
MANUAL OF PRACTICE

2023 EDITION

AN INTEGRAL PART OF
THE URBANA CITY CODE,
CHAPTER 21,
LAND DEVELOPMENT CODE

CITY OF URBANA, ILLINOIS



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FORWARD

Issued June 28, 2023

This Manual of Practice is an administrative document. This designation allows the Administrative Review Committee (ARC), as defined in Chapter 21 of the City Code, to be the authority for revising, amending, and/or modifying this Manual administratively, if certain burdens of proof are met. It also allows a Developer or a Developer's Engineer to request a variance from an item in the Manual, which may be approved by the ARC if certain burdens of proof are met. Section 1.10 of the Manual contains information on requesting variances. A form is included in Appendix K to request revisions to the Manual. Excluding emergency items, revision requests will be filed and reviewed on as-needed basis, with the City's goal being that revision requests will be considered on a once-per-year interval.

Changes to the Manual of Practice will be posted on the City website.

The Manual of Practice is an integral part of Urbana City Code Chapter 21, the Land Development Code.

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CHAPTER 1: ADMINISTRATIVE PROCEDURES

Issued June 28, 2023

- 1.00 Introduction
- 1.01 Definitions of Terms
- 1.02 Scope
- 1.03 Pre-Application Conference
- 1.04 Design Computation Requirements
- 1.05 Other Permit Applications and Approvals
- 1.06 Approval Period
- 1.07 Revisions to Approved Site Engineering Plans
- 1.08 Record Drawings
- 1.09 Project Completion and Final Acceptance
- 1.10 Variances from Manual Requirements
- 1.11 Ties to Control Points and Establishing New Control Points
- 1.12 Electronic Drafting File Standards

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1.00 INTRODUCTION

A major portion of publicly owned improvements are initially designed and constructed by private interests. This Manual of Practice has been prepared to ensure that such improvements result in construction that meets City requirements. It is authorized by Urbana City Code Section 21-120(J).

This Chapter explains the processing requirements and procedures required by the Urbana City Code. The Chapter includes the various documents required prior to, during and after construction in order to accomplish these purposes. The Manual also intends to provide uniform design criteria and construction specifications for facilities designed for or by the City. For any topic of infrastructure design or construction that is not directly addressed by the Manual, the following standards shall apply by default: the IDOT BLRS Manual for design and the IDOT Standard Specifications for Road and Bridge Construction.

The Manual of Practice is intended to be complementary with the Land Development Code and with the various standard manuals and specifications referenced by the Manual. Where a conflict exists between the Manual, the Land Development Code, and the referenced standards, the following hierarchy will be applied according to the interpretation made by the City: the Land Development Code holds over the Manual of Practice; the Manual of Practice holds over Primary Reference Standards; and Primary Reference Standards hold over Secondary Reference Standards.

1.01 DEFINITIONS OF TERMS

The words and terms, whenever they occur in the Manual of Practice (Manual), are defined herein. Definitions provided for in the Land Development Code also apply to this Manual.

AASHTO: American Association of State Highway and Transportation Officials.

ADAAG/ADA: Americans with Disabilities Act Accessibility Guidelines.

Administrative Review Committee (ARC): means the standing deliberative body that includes the City Engineer, the Director of Community Development Services Department, and the Secretary of the Plan Commission, or their respective designees.

ADT: Average daily traffic is the total traffic volume during a given time period, ranging from two (2) to three hundred sixty four (364) consecutive days, divided by the number of days in that time period, and expressed in “vpd” (vehicles per day).

American National Standard Practice for Roadway Lighting: The “American National Standard Practice for Roadway Lighting” prepared by the American National Standards Institute, published by the Illuminating Engineering Society, and Dark Sky Association most recent edition.

Approved Species List: The list of trees, shrubs and groundcover accepted by the City Arborist for use as street trees or screening required by the Urbana City Code as a condition of variance or by agreement (refer to Chapter 24 of this Manual).

ASTM: American Society for Testing and Materials.

Backfill, Initial: The backfill for pipes from the centerline (springline) of the pipe to twelve (12) inches above the top of the pipe. See also “bedding”, “haunching”, and “backfill, final”.

Backfill, Final: The backfill for pipes from twelve (12) inches above the top of pipe to the natural or finished surface elevation. See also “bedding”, “haunching”, and “backfill, initial”.

Base Flood Elevation: The elevation of surface water, in relation to mean sea level, resulting from a flood that has a 1% chance of equaling or exceeding that level in any given year.

Bedding: The four (4) inch layer of material on which a pipe lies. See also “haunching”, “backfill, initial”, and “backfill, final”.

City Arborist: means the City employee who is responsible for the management of the municipal urban forest, landscape plan reviews and development plantings. The City Arborist has been trained in urban forestry, arboriculture, horticulture, landscape architecture or closely related fields and represents the City’s interests in the area of municipal urban forest management.

City Engineer: The person who holds the position of City Engineer for the City of Urbana or the employees of the City Engineering Division to whom the City Engineer report and are designated to perform the duties thereto.

City of Urbana (City): the City of Urbana, Illinois.

Community Development Director (Director): The person who holds the position of Community Development Services Department Director for the City or employees of the City Community Development Services Department to whom report to the Director and are designated to perform the duties thereto.

Controlled Low Strength Material (CLSM): An engineered, compounded slurry-type material that is a self-consolidating, cementing material used primarily as a final backfill as an alternative to compacted, granular backfill. CLSM is also referred to as “flowable fill” and said terms are interchangeable. CLSM generally consists of a mixture of Portland cement, water, fine aggregate and fly ash. The compounding and placement of CLSM shall comply with the current edition of IDOT’s Standard Specifications for Road and Bridge Construction, under Section 593 “Controlled Low Strength Material, Backfill”.

CUUATS: Champaign-Urbana Urbanized Area Transportation Study.

Developer: means the legal or beneficial owner or owners of any lot or any land included in a proposed development including the holder of an option or contract to purchase, or any person with beneficial interest in a land trust, or other persons having enforceable proprietary interest in such land, with the intent of developing the land, by making physical improvements to it by constructing or modifying roads, utility lines, and/or other infrastructure elements.

Developer’s Engineer: The engineer of record, responsible for the preparation of the project plans. The experience and credentials of the Developer’s Engineer relative to the given project shall conform to the State of Illinois Professional Engineering Practice Act of 1989.

Development: As defined in the Land Development Code, means any activity causing a change to be made in the legal rights or physical state a previously developed site or an unimproved tract of real estate, such that the proposed improvement activity satisfies one or more of the following criteria. All developments shall be classified as either a major development or a minor development, and these classifications are defined in the Land Development Code.

- A. Requires a stormwater management plan according to Section 21-430(B) of the Land Development Code; or
- B. Requires a sanitary sewer construction or operation permit from the Illinois Environmental Protection Agency (IEPA); or
- C. Requires a traffic impact analysis according to Section 21-220 of the Land Development Code; or
- D. Constitutes any mining, quarrying, or other excavations related thereto; or
- E. Constitutes the creation or change of a subdivision or a resubdivision or lot-line adjustment; or

- F. Constitutes the creation or a change of a mobile home park; or
- G. Constitutes the creation or change of a planned unit development.

A list of activities that are considered to not constitute a development can be found in Section 21-115 of the Land Development Code.

Development Sketch Plan: A conceptual sketch of a proposed development inclusive of property lines, proposed streets/drives, available utilities, etc., to be used for discussion purposes at a pre-application conference. See Appendix C, Illustration 2, “Development Sketch Plan” in this Manual.

Erosion and Sediment Control Ordinance: Urbana City Code Chapter 6.5, Article II, as amended.

Erosion Control Plan: Plans and specifications prepared by the Developer’s Engineer, which explain how soil erosion will be minimized during any soil disturbing process.

Extraterritorial Jurisdiction (ETJ): The unincorporated territory lying within one and one-half (1½) miles of the Corporate Limits of the City where the City has development authority, excluding the areas located within the development jurisdiction of another municipality.

FEMA: Federal Emergency Management Agency.

Field Tile: A subsurface agricultural drainage system that is often unlocated and which slowly removes excess sub-surface water from agricultural fields, to allow sufficient air space within the soil, to enable proper cultivation, to also allow for access into said field by heavy machinery as needed to tend to and harvest crops, with minimal damage or compaction to the soil.

Flood Routing: The area where water flows when in excess of the capacity in the storm drainage system.

Floodway: The channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one-tenth (0.1) of one foot.

GIS: Geographic Information System.

Haunching: The material placed on each side of an installed pipe, from the top of the bedding to the centerline (springline) of the pipe. See also “bedding”, “backfill, initial”, and “backfill, final”.

IDOT: Illinois Department of Transportation.

IDOT Construction Manual: The “Construction Manual” published by IDOT, most recent edition.

IDOT Bureau of Local Roads and Streets Manual: The “BLRS Manual” published by IDOT, most recent edition.

IDOT Bureau of Design and Environment Manual: The “BDE Manual” published by IDOT, most recent edition.

IDOT Drainage Manual: The “Drainage Manual” published by IDOT, most recent edition.

IEPA: Illinois Environmental Protection Agency.

Illinois Highway Standards (Highway Standards): The “Highway Standards” published by IDOT, most recent edition.

Internal Circulation System: An internal system of streets or drives, which is located in and designed to serve a development.

ISPEZ: “Illinois State Plane - East Zone” Coordinate System.

ITE: Institute of Transportation Engineers.

Land Development Code: Urbana City Code Chapter 21, as amended.

Manual of Practice (Manual): this Manual, as amended.

MUTCD: The “Manual of Uniform Traffic Control Devices” published by the U.S. Department of Transportation, Federal Highway Administration, including the Illinois Supplement, most recent edition.

NACTO: National Association of City Transportation Officials.

Plan Commission: the Plan Commission of the City.

Pond, Detention: A stormwater holding basin that is dry during most times, except during or after rainfall events or snowmelt. A detention pond functions to slow down the flow of stormwater, to contain it for a short time period and to help to improve water quality, thereby lessening the effects of soil erosion. Also referred to as a “dry bottom basin” herein.

Pond, Retention: A stormwater holding basin that maintains a pool of water throughout the year and which also holds and stores stormwater runoff following storms. Retention ponds remove pollutants by allowing sediment to settle as the stormwater slowly moves from one end of the pond to the other and through biological uptake, as plants absorb excess nutrients. Also referred to as a “wet bottom basin” herein.

Portable Document Format (PDF): a file format that provides an electronic image of text or text and graphics that looks like a printed document and can be viewed, printed, and electronically transmitted.

PROWAG: Public Rights-of-Way Accessibility Guidelines.

Punch List: a document created and issued by the Developer’s Engineer, with participation by the Developer and the City Engineer’s authorized designee that is compiled in the final stages of the construction of the Development that provides a list of public improvements items that must be addressed before the construction is considered complete and ready for City Engineer approval.

Record Drawings: Means the City-approved Site Engineering Plans and related documentation that have been revised, based on the construction observer’s field observations and field photos, to accurately show the actual changes to the Development’s public improvements that were made during the construction process, based on field measurements taken by the Developer’s Engineer and other documentation then marked-up via red-line field prints and incorporated into the computer assisted drafting (CAD) files.

Roundabout: means a circular intersection that offers safety, environmental and economic benefits to drivers and the local community. In a roundabout, drivers travel counterclockwise around a center island, where there are no traffic signals or stop signs controlling traffic movements. In a roundabout, drivers entering at each point of the roundabout yield to traffic already in the roundabout, then enter the circulating roadway and exit at their desired street. Under this Manual, a “traffic circle” does not qualify as a roundabout.

ROW: Right-of-way (physical extent of ownership and/ or legal rights) of a public street or alley.

Secretary of the Plan Commission (or Secretary): the City Planner of the City, or the City Planner's authorized designee.

Site Engineering Plans: the drawings that are graphic representations that are completed by the Developer's Engineer (as defined herein), that show the existing and proposed conditions for the Development. Said plans show how the site is to be modified to suit the altered needs of the Development's site. Said plans are to be used by a construction contractor to make the needed improvements to the Development. Said plans shall show both existing and proposed ground contours, buildings, roads, streets, street signs, traffic control devices, sidewalks and paths/trails, parking, stormwater drainage facilities, sanitary sewer lines, water lines, streetlights, and landscaping and erosion control and wetlands mitigation elements. Said plans shall also include the written specifications that detail the quality of the materials and workmanship required. The plans shall show property lines, easement limits, building setback lines, and numerous other public improvements, all in conformance with this Manual and Chapter 21 of the City Code of Ordinances.

Special Flood Hazard Area: Those lands within the jurisdiction of the City, the extraterritorial jurisdiction (ETJ) of the City, or that may be annexed into the City, that are subject to special flood, mudflow, or flood related erosion hazard as defined and mapped by the Federal Emergency Management Agency (FEMA). The floodplains of the City are generally identified as such on panel numbers 313, 314, 318, 325, 426, 427, 429, 431, and 450 of the countywide Flood Insurance Rate Map of Champaign County prepared by FEMA and effective October 2, 2013, as amended. Floodplain also includes those areas of known flooding as identified by the community.

Standard Specifications for Road and Bridge Construction: The "Standard Specifications for Road and Bridge Construction" published by IDOT, most recent edition.

Standard Specifications for Water and Sewer Main Construction in Illinois (SSWSMC): The "Standard Specifications for Water and Sewer Main Construction in Illinois" published jointly by the Illinois Society of Professional Engineers, Consulting Engineers Council of Illinois, Illinois Chapter of the American Public Works Association, Illinois Municipal League and the Associated General Contractors of Illinois, most recent edition.

Stormwater Holding Basin: Is a structure used to collect and hold stormwater runoff for a period of time to compensate for increases in stormwater runoff caused by reduced ground surface perviousness due to activities such as paving and/or building construction. Said basin may be either a detention basin (dry-bottom basin) or a retention basin (wet-bottom basin) as defined herein.

Stormwater Management Plan: As defined in Chapter 21 of the City Code of Ordinances, a set of reports, plans, and documents as required by Section 21-430(B) of the Urbana City Code, Chapter 21, and the content of which is defined in Chapter 19 of this Manual, which provide information on how stormwater runoff is controlled on a site.

Street Tree: Any tree located within a ROW that is owned by the City and maintained by the Public Works Department.

Subsidiary Drainage Plat: A document required by Illinois statute, that shows topographically and by profile the elevation of the land, prior to the commencement of any changes in the elevations, by contours at not greater than one (1) foot intervals for Major Developments and not greater than two (2) ft. intervals for Minor Developments. Said plat shall provide spot elevations for existing culverts, waterways, and other critical drainage system components, and which shall show proposed changes in the elevations and the flow of the surface, from the Development, using proposed spot elevations, floor elevations, flow arrows, and proposed surface contours.

Traffic Calming: One or more measures that may consist of both non-physical measures such as, but not limited to, enhanced speed limit signs, enhanced stop signs, and speed limit pavement and/or

physical measures such as, but not limited to, lane narrowing, realigned intersections, road diets, traffic circles, and other features that use self-enforcing physical or psycho-perception means to alter driver behavior produce desired effects, thereby improving safety conditions for non-motorized street users, including pedestrians, cyclists, and runners.

Tree: A large, woody plant having one of several self-supporting stems or trunks and numerous branches. A tree may be classified as deciduous or evergreen.

Traffic Impact Analysis (TIA): A plan prepared by an engineer that calculates the anticipated on- or off-site traffic impact of a particular development and determines what traffic regulatory improvements, if any, are required to mitigate these impacts.

Urbana & Champaign Sanitary District (UCSD): As defined in Chapter 21 of the City Code of Ordinances.

Wetland: means land that has a predominance of hydric soils and that is inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions.

1.02 SCOPE

The review and approval of plans, specifications and contract documents for certain types of improvements is also the legal responsibility of various other public agencies in addition to the City. This Manual is not intended as a substitute for the requirements of such other public agencies. The Developer's Engineer is responsible for ensuring that the proposed plans, specifications and contract documents meet the legal requirements of all other public agencies and that any permits and bonds required by such agencies are secured.

The Administrative Review Committee (ARC) shall periodically review this Manual. Revisions shall be incorporated through the process detailed in the Foreword of this Manual. The ARC shall have final joint administrative authority for the Manual, with the City Engineer having primary authority for the technical standards contained in Chapters 6 through 27.

1.03 PRE-APPLICATION CONFERENCE

The Developer and the Developer's Engineer shall participate in the pre-application conference described in Section 21-200 of the Land Development Code.

The Development Pre-Application Conference Checklist and other Development Process Forms are listed in Appendix D. Appendix D also contains a Development Review Process Flow Chart.

1.04 DESIGN COMPUTATION REQUIREMENTS

The Developer's Engineer shall make design computations for all phases of the Development when this Manual requires such computations or when the calculations are required by the City Engineer. The City Engineer may request design computations to ensure adequacy and stability of the work and conformance with appropriate standards. Said computations shall be neat and legible and in a form required by this Manual. The computations shall be clear and complete and prepared using generally accepted procedures that meet the applicable codes and standards, in a format approved by the City Engineer. Detailed design calculations submitted with the Site Engineering Plans must include (but not necessarily be limited to) the following, if applicable:

- A. Flood routing and waterway design.
- B. Bridge, culvert, retaining wall, or drainage way design.
- C. Driveway throat length design calculations as required by Chapter 9 herein.
- D. Structural design data for arterial and commercial/industrial collector street pavements, as required under Chapter 10 herein.
- E. Conduit and conductor sizing calculations as well as illumination intensity and uniformity projections for streetlights, when so required by Chapter 13 herein.
- F. Storm sewer design, including sump pump discharge collection line sizing, as per Chapter 17.
- G. Sanitary sewer system design, as per Chapter 18.
- H. Stormwater holding basin design, as per Chapter 23.
- I. Fire flow analysis for the proposed water distribution system, as per Chapter 26 herein.

1.05 OTHER PERMIT APPLICATIONS AND APPROVALS

Other governmental agencies may review and approve all or certain parts of the work included in a project and may require a permit or application for a permit for such work. They may also require that such a permit or application for a permit be executed by the City. When such a permit or permit application is required, it shall be prepared by the Developer's Engineer, and it shall be ready for signatures and containing all required supporting documentation, with sufficient originals for the City to retain one.

1.06 APPROVAL PERIOD

- A. Approval of the Site Engineering Plans by the City Engineer shall be valid for Three Hundred Sixty-Five (365) consecutive calendar days. Construction shall not begin until the City Engineer has approved said plans. City Engineer approval of said plans does not constitute a guarantee that any design errors, omissions, or discrepancies have been discovered and the Developer's Engineer remains responsible for the standard of care and quality of the design, as stipulated under Illinois law.
- B. If construction is not commenced within said period, the approval will be void. Reactivation of such voided approvals will require a written request for extension and must include any new requirements that may be established by the City in the interim.

1.07 REVISIONS TO APPROVED SITE ENGINEERING PLANS

Any deviations from the approved Site Engineering Plans, that in the City Engineer's opinion, affect the location, capacity, stability, performance, safety or operation of the improvements shall be approved in writing by the City Engineer before such changes are made. Minor changes, which in the City Engineer's opinion, do not affect the location, capacity, stability, performance, safety or operation of the improvements will not require formal written approval, but must be verbally approved by the City Engineer and documented by the Developer's Engineer on the Record Drawings. If a change is verbally approved, then a memorandum of record must be sent by the Developer's Engineer to the City Engineer within seven (7) consecutive calendar days of the verbal approval. The memorandum of record shall briefly describe the change, the specific portion(s) of this Manual that pertain to the change, when it was approved and by whom.

1.08 RECORD DRAWINGS

The Developer's Engineer shall prepare and submit to the City Engineer, a set of Record Drawings of the entire set of Site Engineering Plans depicting the improvements as they actually were actually constructed. The Developer's Engineer shall be responsible for the accuracy of the content of the Record Drawings' information. The Record Drawings shall accurately identify in the General Notes sheets the makes, models, and model numbers of all streetlight luminaires, light poles, pole foundation units and traffic signal components that were actually furnished and installed for the Development. Final release of the Construction Performance Bond will not be made until the City Engineer has received said Record Drawings and said Record Drawings have been approved by the City Engineer. Record Drawings shall be provided to the City Engineer in accordance with Section 7.02 B.2 of the Manual along with an electronic submission in accordance with Section 1.12 of this Manual.

1.09 PROJECT COMPLETION AND FINAL ACCEPTANCE

The City Engineer, in cooperation with the Developer's Engineer, shall make a jointly attended final inspection of the completed work prior to accepting the project for maintenance. The Developer shall prepare a final Punch List and it shall be approved by the City Engineer. Said list shall itemize all items not meeting the requirements of the approved Site Engineering Plans. The Developer, or Developer's Engineer, shall notify the City Engineer of the completion of the punch list items. If the City Engineer agrees that the items have been satisfactorily completed, the City Engineer shall notify the Developer or the Developer's Engineer, in writing, that the project has been accepted.

1.10 VARIANCES FROM MANUAL REQUIREMENTS

Subject to Section 1.02 of this Manual, the Administrative Review Committee (ARC) may administratively waive any of the requirements of this Manual, upon written request by the Developer. No variance is available to a Developer as a matter of right. The burden of proving that a variance is justified is on the Developer.

A. General Standard for Variance Approval: The variance shall not be approved unless the ARC find that the variance is justified according to each of the following standards:

1. There is substantial hardship in complying with these regulations, provided that the spirit and intent of these regulations shall be substantially observed, and the public welfare and safety be assured.
2. The granting of the variance will not be detrimental to the public safety, health, or welfare or injurious to other property located in the vicinity of the property in question.
3. The cost or difficulty of complying with the requirements of these regulations is great compared to the gain such compliance provides to the public safety, health, and welfare.

B. Specific Considerations: In deciding whether to approve a variance of these regulations, the following criteria may be considered:

1. Whether the condition upon which the request for a variance is based is unique to the property, but not generally applicable to other properties.
2. Whether the property to be subdivided will be used only for low intensity uses.
3. Whether conditions may be imposed which mitigate the harm to the public caused by the failure to comply with these regulations.

1.11 TIES TO CONTROL POINTS AND ESTABLISHING NEW CONTROL POINTS

(RESERVED)

1.12 ELECTRONIC DRAFTING FILE STANDARDS

A. Electronic Files: Electronic files are required when submitting review copies and final files for:

1. Annexation plats: parcel boundary information only.
2. Subdivision plats: to minimally include a geographical information drawing showing property and tract boundaries and adjacent ROW.
3. The Site Engineering Plans.
4. Record drawings of the Site Engineering Plans.

B. Submittal: Electronic drafting files shall be submitted by the Developer or the Developer's Engineer to the City's online document portal or by other means approved by the City Engineer.

C. Submittal Format: Files shall be provided in PDF format. Files in AutoCAD-compatible and GIS-compatible (Shapefile or feature class) format files are required by the City. Unused blocks, layers, line styles, etc., shall be purged from AutoCAD files. Reference files used shall be in the same subdirectory as the active design file. See Appendix A of this Manual.

D. Layer Requirements: Design elements and symbols on electronically submitted files shall be in accordance with Appendix A of this Manual. The minimum requirement shall be that drawing elements not listed in Appendix A shall be purged from the submitted drawing.

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enable two-sided document printing.*

CHAPTER 2: PRELIMINARY PLAT

Issued June 28, 2023

- 2.00 Introduction
- 2.01 Administrative Procedures
- 2.02 Required Information
- 2.03 Distribution of Preliminary Plats
- 2.04 Electronic Drafting File Standards

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enable two-sided document printing.*

2.00 INTRODUCTION

A preliminary plat document depicts the proposed layout of a subdivision or development, in sufficient detail to provide an adequate basis for the City to determine if it meets the requirements of the Land Development Code. It establishes the basic developmental design concepts and public improvements required to be approved by the final plat. Preliminary Plats indicate the proposed public infrastructure, including streets, storm sewers, sanitary sewers, grading and stormwater holding facilities, and generally depict existing adjacent topography, infrastructure, along with the proposed lot configurations. Unlike final plats, preliminary plats are not recorded and are not the legal document used for sale of lots, but rather are used to allow for a comprehensive review of the proposed development by all affected agencies. These plats are sent for outside review to several agencies and require the approval of the Plan Commission and the City Council. Significant changes to a preliminary plat, in the opinion of the Administrative Review Committee, must be approved through resubmitting a modified preliminary plat. Accordingly, the content contained within the Preliminary Plat is binding upon the Developer, to the extent as determined by the City. In some cases, the requirement to prepare a preliminary plat may be waived, if the subdivision is classified as a minor development and involves little or no public infrastructure. An example of a preliminary plat of a major development and general plan not requiring any variances or variance requests of regulations is shown in Appendix C, Illustration 3A, with an example of a contour map to accompany a preliminary plat of a major development shown by Illustration 3B.

The following information includes instructions for the preparation of a preliminary plat, the associated application, and a summary of the review and approval process.

2.01 ADMINISTRATIVE PROCEDURES

Preliminary plat administrative procedures are provided in Section 21-225 of the Land Development Code.

2.02 REQUIRED INFORMATION

A preliminary plat shall include, but not be limited to, the following information:

A. Format:

1. Sheet Size: Plan set shall be full-sized (22 inches x 34 inches – ANSI D) and reduced-sized (11 inches x 17 inches – ANSI B). Variations in dimensions may be approved by the City Engineer, if requested prior to submission of plans.
2. Plans shall be scalable. Plan scale shall be no greater than one inch = 100 feet.
3. Precision: All distances shall be shown to the nearest 0.01-foot and elevations shall be shown to the nearest 0.1-foot for ground surfaces and to the nearest 0.01-foot for rigid surfaces.
4. Electronic copy: The plan set shall be submitted in PDF format.
5. Paper copies are neither required nor desired.

B. Required Preliminary Plat Requirements:

1. Subdivision, development or replat name.
2. North arrow and graphic scale.

3. Date of preparation, including most recent revision.
4. The location of the property expressed in each of the following ways:
 - a. By quarter-section (or part thereof), section, township, range, meridian, city, county and state;
 - b. By distances and bearings as referenced from magnetic north, grid north, astronomic north, or assumed north with reference to a corner or corners established in the United States Public Land Survey System; and
 - c. By a graphic depiction and a written legal description of the exterior boundaries of the subdivision.
5. The description and location of all survey monuments.
6. Survey data sufficient to reproduce any line or re-establish any monument in the subdivision.
7. A minimum of two (2) corners of the subdivision boundary shall show the coordinates based on the Illinois State Plane – East Zone horizontal coordinate system (NAD83, 2011).
8. Names, signatures, phone numbers and addresses of the property owner, Developer, Developer's Engineer, Developer's attorney, and land surveyor.
9. The source of all topographical data.
10. Total acreage in the preliminary plat.
11. Development boundaries clearly indicated.
12. The names of all adjacent property owners or the names of adjacent subdivisions.
13. A preliminary plat of a major development shall also include the following signature block:

If no variances are sought, the following signature block is to appear on the face of the plat:

APPROVED BY: The Urbana Plan Commission of the City of Urbana, Illinois.

Date: _____ Chairperson: _____

If variances are sought, the following signature block is to appear on the face of the plat:

APPROVED BY: The Urbana Plan Commission of the City of Urbana, Illinois.

Date: _____ Chairperson: _____

APPROVED BY: The City Council of the City of Urbana, Illinois, in accordance with Ordinance No. _____

Date: _____ by _____, Mayor

ATTEST: _____, City Clerk

C. Preliminary Plat Existing Conditions Requirements:

1. The location and size of all existing sanitary sewers, fiber optic cable, water mains, gas mains, buried electrical power lines, storm drainage facilities (including the known locations of farmland drain tiles), fire hydrants, geothermal facilities, and all related ROW and easements within or abutting the proposed development.
2. The topography by contour intervals of not more than two (2) feet related to the North American Vertical Datum of 1988. At least one benchmark for this datum must be shown on the face of the plat.
3. The location and identification of proposed buildings, railroads, overhead electrical power and telephone transmission lines, wind turbines, solar energy systems, pipelines, bridges, culverts and related items within or abutting the proposed development; and the sizes of existing buildings and structures.
4. Street names, surface pavement types, ROW widths and roadway widths for all public and private streets and alleys.
5. Improved or unimproved drainageways.
6. Walkway and/ or sidewalk locations, pavement types and ROW widths.
7. Public and/ or private easements, proposed and existing.
8. Railroad ROW(s).
9. Corporate city limit lines.
10. Parks, schools, or other public lands.
11. Existing and/ or proposed zoning district lines and classifications, including lot sizes plus the front, side and rear yard setbacks, for the proposed Development.
12. The drainage district(s) within which the proposed Development lies or the district to which the development is contiguous; or if the Development is not located in or contiguous to a drainage district, so state.
13. Delineation of commons or public area(s), if any.
14. The location of flood hazard areas and floodway boundaries, if applicable, and the base flood elevation for each building site, if available.
15. The acreage and identification of the upstream drainage basin(s).
16. Show the closest hydrant to the proposed development.
17. Approximate locations of active or abandoned private or public potable water wells, if available.
18. Approximate locations of existing septic tanks and any other existing on-site wastewater disposal systems, if available.
19. Any existing wetlands, as defined by Section 404 of the federal Clean Water Act, as determined by a wetlands survey and via National Wetland Inventory mapping.

20. Any historic landmarks or districts, or a historic consultation report from the City of Urbana Planning Division.

D. Preliminary Plat Proposed Conditions Requirements:

1. The names, locations, ROW and roadway width of proposed streets and alleys.
2. The locations, sizes, types and configurations of controlled intersections of roadways, showing the proposed traffic control measures, including signalized intersections, and stop sign controlled intersections, and roundabouts.
3. The location and width of sidewalk and mid-block sidewalk pavements and ROW or easements.
4. All lots and out lots shown and consecutively numbered.
5. Front yard and side lot setback lines.
6. Proposed utility easement widths and locations.
7. Proposed location, size and course of sanitary sewage conveyance lines and related ROW or easements.
8. Proposed stormwater drainage components, including the size, type and location of stormwater holding basins, plus any inlets and outlets, plus any related easements.
9. The location of proposed watercourses or impoundments, including stream relocations, showing normal water elevations and direction of flow, if applicable.
10. The locations of all proposed water service lines, their sizes and related ROW or easements.
11. The location of all proposed fire hydrants and calculated fire flows for those hydrants shall be as specified in Chapter 26 herein.
12. The location of all proposed gas mains, electrical transmission lines, telephone lines, cable television lines and related ROW or easements, if available.
13. Estimated minimum floor elevations of proposed buildings and/ or structures on that portion of the development within a flood hazard boundary.
14. State whether the lot(s) will be subdivided for common-lot-line dwelling units.
15. The anticipated disturbance of any delineated wetlands and the wetlands disturbance mitigation plan.

