During the time after the acceptance by the Village for maintenance, the developer shall be responsible for any delinquencies incurred within the system, including but not limited to water main leaks, adjustment to manhole frames and bent curb boxes. Upon reaching approximately eighty (80) percent development of building construction, the Director of Public Works will re-inspect the water supply system for any delinquencies which may have occurred and prepare a list of items for repair. The list shall be given or sent to the developer and when the repairs have been made to the satisfaction of the Director of Public Works, the Director shall accept the system for the Village. (Ord. 2570 - 5/2/94)

2. All construction shall meet the requirements and acceptance by the Illinois Environmental Protection Agency prior to the acceptance by the Director of Public Works. (Ord. 2570 5/2/94)

Entire Section Revised 05/18

SECTION 5-112.E.3

3. **Security Methods.** One of the following security methods shall be utilized to guarantee the completion of public improvements:

a. **Letter of Credit**

1. **Form:** The applicant may file an irrevocable letter of credit issued by any local financial institution approved by the Village Manager and the Village Attorney, in accordance with guidelines established by the Board of Trustees. The letter of credit shall be in the same written form as the sample letter of credit that is provided by the Finance Department.

2. **Terms:** The letter of credit shall be in an amount sufficient to pay for the cost of construction of the public improvements, landscaping on private and public property for single family and multi-family residential developments and all non-residential developments, and all engineering costs if deemed necessary by the Village Engineer. The Village will collect an additional 7% of the total cost of construction to recover for management and administrative time and expenses incurred by the Village staff in processing and administering the public improvements and landscaping. Any conditions that the applicant or issuing financial institution seeks to attach to collection or use of the funds, must be included in the terms of the letter of credit. The letter of credit shall provide that the issuing financial institution shall pay to the Village, or as the Village directs, such amounts as may be required to complete the improvements according to the approved specifications. The letter of credit should provide that its amount will be reduced from time to time as payments for improvements approved by the Village Engineer are made, but at no time shall the available balance be less than fifteen percent (15%) of the total estimated cost of the improvements yet to be accepted by the Village. (Ord. 4125 - 4/17/06)

3. **Time Limit:** The letter of credit shall be irrevocable for at least twelve (12) months and shall have an expiration date of not less than sixty (60) days after the date of completion specified for the improvements. The letter of credit shall automatically be extended for additional periods of one (1) year unless the Village notifies the applicant at least thirty (30) days in advance of the expiration date that the Village will not accept an extension of the letter of credit. If any balance remains at the expiration of any time limit placed on the letter of credit, the applicant shall be notified that the current letter of credit must be renewed or that said balance must either be deposited with the Village in a cash escrow, or a new letter of credit must be provided.

SECTION 6-302.D.1

1. Except as provided below, any dumpster, **grease receptacles** or trash handling areas shall be screened from view from public streets and any abutting properties by three opaque walls and an opaque gate. **All dumpsters and grease receptacles shall have lids that remain closed and remain inside garbage enclosure area at all times unless in use.**

SECTION 6-306.B.6

*-Requirements based on square feet mean square feet of gross **building** floor area, except as otherwise indicated.

FIGURE 6-306(C) Required Parking Stall and Aisle Dimensions Insert Exhibit A.

