

**AN ORDINANCE AMENDING ARTICLE I OF THE CITY OF  
HIGHLAND LAND DEVELOPMENT CODE**

WHEREAS, the City of Highland, Illinois (the "City") is a municipality in accordance with the Constitution of the State of Illinois of 1970; and

WHEREAS, the City has authority to adopt ordinances and to promulgate rules and regulations that protect the public health, safety and welfare of its citizens; and

WHEREAS, the City desires to establish a Rural Residential Development Standard within its Land Development Code;

NOW, THEREFORE, BE IT ORDAINED by the Mayor and the City Council of Highland Illinois as follows:

Section 1. Recitals. The facts and statements contained in the preamble to this Ordinance are found to be true and correct and are hereby adopted as part of this Ordinance.

Section 2. The City hereby enacts the following Ordinance which shall amend Article I, Sections 66-1-5 through 66-1-8, of the City's Land Development Code to read as follows:

**Sec. 66-1-5. Rural Residential Development Standard.**

**Jurisdiction.**

This section shall be applicable to all unincorporated territory where at least 90% of the developed tract of land is no closer than one (1) mile from the corporate limits, provided such territory is not located within the subdivision jurisdiction of another municipality. Jurisdiction applies to all unincorporated territory within one and one half (1 ½) miles of the corporate limits. Jurisdiction boundary lines shall be determined in accordance with Illinois Compiled Statutes.

Within the unincorporated territory under the jurisdiction of the city as described above, this Code shall apply to:

1. All platted subdivisions, and
2. the location, width, course and surfacing of public streets, highways, and alleys, ways for public safety and service facilities, streetlights, parks, playgrounds, school grounds, size of lots, storm water drainage, water supply and distribution, sanitary sewers, and sewage collection and treatment, for all other real estate land development, as development is defined in this Code.

## **Requirements.**

Developments shall be in accordance with the following requirements:

1. Maximum of 20 platted lots.
2. Lot acreage minimum of two (2) acres per lot.
3. Total development acreage not to exceed fifty-nine (59) acres, including all improvements.
4. Shall be zoned single-family residential in accordance with all applicable requirements of Madison County, Illinois.
5. Not located within the utility service boundaries of the City of Highland.
6. Streets shall conform to detail D-ST9.
7. Sidewalks and curb and gutter are not required.
8. Variances to this section of the code are prohibited.
9. The development shall be consistent with adjacent developed properties with regard to improvements.
10. The development shall be in accordance with the current comprehensive plan.

## **Annexation.**

At the time of annexation, the incorporated property owners shall enter into a written agreement with the City of Highland to fund the necessary improvements to upgrade the development to comply with the current subdivision requirements.

## **Sec. 66-1-6. Interpretation.**

- (1) *Generally.* Every position of this Code shall be construed liberally in favor of the city, and every regulation set forth herein shall be considered the minimum requirement for the promotion of the public health, safety, and welfare.
- (2) *More restrictive requirements apply.* Whenever the requirements of this Code differ from those of any statute, lawfully adopted ordinance or regulation, easement, covenant, or deed restriction, the more stringent requirement shall prevail, except that if the requirements and provisions of a planned unit development that has been approved by the City Council as provided in Chapter 90 of this Code conflict with the requirements and provisions of this Chapter, the provisions and requirements of the planned unit development as approved by the City Council shall control.
- (3) *County code.* Whenever this Code imposes higher standards, it shall supersede the county regulations in the unincorporated territory located within the city's subdivision jurisdiction.

**Sec. 66-1-7. Disclaimer of liability.**

Except as may be provided otherwise by statute or ordinance, no officer, board member, agent, or employee or the city shall render himself personally liable for any damage that may accrue to persons or property as a result of any act required or permitted in the discharge of his duties under this Code.

State Law reference – Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq.

**Sec. 66-1-8. Severability.**

If any provision of this Chapter is declared unconstitutional or invalid by a court of competent jurisdiction, that judgment shall not affect the validity of any provision hereof not specifically included in said judgment.

Section 3. Effective Date. This Ordinance shall take effect immediately upon its passage, approval and publication.

Passed by the City Council of the City of Highland, Illinois, and deposited and filed in the Office of the City Clerk of the City of Highland, Illinois, on the 3rd day of October, 2005, the votes being taken by ayes and nays, entered upon the legislative records as follows:

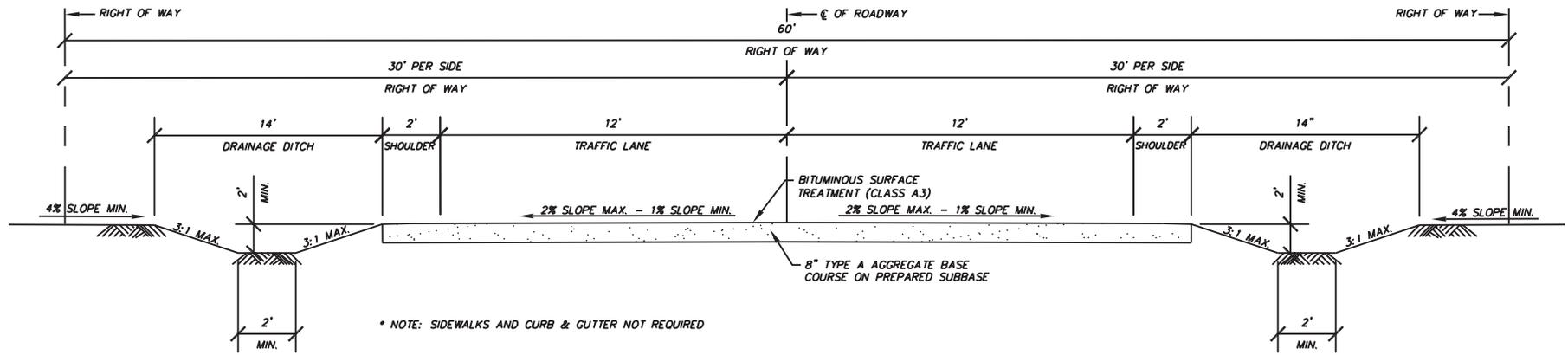
AYES: Gould, Sinnock, Riffel, Zobrist

NAYS: None



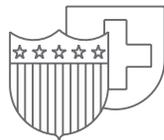
ATTEST:

Barbara Bellm, City Clerk of the City of Highland,  
Madison County, Illinois



TYPICAL RURAL ROAD SECTION

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

SHEET - TITLE

TYPICAL RURAL ROAD

TYPICAL RURAL ROAD  
60' R.O.W.

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-ST9
DATE 9/14/05	

ORDINANCE NO. 2148

AMENDING ARTICLE 5, SECTION 5-8.4 OF THE  
CITY OF HIGHLAND LAND DEVELOPMENT CODE  
RELATING TO  
STORM WATER DETENTION METHODS

NOW, BE IT ORDAINED by the City Council of the City of Highland, Illinois, that Article 5, Section 5-8.4 of the City of Highland Land Development Code be amended by adding Subsection (c) to read as follows:

- C) Underground detention storage utilizing storm sewers, inlets, manholes, and appurtenances is prohibited beyond the storm event.

BE IT FURTHER ORDAINED that this Ordinance shall be known as Ordinance Number 2148 and shall be in full force and effect upon it's passage and publication in pamphlet form.

Passed by the City Council of the City of Highland, Illinois and deposited and filed in the Office of the City Clerk on the 23rd day of February, 2004, the vote being taken by ayes and noes and entered on the legislative record as follows:

AYES: McGinley, Miller, Gould, Sinnock

NOES: None

ABSENT: None

ATTEST:



  
\_\_\_\_\_  
Barbara Bellm, City Clerk of the City of Highland,  
Madison County, Illinois

HIGHLAND LAND DEVELOPMENT CODE

ORDINANCE NO. 2139

**AN ORDINANCE REPEALING AND SUPERSEDING CHAPTER 66 OF THE  
HIGHLAND MUNICIPAL CODE IN ITS ENTIRETY REGARDING  
DEVELOPMENT**

**NOW, BE IT ORDAINED** by the City Council of the City of Highland, Illinois, that this Ordinance hereby repeals Chapter 66 of the Highland Municipal Code in its entirety and replaces it to read as follows:

*(Remainder of this page intentionally left blank)*

HIGHLAND LAND DEVELOPMENT CODE

**CHAPTER 66**

**LAND DEVELOPMENT CODE**

**Table of Contents**

**Article I – General Provisions**

Sec. 66-1-1	Short Title
Sec. 66-1-2	Purpose
Sec. 66-1-3	Jurisdiction
Sec. 66-1-4	Instances when plats not required
Sec. 66-1-5	Interpretation
Sec. 66-1-6	Disclaimer of Liability
Sec. 66-1-7	Severability

**Article II – Definitions**

Sec. 66-2-1	Interpretation of terms
Sec. 66-2-2	Definitions

**Article III – Administration**

Sec. 66-3-1	Building and Zoning Official’s Duties
Sec. 66-3-2	Variances
Sec. 66-3-3	Review of variance by Plan Commission
Sec. 66-3-4	Action by City Council on variance
Sec. 66-3-5	Amendments
Sec. 66-3-6	Fee Schedule
Sec. 66-3-7	Violations
Sec. 66-3-8	Corrective Actions
Sec. 66-3-9	Penalty

**Article IV – Plats**

Sec. 66-4-1	Vacation of Plats
Sec. 66-4-2	General Procedure
Sec. 66-4-3	Filing Procedure
Sec. 66-4-4	Information Required – Preliminary Plat
Sec. 66-4-5	Plan Commission Action
Sec. 66-4-6	Review by City Council; Time Constraints
Sec. 66-4-7	Right and Privileges of Subdivider
Sec. 66-4-8	Improvement Plans
Sec. 66-4-9	Information Required – Improvement Plans
Sec. 66-4-10	Inspections Required
Sec. 66-4-11	Filing “As-Built” Record Drawings
Sec. 66-4-12	Completion Prior to Acceptance
Sec. 66-4-13	Forms of Assurance
Sec. 66-4-14	Amount of Bond or Deposit

## HIGHLAND LAND DEVELOPMENT CODE

Sec. 66-4-15	Eligible Sureties
Sec. 66-4-16	Term of Assurance, Extension
Sec. 66-4-17	Release of Bond / Escrow Deposit
Sec. 66-4-18	Failure to Complete Improvements
Sec. 66-4-19	Compliance
Sec. 66-4-20	Final Plats
Sec. 66-4-21	Information Required
Sec. 66-4-22	Certificates Required
Sec. 66-4-23	Administrative Review, Advisory Report
Sec. 66-4-24	Action by City Council
Sec. 66-4-25	Changes in Approved Final Plats
Sec. 66-4-26	Subdivider's Responsibility
Sec. 66-4-27	Maintenance Bond

### **Article V – Design And Improvement Standards**

#### **Division 1 Generally**

Sec. 66-5-1	Applicability of Article
-------------	--------------------------

#### **Division 2 Land Development**

Sec. 66-5-2	Suitability for Development
-------------	-----------------------------

#### **Division 3 Standards**

Sec. 66-5-3	General Design Standards
-------------	--------------------------

#### **Division 4 Lots**

Sec. 66-5-4	Lots and Blocks
-------------	-----------------

#### **Division 5 Monuments**

Sec. 66-5-5	Monuments
-------------	-----------

#### **Division 6 Street Design**

Sec. 66-5-6	Street Design Standards
5-6.1	General
5-6.2	Abbreviations
5-6.3	Standards for Streets
5-6.4	Cul-de-sacs
5-6.5	Intersections
5-6.6	Additional Right-of-Way
5-6.7	Peripheral Route Access

#### **Division 7 Street Construction**

Sec. 66-5-7	Street Construction Standards
5-7.1	General
5-7.2	Road Cuts and Patches
5-7.3	Preservation of Trees
5-7.4	Erosion Control
5-7.5	Flexible Pavement Construction
5-7.6	Rigid Pavement Construction
5-7.7	Curb and Gutter Construction
5-7.8	Testing
5-7.9	Signage
5-7.10	Pavement Markings
5-7.11	Survey Markers
5-7.12	Sidewalks
5-7.13	Maintenance Responsibility

#### **Division 8 Storm Water**

## HIGHLAND LAND DEVELOPMENT CODE

- Sec. 66-5-8 Storm Water Management Requirements
  - 5-8.1 General
  - 5-8.2 Detention Basins
  - 5-8.3 Retention Ponds
  - 5-8.4 Other Detention Methods
  - 5-8.5 Safety Features
  - 5-8.6 Detention Facility Construction
  - 5-8.7 Storm Water Management Plan
  - 5-8.8 General Storm Water Design Considerations
  - 5-8.9 Specific Storm Water Design Requirements
  - 5-8.10 Sump Pump Drainage

### **Division 9 Water**

- Sec. 66-5-9 Standard for Water Services
  - 5-9.1 General
  - 5-9.2 Construction Plans
  - 5-9.3 Main Requirements
  - 5-9.4 Fire Hydrants
  - 5-9.5 Water Service Lines
  - 5-9.6 Testing
  - 5-9.7 IEPA Approval

### **Division 10 Sanitary Sewer**

- Sec. 66-5-10 Specific Standards for Public Sanitary Sewers
  - 5-10.1 General
  - 5-10.2 Requirements for Extension of Existing Mains
  - 5-10.3 Construction Plans
  - 5-10.4 Sewer Pipes
  - 5-10.5 Service Connections
  - 5-10.6 Service Laterals-Single Customer
  - 5-10.7 Service Laterals-Multiple Customers
  - 5-10.8 Manholes
  - 5-10.9 Manhole Frames and Lids
  - 5-10.10 Sanitary Sewer Lift Stations
  - 5-10.11 Inspection and Testing
  - 5-10.12 Maintenance
  - 5-10.13 Warranty
  - 5-10.14 Private Disposal Systems

### **Division 11 Electrical**

- Sec. 66-5-11 Specific Standards for Electrical Service
  - 5-11.1 Requirements for Installation of Electrical Services for Residential Subdivisions
  - 5-11.2 Requirements for Installation of Electrical Facilities Commercial Developments
  - 5-11.3 General
  - 5-11.4 Streetlights

### **Division 12 General, Easements, and Other Utilities**

- Sec. 66-5-12 Specific Standards for Easements and Other Utilities
  - 5-12.1 General
  - 5-12.2 Safety Provisions
  - 5-12.3 General Easements
  - 5-12.4 Utility Easements
  - 5-12.5 Drainage Easements

## HIGHLAND LAND DEVELOPMENT CODE

- 5-12.6 Maintenance of Easements and Rights-of-Way
- 5-12.7 Storm Water Facility Maintenance

**ARTICLE I**  
**GENERAL PROVISIONS**

**CHAPTER 66**

**ARTICLE I. GENERAL PROVISIONS**

**Sec. 66-1-1. Short Title**

This chapter shall be known as and may be referred to as the City of Highland Land Development Code.

**Sec. 66-1-2. Purpose.**

In accordance with state law (65 ILCS 5/11-12-5, 5/11-12-8--5/11-12-12; 765 ILCS 205/1 et seq.) this Code regulates the subdivision and development of land in order to implement the comprehensive plan and official map duly adopted by the city. Thus this Code assists in achieving the following specific objectives to:

- (1) Preserve, protect, and promote the public health, safety, and welfare;
- (2) Provide a pleasant living environment by furthering the orderly and efficient layout and use of land and by facilitating aesthetic urban design;
- (3) Establish accurate legal records, avoid development in wetland areas, and to avoid legal and other problems by requiring that subdivided land be properly monumented and recorded;
- (4) Conserve and increase the value of land; improvements, and buildings throughout the city;
- (5) Preserve the natural beauty and topography of the city of maximum feasible extent, including preservation of such features as stands of trees, streams, significant archaeological sites, and historical landmarks;
- (6) Provide adequate light, air and privacy for all residents of new developments by preventing undue concentration of population;
- (7) Protect against injury or damage caused by fire, pollution, flooding, storm water runoff, or erosion and sedimentation;
- (8) Provide safe convenient access to new developments and to avoid traffic congestion and unnecessary public expenditures by requiring the proper routing, location, design, and construction of streets and sidewalks;
- (9) Provide an environment whereby the cost of installing and maintaining adequate water mains, sanitary sewers, storm water sewers, and other utilities and services can be kept at a minimum; and

## HIGHLAND LAND DEVELOPMENT CODE

- (10) Ensure that adequate parks, schools, and similar facilities can be made available to serve the residents.

### **Sec. 66-1-3. Jurisdiction.**

This Code shall be applicable within the corporate limits of the city and within all unincorporated territory located within one and one-half (1 1/2) miles of said limits, provided such territory is not located within the subdivision jurisdiction of another municipality. Jurisdictional boundary lines shall be determined in accordance with Illinois Compiled Statutes, Chapter 65, Section 5/11-12-9.

- (1) For property lying within the corporate limits of the city, this Code shall apply to all real estate developments whether residential, commercial, or otherwise in nature, regardless of whether or not a plat is required under the law, statutes, ordinances or regulations of the city, and regardless of whether or not the same is labeled a subdivision.
- (2) Within the unincorporated territory under the jurisdiction of the city as described above, this Code shall apply to:
  - (a) All platted subdivisions, and
  - (b) the location, width, course and surfacing of public streets, highways, and alleys, ways for public safety and service facilities, curbs, gutters, sidewalks, streetlights, parks, playgrounds, school grounds, size of lots, storm water drainage, water supply and distribution, sanitary sewers, and sewage collection and treatment, for all other real estate land development, as development is defined in this Code.
- (3) At a minimum, any tract or tracts of land submitted for municipal review and approval shall include documentation of warranty deeds, easements, and exclusions, as well as a graphic illustration of the property and all easements, certified by an Illinois Professional Land Surveyor. Said illustration shall be on an 8½” x 11” sheet of paper and include, but not be limited to, scale, north arrow, dimensions, easement boundaries, survey reference lines necessary to illustrate the description, and all other pertinent information.

### **Sec. 66-1-4. Instances when plats are not required.**

All submittals shall be in accordance with Section 66-1-3 (3). This Code does not apply and no plat is required in any of the following instances:

- (1) The division or subdivision of land into parcels or tracts of **five** acres or more in size, when said division does not involve any new streets or easements of access;
- (2) The division of lots or blocks of less than one acre in any recorded subdivision which do not involve any new streets or easements of access;
- (3) The sale or exchange of parcels of land between owners of adjoining and contiguous land;

## HIGHLAND LAND DEVELOPMENT CODE

- (4) The conveyance of parcels of land or interests therein for use as right-of-way for railroads, public utility facilities, or pipelines, which does not involve any new streets or easements of access;
- (5) The conveyance of land for highway or other public purposes, grants or conveyance relating to the dedication of land for public use, or instruments relating to the vacation of land impressed with a public use;
- (6) Conveyance made to correct description in prior conveyances;
- (7) The sale or exchange of parcels or tracts of land following the division into no more than two parts of a particular parcel or tract of land recorded on or before July 17, 1959 and not involving any new streets or easements of access;
- (8) The conveyance of land owned by a railroad or other public utility which does not involve any new streets or easements of access;
- (9) The sale of a single lot of less than five acres from a larger tract when a survey is made by a registered surveyor; provided, however, that this exemption shall not apply to the sale of any subsequent lots from the same larger tract of land, as determined by the dimensions and configuration of the larger tract existing as of October 1, 1973;
- (10) Any minor subdivision as (defined in ARTICLE II).

### **Sec. 66-1-5. Interpretation.**

- (1) *Generally.* Every position of this Code shall be construed liberally in favor of the city, and every regulation set forth herein shall be considered the minimum requirement for the promotion of the public health, safety, and welfare.
- (2) *More restrictive requirements apply.* Whenever the requirements of this Code differ from those of any statute, lawfully adopted ordinance or regulation, easement, covenant, or deed restriction, the more stringent requirement shall prevail, except that if the requirements and provisions of a planned unit development that has been approved by the City Council as provided in Chapter 90 of this Code conflict with the requirements and provisions of this Chapter, the provisions and requirements of the planned unit development as approved by the City Council shall control.
- (3) *County code.* Whenever this Code imposes higher standards, it shall supersede the county regulations in the unincorporated territory located within the city's subdivision jurisdiction.

### **Sec. 66-1-6. Disclaimer of liability.**

Except as may be provided otherwise by statute or ordinance, no officer, board member, agent, or employee of the city shall render himself personally liable for any damage that may

HIGHLAND LAND DEVELOPMENT CODE

accrue to persons or property as a result of any act required or permitted in the discharge of his duties under this Code.

**State Law reference-** Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10/1-101 et seq.

**Sec. 66-1-7. Severability.**

If any provision of this Chapter is declared unconstitutional or invalid by a court of competent jurisdiction, that judgment shall not affect the validity of any provision hereof not specifically included in said judgment.

**ARTICLE II**  
**DEFINITIONS**

**ARTICLE II. DEFINITIONS**

**Sec. 66-2-1. Interpretation of terms.**

In construing the intended meaning of terminology used in this Code the following rules shall be observed:

- (1) Unless the context clearly indicates otherwise, words and phrases shall have the meanings respectively ascribed to them in section 66-2-2. Terms not defined in section 66-2-2 shall have the meanings respectively ascribed to them in Chapter 90, pertaining to zoning. If any term is not defined either in section 66-2-2 or in Chapter 90, pertaining to zoning, the term shall have its standard English dictionary meaning.
- (2) Captions (i.e., titles of sections, subsections, etc.) are intended merely to facilitate general reference and in no way limit the substantive application of the provisions set forth hereunder.
- (3) References to sections shall be deemed to include all subsections within that section; but a reference to a particular subsection designates only that subsection.
- (4) A general term that follows or is followed by enumerations of specific terms shall not be limited to the enumerated class unless expressly limited.

**Sec. 66-2-2. Definitions.**

The following words, terms and phrases, when used in this Chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Administrator means the official appointed by the mayor and the City Council to administer this Chapter, which is the city manager or his appointed designee.

Alley means a public right-of-way which affords a secondary means of vehicular access to the side or rear of premises that front on a nearby street, and which may be used for utility purposes.

Amendment means a change in the provisions of this Code, properly affected in accordance with state law and the procedures set forth in this Chapter.

Area, building means the total of areas taken on a horizontal plane at the main grade level of the principal building and all accessory buildings exclusive of unenclosed patios, terraces, and steps.

Area, gross means the entire area within the lot lines of the property proposed for subdivision/development, including any areas to be dedicated/reserved for street and alley rights-of-way, easements and for other public uses.

## HIGHLAND LAND DEVELOPMENT CODE

Area, net means the entire area within the boundary lines of the territory proposed for subdivision, less the area to be dedicated for street and alley rights-of-way, easements and other public use.

Barrier (natural or artificial) means any street, highway, river, pond, canal, railroad, levee, embankment, or screening by a fence or hedge.

Block means an area of land entirely bounded by streets, highways, barriers, or rights-of-way (except alleys, pedestrian ways, or exterior boundaries of a subdivision unless exterior boundary is a street, highway, or right-of-way) or bounded by a combination of streets, public parks, cemeteries, railroad rights-of-ways, waterways, or corporate boundary lines.

Building means any structure, whether temporary, semi-permanent, or permanent, designed or intended for the support, enclosure, shelter or protection of persons or property.

Building line. See Setback line.

Catch basin means a receptacle, located where a street gutter or open channel drainage system discharge into a storm sewer, designed to retain matter that would not easily pass through the storm sewer.

Centerline means:

- (1) The centerline of any right-of-way having a uniform width;
- (2) The original centerline, where a right-of-way has been widened irregularly;
- (3) The new centerline, whenever a road has been relocated;
- (4) Commonly the longitudinal midline of the road or street.

Centerline offset means the distance between the centerline of two roughly parallel streets, measured along the third street with which both said “parallel” streets intersect.

Cluster development means a subdivision planned and constructed so as to group housing units into relatively dense patterns while providing a unified network of open space and wooded areas, and meeting the requirements of this Chapter and the zoning code.

Common land means that land set aside for open space or recreational use for the owners of the lots of a subdivision, which land is conveyed by the developer in fee simple absolute title by warranty deed or trustee’s deed whose trust indenture shall provide that the common land be used for the sole benefit, use and enjoyment of the lot owners, present and future. No lot owner shall have the right to convey his interest in the common land except as an incident of the ownership of a regularly platted lot.

Comprehensive plan means the plan or any portion thereof adopted by the City Council to guide and coordinate the physical and economic development of the city. The city’s comprehensive plan may include, but is not limited to, plans and programs regarding the location, character, and extent of highways, bridges, public buildings or uses, utilities, schools, residential, commercial, or industrial land uses, parks, drainage facilities, etc.

## HIGHLAND LAND DEVELOPMENT CODE

Cross slope means the degree of inclination measured across a right-of-way rather than in the direction traffic moves on said right-of-way.

Cul-de-sac means a short minor local street having only one outlet for vehicular traffic and having the other end permanently terminated by a turnaround for vehicles; the term may also be used to refer solely to said turnaround.

Curb and gutter, integral means the rim forming the edge of a street plus the channel for leading off surface water, constructed of concrete as a single facility.

Dedicate means to transfer the ownership of a right-of-way, parcel of land, or improvement to the city or other appropriate government entity without compensation.

Density, gross means the total number of dwelling units divided by the total project area, expressed as gross dwelling units per acre.

Density, net means the total number of dwelling units divided by the new acreage. See definition of *Area, net*.

Design means the arrangement of uses on the land and the arrangement of easements, lots and rights-of-way, including specifications of materials and structures, alignment, grade, thickness and widths of these elements.

Develop means to erect any structure or to install any improvements on a tract of land, or to undertake any activity (such as grading,) in preparation thereof.

Development means any activity, including subdivisions, that alters the surface of the land to create additional impervious surfaces including, but not limited to, pavement, buildings, and structures except:

- (1) Additions to, improvements and repair of existing single-family and duplex dwellings.
- (2) Construction of any buildings, structures, and/or appurtenant service roads, drives, and walks on a site having previously provided storm water control as part of a larger unit of development with the original approved development plan.
- (3) Remodeling, repair, replacement, and improvements to any existing structure or facility and appurtenances that does not increase the impervious area on the site.
- (4) Construction of any one new single-family or duplex unit, irrespective of the site area on which the same may be situated.

Dimensions refers to both lot depth and lot width.

District, Zoning means a portion of the territory of the city wherein certain uniform requirements or various combinations thereof apply to structures, lots, and uses under the terms of the city's zoning code.

Drainage, Rural means that the use of open channels or swales to convey storm water along the roadway.

## HIGHLAND LAND DEVELOPMENT CODE

Drainage, Urban means the incorporation of curb and gutter along the edge of the pavement for conveying storm water along the roadway.

Drainageway means an open watercourse, gully, dry stream, creek, or ditch which carries storm water runoff or which is fed by street or building gutters or by storm water sewers, or which serves the purpose of draining water from the lands adjacent to such watercourse, gully, dry stream, creek, or ditch.

Easement means a grant by the property owner to the public, a corporation, or a person of the use of land for limited and specifically named purpose.

Emergency spillway means a device used to discharge water under conditions of inflow that exceed the design inflow. The emergency spillway functions primarily to prevent damage to the detention facility that would permit the sudden release of impounded water. It shall be designed to handle the runoff from a 100-year storm.

Escrow deposit means a deposit in cash or other approved securities to assure the completion of improvements within a subdivision. A performance bond may be acceptable in lieu of an escrow deposit.

Filing date means the date that the applicant has filed the last item of required data or information with the city clerk and has paid the necessary fees for review by the Plan Commission.

Floodplain area means the area based on the Federal Emergency Management Agency (FEMA), Firm Flood Insurance Maps and Reports.

Flood hazard area means all land subject to periodic inundation from overflow of natural waterways.

Freeboard means the difference in elevation between the tops of a structure such as a dam or open channel and the maximum design water surface elevation or high water mark and is an allowance against overtopping by waves or other transient disturbances.

Frontage means the lineal extent of the front (street side) of a lot.

Frontage road means a minor street fronting on a street or highway (usually a limited access highway), used for access to abutting lots.

Grade means the degree of inclination of the site or right-of-way, expressed as a percentage. Synonym for *Slope*.

Hillside area means an area with an average slope of 20 percent or more.

Improvement refers to site grading, street work and utilities, including water, sewer, electric, gas, storm water, sidewalk, telephone and cable television, to be installed or agreed to be installed by the subdivider on land to be used for public or private streets, and easements or other purposes as are necessary for the general use of lot owners in the subdivision, including the furnishing of all materials, equipment, work and services such as engineering, staking and supervision, necessary to construct all the improvements

## HIGHLAND LAND DEVELOPMENT CODE

required in Article V of this Chapter or any other improvements that may be provided by the subdivider.

Improvement plans means the construction plans and specifications sealed by an Registered Professional Engineer of Illinois showing types of materials and construction details for earth moving and for the structures, utilities, and facilities to be installed both in, or in conjunction with, a subdivision.

Inlet means a receptacle, located where surface water or groundwater can run to by gravity to be received by the storm sewer.

Intersection means the point at which two or more public rights-of-way (generally streets), meet.

IPSUSESCM means the Illinois Procedures and Standards for Urban Soil Erosion and Sedimentation Control Manual, March, 1982 or current edition.

Land use plan means the comprehensive plan for the desirable use of land, the purpose of such plan being, among other things, to serve as a guide to the zoning and progressive subdividing and use of underdeveloped land.

Lot means a tract of land intended as a unit for the purpose (whether immediate or future), of development or transfer of ownership. A lot may or may not coincide with a lot of record.

Lot area means the area of a horizontal plane bounded by the front, side, and rear lines of a lot, exclusive of any land designated for street right-of-way.

Lot, butt means a lot at the end of a block and located between two corner lots.

Lot, corner means a lot having at least two adjacent sides that abut for their full length upon streets. Both such sidelines shall be deemed front lot lines.