2.03 DISTRIBUTION OF PRELIMINARY PLATS

As required by Sec. 21-225 of the Land Development Code, the Developer shall cause to be prepared a preliminary plat and supporting documents. The Developer shall submit to the Secretary of the Plan Commission one (1) digital copy in PDF format, configured to-scale, formatted for printing on 11" x 17" ledger size paper.

A. Distribution of the Plat Prior to Approval:

If the proposed development lies within the corporate limits of the City, the Secretary will then distribute the PDF files of the Preliminary Plat and supporting documents to the following parties:

Mayor
City Council – only if variances are requested
Plan Commission
Secretary of the Plan Commission
City Engineer
Director of Community Development Services
Fire Chief
Ameren Illinois
Illinois American Water Company
Drainage District
Urbana & Champaign Sanitary District

- B. If the proposed development lies within the City's 1½-mile extraterritorial jurisdiction (ETJ), the Secretary will then distribute the PDF files of the Preliminary Plat and supporting documents to the following parties, in addition to those required above:

Soil and Water Conservation District
Champaign County Highway Engineer
Champaign County Zoning Administrator
Township Road Commissioner

2.04 ELECTRONIC DRAFTING FILE STANDARDS

Electronic Files: Electronic files are required when submitting final PDF files of preliminary plats. Electronic drafting files shall be in accordance with Section 1.12 of this Manual.

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enable two-sided document printing.*

CHAPTER 3: FINAL PLAT

Issued June 28, 2023

- 3.00 Introduction
- 3.01 Administrative Procedures
- 3.02 Required Information
- 3.03 Distribution of Final Plats
- 3.04 Electronic Drafting File Standards

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enable two-sided document printing.*

3.00 INTRODUCTION

The final plat document is the legal document that is recorded with the Champaign County Clerk & Recorder of Deeds. Upon this recording, the sale of lots may proceed. The final plat shall not be recorded until the requirements of these regulations are met. The primary purposes of the final plat are to delineate property boundaries and to describe and dedicate ROW and easements. Public improvements are not shown on the face of the final plat but are submitted through separate design documents (the Public Improvement Site Engineering Plans, the Stormwater Management Plan, Subsidiary Drainage Plat, etc.). These separate design documents and bonding must be approved by the City Engineer prior to City approval of the final plat. If a final plat does not differ substantially from the previously approved preliminary plat and if no new or different variances are requested, then the final plat may be reviewed by the Administrative Review Committee and sent directly to the City Council for approval. If, in the City Engineer's opinion, a final plat differs substantially from the preliminary plat and/or if additional or revised variances are requested, then it must first be reviewed by the Plan Commission prior to City Council approval. An example of a final plat of major development is shown in Appendix C, Illustration 4.

3.01 ADMINISTRATIVE PROCEDURES

Final Plat administrative procedures are provided for in Section 21-230 of the Land Development Code.

3.02 REQUIRED INFORMATION

A final plat shall include, but not be limited to, the following information:

A. Format:

1. Sheet Size: Plan set shall be full-sized (22 inches x 34 inches – ANSI D) and reduced-sized (11 inches x 17 inches – ANSI B). Variations in dimensions may be approved by the City Engineer, if requested prior to submission of plans.
2. Plan scale shall be no greater than one (1) inch = 100 feet.
3. Precision: All distances shall be shown to the nearest 0.01-foot and elevations shall be shown to the nearest 0.1-foot.
4. Electronic copy: The plan set shall be submitted in PDF format.

B. Final Plat Requirements:

1. Subdivision, development, or replat name.
2. North arrow and graphic scale.
3. Date of preparation, including most recent revision.
4. The location of the subdivision expressed in one or more of the following ways:
 - a. By quarter-section (or part thereof), section, township, range, meridian, city, county and state;
 - b. By distances and bearings from an astronomic, magnetic, Grid or assumed north with reference to a corner or corners established in the United States Public Land Survey System;

- c. By a graphic depiction and a written legal metes and bounds description of the exterior boundaries of the subdivision;
 - d. In the case of a replat, by reference to (a) lot(s) in a previously approved and recorded development.
- 5. The description and location of all survey monuments.
- 6. Survey data sufficient to reproduce any line or re-establish any monument in the subdivision.
- 7. A minimum of two (2) corners of the subdivision boundary shall show the coordinates based on the Illinois State Plane – East Zone horizontal coordinate system (NAD83, 2011).
- 8. All highways, streets, alleys, blocks, lots, parcels, public grounds, easements and ROW within, or adjacent to, the subdivision and all required access control zones. Abutting street lines of existing platted developments shall be shown. Proposed street names shall be coordinated with the City Engineer.
- 9. Sufficient angles, bearings or azimuths, linear dimensions and curve data must be shown on the plat to provide a mathematically closed figure for the exterior of the survey. Where record angular dimensions, bearings or azimuths, linear dimensions or curve data exist, such data shall be shown on the plat and distinguished from measured dimensions or data. The length of all boundary lines of all streets, blocks, lots, public grounds, easements, ROW and information sufficient to derive the length of these lines shall be shown. Where the boundary line is an arc of a circle, sufficient curve data (radius, length of the arc, chord distance and chord bearing) to define the arc shall be shown. All dimensions shall be shown to hundredths of a foot, except in the case of riparian boundaries, which may be shown to the nearest foot.
- 10. Easements or lands dedicated to the public by the plat.
- 11. The width of all ROW and easements adjacent to, affecting or serving the subdivision and all detention basins within an adequate distance, as defined by the City Engineer.
- 12. All lots and out lots shall be numbered consecutively, with alphabetic extensions as necessary in subdivisions that contain more than one phase. Lot numbers shall contain a minimum of three digits, with alphabetic extensions as necessary, in subdivisions that contain more than one phase. The first phase of a subdivision shall start with lot number 101; the second phase shall start with number 201, etc. The City Engineer may approve deviations from this lot numbering system, if deemed necessary and appropriate.
- 13. The following notations:
 - a. “No part of the property covered by this plat is in the Special Flood Hazard Area as identified by FEMA.” If in a Special Flood Hazard Area, the FEMA sheet number showing the area shall be identified.
 - b. “The property subdivided is within the corporate limits of the City of Urbana,” or “The property subdivided is within 1½ miles of the corporate limits of the City of Urbana.”
- 14. Boundary of the Special Flood Hazard Area.
- 15. Boundary of the floodway, if shown on available flood boundary floodway map and flood insurance rate maps.
- 16. Base flood elevation for all proposed building sites, if available.

17. Names, signatures and addresses of the property owner/ Developer, Developer's Engineer, and Developer's Land Surveyor.
18. If the owner is a land trust, then the beneficial owners and their percentage interests shall be disclosed in accordance with state statutes. This information must be submitted with the application but does not have to appear on the face of the plat.
19. A three-inch by five-inch (3" x 5") vertical blank space shall be provided in the upper-right hand corner of all subdivision plats that are to be recorded, i.e., final plats, minor plats, replats, etc.
20. The Surveyor's Certificate prepared in accordance with 765 ILCS 205/2, as amended, including the surveyor's seal and statement that all monuments are set as shown. The Surveyor's Certificate shall be shown on the face of the plat.
21. The owner's/ Developer's Engineer's certificate of drainage proposed in accordance with 765 ILCS 205/2, as amended, including the engineer's seal.
22. The location of all public improvements required by the regulations and a statement that the improvements meet current design standards, or if they do not, the extent to which the improvements do not meet current design standards.
23. A notation outlining any variances, conditions, or restrictions, or a notation that such exist and are recorded as separate recording documents.
24. A statement by IDOT with respect to roadway access where such access is to a state highway or by the relevant local highway authority with respect to all other highway access.
25. Show a recording statement on the face of the plat. Said statement shall read as follows:

"I, _____, Illinois Professional Land Surveyor No. _____, in accordance with PAB-0705 (The Plat Act) do hereby designate the City of Urbana as the agent who may record the _____ Subdivision, _____ Township, Champaign County, Illinois, a true copy of which has been retained by me to assure no changes have been made to said plat."
26. School District statement, according to Appendix B.
27. Any additional documentation as required by the Plat Act.
28. The plat of major development shall also include the following signature block:

APPROVED BY: The Urbana Plan Commission of the City of Urbana, Illinois.

Date: _____ Chairperson: _____

APPROVED BY: The City Council of the City of Urbana, Illinois, in accordance with Ordinance No. _____

Date: _____ by _____, Mayor

ATTEST: _____, City Clerk

C. Subsidiary Drainage Plat Requirements:

1. The Developer's Engineer shall prepare a Subsidiary Drainage Plat in accordance with the Illinois Compiled Statutes, 765 ILCS 205 – Plat Act, as amended.
2. The Subsidiary Drainage Plat shall include finished yard grades at building setback lines.
3. The Subsidiary Drainage Plat shall include:
 - a. Typical lot drainage details to show the manner in which drainage will be accommodated between lots.
 - b. The boundary of the Special Flood Hazard Area, if applicable.
 - c. The boundary of the floodway, if applicable.
 - d. The base flood elevation for each building site, if applicable.
 - e. The location of natural vegetation to be maintained and protected.
4. The Subsidiary Drainage Plat shall be subject to the approval of the City Engineer.
5. See Section 6.02.D of this Manual for additional Subsidiary Drainage Plat requirements.

3.03 DISTRIBUTION OF FINAL PLATS

As required by Sec. 21-230 of the Land Development Code, the Developer shall cause to be prepared a Final Plat, a Subsidiary Drainage Plat, and supporting documents. The Developer shall submit to the Secretary of the Plan Commission: two (2) reduced-sized paper prints (11 inches x 17 inches – ANSI B) with original signatures, and one (1) digital copy (formatted to-scale in 11 inches x 17 inches – ANSI B size sheet) in PDF format.

A. Distribution of Final Plat and Related Files, Prior to Approval:

The Secretary of the Plan Commission will, at the time of an application for approval of the Final Plat of major development, transmit the PDF files of the Final Plat, Subsidiary Drainage Plat and supporting documents to the following parties:

Mayor
City Council
Plan Commission
City Engineer
Director of Community Development Services

B. Distribution of Final Plat and Related Files, Following Approval:

If the development lies within the corporate limits of the City, the Secretary shall distribute PDF files of the signed and approved Final Plat, Subsidiary Drainage Plat and supporting documents as follows:

Developer
City Engineer
Township Assessor
Urbana Plan Commission Case File
City Clerk

If the development lies within the City's 1½-mile extraterritorial jurisdiction, then the Secretary shall distribute the PDF files of the signed and approved Final Plat, Subsidiary Drainage Plat and supporting documents, to the following parties, in addition to those required above:

Champaign County Zoning Administrator
Champaign County Highway Engineer
Township Road Commissioner

3.04 ELECTRONIC DRAFTING FILE STANDARDS

Electronic Files: Electronic files are required when submitting final versions of final plats. Electronic drafting files shall be in accordance with Section 1.12 of this Manual.

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enable two-sided document printing.*

CHAPTER 4: MINOR PLAT

Issued June 28, 2023

- 4.00 Introduction
- 4.01 Administrative Procedures
- 4.02 Required Information
- 4.03 Distribution of Minor Plats
- 4.04 Electronic Drafting File Standards

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enable two-sided document printing.*

4.00 INTRODUCTION

The plat of a minor development or minor plat document is to be used when a development or a redevelopment qualifies as a minor development per the Land Development Code. A minor plat may also be prepared where there are simple lot lines adjustments to be made to an existing subdivision via a re-platting process. Lot line adjustments of less than twenty-five (25) feet or involving transfer of less than 10,000 square feet from one lot to another may be eligible for a Certificate of Exemption in lieu of a plat, as per Section 21-240 of the Land Development Code. See Appendix D for the link to the sample Certificate of Exemption form.

4.01 ADMINISTRATIVE PROCEDURES

Minor plat administrative procedures are provided in Section 21-215 of the Land Development Code.

4.02 REQUIRED INFORMATION

A Minor plat shall include, but not be limited to, the following information:

A. Format:

1. Sheet Size: Plan set shall be compiled in full-size (22 inches x 34 inches – ANSI D format and in one (1) reduced-sized (11 inches x 17 inches – ANSI B) format. Variations in dimensions may be approved by the City Engineer, if requested prior to submission of plans.
2. Plan scale shall be no greater than one (1) inch = 100 feet.
3. Precision: All distances shall be shown to the nearest 0.01-foot and elevations shall be shown to the nearest 0.1-foot.
4. Electronic copy: The plan set shall be submitted in PDF format only, and formatted to-scale.
5. Paper copies are neither required nor desired.

B. Required Minor Plat Requirements:

1. Subdivision, development, or re-plat name.
2. North arrow and graphic scale.
3. Date of preparation, including most recent revision.
4. The location of the subdivision expressed in one or more of the following ways:
 - a. By quarter-section (or part thereof), section, township, range, principal meridian, city, county and state;
 - b. By distances and bearings from an astronomic, magnetic, Grid or assumed north with reference to a corner or corners established in the United States Public Land Survey System;
 - c. By a graphically-depicted and a written legal metes and bounds description of the exterior boundaries of the subdivision;
 - d. In the case of a re-plat, by reference to (a) lot(s) in a previously approved and recorded development.

5. The description and location of all survey monuments.
6. Survey data sufficient to reproduce any line or re-establish any monument in the subdivision.
7. A minimum of two (2) corners of the subdivision boundary shall show the coordinates based on the Illinois State Plane – East Zone horizontal coordinate system (NAD83, 2011).
8. All highways, streets, alleys, blocks, lots, parcels, public grounds, easements and ROW within, or adjacent to, the subdivision and all required access control zones. Abutting street lines of existing platted developments shall be shown. Proposed street names shall be coordinated with the City Engineer.
9. Sufficient angles, bearings or azimuths, linear dimensions and curve data must be shown on the plat to provide a mathematically closed figure for the exterior of the survey. Where record angular dimensions, bearings or azimuths, linear dimensions or curve data exist, such data shall be shown on the plat and distinguished from measured dimensions or data. The length of all boundary lines of all streets, blocks, lots, public grounds, easements, ROW and information sufficient to derive the length of these lines shall be shown. Where the boundary line is an arc of a circle, sufficient curve data (radius, arc length, chord length and chord bearing) to define the arc shall be shown. All dimensions shall be shown to hundredths of a foot, except in the case of riparian boundaries, which may be shown to the nearest foot.
10. Easements or lands dedicated to the public by the plat.
11. The width of all ROW and easements adjacent to, affecting or serving the Development and all detention basins within an adequate distance, as defined by the City Engineer.
12. All lots and out lots shall be numbered consecutively and contain a minimum of three digits, with alphabetic extensions as necessary, in subdivisions that contain more than one phase.
13. The following notations:
 - a. “No part of the property covered by this plat is in the Special Flood Hazard Area, as identified by FEMA.” If in a special flood hazard area, the FEMA sheet number showing the area shall be identified.
 - b. “The property subdivided is within the corporate limits of the City of Urbana,” or “The property subdivided is within 1½ miles of the corporate limits of the City of Urbana.”
14. Boundary of the Special Flood Hazard Area.
15. Boundary of the floodway, if shown on available flood boundary floodway map and flood insurance rate maps.
16. Base flood elevation for all proposed building sites, if available.
17. Names, signatures and addresses of the property owner/ Developer, Developer's Engineer, and Developer's Land Surveyor.
18. If the property owner is a land trust, then the beneficial owners and their percentage interests shall be disclosed in accordance with state statutes. This information must be submitted with the application, but does not have to appear on the face of the plat.

19. A three-inch by five-inch (3" x 5") vertical blank space shall be provided in the upper-right hand corner of all subdivision plats that are to be recorded, i.e., final plats, minor plats, replats, etc.
20. The Surveyor's Certificate prepared in accordance with 765 ILCS 205/2, as amended, including the surveyor's seal and statement that all monuments are set as shown. The Surveyor's Certificate shall be shown on the face of the plat.
21. The Owner's and Engineer's certificate of drainage proposed in accordance with 765 ILCS 205/2, as amended, including the engineer's seal.
22. The location of all public improvements required by the regulations and a statement that the improvements do meet current design standards, or if they do not, the extent to which the improvements do not meet current design standards.
29. A recording statement shall be shown on the face of the plat. Said statement shall read as follows:

"I, _____, Illinois Professional Land Surveyor No. _____, in accordance with PAB-0705 (The Plat Act) do hereby designate the City of Urbana as the agent who may record the _____ Subdivision, _____ Township, Champaign County, Illinois, a true copy of which has been retained by me to assure no changes have been made to said plat."
23. The minor subdivision plat shall also include the following signature block:

APPROVED:

Approval of the minor subdivision plat is hereby recommended under the authority of:

Date: _____ By: _____
City Engineer

Date: _____ By: _____
Director, Community Development Services Department

Date: _____ By: _____
Secretary, Urbana Plan Commission

ATTEST: _____ City Clerk, _____ Date

- C. In the event any decision of the Administrative Review Committee is appealed in accordance with 21-215(J) of the Land Development Code, the signature block on the face of the plat shall be changed to conform to the signature block requirement for a final plat of major development contained in Chapter 3 of this Manual.

4.03 DISTRIBUTION OF MINOR PLATS

As required by Section 21-215 of the Land Development Code, the Developer shall cause to be prepared a minor plat and supporting documents. The Developer shall submit to the Secretary of the Plan Commission one (1) to-scale reduced-sized (11 inches x 17 inches – ANSI B) format sheet digital copy in PDF format.

A Distribution of Minor Plats and Related Files, Prior to Approval:

The Secretary of the Plan Commission shall, at the time of an application for approval of a final plat of minor development, distribute the PDF files of the Minor Plat and supporting documents, as follows:

City Engineer
Director of Community Development Services

4.04 ELECTRONIC DRAFTING FILE STANDARDS

Electronic Files: Electronic files are required when submitting final versions of minor plats. Electronic drafting files shall be in accordance with Section 1.12 of this Manual.

CHAPTER 5: RURAL SUBDIVISION PLAT

Reserved

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CHAPTER 6: SITE ENGINEERING PLANS AND SPECIFICATIONS

Issued June 28, 2023

- 6.00 Site Engineering Plans – Procedures & Requirements
- 6.01 Site Engineering Plans – Format
- 6.02 Site Engineering Plan Set – Content
- 6.03 Standard Attachments

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enable two-sided document printing.*

6.00 SITE ENGINEERING PLANS – PROCEDURES & REQUIREMENTS

- A. **Developer's Obligation:** The Developer shall prepare a set of Site Engineering Plans that depict the improvements required. Said improvements shall be designed to meet or exceed the minimum standards set forth in this Chapter and these regulations. Improvements shall also conform to the minimum standards and requirements of other local, state and federal authorities, which have jurisdiction over the development. Site plans and specifications shall be prepared by or under the supervision of an Illinois-licensed Professional Engineer and shall bear said engineer's seal, license number, license expiration date, signature and the date signed.
- B. **Required Submittal:** The Developer's Engineer shall submit the Site Engineering Plans to the Community Development Services Department, who will forward the submittal to the City Engineer for review and written approval, prior to the commencement of construction of any improvements that are required or regulated by these regulations. Said submittal shall include, but not be limited to:
1. One (1) digital copy in PDF format of the Site Engineering Plans in accordance with Section 1.12 of this Manual. Paper copies are neither required nor desired. Electronic drafting files shall also be provided in accordance with Section 1.12.
 2. Plan sets, in PDF file format, will be distributed to the following City Departments, by the Community Development Services Department:
 - a. Building Safety Division of the Community Development Services Department
 - b. Planning Division of the Community Development Services Department
 - c. Fire Department
 - d. Engineering Division of the Public Works Department
 3. Written requests for a variance from the minimum materials and construction standards, describing the degree of deviation, the necessity or advantage of it and the alternate plan, in accordance with Section 1.10 of this Manual.
 4. The signed statement of the Developer authorizing the Developer's Engineer to provide sufficient inspection to certify that the improvements required, and/or regulated, by this Manual are constructed and inspected in accordance with these regulations and other applicable ordinances of the City, and a written understanding by the Developer's Engineer that she/he shall provide such inspection service.
- C. **Flood Prone Areas:** When the Development, or part thereof, is located in a flood-prone area, as designated by FEMA, the Developer shall provide, at his or her own expense, such hydrologic design data and calculations and utility and drainage plans as may be required by the City Engineer to assure that the development is consistent with the need to minimize or eliminate flood damage. (See Chapter 19: Hydrologic Design Standards.)
- D. **City Engineer's Responsibility:** The City Engineer will review the Site Engineering Plans for conformance to this Chapter and to assess whether said plans meet the normal standard of care for engineering practices for this type of development. The City's responsibilities do not include a quality control review of the design compiled by the Developer's Engineer.
- E. **Approval:**
1. The City Engineer will notify the Developer and the Community Development Director of approval or disapproval of the Site Engineering Plans and the Subsidiary Drainage Plat.

2. Such notification, specifying reasons for approval or disapproval, will be made within approximately fifteen (15) working days of the date of submission of complete plans, specifications, and plats required by this section. Plans will be reviewed by the City Engineer in the order in which they are received.
 3. Construction of improvements, required or regulated by this Chapter, shall not commence until the City Engineer has approved, in writing, Site Engineering Plans for the improvements, hydrologic design data as may be required by these regulations, and the Subsidiary Drainage Plat.
- F. **Field Modifications:** As also indicated in Section 7.01.B, if, in the course of construction the Developer wishes to modify the size, type, quality, quantity or location of improvements required or regulated by these regulations as shown on the approved Site Engineering Plans, the Developer's Engineer shall contact the City Engineer for approval prior to proceeding with installation of the modified improvement. Said approval may be verbal or written. In any case, the Developer's Engineer shall submit a brief written memorandum of understanding within one week of the modification.
- G. **Final Plat Requirements:** Approval of the Site Engineering Plans and the Subsidiary Drainage Plat is a prerequisite to submission of the Final Plat.
- H. **Construction Specifications:** The Developer or Developer's Engineer shall submit the Site Engineering Plans to the City Engineer. All construction specifications shall be delineated on said plans and they shall not deviate from the City's construction standards as outlined in this Manual unless the Developer or Developer's Engineer submits a written request for variance from the minimum materials and construction standards to the City Engineer, in accordance with Section 1.10 of this Manual, and the City Engineer approves the requested deviation.

6.01 SITE ENGINEERING PLANS – FORMAT

- A. **Sheet Size:** Plan set shall be full-sized (22 inches x 34 inches – ANSI D) or reduced-sized (11 inches x 17 inches – ANSI B). Variations in dimensions may be approved by the City Engineer, if requested prior to submission of plans.
- B. **Plan scale:** Scale of plans shall be at a minimum of one inch = 10 feet and no greater than one (1) inch equals fifty (50) feet when measured on the ANSI D size sheet.
- C. **Precision:** All distances shall be shown to the nearest 0.01-foot and ground surface elevations shall be shown to the nearest 0.1-foot. The elevations of all building pads, structures, manholes, vaults, rigid pavements, all sewers and their services, water mains and their services, benchmarks, and control points shall be shown to the nearest 0.01-foot.

6.02 SITE ENGINEERING PLANS – CONTENT

A. Cover Sheet:

1. The official name of the development and the phase, if the Development is a multi-phase project.
2. Vicinity location map shall be included with the overall map coverage of at least one-fourth section, indicating adjacent arterial streets, and adjacent developments.
3. Title indicating city, county, and state, with section, township, range and Principal Meridian.

4. A list of benchmark location and elevations. Benchmarks shall be of a type and elevation as generally accepted by legal standards and professional land surveying standards in the State of Illinois. Not less than two (2) benchmarks shall be provided. Plans shall state benchmark datum being referenced and shall describe vertical and horizontal adjustments relative to adjacent tracts with datum equation.
5. An index of sheets, in consecutive numerical order.
6. Signature block for “Developer’s Engineer”, including the Engineer’s seal, and a location for the date the Engineer signed the plans and the expiration date of the engineer’s license.
7. A listing of the Developer’s name, mailing address, telephone number and email address.
8. A listing of the name, mailing address, telephone number and email address of the Developer’s Engineer.
9. A listing of the name, mailing address, telephone number and email address of the Developer’s Attorney.
10. Issuance date of the Plans, along with revision date entries with a description of said revision, as needed.

B. General Notes Sheets:

1. General construction specifications and notes.
2. Traffic control, sidewalk and pavement specifications and notes.
3. Grading and erosion control specifications and notes.
4. Specifications and notes for sanitary sewer mains and service lines, storm sewer mains, drain tile lines (including testing requirements).
5. Tree removal and grubbing specifications and notes.
6. Potable water main and service line specifications and notes,
7. Site Lighting specifications and notes including proposed luminaire makes and models, luminaire mounting heights and coating and color selections, pole materials, makes and models, foundations, junction box specifications, conductor materials and types, cabinet models and makes, and all other information required in Chapter 13 herein;
8. Erosion control and wetlands mitigation specifications and notes;
9. Legend listing the definitions for all line types and symbols shown in the Site Engineering Plan set.

C. Infrastructure Inventory Sheet/Table:

This table shall also be submitted electronically in Microsoft Excel format (most recent version) by completing a template that is available from the City Engineer. Quantities of public infrastructure shall be submitted together with the Developer’s Cost Opinion of the unit price and total cost (see Attachment 6.01). If quantities change during construction, the Infrastructure Inventory Sheet shall be revised and submitted by the Developer’s Engineer with the Record Drawings.

D. Grading Plans, Subsidiary Drainage Plat, and Erosion Control Plans:

Note: These sheets may be shown as separate sheets or combined into a single sheet, except that erosion control must be clearly indicated.

The Grading Plan Sheet(s) shall be drawn at a maximum contour interval of one (1) foot showing proposed and existing elevations with discrete elevations shown at lot corners, mid-lot lines and for minimum building pad elevations. Said sheets shall also show any Special Flood Hazard Area limit lines. Discrete elevations shall also be shown on pavement surfaces sufficient to show that all pavements have a minimum drainage slope longitudinally of 0.4%. Adjacent topography shall be shown to the extent that it impacts the drainage of the current construction area. The Grading Plan Sheet(s) and Subsidiary Drainage Plat are essentially the same, except that the Subsidiary Drainage Plat contains the following statement with signature blocks for the Developer's Engineer and owner:

Drainage Statement

We hereby state that to the best of our knowledge and belief the drainage of surface waters of this Plat will not be changed by the construction of the improvements of this development or any part thereof or that if such surface water drainage will be changed, reasonable provisions have been made for collection and diversion of such surface waters into public areas, or drains which the Developer has a right to use, and that such surface waters will be planned for in accordance with generally-accepted engineering practices so as to reduce the likelihood of damage to the adjoining property because of the construction of the development.

Date: _____

Printed Name of Engineer: _____
Illinois Registered Professional Engineer No. _____

Engineer's Signature: _____

Owner & Developer's Signature: _____

Name of Developer/Owner _____
Title _____
Corporation _____

E. Utility and Pavement Plan Sheets:

1. The Developer shall provide Utility Plan Sheets showing the type, size, length and location for storm sewer and underdrain systems, sanitary sewer systems and other private utility systems. Said plans shall also include site lighting in the plan sheets. Plan sheets shall show the type, size, and location of all proposed utility systems. Stationing shall be shown for all pipelines and elements. It is preferred that these utility plan sheets be separate sheets. All planned private utilities shall be shown and indicated as such.
2. The Developer shall provide pavement plan and profile sheets showing all pavement geometrics, plan dimensions and stationing for streets necessary for construction layout.
 - a. It is preferred that infrastructure systems be shown in their entirety on a single sheet. If it is necessary to break up the systems into multiple sheets, an overall key map must be provided.
 - b. The Developer shall provide profile sheets for proposed and adjacent/existing streets, storm sewers and sanitary sewers. The information required to be shown shall include

distances, elevations, slopes (inverts shall be shown with direction clearly indicated for each).

- c. Street plan and profile sheets shall provide points of vertical intersection (PVIs), points of vertical curvature (PVCs), and points of vertical tangency (PVTs) plus vertical curves (VCs) in streets. Street plan and profile sheets shall show the locations of all proposed bikeways, pedestrian trails and/or multi-use paths.
 - d. The street plan sheets shall also show each parcel's proposed street address. Developer's Engineer shall coordinate with the City Engineer to obtain said addressing assignments, which shall then be applied to the plans prior to final plat approval. The City will approve the street address assignments.
 - e. Where a proposed street in the Development is to tie into an existing arterial or collector street, county highway or IDOT roadway, the pavement plans shall include pavement cross-sections along said existing street or roadway, depicting said tie-in. Cross-sections shall be cut on 50-foot intervals and shall extend in both directions along said street or roadway, not less than 300 feet in each direction or as required by said agency owning said roadway.
 - f. Influent and effluent elevations for sewers as shown on the plans shall be edge-of-manhole elevations. Distance between manholes shall be center-to-center and the pipe lengths shall be shown as edge-to-edge of manhole distances. Where either a storm sewer or a sanitary sewer (including a service line) crosses a potable water main and/or potable water service line, the Utility Plans shall show said crossings in profile and said plans shall graphically resolve any conflicts that could possibly result between said lines, with said resolution complying with the horizontal and vertical separation requirements of SSWSMC.
 - g. Street lighting plans shall show the placement of all ROW lighting and intersection lighting and poles, conduit run sizes, types, locations, and conductors within, plus pull boxes and light controller locations and types. Said plans shall show the proposed placement of traffic signals. Street lighting plans shall also show all proposed fire hydrant locations, to confirm with the required lighting requirements near fire hydrants, as specified in Section 13.03 of this Manual.
 - h. Street signs and their locations on pavement plan sheets.
3. When a Stormwater Management Plan is required per Section 21-430 of Chapter 21 of the City Code of Ordinances, the Developer shall provide Stormwater Management Plan sheets showing the size, location, and type for all stormwater best management practices included in the Stormwater Management Plan.
- F. Intersection Detail Sheets:** The Developer shall provide intersection detail sheets showing intersection jointing patterns, radius/curve information, and discrete elevations. Provide the following information:
1. Edge of pavement locations and top of curb elevations on at least four (4) locations along the curb radius.
 2. Center line
 3. High and low points
 4. Inlet-rim, i.e., low point of water entry, stations and elevations

5. Top-of-curb elevations
 6. The locations of all longitudinal joints, transverse joints, and expansion joints, with dimensions of spacing in each direction.
 7. Each detail shall be scaled not smaller than 1-inch = 20'-0" on ASNI D size sheets.
- G. Pavement Details Sheets:** The Developer shall provide pavement detail sheets showing details for all standard pavements. These details shall include typical sections and jointing patterns. There shall also be details for curb and gutter cross sections, sidewalk ramps, bike paths, pavement joints adjacent to inlets or manholes and medians in accordance with City pavement standards as described in Chapter 10 of this Manual. Other pavement details shall be shown as directed by the City Engineer.
- H. Storm and Sanitary Sewer Detail Sheets:** The Developer shall provide storm and sanitary sewer details sheets, showing manhole and backfill details for storm and sanitary sewer systems as shown in this Manual (see Chapter 17: Storm Sewer Standards and Chapter 18: Sanitary Sewer Systems). These sheets shall also show sanitary and service lateral details and drop manholes. The following shall also be noted and shown on these detail sheets:
1. Concrete encasement of sanitary "wyes" is not permitted; only carefully placed and compacted aggregate material is allowed as outlined in Chapter 18.
 2. External chimney seals are required as per Chapter 18.
 3. Secondary connections to sanitary or storm sewers, such as sanitary connections or individual sump pump discharge line connections respectively, shall be achieved by manufactured "wyes."