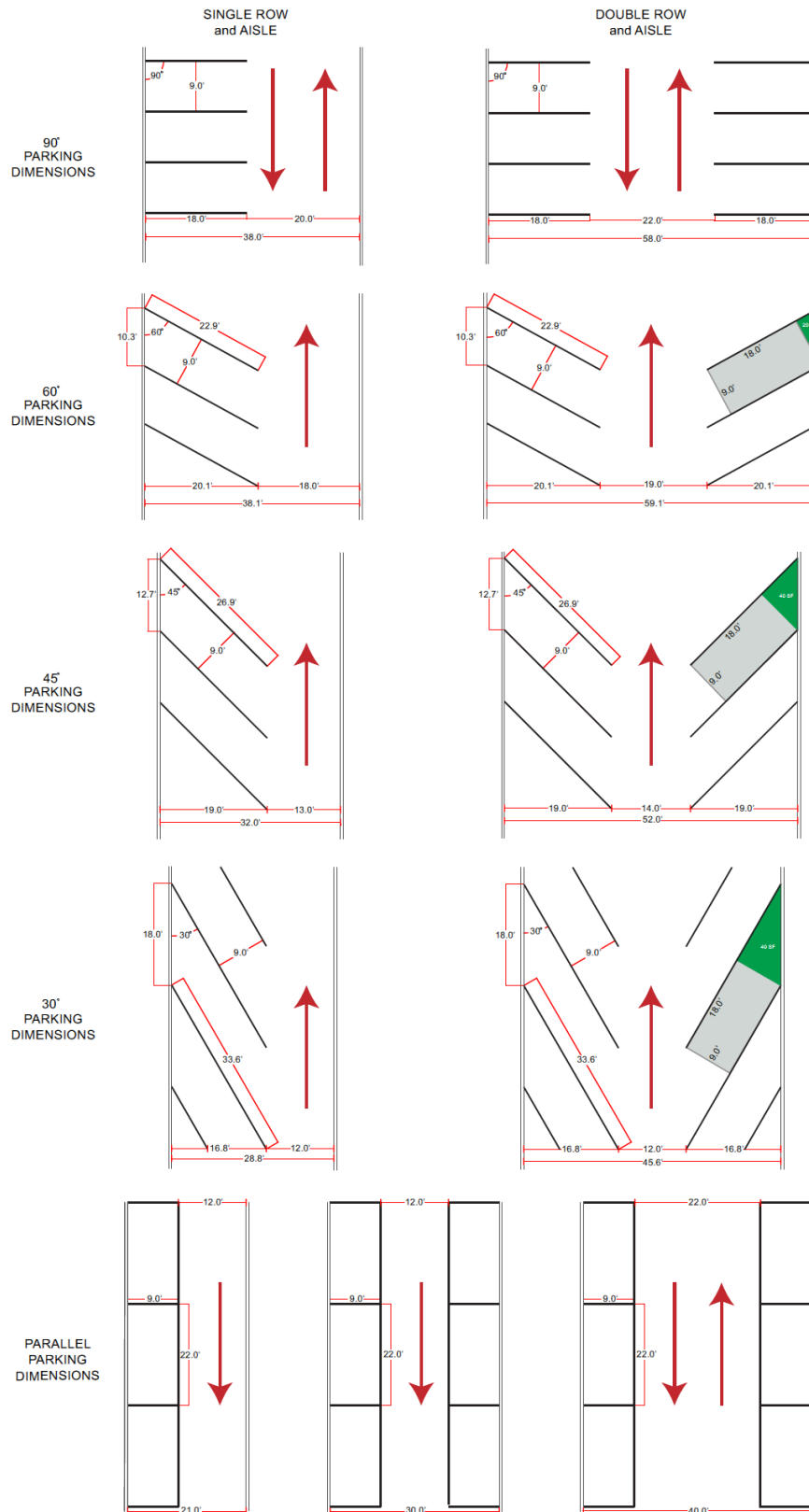
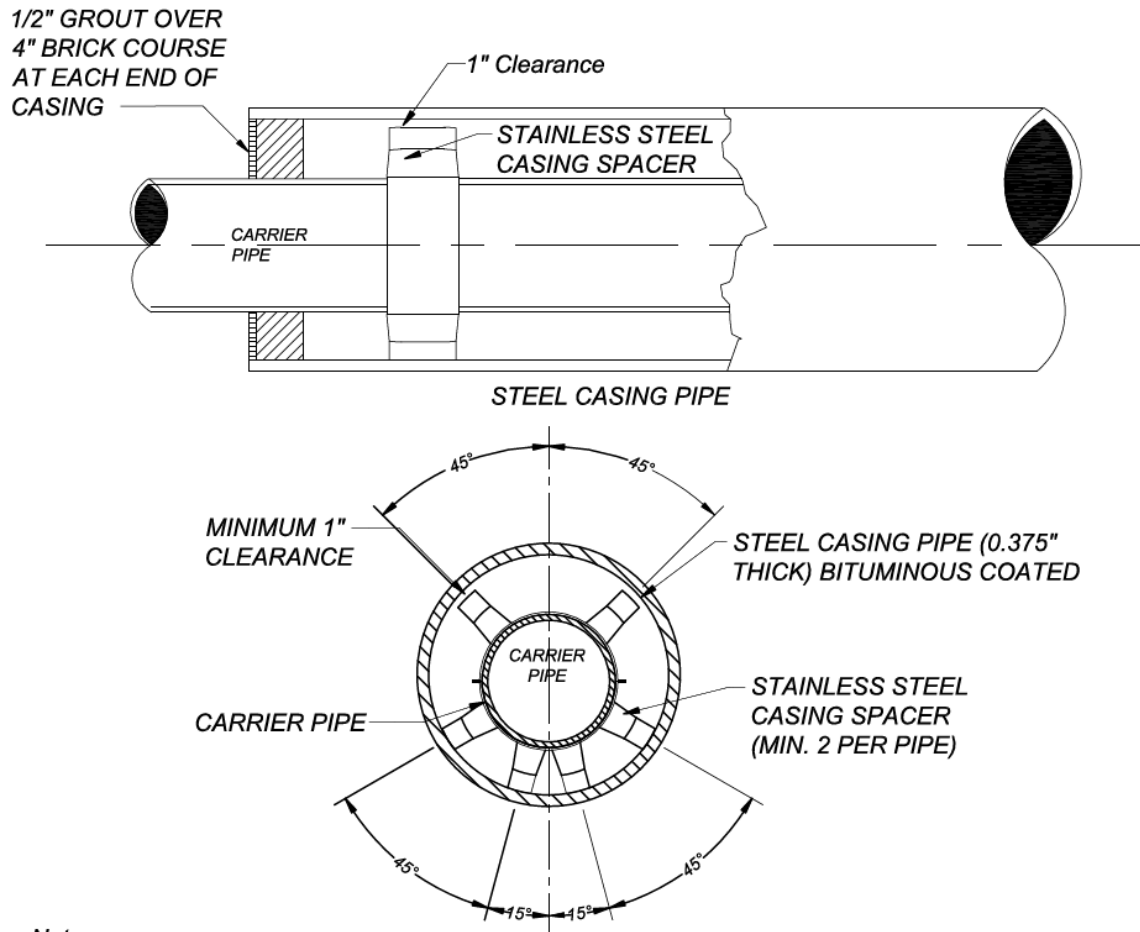