Lot depth means the mean horizontal distance between the front end and the rear lot lines measured in the general direction of the side lot lines.

Lot, interior means a lot whose sidelines do not abut any street.

Lot line, front means the line separating the lot from the street. The front lot line of a corner lot is as above defined.

Lot line, rear means the lot line most nearly parallel to and most remote from the front lot line, except on a corner lot where there shall be no rear lot lines.

Lot line, side means any lot line other than front or rear lot line, except on a corner lot in which case the side lot lines are all the lot lines other than the front lines.

Lot of record means an area of land designated as a lot on a plat of subdivision recorded with the county recorder of deeds in accordance with state law.

## HIGHLAND LAND DEVELOPMENT CODE

Lot, through means a lot having a part of approximately parallel lot lines that abut two approximately parallel streets. Both such lot lines shall be deemed front lot lines.

Lot width means the mean horizontal width of the lot measured at a right angle to the general direction of the side lot lines.

Maintenance bond means a surety bond, posted by the developer and approved by the city, guaranteeing the satisfactory condition of installed improvements. An escrow deposit may be acceptable in lieu of a maintenance bond.

Marginal access means substandard pavement width and right-of-way to accommodate a limited number of parcels that are otherwise not accessible from other roadway classifications.

Master Development plan means a combination of maps, drawings, site plans, charts and supportive narrative material that portrays total development to be achieved in the overall project area, which provides sufficient detailed information to both illustrate and describe the intended character and configuration of development to be accomplished.

Metes and bounds means a description of real property which is not described by reference to a lot or block shown on a map, but is described by starting at a known point and describes the lines forming the boundaries of the property or delineates a fractional portion of a section, lot or area by describing lines or portions thereof.

Official map means a graphic statement of the existing and proposed zoning within the jurisdiction of this Code, and the comprehensive plans of the city which require the acquisition of land, such as streets, drainage systems, parks, etc.

Owner means a person having sufficient proprietary interest in the land sought to be subdivided to commence and maintain proceedings to subdivide the same under this Chapter.

Parking lane means an auxiliary lane of a street and primarily used for vehicular parking.

Pedestrian way means a right-of-way dedicated to public use that cuts across a block to facilitate safe pedestrian access to adjacent streets and properties.

Performance bond means a surety bond posted by the developer and approved by the city, guaranteeing the installation of required improvements within, or in conjunction with, a subdivision. An escrow deposit may be acceptable in lieu of a performance bond.

Person means any agent, individual, firm, association, partnership, corporation, syndicate or trust.

Plan Commission means the Plan Commission of the city.

Planned unit development (PUD) means a comprehensively planned development containing residential, commercial, industrial, or other land uses on an area of land under continuing unified control.

## HIGHLAND LAND DEVELOPMENT CODE

Plans means all of the drawings including plats, cross sections, profiles, working details and specifications, which the subdivider prepares or has prepared to show the character, extent and details of improvements required in this Code.

Plat, final means the final engineering and architectural maps, drawings, and supporting material indicating the subdivider's plan of the subdivision that, if approved, may be filed with the county recorder of deeds.

Plat, preliminary means preliminary engineering and architectural maps, drawings, and supportive material indicating the proposed layout of a subdivision.

Principal spillway means a device such as an inlet, channel, pipe, weir, etc., to discharge water during operation of the facility under specific storm events as specified herein.

Private detention facility means any detention facility located on and controlling discharge from a site wholly owned and controlled by one owner and not platted for future subdivision of ownership. Also, all facilities incorporating detention storage of storm water in or on any of the following:

- (1) Roofs or buildings or structures also used for other purposes.
- (2) Paved or surfaced areas also used for other purposes.
- (3) Enclosed underground pipes or structures on private property when the surface is used for other purposes.

Project area means that territory intended to be subdivided or developed, and portrayed and defined in the preliminary and final plats.

Public detention facility means any detention facility controlling discharge from a tributary area owned by more than one owner or platted for the future subdivision of ownership, except as defined as a private detention facility.

Rational method means an empirical formula for calculating peak rates of runoff resulting from rainfall.

Redevelopment means the same as Development.

Reserve means to set aside a parcel of land in anticipation of its acquisition by the city or other appropriate government entity for public purposes.

Reserve strip means a narrow strip of land between a public street and adjacent lots, which is designated, on a recorded subdivision plat or property deed as land over which vehicular travel is not permitted.

Resubdivision means the same as Subdivision.

Retention area means an area of land designed to capture water runoff from a developed parcel and release it at a specified rate of flow as determined by engineering studies.

Reverse curve means a curve in a street heading in appropriately the opposite direction from the curve immediately preceding it so as to form an S shape.

## HIGHLAND LAND DEVELOPMENT CODE

Right-of-way, public means a strip of land that the owner/subdivider has dedicated to the city or other appropriate government entity for streets, alleys, and other public improvements; sometimes abbreviated as R.O.W.

Roadbed means the graded portion of a street upon which the base course, surface course, shoulders and median are constructed.

Roadway means the entire improved portion of the street, including shoulders, parking lanes, travel way, curbs and gutter.

Setback line means a line establishing the minimum space to be provided as the front, side or rear yard.

Sidewalk means a pedestrian way constructed in compliance with the standards of this Code, generally abutting or near the curb line of the street.

Slope means the degree of inclination of site or right-of-way expressed as a percentage. Synonym for Grade.

Soil and water conservation district means the county soil and water conservation district.

Street means a public or private way for motor vehicle travel. The term “street” includes a highway, thoroughfare, parkway, through way, road, pike, avenue, boulevard, lane, place, drive, court and similar designations, but excludes an alley or a way for pedestrian or bicycle use only.

Street, Arterial means a street designed or utilized primarily for high vehicular speeds or for heavy volumes of traffic on a continuous route with intersections at grade, and on which traffic control devices are used to expedite the safe movement of through traffic. (To be determined by Plan Commission and Director of Public Works.)

Street, Area Service Highway means area service highways that: interconnect collectors and land access streets with the principal system and vice versa; bring all developed areas within a reasonable distance of principal streets; connect and provide direct access to major traffic generators; provide secondary service to smaller communities; may provide access to abutting property; and have a medium volume design capacity and travel speeds.

Street, Commercial / Industrial (As determined by the Plan Commission and Director of Public Works.)

Street, Cul-De-Sac means a short, land access street, having only one end open for vehicular traffic, and the other end permanently terminated by a turnaround for vehicles; the term may also be used to refer solely to said turnaround.

Street, Dead-End means a land access street similar to a cul-de-sac, except that it provides no turnaround circle at the closed end.

Street, Land Access means a street that provides access to abutting properties, has a relatively short travel distance, and has a low volume design capacity and travel speeds.

## HIGHLAND LAND DEVELOPMENT CODE

Street, Local / Residential means a two-way, two-lane road with average daily traffic of less than 1,000 vehicles, which provides access to adjoining property while serving as a connection between local residential streets, collectors, and arterials.

Street, Looped streets intersecting means a land access street having two open ends, each end generally connecting with the same street, with no other between its ends, and property fronts on both sides of the street.

Street, Major Collector means a two-way, two, three, or four lane road with average daily traffic of 5,000 vehicles or more, which provides access to adjoining property while serving as a connection between local residential streets, minor collectors, and arterials.

Street, Minor Collector means a two-way, two-lane road with average daily traffic of less than 5,000 vehicles, which provides access to adjoining property while serving as a connection between local residential streets, major collectors, and arterials.

Street, Service Road means a land access street parallel and adjacent to area service highways and providing access to abutting properties.

Street, Stub or butt means a street that is temporarily terminated, but that is planned for future continuation.

Structure means anything constructed or erected, which requires permanent or temporary location on or in the ground, or is attached to something having a fixed location on or in the ground. All buildings are structures but not all structures are buildings (e.g., a fence).

Subdivider means any person, firm, partnership, association, corporation, estate or other group or combination acting as a unit, dividing or proposing to divide land in a manner that constitutes a subdivision as defined in this section.

Subdivision means:

- (1) The division of land into two or more lots or parcels for the purpose of either immediate or future sale, rental or building development or use other than agricultural use or production.
- (2) Establishment or dedication of a public street or alley through a tract of land regardless of size.
- (3) The term “subdivision” shall also include all resubdivisions of land or lots.

Subdivision, minor means a division of land into two, but not more than four lots, all of which front upon an existing street, not involving any new streets or other rights-of-way, easements, improvements, or other provisions for public areas and facilities.

Topography means the relief features or surface configuration of an area of land.

Travelway means that portion of a street used for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

## HIGHLAND LAND DEVELOPMENT CODE

Tributary area means all land draining to the point of consideration, regardless of ownership.

Vacate means to terminate the legal existence of right-of-way or subdivision, and to so note on the final plat recorded with the County Recorder of Deeds.

Variance, subdivision means a relaxation in the strict application of the design and improvement standards set forth in this Code.

Yard, front means a yard extending across the full width of the lot and lying adjacent to the front line, the depth of which is set forth in the zoning code.

Yard, rear means a yard extending across the full width of the lot between the nearest rear main building and the rear lot lines. The depth of the required rear yard shall be measured horizontally from the nearest part of the main building toward the nearest point of the rear lot lines.

Yard, side means a yard between a main building and the side lot line, extending from the front yard or front lot lines; where no front yard is required, to the rear yard. The width of the required side yard shall be measured horizontally from the nearest point of the side lot line toward the nearest part of the main building.

Zoning code means Chapter 90 of this Code pertaining to zoning.

**ARTICLE III**  
**ADMINISTRATION**

**ARTICLE III. ADMINISTRATION**

**Sec. 66-3-1. Building and Zoning Official's duties.**

The administrator may authorize and direct the Chief Building and Zoning Official to administer and enforce the provisions of this Chapter. This broad responsibility encompasses, but is not limited to, the duty to:

- (1) Review and forward preliminary plats to the Plan Commission (see ARTICLE V of this Chapter);
- (2) Transmit improvement plans to the Director of Public Works for his review (see ARTICLE V of this Chapter);
- (3) Review and forward final plats to the City Council (see Section 66-4-23);
- (4) Issue stop orders as necessary when it is determined that approved improvements are being constructed in violation of this Chapter (see Section 66-4-10);
- (5) Pursue actions authorized at Section 66-4-17 when a developer fails to complete required improvements;
- (6) Evaluate and pass upon proposed changes in approved final plats (see Section 66-4-25);
- (7) Review and forward applications for subdivision variances to the Plan Commission (see Section 66-3-2);
- (8) Maintain up-to-date records of matters pertaining to this Chapter including, but not limited to, preliminary plats, as-built records of completed improvements, final plats, variances, and amendments; and
- (9) Provide information to subdividers/developers and to the general public on matters related to this Chapter.

**Sec. 66-3-2. Variances.**

Any subdivider/developer desiring a variance from the requirements of this Chapter shall file a written application therefore with the administrator at the same time that he files his preliminary plat. The preliminary plat should show on its face what is required. The application shall fully explain the grounds for the variance request, and specify the section of this Chapter, which, if strictly applied, would cause great practical difficulties or hardship. The administrator shall prepare an advisory report on every variance application and submit it, together with the completed application, to the Plan Commission and Zoning Board of Appeals.

**Sec. 66-3-3. Review of variance by Plan Commission.**

The Plan Commission shall review the variance application and the administrator's comments filed pursuant to Section 66-3-2, perform on-site review when

## HIGHLAND LAND DEVELOPMENT CODE

appropriate, and submit their advisory report to the City Council together with their recommendation on preliminary plat approval (see Section 66-4-3). The Plan Commission's advisory report shall be responsive to all the variances standards set forth in Section 66-3-4.

### **Sec. 66-3-4. Action by City Council on variance.**

At the same meeting at which they take action on the application for preliminary plat approval (see Section 66-3-2), the City Council shall decide by resolution whether to grant or deny the requested subdivision variance. A copy of their decision, clearly stating its reasons therefore and the exact terms of any variance granted, shall be attached to both the preliminary and final plats. The City Council shall not grant any subdivision variance unless, based upon the information presented, they determine that:

- (1) The proposed variance is consistent with the general purposes of this Chapter (see Section 66-1-2);
- (2) Strict application of the subdivision requirements (see Article V) would result in great practical difficulties or hardship to the applicant, not a mere inconvenience;
- (3) The proposed variance is the minimum deviation from the subdivision requirements that will alleviate the difficulties/ hardship;
- (4) The plight of the applicant is due to peculiar circumstances not of his own making;
- (5) The peculiar circumstances creating the variance request are not applicable to other tracts and, therefore, that a variance would be a more appropriate remedy than a Chapter amendment;
- (6) The variance, if granted, will not materially frustrate implementation of the municipal comprehensive plan including the official map.

### **Sec. 66-3-5. Amendments.**

- (a) **Proposals.** Amendments to this Chapter may be proposed by the administrator, any member of the City Council, any Plan Commission member, or any party in interest. Every amendment proposal shall be filed on a prescribed form in the administrator's office. The administrator shall promptly transmit each proposal, together with any comments or recommendations he may wish to make, to the Plan Commission for a public hearing.
- (b) **Public hearing.** The Plan Commission shall hold a public hearing on every amendment proposal within a reasonable time, (30 days), after said proposal is submitted to them. At the hearing any interested party may appear and testify, either in person or by duly authorized agent or attorney. Notice indicating the time, date, and place of the hearing, and the nature of the proposed amendment shall be given not more than 30 or less than 15 days before the hearing by publication in a newspaper of general circulation within this city and to the applicant.

## HIGHLAND LAND DEVELOPMENT CODE

- (c) Advisory report, action by City Council. Within a reasonable time after the public hearing, the Plan Commission shall submit an advisory report to the City Council. The City Council shall act on the proposal amendment at their next regularly scheduled meeting following submission of this report. Without another public hearing, the City Council may either pass or reject the proposed amendment or may refer it back to the Plan Commission for further consideration.

### **Sec. 66-3-6. Fee Schedule.**

Preliminary Plat review fees shall be \$100 plus \$10 per lot for all proposed subdivisions. Improvement plan review fees shall be two (2) percent of the approved engineer's estimate of the subdivision improvements. Final plat review fees shall be \$50 per submittal. Significant changes in design or use shall require a new submittal and associated fees as described.

### **Sec. 66-3-7. Violations.**

Violation of this Chapter or failure to comply with any of its requirements, including conditions and safeguards established, shall constitute an ordinance violation. Each day a violation continues shall be considered a separate offense.

### **Sec. 66-3-8. Corrective actions.**

Nothing in this Chapter shall prevent the city from taking such other lawful actions as is necessary to forbid or remedy any violations. All such costs connected therewith shall accrue to the person responsible.

### **Sec. 66-3-9. Penalty.**

Any person who violates this Chapter shall be, upon conviction, subject to a fine of no less than \$100.00 nor more than \$500.00

**ARTICLE IV**

**PLATS**

**ARTICLE IV. PLATS**

**Sec. 66-4-1. Vacation of plats.**

A subdivision plat or part thereof may be vacated as provided by state statute (see 765 ILCS 205/6, 205/7, and 205/8).

**Sec. 66-4-2. General procedure.**

Before preparing a proposed subdivision plat for an area, the owner, developer, or his representatives should have a preapplication meeting with the building and zoning division and city staff to determine applicable ordinance standards, which must be complied with. After the preapplication meetings, the subdivider should then prepare the preliminary plat. As defined in this Chapter, the preliminary plat shall contain a substantial amount of data, and will thus be incomplete and cannot be considered as filed until all required data are submitted. The preliminary plat is received by the building and zoning division who, in turn, will forward the same to the Plan Commission for their review. Following its review as well as comments from other appropriate agencies when required, the Plan Commission forwards its recommendation to the City Council, which then either approves, disapproves, or approves with modifications to the preliminary plat.

**Sec. 66-4-3. Filing procedure.**

- (a) Except as specifically provided in subsection (g) of this section, every person who proposes to subdivide any land located within the subdivision jurisdiction of this city shall file eighteen copies of the preliminary plat of the subdivision with the building and zoning division. See Sec. 66-3-6 for required fees.
- (b) He shall also file one copy of the preliminary plat and supporting data with the Madison County Soil and Water Conservation District (Edwardsville, Illinois). The district shall not have more than 30 days to submit any comments it might wish to make to the administrator (see 70 ILCS 405/22.02a).
- (c) He shall file one copy of the preliminary plat and supporting data with the appropriate utility or other entities which so requests.
- (d) He shall file one copy of the preliminary plat with the president of the school board as provided by statute.
- (e) He shall provide documentation to the Illinois Historical Preservation Society.
- (f) Whenever a tract of ground is to be developed in stages and only a portion of that tract is to be submitted for final plat approval, nonetheless, a master development plan of the entire tract shall be submitted.
- (g) All the preliminary plats shall be reviewed and acted upon in accordance with 65 ILCS 5/11-12-8 and the provisions of the subsection below.
- (h) This section shall not apply to:
  - (1) Minor subdivisions as defined at section 66-2-2; or
  - (2) Land that is specifically exempted from the Illinois Plats Act (765 ILCS 205/1(b)).

## HIGHLAND LAND DEVELOPMENT CODE

### **Sec. 66-4-4. Information required – Preliminary Plat.**

Every subdivision preliminary plat shall be prepared by a registered Professional Engineer and Professional Land Surveyor, State of Illinois, at any scale from one inch equals 10 feet through one inch equals 100 feet, provided the resultant drawing does not exceed 24 inches by 36 inches and shall contain the following:

- (1) Small key map showing the relation of the proposed subdivision to platted subdivisions and dedicated roads within 2,500 feet of the proposed subdivision;
- (2) Names and addresses of the owner, subdivider (if not the owner), Registered Professional Engineer of Illinois and Professional Land Surveyor, State of Illinois;
- (3) Proposed name of the subdivision, location given by township, range, section, or other legal description;
- (4) Zoning district classification of the tract to be subdivided, and of the adjacent land;
- (5) If the plat is shown on two or more sheets, an index shall be provided on each sheet alone with corresponding “match lines”;
- (6) North arrow, graphic scale, and date of map;
- (7) The gross and net acreage area of the proposed subdivision, the acreage of streets, and of any areas reserved for the common use of the property owners within the subdivision and for public use;
- (8) All lot lines adjacent to and abutting the subdivision;
- (9) Tract boundary lines showing dimensions, bearings, and references to known land lines;
- (10) Topography of the tract to be subdivided as indicated by two-foot contour data for land having slopes of zero to four percent, five-foot contour data for land having slopes between four to 12 percent, and ten-foot contour data for land having slopes of 12 percent or more;
- (11) Delineation of pre-development drainage basins showing directions of flow and downstream receiving facility;
- (12) Delineation of post-development drainage basins showing directions of flow and downstream receiving facility;
- (13) Any proposed alteration, adjustment or change in the elevation or topography of any area;
- (14) Locations of such features as bodies of water, ponding areas, natural drainageways, railroads, cemeteries, bridges, parks, schools, etc.;
- (15) Streets and rights-of-way on and adjoining the site of the proposed subdivision; showing the names and including street right-of-way and paving widths; approximate gradients; types and widths of pavement, curbs, sidewalks, crosswalks, planting strips and other pertinent data, including classification of all existing or proposed streets as to function as arterial, collector, residential, major, minor or other roads;
- (16) A copy of the results of any tests made to ascertain subsurface rock and soil conditions and the water table;
- (17) Locations, widths, and purposes of all existing and proposed easements;
- (18) A copy of the description of all proposed deed restrictions and covenants;
- (19) Location and size of existing and proposed sanitary and storm sewers and potable water lines;

## HIGHLAND LAND DEVELOPMENT CODE

- (20) Locations, types, and approximate sizes of all other existing and proposed utilities;
- (21) Front building setback or front yard lines and dimensions;
- (22) Locations, dimensions, and areas of all parcels to be reserved or dedicated for schools, parks/playgrounds, and other public purposes; and
- (23) Locations, dimension, and areas of all proposed or existing lots within the subdivision.

### **Sec. 66-4-5. Plan Commission action.**

- (a) The Plan Commission shall either approve or disapprove the application for preliminary plat approval within 60 days from the date of the application or the filing of the last item of required supporting data, whichever date is later, unless the Plan Commission and the subdivider mutually agree to extend this time limit. If the Plan Commission disapproves the preliminary plat, they shall furnish to the applicant within 10 days of said meeting a written statement specifying the aspects in which the proposed plat fails to conform to this Chapter or the official map. If the Plan Commission approves the preliminary plat, they shall inform the City Council that action can be taken at the next regularly scheduled City Council meeting.
- (b) The Plan Commission shall give notice of its consideration of any preliminary plat and allow the opportunity to be heard to the following person(s) or groups during its preliminary review time span:
  - (1) Any person requesting notification of the meeting including the owner, subdivider, and engineer/land surveyor.
  - (2) Any property owner whose property is contiguous to the property, including property across the streets, railroads, creeks, and similar barriers; such information shall be provided by the applicant to the building and zoning division's office when filing the plat.
  - (3) Any governmental or taxing body which requests notification of the meeting.

### **Sec. 66-4-6. Review by the City Council; time constraints.**

The City Council shall review the preliminary plat, along with the Plan Commission recommendations and approve, disapprove or approve subject to certain conditions or modifications to the preliminary plat within 30 days after its next regularly scheduled meeting following receipt of the written Plan Commission recommendations, unless variances from zoning code requirements are needed, in which case, the City Council's 30 days commence the day after the zoning board of appeals hearing is held, as required by the zoning code. If the City Council rejects the preliminary plat, their resolution shall specify the aspects in which the plat fails to comply with this Chapter or the official map. The city clerk shall attach a certified copy of the council's resolution of approval or disapproval to the preliminary plat. The clerk shall retain one copy of the resolution and plat, one copy shall be filed with the administrator, and one copy shall be sent to the subdivider by return receipt mail or hand delivered.

### **Sec. 66-4-7. Right and privileges of subdivider.**

Subdivision preliminary plat approval shall confer the following rights and privileges upon the subdivider.

## HIGHLAND LAND DEVELOPMENT CODE

- (1) The preliminary plat approval will remain in effect for one-year period from the day the City Council approves the plat. The applicant may, during this period, submit all or part or parts of said preliminary plat for final approval. If the subdivision is being developed in stages, the applicant may, by written mutual agreement with the City Council, have final approval of the last part of the plat delayed for a period not to exceed five years from the date of the preliminary plat approval. Any part of a subdivision, which is being developed in stages, shall contain a tract of land at least one block in area or five gross acres.
- (2) The general terms and conditions under which the preliminary plat approval was granted will not be changed for final approval, unless mutually agreed upon by the City of Highland and the developer.
- (3) The applicant may also proceed with any detailed improvement plans required for all facilities or utilities intended to be provided. Actual construction of such facilities and improvements may commence prior to final plat approval if the detailed improvement plans have been recommended by the Director of Public Works and approved by the administrator, provided that such facilities and improvements will be inspected throughout their construction by the city, and final plat approval will be contingent in part upon acceptable compliance to city improvement and facilities standards.

### **Sec. 66-4-8. Improvement Plans.**

After the City Council has approved the preliminary plat, but prior to submission of the final plat, the developer shall furnish two copies of the plans and specifications for all improvements to be installed within or in conjunction with the proposed development to the building and zoning division, which will forward such to the appropriate city departments. See Sec. 66-3-6 for required fees. Plans must include drainage, streets, alleys and utility locations to be installed in or in conjunction with a subdivision; also, include overall storm water drainage/management plan and an erosion control plan and its effort on contiguous land and source of effluent or discharge. The developer shall furnish two copies of the storm water computations sealed by a Registered Professional Engineer of Illinois. The plans and specifications shall be signed and sealed by the Registered Professional Engineer of Illinois responsible for their preparation. The storm water drainage/management plan, associated storm water system design calculations and the soil erosion control plans shall be submitted to the Madison County Soil and Water Conservation District in Edwardsville, Illinois for their review. There is a fee (from the developer to the district) associated with this review based on the area of the development. If a development exceeds one acre, a storm water permit for the proposed development is required from the Illinois Environmental Protection Agency. Until the Director of Public Works certifies in writing that the proposed improvements conform to generally accepted engineering practices and to the standards in this Chapter:

- (1) The administrator shall not issue any permits to allow construction of said improvements; and
- (2) The City Council shall not act upon the application for final plat approval.

**Sec. 66-4-9. Information required – Improvement Plans.**

Subdivision improvement plans shall consist of black or blue line prints at any scale from one inch equals 10 feet through one inch equals 50 feet, provided the resultant drawing does not exceed 24 inches by 36 inches and is legible, and include an electronic submittal in a format compatible with the City of Highland. Plans shall be prepared by a registered Professional Engineer, State of Illinois, signed and sealed. These plans and the related specifications shall provide all of the following information:

- (1) Topography of the tract, both before and after development,
- (2) Existing and proposed elevations every 50 feet along the centerline of all streets;
- (3) Radii of all curves and lengths of tangents on all streets;
- (4) Locations, elevations and typical cross section of street pavements including curbs/gutters, catch basins, and inlets;
- (5) Locations, elevations and typical cross section of sidewalks and driveway aprons;
- (6) Locations, sizes, configurations, and invert elevations of all existing and proposed sanitary sewers, storm sewers, and fire hydrants, showing connections to any existing or proposed utility systems,
- (7) Drainage calculations for proposed drainage plan.
- (8) Finished grade requirements;
- (9) Locations and sizes of all water, gas, electric, telephone and other utilities;
- (10) Locations of street lighting standards and street signs;
- (11) One or more benchmarks, when requested by the Director of Public Works, in or near the subdivision, to which the subdivision is referenced; the identity and elevation shall be based on the National Geodetic Vertical Datum of sea level;
- (12) All proposed measures to control erosion and sedimentation;
- (13) High water elevations of all lakes/streams adjoining or within the tract;
- (14) Existing and proposed survey monuments, except lot pins, on street plans or on the proposed final plat as required by this Chapter; and
- (15) Such other information as the Director of Public Works may reasonably require, to perform his duties under this section.

**Sec. 66-4-10. Inspections required.**

- (a) The subdivider/developer or his designated individual shall notify the Director of Public Works at least two working days prior to the start of and completion of construction on subdivision improvements and prior to any materials and construction testing. One original of all test results bearing the signature of the authorized testing company shall be submitted to the Director of Public Works before the associated work is accepted by the city.
- (b) The Director of Public Works shall inspect said improvements while they are under construction. If he or his designated agent determines that they are being built in violation of this Chapter, he shall request that the Chief Building and Zoning Official promptly issue a stop order.
- (c) The Director of Public Works shall inspect improvements upon their completion. This city shall not accept any completed improvement until the Director of Public Works has stated in writing that it complies with this Chapter.

## HIGHLAND LAND DEVELOPMENT CODE

- (d) The engineer of record for the development shall inspect the improvements while they are being constructed with sufficient emphasis to certify the improvements are in substantial compliance with the project specifications, drawings and their intent.

### **Sec. 66-4-11. Filing “as-built” record drawings.**

- (a) The subdivider/developer shall file with the building and zoning division, which shall forward to the Director of Public Works, an electronic submittal of as-built drawings in a format compatible with the City of Highland, along with two sets of prints signed, dated and sealed by the engineer or surveyor of record; showing the as-built details and any deviations from the approved plans upon the completion of improvements and prior to final plat approval or prior to any releases of bonds, whichever comes first.
- (b) If the Director of Public Works finds the as-built details to be unacceptable, he shall notify the Chief Building and Zoning Official, who shall initiate corrective action.

### **Sec. 66-4-12. Completion prior to acceptance.**

The City Council shall not approve any final plat of subdivision, and, hence, the final plat shall not be entitled to recording until:

- (1) All improvements required in the improvements plan have been completed by the subdivider/developer at his expense, inspected by the Director of Public Works, and dedicated to his city or other appropriate entity; subject to the approval of the City Council; or
- (2) In accordance with this division below, the subdivider/developer has provided this city with legal assurance to guarantee the satisfactory completion and dedication of all required improvements.

### **Sec. 66-4-13. Forms of assurance.**

At the option of the City Council, the required legal assurance for subdivision improvements may be either a performance bond or an escrow deposit. Every performance bond or escrow deposit shall be reviewed and approved by the city attorney prior to being posted with the city clerk.

### **Sec. 66-4-14. Amount of bond or deposit.**

The amount of the performance bond or escrow deposit shall be equal to 100 percent of the cost of constructing the required improvements as certified by a Registered Professional Engineer of Illinois. Any escrow deposit may be in the form of:

- (1) Cash;
- (2) An irrevocable letter of credit or commitment from a lending institution guaranteeing this city the availability of the escrow funds upon timely demand;
- (3) Certificates of deposit, treasury bills, or other readily negotiable instruments approved by the City Council, and made payable to this city; or

HIGHLAND LAND DEVELOPMENT CODE

- (4) Subdivision lot/parcel of land lien together with the right to collect all attorney fees, title check fees, court costs, and all other lien enforcement expenses as part of such lien.

**Sec. 66-4-15. Eligible sureties.**

No person shall be eligible to act as surety on a performance bond under this division other than a company authorized to write such bonds in Illinois.

**Sec. 66-4-16. Term of assurance, extension.**

The initial term of any performance bond or escrow agreement shall not exceed two years. If all the required improvements have not been completed by the end of the two-year period, the City Council may, at the request of:

- (1) The principal and surety of such bond,
- (2) The escrow depositor, or
- (3) The issuer of the letter of credit,

extend bond/escrow agreement for one year only, or proceed as per section 66-4-18.