6.03 STANDARD ATTACHMENTS

Standard Attachment 6.01—Infrastructure Inventory Sheet

CITY OF URBANA INFRASTRUCTURE INVENTORY SHEET				
PROJECT NAME _____				
DATE _____				
Inventory Item	Unit	Quantity	Unit Price	Total Cost
Pavement System				
7 in. x 28 ft. Concrete Pavement w/ c&g complete	LF			
7 in. x 34 ft. Concrete Pavement w/ c&g complete	LF			
9 in. x 28 ft. Asphalt Pavement w/ c&g complete	LF			
9 in. x 34 ft. Asphalt Pavement w/ c&g complete	LF			
Concrete Sidewalk	LF			
Other _____				
			Subtotal	
Storm Sewer System				
Linear feet of 12 in. dia. RCP CI IV-Storm Sewer	LF			
Linear feet of 15 in. dia. RCP CI IV-Storm Sewer	LF			
Linear feet of 18 in. dia. RCP CI IV-Storm Sewer	LF			
Linear feet of 24 in. dia. RCP CI IV-Storm Sewer	LF			
Linear feet of 36 in. dia. RCP CI IV-Storm Sewer	LF			
Linear feet of 12 in. dia. HDPE-Storm Sewer	LF			
Linear feet of 15 in. dia. HDPE-Storm Sewer	LF			
Linear feet of 18 in. dia. HDPE-Storm Sewer	LF			
Linear feet of 24 in. dia. HDPE-Storm Sewer	LF			
Linear feet of 36 in. dia. HDPE-Storm Sewer	LF			
12 in. dia. RCP F.E.S.	EA			
15 in. dia. RCP F.E.S.	EA			
18 in. dia. RCP F.E.S.	EA			
24 in. dia. RCP F.E.S.	EA			
36 in. dia. RCP F.E.S.	EA			
24 in. dia. Concrete Storm Sewer Structures	EA			
48 in. dia. Concrete Storm Sewer Structures	EA			
_____ Casting Assemblies	EA			
Linear feet of 8 in. dia. Sump Pump Discharge Collection Pipe	LF			
Linear feet of 10 in. dia. Sump Pump Discharge Collection Pipe	LF			
Sump Pump Discharge Collection System Cleanout Assembly	EA			
Other _____				
			Subtotal	
Sanitary Sewer System				
Linear feet of 8 in. dia. Sanitary Sewer	LF			
Linear feet of 10 in. dia. Sanitary Sewer	LF			
Linear ft. of 12 in. dia. -Sanitary Sewer	LF			
48 in. dia. Concrete Sanitary Sewer Manholes	EA			
Sanitary Casting Assemblies	EA			
Other _____				
			Subtotal	
Traffic Control System				
Linear ft. of Thermoplastic Pavement Marking	LF			
Linear ft. of 3M Stamark™ Series 420 or Equal Pavement Marking	LF			
Linear ft. of Paint Pavement Marking	LF			
Traffic Signal Complete	EA			
Other _____				
			Subtotal	
Miscellaneous Items				
Street Trees	EA			
Streetlights	EA			
Streetlight Conduit	LF			
Streetlight Controller	EA			
Bike Path	LF			
Major Permanent Erosion Control	LSUM			
Detention Basins & Inlet/Outlet Structures	LSUM			
Other _____				
			Subtotal	
			Grand Total	

Standard Attachment 6.01—Infrastructure Inventory Sheet

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enable two-sided document printing.*

CHAPTER 7: DEVELOPMENT CONSTRUCTION, OBSERVATION, AND BONDING

Issued June 28, 2023

- 7.00 Construction
- 7.01 Observation and Testing of Public Improvements
- 7.02 Approval of Constructed Public Improvements
- 7.03 City Engineer's Acceptance of Improvements
- 7.04 Duty to Maintain Improvements
- 7.05 Construction Performance Bond Requirements
- 7.06 Maintenance Bond Requirements
- 7.07 Standard Attachments

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enable two-sided document printing.*

7.00 CONSTRUCTION

- A. General:** Improvements required or regulated by this Manual shall be constructed in accordance with the City-approved Site Engineering Plans, the requirements of this Manual, City regulations and any applicable regulations of outside agencies.
- B. Plan Modification:** To modify the size, type, quality, quantity or location of improvements required or regulated by these regulations as shown on the approved Site Engineering Plans, the Developer's Engineer shall contact the City Engineer for approval prior to proceeding with installation of the modified improvement. Said approval may be verbal or written. In any case, the Developer's Engineer shall submit, within one (1) week, a brief written memorandum of understanding that briefly describes the modification and approval.
- C. Notice of Work:** The Developer shall notify the City Engineer at least one (1) working day prior to the beginning of any regulated work. If the Developer fails to comply with this requirement, the City Engineer may take any steps necessary to ensure that the work performed without the knowledge of the City Engineer complies with the approved Site Engineering Plans, these regulations, and other applicable ordinances of the City.
- D. Commencement of Construction:** Construction of development improvements required or regulated by this Manual shall not commence until the City Engineer has approved, in writing, the Site Engineering Plans for said improvements, hydrologic design studies (if required), and the Subsidiary Drainage Plat together with all permits that require the approval of the City Engineer. Additionally, review of said plans or the start of construction of the improvements shall not commence until the formal approval of the preliminary plat is complete. The City will not be responsible for extra costs or penalties incurred when construction activity is undertaken before City approval or after receiving City approval, but prior to obtaining all other permits.
- E. Time Period for Construction:** The Developer shall complete construction of all development improvements in accordance with the Site Engineering Plans that have been approved by the City Engineer within two (2) years of the after date the City approved the final plat of the Development. As outlined in the Land Development Code, at the owner's request, the City Engineer may extend the time period to complete the construction.

7.01 OBSERVATION AND TESTING OF PUBLIC IMPROVEMENTS

- A. Observer Requirements:** An experienced observer, who is approved by the City Engineer, shall be retained by the Developer at Developer's expense to observe the construction of all public improvements. The construction observer shall have at least one (1) year of experience in the observation of similar public improvements. This observer shall be under the direction and supervision of the Developer's Engineer. The observer shall confirm (via a surveyor's leveling instrument and/or a GPS-based instrument) and record the elevations of manholes, sewers, pavements, and all stormwater holding basin depths and dimensions, as shown on the Site Engineering Plans. The observer shall not rely on utilizing and/or copying the construction contractor's field elevations, but shall independently verify said elevations. Where those elevations have slightly changed from those indicated on said plans, the observer shall mark said changes in writing on a field set of "redline" drawings, for use in compiling the Record Drawings called for in Article 1.08 of Chapter 1 herein. Where said elevations have significantly changed from those shown on the Plans, observer shall inform the Developer's Engineer who shall inform the Developer's construction contractor to revise or reconstruct that work to make said deficient work conform to said plans. The observer shall be present one hundred percent (100%) of the time during the field layout, construction, and testing of major infrastructure items, including but not limited to:
 - 1. All pavements, sidewalks, bikeways, storm sewers, drain tiles, field tile repair, sewage pump stations, sanitary sewer mains, manholes, and services and appurtenances, erosion control

measures, street signs, streetlights and appurtenances, traffic signals and appurtenances, street signs, stormwater holding basins (including those to be privately owned or maintained) and their inlet and outlet control structures.

2. The placement of subgrades under all pavements, sidewalks, multi-use paths, and bikeways.
3. All soil compaction efforts.
4. Any bridge or culvert.
5. Any traffic signal or streetlight system.

B. Testing Requirements: Tests required by this Manual shall be performed solely by independent testing laboratories or the Developer's Engineer, and shall be performed at the Developer's expense. The Developer shall notify the City Engineer of failing tests immediately, along with the Developer's plan of action to remedy this failure. The Developer shall deliver all required construction and material testing documentation to the City Engineer together with the certification of the completion of public improvements (see Standard Attachment 7.01). No test results shall be withheld from the City Engineer, i.e., all failing tests shall be reported including corrective action taken and follow up passing tests.

7.02 APPROVAL OF CONSTRUCTED PUBLIC IMPROVEMENTS

A. Approval of the Constructed Public Improvements: Approval of the constructed public improvements will be conveyed only via a written notification by the City Engineer that indicates infrastructure meets the requirements of City construction standards. The only purpose of an approval of infrastructure is to allow a reduction in the bond dollar amount. Approval of infrastructure does not mean that the City has accepted transfer of the ownership of said public infrastructure.

1. *Approving All of the Improvements:* If the City Engineer finds that all of the pavements, sanitary sewer, storm sewer, required grading and drainage improvements and all other required improvements for the Development have been constructed in accordance with the Plans and the requirements of this Manual, and that all required certifications, test results and the Record Drawings have been submitted in accordance with the requirements of this Manual, the City Engineer will issue a written notice of the approval of all these improvements, on behalf of the City.
2. *Approving Part of the Improvements:* At the request of the Developer, if the City Engineer finds that all the required improvements in a distinct contiguous portion of the development or over a complete infrastructure system have been constructed in accordance with the Plans and this Manual, and that all required certifications, test results and the Record Drawings have been submitted in accordance with the requirements of this Manual, the City Engineer will issue a written notice of the approval of all these improvements, on behalf of the City.

B. Required Submittals: Prerequisites for approval include delivery by the Developer of the required engineer's certification, together with testing results and Record Drawings and the correction of any deficiencies (punch list items) as noted by the City Engineer. Upon completion of construction of the public improvements regulated by this Manual, the Developer's Engineer shall deliver to the City Engineer:

1. All required construction and material testing documentation, in PDF format only, not hard copy as follows (See individual chapters for testing requirements):
 - a. Construction documentation and material testing according to the IDOT Standard Specifications for Road and Bridge Construction, Chapter 13 of the IDOT BLRS Manual,

and the IDOT Construction Manual for improvements regulated by Chapters 10, 11, 12, 13, 14, 15, 17, 20, 21, 22, 23, and 24.

- b. Construction documentation and material testing according to the Standard Specifications for Water and Sewer Construction in Illinois and the UCSD Sanitary Sewer Standards for improvements regulated by Chapter 18.
 - c. Copies of the observer's field book notes showing leveling instrument measurements taken by observer when the observer confirmed the storm, sewer, sanitary sewer and manhole invert elevations.
 - d. GPS data confirming sizes, dimensions and elevations of all stormwater holding basins.
 - e. All test data shall include the name of the individual performing tests together with the location, date, time and any other notable environmental conditions.
 - f. All tests results shall be initialed as approved by the observer, printed on letterhead, dated and signed as "Checked by Illinois Professional Engineer _____."
2. One complete set of "Record Drawings", with each sheet clearly marked "Record Drawings" in the lower-right corner. The Record Drawings shall depict the actual construction on the date of submittal of the plans and shall be in accordance with Section 6.02 of this Manual. Record Drawings shall also be submitted in an electronic format in accordance with Section 1.12 of this Manual.
 3. The following signed and sealed "Engineer's Certificate":

ENGINEER'S CERTIFICATE

STATE OF ILLINOIS)
COUNTY OF CHAMPAIGN) SS

I, _____, being a Registered Professional Engineer in the State of Illinois, registration number _____, do hereby certify that the _____ (the Development) was, to the best of my knowledge, constructed in accordance with the Site Engineering Plans entitled "_____" and dated _____, plus any change orders approved by the City Engineer, City of Urbana, Illinois.

I further certify that all construction operations, construction layout, and testing were observed by me or someone under my supervision.

Signed and sealed this _____ day of _____, 20 ____.

Signature (Seal)

4. With the approval of the City Engineer, said certificate may certify to the completion of a portion of the improvements with specifically stated exceptions for which a bond shall be filed.

C. Deficient Construction: The City Engineer is authorized to reject any construction, which fails to conform to the approved Site Engineering Plans or the requirements of this Manual.

7.03 CITY ENGINEER'S ACCEPTANCE OF IMPROVEMENTS

A. Acceptance of Improvements: Acceptance of the constructed improvements is to be conveyed via a written notification by the City Engineer that indicates all required improvements meet the

requirements of City construction standards and that all required certifications, testing results and Record Drawings have been submitted and the City Engineer as completed a Final Inspection of the Development, as per Section 21-350 of the Urbana City Code, Chapter 21. The acceptance of the required improvements results in the start of the 12-month maintenance period (see Sections 7.04 and 7.06 below). Acceptance of infrastructure means that the ownership of the public infrastructure is transferred from the Developer to the City.

- B. Developer's Responsibility:** Upon completion of construction of all development improvements, the Developer shall seek final acceptance of the improvements by the City.
- C. City Engineer's Obligation:** The City Engineer shall issue a written notice of the acceptance of the improvements when she/he finds that all the requirements of this Manual and the Development Regulations have been met.

7.04 DUTY TO MAINTAIN IMPROVEMENTS

The Developer shall maintain the Development's public improvements, free from what is judged by the City Engineer to be a defect or a failure, for a period of twelve (12) months after acceptance in writing of all the development improvements by the City Engineer or after a later date mutually agreed upon by the City Engineer and the Developer. The Developer shall promptly correct, at Developer's expense, any defect or failure of which she/he has been given notice of or which the City discovers, which occurs prior to twelve (12) months from the date of the acceptance of all improvements. The City Engineer will notify the Developer of any defects and/or failures discovered by the City, that occurred during this period and the Developer shall promptly remedy the same. The time period for maintenance shall be twelve (12) months in length with the following stipulations.

- A. Longevity of Improvements:** The Developer shall maintain all of the Development's public improvements free from defects for a period of twelve (12) months after the date the City Engineer issues a written notice of acceptance of all development improvements, or twelve (12) months after a date agreed upon by the City Engineer and Developer. Maintenance in the context of "the maintenance period of the development improvement performance bond" does not refer to routine maintenance (e.g. street cleaning, snow plowing, etc.) but to the Developer's obligation to repair defects.
- B. Severability of Improvement Approval:** If the City Engineer approves part but not all of the development improvements, the Developer must maintain free of defects the part approved, until the expiration of the maintenance period for all development improvements.
- C. Definition of Defects:** A defect that must be corrected, repaired or replaced is any of the following conditions, as judged by the City Engineer:
 - 1. Failure of a development's public improvement to operate in conformance with these regulations during the maintenance period; or
 - 2. Defect in a development's public improvement which is discovered during the maintenance period; or
 - 3. Incomplete and required public improvement.

7.05 CONSTRUCTION PERFORMANCE BOND REQUIREMENTS

- A. General:** The Developer shall execute bonds in favor of the City, which guarantee that all the Development's public improvements that have not already been inspected and approved by the City have been constructed and maintained as required in these regulations. The Developer shall use the Performance Bond form approved by the City Attorney, with bond form templates being

provided in Appendices E-1 and F-1 herein. The City Engineer may require payment of penalties, extended bonds or removal and replacement of substandard infrastructure.

B. Approval: The following procedures for approval of Construction Performance Bonds shall apply:

1. The Development shall have all public improvements completed and accepted or the Construction Performance Bond approved prior to the recording of the final plat. The final plat must be recorded in the 180-day period specified in Section 21-230(F) of the Land Development Code.
2. If all of the public improvements cannot be, or are not to be constructed prior to the aforementioned 180-day deadline, the Developer shall submit a request for approval of a Construction Performance Bond to the City Engineer within thirty (30) days following the date of final plat approval.
3. The City Engineer and City Attorney shall review the proposed Construction Performance Bond within sixty (60) consecutive calendar days subsequent to the submittal of those documents to said parties. If the City Engineer and City Attorney find the bond to be in conformance with this Section, they shall approve said bond within the same sixty (60) days.
4. If a Construction Performance Bond has not been approved nor required improvements installed and approved by the City within the aforementioned 180-day deadline, the final plat shall become void unless the Developer requests and the City Council approves an extension of the 180-day deadline for a specified period.

C. Construction deadline: The condition of the Construction Performance Bond shall be that the Developer shall, within two (2) years from the date of the City's acceptance of the bond or within any City Council approved extension, complete or cause to be completed all bonded improvements in accordance with the approved Site Engineering Plans and in accordance with applicable ordinances, resolutions, and codes of the City. Approved City bond forms must be used, as noted in subsection F below.

D. Failure to meet deadline: Failure of the Developer to complete improvements within two (2) years after the City acceptance of the Construction Performance Bond will cause the City to complete all necessary work. All costs of such improvements shall be paid for by the proceeds of said bond. The unused balance of the proceeds of said bond, if any, shall be returned to the Developer.

E. Construction Performance Bond amount: The Construction Performance Bond shall be in the amount of One Hundred Fifteen Percent (115%) of the estimated cost of construction of the public improvements that have not yet been inspected and accepted by the City, which the Developer's Engineer has prepared and which the City Engineer has approved.

F. Construction Security: The Developer shall provide a Construction Performance Bond to ensure that the construction of public improvements which are a part of the Development, are properly constructed. The bond shall be on a form provided by the City and shall be secured by one of the following methods or a combination of the following methods. The Developer may use an alternative form of security otherwise satisfactory to the City Council.

1. Cash.
2. Corporate surety bond by a company licensed and authorized to do business in the State of Illinois as a surety.
3. Certificates of deposit payable to the City.

4. United States Government Savings Bonds payable to the City.
 5. Irrevocable letters of credit in a form approved by the City Attorney.
- G. Security release:** The City Engineer and City Attorney shall release the Construction Performance Bond and any accrued interest and the surety therein upon satisfaction of all of the following:
1. The Developer's Engineer shall furnish to the City Engineer one (1) complete set of Record Drawings, as stipulated in Section 1.08 of Chapter 1 and Section 6.02 of Chapter 6 herein. Record Drawings shall also be submitted in an electronic format in accordance with Section 1.12 of this Manual.
 2. The Developer's Engineer and the City Engineer shall certify in writing that the public improvements have been constructed in substantial compliance with the approved Site Engineering Plans.
 3. Satisfaction of the conditions of the bond itself.
 4. Submission of a Maintenance Bond by the Developer to the City, in accordance with Section 7.06 of this chapter.
- H. Partial security release:** In the event that said public improvements are constructed in part, the City Engineer and City Attorney may release a bond posted under this Section upon the filing of an identical bond in a lesser amount, but not less than ten thousand dollars (\$10,000.00) or ten per cent (10%) of original bond amount, whichever is greater. However, a substitute bond may be for a shorter or longer period of time if the City Engineer so determines.
- I. Bond release:** Regardless of any other provision of this section, the City Engineer and City Attorney may release any development construction bond or PUD bond upon the recommendation of the City Engineer.
- J. Improvement construction between preliminary and final plats:** A construction bond is not required when a Developer elects to construct public improvements after receiving approval of a preliminary plat and prior to recording the final plat. However, the Developer shall submit construction drawings and details for approval by the City Engineer prior to commencing said construction. In addition, the Developer is required to coordinate such construction and observations with City staff, as deemed necessary by the City Engineer.

7.06 MAINTENANCE BOND REQUIREMENTS

- A. Bond time limit:** The Maintenance Bond required by Section 7.05-F shall be filed with the City Engineer on an approved bond form, with said bond form templates being provided in Appendixes E-2 and F-2 herein. The bond shall be for a term of eighteen (18) months following approval of such bond by the City Engineer and City Attorney. The bond shall, by its terms, guarantee the repair of any defects or failures in the public improvements which appeared during the maintenance period defined in Section 7.04, within eighteen (18) months from the date that the Maintenance Bond was approved by the City Engineer and City Attorney.
- B. City Engineer Final Inspection:** Not more than twenty-eight (28) consecutive calendar days after the completion of the maintenance period defined in Section 7.04, the City Engineer will conduct a Final Inspection of the development's public improvements. The City Engineer will give prior written notice to the Developer and the Developer's Engineer of the date, time, and place of the Final Inspection. If such public improvements are free of defects, the City Engineer will then promptly certify in writing that all public improvements are free of defects in construction and shall

give said certification as such to the Developer, the Secretary of the Plan Commission, and the City Clerk.

- C. Defective Work and Third Engineer:** If the City Engineer finds defects and/or failures in the construction of the public improvements, as determined from the Final Inspection, the City Engineer will, within fourteen (14) consecutive calendar days after the date of the Final Inspection, issue to the Developer a written Defective Work Notification, informing Developer of said defects and the repairs and/or replacements to be made. If there is a disagreement between the Developer and the City Engineer about said defects, Developer shall notify City Engineer in writing of said disagreement within fourteen (14) consecutive calendar days. Developer's failure to notify the City Engineer of said disagreement within this timeline shall constitute Developer's acceptance of the defects' validity and/or means of correction and Developer shall commence correction of said defects within of twenty-eight (28) consecutive calendar days of the Defective Work Notification's issuance date. Developer's failure to commence correction of the defects within this timeline shall constitute default and the City will cause the repairs to be made, the cost of which shall be charged against the Maintenance Bond. To resolve the aforementioned disagreement regarding the validity and/or correction means of the defects, the City and the Developer shall, within fourteen (14) consecutive calendar days from Defective Work Notification's issuance date, mutually select a third independent, unbiased engineer. Failure by the Developer to agree on a Third Engineer within this timeline shall nullify the disagreement and shall constitute authorization to the City to correct said defects, the cost of which shall be charged against the Maintenance Bond. The Third Engineer shall be retained by the Developer and Developer is solely responsible for payment of the Third Engineer's fees. Said engineer shall inspect the Defective Work in the public improvements and prepare a report outlining the defects, if any, their probable cause, and the proposed method of repair. Said report shall be completed and transmitted in PDF format to Developer and City Engineer within fifty-six (56) consecutive calendar days from the date of the Defective Work Notification's issuance date. Third Engineer's failure to submit the report within said deadline shall constitute default and an authorization for the City to cause said repairs to be made, the cost of which shall be charged against the Maintenance Bond. The reported findings of the Third Engineer shall be binding upon the Developer and the City. The Developer, at its sole expense, shall within fifty-six (56) consecutive calendar days from the issuance date of the Third Engineer's report, repair or reconstruct the defective work noted in the Third Engineer's report.
- D. Performance failure:** The Developer's failure to complete the repairs or meet the obligations as specified herein shall be deemed as authorization for the City to complete the repairs. The proceeds of the Maintenance Bond shall be used to pay the costs of such repairs undertaken by the City, plus the anticipated administrative and engineering costs equaling ten percent (10%) of the actual construction repair costs incurred.
- E. Bond amount:** The Maintenance Bond shall be in the amount of not less than twenty-five percent (25%) of the estimated cost of the construction of the public improvements, whichever is greater. The City Engineer will review the Developer's Engineer's estimated cost of construction in calculating the Maintenance Bond amount and said amount is subject to the City Engineer's approval.
- F. Authorized security.** A Maintenance Bond shall secure the City in the same manner as the Construction Performance Bond, as per Section 7.05-F of this Manual.
- G. Bond release.** The City Engineer and City Attorney will release the Maintenance Bond and the surety thereon, if any, upon certification from the City Engineer that all improvements are free of defects in construction and that the conditions of the bond have been satisfied.

7.07 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 8: LOCATION AND GEOMETRY OF STREETS AND ALLEYS

Issued June 28, 2023

- 8.00 Standards
- 8.01 Streets
- 8.02 Sidewalks
- 8.03 Street Names and Signage
- 8.04 Alleys
- 8.05 Parking
- 8.06 Standard Attachments

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8.00 STANDARDS

A. Referenced Standards (all latest editions):

1. Primary Standards:
 - a. IDOT BLRS Manual
 - b. IDOT Highway Standards
 - c. IDOT Standard Specifications for Road and Bridge Construction
 - d. Manual on Uniform Traffic Control Devices (MUTCD)
2. Secondary Standards:
 - a. ITE – Designing Walkable Urban Thoroughfares: A Context Sensitive Approach.
 - b. ITE – Traffic Engineering Handbook.
 - c. NACTO Design Guides.
 - d. Urbana Bicycle Master Plan.
 - e. Urbana Complete Streets Policy.

8.01 STREETS

A. Street Locations:

1. The following factors shall be considered when determining street layout and location:
 - a. Location of existing and proposed streets.
 - b. Topographical and drainage conditions.
 - c. Public safety and convenience.
 - d. Anticipated land use.
 - e. City of Urbana Comprehensive Plan.
 - f. CUUATS Long Range Transportation Plan.
2. Private streets are discouraged and are only permitted or located in special circumstances such as: within planned unit developments; within mobile home parks; or if all lots fronting on the proposed private street meet current minimum lot width requirements.
3. Proposed streets shall be extended and stubbed to the boundary lines of the tract to be developed, unless topography or other physical conditions prevent it, or, in the opinion of the Plan Commission and City Council, such extension is not necessary or desirable for the coordination of the development's street system with the existing or future development of adjacent tracts. Such temporary stub streets in excess of two hundred fifty (250) feet in length shall be provided with a temporary Tee turnaround or a temporary cul-de-sac. The City Engineer shall approve the type of construction.

B. Street and Right-of-Way Geometry:

1. **General Street and Right-of-Way Geometry:** The required ROW dedication and street geometry is as shown in Appendix M herein.
2. **Horizontal alignment:** Horizontal alignment of streets shall be according to Chapter 29 of the BLRS Manual, with Section 29-4 applicable for all streets with design speeds of forty-five (45) miles per hour (mph) or less. Special design criteria may apply for traffic calming systems and will require case-by-case review. When necessary to provide continuity between perpendicular streets in a confined area, 90-degree corners are permitted with a standard centerline radius of fifty-five (55) feet.
3. **Street intersection design:** When required by Section 10-2.02 of the IDOT BLRS Manual, the developer shall prepare an Intersection Design Study (IDS) according to Section 10-2.02. Street intersection design shall also comply with the following:
 - a. *Alignments:* Alignment of street intersections shall be according to Section 34-1.01 of the BLRS Manual.
 - b. *Street intersection jog offsets:* Jogs with centerline offsets of less than two hundred fifty (250) feet measured from street centerline to centerline shall be avoided for local streets. For offsets from collector and arterial streets, the design shall follow the CUUATS Access Management Guidelines for the Urbanized Area (see Appendix G), or a detailed preliminary design study may be required by the City Engineer at the Developer's expense.
4. **Vertical alignment:** Vertical alignment of streets shall be according to Chapter 30 of the BLRS Manual. Streets shall have a minimum longitudinal slope of 0.4%. Street slopes shall comply with Appendix M herein. An angle point (no vertical curve) is permissible if the algebraic difference of grade does not exceed the limits specified in Sections 30-2.01(b) and 30-2.02(b) of the BLRS Manual.
5. **Cross slopes:** Street cross slopes shall be according to Section 31-1.08 of the BLRS Manual.
6. **Street spacing:** No local residential street shall be located fewer than three hundred (300) feet nor more than one thousand, one hundred twenty (1,120) feet from any parallel street, measured from the centerlines of the streets subject to the requirements of Section 8.03, provided that the length, width and shape of blocks shall be determined with due regard to the need for convenient access, circulation, control and safety of pedestrian, bikes, buses and vehicular traffic.
7. **Traffic Calming Measures:** The street geometry design shall proactively evaluate the need for traffic calming features within the development, particularly on streets proposed to have lengthy straight stretches of roadway, relatively large numbers of pedestrians, runners, and cyclists in the Development. Traffic calming features shall be provided when, in the City Engineer's opinion, said measures or speed reductions are needed, pedestrian safety is a possible concern, high traffic volumes are predicted, and/or traffic conflicts exist or are anticipated. Traffic calming measures that may be considered by the City Engineer that must be constructed by the Developer may include both non-physical measures, as defined by the Institute of Transportation Engineers (ITE) such as but not limited to, enhanced speed limit signs, enhanced stop signs, speed limit pavement markings, permanent driver radar speed detection or feedback signs, bike lanes, and bulb-outs or curb extensions at intersection, plus physical measures including, but not limited to, lateral lanes shifts, realigned intersections, or lane narrowing, as defined by ITE.

8. **Cross-reference:** See Chapter 25 Design and Construction Standards for Streets of this Manual.