EXHIBIT A_FIGURE 6-306(C)

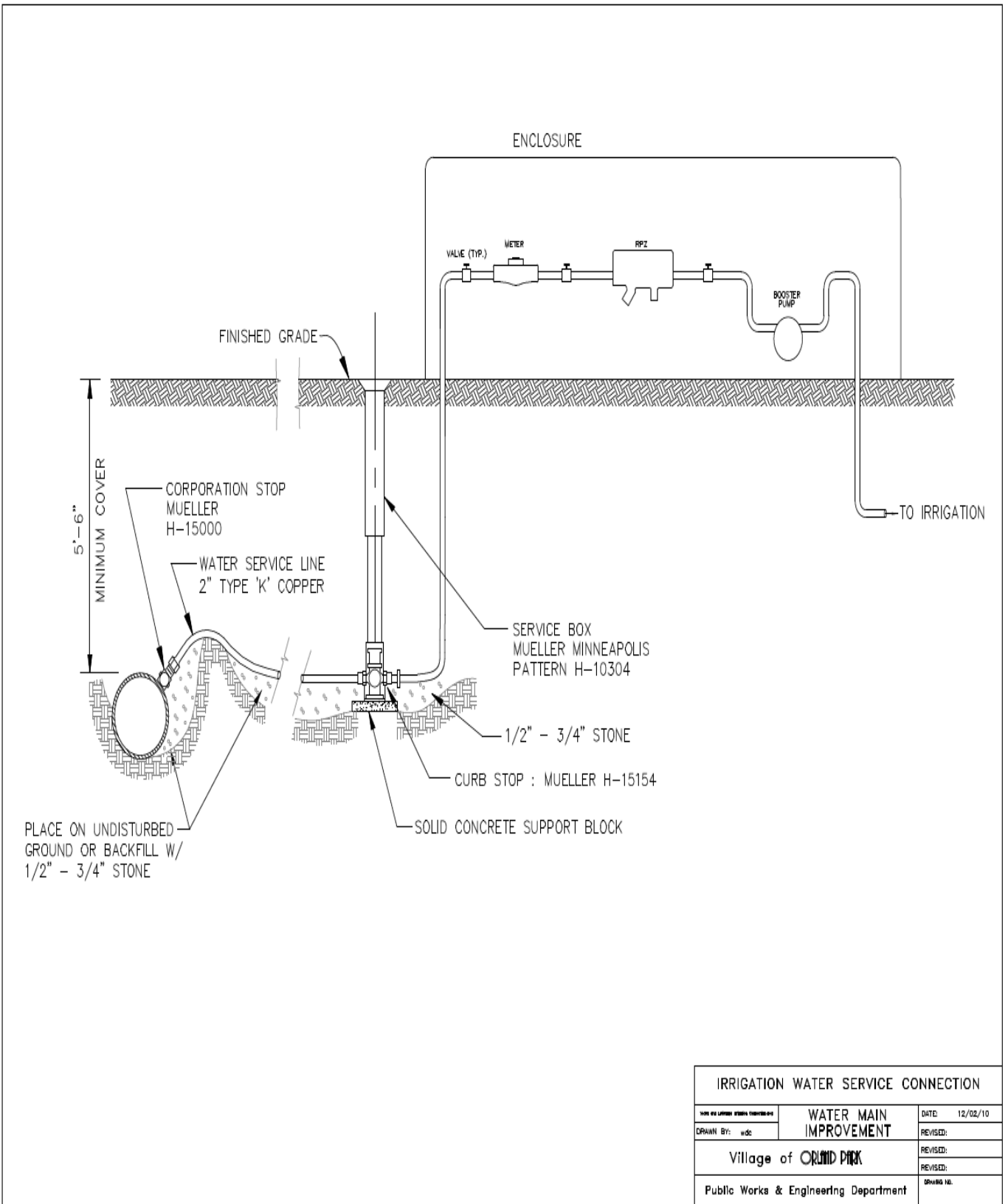
EXHIBIT B FIGURE 6-410.M

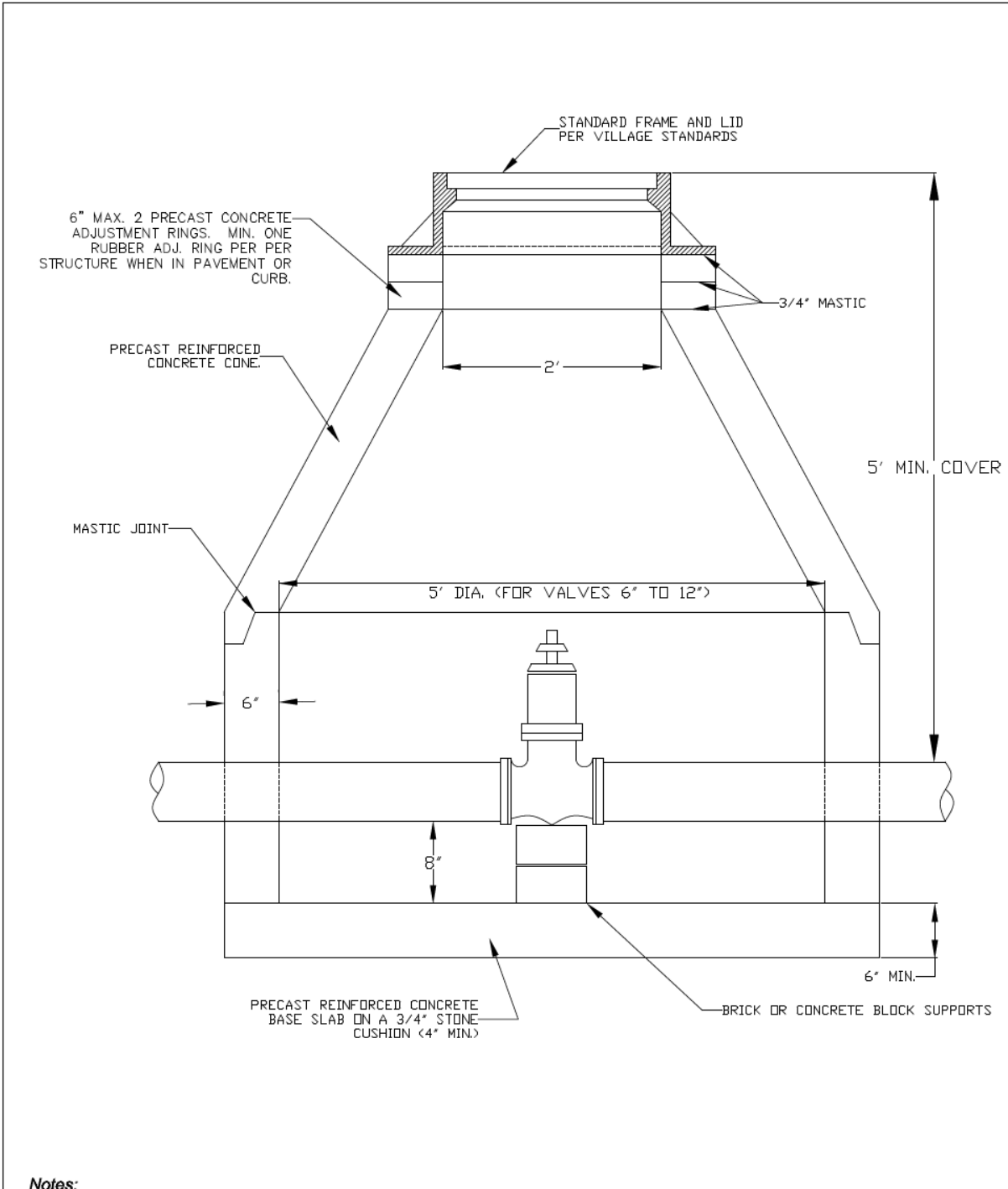


Notes:

1. The watermain shall be 'CENTER SPACED' and restrained on top and bottom utilizing two casing spacers equally spaced per length of pipe.
2. Casing spacers are to be CASCADE WATERWORKS MFG. brand or an equal approved by the Village Engineer.
3. Casing is to be sealed at both ends with a masonry cap and made water-tight.
4. Watermain joints within the casing shall be restrained utilizing U.S. Pipe Field Lok Gasket or an equal approved by the Village Engineer.

PIPE CASING DETAIL		
PIPE CASING DETAIL.DWG		DATE: 7/30/2009
DRAWN BY: WDC		REVISED: 1/3/2017 KTL
Village of ORLAND PARK		REVISED:
Public Works Department		REVISED:
		DRAWING NO. PC-01