**Sec. 66-4-17. Release of bond/escrow deposit.**

- (a) The city clerk may release up to 90 percent of the amount of the performance bond/escrow deposit/letter of credit required under this division, upon receipt of written authorization from the Chief Building and Zoning Official. The amount, which the Chief Building and Zoning Official authorizes to be released, shall be equal to the value of improvements actually completed in accordance with approved plans.
- (b) The balance of the amount of the performance bond/escrow deposit shall not be released by the city clerk until:
  - (1) The Chief Building and Zoning Official has certified to the administrator in writing that all required improvements have been satisfactorily completed; and
  - (2) The improvements have been accepted by and dedicated to this city or other appropriate entity.

**Sec. 66-4-18. Failure to complete improvements.**

If all the required improvements have not been completed by the end of eighteen months, in the case of a two-year period (or thirty months, in the case of a three-year period, extension granted), the administrator, with the assistance of the city attorney, may:

## HIGHLAND LAND DEVELOPMENT CODE

- (1) Require the principal and surety to perform on the bond, and to pay to this city an equal amount to the cost of completing the required improvements or the amount of the bond not theretofore released, whichever is less;
- (2) Order the city clerk to retain all escrowed funds needed to complete the required improvements, and to return the balance (if any) of such funds to the subdivider/developer;
- (3) Require the subdivider/developer to submit a new performance bond/escrow deposit in an amount sufficient to cover any increase in the cost of constructing the required improvements; or
- (4) Demand and enforce payment from the issuer of the letter of credit in an amount equal to the cost of completing the required improvements, or an amount equal to the amount of such credit before released, whichever is less.

### **Sec. 66-4-19. Compliance.**

The City Council shall not approve any subdivision final plat unless they determine that it is in compliance with all pertinent requirements of this Chapter including those set forth in this article.

### **Sec. 66-4-20. Final Plats.**

- (a) The subdivider of every subdivision, whether major or minor but excluding land specifically exempted from the Illinois Plats Act (765 ILCS 205/1(b)), who desires final plat approval shall file ten copies of the final plat and supporting data with the building and zoning division not later than one year after preliminary plat approval has been granted. However, with the consent of the City Council, the subdivider may delay application for final approval of part of the tract shown on preliminary plat for successive one-year periods. No subdivision plat or re-plat shall be filed for record or recorded in the office of the county recorder of deeds, unless and until the approval of the city is endorsed thereon. No lot shall be sold for such subdivision plat or re-plat until it has been approved by the City Council and filed for record in the office of the county recorder of deeds as required by the state statutes. See Sec. 66-3-6 for required fees.
- (b) The subdivider/developer shall cause to be filed the approved final plat with the county recorder of deeds within 30 days after the City Council has approved the plat, and the mayor has affixed his signature thereto. The final plat shall be returned to the building and zoning division's office by the county recorder bearing the official stamp of the county recorder attesting its recording. The subdivider/developer is responsible for all fees incurred in the recording of their final plat with the county recorder of deeds.

### **Sec. 66-4-21. Information required.**

Subdivision final plats shall be prepared by a Professional Land Surveyor and consist of black or blue line prints not larger than 24 inches by 36 inches and include an electronic submittal in a format compatible with the City of Highland. The plan scale shall be legible. The final plat and supporting data shall portray/provide all of the following information:

## HIGHLAND LAND DEVELOPMENT CODE

- (1) Small key map showing the proposed subdivision in relation to section or U.S. Survey lines;
- (2) North arrow, graphic scale, and date;
- (3) Name of subdivider, subdivision, identification of the portion of the public lands survey in which the subdivision is located;
- (4) Accurate metes and bounds or other adequate legal description of the tract, and the included area of the subdivision to the nearest 1/100 of an acre, (where discrepancies occur, both recorded and surveyed bearings and dimensions shall be included);
- (5) Accurate boundary lines with dimensions and bearings which provide a survey of the tract, closing with an error of closure of not more than one foot in 10,000 feet;
- (6) All dimensions shall be shown in feet and decimals of a foot;
- (7) Reference to recorded plats of adjoining platted land within 300 feet, by record name, plat book, and page number;
- (8) Accurate locations and names of all existing streets intersecting the boundaries of the subdivision;
- (9) Right-of-way lines of all streets, other rights-of-way, easements, and lot lines with accurate dimensions, or bearings and curve data, including radii, arcs or chords, points of tangency, and central angles;
- (10) Name and right-of-way width of every proposed street;
- (11) Locations, dimensions and purpose of any existing or proposed easement(s);
- (12) Number of each lot, lot dimensions, and (in a separate list) lot areas;
- (13) Purpose for which sites, other than private lots, are reserved;
- (14) Front setback lines with accurate dimensions;
- (15) Restrictions of all types which will run with the land, and become covenants in the deeds of lots;
- (16) Certification of ownership and dedication of all public areas;
- (17) Accurate distances and bearings to the nearest section or subdivision corner; reference corners shall be accurately described on the final plat;
- (18) Reference to known and permanent monuments and benchmarks from which future surveys may be made together with elevations of any benchmarks. The surveyor must, at the time of making his survey, establish permanent monuments, as defined in section 66-5-5 and set in such a manner that they will not be moved by frost, which mark the external boundaries of the tract to be divided or subdivided and must designate upon the plat the locations where they may be found. External boundaries of new plats shall be marked (have monuments set) at every change in line direction and at every point of curvature;
- (19) Location, type, material and size of all monuments and lot markers;
- (20) Variance items granted by the City Council.

### **Sec. 66-4-22. Certificates required.**

As required by state law (765 ILCS 205/2; 65 ILCS 5/11-12-8), the following certificates shall be included on the face of the plat and all but the city's approval shall be executed on the final plat prior to submittal:

**Owner's Certificate**

We, \_\_\_\_\_, the owners of \_\_\_\_\_, have caused the said tract to be surveyed and subdivided in the manner shown, and said tract to be hereinafter known as \_\_\_\_\_. All rights-of-way and easements shown hereon are hereby dedicated to the use of the public forever including the release and waiver of the right of homestead under the homestead exemption laws of the State of Illinois. We further state that this land is located within the boundary of Highland Community Unit School District # 5.

Dated this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Seal)

\_\_\_\_\_

(Seal)

\_\_\_\_\_

**Notary Public's Certificate**

State of Illinois            )  
  ) ss  
County of Madison        )

I, \_\_\_\_\_, a notary public in and for the county aforesaid, do hereby certify that \_\_\_\_\_ are personally known to me to be the same persons whose names are subscribed to the foregoing instrument, and that they appeared before me this day in person and acknowledged that they signed and sealed the same as their free voluntary act for the uses and purposes therein set forth, including the release of waiver of the right of homestead.

Given under my hand and notarial seal this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_

Notary Public

**Surveyor's Certificate**

I, \_\_\_\_\_, an Illinois professional land surveyor, have surveyed and subdivided the above-described property. I further certify that the property herein described is not within a flood hazard area as indicated by the Federal Emergency Management Agency. I further certify that the tract shown herein is within the corporate limits of the City of Highland which has adopted a city plan and is exercising the special powers authorized by division 12 of article II of the Illinois Municipal Code, and that the tract is not within 1 ½ miles of any other city, town or village which has adopted a city plan and is exercising the special powers authorized by said division 12 of article II of the Illinois Municipal Code. I hereby certify that I have reviewed the Mined-Out Coal Area Maps, as available from the Illinois State Geological Survey, and hereby indicate that the subdivision property shown hereon is not within a mined-out area. Given under my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

\_\_\_\_\_  
Professional Land Surveyor

\_\_\_\_\_  
Illinois Registered Number

**County Clerk's Certificate**

I, \_\_\_\_\_, county clerk of Madison County, Illinois, do hereby certify that I find no unpaid or forfeited taxes against any of the real estate included within this plat.

\_\_\_\_\_  
County Clerk

HIGHLAND LAND DEVELOPMENT CODE

\_\_\_\_\_  
Date

**Certificate of City Council**

I, \_\_\_\_\_, Mayor of the City of Highland, do hereby certify that the plat shown herein was duly presented to the City Council and approved at a meeting of same held on \_\_\_\_\_.

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

**9-1-1 Certificate**

I, \_\_\_\_\_ Madison County 9-1-1 Coordinator do hereby certify that the street/road/highway names and numbering system on the attached plat have been reviewed and approved for use.

\_\_\_\_\_  
9-1-1 Coordinator

\_\_\_\_\_  
Date

**Sec. 66-4-23. Administrative review, advisory report.**

Within 45 days form the date of application for final plat approval, the Chief Building and Zoning Official shall review the final plat and supporting data, and shall advise the administrator and City Council in writing whether it substantially conforms to the approved preliminary plat and improvement plans.

**Sec. 66-4-24. Action by City Council.**

- (a) The City Council shall either approve or disapprove the application for final plat approval by resolution within 60 days from the date of said application or the filing of the last item of required supporting data, whichever date is later, unless the council and the subdivider mutually agree to extend this time limit. The City Council shall not approve any final plat unless:
  - (1) The final plat substantially conforms to the approved preliminary plat;
  - (2) The final plat manifests substantial compliance with the design and improvements standards of this Chapter, the zoning code, and the official map;
  - (3) To the council's knowledge and belief, the final plat complies with all pertinent requirements of state law; and
  - (4) All required improvements have been completed, accepted, and dedicated, or a performance bond has been posted with the City Clerk.
- (b) If the City Council fails to act within 60 days, the final plat is considered approved, and the city clerk shall enter the appropriate certification on the plat.
- (c) If the City Council disapproves the final plat, their resolution shall specify the aspects in which the plat fails to meet the conditions for approval.
- (d) The city clerk shall attach a certified copy of the council's resolution of approval or disapproval to the final plat. The clerk shall retain one copy of the resolution and plat, one copy shall be filed with the Chief Building and Zoning Official, and one copy shall be given to the subdivider/developer.

**Sec. 66-4-25. Changes in Approved Final Plats.**

Once a subdivision final plat is approved by the City Council, it shall not thereafter be modified; provided, however, that minor changes may be made upon written application to and approved in writing by the administrator. Major changes require the filing of a new final plat and complete review.

**Sec. 66-4-26. Subdivider's Responsibility.**

At the discretion of the city, the subdivider/developer shall maintain or bear financial responsibility for all the improvements in the subdivision until they have been accepted by and dedicated to the city, or other appropriate entity, and the maintenance period has expired.

**Sec. 66-4-27. Maintenance Bond.**

Prior to dedication of subdivision improvements, the subdivider/developer shall post a maintenance bond with the city clerk in the form approved by the city attorney. This bond shall be fifty percent of the total improvement costs conditioned upon the satisfactory condition of the

## HIGHLAND LAND DEVELOPMENT CODE

required improvements for a period of two years from the date of their acceptance and dedication. If at any time during the two-year period the improvements are found to be defective, they shall be repaired/replaced at the subdivider/developer's expense. If the subdivider/developer fails or refuses to pay such costs within 90 days after demand is made upon him by the Chief Building and Zoning Official, the city shall demand and enforce payment from the maintenance bond to make the necessary repairs/replacement. If the cost of repairs/replacement exceeds the bond amount, the subdivider or developer shall be liable for the excess. At the end of the two-year period, the maintenance bond shall be released.

**ARTICLE V**  
**DESIGN & IMPROVEMENT**  
**STANDARDS**

**ARTICLE V. DESIGN AND IMPROVEMENT STANDARDS**

**DIVISION 1. GENERALLY**

**Sec. 66-5-1. Applicability of article.**

- A) No land within the subdivision and development jurisdiction of this city shall be subdivided or developed except in compliance with the regulations of this article and the applicable provisions of state law (65 ILCS 5/11-12-8; 765 ILCS 205/1 et seq.). No lot in any subdivision shall be conveyed until:
- B) The final plat of said subdivision has been approved by the City Council and recorded in the office of the county recorder of deeds; and
- C) The portion of said subdivision in which the lot is located has been improved in accordance with the requirements of this article or until a performance bond or other security has been posted to assure the completion of such improvements.
- D) The Chief Building and Zoning Official shall not issue a building permit for any lot conveyed in violation of this section.

**DIVISION 2. LAND DEVELOPMENT**

**Sec. 66-5-2. Suitability for development.**

Land that is unsuitable for development due to flooding, poor drainage, rough topography, adverse soil conditions, or other features which will be harmful to the health, safety, and General welfare of the inhabitants of the development and/or its surrounding areas shall not be subdivided or developed unless the subdivider/developer formulates adequate plans/methods to solve the problems caused by the adverse land conditions.

**DIVISION 3. STANDARDS**

**Sec. 66-5-3. General Design Standards.**

This division sets minimum design standards to be used in the design and construction of streets, water, sanitary sewer, storm facilities, and electric distribution. Improvements shall be in accordance with the latest revisions/editions of the following standard references:

- Highland Code
- Highland Land Development Code
- Highland Comprehensive Plan
- Illinois Department of Transportation Standard Specifications for Road and Bridge Construction

## HIGHLAND LAND DEVELOPMENT CODE

- Illinois Department of Transportation Drainage Manual
- Illinois Department of Transportation Design Manual
- Illinois Department of Transportation Construction Manual
- Illinois Department of Transportation Highway Standards
- Administrative Policies – Illinois Department of Transportation Bureau of Local Roads and Streets
- Standard Specifications for Water and Sewer Main Construction in Illinois
- National Electric Code

It is the intent of this Chapter and the City of Highland to facilitate the design of new subdivisions and developments that are in compliance with the provisions and procedures outlined herein. As such, the City has developed details in order to illustrate specific design requirements.

Said details are included herein and made a part hereof by reference. The City shall make said details available to all Subdividers/Developers, who are thereafter encouraged to photocopy said sheets and include them within the construction plans for the proposed development. By doing so, the Subdivider/Developer can more easily make the requirements of this Chapter known to the contractors responsible for the construction and installation of improvements within the development, and be more assured that actual construction will be in compliance with said illustrations.

### **DIVISION 4. LOTS**

#### **Sec. 66-5-4. Standards for Lots and Blocks.**

- A) All lots in a subdivision shall conform to the minimum lot area and dimension requirements of the zoning district in which said subdivision is located; land that is under water or reserved for street improvements shall not be counted to satisfy these minimum requirements. Every corner and through lot shall be large enough to permit compliance with the district's front setback requirements on every side of the lot that faces a street. All lot remnants shall be added to adjacent lots to avoid the creation of unbuildable parcels. All lots shall contain adequate space for required off-street parking and loading. All side lot lines shall be at right angles to straight street right-of-way lines or radial to curved street right-of-way lines except where a deviation from this rule will provide a better street and lot design.
- B) Blocks in a subdivision shall be sufficiently wide to accommodate two tiers of lots having the minimum depth required by the zoning district regulations; provided, that this requirement may be waived in blocks adjacent to local collector or collector streets, railroads, or watercourses.
- C) No block shall be longer than 1,400 feet or shorter than 500 feet. Wherever practicable, blocks along collector streets shall not be less than 1,000 feet in length.
- D) In a subdivision, crosswalks, not less than ten feet wide, may be required through the center of blocks more than 1,000 feet long where necessary to provide circulation or access to schools, playgrounds, shopping centers, transportation, or other community facilities.

**DIVISION 5. MONUMENTS**

**Sec. 66-5-5. Reference monuments.**

In a subdivision, stone or reinforced concrete reference monuments, set in the ground in such a manner that they will not be moved by frost, shall be placed in the field in accordance with the Plats Act, as now or hereafter amended. (65 ILCS 205/1.) All lot corners shall be marked by a minimum of one-half inch diameter iron pins not less than 30 inches long. These pins shall be driven into the ground deep enough that they do not protrude above the ground surface more than one-half inch.

**DIVISION 6. STREET DESIGN**

**Sec. 66-5-6. Street Design Standards**

**5-6.1 General**

The design standards specified hereinafter are minimum standards. All plans and designs are subject to review by the Director of Public Works.

All streets shall be properly integrated with the existing and proposed street system indicated in the municipal comprehensive plan, and shall meet the specifications set forth in subsequent sections.

**5-6.2 Abbreviations**

Wherever in these Specifications or in other contract documents the following terms or pronouns in place of them are used, the intent and meaning shall be interpreted as follows:

AAN	American Association of Nurserymen
AAR	Association of American Railroads
AASHTO	American Association of State Highway & Transportation Officials
ADT	Average Daily Traffic
AISC	American Institute of Steel Construction
ANSI	American National Standards Institute
ARA	American Railway Association
AREA	American Railway Engineering Association
ASA	American Standards Association
ASLA	American Society of Landscape Architects
ASTM	American Society of Testing and Materials
AWG	American Wire Gauge
AWPA	American Wood Preserves Association
AWWA	American Water Works Association
AWS	American Welding Society

## HIGHLAND LAND DEVELOPMENT CODE

BWC	Bridge Welding Code
EPA	United States Environmental Protection Agency
FHWA	Federal Highway Administration
FSS	Federal Specifications and Standards
GSA	General Service Administration
IEMA	Illinois Emergency Management Agency
IEPA	Illinois Environmental Protection Agency
IPCEA	Insulated Power Cable Engineers Association
MUTCD	Manual on Uniform Traffic Control Devices
NEC	National Electric Code
NEMA	National Electrical Manufacturers Association
NESC	National Electrical Safety Code
NRMCA	National Ready-Mix Concrete Association
SAE	Society of Automotive Engineers
UL	Underwriters Laboratories
USASI	United States of America Standards Institute
USDA	United States Department of Agriculture

### 5-6.3 Standards for Streets.

- A) Roadway design life shall be twenty years.
- B) Roadways structural design traffic shall be the projected average daily traffic for the tenth year from the estimated date of construction completion. Trip generations projections shall be based from the Trip Generation Manual developed by the Institute of Transportation Engineers.
- C) The roadbed soils to be used shall be tested or classified per IDOT accepted methods to determine the appropriate Illinois Bearing Ratio minimum value to be used in the design of the roadway.
- D) Pavement types shall be either flexible or rigid (Bituminous Concrete Binder/Surface, Portland Cement Concrete) using IDOT approved materials and combinations of materials, except as provided below. Minimum concrete strength for rigid pavement shall be 3500 psi at fourteen days. Bituminous Surface Treatment (oil and chip) shall not be allowed.
- E) All deleterious materials shall be removed from the proposed roadway limits.
- F) All driveways, from the edge of road pavement or back of curb to the right-of-way, shall be constructed of reinforced concrete in accordance with Article IV, Sec. 62-101 of the Highland Code. Minimum concrete compressive strength shall be 3500 psi at fourteen days. See detail D-ST6, Appendix A, Appendix A.
- G) Road elevations will be determined by the storm water drainage design to limit storm water encroachment to allow for nine (9) feet of dry pavement each side of the centerline on local/residential streets and two-lane collector streets, and one half (1/2) traffic lane maximum encroachment on a 4-lane collector road. Encroachment calculations based on storm water run-off during a twenty-five year twenty-four hour design rainfall event. Refer to Section 66-5-9 for storm water design requirements. Rural drainage employs the use of open channels or

HIGHLAND LAND DEVELOPMENT CODE

swales to convey storm water along the roadway. Urban drainage incorporates curb & gutter along the edge of the pavement for conveying storm water along the roadway.

**TABLE 1.1  
STREET DESIGN SPECIFICATIONS**

Residential Street Classification	Average Daily Traffic	Permitted On-street Parking	Required R.O.W.-Min. (ft.)	Pavement Width (ft.)	Min/Max Cross Slope (%)
Marginal Access	0-100	None	40	10	2%-4%
Local /Residential	100-1,000	One side	50	28 min. (see detail D-ST3, Appendix A)	1%-2%
Minor Collector	1,000-5,000	Both sides	80	36 min. (see detail D-ST2, Appendix A)	1%-2%
Major Collector	Over 5,000	None	100	36 min.-Rural; 44 min.-Urban (see detail D-ST1, Appendix A)	1%-2%
Arterial	To be determined by the Plan Commission and Director of Public Works.	None	100	To be determined by the Plan Commission and Director of Public Works.	1%-2%
Commercial & Industrial Streets		None	65	32	1%-2%

Commercial and/or Industrial Streets to be determined by the Plan Commission and the Director of Public Works.

- 
- H) Curb Radii. To permit safe vehicular movements at corners, the minimum curb radius at the intersection of two streets shall be:

## HIGHLAND LAND DEVELOPMENT CODE

Marginal Access 20 feet

Local/Residential Streets 25 feet

Collector Streets 30 feet

Arterial streets and all streets in any commercial or industrial zones 35 feet.

### **5-6.4 Cul-de-sacs**

- A) Temporary Stub Streets. Streets shall be so arranged so as to provide for the continuation of principal streets between adjacent properties when such continuation is necessary for convenient movements of traffic, effective fire and police protection, and efficient provision of utilities and where such continuation conforms to the City's official maps. If the adjacent property is undeveloped and the street must dead-end temporarily, the right-of-way shall be extended to the property line, and no strip that would prevent connections with future streets shall be reserved. A temporary turnabout shall be provided at the terminus of any temporary dead-end street. The temporary turn around shall have a minimum radius of 35 feet. See detail D-ST5, Appendix A. No oil and chip pavement is allowed for a street that may be extended in the future.
- B) Permanent Dead-End Streets. The terminus of a permanent dead-end street shall not be closer than fifty (50) feet to the boundary of an adjacent tract. A cul-de-sac turnaround, having a minimum outside pavement radius of 43 feet (see detail D-ST4, Appendix A), shall be provided at the end of every permanent dead-end street.

### **5-6.5 Intersections**

- A) Only Two Streets. Not more than two (2) streets intersect at any one point.
- B) Angles. Streets shall be laid out so as to intersect as nearly as possible at right angles; in no case shall two (2) streets intersect at an angle of less than seventy-five (75) degrees. A street shall not be any closer than (100) feet from an intersection.
- C) Proper Alignment. Proper new intersections along one side of an existing street shall, whenever practicable, coincide with any existing intersections on the opposite side of such street. Street jogs with centerline offsets of less than one hundred twenty-five (125) feet shall not be permitted, except where the intersected street has divided lanes without median breaks at either intersection. Intersections involving collector or arterial streets shall be at least eight hundred (800) feet apart.
- D) Adequate Sight-Lines. Where any street intersection will involve earth banks or existing vegetation, the developer shall cut such ground and/or vegetation (including trees) in connection with the grading of the public right-of-way to the extent necessary to provide an adequate sight distance.

### **5-6.6 Additional Right-Of-Way**

## HIGHLAND LAND DEVELOPMENT CODE

Right-of-Way width in excess of the standards set forth in the Table of Street Design Specifications (Table 1.1) shall be required where:

- A) Due to topography, additional width is necessary to provide adequate earth slopes; the maximum cut to fill slope resulting from street grading is four horizontal to one vertical.
- B) Due to the location of railroad tracks, additional width is needed to construct overpasses, underpasses, and approaches thereto.

### **5-6.7 Peripheral Route Access**

Streets intersecting the City's peripheral route shall be a minor collector not less than eight (800) hundred feet apart. Residential driveway access shall not be permitted.

## **DIVISION 7. STREET CONSTRUCTION**

### **Sec. 66-5-7 Street Construction Standards**

#### **5-7.1 General**

- A) All construction must conform to the Illinois Department of Transportation Standard Specifications for Road and Bridge Construction (latest edition) and Construction Manual (latest edition). This includes construction materials and methods, water control, dust control, erosion & sediment control, noise control, pollution control and traffic maintenance/control.
- B) Cross reference – Streets, sidewalks, and other public places, Chapter 62.
- C) Work site shall be kept clean and properly barricaded for safety at **all** times.
- D) All underground utilities underneath or crossing all roadways shall be constructed **prior** to any roadwork.
- E) Surface tests shall be in accordance with applicable sections of the Standard Specifications for Road and Bridge Construction.

All tolerance checks shall be taken and recorded by the Engineer's representative and certified to the Public Works Department by the Engineer. Any work found out of tolerance shall be immediately corrected by the Contractor before proceeding with the work. The deficiency and correction shall be properly recorded by the Engineer's representative with documentation to the Public Works Department. Corrections to asphalt and concrete pavements shall be per IDOT approved methods.

#### **5-7.2 Road Cuts and Patches**

## HIGHLAND LAND DEVELOPMENT CODE

- A) All road cuts must be authorized by the Public Works Department.
- B) Repair of road cuts and patches shall conform to IDOT approved methods.

### **5-7.3 Preservation of Trees**

No trees shall be removed outside of excavated or filled areas, unless authorized by the City. Trees left standing shall be adequately protected from permanent damage by construction operations with use of straw bales fencing or other methods acceptable to the City.

### **5-7.4 Erosion Control**

All erosion from construction activities shall be contained on the construction site by installing **and** maintaining proper barriers as shown on details D-GN1, Appendix A and D-GN2, Appendix A, or other methods approved by the City.

### **5-7.5 Flexible Pavement Construction**

This work shall be in accordance with applicable sections for Bituminous Concrete Binder/Surface of the Standard Specifications for Road and Bridge Construction.

The Director of Public Works shall approve all mix designs prior to construction.

### **5-7.6 Rigid Pavement Construction**

As a preferred method, Portland Cement Concrete Pavement shall be placed with a slip-form paver with an electronic grade-control system, and capable of striking off, consolidating, and finishing the pavement to the required cross section. Pavement may **not** be placed monolithically with the curb and gutter.

The Director of Public Works shall approve all mix designs prior to construction.

### **5-7.7 Curb and Gutter Construction.**

All streets, except those classified as alleys, shall be constructed with curbs and guttering of Portland Cement Concrete.

- A) Those streets classified as Major Collector shall be constructed with a B-6.24 vertical combination curb and gutter in accordance with Standard 606001-01 of the IDOT Highway Standards.
- B) Those streets classified as Minor Collector, Residential, or Marginal Access may be constructed with either a vertical combination curb and gutter, or with a mountable curb and gutter as shown on detail D-ST7, Appendix A.
- C) Curb and gutter shall be constructed separately from PCC Pavement.
- D) Contraction joints and expansion joints shall be installed in curb and gutter, in prolongation with joints in adjacent Portland Cement Concrete pavement or base

## HIGHLAND LAND DEVELOPMENT CODE

course, except that dowel bars shall not be required in contraction joints. Joints shall not exceed fifteen (15) feet.

- 1) Contraction joints shall be sealed in accordance with IDOT Standard Specifications.
- E) When curb and gutter is constructed adjacent to flexible pavement, a one (1) inch expansion joint shall be installed at points of curvature for short-radius curves and at construction joints.
  - 1) Contraction joints shall be placed between expansion joints at distances not to exceed fifteen (15') feet.
- F) All expansion joints shall be constructed with a minimum one (1) inch thick preformed expansion joint filler conforming to the cross section of the curb and gutter, and shall be provided with a one and one-fourth (1 1/4) inch diameter by eighteen (18) inch long, coated smooth dowel bar conforming to standard specifications.
  - 1) Said dowel bar shall be fitted with a cap having an inched stop that will provide a minimum one (1) inch of expansion.
- G) Construction joints constructed in curb and gutter adjacent to Portland Cement Concrete pavement and Portland Cement Concrete base course, shall be provided with #4 deformed steel tie bars at least thirty (30) inches long, and placed on nine (9) inches or more centers with a minimum of two (2) bars per joint.

### **5-7.8 Testing**

- A) Testing for subgrade, base course, pavement, and sidewalks shall be in accordance with the Manual for Test Procedures of Materials per the Illinois Department of Transportation.
- B) All samples and tests must be taken by an independent Engineering Testing Laboratory at the expense of the contractor or developer.
- C) An original and one copy of all test results shall be promptly submitted to the Public Works Department. The test results shall be signed, sealed and dated by the Professional Engineer of the testing laboratory Company.
- D) Any work found deficient by the test results shall be removed and replaced by the Contractor at their expense.
- E) The testing laboratory must be authorized to operate in the State of Illinois and maintain a full-time Registered Professional Engineer on staff to review services.

### **5-7.9 Signage**

Street name signs and traffic control devices of the size, height, and type approved by the Director of Public Works shall be supplied and placed by the developer at all intersections within or abutting any subdivision.

## HIGHLAND LAND DEVELOPMENT CODE

All addresses will be assigned by the city in conjunction with the Madison County 911 Coordinator. Street names shall be sufficiently different in sound and spelling from other street names in this city and 911 emergency service number area as to avoid confusion.

- A) Street name signs shall be placed at all street intersections and shall be white lettering on dark blue background. Street name shall be in upper case primary six inches high per foot, Highway Standard 2380-4.
- B) Sign height and location shall conform to the Manual on Uniform Traffic Control Devices and IDOT specifications, except as otherwise required in these specifications.
- C) Sign material shall be aluminum (0.080) gage thickness.
- D) Signs shall use an Engineer grade 3M blue sheeting for the background and silver (white) for the lettering.
- E) Sign posts shall be metal U-channel 2 pounds per foot, ten foot in length, painted green.
- F) Sign mounting shall be on the top of the sign post. The street name sign shall have a vertical ground clearance of seven feet.
- G) Post mounting shall be embedded in the ground two feet minimum.
- H) All regulatory signs shall conform to the Manual on Uniform Traffic Control Devices and IDOT specifications, pertaining to materials, shapes, lettering, symbols, coloring, location and placement.
- I) A street which is planned as a continuation of an existing street shall bear the same name.

### **5-7.10 Pavement Markings**

- A) All markings shall conform to the Manual on Uniform Traffic Control Devices and IDOT specifications and requirements.
- B) Cross walks shall be two (2) feet by six (6) feet “Continental Crosswalk” in accordance with MUTCD.
- C) Marking paint shall be reflective.
- D) Pavement lane and edge lines are required on Arterial, Major Collector, and Minor Collector unless otherwise directed by the Public Works Department.
- E) Bicycle lane markings shall be marked as required.

### **5-7.11 Survey Markers**

## HIGHLAND LAND DEVELOPMENT CODE

- A) Permanent survey reference markers shall be installed at all points of curvature and right-of-way corners.
- B) Location and installation shall be performed under the direct supervision of a Professional Land Surveyor licensed in the State of Illinois.
- C) A brass disc shall be used in Portland cement concrete streets.