C. Dead End Streets:

1. **Permanent Turnarounds:** When a street in a new development is intended to be a permanent dead end street, the street shall be designed with a cul-de-sac according to Section 41-1.01 of the BLRS Manual.
2. **Cul-de-sac streets in single-family residential zoning districts:** These cul-de-sacs shall have a maximum length of six hundred (600) feet or have no more than twenty-five (25) single-family dwellings or lots fronting thereon, whichever is more restrictive. In duplex residential zoning districts, cul-de-sac streets shall have a maximum length of six hundred (600) feet or have no more than twenty (20) duplex structures or lots fronting on the street, whichever is more restrictive. The length of a cul-de-sac street shall be measured from the centerline of the nearest intersection street to the center of the turn-around.
3. **Cul-de-sac streets serving multiple-family, industrial or commercial developments:** For these cul-de-sac streets, the Developer shall be required, prior to approval, to present data showing that the length of the cul-de-sac would not generate more traffic than two hundred fifty (250) vehicles per day. The maximum length shall not exceed six hundred (600) feet. Radius, roadway and ROW dimensions of the street and turn-around shall be adequate to assure safe access given the type and volume of traffic that may be anticipated when the development is complete.
4. **Temporary Dead ends:** When streets temporarily dead end, but are intended to be extended with further development, the following temporary construction requirements shall apply:
 - a. If the dead end street is not planned to be extended within one (1) calendar year, then a temporary turnaround shall be constructed within the existing ROW or a temporary easement, with a minimum of four end-of-roadway markers, shall be installed marking the back of the turnaround. Said temporary turnaround shall have a minimum diameter of seventy (70) feet and shall be paved with not less than eight (8) compacted inches of IDOT approved CA-6 crushed stone. All end-of-roadway markers shall be manufactured and installed in accordance with the MUTCD. As per the MUTCD, the minimum mounting height shall be four (4) feet and appropriate advance warning signs shall be used.
 - b. If the dead end is planned to be extended within one calendar year, then a turnaround is not required, but a minimum of four end-of-roadway markers shall be installed marking the end of the stub street.
 - c. In all cases of temporary or permanent dead ends a "No Outlet" sign shall be installed on the block of the dead end per City sign standards and the MUTCD.
 - d. Use IDOT standard Type III Road Closed Barricades with appropriate advanced warning signs for all dead end streets where construction is ongoing or imminent for the continuation of that street. Type III Barricades are not permitted at medium term or long-term dead end streets.
 - e. During construction, Type III Road Closed Barricades shall be maintained at all times.
 - f. In all cases when the adjacent tract is developed and the dead end street continued, the temporary dead end construction (including signage) shall be removed and the area landscaped by the Developer responsible for the continuation.

8.02 SIDEWALKS

See Section 21-405 of the Land Development Code and Chapter 11 of this Manual.

8.03 STREET NAMES AND SIGNAGE

A. Design

1. Street name signs: Street name signs are required at all intersections. Street name signs may be mounted on the same post with other regulatory signs. At signalized intersections, the street name signs shall be mounted on the traffic signal mast arms. When block numbering is required by the City (currently only at major intersections), the block numbering shall be incorporated into the street name signage.

B. Materials and Construction

1. Street name signs shall be according to MUTCD.

8.04 ALLEYS

Alley designs shall comply with Section 41.1.02 of IDOT's BLRS Manual, as amended, and Section 21-415 of the Land Development Code.

8.05 PARKING

(RESERVED)

8.06 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 9: VEHICULAR ACCESS CONTROL

Issued June 28, 2023

9.00 Introduction and Goals

9.01 Administration

9.02 Standards

9.03 Standard Attachments

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9.00 INTRODUCTION AND GOALS

Moving traffic and accessing property are often in conflict. The higher the volume and speed of traffic on a street, the more that access to the street reduces safety and traffic flow. On streets where it is important to maintain higher traffic volume and/or speed, the City must regulate access to maintain function of the street. Lower traffic volume and lower speed streets are less impacted, so less regulation is needed. Individual properties need some form of street access, but it must not come at the expense of the travelling public. This Chapter's goals are to:

- A. Promote and ensure the safety of the motoring, cycling, and walking public using City streets.
- B. Preserve an acceptable level of service on City streets, Level C or better, as defined by the Transportation Research Board (TRB) Highway Capacity Manual.
- C. Minimize conflicts between vehicles using City streets and vehicles entering and leaving property along City streets.
- D. Regulate safe and reasonable access from City streets to abutting property and to provide sufficient spacing between access points to minimize interference with traffic using adjacent access facilities.
- E. Prohibit the use of a City street as a portion of the internal circulation system of abutting property.
- F. Establish reasonable standards and design specifications for access facility improvements.
- G. Establish reasonable requirements for performance and maintenance guarantees to ensure the proper construction of required improvements and to ensure that required improvements are completed in an expeditious manner in accordance with accepted engineering and geometric standards and specifications.
- H. Provide information as to whether the ultimate development impacts are expected to be at Level C or better, as defined by the TRB Highway Capacity Manual.

9.01 ADMINISTRATION

- A. All new developments and construction projects requiring driveway permits in the City and within the 1½-mile extraterritorial jurisdiction (ETJ) shall be designed in compliance with these standards.
- B. A ROW permit from the City is required:
 - 1. To construct a new driveway within City limits.
 - 2. To reconstruct a driveway within City limits.
- C. IDOT permits are also required for access to streets under IDOT jurisdiction.
- D. Traffic signals shall be furnished and installed by the Developer at all vehicular access points that will immediately meet warrants for traffic signals, or are projected to meet said warrants within two (2) years of the time of occupation or at full buildout. An agreement between the Developer and the City for operation, maintenance, rehabilitation and utility payments is required. Note: IDOT or other jurisdictions may have different installation timing requirements or conditions.
- E. The City Engineer may grant exceptions to the standards for reasonable cause, including infill development conditions and other unusual situations.

- F. When a driveway requires work on City ROW, all associated costs of that work shall be paid by the Developer or person holding the ROW permit.

9.02 STANDARDS

A. Referenced Standards (all latest editions):

1. Primary Standards:
 - a. CUUATS Access Management Guidelines for the Urbanized Area (see Appendix G).
 - b. IDOT BLRS Manual
 - c. IDOT Highway Standards
 - d. IDOT Standard Specifications for Road and Bridge Construction
 - e. ITE – Trip Generation Manual.
2. Secondary Standards:
 - a. ITE – Designing Walkable Urban Thoroughfares: A Context Sensitive Approach.
 - b. ITE – Traffic Engineering Handbook.
 - c. NACTO Design Guides.
 - d. Urbana Bicycle Master Plan.
 - e. Urbana Complete Streets Policy.

B. General Guidelines:

No access to streets in the City or the ETJ shall be constructed without the approval of the City Engineer. Locations and configurations shall be designed to accepted engineering standards, which shall consider, but not be limited to the following items:

1. **Functional classification of the street being accessed** (See the functional street classification map in Appendix H):
 - a. Arterial streets:
 - i. No direct private access except as approved by the City Engineer.
 - ii. Access streets shall be located at quarter-mile or greater intervals, to achieve only three intermediate access points per mile.
 - iii. Access points on opposite sides of the street shall be aligned with each other.
 - iv. Reasonable consideration will be given to direct access to properties at locations within sections of the City platted prior to 1988.
 - b. Collector streets:
 - i. Access allowed by permit, with some restrictions.
 - ii. See CUUATS Access Management Guidelines for the Urbanized Area in Appendix G for restrictions.
 - c. Local streets:
 - i. Access allowed by permit, with minimal restrictions.

- ii. See CUUATS Access Management Guidelines for the Urbanized Area in Appendix G for restrictions.
- 2. **Traffic generation:** Amount of traffic being generated by the site taking access shall be estimated. Trip generation rates shall be taken from the ITE Trip Generation Manual, or alternate study information, if approved by the City Engineer.
- 3. **Sight distances:** All non-signalized access points, including streets, except those controlled by all-directional stop signs, shall have adequate sight stopping distance. Sight distance measurements shall be in accordance with the visibility triangle requirements presented in the City ROW standards, which can be found on the City website.
- 4. **Throat length:** Driveways shall be designed and constructed with adequate space between the edge of the street and the point on the site where vehicles either park or may encounter cross traffic. Design drawings and calculations shall verify that traffic entering a site is not likely to be forced to wait on the street for space in the driveway to become available. The minimum driveway throat length is fifty (50) feet, except in residential developments.
- 5. **Driveway geometry:**
 - a. Driveways shall be designed so that vehicles may enter and exit on the paved driveway surface without difficulty. See the City's ROW standards for the four applicable drawings entitled "Detail DRWY-01 through Detail DRWY-04".
 - b. Accesses onto arterials and non-residential collectors shall be designed so that the design user vehicle can make a right turn entry without swinging into an adjacent lane.
 - c. Driveways shall be designed to accommodate internal queued traffic without causing vehicles to wait on the public street to enter the site.
 - d. Curb cut lengths shall be kept to the minimum needed for good design. Residential driveways shall not exceed thirty-five (35) feet wide at the tangent to the curb radii or one-third (1/3) of the lot width at the front of the property unless called for by design approved by the City Engineer.
- 6. **Driveway spacing:**
 - a. Driveways shall be spaced at adequate distances from intersections to mitigate conflict with traffic using the intersection. Lateral clearance distance shall consider classification and volume of street, and type and volume of the driveway.
 - b. Driveways shall be separated far enough from adjacent driveways to prevent interaction with each other, or being a safety issue to traffic on the street.
 - c. Multiple driveways on single lots are discouraged. They may be permitted if the City Engineer determines that they improve traffic impacts on the street over a single entrance, or that the lot is large enough to have no impact on street traffic. Shared driveways are encouraged.
 - d. Driveways shall be set back from property lines so that the flair or end of the radius of the driveway does not overlap the property line extended to the curb line, except in cul-de-sac bulbs or other short-radius curves. Where driveways are serving separate freestanding buildings, except in short-radius curves, driveways shall be at least six (6) feet away from the property line, unless arrangements have been made to handle the side yard stormwater drainage without routing it onto the driveway.

7. Internal circulation:

- a. Other than for one- and two-family residential development, all site development plans taking access to a public street shall include design information showing planned traffic circulation patterns on the site. The City Engineer may require changes from the planned site configurations to improve internal circulation that appears to cause problems to traffic on the street.
- b. In commercial zoning districts, adjacent properties along collector and arterial streets shall provide connections to allow direct movements between properties without re-entering the public street when feasible.

8. Median opening spacing:

- a. Local streets – openings are allowed wherever accesses are taken.
- b. Collector streets – new openings are prohibited in commercial and industrial areas unless the Developer proves to the reasonable satisfaction of the City Engineer that they will not adversely impact traffic flow or safety.
- c. Arterial streets – openings are not allowed, except at street intersections, and may be restricted at un-signalized street intersections if the City Engineer finds they will adversely impact traffic flow or safety.

C. Traffic Impact Analyses (TIAs)

- 1. TIAs are required to be prepared by the Developer in the following situations:
 - a. Developments that can be expected to generate more than one hundred (100) new peak-hour vehicle trips on the adjacent street, as per the ITE Trip Generation Manual.
 - b. Developments of fewer than one hundred (100) new peak-hour trips in problem areas such as high accident locations, congested areas or other areas of critical local concern to the City.
 - c. Any changes that will increase the site traffic generation by more than fifteen percent (15%) if more than one hundred (100) peak-hour trips are involved.
 - d. Any change that will cause the directional distribution of traffic to change by more than twenty percent (20%) where site traffic generation can be expected to ultimately be over one hundred (100) peak-hour trips.
 - e. On any incomplete project when the original TIA is more than two (2) years old.
 - f. When an agreement between the Developer and the City requires cost-sharing contributions to major roadway improvements.
 - g. Any other situation where the City Engineer believes it is important to understand the impact of traffic from the new development on its surrounding area.

2. The TIA shall be performed by or under the supervision of an Illinois-licensed professional engineer who, in the City Engineer's opinion, is qualified to complete traffic studies. The TIA shall include the following information:
 - a. Introduction.
 - b. Existing conditions.
 - c. Proposed site use(s), including buildings, parking, internal circulation patterns and other factors that affect traffic on and adjacent to the site.
 - d. Site-generated ADT and design hourly traffic volumes at fully built status.
 - e. Site trip distribution and traffic origin/destination assignments.
 - f. Existing and projected traffic volumes on the adjacent roadway system (at 20-year horizon, unless otherwise approved).
 - g. Traffic accident history on adjacent streets.
 - h. Capacity analysis, consistent with methods identified in the TRB Highway Capacity Manual, on the adjacent street system, including laneage, signals, pedestrian movements and other relevant factors. Analysis shall be performed with and without the development traffic. Commercially available software such as Synchro, HCM, Cinema, etc., may be used, but only upon prior approval to do so, by the City Engineer.
 - i. Traffic improvement recommendations.
 - k. Traffic control warrants at intersections, if applicable.
 - l. Site plan(s).
 - m. Conclusions and summary of findings, which should address:
 - i. The adequacy of site access.
 - ii. The impact of the specific development on the surrounding area.
 - iii. The suitability of on-site circulation and parking.
 - iv. Projected traffic volumes on individual roadway segments.
 - v. Projections of turn movements at individual intersections or access drives.
 - vi. Considerations given to possible alternatives.
 - vii. The need for any Intersection Design Studies (IDS) according to the criteria in Section 10-2.02 of the IDOT BLRS Manual.
 - n. The level of detail of items "a" through "m" depends on the nature of the development, but they are intended to:
 - i. Provide Developers with recommendations for site selection, site transportation planning, and anticipated traffic impacts.
 - ii. Provide the City with information on which to base decisions about permits and approvals.

9.03 STANDARD ATTACHMENTS

(RESERVED)

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CHAPTER 10: PAVEMENT STANDARDS

Issued June 28, 2023

10.00 Introduction and Goals

10.01 Administration

10.02 Standards

10.03 Standard Attachments

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10.00 INTRODUCTION AND GOALS

The purpose of this chapter is to provide guidance for the design and construction of pavements in accordance with criteria and standards established by IDOT and the City. The goal is to design and construct pavements that are free from defects and will provide superior long-term performance.

10.01 ADMINISTRATION

This Chapter applies to all new and existing public street pavements within the City limits and the 1½-mile extraterritorial jurisdiction (ETJ). The following general guidelines shall apply when designing and constructing pavements. All pavement design and construction shall be in general conformance with the Land Development Code and this Manual.

10.02 STANDARDS

A. Referenced Standards: Design and construction standards for pavements shall comply with the requirements of the following standards (latest editions):

1. Primary Standards:
 - a. IDOT BLRS Manual.
 - b. IDOT Construction Manual.
 - c. IDOT Highway Standards
 - d. IDOT Standard Specifications for Road and Bridge Construction
2. Secondary Standards:
 - a. (Reserved)

B. Subgrade: The subgrade shall be prepared in accordance with Standard Specifications for Road and Bridge Construction, except as amended or expanded as follows:

1. **Roadway Geotechnical Report:** For all Class I or Class II streets (as defined by Chapter 44 of the BLRS Manual), a roadway geotechnical report shall be required according to the IDOT Geotechnical Manual, unless one of the exceptions listed in Section 7.3.1 of the IDOT Geotechnical Manual are satisfied.
2. **Testing:** The following minimum subgrade tests shall be performed according to applicable testing standards:
 - a. **Compaction:** The Standard Specifications for Road and Bridge Construction shall govern subgrade compaction with minimum sampling frequency according to the IDOT Project Procedures Guide. The minimum sampling frequency for Immediate Bearing Value (IBV) shall be every 100 feet of roadway with tests alternating between lanes, i.e., 200-foot intervals in each lane of traffic.
 - b. **Proof Rolling:** In addition to stability and density testing, the City Engineer may require that the subgrade be “proof rolled” prior to approval of the subgrade and before the placement of base materials. Proof rolling shall be according to the IDOT Subgrade Stability Manual.

3. **Remediation:** If subgrade compaction and stability requirements cannot be met, then, with the approval of the City Engineer, a remediation method from the IDOT Subgrade Stability Manual shall be executed.

C. Pavements

1. Minimum Street Thickness Standard:

Functional Classification	Full-Depth Asphalt Minimum Thickness	PCC Minimum Thickness
Local	9 inches	7 inches
Collector	10 inches	9 inches

2. **Pavement Design:** All street pavement for new construction shall be designed according to Chapter 44 of the IDOT BLRS Manual, except that doweled joints are required for all PCC pavements. All pavement design calculations shall be submitted to the City Engineer for review and approval. A subgrade support rating of “poor” shall be used unless otherwise determined by a Roadway Geotechnical Report.
3. **Curb & Gutter:** Curb and gutter type selection shall be according to Section 31-1.07 of the BLRS Manual.

D. Materials

1. **Portland Cement Concrete (PCC) Pavement:** Materials for Portland cement concrete shall conform to the Standard Specifications for Road and Bridge Construction, except as amended or expanded as follows:
 - a. PCC must be produced at an IDOT-approved plant using IDOT currently approved materials for the IDOT-approved mix design.
 - b. An IDOT approved mix design specification sheet must be provided to, or on file with and approved by the City Engineer prior to use of the PCC mixture for pavement construction.
2. **Hot-Mix Asphalt (HMA) Pavement:** Materials for hot-mix asphalt pavement shall conform to the Standard Specifications for Road and Bridge Construction except as amended or expanded as follows:
 - a. All proposed HMA binder and surface courses shall be designed in accordance with Superpave mix design procedures and be approved by IDOT. Evidence of IDOT approval must be submitted to the City Engineer.
 - b. The HMA surface course shall be modified with polymers unless directed otherwise by the City Engineer.
 - c. An IDOT-approved Quality Control/Quality Assurance (QC/QA) Plan must be submitted to the City Engineer prior to the use of a Superpave mix for pavement construction.
 - d. HMA materials must be produced at an IDOT-approved plant using IDOT-approved materials for the IDOT-approved mix design.

E. Construction

1. **Portland Cement Concrete (PCC) Pavement:** Construction of PCC pavement shall conform to the Standard Specifications for Road and Bridge Construction and Highway Standards, except as amended or expanded as follows:
 - a. Joint inserts or dummy joints are expressly prohibited.
2. **Hot-Mix Asphalt (HMA) Pavement:** Construction of hot-mix asphalt pavement shall conform to the Standard Specifications and Highway Standards, except as amended or expanded as follows:
 - a. The HMA surface course shall have a minimum thickness of two (2) inches.

F. Testing

1. **Portland Cement Concrete (PCC) Pavement:** Testing of PCC pavement shall conform to the Standard Specifications for Road and Bridge Construction, except as amended or expanded as follows:
 - a. Compression tests of the concrete are required as described in the IDOT Construction Manual and as specified as follows:
 - i. If compressive strength tests do not meet the minimum requirements set forth in this chapter, then pavement cores shall be taken at the rate of one per two hundred fifty (250) feet per lane at locations designated by the City Engineer. The Developer shall furnish the results of compressive strength tests of pavement cores.
 - ii. When evaluating deficient concrete strength, the current American Concrete Institute (ACI) Building Code Requirements for Structural Concrete (see Evaluation and Acceptance of Concrete—Laboratory-Cured Specimens) shall be followed.

G. Pavement Constructed Out of Specification

1. The City Engineer shall determine if pavement is out of specification by reviewing the materials, testing, strength, appearance, etc. While it is understood that random cracks may appear in concrete pavement, this should be a rare occurrence. Cases of numerous cracks, shrinkage or otherwise shall be subject to removal and replacement per the direction of the City Engineer.
2. Pavement maintenance bonds for securing repair and replacement of pavement initially failing to meet standards shall meet the following criteria:
 - a. If the Developer is allowed to post a pavement maintenance bond in lieu of repair and replacement of pavement which does not meet the design and testing criteria set forth in these regulations, the pavement maintenance bond shall secure the removal and replacement of the deficient pavement within sixty (60) calendar days of the City's demand to replace the same within a period of five (5) years.
 - b. If at any time within the five-year pavement maintenance bond period, two or more random cracks, shrinkage cracking, spalling, or durability cracking appear within a panel of Portland cement concrete pavement, that panel shall be removed and replaced.

- c. If at any time within the five-year pavement maintenance bond period, two or more cracks, raveling, or stripping appear within a section of hot-mix asphalt pavement that entire section shall be removed and replaced to the full thickness of pavement.
- 3. The pavement maintenance bond shall be secured by cash in an amount equal to one hundred fifteen percent (115%) of the Developer's Engineer's City Engineer approved estimate of removal and replacement costs. The pavement maintenance bond and security shall be in a form approved by the City Attorney.
- 4. The pavement maintenance bond shall be executed by the Developer or the Developer's contractor.

10.03 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 11: SIDEWALK STANDARDS

Issued June 28, 2023

11.00 Introduction and Goals

11.01 Administration

11.02 Standards

11.03 Standard Attachments

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enable two-sided document printing.*

11.00 INTRODUCTION AND GOALS

The purpose of this chapter is to provide safe and convenient pedestrian access to all residential, commercial, office, and industrial developments. Sidewalks shall be provided in all developments unless a variance has been granted by the City. Sidewalks shall be provided, repaired or upgraded as needed on any individual site development/redevelopment as determined by the City Engineer.

11.01 ADMINISTRATION

A. Repair or reconstruction of existing sidewalks: All sidewalk repair or reconstruction shall be performed in accordance with the direction of the City Engineer, the standards outlined in Chapter 25 of this Manual, and the following criteria:

1. **Traffic Control:** Traffic control shall be provided for all sidewalk construction including the necessary means of keeping both pedestrians and the Developer's contractor safe during construction of sidewalks. This may include the use of construction signs, barricades, lighting, and/or directing traffic (with traffic control flaggers if necessary.)
2. **ROW Permits:** The necessary ROW permits shall be obtained as per Chapter 25 of this Manual.

B. Construction of new sidewalks: Construction of new sidewalks shall be per the Standard Specifications for Road and Bridge Construction and the requirements of this Manual.

C. Referenced Standards (latest editions):

1. Primary Standards:
 - a. IDOT BLRS Manual.
 - b. IDOT Construction Manual.
 - c. IDOT Highway Standards
 - d. IDOT Standard Specifications for Road and Bridge Construction
2. Secondary Standards:
 - a. Illinois Accessibility Code.
 - b. ITE – Designing Walkable Urban Thoroughfares: A Context Sensitive Approach.
 - c. NACTO Design Guides.
 - d. Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG)
 - e. Urbana Complete Streets Policy.
 - f. Urbana Pedestrian Master Plan.

11.02 STANDARDS

A. Thickness: All sidewalks shall be a minimum six (6) inches thickness. Sidewalks at driveway locations shall be thickened to match the thickness of the driveway pavement.

B. Width: Sidewalk widths shall be as follows:

1. Five (5) feet minimum width.
2. In areas with existing sidewalks that measure less than five (5) feet in width, sidewalks shall be reconstructed to five (5) feet in width when more than one hundred (100) feet of contiguous length is being reconstructed.
3. In areas with existing sidewalks that measure more than five (5) feet in width, new or reconstructed sidewalks shall match the width of the existing sidewalk.
4. When there is less than a one-foot of buffer between back of curb and the front of the sidewalk, a six (6) foot wide minimum width sidewalk shall be provided.

C. Location: All sidewalks and multi-use paths shall be located totally within a street right-of-way or approved sidewalk easement or right-of-way, shall be roughly parallel to the abutting street (except for sidewalks considered as part of a planned unit development or mobile home park), and shall align one (1) foot inside the right-of-way line, unless otherwise approved by the City Engineer. Also, see Section 21-405 of the Land Development Code.

D. Access: See Section 21-405 of Chapter 21 of the Urbana City Code of Ordinances.

E. ADA/PROWAG: All sidewalks shall conform to all current Americans with Disabilities Act (ADA) and PROWAG standards.

F. Minimum Geometry Requirements: Sidewalk geometry shall comply with this Manual, State of Illinois requirements, PROWAG, and ADA requirements. Minimum geometry requirements shall include but not be limited to the following:

1. **Grade** (longitudinal slope) shall not exceed 8.33% for ramps and five percent (5%) elsewhere. Landings shall be provided per the current ADA/PROWAG guidelines.
2. **Cross Slope** (transverse slope) standard shall be one point five percent (1.5%) with a maximum allowable slope of two percent (2%) downward in the direction of the back of curb.
3. **Ramps:** ADA/PROWAG ramps shall be provided at all necessary locations per IDOT, PROWAG, and ADA requirements. Minimum face to face of curb width on sidewalk ramps shall be five (5) feet.

G. Material Requirements: Sidewalks shall be constructed of Portland cement concrete (PCC) from an IDOT approved concrete batch plant using IDOT approved mix designs and materials.

H. Construction Requirements: Sidewalks shall be constructed according to the Standard Specifications for Road and Bridge Construction and the Highway Standards.

11.03 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 12: TRAFFIC CONTROL DEVICE STANDARDS

Reserved

RESERVED

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enable two-sided document printing.*

CHAPTER 13: RIGHT-OF-WAY LIGHTING STANDARDS

Reserved

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CHAPTER 14: TRAFFIC SIGNAL STANDARDS

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CHAPTER 15: GENERAL UTILITY REQUIREMENTS

Reserved

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CHAPTER 16: DEDICATION AND VACATION OF EASEMENTS AND RIGHT-OF-WAY

Issued June 28, 2023

16.00 Introduction

16.01 Administration

16.02 Standards

16.03 Standard Attachments

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enable two-sided document printing.*

16.00 INTRODUCTION

The purpose of this Chapter is to explain the legal requirements for dedication of right-of-way and easements. The Chapter also covers the approval process for such dedications and for vacation of easements and right-of-way.

16.01 ADMINISTRATION

General definitions and descriptions for various types of easements and rights-of-way are described in the following sections. The methods of dedication and acceptance are also covered.

A. General Background:

1. **Right-of-Way.** Right-of-way is dedicated through either a statutory or common law process. Statutory dedication occurs through the platting process and results in a fee simple (ownership) interest in the public jurisdiction to which the right-of-way is dedicated. Common law dedication occurs through an ineffective platting process or through public use over a prolonged period of time. Common law of dedication of right-of-way results in an easement, not an ownership, interest on the part of the public jurisdiction to which the right-of-way is dedicated. This Chapter covers only statutory dedication of right-of-way.
2. **Easements.** An easement is a right-of-use by a private party or by the public of a designated portion of private property for a limited purpose. When an easement is dedicated or granted, the owner retains the fee simple ownership while another party receives the right to use the specific area for a specific purpose which is described in the easement. Public easements are dedicated either to the “public” or to a specific governmental unit. Public easements are controlled by the governmental body that has jurisdiction over the land in question for the purpose designated in the easement. Easements are defined by how they are created, to whom they are dedicated, or how they are used. Each of these will be described.
 - a. **Categorization by method of creation:**
 - i. *Prescriptive easements:* Prescriptive easements are easements which have grown up as a result of use by either the public, or a specifically identifiable individual or group over at least twenty (20) years. Prescriptive easements may be created, for example, when the public uses a path as a general means of access between two public areas. A prescriptive easement may be created when one neighbor uses a driveway across another neighbor’s property in order to access his buildings. Prescriptive easements, because of their nature, are not regulated or controlled by this chapter.
 - ii. *Express easements:* Express easements are created by a written document. This can be designation on the face of a plat, together with dedication language in the Owner’s Certificate, or in a separate written document. The easement would designate the grantor (owner) and grantee (named private party or the public or the specified public entity), and specify the purpose or use of the easement. Some may be limited in time; others are perpetual.
 - b. **Categorization by user:**
 - i. *Public vs. private easements.* Public easements, public right-of-way, and public places are all terms used to describe land that a governmental body has jurisdiction over. Within the City, unless right-of-way is a state, federal or county highway, the

City has authority to control the use of “public” right-of-way or easements dedicated “to the public”. This includes the authority to control the placement and relocation of utilities within these public easements. Some easements are granted to a specifically named unit of government. In that case, the unit of government has control over the use of such right-of-way or easement. Such easements cannot be accepted or vacated by the City. The City can declare that public easements are full and no additional utilities may be placed there. Additionally, the City may require that utilities be removed from these public places/easements. Private easements are dedicated to the use of a specifically named individual or entity. Usually, these are neighboring properties. Private easements, such as an ingress/egress easement, may be required by the City in the course of platting as a condition of a variance from general subdivision regulations, or as a part of its authority to control street access.

c. Easements classified by purpose or use:

- i. *Ingress/Egress Easement.* This is a private easement guaranteeing the vehicular and pedestrian access rights to a designated area and access point to one or more private entities. This easement may be dedicated on the face of a plat or by separate easement document.
- ii. *Utility or General Utility Easement.* This is a public easement that may be used by various public or privately owned utilities. This type of easement is usually dedicated on the face of the plat, or by a separate easement document. This utility easement, depending on the language of dedication in the plat or easement document, may be used for any purpose deemed to be a utility by the City, or may be limited to some specific kind of infrastructure. This kind of easement may be dedicated to a specific governmental unit other than the City such as a drainage district or the Urbana & Champaign Sanitary District, in which case control over the easement rests with that body alone. Utility or General Utility Easements may include or not include, depending on language in the easement document, drainage and stormwater purposes. If the utility easement generically states that it is for any purpose deemed a utility in the City, the easement will cover sanitary sewer, storm sewer, general drainage and stormwater purposes together with other general public and private utilities such as potable water, gas, electric, and communications. These provisions can be superseded by specific easement language that is approved by the City.
- iii. *Private Utility Easement.* This is an easement obtained by an individual utility company, whose use is restricted to that specific utility company, or its successors.
- iv. *Sanitary Sewer Easement.* This is a utility easement limited to sanitary sewer use only and is usually dedicated on the face of the plat or by separate easement document. This easement may be dedicated to the public, in which case the City controls the easement or may be dedicated to Urbana & Champaign Sanitary District, in which case that unit of government controls the easement.
- v. *Drainage or Stormwater Easement.* This is a limited utility easement that is for the sole purpose of stormwater detention or overland drainage ways. This type of easement is usually dedicated on the face of the plat or by separate easement document. This easement may be dedicated to the public, in which case the City controls the easement or may be dedicated to a specific drainage district, in which case that unit of government controls the easement.

B. Dedication of an Easement or Right-of-Way: Dedication is a two-step process. Step one involves the mapping, legal description, and transfer of rights as agreed to by the current owners of a property as part of a legal plat of property or by separate document. The second step is the

public acceptance of the easement or right-of-way. The nature of the acceptance is dependent upon the nature of the dedication and use of the easement or right-of-way.

C. Right-of-Way.

1. **Dedication:** Right-of-way is designated on a plat and is dedicated in the Owner's Certificate. Property that is within the City must be specifically dedicated to the City of Urbana. Right-of-way located outside the City limits is dedicated "to the public".
2. **Right-of-Way Acceptance:** For land within the City, right-of-way acceptance involves approval of the plat by the City Council. If construction of infrastructure is required as part of the platting process, acceptance of the right-of-way is not complete until the infrastructure is "accepted" by the City's Public Works Department. For right-of-way located outside of the City at the time of plat approval, the procedures of the jurisdictional government (township, county, etc.) shall be followed.
3. **Vacation of Right-of-Way:** The City of Urbana can only vacate right-of-way that is located inside the City limits at the time of vacation. Vacation of right-of-way is governed by state statute (65 ILCS 5/11-91-1) and City municipal ordinance provisions. Petitioners should contact the City of Urbana Legal Department if one wishes to have a right-of-way vacated. Right-of-way located outside the City must follow the procedures of the jurisdictional unit that has authority over that right-of-way. The County can vacate County roads (605 ILCS 5/5-109); and a township can vacate township roads (605 ILCS 5/6-301 et. seq.).