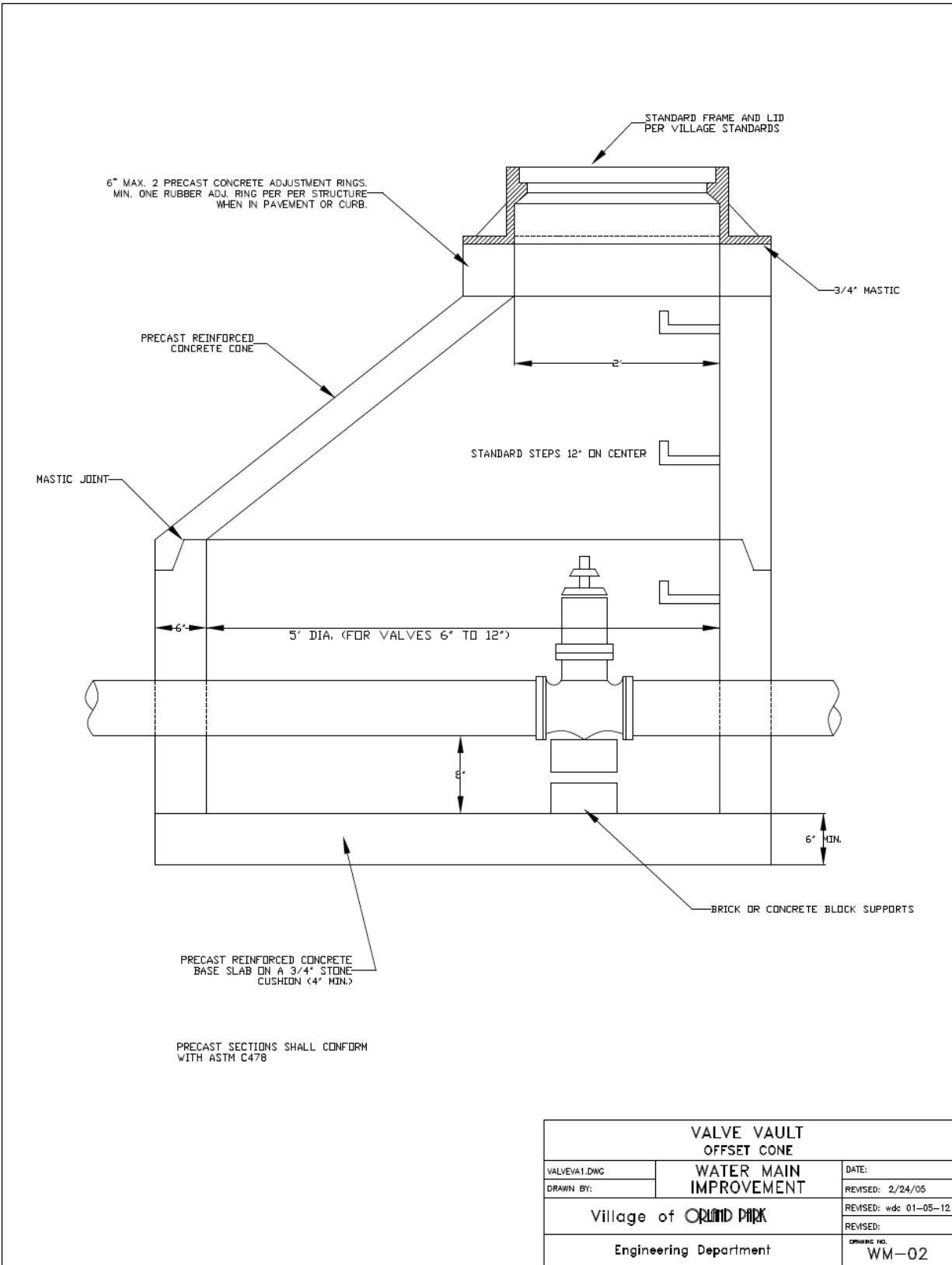


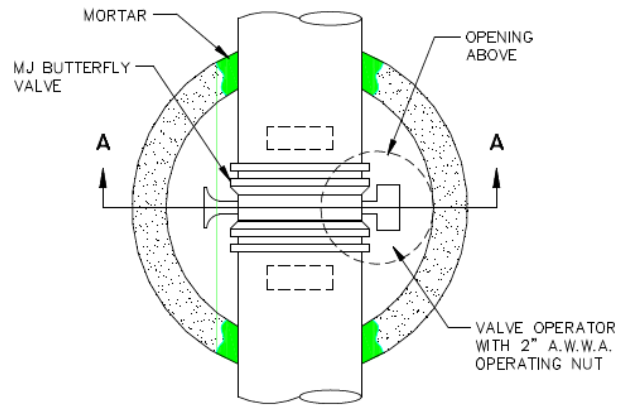


Notes:

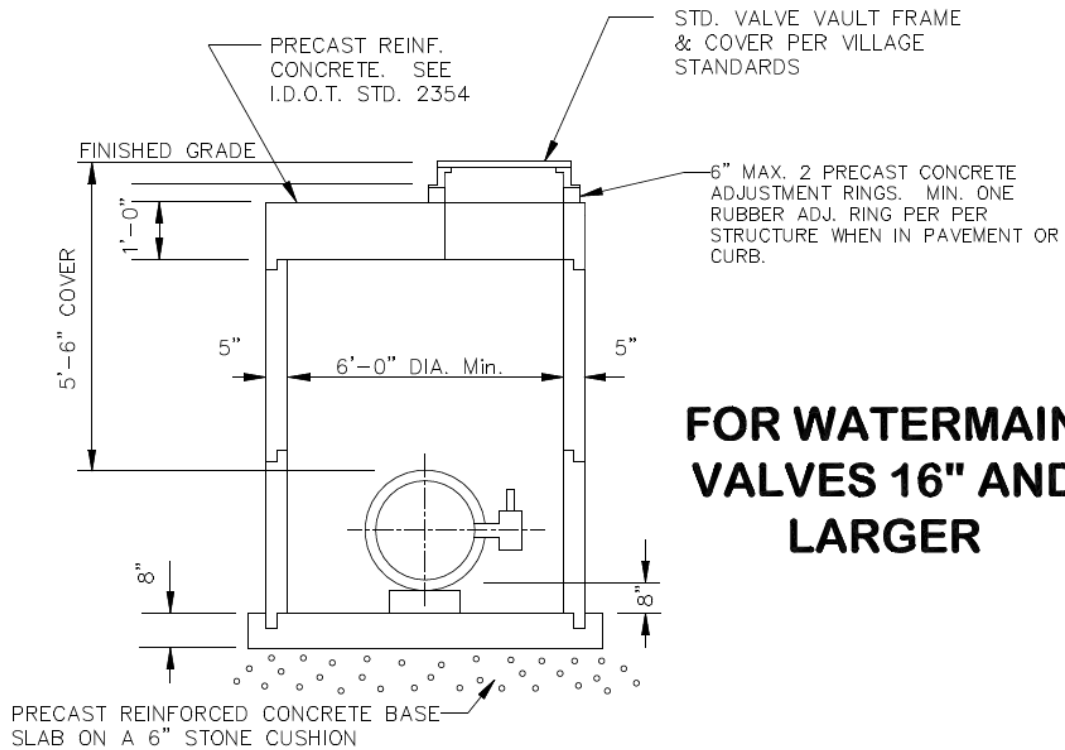
1. Adjustments to existing structures should not exceed a total of 12" of adjustment rings. Any adjustment greater than 12" must use a barrel extension.
2. Precast concrete sections shall conform to ASTM C478.