### 5-7.12 Sidewalks

In a subdivision, sidewalks shall be required:

- 1) On the recommendation of the Plan Commission that sidewalks are needed to ensure public safety.
- 2) Along streets (both sides), near schools, and in shopping areas similar to public places.

The requirements of this section shall not be waived unless the Plan Commission advises the City Council that, in the area in question, sidewalks are not needed to ensure public safety, and/or that topographical conditions make the installation of sidewalks impractical. All sidewalks constructed within the city shall meet the Illinois Department of Transportation Standard Specification for Road and Bridge Construction.

- A) Sidewalks shall be accessible to the handicapped per the American Disabilities Act (ADA).
- B) Sidewalks butting to the roadway pavement at intersections shall align with the sidewalk or proposed sidewalk on the opposite side of the street.
- C) The minimum width of sidewalk shall be five feet. See detail D-ST6, Appendix A.
- D) The minimum distance between the back of curb and the face of sidewalk shall be two feet with a maximum slope of 4%.
- E) Sidewalks shall be constructed with 3500 psi compressive strength at 14 days Portland Cement Concrete in accordance with Section 424 of the Standard Specification for Road and Bridge Construction.
- F) Sidewalk pitch (slope from side-to-side) shall be  $\frac{1}{4}$ " per foot (2%). The longitudinal slope shall not exceed ADA standards.
- G) Sidewalk handicap ramp grade shall not exceed one vertical to twelve horizontal (8.3%).
- H) Sidewalk shall be constructed of a minimum of four (4) inches in-thickness of Portland cement concrete with four (4) inches in-thickness of aggregate base (CA 6) except across driveway, where the minimum thickness of walk shall be six (6) inches with four (4) inches of base. See detail D-ST6, Appendix A.

## HIGHLAND LAND DEVELOPMENT CODE

- I) Sidewalks shall be built on a continuous grade through driveways with a maximum pitch of 2%. See detail D-ST6, Appendix A.
- J) All vegetation and tree roots shall be removed from the sidewalk area to allow sufficient thickness of concrete. The aggregate base may be eliminated in those areas next to the tree. No trees, roots or plants may be removed or pruned without the authorization from the resident inspector.
- K) Ramps shall be constructed as appropriate at road crossings. Conforming to IDOT Standard 424001, Type B ramp. The width of the ramp (excluding the flared sides) shall match the sidewalk width.
- L) Expansion joints shall be placed where the sidewalk concrete butts existing concrete and every one hundred (100) feet along the length of the sidewalk.
- M) Contraction joints shall be placed every five (5) feet, where possible, along the length of the sidewalk. In any case, the joint spacing shall not exceed six (6) feet, nor be less than four (4) feet.
- N) Concrete surface finish and curing shall be per IDOT Type B finish specifications. No smooth finishes will be accepted.
- O) Concrete curb cuts for sidewalk ramp construction shall be done per IDOT approved procedures.
- P) Work area shall be protected and properly barricaded for safety to the public.
- Q) Testing shall be conducted as specified in Section 66-5-7.8.
- R) Courtesy walks are Portland cement concrete sidewalks perpendicular to the main sidewalk extending from the back of curb to the main sidewalk. They shall be three (3) feet in width with no cross slope.

### **5-7.13 Maintenance Responsibility.**

Subsequent to completion of street construction by the subdivider, and the receipt of all of the construction testing reports, the as-built record drawings and the engineer of record's certification that the improvements are in substantial compliance with the development specifications, plans, and intent, the Director of Public Works shall make a final inspection of all streets to ascertain the acceptability of structural condition, earth slopes, drainage structures, etc. If said inspection indicates no deficient items, the city shall take formal action to accept the completed streets for maintenance based upon the Director of Public Works' recommendation. Should any item need correction or repair, the subdivider will be notified in writing of each deficiency. No street(s) will be accepted in a subdivision until all streets comply with the city's requirements to the satisfaction of the Director of Public Works.

## **DIVISION 8. STORM WATER**

**Sec. 66-5-8. Storm Water Management Requirements.**

**5-8.1 General.**

- A) Any person, firm, corporation, or other entity proposing to construct buildings or develop land within the jurisdiction of the City shall prepare, for review by the Director of Public Works, a Storm Water Management Plan that describes the manner in which erosion, sediment and run-off resulting from the development will be controlled and managed. The provisions of this section shall be applicable to the following developments:
- 1) Any residential development, or redevelopment, having a gross aggregate of one (1) acre or more; or
  - 2) Any commercial, industrial, institutional or utility development, or redevelopment that has a gross aggregate area of one half (1/2) acre or more.
- B) No building or construction permits or plat approval shall be issued by the City until the Storm Water Management Plan has been reviewed and approved by the Director of Public Works as meeting the requirements of this Ordinance, or the requirement for such Storm Water Management Plan has been waived by the Director of Public Works.
- C) Downstream property owners, watercourses, channels, or conduits shall not receive storm water runoff from proposed upstream developments at a higher peak flow rate than would have resulted from the same storm event occurring over the site of the proposed development with the land in its natural, undeveloped conditions, nor shall storm water runoff exceed the capacity of the natural drainage system.
- D) Storm water runoff resulting from a proposed development shall be detained on-site;
- 1) By wet or dry bottom reservoirs;
  - 2) By underground reservoirs;
  - 3) On flat roofs, parking lots, or streets; or
  - 4) By other detention methods reviewed by the Director of Public Works.
- E) For purposes of designing adequate on-site detention facilities, the Illinois State Water Survey Bulletin 70 rainfall data for this region shall be used.
- F) All storm water facility maintenance shall be in accordance with Section 66-5-12.7 of the Highland Code.

**5-8.2 Detention Basins.**

Detention basins may be constructed to temporarily detain the storm water runoff so that the rate at which it is released is the same rate as before development. The requirement for storm water detention shall be evaluated for all development or re-development projects submitted to the City for review and approval. Detention shall be deemed necessary if the post-development runoff exceeds the

## HIGHLAND LAND DEVELOPMENT CODE

pre-development runoff by two (2) cfs or more for a ten (10)-year design storm. The following features shall be incorporated into the design of any detention basin:

- A) The storm water drainage system shall be designed to control the peak rate of discharge from the site for the 2-year and 50-year, 24-hour storm events to levels that will not cause an increase in flooding or channel instability downstream when considered in aggregate with other developed properties and downstream drainage capacities.
- B) The post-developed peak flow rate from the site may not exceed the existing peak flow rate for the 2-year and 50-year, 24-hour storm events.
- C) Outlet works shall be designated to limit peak outflow rates from detention storage areas to or below peak flow rates that would have occurred prior to the proposed development. Due to the potential for maintenance problems associated with small diameter outfall pipes from detention facilities, no outfall pipe smaller than four (4) inches in diameter shall be used.
- D) Outlet works shall not include any mechanical components or devices and shall function without requiring attendance or control during operation.
- E) Emergency spillways shall be provided to permit the safe passage of runoff generated from a one hundred (100) year, twenty-four (24) hour storm event.
- F) The basin shall have sufficient volume and spillway capacity to pass/contain the 100-year, 24-hour storm event with the low flow outlet obstructed.
- G) The 2-year, 50-year and 100-year, 24-hour inflow hydrographs for the existing and developed conditions shall be determined by utilization of Technical Release 55 (TR-55), "Urban Hydrology for Small Watersheds" from the Natural Resources Conservation Service (NRCS), formerly Soil Conservation Service (SCS) or the equivalent methodology embodied in other appropriate procedures. The inflow hydrographs shall be developed based on the actual flow and timing characteristics upstream of the detention facility. The design storm shall be Type II rainfall distribution.
- H) Pre-development runoff shall be based upon a maximum CN value of 76 for type B hydrologic soils groups and a CN value of 82 for type C hydrologic soils groups in agricultural areas unless the engineer provides significant evidence (e.g. prior development) for a higher existing value.
- I) Detention basin volume will be based on routing of the post-developed two (2)-year, and fifty (50) year twenty-four (24) hour inflow hydrographs through the detention basin while satisfying the appropriate allowable release rates.
- J) Routing may be performed manually or by appropriate computer methods. In all cases, it must be shown that backwater does not affect the performance of the detention outlet, or that the method employed is capable of evaluating such downstream effects.
- K) The developer's engineer shall be required to submit the following computations for evaluation of the storm water detention system:
  - 1) Elevation vs. Discharge tables or curves for outflow structure(s).
  - 2) Elevation vs. Storage tables or curves for the basin or pond.

## HIGHLAND LAND DEVELOPMENT CODE

- 3) Routing calculations and data for all storm frequencies to include (at least): Inflow, storage, elevation, and outflow throughout the storm runoff and outflow duration. These parameters must be shown at intervals short enough to at least define the peak inflow and outflow.
  - 4) Hydraulic grade line computations for pipes entering and leaving the detention basin for all storm frequencies.
- L) A registered professional engineer shall seal all storm water computations.
  - M) The maximum planned depth of storm water stored shall not normally exceed four (4) feet.
  - N) The maximum side slopes for grassed basins shall not exceed one (1) foot vertical for three (3) feet horizontal (3:1 slope).
  - O) In no case shall the limits of maximum ponding be closer than thirty (30) feet horizontally from any building and less than two (2) feet vertically below the lowest sill elevation. A minimum of one foot of freeboard shall be provided within the basin for the 50-year, 24-hour storm event, and a minimum of two feet shall be provided between the design high water surface and any adjacent building.
  - P) The basin bottom should be designed to drain expeditiously. If the bottom is to be grass, it should have a minimum slope of one percent (1%).
  - Q) Small flows through the detention basin should be handled by paved ditches from inflow structures to outflow structure to minimize erosion.
  - R) If the detention basin is to have other uses, the design of the basin bottom should include underdrains to expedite drying of the bottom between runoff events.
  - S) Designs should result in aesthetically pleasing configurations that will enhance public acceptability.
  - T) Outfall storm sewer structures for detention ponds and basins shall be piped through lots.

### **5-8.3 Retention Ponds.**

Retention Ponds may also be used to temporarily detain the differential runoff from the development. In addition to the general design features for detention basins as listed above, the following should also be incorporated into the design of any detention pond.

- A) In order to minimize weed growth, the normal pool depth should be four (4) feet minimum.
- B) If fish are to be kept in the pond, at least one-quarter of the area of the permanent pool should have a minimum depth of ten (10) feet.
- C) In order to ease cleaning of the pond or shoreline maintenance, the pond design should include provisions for emptying the pond.
- D) The design of any pond may include a low flow by-pass channel or pipeline to divert runoff that can be accommodated by downstream drainageways.

## HIGHLAND LAND DEVELOPMENT CODE

- E) In order to minimize the effects of waves or ice, some type of bank stabilization such as riprap or concrete should be placed along the normal pool shoreline.
- F) The side slopes below the normal pool elevation may exceed the maximum side slope permitted above normal pool. The design shall, however, include provisions for a safety ledge having a depth of water not greater than three (3) feet immediately adjacent to the shoreline.
- G) Outfall storm sewer structures for detention ponds and basins shall be piped through lots.

### **5-8.4 Other Detention Methods.**

- A) Detention storage may be met in total or in part by detention on roofs. Details of such design, which shall be included in the building permit application, shall include the depth and volume of storage, details of outlet devices and downdrains, elevations of overflow scuppers, design loadings for the roof structure and emergency overflow provisions. Direct connection of roof drains to sanitary sewers is prohibited.
- B) All or a portion of the detention storage may also be provided in underground or surface detention facilities, to include basins, tanks, or swales.

### **5-8.5 Safety Feature.**

- A) The design of detention facilities shall incorporate safety features, particularly at outlets, on steep slopes, and at any attractive nuisances to include, as necessary, fencing, handrails, lighting, steps, grills, signs and other protective or warning devices so as to restrict access during critical periods and to afford some measure of safety to both authorized and unauthorized persons.

### **5-8.6 Detention Facility Construction.**

- A) The storm water detention facilities must be built in conjunction with the storm sewer installation and be fully operational after the clearing of vegetation.
- B) Silt and debris connected with early construction shall be removed periodically from the detention area to maintain full storage capacity.

### **5-8.7 Storm water Management Plan.**

- A) In order to insure compliance with the requirement for a Storm Water Management Plan, every Subdivider/Developer shall provide the following:
- B) Topography plans showing all existing and proposed grades, culverts, ditches, inlets, and other storm water management features, along with:
  - 1) Detention calculations and a site plan detailing total drainage area and breakdown of land usages, time of concentration, existing peak discharge for

## HIGHLAND LAND DEVELOPMENT CODE

each design storm, existing and proposed runoff coefficient, and total required detention; and

- 2) The location of proposed detention facilities detailing limits of ponding for each design storm and total available volume, detail of outlet structure(s), and calculations showing peak discharge from outlet structure(s) for each design storm.
- C) The Director of Public Works, on a case-by-case basis, shall have the authority to require additional information for a proper review and to grant variations from those requirements in this Section that may not apply.
- D) Any storm water design calculations reviewed and approved by the Illinois Department of Transportation shall serve as fulfilling the requirements in this Section provided that the developer submits documentation of such approval.
- E) The minimal design requirements of this Chapter, shall not be construed to relieve the Subdivider/Developer of any legal responsibilities for downstream/upstream storm water damages inflicted by runoff or backup from the development.

### **5-8.8 General Storm Water Design Considerations.**

- A) The plans and specifications of every drainage and storm sewer system shall include provisions to show compliance with the drainage laws of the State and any subdivision thereof in effect at that time, provided, however, that by requiring that the Subdivider/Developer evidence planned compliance with drainage laws, the City assumes no responsibility to landowners or others for damage caused by noncompliance with such laws.
- B) Properly sized storm sewers shall be provided to carry surface runoff from streets and curb and/or gutters and shall be of sufficient length that they transport the runoff at least sixty (60) feet from the street pavement and into existing natural drainageways or swales and approved drainage facilities.
- C) Natural drainage swales may be utilized to accommodate surface runoff providing they are located near lot lines and the flows induced therein do not pose a health or safety hazard for residents or occupants.
  - 1) In general, all drainage swales having less than 1.0% slope shall be paved with Portland Cement Concrete or shall utilize storm sewers to transport storm water flows. Ditches over two (2) feet deep from grade to flow line shall utilize storm sewer to carry storm water flows.
  - 2) Open channels shall have a minimum two (2) feet flat bottom with maximum three (3) feet horizontal to one (1) foot vertical side slope.
- D) Drainage facilities shall be adequate to accommodate potential runoff from the entire drainage area upstream of the proposed subdivision.
  - 1) Potential runoff shall be determined on the basis of maximum land use of the upstream area that is consistent with current zoning or adjacent land use trends.

## HIGHLAND LAND DEVELOPMENT CODE

- E) In order to protect downstream property from potential damages by increased flows or greater velocities, and where such facilities are deemed necessary in the interest of public safety and welfare, the City shall require the Subdivider/Developer to install drainage detention or retention facilities.
  - 1) Drainage detention facilities shall be designed to accommodate the excess runoff, due to the proposed development, from the one hundred year design storm.

### **5-8.9 Specific Storm Water Design Requirements.**

- A) Storm sewers/pipes hydrologic/hydraulic design shall be undertaken by utilization of either the Rational Method, as discussed in the IDOT Drainage Manual, using Illinois State Water Survey Bulletin – 70, or by the Soil Conservation Service TR-55 or TR-20 methodology as applicable. Detention facilities shall be designed by the methodology discussed in the IDOT Drainage Manual Detention Storage Section, or designed by utilizing the Corps of Engineers HEC-1 program or the WSPRO (Water Surface Profiles Program).
- B) Storm sewers/pipes shall be designed and installed by the Subdivider/Developer to satisfactorily accommodate the surface runoff incident to the twenty-five (25) year design storm
- C) Design calculations showing velocity of the storm sewers, discharge velocity, and design of any riprap in accordance with the Corps of Engineers HEC-11 program, shall be submitted to the City for all storm sewer pipes. The Subdivider/Developer's engineer shall also submit the Engineer's Hydraulic/Hydrologic Drainage Summary.
- D) The minimum diameter of storm sewers shall be twelve (12) inches and the minimum diameter of pipe culverts shall be fifteen (15) inches. All ending runs of storm sewer and/or culverts shall have an appropriate end section.
- E) Storm sewers located under paved surfaces and right-of-way shall be of reinforced concrete pipe with rubber gasket joints and sufficient wall thickness and reinforcement to carry the intended loading, meeting the requirements of ASTM C-76 and ASTM C-443.
- F) Storm sewers/pipes located outside paved surfaces and right-of-way may be of any of the following materials;
  - 1) Reinforced concrete pipe with sufficient wall thickness and reinforcement to carry the intended loading, and meeting the requirements of ASTM C-76.
  - 2) Precoated galvanized corrugated steel culvert pipe and precoated galvanized corrugated steel pipe arch fabricated from precoated steel sheets, and conforming to AASHTO M 246M (M246), Grade 10/3. The precoated culvert pipe and pipe arch shall conform to the requirements of AASHTO M 245M (M245), except that the sheet thickness for the respective diameters of pipe and fill heights shall be as specified in Tables IB and IIA of Article 542.03 of the IDOT

## HIGHLAND LAND DEVELOPMENT CODE

Standard Specifications. Precoating of the connecting bands will not be required.

- 3) Bituminous coated corrugated steel culvert pipe and bituminous coated steel pipe arch conforming to the requirements of AASHTO M 190, Type A. Any bituminous coating damaged in shipment, during installation, or prior to final acceptance shall be repaired by the Subdivider/Developer to the satisfaction of the Director of Public Works. Bituminous coating for the connecting bands will not be required.
- 4) Polyethylene pipe conforming to AASHTO M294-94. This pipe shall have a smooth wall interior fitted with elastomeric gaskets conforming to ASTM F477-93.
- G) The Subdivider/Developer shall be responsible for providing the proper plate gauges for the particular loading situation encountered, and for increasing minimum plate gauges as the final loading dictates.
- H) All trenches for pipe/storm sewers that are located under paved surfaces shall be properly backfilled and properly compacted to a density not less than ninety percent (90%) of maximum standard lab dry density as prescribed by AASHTO T-99 and in accordance with the Standard Specification for Road and Bridge Construction.
- I) Storm sewer manholes, designed in accordance with the Standard Specification for Water and Sewer Main Installation in Illinois shall be installed at all changes in vertical grade or horizontal alignment of storm sewers, if at locations other than inlets/catch basins.
- J) The spacing for inlets/catch basins shall be calculated so that the runoff from the design storm shall allow for a minimum of nine (9) feet of dry pavement each side of the centerline on local/residential streets and two-lane collector streets, and one half (1/2) traffic lane maximum encroachment on a 4-lane collector road; however, that under no circumstances shall such spacing exceed five hundred (500) feet.
  - 1) Inlets/catch basins shall be constructed in accordance with the standards.
  - 2) No open throat inlet shall have an opening greater than five (5) inches high unless said opening is protected by a cross bar intended to prevent the entry of persons into the throat of the inlet.
  - 3) Vaned inlets shall be used within the curb and gutter on streets where the slope exceeds five percent (5%), in order to prevent the by-pass of storm water flows.
- K) The minimum and maximum gradients of pipes/storm sewers shall conform to the following criteria:
  - 1) Minimum grade shall be three-tenths percent (.3%).
  - 2) There is no maximum grade; provided, however, that riprap and/or energy dissipaters shall be utilized at discharge points, as needed, to minimize erosion.

## HIGHLAND LAND DEVELOPMENT CODE

- L) The minimum and maximum gradients of earth drainage ways and/or swales shall conform to the following criteria:
  - 1) Minimum grade shall be one percent (1%), which may be reduced to thirty five hundredths percent (.35%) if paved with concrete.
  - 2) Maximum grade shall be three percent (3%) with no protection other than sod, or twelve percent (12%) with paving, rip rap, and/or energy dissipaters.

### **5-8.10 Sump Pump Drainage**

- A) Sump pump drainage lines shall be required for all new subdivisions.
- B) The pipe system for sump pump drainage shall consist of six (6) inch diameter Schedule 35 PVC at a minimum depth of thirty-six (36) inches. A clean out shall be located every four hundred (400) feet or less, at every change in direction, and at every junction of two or more lines. The piping system shall be connected to the drainage facility within the subdivision. Slope shall be a minimum 2.5%.
- C) All service lines to the main shall be privately owned and maintained and shall be a minimum one and one half (1 ½) inch diameter.
- D) All connections to the sump pump drainage system shall be a tee fitting cut into the system and inspected by the City.
- E) The sump pump drainage lines are intended for sump pump drainage only. Surface drainage shall not be allowed into the line. Storm sewer shall be installed if surface drainage and sump pump drainage are combined.

## **DIVISION 9. WATER**

### **Section 66-5-9. Standard for Water Services.**

#### **5-9.1 General.**

- A) It is the responsibility of the Subdivider/Developer to install, or have installed, all water mains necessary to serve the proposed development. In addition, the Subdivider/Developer shall connect the water mains within said subdivision to the public water system, under the direction and supervision of the City, but at no cost to the City.

#### **5-9.2 Construction Plans.**

- A) The Subdivider/Developer's engineer shall first prepare detailed construction plans, determine a complete bill of materials, and complete all forms and submissions required for a permit from the Illinois Environmental Protection Agency.

## HIGHLAND LAND DEVELOPMENT CODE

- B) The Director of Public Works and the Supervisor of Water Distribution and Sewer Collection shall review and approve said plans prior to submittal to the IEPA. It is the Subdivider/Developer's responsibility to secure IEPA approval.
- C) Design and construction shall be in accordance with the applicable portions of the current edition of the 'Standard Specifications for Water and Sewer Main Construction in Illinois'.
- D) Plans for, and actual installation of, all water mains shall assure at least a five (5) feet separation from all other utilities. Separation from sanitary sewer and storm sewers shall be in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois.

### **5-9.3 Main Requirements.**

- A) Every water main extension installed by a Subdivider/Developer, either inside or outside the limits of his subdivision, shall be a minimum of eight (8) inches in diameter.
- B) If a water main extension will ultimately serve future developments, the City may require the main to be larger than the minimum size.
- C) If the water main will supply industrial or commercial developments, it shall be a minimum of twelve (12) inches in diameter.
- D) All water mains shall be constructed of either ductile iron (Class 52, or Class 151) meeting the requirements of AWWA C-104 and 110, or C 900 PVC water main meeting the requirements of ASTM D-2241 and having slip-on-joints with rubber gaskets meeting the requirements of ASTM D-3139.
- E) All water mains shall be a minimum forty-two (42) inches below finished grade.
- F) Gate valves shall be Underwriter's Lab approved resilient seat gate valves AWWA C-500 and shall be installed in valve boxes as specified by the City.
- G) Valve boxes shall be manufactured by "Tyler" brand cast iron 5 1/4" with screw type adjustment with valve box adapter manufactured by Adapter Inc. Lids shall be cast iron marked "Water". See detail D-W2, Appendix A.
- H) All bends and fittings shall be mechanical joints conforming to AWWA C111 and C600.
- I) The Subdivider/Developer shall install THWN soft drawn solid No. 12 copper tracer wire shall be taped on the side of the pipe at ten (10) feet intervals maximum. Provide double length loop inside one half-inch CPVC conduit extending eight (8) inches above the ground surface at valve boxes.
- J) Where the trench for any water main or service line crosses the location of a street or right-of-way, it shall be backfilled in accordance with Detail D-W1, Appendix A.

### **5-9.4 Fire Hydrants.**

- A) The Subdivider/Developer shall submit a plan to the City for review of fire hydrant locations within the development.

## HIGHLAND LAND DEVELOPMENT CODE

- B) The spacing between fire hydrants shall not exceed four hundred (400) feet.
- C) Upon approval of said plan, the Subdivider/Developer shall install hydrants at the designated locations.
- D) Without substitution, hydrants shall be AWWA C-502 Mueller Super 200 Centurion or Kennedy K-81A Guardian. The City shall specify.
- E) Fire Hydrants shall be in accordance with detail D-W3, Appendix A.
- F) Hydrants shall be set so that at least the minimum pipe cover is provided for branch supply line and the nozzles are eighteen (18) to twenty-four (24) inches above finished grade. Each hydrant shall be anchored with two (2) three quarter ( $\frac{3}{4}$ ) inches threaded stainless steel rods from the hydrant to the mechanical joint tee on the main. All steel rods shall be coated with two coats of thixotropic coal tar as specified in the Polyvinyl Chloride (PVC) Pressure Pipe and Fittings section.
- G) Hydrant drainage shall be provided by installing at least 9 cubic feet of one (1) inch diameter clean rock around the hydrant and below the top of the hydrant supply pipe.
- H) All hydrants shall stand plumb. Hydrants with pumper nozzles shall have hose nozzles parallel with, and the pumper nozzle perpendicular to, the curb line. Hydrants located behind curbs, where sidewalks extend close to or abut the curb, shall be set so that no portion of the pumper or hose nozzle caps will be less than 12 inches from the back edge of the sidewalk and four feet from the back of curb. Where set between the curb and sidewalk, or between the sidewalk and property line, no portion of the hydrant or nozzle cap shall be within 12 inches of the sidewalk and 4 feet from the back of curb. Where no curb exists, the hydrant shall be no closer than 8 feet from the edge of pavement and 6 feet from the flow line of the drainage ditch.
- I) Immediately before installation of a hydrant, the following operations shall be performed: (a) the hydrant shall be thoroughly inspected; (b) the hydrant interior shall be thoroughly cleaned; and (c) the hydrant shall be opened and closed as many times as may be necessary to determine if all parts are in proper working order, with valves seating properly and the drain valve operating freely.

### **5-9.5 Water Service Lines.**

No service connection shall pass through property other than the property it serves.

Individual services are required for each customer. Multiple unit building(s) more than four units shall use a one (1) inch tap for every two (2) units unless one or both unit(s) requires a larger service. Two (2)-three quarter ( $\frac{3}{4}$ ) inch services shall branch from the tap to serve two units. A curb stop is required for each unit served.

Material Specifications:

## HIGHLAND LAND DEVELOPMENT CODE

- A) Tapping saddle AWWA taper thread (CC) 85-5-5-5 waterworks brass, 2-in to have double band (ASTM B-62), Ford S/90 for C900 PVC and Ford 101B for ductile iron; McDonald 3895 for C-900.
- B) Corporation stop AWWA-CC threaded by flare, plug-type valve, (ANSI/AWWA) C800, Ford-600.
- C) Unions Flared, copper, 3-piece, Ford or Mueller.
- D) Curb valves Inverted key, bronze construction, flare connection, Mueller H15200.
- E) Curb box  $\frac{3}{4}$  and 1 inch, cast-iron box and cover, extension type, without opening rod, Mueller 10306.
- F) Copper tubing ASTM B88, Type K one (1) inch or less, PVC Schedule 40 more than one (1) inch.

### 5-9.6 Testing.

- A) The Subdivider/Developer shall be required to provide air testing and sampling as required by the IEPA and in accordance with the Standard Specifications for Water and Sewer Main Construction in Illinois, in order for the City to obtain an Operating Permit. The Subdivider/Developer shall clean and disinfect all water mains per the IEPA requirements at their expense.
- B) The Public Works Department shall be present during the performance of all testing work and shall be notified of the time and place of testing at least forty-eight (48) hours prior to commencement of the test.
- C) Water meters and pressure gauges shall be accurately calibrated and shall be subject to review and acceptance by the Public Works Department.
- D) A Public Works representative shall deliver all samples to the laboratory for testing. Samples must pass and the Public Works Department must receive written confirmation of the results from the laboratory.

### 5-9.7 IEPA Approval.

No connection to the existing water main, or water service taps shall be made until such time as the City has received an Operating Permit from the IEPA.

## DIVISION 10. SANITARY SEWER

### Sec. 66-5-10 Specific Standards for Public Sanitary Sewers.

#### 5-10.1 General.

- A) It is the sole responsibility of the Subdivider/Developer to provide a sanitary sewage disposal system for every subdivision or development, which complies

## HIGHLAND LAND DEVELOPMENT CODE

with the regulations of the Illinois Department of Public Health ("Private Sewage Disposal Licensing Act and Code"), the Illinois Environmental Protection Agency, and/or the Madison County On-Site Sewage Disposal. In addition, the Subdivider/Developer shall connect the sanitary sewer mains within said subdivision or development to the public sewer system, under the direction and supervision of the City, but at no cost to the City.

- B) Sanitary sewer shall not be interconnected with any storm sewer piping or drains.

### **5-10.2 Requirements for Extension of Existing Mains**

- A) If the public sanitary sewer system is within six hundred feet (600') of the proposed subdivision or development, and said system has the available capacity, the Subdivider/Developer shall extend the existing system and sewer to his entire proposed development at his own expense.
- B) Should the public sanitary sewer system be more than six hundred feet (600') away from the proposed subdivision or development, the City may negotiate with the Subdivider/Developer to share the cost of extending the existing system and sewer.

### **5-10.3 Construction Plans.**

- A) The Subdivider/Developer shall employ a professional engineer registered in the State of Illinois to first prepare detailed construction plans, including the extension of any existing public sewer main, determine a complete bill of materials, and complete all forms and submissions required for a permit from the Illinois Environmental Protection Agency.
- B) The Director of Public Works and the Supervisor of Water Distribution and Sewer Collection shall review and approve said plans prior to submittal to the IEPA. It is the Subdivider/Developer's responsibility to secure IEPA approval.
- C) Design and construction shall be in accordance with the applicable portions of the current edition of the "Standard Specifications for Water and Sewer Main Construction in Illinois".
- D) As part of said plans, the Subdivider/Developer shall locate every sanitary sewer main within the right-of-way, or within an easement.
- E) The City shall retain the right to disapprove the proposed location of any sewer main.