D. Easements.

1. **Dedication:** Easements may be designated on a plat and dedicated in the Owner's Certificate. All plats to be approved by the City of Urbana must dedicate public easements to the City of Urbana. State statute gives the City authority to accept easements within its mile and a half (1-½ mile) extraterritorial jurisdiction. (65 ILCS 5/11-105-1).
2. **Easement Acceptance:** Acceptance of an easement is shown by the City's approval of the plat or via administrative acceptance of separate easement documents.
3. **Easement Vacation:** The vacation of an easement is a request that an easement that has previously been dedicated and accepted such as with the recording of a plat, be legally removed due to utility reroute, non-use of the easement, or other reasons. The City can vacate only "public" easements dedicated to the City or to the public within the City. In general, the City vacates easements only when affected utility companies or other affected governmental units have all agreed to the release of the easement. In order to vacate a general utility easement, the City Engineer must receive written confirmation from all utility companies and other governmental units providing infrastructure at that location indicating no objection to the vacation. An easement may be vacated by a replat of the plat that originally dedicated the easement.

16.02 STANDARDS

- A. **General:** Easement dedications are to be granted or released by the City Engineer, as stated in Urbana Municipal Code Section 20-104. All other right-of-way dedications and vacations must include actions by the City Council, as per Urbana Municipal Code Section 20-104. This process is limited to easements and rights-of-way within the City limits.
- B. **Easement and Right-of-way Dedication/Vacation Submittal Process:** The surveyor of record shall submit a written request for acceptance/release of an easement or right-of-way by the City of Urbana together with a dedication/ vacation document, legal description, and corresponding

plat. In the event of a right-of-way dedication/ vacation request, the City Engineer shall prepare a memorandum to the City Council informing the Council of the said request.

- C. Easement and Right-of-way Dedication Document:** The dedication document shall be prepared in a manner and format similar to examples shown in Standard Attachments 16.01A and 16.01B. The tract's Legal Description and corresponding Plat shall be attached as exhibits to the dedication document. A five (5) inch tall by three (3) inch wide blank space shall be left in the top right portion of the first page of the document for use by the County Recorder. Any deviation from the language shown in the attached example shall be approved by the City Attorney.
- D. Easement and Right-of-way Vacation Document:** The vacation document shall be prepared using the examples shown in Standard Attachments 16.02A and 16.02B. The tract's Legal Description and corresponding Plat shall be attached as exhibits to the vacation document. A five (5) inch tall by three (3) inch wide blank space shall be left in the top right portion of the first page of the document for use by the County Recorder. Any deviation from the language shown in the attached example shall be approved by the City Attorney.
- E. Legal Description of Easement and Right-of-way Dedication/ Vacation:** A certified standard legal description prepared by an Illinois Registered Land Surveyor describing the limits of the easement(s)/ right(s)-of-way shall be incorporated within the submitted document.
- F. Plat of Easement and Right of way:** The Plat of Easement/ Right-of-way shall be a plan drawing which-corresponds to the legal description of the subject easement/ right-of-way and the boundaries of the subdivision in which it lies and any adjacent subdivisions which clarify the purpose of the easement/ right-of-way. See the examples of a "Plat of Easement" as shown by Standard Attachment 16.03A and a "Plat of Right-of-way" as shown by Standard Attachment 16.03B.
- G. Approval and Recording:** The City Engineer shall review, then approve or reject the release (vacation)/dedication of the easement. The City Council shall review, then approve or reject all other right-of-way vacations/ dedications. The City Clerk shall distribute and record the documents as appropriate.

16.03 STANDARD ATTACHMENTS

Standard Attachment No. 16.01A - Dedication of Easement Document
Standard Attachment No. 16.01B - Dedication of Right-of-way Document
Standard Attachment No. 16.02A - Easement Vacation Document
Standard Attachment No. 16.02B - Right-of-Way Vacation Document
Standard Attachment No. 16.03A - Standard Plat of Easement
Standard Attachment No. 16.03B - Standard Plat of Right-of-Way

Standard Attachment 16.01A - Dedication of Easement Document

This instrument was prepared by:

Dan Rothermel
Land Surveyor
City of Urbana
706 S. Glover Avenue
Urbana, IL 61802

2018R19648

REC ON: 11/15/2018 09:03:49 AM

CHAMPAIGN COUNTY

MARK SHELDEN

REC FEE: 51.00

RHSPS Fee:

REV FEE:

PAGES 5

PLAT ACT: 0 PLAT PAGE:

EXAMPLE

Mail recorded document to:

Public Works Director
City of Urbana
706 S. Glover Avenue
Urbana, Illinois 61802

City of Urbana – Champaign County

**STORM SEWER
EASEMENT AND OPERATION-MAINTENANCE AND REPAIR
AGREEMENT**

**Amerco Real Estate Company, a Nevada corporation
2727 North Central Avenue
Phoenix, AZ 85004**

PIN: 93-21-21-202-077

Standard Attachment 16.01A - Dedication of Easement Document

PERMANENT EASEMENT

The Grantors, Amerco Real Estate Company, a Nevada corporation, for and in consideration of One Dollar and other good and valuable consideration, herewith and hereby gives, grants and conveys unto the Grantee herein. THE CITY OF URBANA, a municipal corporation of the State of Illinois, a perpetual easement, privilege, right, and authority to construct, reconstruct, repair and maintain a storm sewer and appurtenances upon, under and within a part of the real estate described as follows:

EXAMPLE

A part of Lot 201 in Webber's Replat of part of Lot 1 and Lot 2 of Southgate Shopping Center Subdivision, as shown on a plat recorded July 12, 2001 as Document 2001R18798 in the Office of the Recorder of Deeds, Champaign County, Illinois, being more particularly described as follows;

Commencing at the northwest corner of said Lot 201; thence N 89°39'11" E along the north line of said Lot 201, a distance of 38.74 feet to the Point of Beginning, thence continuing N 89°39'11" E along the north line of said Lot 201, 15.58 feet; thence S 49°43'37" W, a distance of 47.71 feet; thence S 04°25'01" E, a distance of 123.68 feet to a point on the southerly line of said Lot 201; thence, S 89°39'24" W along the southerly line of said Lot 201, a distance of 0.48 feet; thence N 45°15'03" W along the southwesterly line of said Lot 201, a distance of 14.56 feet; thence N 04°25'01" W, a distance of 109.85 feet; thence S 81°49'40" W, a distance of 7.72 feet to a point on the west line of said Lot 201; thence N 00°50'44" W along the west line of said Lot 201, a distance of 10.08 feet; thence N 81°49'40" E, a distance of 10.34 feet; thence N 49°43'37" E, a distance of 36.87 feet to the point of beginning.

Said easement having an area of 1,730 square feet (0.04 acres), more or less, all situated in the City of Urbana, Champaign County, Illinois, and being as shown on the attached plat.

In consideration of the grant of the easement hereinabove contained and of payment thereof, the GRANTOR(S) and GRANTEE hereby agree as follows:

1. During the performance of the construction work, the GRANTEE, its contractors and agents, shall have exclusive use of the permanent easement area as is necessary to the orderly and economical performance of the construction work.
2. The storm sewer shall be constructed of such materials and maintained in such manner as the GRANTEE may deem suitable.

Standard Attachment 16.01A - Dedication of Easement Document

3. The GRANTEE, or its contractor, shall regrade all disturbed ground, so that the surface of the real estate above described shall be restored to a condition of safety and amenity, and shall remove from the above described real estate all surplus soil and debris resulting from any such construction work.
4. The GRANTOR(S) shall have all rights, now herein granted, to the ownership, use and occupation of the above described real estate, except that the GRANTOR(S) shall place no permanent building or structure over or within the permanent easement herein granted, in such a manner as to damage the storm sewer, or restrict the use thereof, or deny the GRANTEE reasonable access thereto for the purpose of the use, repair, replacement, or maintenance thereof.
5. The GRANTEE will indemnify and save harmless the GRANTOR(S), their heirs, executors, administrators, and assigns, from any and every claim, demand, suit, damage, and payment thereof, in respect thereto, or in respect of any of them with reference to injury to persons or damage to property caused by any of the work performed by the GRANTEE under this grant, and will require its contractors to so indemnify and save harmless the said GRANTOR(S), their heirs, executors, administrators, and assigns.
6. The grant herein contained shall constitute a covenant which runs with the land and shall be binding upon the heirs, executors, administrators, and assigns of the GRANTOR(S) and the terms and conditions herein set forth shall be binding upon the GRANTOR(S) and the GRANTEE.

Amerco Real Estate Company, a Nevada Corporation

By: Michael Faucher Its Owner's Representative
Print Name

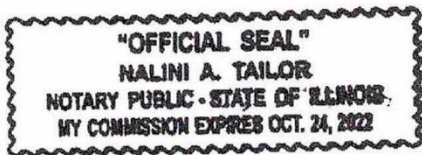
By: _____ Its _____
Print Name

Standard Attachment 16.01A - Dedication of Easement Document (Example)

STATE OF ILLINOIS
COUNTY OF McLean

I certify that on this date before me, Nalini A. Taylor, a Notary Public duly authorized in the state and county named above to take acknowledgements, personally appeared Michael A. Franchi and _____, who proved to my satisfaction that they are the persons described in and who executed the foregoing instrument as Owner's Rep. (title) and _____ (title), respectively, of Amerco Real Estate Company, a corporation organized under the laws of the State of Nevada. They acknowledged before me that they, being duly authorized, signed the foregoing instrument and that the same is their free act and deed and the free act and deed of the above-named corporation.

Given under my hand and official seal this 13th day of November, 2018.



Nalini A. Taylor
Notary Public

My Commission Expires: Oct 24th 2022

Accepted on behalf of the City of Urbana.

EXAMPLE

BY: Carol J. Mitten

~~William R. Gray~~ Carol J. Mitten

Interim Public Works Director/City Engineer

Date: 11.14.18

Standard Attachment 16.01B - Dedication of Right-of-way Document (Example)



8 4 0 6 4 2 4
Tx:4164298

STATE OF ILLINOIS
COUNTY OF CHAMPAIGN
CITY OF URBANA

2022R01597
REC ON: 01/25/2022 10:49:33 AM
CHAMPAIGN COUNTY
AARON AMMONS
REC FEE: 51.00
RHSPS Fee:
STATE TAX:
COUNTY TAX:
PLAT ACT:
PAGES 3

DEDICATION OF RIGHT OF WAY FOR PUBLIC ROAD
PURPOSES

THIS INDENTURE WITNESSETH, that the Grantor, Urbana School District #116, its successors and assigns, for and in consideration of the benefits resulting from the construction and maintenance of the public roadway and sidewalk herein referred to, and other good and valuable consideration, does by these presents, hereby grant, convey and dedicate to The City of Urbana, Illinois, a municipal corporation, for the purpose of a public right of way for Public road purposes, a tract of land situated in the Southeast Quarter of Section 17, Township 19 North, Range 9 East of the Third Principal Meridian, Champaign County, Illinois, and described as follows:

EXAMPLE

A part of Lots 1, 2, and 14 of the Assessor's Plat of the Northwest Quarter of the Southeast Quarter of Section 17, Township 19 North, Range 9 East of the Third Principal Meridian, as shown on a plat recorded in Plat Book "D" at page 42, and a part of Lot 1 of Zimmerman's Subdivision of a portion of Lot 1 of the Assessor's Plat of the Northwest Quarter of the Southeast Quarter of Section 17, Township 19 North, Range 9 East of the Third Principal Meridian, as shown on a plat recorded in Plat Book "E" at page 451, both recorded in the Office of the Recorder of Deeds, Champaign County, Illinois, being more particularly described as follows:

Beginning at the northeast corner of Lot 1 of said Assessor's Plat of the Northwest Quarter of the Southeast Quarter of Section 17, Township 19 North, Range 9 East of the Third Principal Meridian; thence S 00°50'38" E along the existing westerly Right-of-Way line of Vine Street, a distance of 27.74 feet; thence N 41°15'50" W, a distance of 28.64 feet; thence S 89°21'26" W along a line parallel with and 6.00 feet southerly of the existing southerly Right-of-Way line of Washington Street, a distance of 367.45 feet; thence N 00°38'34" W along a line perpendicular to said southerly Right-of-Way line, a distance of 6.00 feet to a point on said southerly Right-of-Way line; thence N 89°21'26" E along the existing southerly Right-of-Way line of Washington Street, a distance of 386.00 feet to the Point of Beginning.

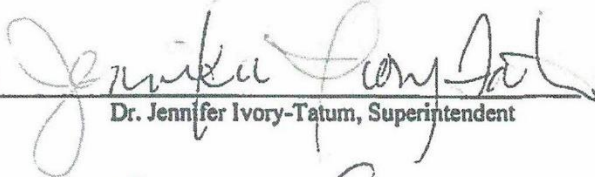
Said tract having an area of 2,518 square feet, more or less, all situated in the City of Urbana, Champaign County, Illinois. Said tract being also shown by the plat hereto attached and considered a part hereof. Being a portion of Permanent Parcel Numbers: 93-21-17-402-001; 93-21-17-402-002, 93-21-17-402-003 and 93-21-17-402-004.

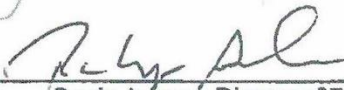
And the Grantor and Grantee further, as a part of this dedication, agree that City officials having authority as to public roadways, and its representatives, engineers, agents, contractors and employees are hereby authorized to enter into and take full and complete possession of the said tract;

Standard Attachment 16.01B - Dedication of Right-of-way Document (Example)

IN WITNESS WHEREOF, the Grantor has hereunto set his hand and seal this 18 day of January, 2022A.D.

URBANA SCHOOL DISTRICT #116 - URBANA, ILLINOIS

BY: 
Dr. Jennifer Ivory-Tatum, Superintendent

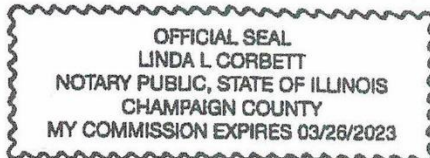
ATTEST: 
Randy Ashman, Director of Facilities Service

EXAMPLE

STATE OF ILLINOIS)
) S.S.
COUNTY OF CHAMPAIGN)

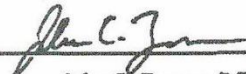
I, the undersigned, a Notary Public in and for said County and State aforesaid, do hereby certify that Dr. Jennifer Ivory-Tatum and Randy Ashman, personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered such instrument as their free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and Notarial Seal this 18 day of January, 2022A.D.




Notary Public

Accepted for the City of Urbana by:


John C. Zeman, P.E., S.E.
City Engineer

(G) Prepared By & Return To:
Urbana Public Works – Engineering Dept.
706 Glover Avenue
Urbana, IL 61802
(217) 384-2342

Send Tax Bill To:
City of Urbana
400 S. Vine St.
Urbana, IL 61801

Standard Attachment 16.02A- Easement Vacation Document



8 2 9 1 8 2 0
Tx:4118309

2019R17273

REC ON: 10/16/2019 04:00:45 PM

CHAMPAIGN COUNTY

MARK SHELLEN

REC FEE: 51.00

RHSPS Fee:

REV FEE:

PAGES 4

PLAT ACT: PLAT PAGE:

Release

Recording Cover Page

Mark Shelden

Champaign County Recorder

EXAMPLE

2019R17273 1 OF 4

Page 1 of 4 of Standard Attachment 16.02A

Standard Attachment 16.02A- Easement Vacation Document

RELEASE OF EASEMENT

KNOW ALL MEN BY THESE PRESENTS, that the City of Champaign, in the County of Champaign and State of Illinois, for said City and behalf of the public, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby confessed, does hereby release and vacate to Tim Tatman, member of DNT of Illinois, LLC, right, title and interest whatsoever that the City of Champaign, Illinois, for itself and on behalf of the public, may have in and to the Utility Easement described on Exhibit "A" attached, which was granted to the City by the instrument recorded in the Champaign County Recorder's office on September 21, 2004 as Document No. 2004R30310, also known as the "Final Plat Lots 4, 17, 23-27, 36, 38, 39 and 46 of Mattis Commercial Park".

BY: [Signature] Dated this 0th day of August, 2019

CITY OF CHAMPAIGN, ILLINOIS

Sec. 30-800
APPROVED AS TO FORM:

[Signature]
Assistant City Attorney

By: [Signature]
City Manager

ATTEST: [Signature]
City Clerk

STATE OF ILLINOIS }
}ss.
COUNTY OF CHAMPAIGN }

I, the undersigned, a Notary Public in and for said County and State aforesaid, DO HEREBY CERTIFY, that TIM TATMAN and N/A, personally known to me to be the same persons whose names are subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that they signed, sealed and delivered the said instrument as their free and voluntary act and as the free and voluntary act of said City, for the uses and purposes therein set forth, and that they were duly authorized to execute the same by the City Council of the City of Champaign, Illinois.

Given under my hand and Notarial Seal this 0th day of August A.D., 2019.

[Signature]
Notary Public



My commission expires: 9/4/2019

RETURN TO:
City Clerk
City of Champaign
102 North Neil Street
Champaign, IL 61820

EASEMENT DOCUMENT PREPARED
BY:
City of Champaign Engineering
Division
702 Edgebrook Drive
Champaign, IL 61820

LEGAL DESCRIPTION PREPARED
BY:
MSA Professional Services
201 West Springfield Avenue,
Suite 400
Champaign, IL 61820

Standard Attachment 16.02A- Easement Vacation Document

Lot 27 Easement Vacation Legal Description

TCT Construction - Tatman's CARSTAR Expansion Sanitary Main Extension
MSA Project #14299003

Part of the Northeast Quarter of Section 10, Township 19 North, Range 8 East of the Third Principal Meridian, Champaign County, Illinois, described as follows:

The east 10 feet of Lot 27 of *Lots 4, 17, 23-27, 36, 38, 39 and 46 of Mattis Commercial Park* per the plat recorded September 21, 2004 as Document 2004R30310 in the Champaign County Recorder's Office EXCEPT the north 30 feet and south 10 feet thereof

Said tract containing 0.026 acres, more or less.

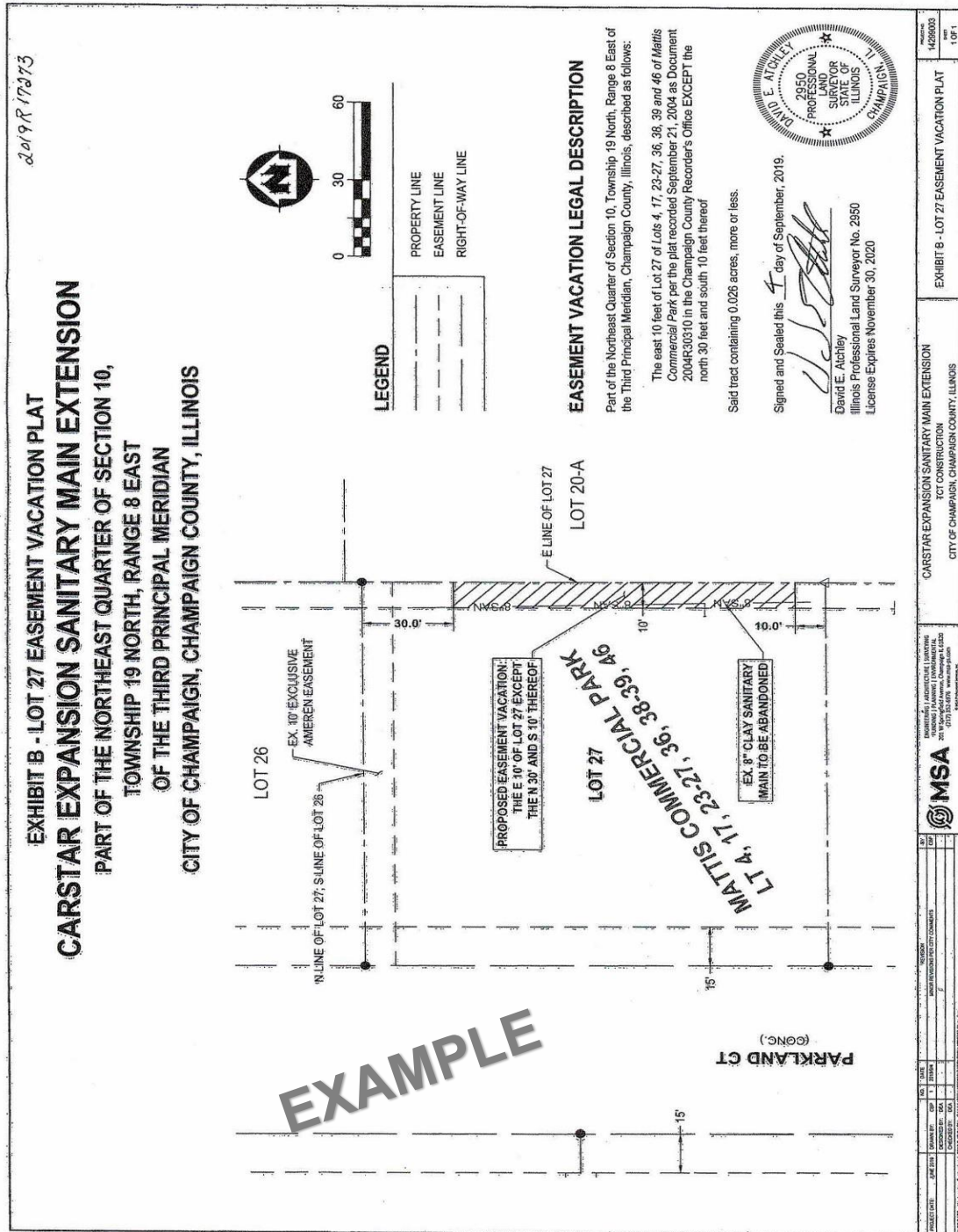
EXAMPLE

July 30, 2019

2019R17273 3 OF 4

Page 3 of 4 of Standard Attachment 16.02A

Standard Attachment 16.02A- Easement Vacation Document



Standard Attachment 16.02B- Right-of-way Vacation Document

EXAMPLE

ORDINANCE NO. 2020-03-011

AN ORDINANCE VACATING CERTAIN ALLEYS

**(East Alley of Vine Street between Elm and Green Streets and
North Alley of Green Street between Vine Street and Urbana Avenue)**

WHEREAS, Section 11-91-1 of the Illinois Municipal Code (65 ILCS 5/11-91-1) provides that the corporate authorities of a municipality may by ordinance vacate any street or alley, or part thereof, within their jurisdiction after determining that the public interest will be subserved by said vacation; and

WHEREAS, 200 S Vine St, LLC is the owner of all of the land abutting the north-south alley located east of South Vine Street between East Elm Street and East Green Street and the east-west alley located north of East Green Street between South Vine Street and South Urbana Avenue; and

WHEREAS, the City of Urbana ("City") heretofore has agreed to vacate said alleys pursuant to a redevelopment agreement with Green Street Realty Co., of Ill., approved by Ordinance No. 2019-01-005; and

WHEREAS, the requirements of Urbana City Code Section 2-160 for a public hearing and public notice of such hearing prior to the City Council's consideration of an ordinance to vacate any street do not, pursuant to the terms thereof, apply to an ordinance vacating public grounds other than a public street; and

WHEREAS, said vacations will not materially impair access to any property owner; and

WHEREAS, the City Council finds that the alleys are of no further use to the City except as hereinafter provided; and

WHEREAS, the aforestated owner has agreed to pay all costs to maintain the alleys after such vacations, except as otherwise provided in this Ordinance; and

WHEREAS, the City Council finds that the relief to the public from the further burden and responsibility of maintaining the alleys herein vacated is just and adequate compensation for the benefits which will accrue to the said owner; and

Page 1 of 4

Page 1 of 5 of Standard Attachment 16.02B

Standard Attachment 16.02B- Right-of-way Vacation Document

WHEREAS, the City Council finds that the public interest is subserved by vacating said alleys, particularly when considering such relief to the public; and

WHEREAS, Section 11-91-2 of the Illinois Municipal Code (65 ILCS 5/11-91-2) provides that upon the vacation of an alley, or any part thereof, by virtue of any ordinance of any municipality, title to the land included therein will vest in the then owners of the land abutting thereon; and

WHEREAS, the City Council further finds that the public interest is subserved by the City's retention of a permanent easement in the north-south alley located east of South Vine Street between East Elm Street and East Green Street for the installation, maintenance, renewal, and reconstruction of certain public service facilities.

NOW, THEREFORE, BE IT ORDAINED by the City Council of the City of Urbana, Illinois, as follows:

EXAMPLE

Section 1.

The City Council of the City of Urbana, Illinois, hereby vacates, subject to the terms set forth in this Ordinance, the following described north-south alley located east of South Vine Street between East Elm Street and East Green Street and east-west alley located north of East Green Street between South Vine Street and South Urbana Avenue:

All of a north-south Public Alley and all of an east-west Public Alley, both being in the Northeast Quarter of the Northeast Quarter of Section 17, Township 19 North, Range 9 East of the Third Principal Meridian, Champaign County, Illinois, being more particularly described as follows:

All of a north-south Public Alley, being twelve feet (12') in width, and all of an east-west Public Alley, being twelve feet (12') in width, lying adjacent to Lots 9, 10, 11, 12, 13, 14, 15, and 16 of W. T. Webber's Subdivision in the City of Urbana, as shown on a plat recorded in Deed Record Book "A" at page 357 in the Office of the Recorder of Deeds, Champaign County, Illinois, and bounded on the north by Elm Street; on the east by Urbana Avenue; on the south by Green Street; and on the west by Vine Street.

Said alleys containing 6,480 S.F. (0.149 acre), more or less, all situated in the City of Urbana, Champaign County, Illinois.

Standard Attachment 16.02B- Right-of-way Vacation Document

Section 2.

Upon vacation of the above-described alleys, title thereto shall vest in the record owner of the land abutting the vacated alleys for the extent of the common borders of the owner's respective parcels with the said alleys.

The owner, permanent index numbers, and addresses of the land abutting the north-south alley located east of South Vine Street between East Elm Street and East Green Street are as follows:

200 S Vine St, LLC	92-21-17-233-001	202 S. Vine Street
200 S Vine St, LLC	92-21-17-233-002	305 E. Elm Street
200 S Vine St, LLC	92-21-17-233-006	306 E. Green Street
200 S Vine St, LLC	92-21-17-233-005	304 E. Green Street

The owner, permanent index numbers, and addresses of the land abutting the east-west alley located north of East Green Street between South Vine Street and South Urbana Avenue are as follows:

200 S Vine St, LLC	92-21-17-233-001	202 S. Vine Street
200 S Vine St, LLC	92-21-17-233-002	305 E. Elm Street
200 S Vine St, LLC	92-21-17-233-004	205 S. Urbana Avenue
200 S Vine St, LLC	92-21-17-233-007	308 E. Green Street; 207 S. Urbana Avenue
200 S Vine St, LLC	92-21-17-233-006	306 E. Green Street
200 S Vine St, LLC	92-21-17-233-005	304 E. Green Street

Section 3.

The vacation of the above-described alleys shall be subject to the condition that a perpetual easement upon the north-south alley located east of South Vine Street between East Elm Street and East Green Street is hereby reserved for and granted to the City of Urbana, Illinois, any public utilities, and their successors and assigns to construct, install, reconstruct, repair, remove, replace, inspect, maintain, and operate their facilities in, under, across, along, over, and upon the vacated alley, together with the right of access thereto for the personnel and equipment necessary and required for such uses and purposes and the right to cut, trim, or remove trees, bushes, and roots as may be reasonably required incidental to the rights herein given.

EXAMPLE

Standard Attachment 16.02B- Right-of-way Vacation Document

Section 4.

A plat of vacation, in substantially the form of the copy of the plat attached hereto and hereby incorporated by reference, be and the same is hereby authorized and approved.

Section 5.

This Ordinance shall not be construed to affect any suit or proceeding pending in any court, or any rights acquired, or a liability incurred, or any cause or causes of action acquired or existing prior to the effective date of this Ordinance; nor shall any right or remedy of any character be lost, impaired, or affected by this Ordinance.

Section 6.

This Ordinance shall be in full force and effect from and after its passage. Upon approval of this Ordinance, the City Clerk is directed to record a certified copy with the Champaign County Office of the Recorder of Deeds.

This Ordinance is hereby passed by the affirmative vote, the “ayes” and “nays” being called, of three-fourths of all the alderpersons then holding office (6 of 7 votes) of the City of Urbana, Illinois, at a meeting of the City Council.

PASSED BY THE CITY COUNCIL this 9th Day of March, 2020.