VALVE VAULT		
VALVEVAULDWG	WATER MAIN IMPROVEMENT	DATE:
DRAWN BY:		REVISED: 11/19/07
Village of ORLAND PARK		REVISED: wdc 01-05-12
Engineering Department		REVISION NO. WM-01





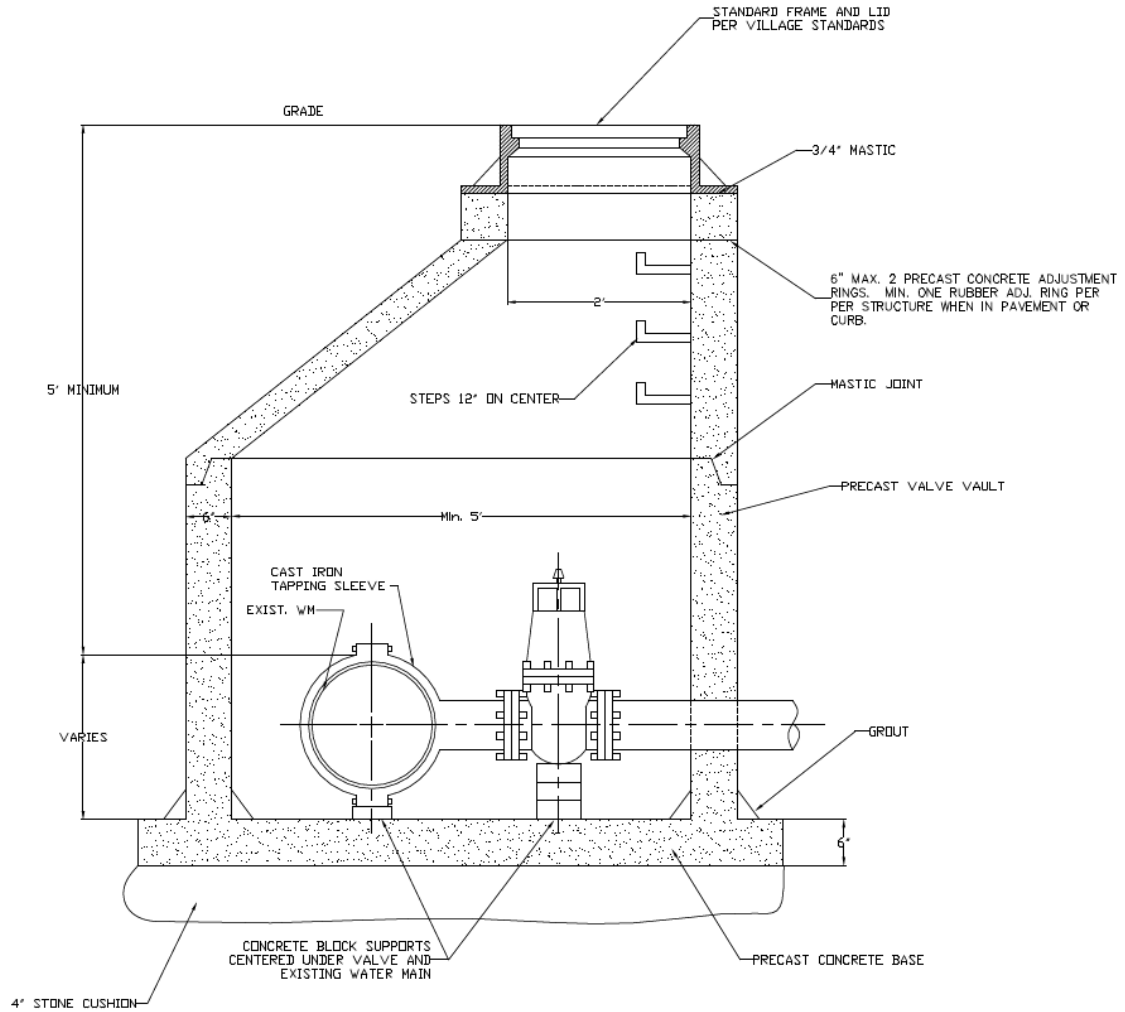
SECTIONAL PLAN



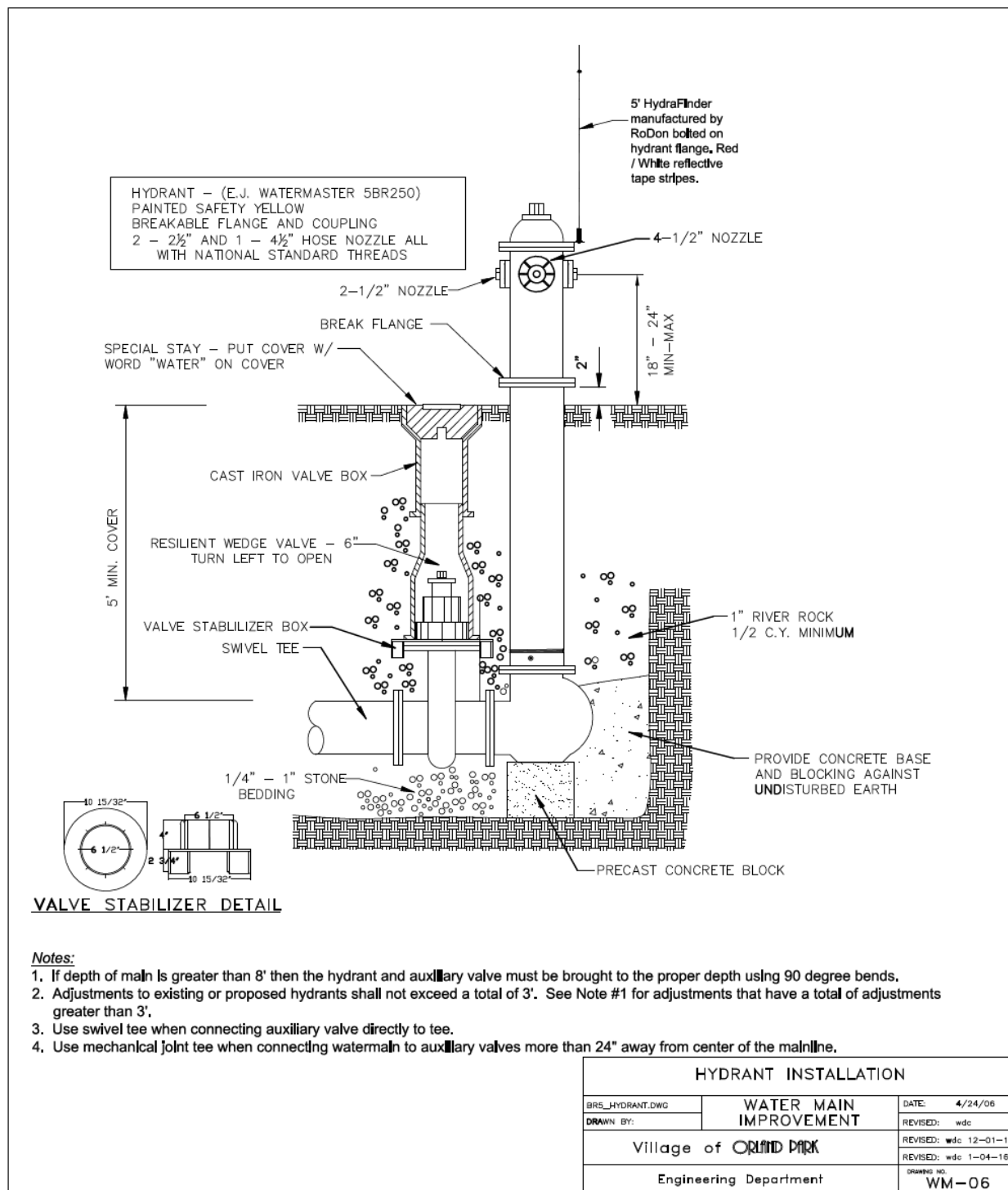
**FOR WATERMAIN
VALVES 16\"/>**

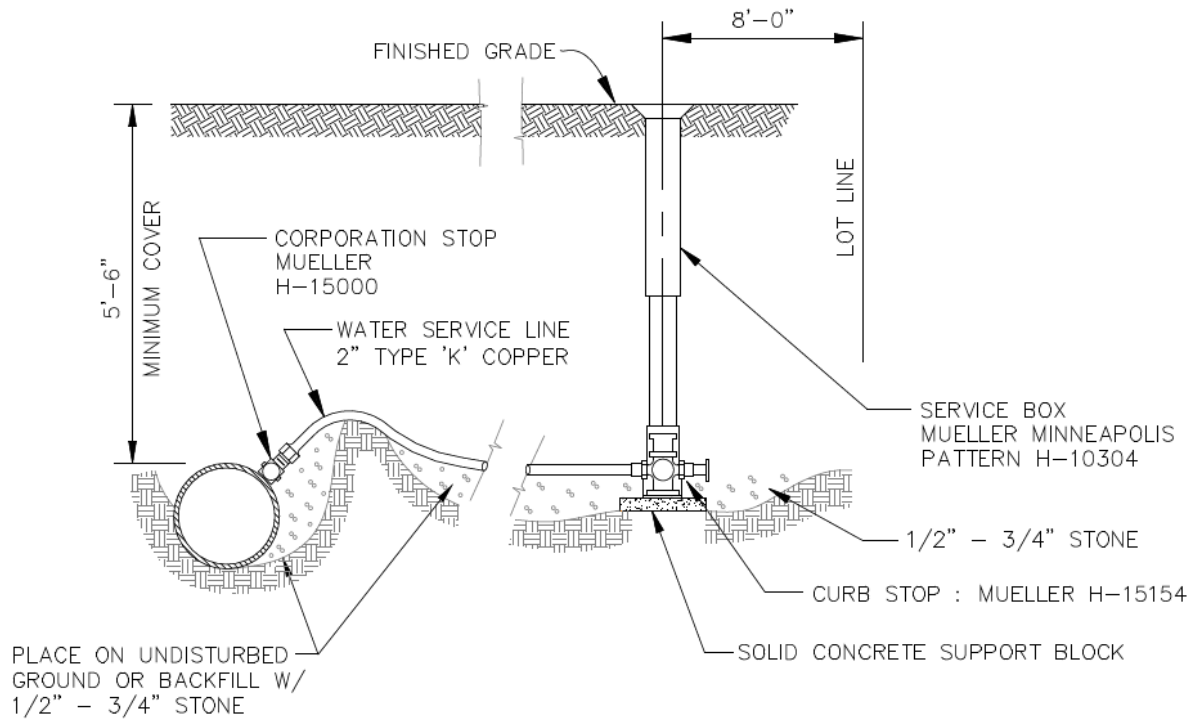
SECTION A-A

BUTTERFLY VALVE VAULT		
BUTTERFLY.DWG	WATER MAIN IMPROVEMENT	DATE:
DRAWN BY:		REVISED: 2/24/05