### **5-10.4 Sewer Pipes.**

- A) Pipes used for sewer mains shall either be polyvinyl chloride (PVC) sewer pipe conforming to ASTM D 3034, type PSM for sizes 8"-15" and ASTM F-679-89 for sizes 18"-36".
- B) For PVC pipe, the Standard Dimension Ratio (SDR) shall be a minimum of 26.
- C) The PVC plastic pipe shall have a minimum cell classification of 12454-C, and shall have a minimum pipe stiffness of forty-six (46) pounds per inch per inch (317 kPa).

## HIGHLAND LAND DEVELOPMENT CODE

- D) Joints for PVC sewer pipe shall conform to ASTM D-3212.
- E) Bedding, haunching, and backfill shall be in accordance with Detail D-SN2, Appendix A.
- F) The minimum allowable size for sewer mains shall be eight (8) inches in diameter.
- G) All sewer mains shall be installed using a laser to align the sewer to the correct vertical grade and horizontal alignment.
- H) The maximum distance between manholes shall be four hundred (400) feet.
- I) Minimum cover over sewer collection pipe shall be five (5) feet, unless approved by the Director of Public Works.
- J) PVC shall be installed and backfilled with CA-7 aggregate in conformance with the Standard Specifications for Water and Sewer Main Construction in Illinois.
- K) Where a sewer main crosses under the location of a street, drainage structure, right-of-way or other paved areas, the trench shall be backfilled in accordance with Detail D-SN2, Appendix A.
- L) No other utility shall pass through, or come in to contact with, a sewer pipe.

### **5-10.5 Service Connections.**

- A) The Subdivider/Developer shall provide a six (6) inch SDR 26 service connection for each residential lot, accomplished by way of a sanitary tee fitting matching the diameter of the sewer main and the service lateral, made from the same material as said pipes, and installed in the sanitary sewer main in order to provide for connection of said laterals to the sewer main. Services shall not be allowed to cross private property to serve the intended property.
- B) The sanitary tee fitting shall be installed in said sewer main in such a manner so that the centerline of the service riser will be 45 degrees above a horizontal plane through the center of the main.
- C) Material joining the sanitary tee fitting to the pipes shall be free from cracks and shall adhere tightly to each joining surface.
- D) A log, locating all tee fittings by indicating accurate measurements for the distance from the downstream manhole and the depth of the connection at the main, shall be established by the Contractor and maintained during installation as a permanent record of said locations and shall be provided to the City prior to the issuance of any occupancy permit.

### **5-10.6 Service Laterals – Single Customer.**

- A) The Subdivider/Developer shall provide a six (6) inch service connection at the tee for each residential lot, the lateral of which, shall be extended to the property line or easement line (whichever is greater), to a minimum nine (9) feet below finished grade. See Detail D-SN1, Appendix A.

## HIGHLAND LAND DEVELOPMENT CODE

- B) Any transition in said lateral from the tee fitting to the vertical shall be made by the use of a series of forty-five (45) degree elbows or through the use of a six (6) inch ninety (90) degree "long sweep".
- C) The end of the sewer lateral as it extends above grade shall be sealed with a six (6) inch cap securely glued into place so as to withstand air test procedures.
- D) Pipes used for service laterals shall be six (6) inch polyvinyl chloride (PVC) sewer pipe conforming to ASTM D 3034, type PSM for service lines.
- E) The PVC pipe shall have a minimum cell classification of 12454-C, and shall have a minimum pipe stiffness of forty-six (46) pounds per inch per inch (317 kPa).
- F) Joints for PVC sewer pipe shall conform to ASTM D-3212.
- G) The minimum allowable grade is 1.0%
- H) Service lines shall be installed and trenches backfilled with CA-7 aggregate in conformance with the Standard Specifications for Water and Sewer Main Construction in Illinois.
- I) CA-7 granular aggregate to a minimum depth of four (4) inches shall be used as bedding for all PVC sewer laterals.
- J) Where a sewer lateral crosses under the location of a street, drainage structure, right-of-way or other paved areas, the trench shall be backfilled in accordance with Detail D-SN2, Appendix A.
- K) The end of the lateral shall be marked with a steel fence post, or a 2"x4" wooden post painted white a minimum three (3) feet above finished grade and shall have a one half (1/2) inch rebar driven six (6) inches below grade.
- L) Maintenance of laterals is the owner's responsibility.

### **5-10.7 Service Laterals – Multiple Customers.**

Buildings containing multiple tenants such as, but not limited to, apartments, town homes, duplexes, and strip malls, are allowed to connect to one sewer connection and lateral. However, each tenant must install an individual service line as described below.

- A) Service connections shall be installed as described in section 10.5.
- B) A six (6) inch PVC sewer pipe shall be installed parallel with the building and five (5) feet from the outer most corner and be of sufficient length to accept individual sewer services from each tenant space. Each service pipe shall have a clean out installed before connecting to said pipe. Said pipe shall be connected to the sewer lateral with a sanitary tee fitting.
- C) Maintenance of laterals is the owner's responsibility.

### **5-10.8 Manholes.**

- A) The Subdivider/Developer shall provide sanitary sewer manholes within the proposed subdivision or development as part of the sewer system design, and at locations necessitated by said design.

## HIGHLAND LAND DEVELOPMENT CODE

- B) Manholes shall be provided at all changes in horizontal direction and at the end of all sewer mains. Clean out structure may not be substituted.
- C) Manholes shall be Type A and constructed of pre-cast Portland Cement Concrete in conformance with ASTM C-478, and shall be constructed in such a way so as to prevent the leakage of sewage from the manhole, or the infiltration of ground water into the manhole.
- D) Minimum wall thickness for manholes shall be five (5") inches.
- E) Cones and sections shall be substantially free from fractures, large or deep cracks and surface roughness.
- F) Slabs shall be sound and free of gravel pockets.
- G) Manhole steps shall be furnished and installed and shall be polypropylene coated steel reinforcing rods at sixteen (16) inches on center with load and pullout ratings conforming to OSHA requirements.
- H) Pre-cast inverts shall be provided in the base sections to accommodate pipe openings with side channel walls extending to roughly the center of the sanitary sewer pipe. Grouting is required around pipes to provide a consistent smooth invert. Special care shall be taken to see that the openings through which pipes enter the structure shall be provided with "A-Lok" flexible watertight connections conforming to ASTM C 923, "Standard Specifications for Resilient Connectors Between Reinforced Concrete Manhole Structures and Pipes."
- I) Drop connections shall be used where the difference in elevation of connecting pipes is greater than twenty-four (24) inches in accordance with the Standard Specification for Water and Sewer Main Construction in Illinois.
- J) No other utility shall pass through, or come in to contact with, a sewer pipe.

### **5-10.9 Manhole Frames and Lids.**

- A) Castings shall conform to ASTM A 48 and shall be Neenah R-1772, East Jordan EJ 1022Z1-1 manhole frame with four (4) centerlugs, or equivalent cast iron frame and lids with concealed pick holes and self-sealing gaskets in the lid.
- B) Sanitary sewer manhole frame and grates shall be capable of handling H-20 loadings.
- C) In areas that are subject to surface water ponding, frames with stainless steel bolt down gasketed lids and concealed pick holes, which are Neenah R-1915 or equivalent, may be required to prevent ground water infiltration.
- D) The word "SANITARY" shall be cast in the lids of all sanitary sewer manholes.
- E) Lids and frames shall be properly sealed at the time they are adjusted to finished grade.
- F) Adjusting rings may be necessary to place the frame and lid at the correct elevation. Rings may be applied to a height of eight (8) inches. If the adjustment requires more than eight (8) inches, a barrel section must be installed under the cone section.

**5-10.10 Sanitary Sewer Lift Stations.**

- A) The design of lift stations shall conform to Title 35: Environmental Protection; Subtitle C: Water Pollution; Chapter II: Environmental Protection Agency; Part 370: Illinois Recommended Standards for Sewage Works; Subpart D: Sewage Pumping Stations; of the State of Illinois Rules and Regulations, and the Standard Specifications for Water and Sewer Main Construction in Illinois, latest edition.
- B) The Subdivider/Developer shall install all necessary lift station(s) and appurtenances at no cost to the City of Highland. Lift stations shall be considered part of the improvements.
- C) Every lift station shall be located off the traffic way of streets and alleys and shall be enclosed by a fence. Areas inside the fence shall be rocked with six (6) inches of CA-6 aggregate with a weed control barrier.
- D) The Subdivider/Developer shall provide a permanent road surface of either asphalt or concrete for access to any lift station so that lift stations are readily accessible by maintenance vehicles during all weather conditions.
- E) Sewage lift station structures and mechanical equipment shall be protected from physical damage and designed to remain operational during a 100 year flood event.
- F) Sewage lift station pumps and appurtenances shall be Flygt, or as approved by the Director of Public Works.
- G) Electrical systems and components shall comply with the National Electrical Code requirements for Class 1, Group D, Division 1 locations.
- H) The Director of Public Works shall specify the electrical panel and controls.
- I) The Subdivider/Developer shall also equip the lift station with a six (6) inch quick disconnect and a four (4) inch female fitting for bypass pumping in emergency situations.
- J) The lift station shall be equipped with a high water alarm light and a telemetering system.
- K) Under no circumstances shall the wet well inlet be less than four (4) feet above the pumps.
- L) Sanitary sewer force main shall be pressure tested and installed with THWN No. 12 tracer wire.
- M) All lift station components, design criteria, and IEPA permit application shall be reviewed by the Director of Public Works prior to approval for construction.

**5-10.11 Inspection and Testing.**

- A) All sections of all sanitary systems, including sewer mains and laterals, shall be air and mandrel tested by a qualified testing agency or firm hired by the Subdivider/Developer, who bears all cost for said testing. Testing shall be in accordance with applicable sections of the Standard Specifications for Water and Sewer Main Construction in Illinois.

## HIGHLAND LAND DEVELOPMENT CODE

- B) Testing of sewer mains and laterals shall not be performed sooner than thirty (30) days after the installation.
- C) As a minimum, a testing agency or firm shall not be considered as qualified unless they are independent of the contractor installing the sanitary sewer system, demonstrate competency in the performance of air and mandrel tests, follow standard safety practices for performing testing in confined spaces, and are insured, including for errors and omissions. As such, the City has the right to approve or not approve any such agency or firm.
- D) When air testing, all sanitary sewer mains and laterals shall hold five (5) pounds for a minimum of four (4) minutes without dropping more than one (1) pound in that time period regardless of the length of pipe being tested. This procedure applies to all sanitary sewer main and lateral testing.
- E) Mandrels shall have a diameter equal to ninety-five (95) percent of the inside diameter of the pipe as established in the ASTM standard to which the pipe is manufactured. The test shall be performed without mechanical devices. No pipe shall exceed a deflection of five (5) percent.
- F) The testing agency or firm shall notify both the Subdivider/Developer and the City, in writing, of the results of all tests, as soon as possible after said tests are performed.
- G) Should any test fail, the Subdivider/Developer shall make repairs, and arrange for the test to be performed again, and shall continue to make repairs and perform testing until each section of pipe has passed said tests. The use of television cameras or other visual methods for inspection may be required at the discretion of the Public Works Department.

### **5-10.12 Maintenance.**

- A) The Subdivider/Developer shall be responsible for all maintenance of sewer mains, manholes, lift stations, service connections, and service laterals until such time as the paving of the streets and the grading adjacent to the sewer is complete, and said improvements are officially accepted by the City Council.

### **5-10.13 Warranty.**

- A) The Subdivider/Developer shall notify the City in writing when initiating the operation of any new sanitary sewer system, and shall thereafter be responsible for any and all defects in said system, including sewer mains, manholes, lift stations, service connections, and backfill settlement for a period of two-years.

### **5-10.14 Private Disposal Systems.**

All private sanitary sewer systems shall be in accordance with Division 2. Private Disposal Systems under Utilities in the Highland Code.

**DIVISION 11. ELECTRICAL**

**Sec. 66-5-11 Specific Standards for Electrical Service.**

**5-11.1 Requirements for Installation of Electrical Services for Residential Subdivisions.**

- A) Site Requirements:
- 1) The Developer's responsibilities will be as follows:
    - a) The Developer, at no cost, shall provide all necessary easements or rights-of-way, dedicated to the Utility.
    - b) Prior to the installation of distribution facilities the Developer shall be responsible for providing the Utility with level grade to 3 inches of final and staking of all rights-of-ways, easements, curbs, and lot lines at no cost to the Utility.
    - c) The developer shall be responsible for all final grading, seeding, and sodding necessary after the installation of the facilities.
    - d) The Developer shall be responsible for all costs incurred by the Utility, after initial installation of the electric distribution system, for modifications to the installed electric distribution system necessitated by subsequent changes to the layout, arrangement, or elevation of the development that are beyond the direct control of the Utility.
    - e) The Developer shall be responsible for any costs incurred by the Utility, after initial installation of the electric distribution system, for damage to such system facilities before such facilities are officially commissioned for use to serve Utility customer loads.
  - 2) The electrical distribution system installed in all new residential developments shall be of the underground residential distribution (URD) type.
  - 3) All electrical distribution facilities shall be installed by the Utility or by use of an electrical contractor under contract to the Utility.
  - 4) All single phase electric distribution transformers, pedestals, junctions, handholes, streetlights and all other devices that the Utility may deem necessary, in its exclusive judgment, shall be installed within 10'-0" of the side property line (typically) unless conflicts develop.
  - 5) All costs associated with the installation of telephone and CATV facilities will be the responsibility of the Developer.
  - 6) As directed by the Utility, the Developer of residential subdivisions shall install conduits for the future installation of cable at all road crossings identified by the Utility prior to the installation of roads and after the pouring of curbs. A total of four (4) heavy wall PVC (Schedule 40 or heavier), or rigid metal conduit shall be installed, if so directed by the Utility, of adequate size to accommodate electric conductor, telephone and CATV cables at all street crossings identified by the Utility. Conduit so installed shall extend a minimum of five feet (5') beyond the back curb line on each side of the street. The conduits shall be laid at a

## HIGHLAND LAND DEVELOPMENT CODE

minimum of thirty-six inches (36") below the final grade level of the street curb.

- 7) Site Preparation: The Developer shall, prior to the starting of the physical installations of the electrical distribution facilities, perform the following:
  - a) Remove all obstructions from all Utility easements.
  - b) Place marked stakes at all lot corners.
  - c) Establish an easement strip clearance to within plus or minus three inches (3") of final grade.
  - d) Provide written notification to the Utility confirming completion of Items a through c, above.
- 8) Street lighting in new developments inside the City limits shall be installed by the Utility as part of improvements for new developments and shall be owned, operated and maintained by the Utility.
  - a) The Utility-installed street lighting standards shall consist of high-pressure sodium luminaries installed on fiberglass poles.
  - b) The Utility-installed street lighting standards shall be placed in accordance with the standard Utility practice.
  - c) Should the Developer wish to upgrade the street lighting system installed in new developments, such upgraded lighting systems shall be designed, furnished, and installed by the Developer. Type of upgraded pole/light fixture and installation design shall receive approval from the Utility prior to installation. The Utility will require a supply of spare parts equal to one (1) pole/light fixture for every 10 poles/fixtures or portion of thereof (i.e., 4 poles/fixtures-one (1) spare, 15 poles/fixtures-two (2) spares).
- 9) Street lighting in new developments outside the City limits may be installed by the Utility as part of improvements for new developments shall be owned, operated, and maintained by the Utility.
  - a) The developer initially, then the subsequent homeowners association will be responsible for paying a monthly rental fee based on fixture wattage
  - b) Utility-installed street lighting standards shall consist of high-pressure sodium luminaries installed on wood poles.
  - c) The Utility installed street lighting standards shall be placed in accordance with the standard utility practice.
  - d) Should the Developer wish to upgrade the street lighting system installed in new developments, such upgraded lighting systems shall be designed, furnished, and installed by the Developer. Type of upgraded pole/light fixture and installation design shall receive approval from the Utility prior to installation. The Utility will require a supply of spare parts equal to one (1) pole/light fixture for every 10 poles or portion of thereof (i.e., 4 poles/fixtures-one (1) spare, 15 poles/fixtures-two (2) spares) for the development.

## HIGHLAND LAND DEVELOPMENT CODE

### B) General Requirements:

Prior to the installation of any electrical facilities by the City, the Developer shall be in compliance with all City or County administrative requirements including, fees, building permits, annexation agreements, etc. as deemed necessary by the City's staff.

### 5-11.2 Requirements for Installation of Electric Facilities Commercial Developments

#### A) Site Requirements:

- 1) The Developer's responsibilities will be as follows:
  - a) The Developer, at no cost, shall provide all necessary easements or rights-of way, dedicated to the Utility.
  - b) Prior to the installation of distribution facilities the Developer shall be responsible for providing the Utility with level grade to 3 inches of final and staking of all rights-of-ways, easements, curbs, and lot line at no cost to Utility.
  - c) The Developer shall be responsible for all final grading, seeding or sodding necessary after the installation of the facilities.
  - d) The Developer shall be responsible for all costs incurred by the Utility, after initial installation of the electric distribution system, for modifications to the installed electric distribution system necessitated by subsequent changes to the layout, arrangement, or elevation of the development that are beyond the direct control of the Utility.
  - e) The Developer shall be responsible for any costs incurred by the Utility, after initial installation of the electric distribution system, for damage to such system facilities before such facilities are officially commissioned for use to serve Utility customer loads.
- 2) The electrical distribution system installed in all new commercial developments shall be of the underground distribution type.
- 3) All electrical distribution facilities shall be installed by the Utility or by use of an electrical contractor under contract to the Utility.
- 4) As directed by the Utility, the Developer of commercial developments shall install conduits for the future installation of cable at all driveway and road crossings identified by the Utility prior to the installation of driveways and roads and after the pouring of curbs. A total of two (2) heavy wall PVC (Schedule 40 or heavier), or rigid metal conduit shall be installed, if so directed by the Utility, of adequate size to accommodate electric conductor at all paved crossings identified by the Utility. Conduit so installed shall extend a minimum of five feet (5') beyond the back curb line on each side of the driveway or road. The conduits shall be laid at a minimum of thirty-six inches (36") below the final grade level of the street curb.
- 5) The Developer shall, prior to the starting of the physical installation of the Electrical Distribution Facilities, provide the following:

## HIGHLAND LAND DEVELOPMENT CODE

- a) Removal of all obstructions from all electrical utility easements.
  - b) Placement of marked stakes for all lot corners.
  - c) Establishment of easement strip clearance to within plus or minus three inches (3") of final grade.
  - d) Written notification to Utility of completion of Items a through c, above.
- B) General Requirements:
- Prior to the installation of any electrical facilities by the City, the Developer shall be in compliance with all City or County administrative requirements including, fees, building permits, annexation agreements, etc. as deemed necessary by the City's staff.

### 5.11.3 General.

- A) Underground service connections for said utilities shall be provided at the property line of each platted lot.
- B) All conduits or cables for said utilities shall be located within easements or public rights-of-way in such a manner that they do not interfere with other underground services or utilities.

### 5-11.4 Streetlights

Street lighting for new developments is discussed in Section 66-5-11, paragraphs 8 and 9.

## DIVISION 12 GENERAL, EASEMENTS AND OTHER UTILITIES

### Sec. 66-5-12 Specific Standards for Easements and Other Utilities.

#### 5-12.1 General.

- A) It shall be the responsibility of the Subdivider/Developer to forward plans for the subdivision/development to the respective providers of natural gas, telephone, and cable television services.
- B) Said utility companies shall develop and submit to the Subdivider/Developer, proposed layouts for their facilities so that the Subdivider/Developer may approve said layouts and forward them to the City for review as part of the City's approval process.
- C) Underground service connections for said utilities shall be provided at the property line of each platted lot.
- D) All conduits or cables for said utilities shall be located within easements or public rights-of-way in such a manner that they do not interfere with other underground services or utilities.

## HIGHLAND LAND DEVELOPMENT CODE

- E) No underground utilities shall be constructed until their physical location is reviewed in writing by the Director of Public Works, Director of Light and Power, and/or Administrator.

### **5-12.2 Safety Provisions.**

It shall be the responsibility of the Subdivider/Developer to provide all necessary and appropriate safety features within any subdivision or development, including but not limited to, guard rails, retaining walls, curbing, and revised grading, at hazardous or potentially hazardous locations. Hazardous locations might include where water is impounded next to roadway, in areas of high fills, along large culverts, and near steep embankments.

### **5-12.3 General Easements.**

- A) In designing any subdivision, the Subdivider/Developer shall provide easements for all utilities including but not limited to drainage and storm sewers, sanitary sewers; gas mains; water mains; underground electric, telephone, and cable television lines.
- B) Any easements, new or not shown on the final plat, shall be submitted to the City for review and approval. A sketch shall accompany easement descriptions and shall be certified by an Illinois Professional Land Surveyor for recording. The sketch shall be submitted as an exhibit to the description on an 8 ½ x 11 sheet of paper with all pertinent information including, but not limited to, scale, north arrow, dimensions, easement boundaries, and survey reference lines necessary to illustrate the description.

### **5-12.4 Utility Easements.**

- A) Unless utilities are to be installed in the public rights-of-way, utility easements, not less than twenty (20) feet wide (or 10 feet each side of property line), shall be provided along all rear lot lines, and along those side lot lines where necessary. A minimum twenty (20) feet wide easement shall be provided adjacent to Local/Residential rights-of-way and fifteen (15) feet wide adjacent to Collectors (Minor and Major).
- B) Property owners may (at their own risk) plant shrubbery or hedges (not reaching over four feet in height at maturity) or install fences on the easement areas. No trees, buildings, or other structures shall be placed on any easement. Utilities (private and public), however, in order to have access for repair shall have the election to destroy said improvements and restore the area only by grading and sodding or seeding/mulching or to have alternate access through the owner's property. The restoration of the alternate access is the property owner's responsibility.
- C) As a common practice, in the case of abutting lots, said easements shall be designed so that they are apportioned evenly on either side of said lot lines.
- D) Preliminary plats shall be submitted to the appropriate utility companies for their input regarding the location of utility easements.

## HIGHLAND LAND DEVELOPMENT CODE

- E) Water mains shall be installed in easements adjacent to the right-of-way at the front of lots. Sanitary sewer mains can be installed in easements located in the rear of lots. Electric lines shall be installed in easements adjacent to the right-of-way at the front of lots. See detail D-GN4, Appendix A.
- F) Easements of greater width may be required along or across lots when necessary for the extension of sewer mains or other utilities, or where both water and sewer lines must be located in the same easement.
- G) The final location and minimum widths of all easements shall be at the discretion of the Director of Public Works, Director of Light and Power, and/or Administrator.

### **5-12.5 Drainage Easements.**

- A) Adequate easements for storm water drainage shall be established along any natural drainage channel and in such other locations as may be necessary to provide satisfactory disposal of storm water from streets, alleys, and all other portions of the subdivision.
- B) The Director of Public Works and the Director of Light and Power shall approve the location and widths of such easements. In no case shall said easements be less than fifteen feet (15') in width.
- C) Easements for drainage retention and detention facilities shall also be provided as necessary.
- D) Plans depicting drainage easements shall indicate the direction of water flow by the use of arrows.

### **5-12.6 Maintenance of Easements and Rights-of-Way.**

Maintenance of easements and grassed/landscape portions of the rights-of-way is the property owner's expense, excluding actual street pavement.

### **5-12.7 Storm Water Facility Maintenance.**

- A) Definitions. The following definitions shall apply to Section 66-5-12.7:

Owner(s) shall mean the owner of a parcel of property, his/her successors, heirs and assigns, and all subsequent owners of that parcel of property or parcels within the property as subdivided.

Storm water drainage facilities shall mean an open watercourse, gully, dry stream, creek, ditch or any type of structure which carries storm water runoff or which is fed by street or building gutters, sump drainage lines or storm water sewers, or which serves the purpose of draining water from the lands adjacent to such watercourse, gully, dry stream, creek, ditch or structure.

- B) Drainage Facility Maintenance Responsibility.

One lot development or redevelopment: Maintenance of storm water drainage facilities located on private property shall be the responsibility of the Owner of that property. Before an appropriate permit for development or redevelopment is obtained from the City of Highland, Illinois the applicant shall execute a Maintenance Agreement with the City of Highland, Illinois, which Agreement

## HIGHLAND LAND DEVELOPMENT CODE

shall obligate the Owner (and the Owner's successors, heirs and assigns) to maintain the drainage facilities located on the Owner's property. Such Agreement shall be recorded in the Recorder's Office of Madison County, Illinois. It is the responsibility of the Owner of the property to obtain the Maintenance Agreement from the Department of Public Works.

Subdivision Development: Prior to approval of any final subdivision plat by the City of Highland, the Owner/Developer of any land intended for subdivision shall enter into a Maintenance Agreement with the City of Highland. Said Agreement will obligate the Owner/Developer of the intended subdivision to maintain the all water drainage and water detention facilities located within the boundaries of the development. Further, said Agreement will be binding upon the successors, heirs and assigns of the Developer (so as to create joint and several liability on all future property owners in the Development) for maintenance of the drainage facilities located within the boundaries of the development. Such Maintenance Agreement shall be recorded in the Recorder's Office of Madison County, Illinois. It is the responsibility of the Owner/Developer of the property to obtain the Maintenance Agreement from the Department of Public Works.

The Maintenance Agreement shall include a schedule for regular maintenance of each aspect of the Development's storm water drainage facility system and shall provide to the City of Highland a perpetual easement for access above and across the property for the purpose of inspection of the drainage facility system. The Owner(s), his/her/its successors, heirs, assigns, or the subsequent owners of property within the subdivision shall notify the City of Highland, Director of Public Works, in writing no less than forty-eight (48) hours prior to any maintenance operations, excluding routine grass mowing. The Maintenance Agreement shall also stipulate that if the appropriate personnel of the City of Highland, Illinois notify the Owner(s), his/her/its successors, heirs, assigns, or the subsequent owners of property within the subdivision in writing of maintenance problems requiring correction, the Owner(s), his/her/its successors, heirs, assigns, or the subsequent owners of property within the subdivision shall begin such corrections within forty-eight (48) hours and shall not extend beyond seven (7) calendar days of such notification. If the corrections are not made within this time period the City of Highland may have the necessary work completed and assess the cost to the Owner(s), his/her/its successors, heirs, assigns, or the subsequent owners of property within the subdivision pursuant to maintenance agreement.

**APPENDIX A**  
**CHECKLISTS & DETAILS**

**Appendix A Exhibit 1  
Land Development Control Information Sheet**

The Plan Commission and the Zoning Board of Appeals meet the first Wednesday of the month. All requests for land development review are to be submitted to the Building and Zoning Division, City of Highland, 2610 Plaza Dr., P.O. Box 218, Highland, IL. Copies of the Preliminary Plat Checklist and the Final Plat Checklist are located in Appendix A of the Highland Land Development Code and are labeled Exhibit 2 and Exhibit 3 respectively.

The City of Highland has control over all land developments planned within the corporate limits of the City and for a distance of one and one-half miles beyond the City limits of the City of Highland. All land developments shall be in full compliance with the regulations of the land development control ordinance of the City of Highland.

No lot in any land development may be sold, any building permit issued, or any alterations made to any building upon land in a proposed land development until the final land development plat has been approved by the City of Highland and properly recorded with the County.

**STEP ONE**

The City of Highland requires anyone planning land development within its jurisdiction to consult with the Building and Zoning Division and City staff approximately 2.5 months prior to the meeting date for submission of a preliminary plat to the Plan Commission. The subdivider should provide a sketch plan for submission to the Building and Zoning Division for review and informal discussion with the City staff. A sketch plan does not need to be prepared by an engineer or draftsman nor does it need to be on exact scale or precise dimensions. The following information shall be provided in the sketch plan at the discretion of the Subdivider:

1. Tract boundaries
2. Area in which land development is located
3. North point
4. Streets on and adjacent to the tract
5. Significant topographical and physical features
6. Proposed general street layout
7. Proposed general lot layout

The City staff will then advise and give assistance to the Subdivider in order to facilitate the subsequent preparation and approval of the preliminary plat. Sketch plan will be considered submitted for informal and confidential discussion between the subdivider and the City staff. Submission of a land development sketch plan shall not constitute formal filing of a plat with the Plan Commission or City staff.

As far as may be practical on the basis of the sketch plan, the City staff will informally advise subdivider as promptly as possible the extent of which the proposed development conforms to the design standards of Chapter 66 Article V and will discuss possible plan modifications necessary to secure conformance.

**STEP TWO**

Following the recommended changes by the City staff to conform with Chapter 66 Article V, the subdivider shall provide the following items for a preliminary plat review approximately 1.5 months prior to the meeting date of the Plan Commission: (1) A properly executed check list, as

## HIGHLAND LAND DEVELOPMENT CODE

shown in Appendix A attached; (2) A letter requesting review and approval of the preliminary plat with the name and address of the person to whom the notice of hearing by the Plan Commission on the preliminary plat drawn to specifications and information to be provided as provided in Chapter 66 Articles I, II and III (attached).

Building and Zoning and City Staff will review the preliminary plat together with the subdivider, after the City's review of the submitted preliminary plat. At that time, any minor changes that need to be made by the developer upon the recommendation of the City staff shall be done either on the original preliminary plat or by signed letter stating the developer agrees to make the changes as recommended.

The preliminary plat shall then be submitted to the Plan Commission who shall afford a hearing. The Plan Commission Secretary will send a notice of the hearing to the person designated in the letter requesting preliminary plat review, not less than five days prior to the date of the hearing.

The Plan Commission shall recommend tentative approval or disapproval of the preliminary plat to the City Council. A notation of the action taken will be inserted on four copies of the plat including a statement of the reasons, if any, for disapproval. One copy shall be returned to the subdivider or his agent, one copy shall be added to the records of the Plan Commission and one copy shall be available to the City Council with one copy also going to the Building and Zoning Division.