AYES: Brown, Colbrook, Hursey, Jakobsson, Miller, Roberts, Wu

NAYS:

ABSTENTIONS:

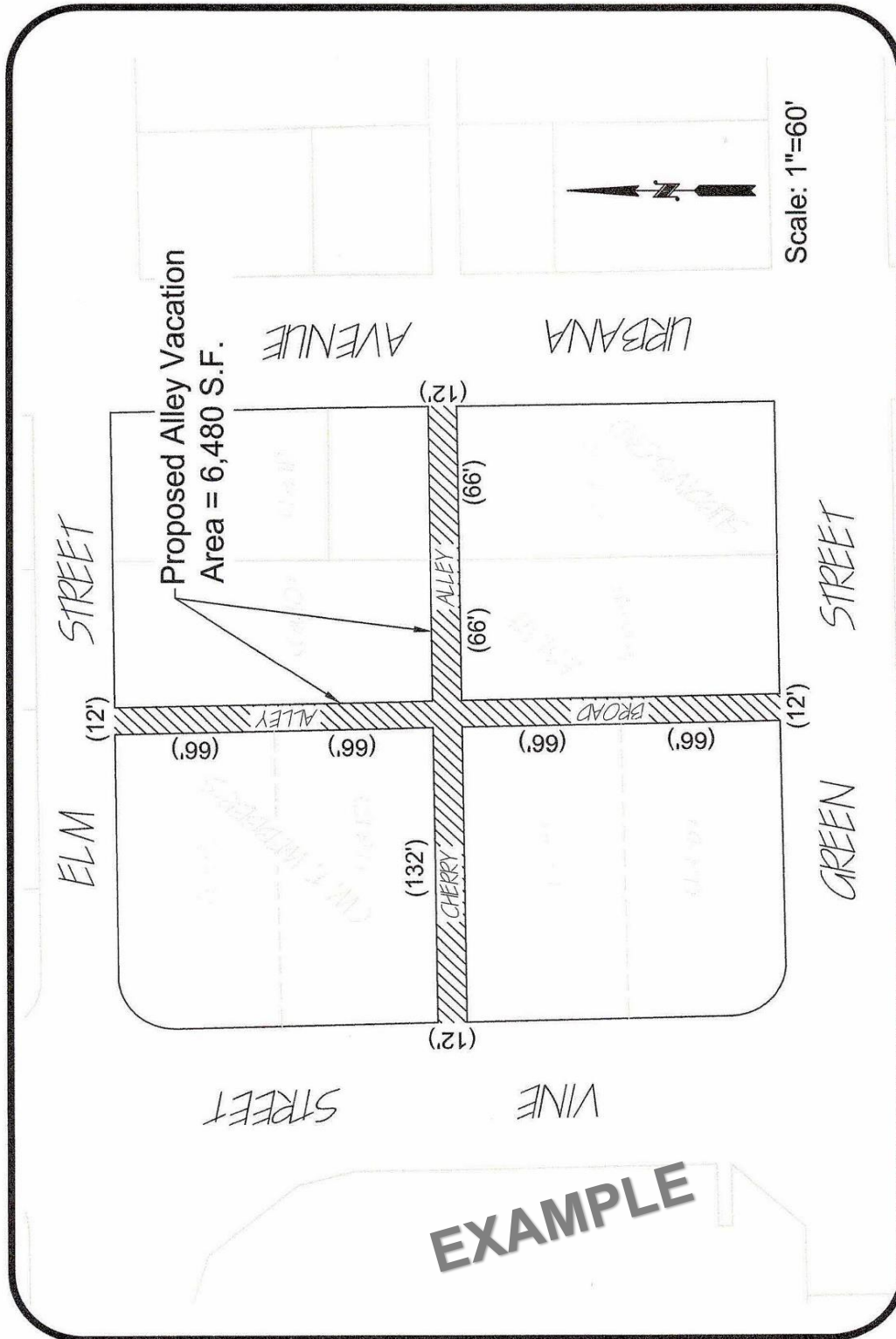
EXAMPLE


Charles A. Smyth, City Clerk

APPROVED BY THE MAYOR this 10th Day of March, 2020.


Diane Wolfe Marlin, Mayor

Standard Attachment 16.02B- Right-of-way Vacation Document



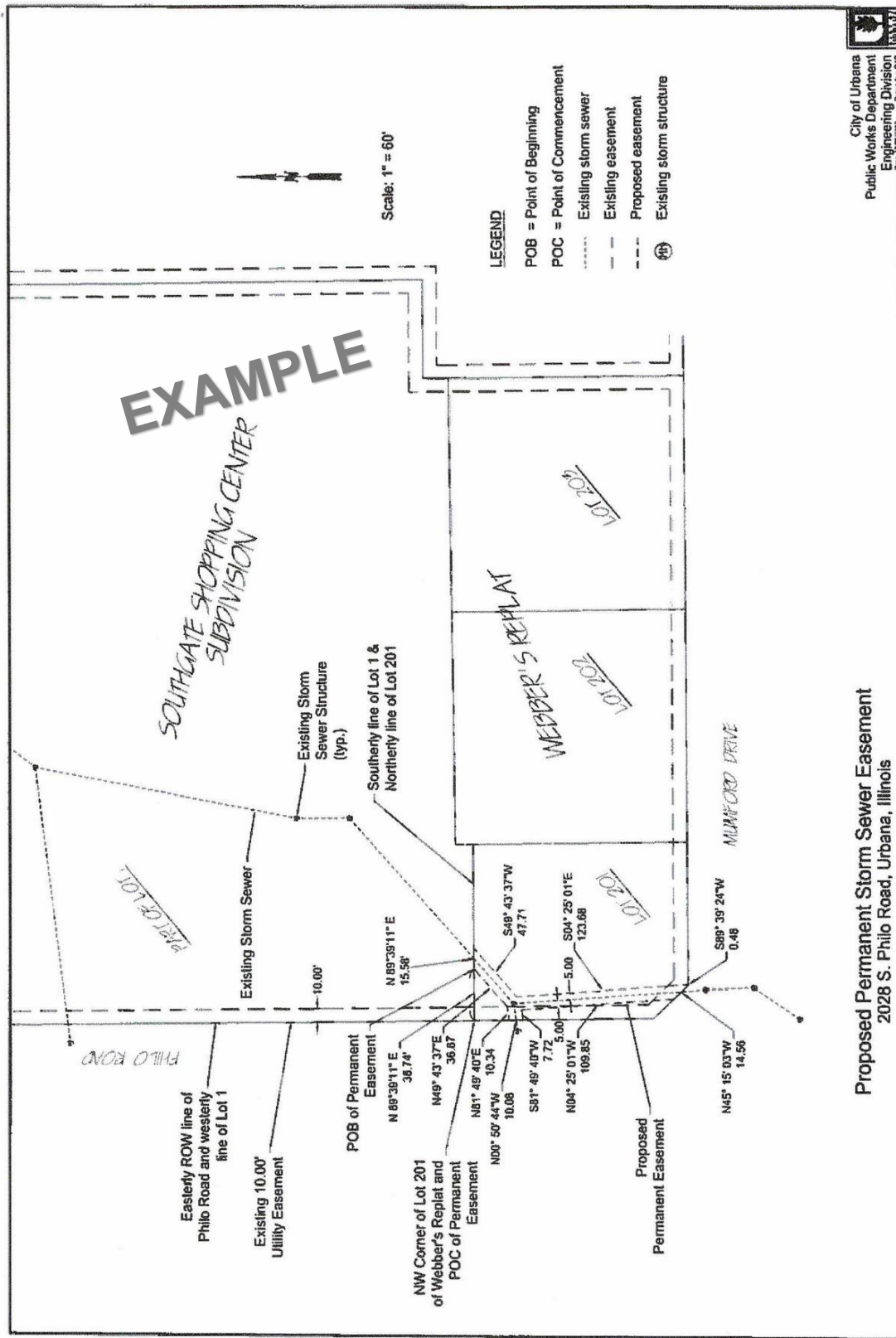
CITY OF URBANA

City of Urbana
Public Works Department
Engineering Division

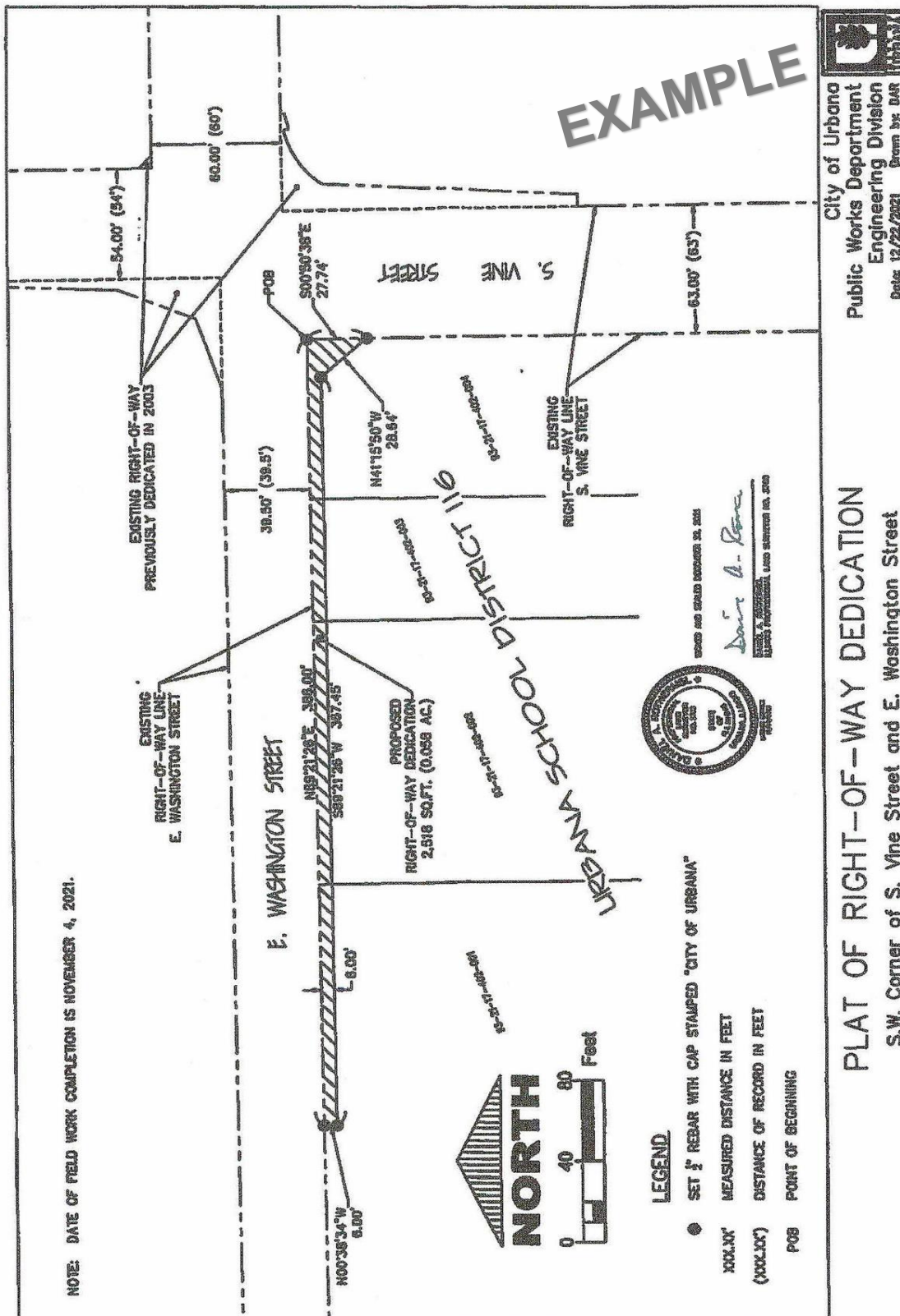
Drawn by: DAR
Checked by: BMB 03/19/2019
Date: 03/19/2019

PLAT MAP SHOWING PUBLIC RIGHT-OF-WAY VACATED
BY CITY OF URBANA ORDINANCE NO. 2020-03-011
DATE: MARCH 8, 2020

Standard Attachment 16.03A - Standard Plat of Easement



Standard Attachment 16.03B - Standard Plat of Right-of-Way



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enable two-sided document printing.*

CHAPTER 17: STORM SEWER STANDARDS

Issued June 28, 2023

17.00 Introduction

17.01 Administration

17.02 Standards

17.03 Standard Attachments

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enable two-sided document printing.*

17.00 INTRODUCTION

The purpose of this chapter is to provide guidance for the design and construction of storm sewer systems and sump pump discharge collection lines throughout the city and within the 1½-mile extraterritorial jurisdiction (ETJ).

17.01 ADMINISTRATION

All storm sewer projects in the City or within the ETJ shall be designed and constructed in compliance with these standards, shall comply with the City's Erosion and Sediment Control Ordinance, and shall require the Developer to submit a stormwater management plan along with the construction plans to the City Engineer for approval.

17.02 STANDARDS

A. Referenced Standards: Specific technical aspects of all storm sewers shall be designed in accordance with this Manual and the following design standards:

1. Primary Standards:

- a. IDOT BLRS Manual
- b. IDOT Construction Manual
- c. IDOT Drainage Manual
- d. IDOT Highway Standards
- e. IDOT Standard Specifications for Road and Bridge Construction

2. Secondary Standards:

- a. Standard Specifications for Water & Sewer Main Construction in Illinois (SSWSMC)

B. General Storm Sewer & Sump Pump Discharge Collection Line Design Standards: Storm sewer systems and/or sump pump discharge collection lines are required in all new developments. All lots shall be provided with an approved outlet by a direct connection available to either a storm sewer or a sump pump discharge collection line system. The outlet location shall be designed to accommodate the natural drainage of the lot served. Sump pump discharge collection line systems shall conform to the design standards found in this Chapter.

1. General Requirements:

- a. In non-paved areas, the minimum cover from the top of the pipe to the finished grade shall be two (2) feet.
- b. Curved alignments in storm sewers between manholes are discouraged. Curved alignments may be permitted in special cases according to the design criteria in Section 8-008.10 of the IDOT Drainage Manual.
- c. All easements shall conform to Section 21-410 of the Land Development Code and Chapter 16 of this Manual.
- d. Catch basins (as defined in Section 8-104 of the IDOT Drainage Manual) or other structures with sumps are not permitted for use on public storm sewer systems.

- e. For areas within the ROW of an arterial or collector street that require Trench Backfill according to Section 208 of the Standard Specifications, the final backfill shall be controlled low strength material (CLSM), according to Section 593 of the Standard Specifications.
- 2. **Design Storm:** The minimum design storm used in calculating run-off in the design formula will be the rainfall intensity associated with a recurrence interval of five (5) years for the storm period for post construction conditions calculated by the time of concentration as outlined by the latest technical letters or bulletins produced by the Illinois State Water Survey for rainfall frequencies in the City.
- 3. **Calculations:** Perform storm sewer sizing calculations in accordance with the IDOT Drainage Manual and Chapter 19.
- 4. **Access:** All lots shall be provided with access to a storm sewer, drain tile, or sump pump discharge collection system for connection by sump pumps, footing drains, or other similar means.
- 5. **Sump Pump Discharge Collection Line Systems:**
 - a. When designing a sump pump discharge collection line system, sump pumps shall be calculated at a rate of 0.05 cubic feet per second (22.5 gallons per minute) per house. Minimum pipe slope shall be 0.4%. Minimum diameter of public sump pump discharge collection lines shall be eight (8) inch diameter. Developer's engineer shall perform sump pump discharge collection line sizing calculations that shall indicate, for each pipe segment and the pumping rate(s) being evaluated, the full flow capacity of each sump pump discharge collection line and the percent of full flow depth that the pipe will flow for that scenario.
 - b. These public collection lines shall be located in the right-of-way or within a minimum 10-foot wide public utility easement.
 - c. Manholes or inlets shall be provided at all junctions of the secondary drainage pipe and at any changes in direction greater than 22.5 degrees. Material and design of the manholes shall be approved by the City Engineer. In lieu of manholes, cleanouts may be provided at the ends of all sump pump discharge collection lines plus where any change in direction occurs in said lines and at a spacing not to exceed one hundred fifty (150) feet.
 - d. A pump or sump pump may be required to discharge stormwater from a building to a storm sewer or sump pump discharge collection line system. In residential areas, roof drains shall not connect directly to any sump pump discharge collection lines, but rather discharge to the surface and drain overland to a collection area.
 - e. All connections to sump pump discharge collection lines shall be made using push-on joint PVC wye or tee fittings cut into the main line using rubber flexible couplings, Fernco 1056 Series or City Engineer-approved equal. Saddle clamp type tees are not permitted.
- 6. **General Design Requirements:**
 - a. The hydraulic grade line (HGL) for a five-year storm event shall be wholly within the pipe.
 - b. Inflow and outflow pipes shall be constructed with end sections or headwalls. Outflow pipes shall be designed with energy dissipation according to Section 6-200 of the IDOT Drainage Manual.

C. Casting/Frame and Grates:

1. **Heavy Duty Castings:** Storm inlet and manhole castings located in the ROW and in areas subject to vehicular traffic shall be of heavy-duty construction. The following applications are referenced by Neenah Foundation Catalogue, current edition. Similar casting provided by another manufacturer may be acceptable, but are subject to prior approval by the City Engineer.

Casting Location	Neenah Casting* Number	IDOT Type &Standard
Barrier Curb in Sag	R-3277-AC	Type 3, 604006
Barrier Curb on Grade	R-3277-AL	Type 3V, 604011
Driveway or Sidewalk Conflict	R-3508-A2	Type 10, 604046
Backyard or Area Drains	R-4340-B	Type 8, 604036
Ditch Grates	R-4342	N/A
Storm Manholes/Inlets	R-1713with R-2504-Type C Grate	Type 1, 604001

* Or a City Engineer-approved equivalent.

2. **Pavement Castings:** Castings located within a paved area shall be set in a full bed of mortar and sealed completely around the outside with concrete.
3. **Yard/Parkway Castings:** Castings located outside a paved area shall be set in a full bed of mastic and shall be constructed with an external chimney seal.
4. **Constructed Elevation:** Castings located in unpaved areas that are designed to accept stormwater flows shall be constructed with the top of the casting one (1) inch below the adjacent ground surface. All other castings located in unpaved areas that are not designed to accept stormwater flows shall be constructed with the top of the casting one inch above the adjacent ground surface. The frame and grate will be constructed to the plan elevation in accordance with Standard Specification for Road and Bridge Construction. A maximum of nine (9) inches of adjusting rings shall be allowed.
5. **Grate Stampings:** Casting on grates of storm sewer manholes and inlets shall be stamped with "NO DUMPING - DRAINS TO RIVER OR CREEK."

- D. **Major System Design:** A major system is a stormwater system that is designed to accommodate stormwater flows in excess of the five-year design frequency. This system may include swales, pavements, detention basins, overflows, large diameter pipes, channels and ditches within or adjacent to the development. See Chapters 19, 20, and 23 of this Manual for the design of the major system components.

E. Manholes:

1. Adjusting Rings: PRO-RING™ Expanded Polypropylene (EPP) manufactured by Cretex or City Engineer-approved equal.
2. Manholes shall be installed at the end of each storm sewer line, at all changes in grade or alignment, at all storm sewer and/or sump pump discharge collection line intersections, and at distances not to exceed four hundred (400) feet. Greater spacing may be permitted in storm sewers larger than forty-eight (48) inches diameter.

3. Minimum drop between influent and effluent pipes in a manhole, if there is no change in pipe diameter, shall be 0.1 feet and the desirable maximum drop shall be two feet.
4. When the influent and effluent pipes differ in diameter, no hydraulic losses should be allowed. In manholes where pipe sizes change, the hydraulic grade lines shall be matched by setting the larger effluent pipe invert at $0.8(d_{\text{eff}} - d_{\text{inf}})$ below the influent pipe invert. An example of calculating the drop across a manhole with a 24-inch outlet (effluent) and a 12-inch inlet (influent) is calculated by the following method:

Outlet pipe diameter (in feet) – inlet pipe diameter (in feet) = elevation difference in feet (2.0 feet - 1.0 foot = 1.0 foot). Then the elevation difference times 0.8 (1.0-foot x 0.8 = 0.8 feet).

The outlet pipe invert is lowered a minimum of 0.8 feet below the inlet pipe invert.

5. Plastic manhole steps shall be used according to IDOT's Standard Specifications and Highway Standards. Cast iron steps will not be allowed.

F. Inlets:

1. Adjusting Rings: PRO-RING™ Expanded Polypropylene (EPP) manufactured by Cretex or City Engineer-approved equal.
2. Sufficient inlets for local streets shall be provided at all low points and at a maximum spacing of 300 feet. Inlet capacity shall be designed in accordance with the IDOT Drainage Manual. The maximum encroachment of stormwater on local streets shall be to the crown of the pavement.
3. Inlet locations for collectors and arterial streets shall be designed in accordance with the IDOT Drainage Manual. The maximum encroachment of stormwater on collector and arterial streets shall be according to Section 38-2.09 of the IDOT BLRS Manual.
4. Because of the possibility in sag locations of debris clogging the grates/inlets on collector and arterial streets, as per the IDOT Drainage Manual, a clear opening or perimeter at least twice that required by the capacity equations shall be used.

G. End Sections and Headwalls:

1. End sections and headwalls shall be provided with protective grates when required for roadside safety, according to Chapter 35 of the IDOT BLRS Manual.

H. Testing and Observation:

1. City Acceptance of Sewers: Prior to City acceptance of a sewer line, the Developer's Engineer shall file a signed and sealed certificate with the City Engineer certifying that the required improvements were observed by said engineer during actual construction and that said improvements were constructed in substantial accordance with the approved Site Engineering Plans. Developer's Engineer shall also submit the following:
 - a. Record drawings of the sewer line.
 - b. Deflection testing for flexible pipe.
 - c. Television inspection reports and video.
 - d. Field notes and data that document during construction the elevations, lengths, and computed slopes of the storm sewers, drain tiles, their inverts and manhole rims as

recorded by the observer who was employed by Developer's Engineer to observe said work.

I. Storm Sewer Pump Stations:

(RESERVED)

17.03 STANDARD ATTACHMENTS

(RESERVED)

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enable two-sided document printing.*

CHAPTER 18: SANITARY SEWER SYSTEM STANDARDS

Issued June 28, 2023

18.00 Introduction and Goals

18.01 Administration

18.02 Standards

18.03 Standard Attachments

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enable two-sided document printing.*

18.00 INTRODUCTION AND GOALS

The purpose of this Chapter is to provide guidance and outline specific standards for the design, construction and rehabilitation of the City's sanitary sewer infrastructure.

18.01 ADMINISTRATION

A. General:

1. **Definition of Sanitary Sewer System Components:** Sanitary sewer infrastructure is comprised of some or all of the following components, which are further defined in the following paragraphs:
 - a. Sanitary sewer service laterals (also referred to in the Illinois Plumbing Code and in Section 24 of the City Code as “building sewers”) are generally small-diameter sewers, e.g., four-inch and six-inch diameter, that connect the individual building drain line to the public sanitary sewer system.
 - b. Collector sewers are the sewers constructed in a public street, alley or easement to receive the waste discharged from the individual building service laterals. These sewers may serve one or more blocks before they discharge into larger interceptor sewers. Collector sewers are generally eight-inch or ten-inch diameter.
 - c. Connection “wyes” are the typical connections between the service lateral and the collector sewer, depending on the configuration of the service lateral and collector sewer. Service laterals larger than six (6) inch diameter usually are connected to the collector sewer at a manhole. Service laterals that require flow monitoring or sampling will also be connected to collector sewers at manholes.
 - d. Break-in service lateral connections are an inferior and unacceptable type of connection between the sanitary service lateral and the public sanitary sewer main. These connections typically exist in older sections of the City but they can be encountered in new developments. They are unauthorized by the City and are created by a construction worker breaking a hole in the side of the collector sewer, extending the sanitary lateral pipe through the hole into the public sanitary sewer main, and then sealing the annular space between the hole and lateral with a grout or concrete product.
 - e. Interceptor sewers are the sewers that carry the waste discharged from one or more collector sewers to the ultimate point of disposal or treatment plant. Occasionally, service laterals discharge directly into interceptor sewers where conditions do not permit a collector sewer or a collector sewer would be redundant. Interceptor sewers are generally larger than 12-inch diameter.
 - f. Manholes and cleanouts shall be provided on sewers to provide access for maintenance. Normally a small-diameter pipe connected to the sewer pipe and brought to the surface of the ground is all that is necessary on service laterals. Manholes, underground structures built on the sewer and large enough for a person to enter, shall be constructed at pipe bends and periodically along the sewer line on collector and interceptor sewers.
 - g. Pumping stations shall be used to lift wastewater when there is not enough difference in elevation to flow by gravity, or when the inflow sewer is below the receiving sewer. The receiving sewer may be a gravity sewer or a force main.
 - h. Force mains are the system of pressurized piping used to connect a pumping station to the interceptor sewer. A force main can be short in length by just conveying the

wastewater from the pumping station to an adjacent interceptor; or, in some instances, the pipe can convey the wastewater a considerable distance under pressure before discharging it.

- ii. Chimney seals are durable elastomer materials that shall be provided to seal a manhole's frame that firmly and keep the manhole frame in place, while making it watertight. Chimney seals shall be installed on sanitary manholes for the purpose of keeping water from infiltrating into the manhole.

2. Sanitary Sewer System Ownership:

- a. City Sanitary Sewers: The City owns and maintains a system of sanitary collector sewers, manholes, and cleanouts for the collection and transport of wastewater generated by users within the City.
- b. UCSD Facilities: The UCSD owns and maintains the interceptor sewers even if they are located within the City limits. The UCSD also owns and maintains the collector sewers in the unincorporated areas surrounding and adjacent to the City. All sanitary sewage pumping station facilities and force mains within the City limits and ETJ are owned and maintained by the UCSD.
- c. Lateral Ownership: Ownership and maintenance of the sanitary sewer service lateral is defined in City Code Section 24-38.
- d. Private sewers: Private sewers and connections to the City collector sewer that have been constructed for the benefit of a single property are owned and maintained by the owner of that property. This also applies to cases where there may be agreements made among two or more property owners to install a private sewer to benefit a group of properties. Where sewers are installed on private property such as a mobile home park or apartment complex, ownership and maintenance responsibility, including the connection point, is the responsibility of the property owners unless there are subdivision covenants or written agreements and easements that clearly indicate otherwise.

B. Jurisdiction:

1. **City and UCSD Jurisdiction:** The City has regulatory jurisdiction over sanitary sewer infrastructure, including private components, within the City limits. Maintenance responsibility remains with the sewer owner. Both the City and UCSD review designs and inspect the construction of sanitary sewers outside the City and within its ETJ. These sewers are then maintained by the UCSD until the land the sewer is on is annexed into the City.
2. **Applicable Standards within Jurisdiction:** City standards, UCSD standards, and IEPA requirements apply to sanitary sewer design and construction within the City limits and ETJ. IDOT, local drainage districts, or railroads may have additional standards or requirements for sanitary sewer construction within their jurisdiction.

C. Permits:

Construction, rehabilitation, renovation and repair of sanitary sewers and services may require federal, state, and/or local permits. Where permits are required, they shall be fully executed prior to initiating work.

1. IEPA Construction/Operating Permits:

- a. Regulations: IEPA construction/operating permit requirements are covered within the following regulations:

Illinois Administrative Code, Title 35: Environmental Protection
Subtitle C: Water Pollution, Chapter I: Pollution Control Board
Part 309: Permits
Part 310: Pretreatment Programs

- b. Regulation Availability: These regulations are available from the IEPA at the address below or on the web through the IEPA web page <http://www.epa.state.il.us/>

Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276
Telephone: 217-782-0610

- c. Permits Not Required: In general, IEPA construction/operating permits are not required for sanitary service laterals for individual structures. However, IEPA has some exceptions for high-flow volumes (1,500 gallons/day or more) and high-strength or toxic wastewater. The IEPA regulations should be consulted for their specific requirements.

- d. Permits Required: IEPA construction/operating permits are required for the following construction activities:

- i. New collector and interceptor sewer construction
- ii. Modification or repair to existing sanitary sewage facilities involving a change in capacity or location.
- iii. New pumping stations or modification to existing pumping stations
- iv. A privately owned sewer or sanitary sewer service that discharges more than 1500 gallons per day. (Privately owned sewers serving mobile home parks may be governed by separate legislation.)
- v. Sewers serving industrial users

- e. General Permit Requirements: Permit forms, instructions, and related schedules can be obtained from the IEPA at the address listed above. In instances where new sewers or pumping stations discharge into City collector sewers or UCSD interceptor sewers, City and UCSD approval must be obtained on the permit form. It is the responsibility of the person obtaining the permit to verify with the City and UCSD that adequate hydraulic and treatment capacity is available for the additional flow. The City will grant approval of the permit only when the applicant's portion of the permit is fully completed, including the signature of an Illinois-registered professional engineer, and provision of satisfactory documentation of hydraulic capacity to the City Engineer.

- 2. NPDES Discharge Permits:** Except for subdivision development and very unusual circumstances, NPDES wastewater discharge permits should not be required for any sanitary sewer work under the jurisdiction of the City. However, coverage for a federal NPDES General Permit is required for the stormwater discharged from the Development's site, in accordance with USEPA General NPDES Permit ILR10. IEPA regulations should be consulted for their specific requirements.

- 3. City of Urbana Permit:** General Requirements: The City requires a permit for any sanitary sewer work within the City limits and its ETJ. A drawing will be requested where necessary to

clarify the proposed work. Permits and observation of sanitary sewers in new developments are handled through the development review/inspection process.

4. **UCSD Permits:** All construction work on sewers that will require a City permit will also require a UCSD permit. To obtain additional information and secure the appropriate forms contact:

Urbana & Champaign Sanitary District
1100 East University Avenue
Post Office Box 669
Urbana, IL 61803
Telephone: 217-367-3409
Or visit: www.u-csd.com

5. **Other Permits:**

- a. IDOT Permits are not required for sanitary sewer construction work unless excavation or other work is required in the State ROW. IDOT should be contacted in the design stage at the address below. An approved permit shall be obtained prior to starting work in the State ROW.

Illinois Department of Transportation
Division of Highways/Division 5
Route 133 West
Post Office Box 610
Paris, IL 61944-0610
Telephone: 217-465-4181

- b. Drainage district reviews and/or permits may be required for sanitary sewer construction within their easements or crossing their streams.
- c. Railroad permit requirements vary. When work is anticipated in a railroad ROW, the individual railroad should be contacted during the design stage and prior to starting any work.

18.02 STANDARDS

The most recent editions of the standards referenced herein shall govern new construction, rehabilitation, renovation and repair of sanitary sewers and appurtenances. The same standards shall also govern new construction and repair of sanitary sewer service laterals. In case of conflict between referenced standards and the criteria contained herein, the criteria in this Chapter shall govern.