Village of ORM PRK		REVISED: 5/4/11--wdc
Public Works & Engineering Department		REVISED:
		DRAWING NO. WM-04



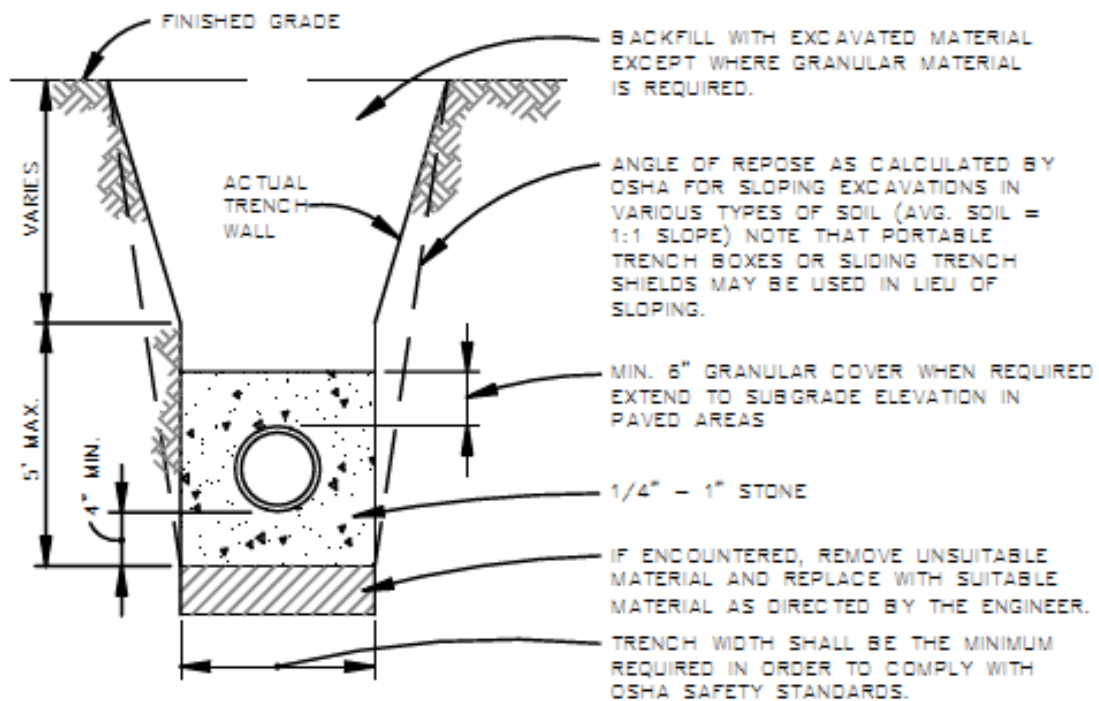
PRESSURE CONNECTION		
PRESSURE.DWG	WATER MAIN IMPROVEMENT	DATE:
DRAWN BY:		REVISED: 2/24/05
Village of ORLAND PARK		REVISED: wdc 01-05-12
Engineering Department		REVISED:
		DRAWING NO. WM-05





NOTE :
TERMINATE WATER SERVICE AT CURB STOP
UNLESS OTHERWISE SHOWN ON THE PLAN.

WATER SERVICE CONNECTION		
2_In_Water_Service.dwg	WATER MAIN IMPROVEMENT	DATE: 4/28/05
DRAWN BY:		REVISED: wdc
Village of Orland Park		REVISED: wdc 12/2/10
Engineering Department		REVISED:
		DRAWING NO. WM-08



DIP AND PVC WHEN USED AS WATER MAIN SHALL NOT REQUIRE GRANULAR BEDDING OR COVER. PROVIDE UNIFORM AND CONTINUOUS SUPPORT OF PIPE BARREL BETWEEN BELL HOLES

TRENCH SECTION (WATER MAIN)		
DESIGNED BY:	WATER MAIN IMPROVEMENT	DATE:
DRAWN BY:		REVISED:
Village of ORLAND PARK		REVISED:
Engineering Department		REVISED:
		ENGINEER: WM-11