Approval of the preliminary plat does not constitute approval of a final plat. It indicates only approval of the layout as a guide to the preparation of the final plat. Tentative approval shall expire and be null and void after a period of one year unless an extension of time is applied for by the subdivider or his representative and approved by the Plan Commission and the City Council. The Plan Commission shall either approve or disapprove the application for preliminary plat approval within 60 days from the date of the application or the filing of the last item of required supporting data, whichever date is later, unless the Plan Commission and the subdivider mutually agree to extend this time limit.

### STEP THREE

Within one year after Council's action on the preliminary plat, the final plat and necessary supporting data shall be submitted to the City for final approval; otherwise, the plan submitted shall be considered a new preliminary plat. An extension of time, however, may be granted by the City Council upon written request.

The final plat shall conform in all important respects with the preliminary plat as previously reviewed by the Plan Commission and shall incorporate modifications and revisions specified by the Council in its approval of the preliminary plat. Otherwise, it will be considered as a revised preliminary plat.

The final plat and supporting data shall comply with the provisions of Chapter 66 Article V attached. The following shall be submitted to the City of Highland Building and Zoning Division:

- \* A letter requesting review and approval of the final plat, giving the name and address of the person to who notice of public meeting by the City Council shall be sent. This should be submitted approximately six weeks prior to the planned scheduled meeting date of the City Council.

## HIGHLAND LAND DEVELOPMENT CODE

\* The developer shall obtain all signatures including the required county signatures before submittal to the City of Highland Building and Zoning Division. (Does not include signature of the Madison County Land Use Chairman and Madison County 9-1-1 Coordinator for developments out of the corporate limits but within the 1.5-mile jurisdictional boundary).

\* The developer shall submit ten (10) copies of the final plat plus the original, which shall be drawn in permanent ink on permanent reproducible material equal to the standards required by the County Recorder for the City Council's review and approval (Six weeks prior to the planned scheduled meeting date of the City Council).

\* The completed Final Plat Checklist (Six weeks prior to the planned scheduled meeting date of the City Council).

City staff together with Building and Zoning will review the final plat to check for conformance with the approved preliminary plat and with the rules and regulations of the land development control ordinance. Upon meeting those rules and regulations, the plat will then be forwarded to the City Council to afford a public meeting of the final plat. Notice of time and place of the public meeting shall be sent, by registered or certified mail, to the person designated in the letter requesting final plat review, not less than five days prior to the date of the public meeting.

The City Council shall approve or disapprove the final plat. A notation of the action of the City Council shall be made on the original drawing and on all copies of the final plat including a statement of the reasons for recommending disapproval, if that is the action taken. If the City Council fails to act within 60 days, the plat is considered approved. Final acceptance of all land improvements by the City shall be by resolution of the City Council.

Upon approval of the final plat, the subdivider/developer shall have the final plat recorded at the office of the Madison County Recorder of Deeds. The subdivider/developer shall be responsible for payment of the recording fees.

Appendix A Exhibit 2

**Checklist for Preliminary Plat**

Name of subdivision: \_\_\_\_\_

Date of submission: \_\_\_\_\_

Eight (8) copies of the preliminary plat shall be submitted. To properly execute this checklist, the subdivider, or engineer, shall:

- Insert the required information.
- Denote compliance with applicable ordinances by placing initials in all spaces where applicable.
- Denote those items which the subdivider, or engineer, considers “not applicable” to the is particular subdivision by the abbreviation “N.A.”

Every subdivision preliminary plat shall be prepared by a registered Professional Engineer and Professional Land Surveyor, State of Illinois, at any scale from one inch equals 10 feet through one inch equals 100 feet, provided the resultant drawing does not exceed 24 inches by 36 inches and shall contain the following:

- \_\_\_ 1. Small key map showing the relation of the proposed subdivision to platted subdivisions and dedicated roads within 2,500 feet of the proposed subdivision.
- \_\_\_ 2. Names and addresses of the owner, subdivider (if not the owner), Name and seal of Registered Professional Engineer of Illinois and Professional Land Surveyor, State of Illinois.
- \_\_\_ 3. Proposed name of the subdivision, location given by township, range, section, or other legal description.
- \_\_\_ 4. Zoning district classification of the tract to be subdivided, and of the adjacent land.
- \_\_\_ 5. If the plat is shown on two or more sheets, an index shall be provided on each sheet alone with corresponding “match lines”.
- \_\_\_ 6. North arrow, graphic scale, and date of map.
- \_\_\_ 7. The gross and net acreage area of the proposed subdivision, the acreage of streets, and of any areas reserved for the common use of the property owners within the subdivision and for public use
- \_\_\_ 8. All lot lines adjacent to and abutting the subdivision.
  - \_\_\_ a. Ownership of the surrounding land.
  - \_\_\_ b. Alignment of existing streets and rights-of-way.
  - \_\_\_ c. Section and corporate limit lines.

HIGHLAND LAND DEVELOPMENT CODE

- \_\_\_ 9. Tract boundary lines showing dimensions, bearings, and references to known land lines.
- \_\_\_ 10. Topography of the tract to be subdivided as indicated by two-foot contour data for land having slopes of zero to four percent, five-foot contour data for land having slopes between four to 12 percent, and ten-foot contour data for land having slopes of 12 percent or more. Benchmarks indicating location, description, and elevation.
- \_\_\_ 11. Delineation of pre-development drainage basins showing directions of flow and downstream receiving facility.
- \_\_\_ 12. Delineation of post-development drainage basins showing directions of flow and downstream receiving facility.
- \_\_\_ 13. Any proposed alteration, adjustment or change in the elevation or topography of any area.
- \_\_\_ 14. Locations of such features as bodies of water, ponding areas, natural drainageways, railroads, cemeteries, bridges, parks, schools, permanent structures, buildings, etc.
- \_\_\_ 15. Streets and rights-of-way on and adjoining the site of the proposed subdivision; showing the names and including street right-of-way and paving widths; approximate gradients; types and widths of pavement, curbs, sidewalks, crosswalks, planting strips and other pertinent data, including classification of all existing or proposed streets as to function as arterial, collector, residential, major, minor or other roads.
- \_\_\_ 16. A copy of the results of any tests made to ascertain subsurface rock and soil conditions and the water table.
- \_\_\_ 17. Locations, widths, and purposes of all existing and proposed easements.
- \_\_\_ 18. A copy of the description of all proposed deed restrictions and covenants.
- \_\_\_ 19. Location and size of existing and proposed sanitary and storm sewers and potable water lines.
- \_\_\_ 20. Locations, types, and approximate sizes of all other existing and proposed utilities.
- \_\_\_ 21. Front building setback or front yard lines and dimensions.
- \_\_\_ 22. Locations, dimensions, and areas of all parcels to be reserved or dedicated for schools, parks/playgrounds, and other public purposes.
- \_\_\_ 23. Locations, dimension, and areas of all proposed or existing lots within the subdivision.

HIGHLAND LAND DEVELOPMENT CODE

- \_\_\_ 24. An outline of proposed covenants accompanies the plans indicating the intention of the subdivider to have the covenants recorded with the final plat.
  
- \_\_\_ 25. Indication on drawing, or by certificate, that the subdivider is aware of the responsibility for installation of street signs.

Completed by:

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Date \_\_\_\_\_

Appendix A Exhibit 3

**Checklist for Improvement Plans**

Name of subdivision: \_\_\_\_\_

Date of submission: \_\_\_\_\_

Two (2) copies of the improvement plans and two (2) copies of the storm water computations shall be submitted. To properly execute this checklist, the subdivider, or engineer, shall:

- Insert the required information.
- Denote compliance with applicable ordinances by placing initials in all spaces where applicable.
- Denote those items which the subdivider, or engineer, considers “not applicable” to the is particular subdivision by the abbreviation “N.A.”

Subdivision improvement plans shall consist of black or blue line prints at any scale from one inch equals 10 feet through one inch equals 50 feet, provided the resultant drawing does not exceed 24 inches by 36 inches and is legible, and include an electronic submittal in a format compatible with the City of Highland. Plans shall be prepared by a registered Professional Engineer, State of Illionis, signed and sealed. These plans and the related specifications shall provide all of the following information:

- \_\_\_ 1. Topography of the tract, both before and after development.
- \_\_\_ 2. Existing and proposed elevations every 50 feet along the centerline of all streets.
- \_\_\_ 3. Radii of all curves and lengths of tangents on all streets.
- \_\_\_ 4. Locations, elevations and typical cross section of street pavements including curbs/gutters, catch basins, and inlets.
- \_\_\_ 5. Locations, elevations and typical cross section of sidewalks and driveway aprons.
- \_\_\_ 6. Locations, sizes, configurations, and invert elevations of all existing and proposed sanitary sewers, storm sewers, and fire hydrants, showing connections to any existing or proposed utility systems.
- \_\_\_ 7. Drainage calculations for proposed drainage plan.
- \_\_\_ 8. Finished grade requirements.
- \_\_\_ 9. Locations and sizes of all water, gas, electric, telephone and other utilities.
- \_\_\_ 10. Locations of street lighting standards and street signs.

HIGHLAND LAND DEVELOPMENT CODE

- \_\_\_ 11. One or more benchmarks, when requested by the director of public works, in or near the subdivision, to which the subdivision is referenced; the identity and elevation shall be based on the National Geodetic Vertical Datum of sea level.
- \_\_\_ 12. All proposed measures to control erosion and sedimentation.
- \_\_\_ 13. High water elevations of all lakes/streams adjoining or within the tract.
- \_\_\_ 14. Existing and proposed survey monuments, except lot pins, on street plans or on the proposed final plat as required by this chapter.
- \_\_\_ 15. Such other information as the director of public works may reasonably require, to perform his duties under this section.

Completed by:

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Date \_\_\_\_\_

Appendix A Exhibit 4

**Checklist for Final Plat**

Name of subdivision: \_\_\_\_\_

Date of submission: \_\_\_\_\_

Ten (10) copies of the final plat shall be submitted. To properly execute this checklist, the subdivider, or engineer, shall:

- Insert the required information.
- Denote compliance with applicable ordinances by placing initials in all spaces where applicable.
- Denote those items which the subdivider, or engineer, considers “not applicable” to the is particular subdivision by the abbreviation “N.A.”

Subdivision final plats shall be prepared by a Professional Land Surveyor and consist of black or blue line prints not larger than 24 inches by 36 inches and include an electronic submittal in a format compatible with the City of Highland. The plan scale shall be legible. The final plat and supporting data shall portray/provide all of the following information:

- \_\_\_ 1. Plat has been submitted within one year after the approval of the preliminary plat.
- \_\_\_ 2. Small key map showing the proposed subdivision in relation to section or U.S. Survey lines.
- \_\_\_ 3. North arrow, graphic scale, and date.
- \_\_\_ 4. Name of subdivider, subdivision, identification of the portion of the public lands survey in which the subdivision is located.
- \_\_\_ 5. Accurate metes and bounds or other adequate legal description of the tract, and the included area of the subdivision to the nearest 1/100 of an acre, (where discrepancies occur, both recorded and surveyed bearings and dimensions shall be included).
- \_\_\_ 6. Accurate boundary lines with dimensions and bearings which provide a survey of the tract, closing with an error of closure of not more than one foot in 10,000 feet.
- \_\_\_ 7. All dimensions shall be shown in feet and decimals of a foot.
- \_\_\_ 8. Reference to recorded plats of adjoining platted land within 300 feet, by record name, plat book, and page number.
- \_\_\_ 9. Accurate locations and names of all existing streets intersecting the boundaries of the subdivision.

HIGHLAND LAND DEVELOPMENT CODE

- \_\_\_ 10. Right-of-way lines of all streets, other rights-of-way, easements, and lot lines with accurate dimensions, or bearings and curve data, including radii, arcs or chords, points of tangency, and central angles.
- \_\_\_ 11. Name and right-of-way width of every proposed street.
- \_\_\_ 12. Locations, dimensions and purpose of any existing or proposed easement(s).
- \_\_\_ 13. Number of each lot, lot dimensions, and (in a separate list) lot areas.
- \_\_\_ 14. Purpose for which sites, other than private lots, are reserved.
- \_\_\_ 15. Front setback lines with accurate dimensions.
- \_\_\_ 16. Restrictions of all types which will run with the land, and become covenants in the deeds of lots.
- \_\_\_ 17. Certification of ownership and dedication of all public areas.
- \_\_\_ 18. Accurate distances and bearings to the nearest section or subdivision corner; reference corners shall be accurately described on the final plat.
- \_\_\_ 19. Reference to known and permanent monuments and benchmarks from which future surveys may be made together with elevations of any benchmarks. The surveyor must, at the time of making his survey, establish permanent monuments, as defined in section 66-5-5 and set in such a manner that they will not be moved by frost, which mark the external boundaries of the tract to be divided or subdivided and must designate upon the plat the locations where they may be found. External boundaries of new plats shall be marked (have monuments set) at every change in line direction and at every point of curvature.
- \_\_\_ 20. Location, type, material and size of all monuments and lot markers.
- \_\_\_ 21. Variance items granted by the City Council.
- \_\_\_ 22. All required certificates.

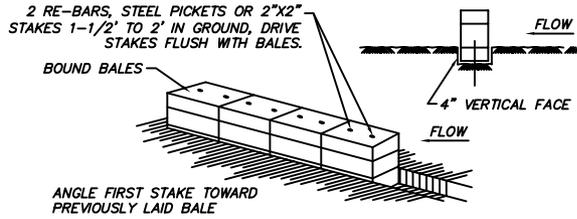
Completed by:

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date \_\_\_\_\_



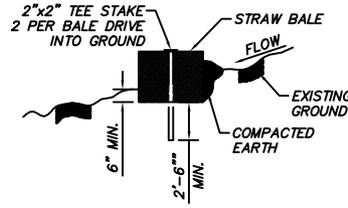


ANGLE FIRST STAKE TOWARD PREVIOUSLY LAID BALE

**NOTES:**

1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR AS SHOWN ON PLANS, PLACE IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF FOUR INCHES (4"), AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

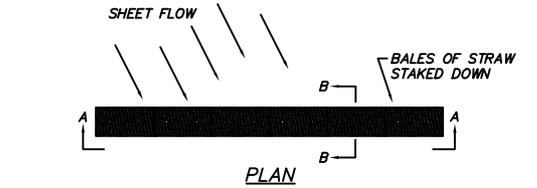
**1** STRAW BALE DETAIL  
N.T.S.



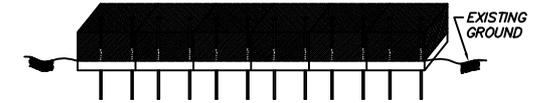
**SECTION B-B**

**NOTES:**

1. STRAW BALES SHALL BE INSPECTED PERIODICALLY FOR DETERIORATION. BALES WHICH HAVE ROTTED OR FAILED SHALL BE REPLACED.

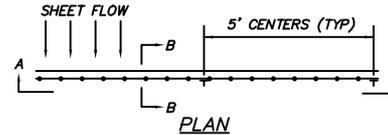


**PLAN**

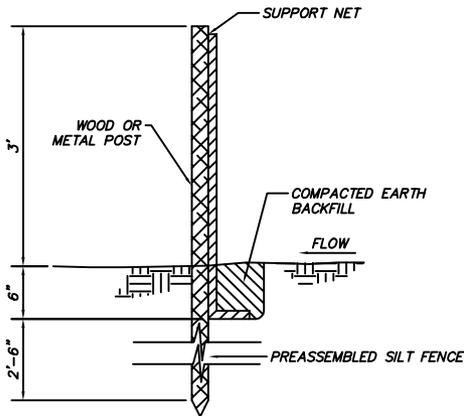


**SECTION A-A**

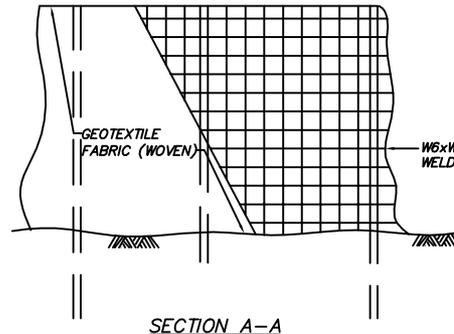
**3** STRAW BALE DETAIL  
N.T.S.



**PLAN**



**2** TEMPORARY SILTATION CONTROL FENCE DETAIL  
N.T.S.

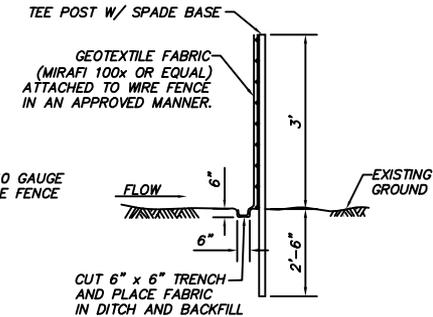


**SECTION A-A**

**EROSION CONTROL NOTES:**

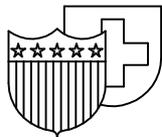
1. SILTATION FENCES SHALL BE INSPECTED PERIODICALLY FOR DAMAGE AND FOR THE AMOUNT OF SEDIMENTATION WHICH HAS ACCUMULATED. REMOVAL OF SEDIMENT WILL BE REQUIRED WHEN IT REACHES 1/2 OF THE HEIGHT OF THE SILTATION FENCE.
2. ATTACHMENT OF WELDED WIRE FENCE AND GEOTEXTILE FABRIC TO BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

**4** SILTATION FENCE DETAIL  
N.T.S.



**SECTION B-B**

DRAWING ISSUE	
DATE	PRELIMINARY DRAWINGS
DATE	PROGRESS DRAWING
DATE	ISSUED FOR DESIGN
DATE	ISSUED FOR PERMIT
DATE	ISSUED FOR CONSTRUCTION



**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

SHEET - TITLE

SHEET-TITLE

**EROSION CONTROL DETAILS**

DESIGNED BY NAME	JOB NO. #
DRAWN BY NAME	SHEET NO.
CHECKED BY NAME	#
DATE #/#/#	

MATERIALS

1. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

<u>PHYSICAL PROPERTY</u>	<u>REQUIREMENTS</u>
FILTERING EFFICIENCY	75% (MIN.)
TEXTILE STRENGTH AT 20% ELONGATION	EXTRA STRENGTH 50 LBS./LIN. IN (MIN.) STANDARD STRENGTH 30 LBS./LIN. IN (MIN.)
FLOW RATE	0.3 GAL/SQ. FT./MIN. (MIN.)

SYNTHETIC FILTER FABRIC REQUIREMENTS

2. BURLAP SHALL BE 10 OUNCE PER SQUARE YARD FABRIC.
3. POSTS FOR FILTER FENCES SHALL BE EITHER 4-INCH DIAMETER WOOD OR 1.33 POUNDS PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM.
4. STAKES FOR FILTER FENCES SHALL BE 1" X 2" WOOD (PREFERRED) OR EQUIVALENT METAL WITH A MINIMUM LENGTH OF 3 FEET.
5. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 36 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.

CONSTRUCTION

THIS SEDIMENT BARRIER UTILIZES BURLAP, STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS ARE EXPECTED. IN SPECIAL CASES BURLAP MAY BE USED IN DRAINAGEWAYS.

1. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES (HIGHER BARRIERS MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
2. THE FABRIC SHALL BE PURCHASED IN A CONTINUOUS ROLL, CUT TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOINTS. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCHES OVERLAP, AND SECURELY SEALED.
3. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL NOT EXCEED 5 FEET.
4. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER.
5. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES, OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES AND SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
6. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED OR WIRED TO THE FENCE, AND 8 INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

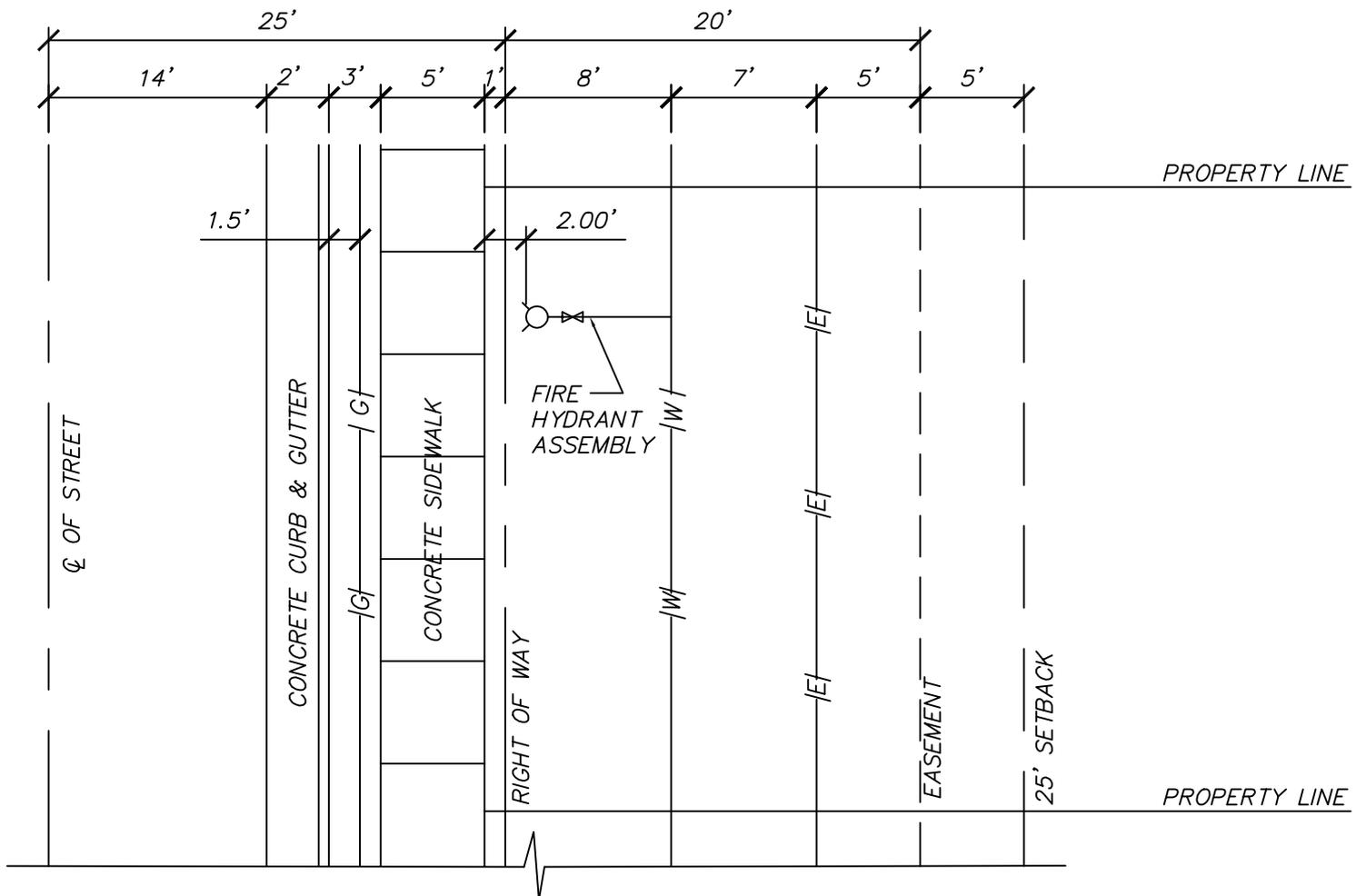
7. WHEN EXTRA STRENGTH FILTER FABRIC OR BURLAP AND CLOSED POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED OR WIRED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEMS NO. 6 APPLYING.
8. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.
9. FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

PLANS AND SPECIFICATIONS

PLANS SHOULD SHOW THE LOCATION AND ALL DIMENSIONS OF FILTER BARRIERS. SUFFICIENT DETAIL MUST BE SHOWN THAT CONTROL MEASURES ARE INSTALLED AS DESIGNED. MATERIAL REQUIREMENTS MUST BE SPECIFIED. SEE DETAIL "D-GN1" FOR MORE DETAILED DRAWINGS OF EROSION CONTROL MEASURES.

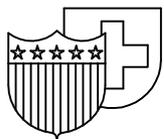
DRAWING ISSUE		 <b>CITY OF HIGHLAND</b> PUBLIC WORKS DEPARTMENT	<u>SHEET - TITLE</u>		EROSION CONTROL NOTES		DESIGNED BY JD	JOB NO. STD DETAILS
PRELIMINARY DRAWINGS			<b>EROSION CONTROL NOTES</b>		DRAWN BY JD	D-GN2		
PROGRESS DRAWING					CHECKED BY JC			
ISSUED FOR DESIGN					DATE 11/26/03			
ISSUED FOR PERMIT								
ISSUED FOR CONSTRUCTION								





**TYPICAL UNDERGROUND UTILITY PLACEMENT**  
NOT TO SCALE

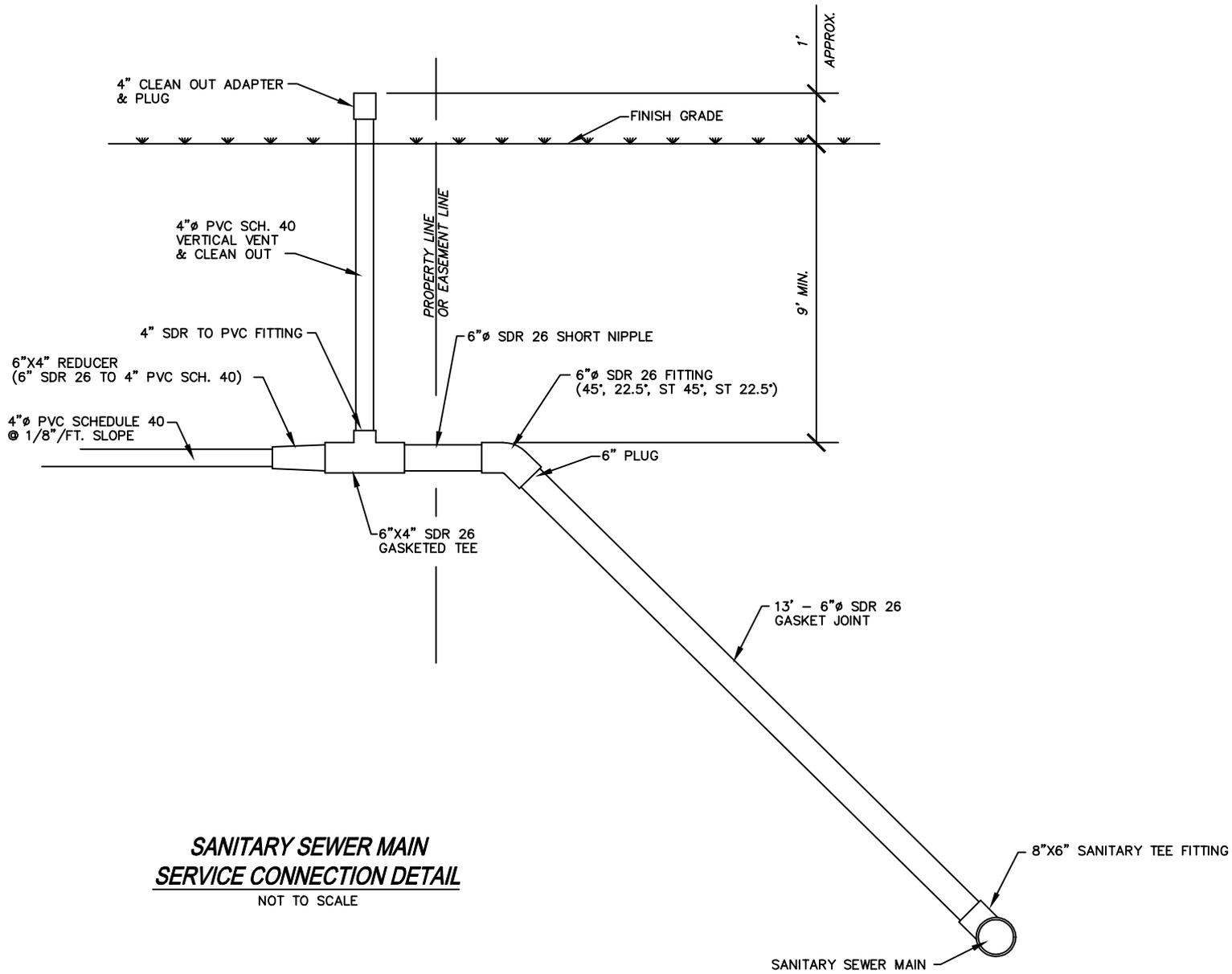
DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

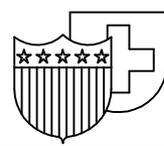
<b>SHEET - TITLE</b>	TYPICAL UTILITY PLACEMENT
<b>TYPICAL UNDERGROUND UTILITY PLACEMENT DETAIL</b>	

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-GN4
DATE 10/17/03	



**SANITARY SEWER MAIN  
SERVICE CONNECTION DETAIL**  
NOT TO SCALE

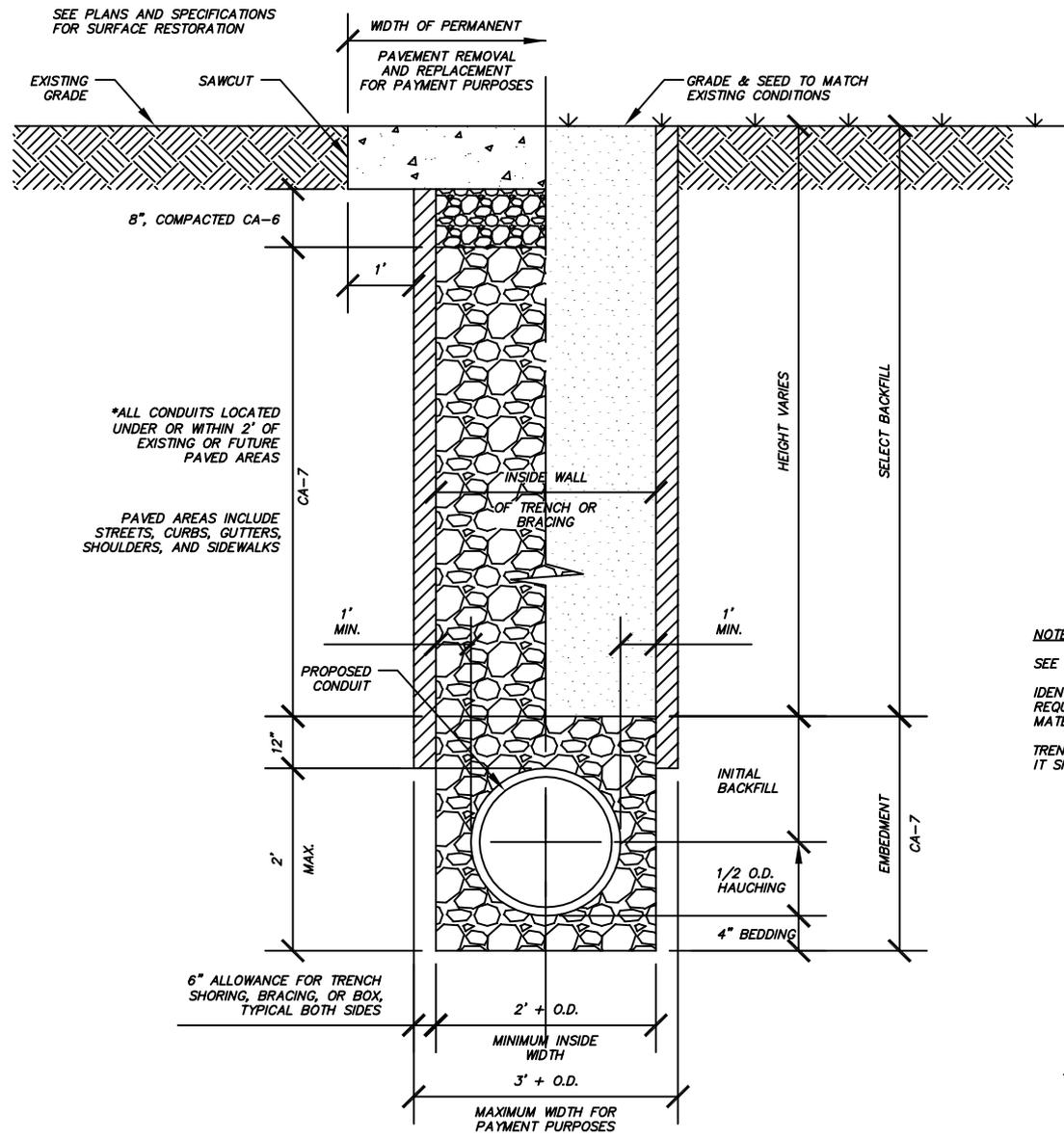
DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

<b>SHEET - TITLE</b>	SEWER CONNECTION DETAIL
<b>SANITARY SEWER MAIN SERVICE CONNECTION DETAIL</b>	

DESIGNED BY JG	JOB NO. STD DETAIL
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-SN1
DATE 08/11/03	



**NOTES:**  
 SEE PLANS AND SPECIFICATIONS FOR SURFACE RESTORATION.  
 IDENTIFICATION OF WHERE SELECT GRANULAR MATERIAL IS REQUIRED TERMINOLOGY, DIMENSION AND TYPE OF SELECT MATERIAL, WHEN REQUIRED.  
 TRENCH BOX SHALL NOT EXTEND BELOW TOP OF PIPE, HOWEVER IT SHALL NOT EXCEED 2 FEET FROM THE BOTTOM OF THE TRENCH.