A. Reference Standards:

1. Primary Standards:

- a. Illinois Administrative Code, Title 35: Environmental Protection, Subtitle C: Water Pollution, Chapter II: Environmental Protection Agency, Part 370: Illinois Recommended Standards for Sewage Works (IRSSW)
- b. Sanitary Sewer Standards (SSS) – Urbana & Champaign Sanitary District and Affiliated Communities (See Appendix I)
- c. Standard Specifications for Water & Sewer Main Construction in Illinois (SSWSMC)
- d. IDOT Construction Manual

- e. IDOT Drainage Manual
 - f. IDOT Highway Standards
 - g. IDOT Standard Specifications for Road and Bridge Construction
2. Secondary Standards:
- a. IDOT Construction Manual
 - b. IDOT Highway Standards
 - c. IDOT Standard Specifications for Road and Bridge Construction
- B. Design Criteria:** In general, detailed design shall meet the design criteria set forth in Subpart C of IRSSW and the following:
- 1. **Proposed Flow:** Proposed flow for domestic sewage discharge shall be determined in accordance with Subpart C of the IRSSW. Proposed flow for commercial and industrial sewage discharge shall be based on projected population equivalents for proposed facilities. Perform sanitary sewer sizing calculations that shall indicate, for each pipe segment the full flow capacity of each sanitary sewer and the percent of full flow depth that the pipe will be passing, for both peak hourly flow and daily average flow.
 - 2. **Future Expansion:** Collector sewers shall be large enough and deep enough to be extended to provide service to upstream tributary areas of the City upon build-out. Collector sewers shall end in a terminal manhole at the boundary of the development.
 - 3. **System Type:** All developments shall be provided with gravity-type sanitary sewers. Alternative sanitary sewer systems, such as on-site septic tanks equipped with septic tank effluent pumps and pressurized mains, on-site grinder pumps and low-pressure sewers, and vacuum sewers are prohibited, unless a Minor Variance for said system is granted by the City. Hybrid systems, consisting of a combination of gravity sewers and the aforementioned alternative systems are also prohibited, unless a Minor Variance for said system is granted by the City.
 - 4. **Sewer alignment** shall be in accordance with Subpart C, Section 370.120 of the IRSSW except that no curvilinear alignments shall be allowed.
 - 5. **Depth:** Sewers shall have minimum cover of forty-two (42) inches to the proposed finished grade. Service lateral extensions from the sewer shall be installed to the property line and should be between six and seven feet deep below the finished ground surface at the property line.
 - 6. **Minimum Slope:** Minimum slopes shall comply with the IRSSW except that terminal run sewers shall comply with Section 190.0 of the SSS.
 - 7. **Service Laterals:** Service laterals shall comply with SSS Section 120.00 and the following requirements
 - a. The fitting shall be located near the center of the lot unless the location of the service for the lot is known.
 - b. The service lateral for each lot shall be extended to the property line.

- c. The service shall terminate in a manufactured bell and infiltration-limiting plugs (gasketed) installed.
 - d. Break-in service lateral connections, as defined herein, are prohibited.
- 8. **Manholes:** Manholes shall comply with IRSSW Subpart C and SSS Section 110.00.
- 9. **Stream Crossings:** Where sanitary sewers must cross streams or drainage channels, design of the sewer shall meet the requirements of Subpart C of the IRSSW.
- 10. **Pumping Stations and Force Mains:** Pumping stations and force mains are not permitted without UCSD approval. When pumping stations and force mains are hydraulically necessary to provide sanitary sewer service to the site, the Developer shall be entirely responsible for the cost of said infrastructure.
- C. **Materials:** In general, materials shall meet the requirements of the SSS (see Appendix I), Subpart C of the IRSSW, the SSWSMC, and the following standards:
 - 1. **Sewers and Service Laterals:** Pipe materials for sanitary sewers shall meet the requirements of Section 100.00 of the SSS. Pipe materials for service laterals shall meet the requirements of Section 120.0 of the SSS.
 - 2. **Wyes:** “Wyes” for sewer service lateral connections shall meet the requirements of Section 141.0 of the SSS.
 - a. Lined Sewers: Where new service lateral connections must be made to sewer piping that has been lined, specially designed connectors shall meet the requirements of Section 142.0 of the SSS.
 - b. Existing Sewers: Where tapping existing sewers to install a new connector is permitted, the connector shall meet the requirements of Section 142.0 of the SSS. Where “wyes” must be cut into existing concrete sewer pipe, PVC “wyes” shall be used with adapter couplings.
 - 3. **Sewer Lining and Pipe Bursting Materials:** The material and method used for sewer relining and pipe bursting shall be in accordance with Sections 124.0 and 125.0 of the SSS.
 - 4. **Pipe Couplings:** Couplings shall meet the requirements of Section 143.0 of the SSS. Where pipes of dissimilar materials are to be joined, transition couplings specially designed to fit the different pipe materials and sizes shall be used. The use of concrete collars to couple sanitary sewer pipe is prohibited.
 - 5. **Manholes:** Sanitary manholes shall meet the requirements of the UCSD Sanitary Sewer Standards.
 - a. Manhole Joints: Only rubber “O”-ring joints shall be allowed.
 - b. Chimney Seals: External chimney seals shall be used on all new sanitary manholes. The use of internal chimney seals are prohibited. External chimney seal should be Cretex or City Engineer-approved equal.
 - c. Adjusting Rings: PRO-RING™ Expanded Polypropylene (EPP) manufactured by Cretex or City Engineer-approved equal.
 - d. Castings: Castings shall be Neenah R-1713 provided with Type B self-sealing, covers, or approved equal. The word “SANITARY” shall be cast in the lid.

- e. Plastic manhole steps shall be used according to the IDOT Standard Specifications and Highway Standards. Cast iron steps will not be allowed.

6. Bedding and Initial Backfill: Bedding materials shall meet the requirements of Section 20 of the SSWSMC, Sections 1003 and 1004 of IDOT, and Sections 130 and 150 of the SSS, except that for PVC pipe bedding only IDOT gradations CA-16, FA-5, FA-6, or FA-10 shall be used. When wet trench bottom conditions are encountered, IDOT-approved CA-7 shall be used for bedding, haunching, and initial backfill.

D. Construction: In general, the construction of new sewers and appurtenances and the rehabilitation and repair of existing sewers and appurtenances shall comply with the IRSSW, SSWSMC, and the SSS. All construction work shall also meet the requirements of other chapters of this Manual.

1. Sewers and Service Laterals: Sewers and service laterals shall be installed in accordance with Sections 20, 21, 22, 31, 34, and 35 of the SSWSMC and Sections 130.0, 140.0, and 150.0 of the SSS.

- a. **Bedding and Initial Backfill:** Granular bedding and haunching shall be required on all pipes, complying with Section 18.02-C-6 above. Pipe bedding, haunching and initial backfill shall extend to twelve (12) inches above the top of the pipe.
- b. **Cleanouts:** Cleanouts shall be required on sanitary sewer service laterals within five (5) feet of the outside of the building foundation and a maximum of one hundred (100) feet for four-inch diameter pipe and one hundred fifty (150) feet for six-inch diameter pipe, from a previous upstream cleanout or “wye.” Cleanouts should also be installed immediately upstream of a directional change in excess of forty-five 45 degrees, excluding “wyes.”
- c. **Minimum Cover:** The minimum cover for sanitary sewer service laterals shall be forty-two (42) inches from the finished ground surface to the top of the pipe.
- d. **Locate Service Laterals:** The location of the end of new service laterals shall be marked with a wood post (four inch x four inch) extending a minimum of one foot above the finished ground surface. This location shall be at the ROW line if the sewer is located in the ROW and at the easement line if the sewer is located in an easement. The sanitary sewer service lateral shall be located at a point no closer than five feet to any lot corner. Additionally, the outside of the sidewalk shall be marked with a permanent “S” when poured to mark the location of the lateral sewer services.
- e. **Service Lateral Risers:** Any service lateral “wye” which is ten (10) feet or deeper from the finished grade shall be equipped with a riser pipe to bring the service to within seven (7) feet of the finished grade.
- f. **Stream Crossings:** Where sanitary sewers must cross streams or drainage channels, construction shall meet the requirements of Subpart C of the IRSSW.

2. Manholes: Manholes shall be installed in accordance with Section 32 of the SSWSMC and Section 110.0 of the SSS and the following.

- a. **Rim Elevation:** The top of all manhole rims shall be set two (2) inches above the finished ground surface in unpaved areas and flush with the pavement in paved areas. Castings shall be set on top ring with sealant, according to grade adjustment ring manufacturer's instructions.

- b. **Manhole Fall:** Minimum fall through a sanitary manhole from inlet pipes to outlet pipe shall be 0.1 feet and the maximum shall be two (2) feet. Where the fall is in excess of two feet, an external drop-type manhole shall be required per SSWSMC.
 - c. **Manhole Benches:** Cast-in-place concrete benches shall slope down two (2) inches per foot from the manhole wall to the edge of the flow channel.
 - d. **Locate Manholes:** For manholes constructed on new sewers intended to serve future development, a wood leader (four inch x four inch) shall be installed adjacent to the manhole and brought to a point three feet above the finished ground surface.
3. **Lining and Sleeving:** Lining and sleeving sewers, as well as other specialized trenchless repair techniques, shall be completed in strict compliance with the individual process manufacturer's written specifications and instructions and shall be approved in advance by the City Engineer. Reinstatement of service taps where sewers are lined shall be done in strict compliance with the individual process manufacturer's written instructions.
4. **Pumping Stations and Force Mains:** Construction of pumping stations and force mains shall meet the requirements of UCSD and Subpart D of the IRSSW.
5. **Restoration Work:** Surface restoration work shall be completed in accordance with the other chapters of this Manual, the City ROW standards, Section 21 of the SSWSMC, Section 180.0 of the SSS and the following:
- a. Freshly-placed concrete shall be guarded until it sets and hardens sufficiently to prevent people from writing, walking, riding bicycles, or otherwise marking or defacing the concrete in a permanent fashion. The Developer shall be responsible for replacement of defaced slabs at its expense.
 - b. Seeding mixture when used shall be Class I, lawn mixture per IDOT and SSWSMC.

E. Testing and Observation:

1. **Sewers and Service Laterals:** Sanitary sewers and service laterals shall be tested in accordance with Sections 160.0 and 170.0 of the SSS and Section 31-1.11 of the SSWSMC. Deflection testing of PVC pipelines shall not be initiated until a minimum of thirty (30) days after the entire reach to be tested has been backfilled.
2. **Manholes:** All new manholes shall be leakage tested in accordance with Subpart C of the IRSSW (ASTMC 1244 Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (vacuum) Test or ASTMC 969 Standard Practice for Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines.) The leakage test shall include the joint between the casting and the manhole chimney.
3. **Repair Sections:** Repaired sections of sewer pipe shall be leakage tested as above in *Sewers and Service Laterals*. Where the City Engineer agrees that this leakage testing is not practical, or testing would require that sewer joints not completed as part of the work would be included in the test, the City may televise the line to visually check for infiltration and leakage. Televising shall be initiated only after the work is completed and the water level in the trench is at least two (2) feet above the crown of the pipe. Additionally, if televising results or the visual checks are inconclusive, the City may request that each joint in the repair section be air tested by the Developer of the sewer.

4. Televising:

- a. **New Sewers:** After all testing has been completed, all new sewer systems shall be inspected by the Developer, utilizing internal televising equipment and experienced personnel that have been approved by City Engineer and in accordance with Section 165.0 of the SSS. An observer working under the supervision of the Developer's engineer shall witness all sewer televising efforts. All televising shall be executed using pan-and-tilt cameras equipped with optical and digital zoom. The Developer shall correct any defects discovered via televising, as per Section 165.0 of the SSS. After such correction, said sewer section shall be re-televised at the Developer's expense. Provide digital files of all televising work as per Section 165.0 of the SSS in order to receive final acceptance of the sanitary sewers.
- b. **Lining Rehabilitation:** All sewers that are lined or have had other trenchless techniques repairs completed on them shall be televised before and after the work and an electronic files containing both the recorded video and video log shall be furnished to the City. Said files shall comply with Appendix I of this Manual of Practice.

5. City Acceptance of Sewers: Prior to the City's acceptance of a sewer line, the Developer's Engineer shall file a certificate with the City Engineer and the UCSD certifying that the construction and testing of the required public improvements were observed by or under the supervision of said Engineer during actual construction and testing and that said improvements were constructed in substantial accordance with the approved Site Engineering Plans. The Developer's Engineer shall also submit the following:

- a. Record Drawings of the sewer line.
- b. Manhole vacuum test results.
- b. Pipe infiltration/exfiltration test results.
- c. Mandrel test results.
- d. Field notes and data that document during construction the elevations, lengths, and computed slopes of the sanitary sewers, their inverts and manhole rims as recorded by the observer who was employed by Developer's Engineer to observe said work.

18.03 STANDARD ATTACHMENTS

(RESERVED)

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CHAPTER 19: HYDROLOGIC DESIGN STANDARDS

Issued June 28, 2023

- 19.00 Introduction and Goals
- 19.01 Administration
- 19.02 Standards
- 19.03 Stormwater Management Plan
- 19.04 Standard Attachments

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19.00 INTRODUCTION AND GOALS

The purpose of this Chapter is to provide information on methods commonly used in the City to develop runoff estimates for stormwater design such as the design of storm sewers, swales, ditches, culverts, bridges, and detention basins.

19.01 ADMINISTRATION

- A. This Chapter applies to hydrologic design for detention basins and other storm drainage facilities (storm sewers, swales, ditches, culverts, bridges) within the City limits and the 1½-mile extraterritorial jurisdiction (ETJ).
- B. Hydrologic design calculations will be reviewed by the City Engineer through one of the following processes:
 - 1. Subdivision plat review
 - 2. Site engineering plan review

19.02 STANDARDS

The following standards apply to hydrologic design:

- A. **Referenced Standards:** Design standards for hydrologic design shall comply with these regulations, the latest editions of the IDOT BLRS Manual, the IDOT Drainage Manual, and the Land Development Code, unless otherwise stated by this Manual.
- B. **Rainfall Data:** Rainfall duration and frequency distributions shall be taken from Illinois State Water Survey (ISWS) Bulletin 75 or most recent ISWS equivalent, unless the use of other local data is approved in writing by the City Engineer.
- C. **Rainfall Recurrence Interval:** The design rainfall recurrence interval shall be set by the design application according to Chapters 36 and 38 of the BLRS Manual, Table 1-305 of the IDOT Drainage Manual, and the following:

Detention	50-year
Emergency Overflow Routing	100-year
Underpasses	100-year
Storm Sewers	5-year

D. Design:

- 1. The Developer's Engineer shall choose an applicable hydrologic design method according to Figure 4-001 of the IDOT Drainage Manual. More-complex hydrologic design methods, such as TR-20 or HEC-1, may upon the City Engineer's approval, be substituted for less-complex methods when selecting appropriate design methods. Said engineer may also be permitted to utilize personal computer-based stormwater modeling software, such as HydroCAD, Civil 3D or equal for said analysis. Said engineer's proposed design method selection and any substitute methods are subject to prior approval by the City Engineer.
- 2. Hydrologic design calculations shall include contour map(s) clearly showing the design drainage area(s), stormwater facilities, storm sewers, swales, ditches, culverts, bridges and receiving stormwater facilities. Critical spot elevations, invert elevations, pervious and

impervious areas shall be clearly indicated. See the Land Development Code for other subdivision plat submittal requirements.

3. Submittals shall include design calculations, drainage basin areas and surface types, rainfall data used, critical storm duration and justification of duration selection.
4. See Chapter 23 for detention routing and design requirements.

19.03 STORMWATER MANAGEMENT PLAN

A. Stormwater Management Plan Requirements: Unless the City Engineer excludes specific items, the stormwater management plan shall include, but not be limited to, the following information:

1. A topographic map of the project site, a drainage basin limits map, drainage areas for the project site including any offsite areas that are to generate stormwater flows that are proposed to pass through the Development, and other pertinent data necessary to define flows entering the development from adjacent land. Maps shall be of suitable scale and contour interval, and include the extent of floodplains, calculated high-water elevations, and the shoreline of existing lakes, ponds, wetlands and detention basins as well as their inflow and outflow structures, if any. Maps shall also include the 50- and 100-year floodplain elevations for any streams for which detailed flood studies have been prepared by the Illinois Office of Water Resources or federal agencies. Floodway limits should also be shown as defined by available studies.
2. The locations and invert elevation of all existing sanitary and storm sewers in the developing area or in adjacent areas.
3. Detailed calculations of runoff anticipated for the developed site that indicate the anticipated design volumes and existing and proposed runoff rates for each portion of the watershed tributary to the storm drainage system, including any offsite watersheds. The Developer's Engineer shall submit the calculations used to determine said runoff volumes and rates as well as a restatement of the criteria used throughout the calculations. Calculations shall be provided for the 5-year storm, 50-year storm, and 100-year storm events.
4. A site plan of the proposed stormwater management system including the location and size of all drainage structures, storm sewers, channels and channel sections, detention basins, outlet lines, and analyses of the effect of said improvement on the receiving outlet pipe, the associated channel and high water elevations.
5. The slope, type, and size of all existing and proposed storm sewers and other waterways.
6. A plot or tabulation of storage volumes with corresponding water surface elevations and of the basin outflow rates for 5-year, 50-year and 100-year water surface elevations for all detention basins shall be provided. If development work is to be performed in phases, said tabulations should be performed independently for each phase.
7. Design hydrographs of inflow and corresponding outflow for both the 50-year and 100-year design runoff events for the site's projected final stage of development and the calculated 5-year, 50-year, and 100-year peak inflows from the development under existing conditions and under the projected final state of development for all detention basins.
8. A profile and one or more cross sections of all existing and proposed channels or other open drainage facilities, showing existing conditions and the proposed changes thereto. In addition, the Developer's Engineer will provide high-water elevations expected from stormwater runoff

under the controlled conditions called for by these regulations and the relationship of structures, streets, and other utilities to such channels.

9. An engineering cost estimate detailing and explaining all construction costs associated with the stormwater management plan.

- B. Release rate:** The controlled release rate of stormwater runoff from the Development shall not exceed the subject property's rate of runoff (and any tributary areas passing through the site) from a 5-year design storm event prior to the proposed development. The design rate at which stormwater runoff is delivered to a designated stormwater storage area shall be based on a 50-year storm event after full development. The storm sewers, storm inlets, and storm drains, however, shall be designed to deliver a runoff resulting from a 5-year design storm event. Storm sewer designs that propose to utilize pressure flow conditions during said design storm event are prohibited. The rate of runoff in excess of the 5-year design storm event shall be delivered by storm sewers under surcharge conditions followed by overland flow.

In the event the existing downstream channel or storm sewer system is inadequate to accommodate the required release rate, the allowable release rate shall be reduced to that rate permitted by the capacity of the downstream channel or storm sewer system without overflowing its banks or surcharging of sewers.

- C. Development design.** Streets, blocks, lots, parks, and other public grounds shall be located and designed to give a continuous surface relief path avoiding the flooding of buildings and structures, and to preserve and utilize existing and planned streams, channels, and detention basins. Whenever possible, streams and floodplains shall be located within parks and other public grounds.

19.04 STANDARD ATTACHMENTS

(Reserved)

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CHAPTER 20: CULVERT AND DITCH STANDARDS

Issued June 28, 2023

20.00 Introduction and Goals

20.01 Administration

20.02 Standards

20.03 Standard Attachments

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20.00 INTRODUCTION AND GOALS

The purpose of this Chapter is to provide information on the design and construction of culverts and ditches. This Chapter does not address the design of large culverts (greater than ten (10) feet in diameter) or bridges. Culverts larger than ten (10) feet in diameter and bridges shall be designed to IDOT standards by or under the supervision of a structural engineer registered in the State of Illinois.

Culverts and ditches serve as primary drainage facilities and may be used to route stormwater runoff on a limited number of streets without storm sewers when approved in advance by the City Engineer. Culvert/ditch systems shall not be used for stormwater routing in a residential development.

Swales (a shallow, wide, grassed ditch) serve as secondary drainage facilities and are typically used for emergency overflow routes when a storm's runoff exceeds the storm sewer capacity. Streets may also serve to a limited extent as part of a designed emergency runoff route. Swales may also be used for stormwater routing in subdivisions between houses and in backyards.

20.01 ADMINISTRATION

This Chapter applies to culverts and ditches within the City limits and the 1½-mile extraterritorial jurisdiction (ETJ).

20.02 STANDARDS

The following standards apply to culvert and ditches:

A. Referenced Standards: Design standards for culvert and ditch design shall comply with the provisions of the following, unless otherwise stated by this Manual:

1. Primary Standards:
 - a. IDOT BLRS Manual
 - b. IDOT Construction Manual
 - c. IDOT Drainage Manual
 - d. IDOT Highway Standards
 - e. IDOT Standard Specifications for Road and Bridge Construction
2. Secondary Standards:
 - a. (Reserved)

B. Design:

1. **General:**
 - a. Use Chapter 19 of this Manual – Hydrologic Design Standards – to determine design storm and hydrologic method of determining peak flows. Culvert sizing shall follow the methodology in IDOT Drainage Manual.
 - b. Ditches and swales shall be in the ROW or an easement. See Chapter 15 – General Utility Requirements, for location information.

2. Culverts:

- a. End sections or headwalls are required at both the upstream and downstream ends of a culvert.
- b. End sections and headwalls shall be provided with protective grates when required for roadside safety, according to Chapter 35 of the IDOT BLRS Manual.
- c. Culverts shall be designed with energy dissipation according to Section 6-200 of the IDOT Drainage Manual. Erosion protection, if indicated, shall consist of riprap, grouted riprap, turf reinforcement matt, or other method approved by the City Engineer.
- d. In non-paved areas, the minimum cover from the top of a pipe culvert to the finished grade shall be two (2) feet.

3. Ditches/Swales:

- a. Minimum ditch/swale running slopes shall be one percent (1%). Maximum ditch/swale slopes shall not exceed requirements for grassed ditches for the soil type present per IDOT Drainage Manual, unless an approved ditch lining is used for erosion protection.
- b. Ditch/swale cross-sections shall be trapezoidal with a minimum bottom width of two (2) feet.
- c. In ditches, a minimum of one-foot freeboard shall be maintained between the design storm hydraulic grade line and the top of ditch bank.
- d. Ditch/swale side slopes shall be mowable. Minimum side slope shall be 10H:1V and maximum side slope shall be 4H:1V unless otherwise approved in writing by the City Engineer. This side slope maximum shall also apply to the slope from the road surface to the culvert end section or headwall.
- e. Ditch/swale alignment shall minimize bank erosion by avoiding abrupt changes in direction (greater than 45-degrees). Tributaries shall be aligned to join the main ditch at an angle or 45-degrees or smaller.
- f. Maintenance access, minimum of fifteen (15) feet wide, shall be provided along all ditches and swales on at least one side.

C. Construction:

1. Culverts:

- a. For areas within the ROW of an arterial or collector street that require Trench Backfill according to Section 208 of the Standard Specifications, the final backfill shall be controlled low strength material (CLSM), according to Section 593 of the Standard Specifications.

2. Ditches/Swales:

- a. Erosion control shall be required in accordance with Chapter 22 of this Manual.
- b. Ditch/swale construction shall be in accordance with Standard Specifications for Road and Bridge Construction Section 202, Earth and Rock Excavation, and Chapter 21 of this Manual – Earthwork Standards.

D. Materials:

1. Culverts:

- a. The following material types are not permitted: Extra Strength Clay Pipe, Corrugated PE pipe with a smooth interior and corrugated polypropylene pipe with a smooth interior.

2. Ditches/Swales:

- a. Ditches/swales shall be grassed or otherwise lined.
- b. Ditches/swales shall be provided with a minimum topsoil thickness of six inches.

E. Testing: (Reserved)

20.03 STANDARD ATTACHMENTS

(Reserved)

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CHAPTER 21: EARTHWORK STANDARDS

Issued June 28, 2023

21.00 Introduction and Goals

21.01 Administration

21.02 Standards

21.03 Standard Attachments

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21.00 INTRODUCTION AND GOALS

The purpose of this chapter is to provide information on earthwork design and construction other than for road subgrades or sanitary sewer backfill, which are covered in Chapters 10 and 18 of this Manual, respectively. Earthwork design and construction shall conform also to the standards in Chapter 22 – Erosion Control & NPDES Requirements.

21.01 ADMINISTRATION

- A. This Chapter applies to earthwork design and construction within the City limits and the 1½-mile extraterritorial jurisdiction (ETJ).
- B. Earthwork design shall be reviewed by the City through either of the following processes:
 - 1. Subdivision plat review
 - 2. Site Engineering Plan review

21.02 STANDARDS

The following standards apply to earthwork:

- A. **Referenced Standards:** Standards for earthwork shall comply with the provisions of the IDOT Standard Specifications for Road and Bridge Construction, the IDOT Construction Manual, and the City's Stormwater Management Regulation, latest editions, unless otherwise stated by this Manual.
- B. **All Projects:**
 - 1. Coordinate project haul routes with the City Engineer.
 - 2. General grading slope limits are one percent minimum (1%), two percent (2%) preferred minimum, and 4H:1V maximum.
 - 3. Overall historical drainage patterns shall be maintained. Significant changes must be approved in writing by the City Engineer.
 - 4. All drainage facilities, field tiles, and sewer lines broken or damaged during construction shall be restored as nearly as possible to their original state by the Developer, except that all existing field tiles shall be connected to the storm sewer system where necessary for protection of improvements or prevention of upstream flood damage.
- C. **Underground Utilities:**
 - 1. Trenches shall be compacted in such a way that minimizes settlement and any settlement that does occur shall be repaired immediately.
 - 2. Topsoil minimum thickness shall be twelve (12) inches, compacted.
- D. **Stormwater Holding Basins:**
 - 1. Topsoil minimum thickness shall be twelve (12) inches, compacted.

E. Developments:

1. Topsoil minimum thickness shall be twelve (12) inches, compacted.
2. Each building pad elevation shall be a minimum of one (1) foot and not more than three (3) feet above the back of the curb as measured at the property lines. Each building pad elevation shall not exceed six (6) inches above or below the adjacent building pad elevation.
3. The grade or slope away from a building pad shall be ten percent (10%) for the first five feet. The grade may continue between a minimum of one percent (1%), two percent (2%) preferred minimum, and a maximum of ten percent 10% thereafter.
4. Topsoil, organic material, frozen material, and debris shall be removed from under proposed pavement or building locations in accordance with Standard Specifications for Road and Bridge Construction Section 202.

21.03 STANDARD ATTACHMENTS

(RESERVED)

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CHAPTER 22: EROSION CONTROL & NPDES REQUIREMENTS

Issued June 28, 2023

22.00 Introduction and Goals

22.01 Administration

22.02 Standards

22.03 Standard Attachments

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22.00 INTRODUCTION AND GOALS

The purposes of this Chapter are to limit the pollution of waterways by construction-caused sediment, to limit the siltation of storm sewers and stormwater holding basins during construction, to maintain safe, clean, and drivable streets, and to inform the public of National Pollutant Discharge Elimination System (NPDES) requirements.

22.01 ADMINISTRATION

A. General: Water-caused erosion and eroded soil sediments are considered a form of pollution by the federal Clean Water Act and the United States Environmental Protection Agency (USEPA). The current NPDES program of the Clean Water Act requires that construction sites disturbing one (1) acre and greater be covered by a NPDES permit. The IEPA has issued a statewide general permit (NPDES Permit No. ILR10) that details the NPDES requirements for construction projects that meet or exceed the threshold for permit applicability.

The City adopted an Erosion and Sediment Control Ordinance on December 3, 2007, requiring erosion control permits for any land disturbing activities over 2,000 square feet. An electronic PDF copy of Urbana's Erosion and Sediment Control Ordinance is available at https://www.urbanailinois.us/Erosion_Control.

B. Projects Required to Obtain an Erosion Control Permit:

1. New home construction
2. New commercial, industrial, or institutional construction
3. Home improvement projects that add over 1,000 square feet of building area
4. Demolition projects for buildings
5. Any land disturbance activity over 2,000 square feet in area

Land disturbance area is defined by the ordinance as: any land change that may result in soil erosion from wind, water and/or ice and the movement of sediments into or upon waters, lands, or ROW within the City, including but not limited to building demolition, clearing and grubbing, grading, excavating, transporting, and filling of land.

C. Projects Exempt from Erosion Control Permits:

1. Lawn maintenance activities that disturb less than 10,000 square feet
2. Underground utility repairs
3. Home gardens
4. Minor home repairs
5. Fence, sign, telephone, and electrical pole installation
6. Emergency work to protect life, limb or property
7. Agricultural or farming activities
8. Home improvement projects that add less than 1,000 square feet of building area

9. Any land disturbance activity less than 2,000 square feet in area

D. Types of Permits Required:

1. Class 1 Permit: for sites of one acre (43,560 square feet) or more of disturbed area
2. Class 2 Permit: for sites between 2,000 square feet and one acre (43,560 square feet) of disturbed area
3. Class 3 Permit: for utility company disturbances less than one acre (43,560 square feet) of area).

22.02 STANDARDS

The following standards apply to erosion control:

Referenced Standards: Design standards for erosion and sediment control shall comply with the City Erosion Control Manual of Practice. The Manual of Practice is available at http://urbanainlinois.us/Erosion_Control.

22.03 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 23: STORMWATER HOLDING BASIN STANDARDS

Issued June 28, 2023

23.00 Introduction and Goals

23.01 Administration

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23.03 Standard Attachments

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enable two-sided document printing.*

23.00 INTRODUCTION AND GOALS

- A. The purpose of this Chapter is to explain the City's policy regarding the ownership, design, construction, and maintenance responsibility for stormwater holding basins.
- B. Stormwater holding basins historically range in size from backyard holding basins provided by swales to large regional stormwater holding basins. Stormwater holding basins may be wet-bottomed or dry-bottomed basins. Residential backyard or side yard single-lot detention or retention is prohibited, except when low impact improvements (such as rain gardens, rain barrels, and permeable pavements) are proposed for said private tracts of land.

23.01 ADMINISTRATION

- A. This Chapter applies to stormwater holding basins within the City limits and the 1½-mile extraterritorial jurisdiction (ETJ).
- B. Stormwater holding basin construction is required for certain conditions by the Land Development Code.

23.02 STANDARDS

The following standards apply to stormwater holding basins:

- A. **Referenced Standards:** Design standards for stormwater holding basin design and construction shall comply with the provisions of the latest editions of the following, unless otherwise stated by this Manual.

- 1. Primary Standards:

- a. Clean Water Act (discharges regulated by the United States EPA through NPDES permits)
- b. IDOT BLRS Manual
- c. IDOT Construction Manual
- d. IDOT Drainage Manual
- e. IDOT Highway Standards
- f. IDOT Standard Specifications for Road and Bridge Construction
- g. Illinois Urban Manual

- 2. Secondary Standards:

- a. Standard Specifications for Water & Sewer Main Construction in Illinois (SSWSMC)

- B. **Ownership:**

- 1. Detention or retention basins are owned by the property owner (often a homeowners association or business), except as noted below.

C. Regionalization:

1. Regional stormwater holding basins owned and maintained by the City include the following: the Goodwin Avenue Retention Basins, the East Urbana Retention Basin (located east of Wal-Mart), and the Olympian Drive Retention Basin (located east of the intersection of Lincoln Avenue and Olympian Drive).
2. Developers may direct site stormwater runoff into a regional stormwater holding basin instead of an onsite stormwater holding basin, if the site is within a watershed that is tributary to a regional basin and if approved by the City Engineer. Developer shall coordinate with City staff and shall demonstrate how the regional basin is adequately sized to hold and manage the additional stormwater runoff, in order to receive approval from the City Engineer, for discharge into a regional basin.