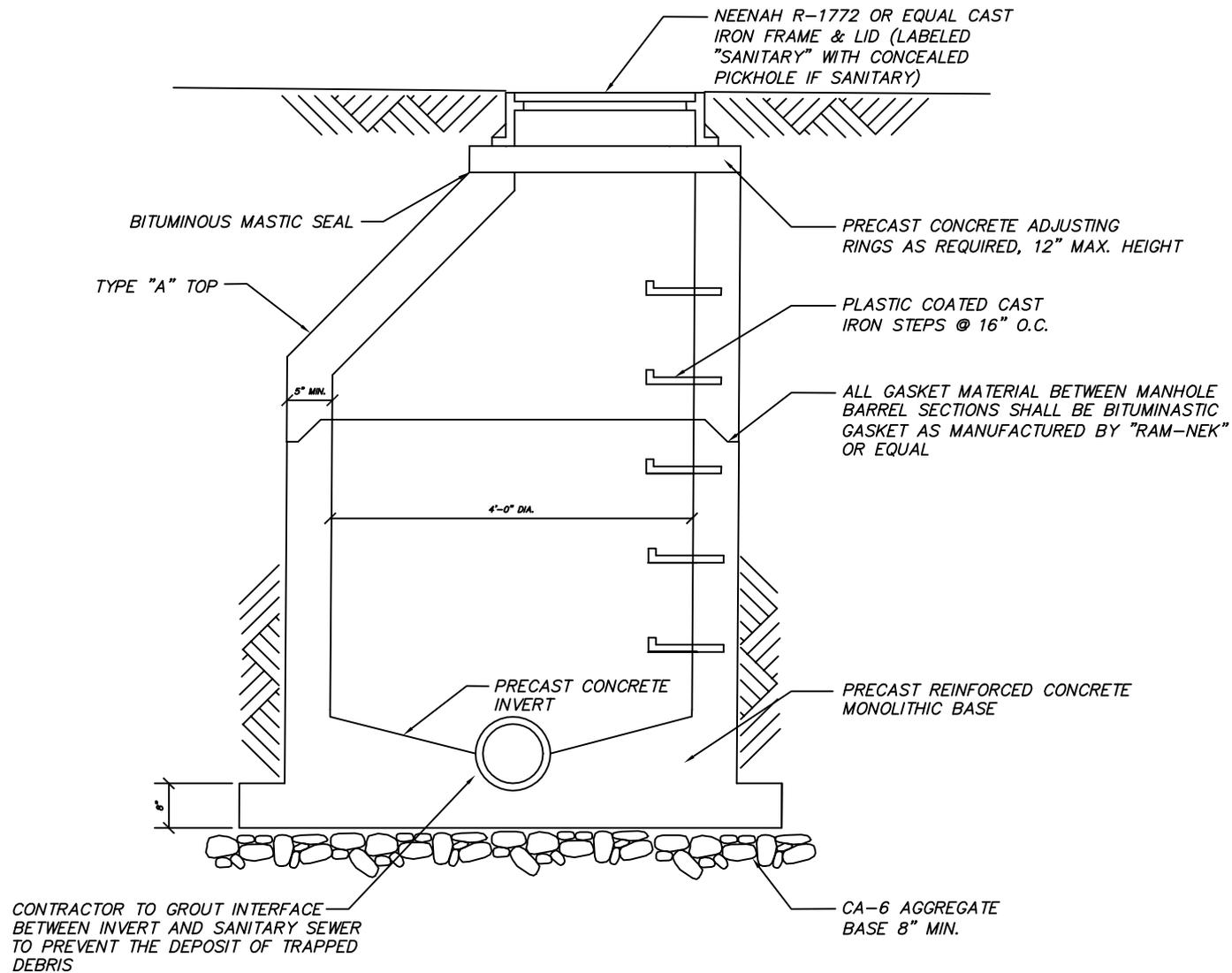
**SANITARY SEWER TRENCH DETAIL**  
 NOT TO SCALE

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



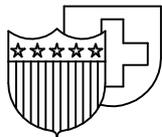
**CITY OF HIGHLAND**  
 PUBLIC WORKS DEPARTMENT

<b>SHEET - TITLE</b>		SAN. SEWER TRENCH DETAIL	
<b>SANITARY SEWER TRENCH DETAIL</b>		DESIGNED BY JG	JOB NO. STD DETAILS
		DRAWN BY JD	SHEET NO.
		CHECKED BY JG	D-SN2
		DATE 08/11/03	



**MANHOLE DETAIL**  
N.T.S.

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



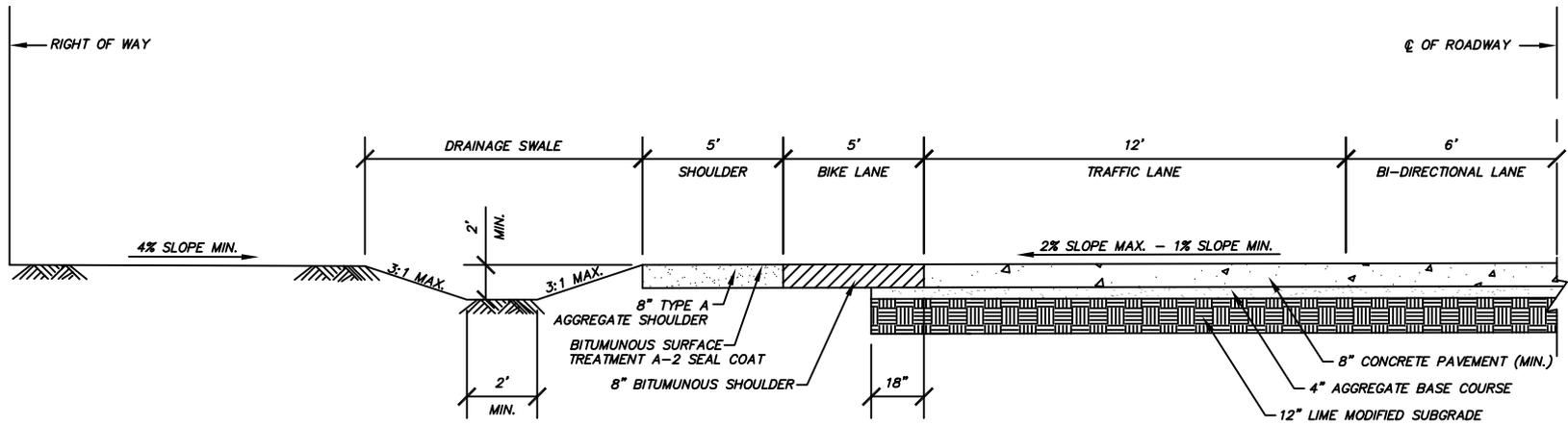
**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

**SHEET - TITLE**

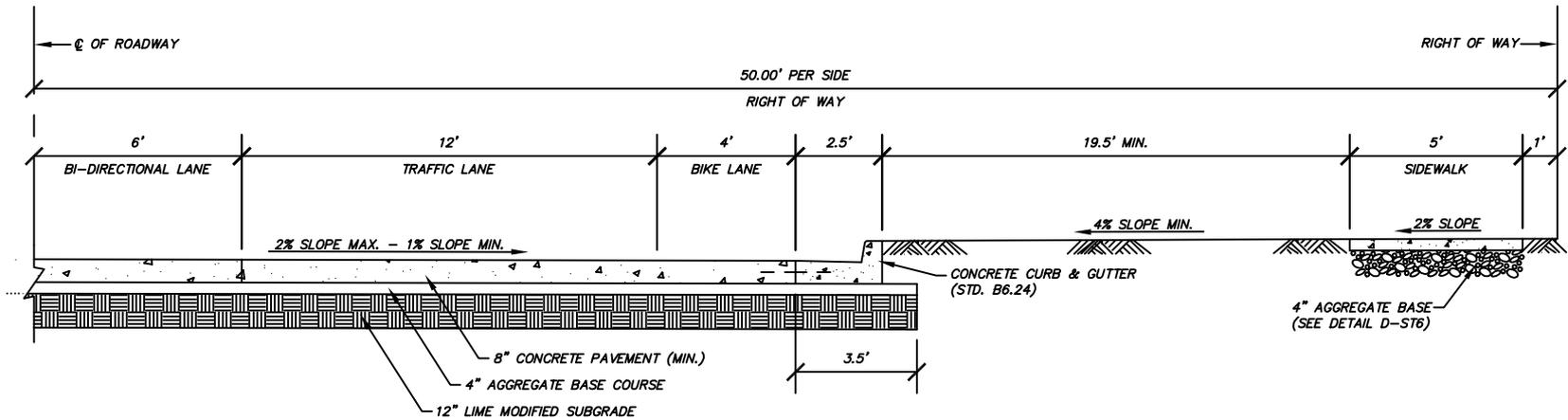
MANHOLE DETAILS

**TYPICAL MANHOLE DETAIL**

DESIGNED BY	JOB NO.
JG	STD DETAILS
DRAWN BY	SHEET NO.
JD	D-SN3
CHECKED BY	
JG	
DATE	
10/17/03	



**RURAL SECTION WITH DRAINAGE SWALE**



**URBAN SECTION WITH CURB & GUTTER**

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



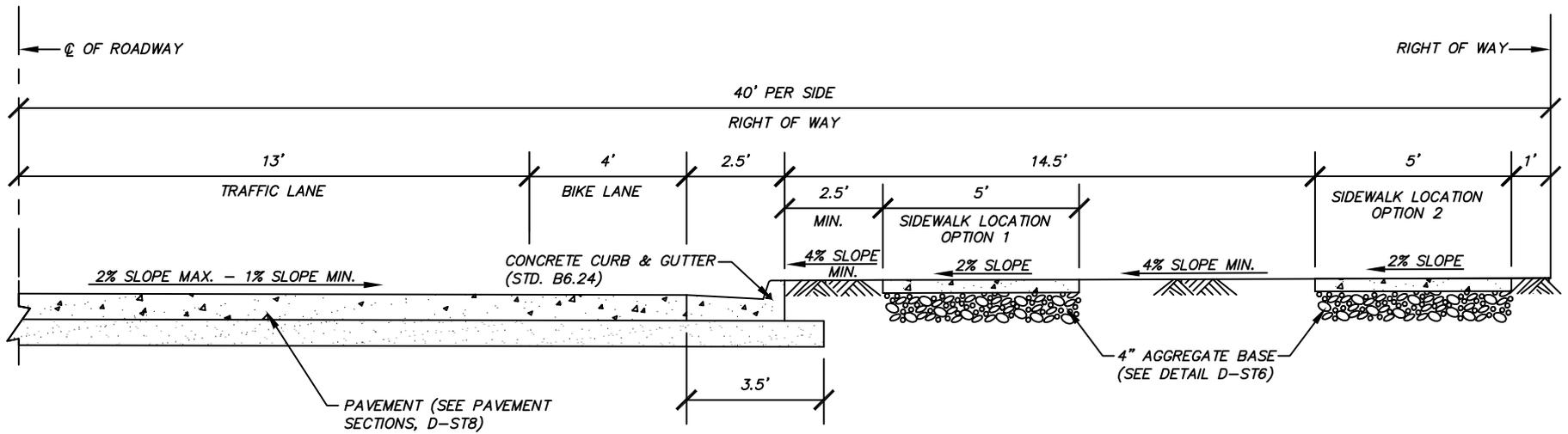
**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

**SHEET - TITLE**

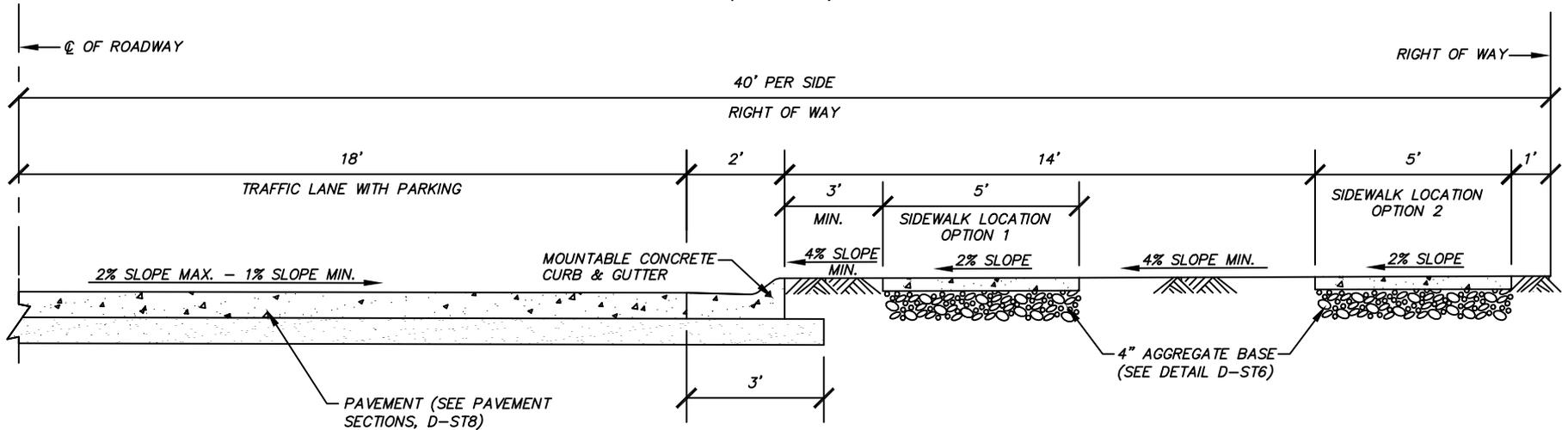
MAJOR COLLECTOR ROAD

**TYPICAL MAJOR COLLECTOR ROAD**  
100' R.O.W.

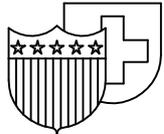
DESIGNED BY	JOB NO.
JG	STD DETAILS
DRAWN BY	SHEET NO.
JD	D-ST1
CHECKED BY	
JG	
DATE	
08/11/03	



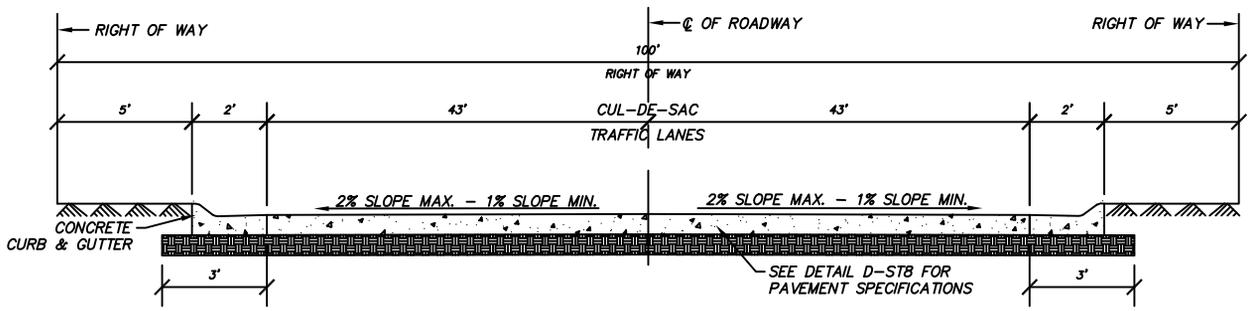
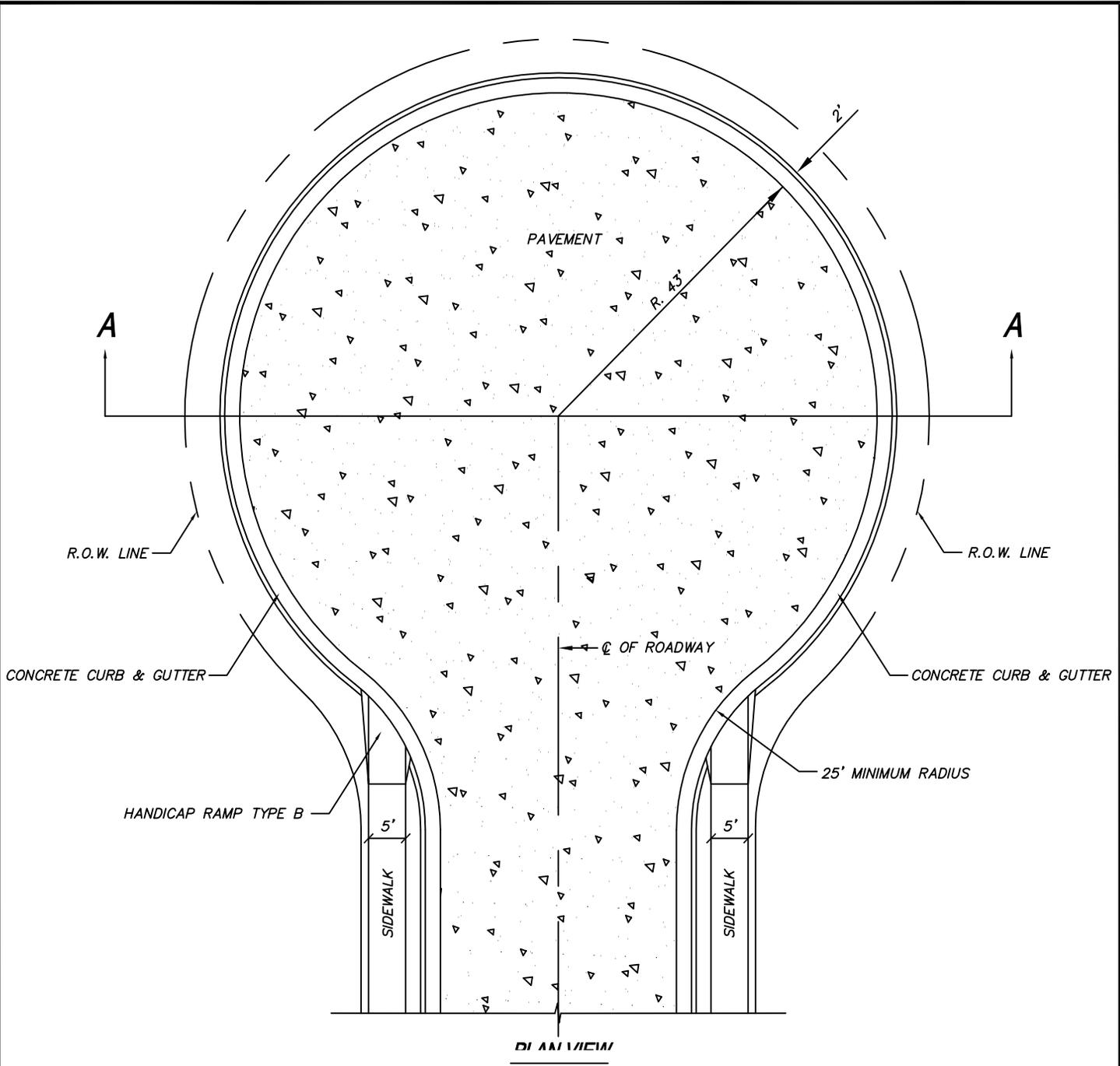
**URBAN SECTION WITH BIKE LANE**  
(NO PARKING)



**URBAN SECTION WITHOUT BIKE LANE**

DRAWING ISSUE PRELIMINARY DRAWINGS PROGRESS DRAWING ISSUED FOR DESIGN ISSUED FOR PERMIT ISSUED FOR CONSTRUCTION	 <b>CITY OF HIGHLAND</b> PUBLIC WORKS DEPARTMENT	<b>SHEET - TITLE</b> MINOR COLLECTOR ROAD DETAIL		DESIGNED BY JG	JOB NO. STD DETAILS
		<b>TYPICAL MINOR COLLECTOR ROAD</b> 80' R.O.W.		DRAWN BY JD	SHEET NO.  D-ST2
				CHECKED BY JG	
				DATE 10/15/03	





DRAWING ISSUE	
PRELIMINARY DRAWINGS	
PROGRESS DRAWING	
ISSUED FOR DESIGN	
ISSUED FOR PERMIT	
ISSUED FOR CONSTRUCTION	



**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

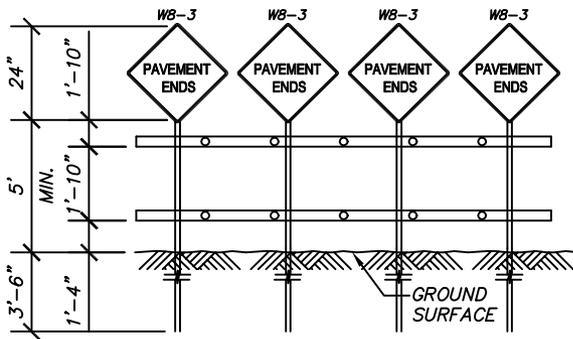
**SHEET - TITLE** CUL-DE-SAC PLAN & SECTION

**CUL-DE-SAC DETAIL**

DESIGNED BY	JOB NO.
JG	STD DETAILS
DRAWN BY	SHEET NO.
JD	D-ST4
CHECKED BY	
JG	
DATE	
10/15/03	

(2) 2 X 6 WOOD RAILS  
BOLTED THROUGH  
4 X 4 WOOD POSTS WITH  
REFLECTORS AT 24" O.C.

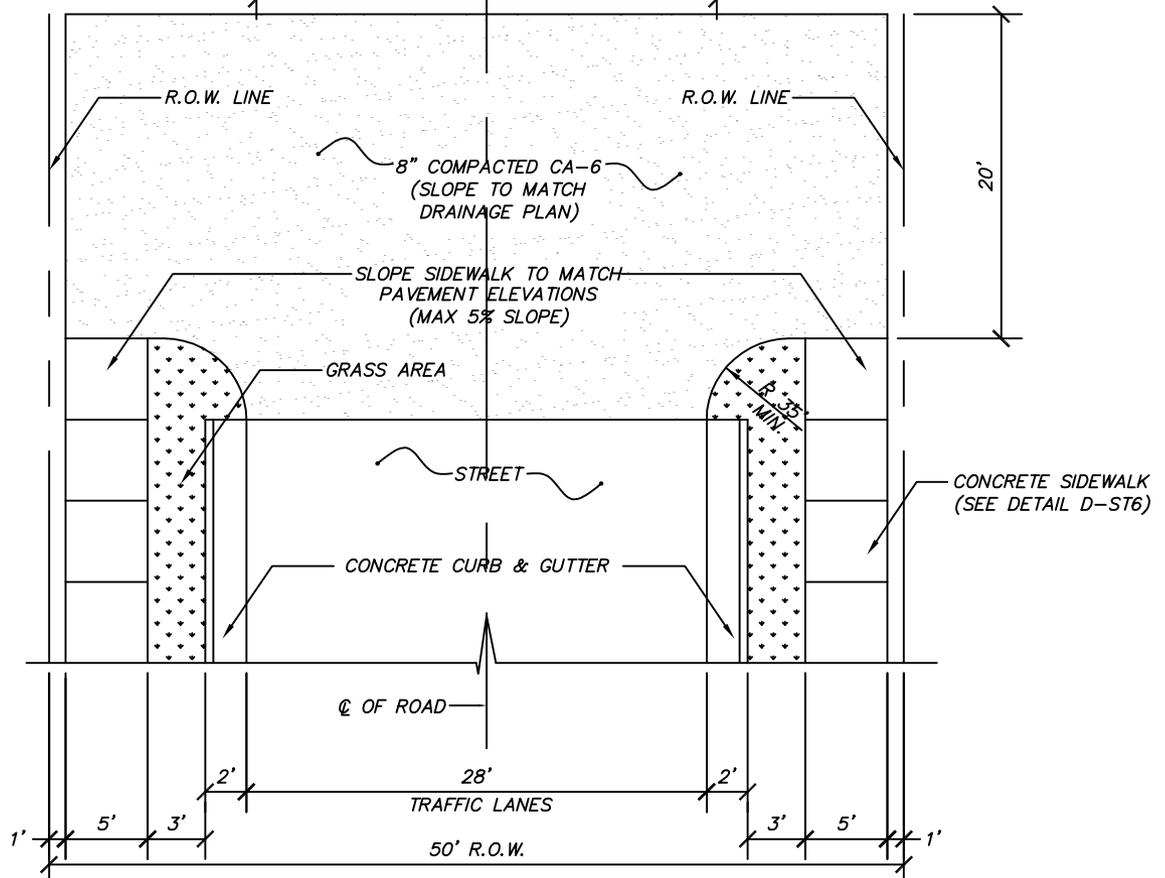
24" X 24" DIAMOND SHAPED W8-3  
"PAVEMENT ENDS" SIGN, IN ACCOORDANCE  
WITH MUTCD, MOUNTED ON 4 X 4 WOOD POSTS,  
SEE SIGN ELEVATION FOR DETAILS



**SIGN ELEVATION**

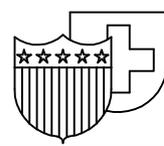
**NOTES:**

1. THE MARKERS FOR THE "END OF PAVEMENT" SHALL CONFORM WITH SECTION 3C-4 OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
2. FOR SIGN DIMENSIONS SEE SECTION 2C-23 OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", LATEST EDITION.
3. 4 X 4 WOOD POSTS AND 2 X 6 WOOD RAILS SHALL BE PRESSURE TREATED.
4. REFLECTORS SHALL BE 1 1/2" Ø, 24" O.C.



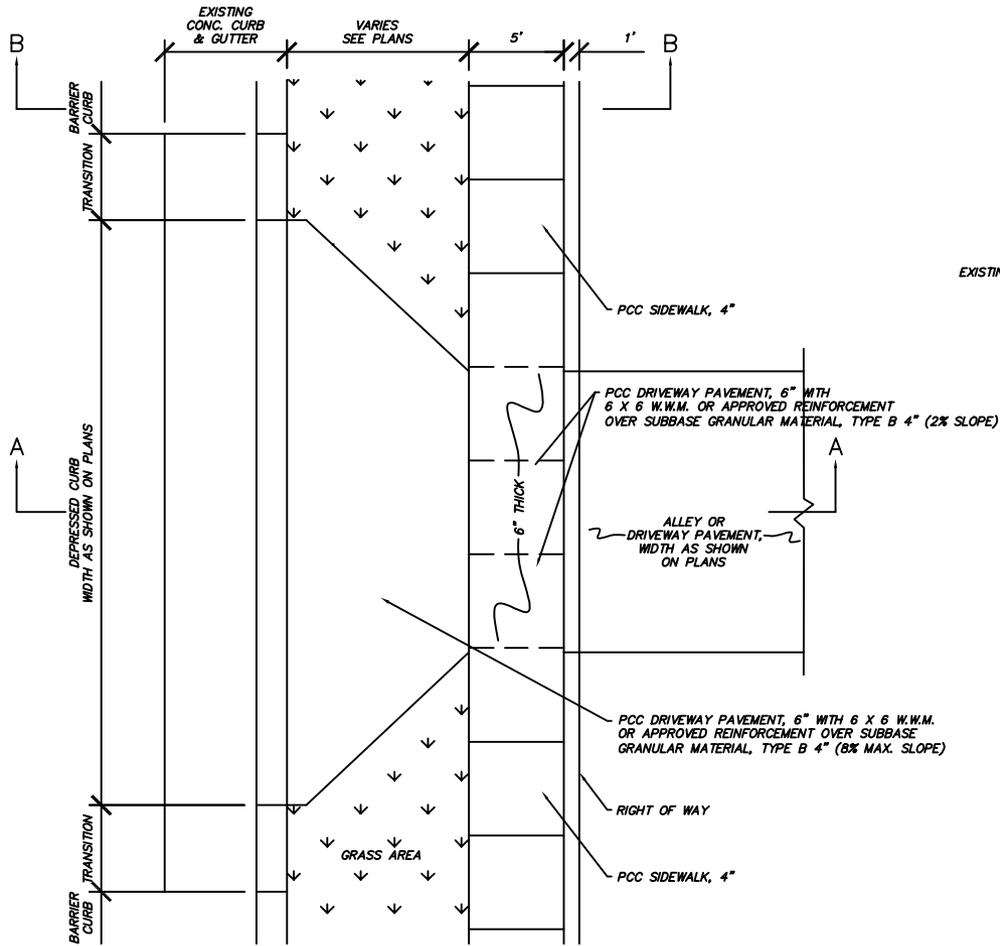
**TURN AROUND  
(RESIDENTIAL / LOCAL ROADS ONLY)**

DRAWING ISSUE	
PRELIMINARY DRAWINGS	
PROGRESS DRAWING	
ISSUED FOR DESIGN	
ISSUED FOR PERMIT	
ISSUED FOR CONSTRUCTION	

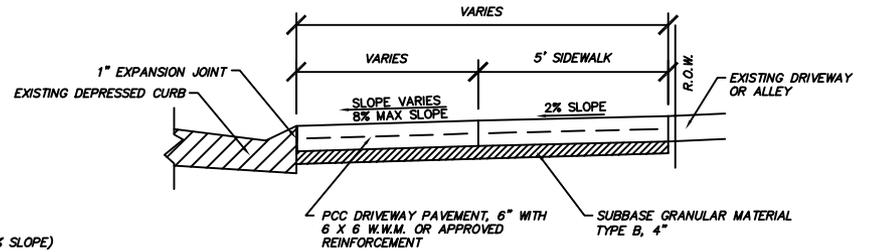


**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

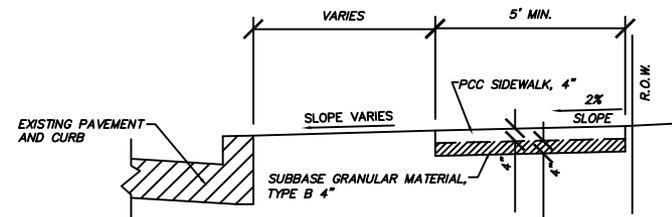
<b>SHEET - TITLE</b>		TURN AROUND DETAIL	
<b>TURN AROUND DETAIL 50' R.O.W.</b>		DESIGNED BY JG	JOB NO. STD DETAILS
		DRAWN BY JD	SHEET NO.
		CHECKED BY JG	D-ST5
		DATE 10/17/03	



**ALLEY OR DRIVEWAY PAVEMENT DETAIL**  
N.T.S.

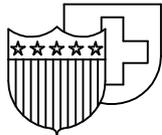


**TYPICAL SECTION A-A**  
N.T.S.



**TYPICAL SECTION B-B**  
N.T.S.

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



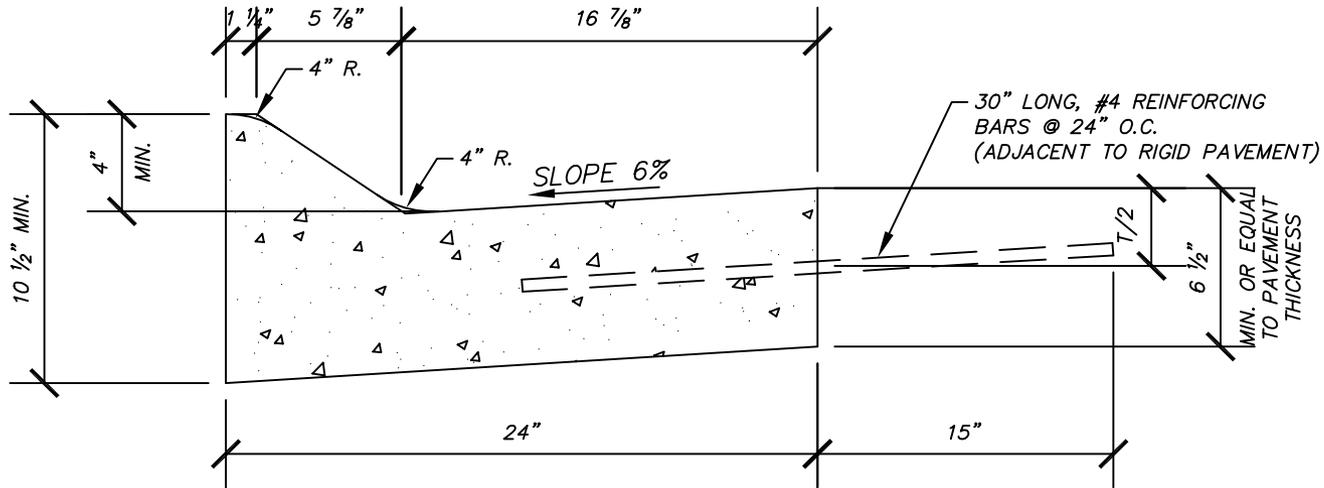
**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

**SHEET - TITLE**

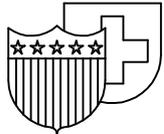
SIDEWALK DETAILS

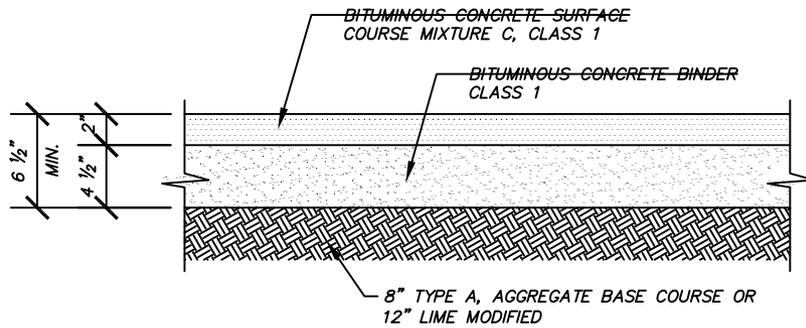
**TYPICAL SIDEWALK DETAILS**

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-ST6
DATE 04/01/03	



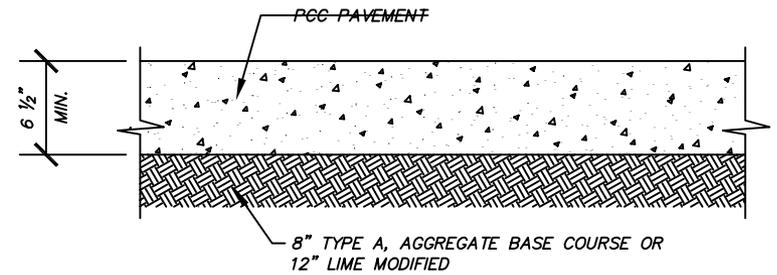
**MOUNTABLE CURB**  
NOT TO SCALE

DRAWING ISSUE	 <b>CITY OF HIGHLAND</b> PUBLIC WORKS DEPARTMENT	<i>SHEET - TITLE</i>	CONCRETE CURB & GUTTER	DESIGNED BY JG	JOB NO. STD DETAILS
PRELIMINARY DRAWINGS		<b>CONCRETE CURB &amp; GUTTER DETAIL</b>	DRAWN BY JD	SHEET NO.	
PROGRESS DRAWING			CHECKED BY JG	D-DST7	
ISSUED FOR DESIGN			DATE 10/15/03		
ISSUED FOR PERMIT					
ISSUED FOR CONSTRUCTION					



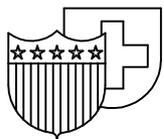
**1 ASPHALT PAVEMENT SECTION**  
N.T.S.

**OR**



**2 CONCRETE PAVEMENT SECTION**  
N.T.S.

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION

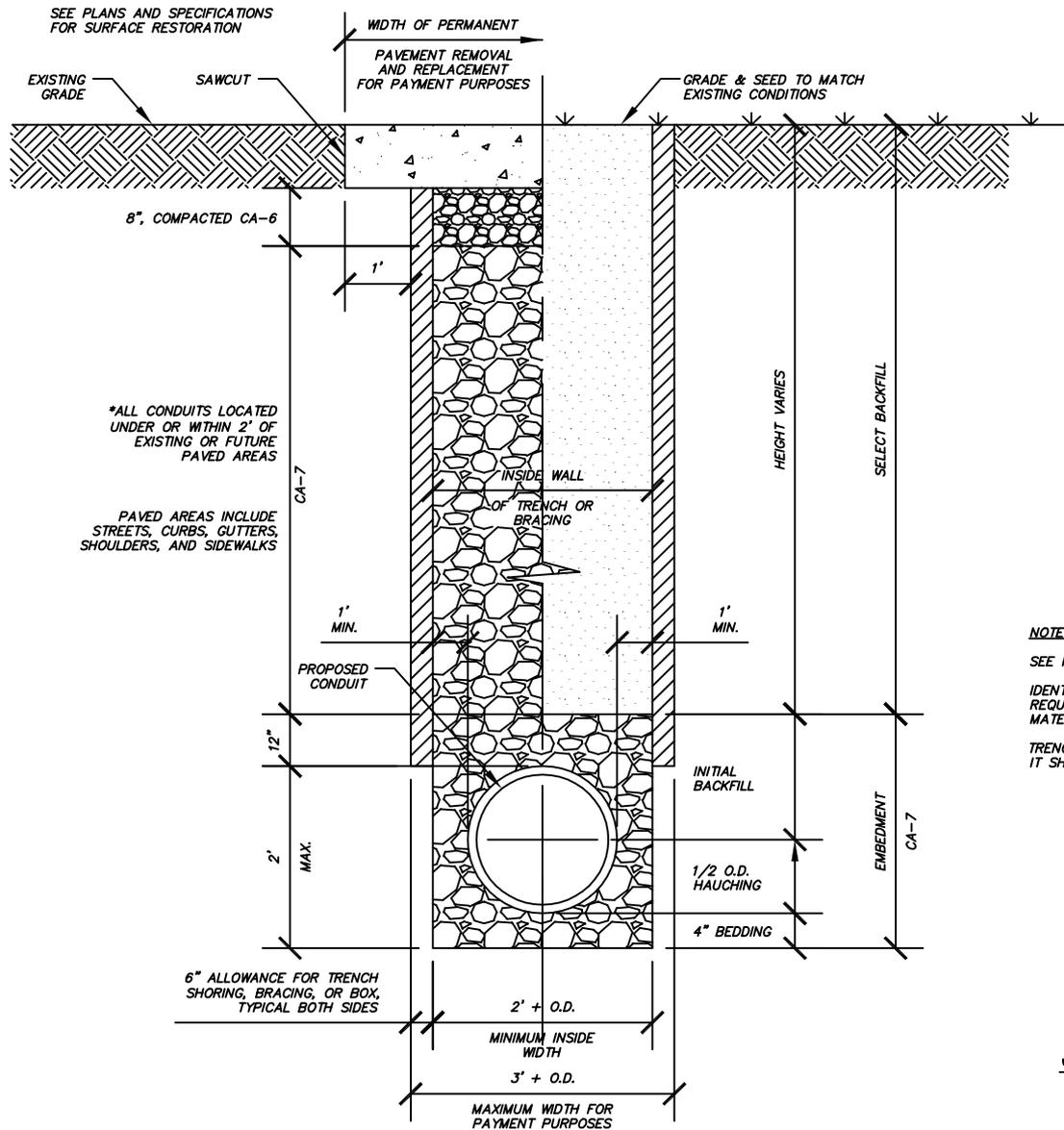


**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

**SHEET - TITLE** PAVEMENT SECTION DETAILS

**PAVEMENT SECTION DETAILS**

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-ST8
DATE 04/01/03	



**NOTES:**

SEE PLANS AND SPECIFICATIONS FOR SURFACE RESTORATION.

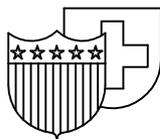
IDENTIFICATION OF WHERE SELECT GRANULAR MATERIAL IS REQUIRED TERMINOLOGY, DIMENSION AND TYPE OF SELECT MATERIAL, WHEN REQUIRED.

TRENCH BOX SHALL NOT EXTEND BELOW TOP OF PIPE, HOWEVER IT SHALL NOT EXCEED 2 FEET FROM THE BOTTOM OF THE TRENCH.

**STORM SEWER TRENCH DETAIL**

NOT TO SCALE

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



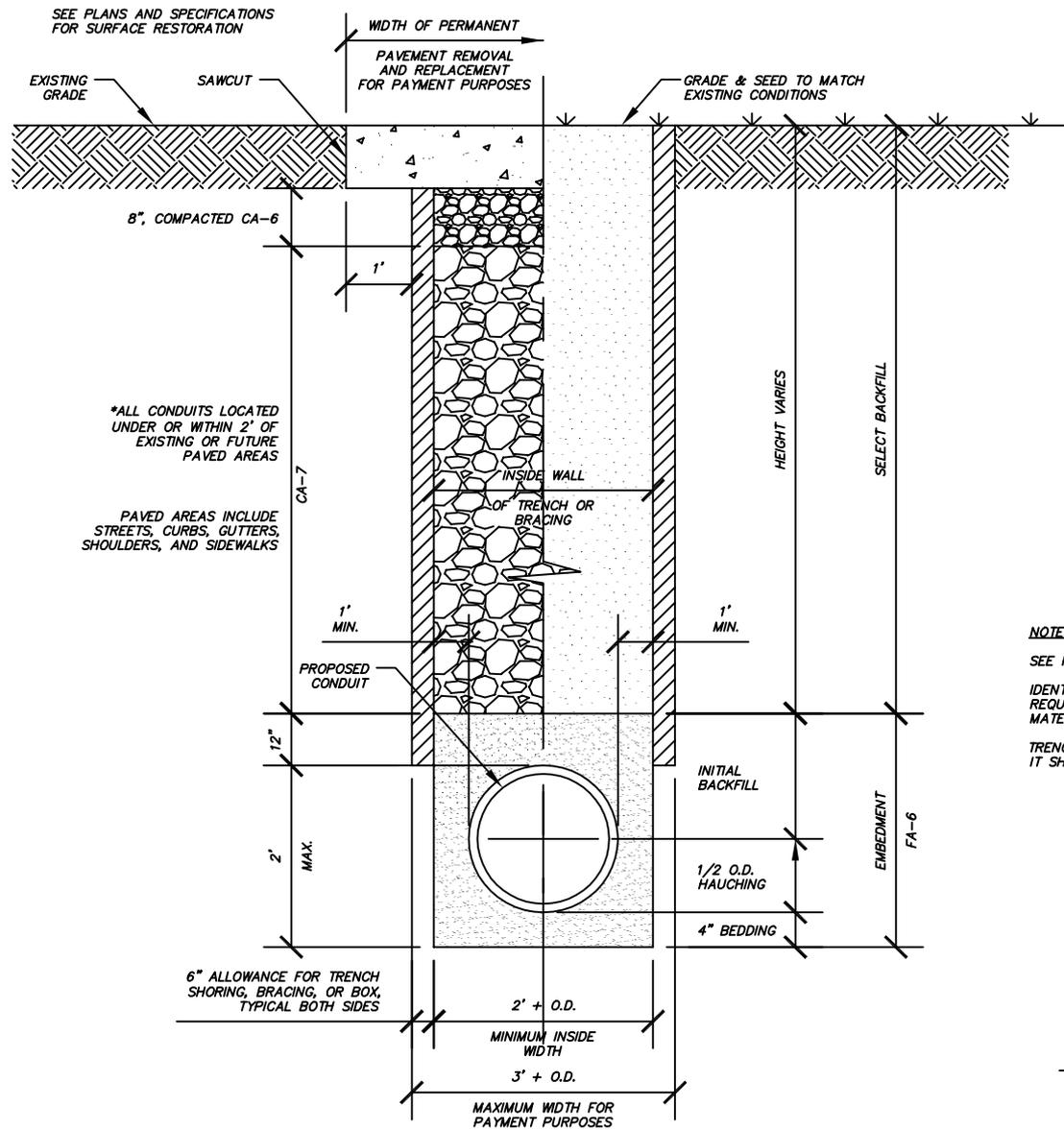
**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

**SHEET - TITLE**

STORM TRENCH DETAIL

**STORM SEWER TRENCH DETAIL**

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-STM1
DATE 08/11/03	



**NOTES:**

SEE PLANS AND SPECIFICATIONS FOR SURFACE RESTORATION.

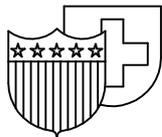
IDENTIFICATION OF WHERE SELECT GRANULAR MATERIAL IS REQUIRED TERMINOLOGY, DIMENSION AND TYPE OF SELECT MATERIAL, WHEN REQUIRED.

TRENCH BOX SHALL NOT EXTEND BELOW TOP OF PIPE. HOWEVER IT SHALL NOT EXCEED 2 FEET FROM THE BOTTOM OF THE TRENCH.

**WATER MAIN TRENCH DETAIL**

NOT TO SCALE

DRAWING ISSUE
PRELIMINARY DRAWINGS
PROGRESS DRAWING
ISSUED FOR DESIGN
ISSUED FOR PERMIT
ISSUED FOR CONSTRUCTION



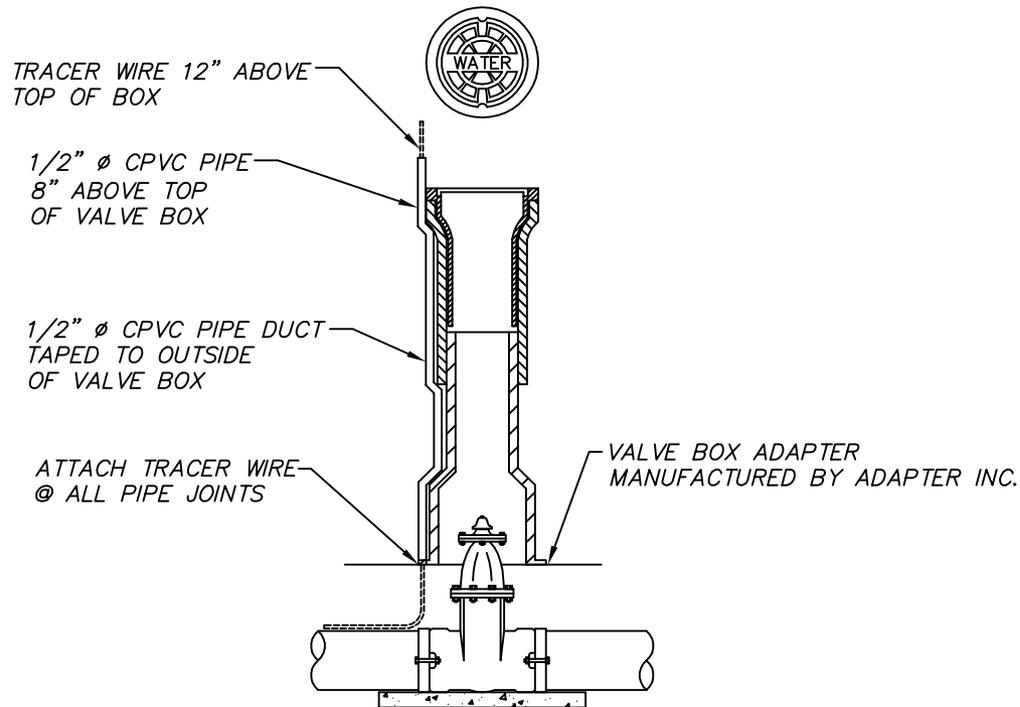
**CITY OF HIGHLAND**  
PUBLIC WORKS DEPARTMENT

**SHEET - TITLE**

TRENCH DETAIL

**WATER MAIN TRENCH DETAIL**

DESIGNED BY JG	JOB NO. STD DETAILS
DRAWN BY JD	SHEET NO.
CHECKED BY JG	D-W1
DATE 08/11/03	



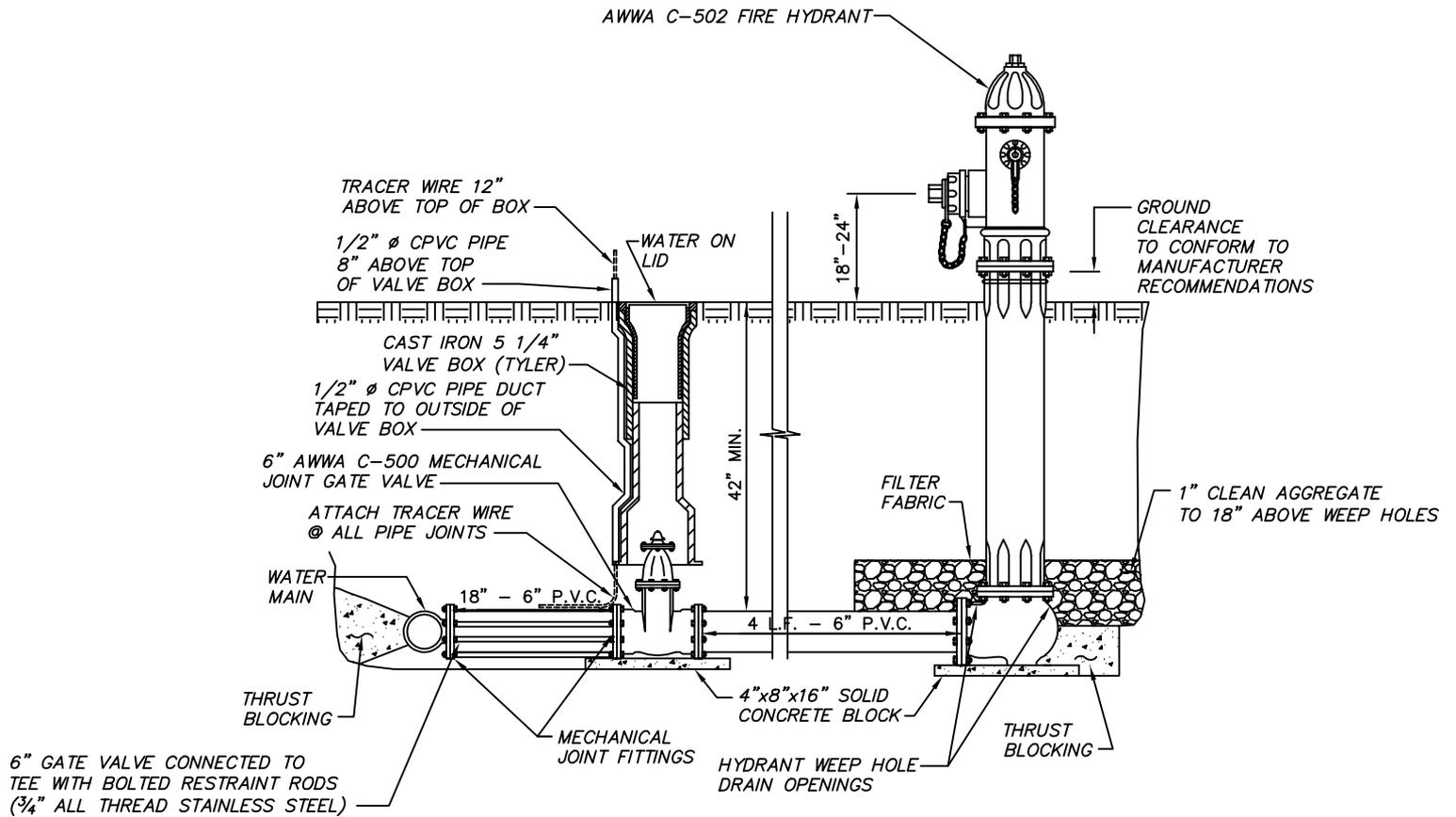
## CAST IRON VALVE BOXES & TRACER WIRE DETAIL

NOT TO SCALE

SPECIFICATIONS: CAST IRON VALVE BOX MADE BY "TYLER"  
5 1/4" WITH SCREW TYPE ADJUSTMENT

EXECUTION: EXECUTION SHALL BE IN ACCORDANCE WITH THE STANDARD  
SPECIFICATION FOR WATER AND SEWER MAIN CONSTRUCTION  
IN ILLINOIS.

DRAWING ISSUE PRELIMINARY DRAWINGS PROGRESS DRAWING ISSUED FOR DESIGN ISSUED FOR PERMIT ISSUED FOR CONSTRUCTION	 <p style="font-size: 1.2em; font-weight: bold;">CITY OF HIGHLAND</p> <p>PUBLIC WORKS DEPARTMENT</p>	<p><i>SHEET - TITLE</i></p> <p>GATE VALVE DETAIL</p> <p style="font-weight: bold; margin-top: 20px;">CAST IRON VALVE BOXES AND TRACER WIRE DETAIL</p>	DESIGNED BY JG DRAWN BY JD CHECKED BY JG DATE 04/01/03	JOB NO. STD DETAILS SHEET NO. D-W2
--	---	---	---	---



## FIRE HYDRANT DETAIL

NOT TO SCALE

**SPECIFICATIONS:** FIRE HYDRANTS SHALL BE KENNEDY GUARDIAN K-81A OR MUELLER SUPER CENTURION 200 (SELECTION BY CITY), 5 1/4 3-WAY WITH A FOUR(4) FOOT BURY, TWO - 2 1/2" DISCHARGE NOZZLES, AND A 4 1/2" STEAMER NOZZLE, ALL CONFORMING TO AWWA C-502.

**EXECUTION:** EXECUTION SHALL BE IN CONFORMANCE WITH THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS.

<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">DRAWING ISSUE</td></tr> <tr><td style="text-align: center;">PRELIMINARY DRAWINGS</td></tr> <tr><td style="text-align: center;">PROGRESS DRAWING</td></tr> <tr><td style="text-align: center;">ISSUED FOR DESIGN</td></tr> <tr><td style="text-align: center;">ISSUED FOR PERMIT</td></tr> <tr><td style="text-align: center;">ISSUED FOR CONSTRUCTION</td></tr> </table>	DRAWING ISSUE	PRELIMINARY DRAWINGS	PROGRESS DRAWING	ISSUED FOR DESIGN	ISSUED FOR PERMIT	ISSUED FOR CONSTRUCTION	<h3 style="margin: 0;">CITY OF HIGHLAND</h3> <p style="margin: 0;">PUBLIC WORKS DEPARTMENT</p>	<p><b>SHEET - TITLE</b> FIRE HYDRANT DETAIL</p> <p style="font-size: 1.2em; font-weight: bold; margin-top: 20px;">FIRE HYDRANT DETAIL</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="text-align: center;">DESIGNED BY <i>JG</i></td><td style="text-align: center;">JOB NO. STD DETAILS</td></tr> <tr><td style="text-align: center;">DRAWN BY <i>JD</i></td><td style="text-align: center;">SHEET NO.</td></tr> <tr><td style="text-align: center;">CHECKED BY <i>JG</i></td><td style="text-align: center; font-size: 1.2em; font-weight: bold;">D-W3</td></tr> <tr><td style="text-align: center;">DATE 08/11/03</td><td></td></tr> </table>	DESIGNED BY <i>JG</i>	JOB NO. STD DETAILS	DRAWN BY <i>JD</i>	SHEET NO.	CHECKED BY <i>JG</i>	D-W3	DATE 08/11/03	
DRAWING ISSUE																	
PRELIMINARY DRAWINGS																	
PROGRESS DRAWING																	
ISSUED FOR DESIGN																	
ISSUED FOR PERMIT																	
ISSUED FOR CONSTRUCTION																	
DESIGNED BY <i>JG</i>	JOB NO. STD DETAILS																
DRAWN BY <i>JD</i>	SHEET NO.																
CHECKED BY <i>JG</i>	D-W3																
DATE 08/11/03																	

HIGHLAND LAND DEVELOPMENT CODE

This Ordinance shall be known as Ordinance No. 2139 and shall be in full force and effect from and after its passage and publication.

Passed by the City Council of the City of Highland, Illinois, and filed in the office of the City Clerk on this 1<sup>st</sup> day of December, 2003, the vote being taken by ayes and noes and entered upon the legislative record as follows:

AYES: McGinley, Miller, Gould, Sinnock

NOES: None

ATTEST:

/s/ Barbara Bellm  
Barbara Bellm, City Clerk of the City of Highland,  
Madison County, Illinois