D. Maintenance and Repair Responsibilities:

1. Stormwater holding basins and associated inflow and outflow systems (to the property line) are maintained by the property owner absent any specific legal agreement to the contrary.
2. Maintenance agreement. The Developer shall provide for permanent maintenance and operation of the stormwater holding basins, piping and appurtenances by executing the maintenance agreement which is a covenant running with the land and is binding on all subsequent owners and assignees. The City will draft the maintenance agreement.

E. Design: Increased stormwater runoff resulting from a proposed development may be stored in appropriate stormwater holding facilities including wet-bottom retention basins, dry-bottom detention basins, underground storage facilities, and parking lots. The following standards shall govern the design of stormwater holding basins:

1. *Sizing:* On redevelopment projects where stormwater runoff from the existing site is currently being managed and will continue being managed post-development per an existing stormwater management plan which was approved by the City of Urbana, new stormwater detention or retention is only required for the incremental increase in proposed impervious area over the existing impervious area. Aerial photography may be utilized to document the amount of impervious area on a site before redevelopment activities occur.
2. *Storage volume.* The volume of storage capacity provided in stormwater holding facilities shall be sufficient to control the excess stormwater runoff resulting from a post-development fifty-year storm event rainfall as published by the Illinois State Water Survey (ISWS) in Bulletin 75.
3. *Release rate.* At no time during the design storm shall the stormwater runoff release rate exceed the allowable pre-development five-year storm event release rate required in Chapter 19 of this Manual.
4. *Release velocity.* Stormwater holding facilities shall release stormwater at a non-erosive velocity. Protected channels receiving detention or retention basin discharges shall incorporate features to reduce velocity to non-erosive levels where such discharge enters an unprotected channel.
5. *Spillway.* An emergency spillway shall be provided to permit the safe passage of runoff generated from a 100-year storm event or greater, under developed conditions.
6. *Freeboard.* Wet-bottom and dry-bottom stormwater holding basins shall have adequate capacity to contain the storage volume of tributary stormwater runoff in a post-development

50-year storm event with at least one (1) foot of freeboard above the water surface at the design high water level.

7. Plans shall clearly indicate normal and high water elevations; design storage volume; and minimum, maximum, and typical slopes (on open basins), if applicable.
8. Stormwater holding facilities shall completely release the 50-year storm event storage volume within twenty-four (24) to forty-eight (48) hours, except that retention basins shall release the 50-year storm event from their temporary storage zones in a maximum time of seventy-two (72) hours.
9. Minimum outlet storm sewer size shall be 12-inches; smaller diameter restrictions, e.g., orifice plate or short pipe length, are acceptable.
10. Inlet and outlet pipes shall be provided with flared end sections and erosion protection.
11. "Bubble up" outlets, which position the invert of the outlet's discharge pipe below the area's final grade, causing a submerged outlet, are prohibited.
12. Pumped outlets and other active control structures are discouraged and must be approved on a case-by-case basis by the City Engineer.
13. Temporary erosion techniques shall be used as required by the Illinois Urban Manual, to ensure a full stand of cover vegetation within the timelines specified in the City's Erosion and Sediment Control Ordinance.

F. Location:

1. Drainage facilities for the purpose of the detention or retention of water shall not be constructed within a distance of ten (10) feet plus one-and-one-half times the depth of said drainage facility adjacent to the ROW of any public highway without the written permission of the highway authority having jurisdiction over the public highway.
2. Earthen berms shall not be constructed such that the toe of such berm will be nearer than ten feet to the ROW of any public highway without the written permission of the highway authority having jurisdiction over the public highway.
3. In all Major Developments, stormwater holding basins and their 50-year storm event design high water volume shall be contained within platted lots solely dedicated for drainage purposes.
4. Any lot containing a stormwater holding basin shall have a minimum of thirty (30) feet of frontage on a ROW for the purpose of providing unrestricted access for maintenance. Exceptions may be made for infill development as approved by the City Engineer.
5. A twenty (20) foot minimum setback is required from all property lines to the normal pool elevation of retention basins.
6. Buildings within one hundred (100) feet of a stormwater holding basin's 50-year storm event design high water volume shall have the lowest water entry point a minimum of two (2) feet above the 50-year storm event design water elevation.

G. Dry-Bottom Detention Basins:

1. Side slopes shall be a maximum of 4H:1V. If retaining walls are used, their height is limited to four (4) feet. Retaining wall design and material type shall be approved by the City Engineer.

2. Dry-bottom basins shall have one percent (1%) minimum bottom floor slopes or underdrain systems as approved by the City Engineer.
3. Dry-bottom basins shall include a low-flow channel with erosion protection.
4. When concentrated flows entering the basin are anticipated to have high loads of sediment and/or debris, the basin shall be provided with one or more sediment forebays that will capture and contain sediment, preventing it from spreading out into the overall basin.
5. Grass and other vegetation used to line the bottom and sides of the reservoir shall be able to sustain a minimum 30-hour period of inundation.
6. Whenever possible, the dry-bottom reservoir should be considered for other land uses during dry periods. Acceptable secondary land uses include: baseball fields, tennis courts, playgrounds, and parks or other recreation areas. When these secondary uses are being executed, permanent safety-related warning signage shall be provided at points of access around the perimeter of each basin, indicating that the water in the basin will rise during heavy rainfall.
7. To expedite drainage, French drain tile lines shall be included in any dry-bottom reservoir having multiple land uses. Each tile line shall have a cleanout and/or manhole at each end to allow for maintenance.

H. Wet Bottom Retention Basins:

1. Above water, side slopes shall be a maximum of 5H:1V. If retaining walls are used, their height is limited to four (4) feet. Retaining wall design and material type shall be approved by the City Engineer.
2. Below water slopes shall be a maximum of 4H:1V.
3. Wet-bottom basins shall have a natural or artificial means of aeration.
4. If fish or other aquatic wildlife is desired, a minimum depth of eight (8) feet shall be maintained over at least 25% of the pond's surface area.
5. An edge treatment to minimize erosion shall be required in all residential developments. Edge treatments can include riprap, permanent turf reinforcement mats, or other methods approved by the City Engineer.
6. An outlet structure shall be provided to allow dewatering of the pond for maintenance. Gravity dewatering is strongly preferred.
7. Wet-bottom basin design shall include an evaluation of soil permeability. A soil basin liner composed of compacted, impermeable clay shall be included in the design if needed to ensure water retention to normal pool elevation. Synthetic liners are prohibited.
8. Wet-bottom reservoirs shall be constructed with a permanent pool that is not considered a part of the storage capacity of the basin. Only the volume above the permanent pool of water may be included in the drainage calculations.
9. If fishing, boating, and other recreational activities are to be allowed, supplementary facilities for these activities should be designed and constructed in accordance with appropriate codes and ordinances.

10. Whenever possible, the wet-bottom reservoir should be designed and landscaped as a naturalistic water feature. A buffer strip of native plants around part or all of the reservoir is recommended to discourage resident geese. Native emergent aquatic vegetation shall be planted around the edge of the basin to inhibit the establishment of non-native invasive species.
 11. Fences surrounding wet bottom retention basins are prohibited.
 12. When concentrated flows entering the basin are anticipated to have high loads of sediment and/or debris, the basin shall be provided with one or more sediment forebays that will capture and contain sediment, preventing it from spreading out into the overall basin. The forebay(s) storage volume shall count toward the total permanent pool. The sediment forebays shall be designed to have a surface area equivalent to ten percent (10%) of the basin's permanent pool surface area or equivalent to one-tenths percent (0.1%) of the drainage area being served by the basin. Each sediment forebay shall be provided with a fixed vertical sediment depth marker, used to measure sediment deposition over time. The marker should be sturdy and placed deep enough into the bottom of the forebay so that ice movement does not affect its position. Sediment forebay bottoms shall be lined with grouted riprap, in order to better facilitate sediment removal.
 13. Retention basin side slopes above normal pool elevation shall be designed with permanent erosion protection consisting of grass, non-grass vegetation, or other permanent finish. Permanent erosion protection shall be aesthetically suitable to the development or existing surrounding land use.
 14. Open retention basins shall be provided with permanent safety-related warning signage at points of access around the perimeter of each basin, indicating that the basin is for "Stormwater Retention" and that swimming, wading and ice skating are prohibited in the basin.
- I. Special Detention Areas:** These areas, including paved parking lots, rooftops and plazas may be utilized, when so permitted by the City Engineer, for stormwater detention with the following restrictions:
1. Said facilities shall be designed in accordance with Best Management Practices established by an authority recognized by the City Engineer.
 2. There should be no more than seven (7) inches of water depth in remote areas of the parking lot or four inches in heavy traffic areas under design storm conditions.
 3. The special detention area may not violate appropriate provisions of other ordinances governing their design and operation.
 4. For rooftop storage, the roof structure must be able to support the additional load created by ponded water. Ponding depths should generally be less than 6 inches and stored water shall not cause any damage to any HVAC equipment on the roof. The areas utilized for storage must have adequate waterproofing. Emergency overflows shall be provided by openings in the parapet wall or by additional drains.
- J. Other Stormwater Holding Facilities:** Upon City Engineer approval, other types of stormwater holding facilities may be provided to satisfy a part or all of the stormwater holding requirements. Alternative facilities will be evaluated on a case-by-case basis and may include bio-retention, green roofs, blue roofs, rain gardens, permeable pavement, rainwater harvesting cisterns, and subsurface stormwater holding chambers, designed in accordance with the Illinois Urban Manual's Practice Standards.

K. Construction:

1. Earth excavation and embankment shall be in accordance with Standard Specifications for Water and Sewer Main Construction in Illinois Sections 202 and 205.
2. Erosion control shall be required in accordance with the City's Erosion and Sediment Control Ordinance. Successful erosion control is one of the critical components of stormwater holding facility construction. Erosion control issues of particular concern to the City include preventing the following:
 - a. tracking of dirt or mud from the site;
 - b. sedimentation of downstream ditches and sewers; and
 - c. wind borne dust from leaving the site.
3. Stormwater holding facilities in a particular basin shall be constructed in the early stages of development to minimize excess flow during construction, and to collect sediment, top soil and other construction related materials which could flow into the drainage system during development.
4. Upon the completion of the land development, the stormwater holding facilities shall be restored to the original cross section illustrated on the development plans that the City Engineer previously approved. The City Engineer shall approve the manner and disposition of any deposits removed from the facility. The Construction Performance Bond for the Development will not be released until the City Engineer has certified that the stormwater holding facility has been restored to its original design cross section.
5. If parking lots or other stormwater holding facilities are not available at the initiation of construction, the Developer shall provide alternatives to minimize flooding and degradation of water quality until the permanent stormwater holding facilities are constructed.

L. Materials: Stormwater holding facility materials shall comply with the Illinois Urban Manual Material Specifications.

M. Testing and Observation:

1. Erosion protection shall be observed by the Developer's Engineer throughout the project duration.
2. Stormwater holding basin storage volumes, sizes and dimensions shall be verified to the satisfaction of the City Engineer through topographic surveys, GPS-based surveying, or other means, completed by the Developer's Engineer.
3. Inflow, outflow and emergency overflow elevations shall be verified through elevational surveys completed by the Developer's Engineer.
4. Final vegetative cover shall be inspected by the Developer's Engineer, for completeness of cover.

23.03 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 24: RIGHT-OF-WAY TREE STANDARDS

Issued June 28, 2023

24.00 Introduction and Goals

24.01 Administration

24.02 Standards

24.03 Standard Attachments

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24.00 INTRODUCTION AND GOALS

The purpose of this Chapter is to promote the health and development of the urban forest in the City in a manner that increases the value of real property and improves the quality of life in the City.

24.01 ADMINISTRATION

- A. All new streets within the City limits and the 1½-mile extraterritorial jurisdiction shall have street trees furnished and installed in the ROW per the requirements of this Manual.
- B. To prevent conflicts with driveway location and construction access, all trees shall be planted after lot construction is complete, with the exception of trees planted in constructed medians that will not be affected by construction activities.
- C. Tree planting in rights-of-way shall be accomplished by the City and at the expense of the Developer, requiring a payment per tree as provided for in Urbana City Code Section 14-7 (Schedule of Fees) and its non-codified updating ordinances to contract for new Development planting. The Developer should contact the City Arborist to determine the current tree fee schedule. Tree planting will be accomplished through the following means:
 - 1. City furnishment and Installation: The Developer shall pay the City a per tree fee in accordance with Urbana City Code Section 14-7. Said fee shall be paid with the submission of the subdivision's Final Plat. Tree planting and planting schedule will be managed by the City.

24.02 STANDARDS

- A. **Introduction:** The following outlines the permit requirements, standards, and procedures for planting trees on the City ROW. For further information on tree planting, see the City's Arboricultural Specifications and Standards Manual, which can be obtained by contacting the City Arborist at 217-384-2342.
- B. **Standards and Procedures:**
 - 1. **New Development Planting Standards:**
 - a. Trees must be approved species (see Standard Attachment 24.02).
 - b. New street trees shall be planted on a spacing of not less than forty (40) feet nor more than seventy-five (75) feet of street frontage on each side of the ROW, as measured along each front lot line and located as follows:
 - i. in a parkway that is no less than 5 feet wide; and
 - ii. at least 10 feet from driveways, alleys and fire hydrants; and
 - iii. at least 15 feet from streetlights.
 - iv. Preserved existing trees may be included as part of meeting this requirement.
 - c. The planting site should be free of overhanging crown growth from trees growing off the ROW.
 - d. Trees planted under or next to aerial utility lines must be of species and cultivars whose height at maturity will not interfere with these lines. Large shade trees, those that have a mature height over fifty (50) feet, planted adjacent to overhead lines should be planted a minimum of thirty (30) feet from overhead lines.

- e. New street trees shall only be planted in locations that, in the City Engineer's opinion, avoid conflicts with existing and new underground and overhead public and private utilities, including private sanitary sewer service laterals and sump pump discharge lines.

2. Tree Planting Procedures for all Locations:

- a. The planting hole should be twenty-four (24) inches to thirty-six (36) inches larger in diameter than the diameter of the root ball, and the root balls shall be placed on undisturbed subgrade to prevent settling.
- b. The root flare, where roots spread at the tree base, should always be at the ground line. Often, nurseries mound soil around the tree base above the root flare. When wrapped with burlap, the basal flare is hidden. If the tree is planted with the top of the ball at ground line, the tree will have been planted too deeply.
- c. The twine holding the burlap around the ball must be cut and the burlap loosened from around the top of the ball. The wire basket, twine, nails, and burlap, shall be removed from the top twelve (12) inches of the root ball prior to backfilling. The burlap, twine, nails, and wire removed from the tree ball shall be properly disposed of and not left in the planting hole.
- d. The hole should be backfilled and gently tamped so that no air pockets are left around the ball. Backfill soil should not be amended unless planting in building rubble, poor or severely disturbed soils. Procedures for amending backfill soil shall be approved by the City Arborist.
- e. The trunks should be vertical after planting. Leaning trees shall be required to be carefully excavated and replanted to be straightened.
- f. Excess soil should be removed from the site and a two inch to three-inch layer of wood chip mulch placed around the base of the tree. Avoid placing wood chip mulch directly in contact with the trunk.
- g. Trees shall be watered within twenty-four (24) hours of planting and weekly thereafter for the first growing season.
- h. Staking is not typically recommended; however, when necessary, follow current recommendations of the City Arborist. Strap material rather than wire shall be used as guy trees. Wire and garden hose for guying is unacceptable.
- i. Plants should be pruned after planting only to remove broken or dead branches.

3. Quality of Trees:

- a. All trees shall conform to the "American Standard for Nursery Stock" as approved by the American National Standards Institute, Inc., and issued as the most current edition of ANSI Z60.1.
- b. All trees must be true to species, variety, and/or cultivar, and each plant must be labeled when delivered.
- c. All trees must have normal trunks, leaders, tops and branches typical of the species, variety, or cultivar, and exhibit evidence of proper nursery pruning practices.
- d. All trees must be certified free of insect pests and diseases by the Illinois Department of Agriculture, Division of Entomology.

- e. All trees must be free of mechanical injuries and not show evidence of recent or previous wounds on the trunk.
 - f. All trees must be nursery-grown and must have received proper fertilizing, watering, top and root pruning as is normally needed for that particular kind of tree. Plants must have been grown in nursery conditions for the past two (2) years under soil and climate conditions similar to that of the City.
 - g. Unless a tree is to be transplanted by mechanized tree spade, all tree roots shall be containerized, or ball and burlap. Nylon twine shall not be used for balling. Minimum ball size must conform to the most current edition of ANSI Z60.1. Root balls shall be intact at the time of planting. Bare root plantings are discouraged, but may be approved in special cases by the City Arborist.
 - h. Trees on the Approved Species List must have trunks at least two (2) inches in diameter measured six (6) inches above the ground, and a soil ball of at least twenty-four (24) inches in diameter.
 - i. Plant material shall be planted the day it is taken to the planting site, or it shall be watered and/or covered, and placed in a shady area to prevent drying out or freezing.
 - j. Trees shall be guaranteed by the Developer for a period of one (1) year from the date the City Arborist approves the planting.
4. **Approved Species:** Refer to the Approved Species List incorporated herein (see Standard Attachment 24.02).

24.03 STANDARD ATTACHMENTS

Standard Attachment Number 24.01 – Permit Form

Standard Attachment Number 24.02 – Approved Species Lists (Tables A1-A5)

CITY OF URBANA
PUBLIC WORKS/FORESTRY SECTION
706 S Glover Avenue, Urbana, Illinois 61802

TREE PLANTING AND MAINTENANCE PERMIT

Permit or approval to perform tree maintenance or planting of trees on City ROW.

APPLICANT ONLY - Please provide the following information:

Name: _____

Address: _____

Telephone Number: _____

Work Site Location: _____

Type of tree work/planting/treatment involved: _____

Proposed species to be planted: _____

For tree planting, please indicate approximate location using dimensions in relation to other lot features (e.g. driveway, existing trees, corner, etc.) A rough sketch to illustrate location is helpful. (Please use the space to the right.)

A J.U.L.I.E. locate is necessary before a permit for planting is granted.
J.U.L.I.E. can be reached at (800) 892-0123.

J.U.L.I.E. dig number: _____

Applicant Signature: _____ **Date:** _____

____ Approved ____ Not Approved **Permit No.** _____

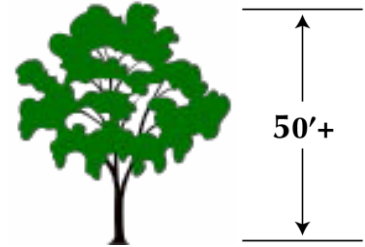
Additional comments or
conditions: _____

Approved by: _____ Date: _____
City Arborist

Standard Attachment 24.01

TABLE A-1 LARGE TREES

Spacing: 40' minimum
 Parkway Width: 8' minimum
 Larger trees are preferred on street parkways for better clearance adaptability. They require more living space.



SCIENTIFIC NAME	COMMON NAME	CULTIVARS
<i>Acer saccharum</i> ³	Sugar Maple	'Green Mountain' 'Fairview' 'Goldspire'
<i>Acer x freemanii</i> ^{2,3}	Freeman Maple	
<i>Acer nigrum</i>	Black Maple	
<i>Aesculus hippocastanum</i> ^{2,3}	Horse Chestnut	
<i>Aesculus x carnea</i>	Ruby Red Horse Chestnut	
<i>Carya illinoensis</i>	Pecan	
<i>Celtis occidentalis</i> ²	Hackberry	
<i>Celtis laevigata</i> ^{1,2}	Sugar Hackberry	
<i>Fagus grandifolia</i>	American Beech	
<i>Fagus sylvatica</i>	European Beech	
<i>Ginkgo biloba</i> ²	Ginkgo (male)	
<i>Gymnocladus dioica</i> ^{1,2}	Kentucky Coffee (male)	'Prairie Titan' or Espresso'
<i>Larix decidua</i>	European Larch	
<i>Magnolia acuminata</i>	Cucumber Tree	
<i>Quercus alba</i>	White Oak	
<i>Quercus bicolor</i> ¹	Swamp White Oak	'Regal Prince'
<i>Quercus imbricaria</i>	Shingle Oak	
<i>Quercus macrocarpa</i> ^{1,4}	Bur Oak	'Heritage'
<i>Quercus cerris</i> ²	Turkey Oak (very rare)	'Argenteovariegata' variegated
<i>Quercus coccinea</i>	Scarlet Oak	
<i>Quercus phellos</i>	Willow Oak	
<i>Quercus robur</i> ²	English Oak	Mildew resistant varieties
<i>Quercus rubra</i> ^{2,3}	Red Oak	
<i>Quercus shumardii</i>	Shumard Oak	
<i>Quercus stellata</i> ⁴	Post Oak	
<i>Quercus muehlenbergii</i> ^{1,2}	Chinkapin Oak	
<i>Sassafras albidum</i>	Sassafras	
<i>Taxodium distichum</i> ¹	Bald Cypress	
<i>Tilia americana</i>	Basswood	
<i>Tilia euchlora</i>	Crimean Linden	
<i>Tilia heterophylla</i>	Beetree Linden	
<i>Tilia platyphyllos</i>	Bigleaf Linden	
<i>Tilia tomentosa</i> ²	Silver Linden	
<i>Tilia petiolaris</i>	Pendent Silver Linden	
<i>Ulmus parvifolia</i> ²	Lacebark Elm	
<i>Ulmus x triumph</i> ²	Triumph Elm	
<i>Zelkova serrata</i>	Zelkova Tree	'Village Green'

Notes to Table A-1: 1. Native to Illinois 2. Tolerant to urban conditions 3. Limit use/Over planted genus 4. Tolerant to poor soil conditions

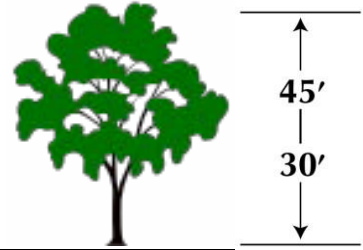
Standard Attachment 24.02

**TABLE A-2
MEDIUM TREES**

Spacing: 30' minimum

Parkway Width: 6' minimum

Medium trees are better suited for planting on crowded City parkways than their larger counterparts.



SCIENTIFIC NAME	COMMON NAME	CULTIVARS
Acer griseum	Paperbark Maple	
Acer miyabei ²	Miyabe Maple	
Acer rubrum ^{2,3}	Red Maple	'Autumn Flame'
		'October Glory'
		'Red Sunset'
		'Schlesinger'
		'Scarlet Sentinel'
		'September Song'
		'Armstrong'
		'Bowhall'
Acer truncatum x platanoides	Shantung Maple	'Pacific Sunset'
Carpinus betulus	European Hornbeam	
Cercidiphyllum japonicum	Katsuratree	
Corylus colurna	Turkish Filbert	
Eucommia ulmoides	Hardy Rubber Tree	
Ginkgo biloba (male only)	Ginkgo (narrow cultivars)	
Halesia carolina	Carolina Silverbell	'Princeton Sentry'
Ostrya virginiana ¹	Ironwood	
Koelreuteria paniculata ²	Goldenrain Tree	
Maclura pomifera	Osage Orange (male, thornless)	'Double O', 'White Shield'
Magnolia kobus	Kobus Magnolia	
Nyssa sylvatica	Black Gum	
Phellodendron amurense	Amur Cork Tree (male only)	'Macho'
		'His Majesity' 'Shademaster'
Ostrya virginiana ¹	Ironwood	
Quercus robur	English Oak (Columnar Cultivars)	Mildew resistant varieties
Sophora japonica	Pagodatree	

Notes to Table A-2: 1. Native to Illinois 2. Tolerant to urban conditions 3. Limit use/Over planted genus* Selected cultivars or varieties of suitable form and resistant to scab disease

Standard Attachment 24.02

TABLE A-3
SMALL TREES

Spacing: 20' minimum
Parkway Width: 5' minimum

Small trees are appropriate in parkway locations where larger trees cannot be properly utilized due to space limitations.



SCIENTIFIC NAME	COMMON NAME	CULTIVARS
<i>Acer campestre</i> ²	Hedge Maple	tree form
<i>Acer palmatum</i> ³	Japanese Maple	
<i>Acer pennsylvanicum</i>	Striped Maple	
<i>Acer tataricum</i> ^{2,3}	Tatarian Maple	
<i>Alnus rugosa</i> ²	Speckled Alder	
<i>Alnus serrulata</i> ²	Hazel Alder	
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	tree form
<i>Amelanchier x grandiflora</i>	Apple Serviceberry	tree form
<i>Amelanchier laevis</i>	Alleghany Serviceberry	tree form
<i>Asimina triloba</i> ³	Common Paw	tree form
<i>Carpinus betulus</i>	European Hornbeam (columnar forms)	
<i>Carpinus caroliniana</i> ¹	American Hornbeam	
<i>Chionanthus virginicus</i> ³	White Fringetree	tree form
<i>Cornus alternifolia</i> ³	Pagoda Dogwood	
<i>Cornus kousa</i> ³	Japanese Dogwood	
<i>Cornus mas</i> ^{2,3}	Cornelian Cherry Dogwood	
<i>Crataegus</i> sp. ²	Hawthorn (thornless varieties)	
<i>Cotinus obovatus</i>	American Smoke Tree	
<i>Maackia amurensis</i>	Amur Maackia	
<i>Magnolia x loebneri</i>	Loebner Magnolia	
<i>Magnolia virginiana</i> ³		Illinois cultivars
	Sweetbay Magnolia	
		'Mayer'
		'Moonglow'
		'Havener'
<i>Malus</i> spp.* ^{2,3}	Flowering Crab	Only approved cultivars
<i>Syringa reticulata</i> ^{2,3}	Japanese Tree Lilac	
<i>Syringa pekinensis</i> ³	Pekin Tree Lilac	
<i>Viburnum prunifolium</i> ¹	Blackhaw Viburnum	tree form

Notes to Table A-3: 1. Native to Illinois 2. Tolerant to urban conditions 3. Generally suitable for planting beneath power lines.

Standard Attachment 24.02


TABLE A - 4
TREES THAT ARE UNACCEPTABLE &
NOT PERMITTED ON CITY RIGHT OF WAYS



The following is a listing of trees common to our area that are unacceptable as street or parkway trees. Their lack of suitability is based on undesirable growth habits, fruiting habits, weak structure, susceptibility to serious diseases or pests, propensity for storm damage and other limitations. The limitations listed for each tree or species are the more serious problems encountered locally. There are many superior street or parkway trees listed in Tables A-1, A-2, and A-3.

SCIENTIFIC NAME	COMMON NAME	PROBLEM OR LIMITATION
Abies spp	Fir	Form – visibility hazard
Acer negundo	Boxelder	Fast growing, weak wooded
Acer platanoides	Norway Maple	Verticillium wilt
Acer saccharinum	Silver/Soft Maple	Subject to rot/storm damage
Ailanthus altissima	Tree of Heaven	Weak wooded, aggressive
Albizia spp	Mimosa	Not hardy, disease prone
Betula spp	Birches	Environmental stress, borers, ice storm damage
Carya spp	Hickory	Littering fruit
Catalpa spp	Catalpa	Littering fruit
Diospiros virginiana	Persimmon	Littering fruit
Elaeagnus angustifolia	Russian Olive	Form, disease
Fraxinus	Ash species	Disease and insect problems
Gleditsia spp	Honeylocust	Serious disease/insect problem
Ginkgo biloba (female)	Maiden Hair Tree	Malodorous fruit
Juglans spp	Walnut	Littering fruit
Juniperus spp	Juniper	Form – visibility hazard
Liquidamber styraciflua	Sweetgum	Littering fruit
Malus spp	Common Apple	Littering fruit
Morus spp	Mulberry	Littering fruit (female) Paulownia tomentosa
Pinus spp	Pine	Form – visibility hazard Platanus occidentalis
Prunus spp	Cherry and Plum	Littering fruit, disease
Pyrus calleryana	Bradford Pear	Poor branch structure, littering fruit, disease, invasive
Pyrus communis	Common Pear	Littering fruit
Quercus palustris	Pin Oak	Iron chlorosis
Robinia pseudoacacia	Black Locust	Shallow rooted, borers
Salix spp	Willow	Weak wooded, aggressive
Sorbus species	Mountain Ash	Short lived
Thuja spp	Arbor-vitae	Form – visibility hazard
Tsuga spp	Hemlock	Form – visibility hazard
Ulmus pumila	Siberian Elm	Weak wooded, disease

Standard Attachment 24.02

HEAT TOLERANT SUITABLE FOR ABOVE GROUND CONTAINERS RESTRICTED ROOT AREA COMPACTED SOIL POLLUTION TOLERANT										TABLE A-5 TREES FOR DIFFICULT AREAS										ALKALINE SOILS DRY SOILS WET SOILS SALT TOLERANT PH TOLERANT					
																									
COMMON NAME										SCIENTIFIC NAME															
			x	x						Amur M aple, <i>Acer ginnala</i>															
			x	x						Apple Serviceberry, <i>Amelanchier X gradiflora</i>															
										Cornelian Cherry Dogwood, <i>Cornus mas</i>															x
										Crabapple, <i>Malus*</i>											x				x
					x	x				Hawthorn (thornless varieties)											x	x			x
					x	x				Hazel Alder , <i>Alnus serrulata</i>												x			
				x	x					Hedge Maple, <i>Acer campestre</i>															x
				x						Japanese Tree Lilac, <i>Sy ringa reticulata</i>															
					x	x				Tag Alder, <i>Alnus incana var rugosa</i>												x			
										Tatarian Maple, <i>Acer tataricum</i>											x				x
										Amur Corktree, <i>Phellodendron amurense†</i>											x				x
					x	x				Black Alder, <i>Alnus glutinosa</i>											x	x			
x						x				Goldenrain Tree, <i>Koelreuteria paniculata</i>											x				x
x						x				Pacific Sunset M aple, <i>Acer x 'Warrenred'</i>											x				x
x						x				Pagodatree, <i>Sophora japonica</i>											x				
x										Sawtooth Oak, <i>Quercus acutissima</i>											x	x			x
										State Street Miyabei Maple, <i>Acer miyabei 'State Street'</i>										x					
										Turkish Filbert											x				x
				x						Limber Pine, <i>Pinus flexilis</i>											x				
										American Sentry Linden, <i>Tilia americana 'American Sentry'</i>											x				
					x					Bald Cypress, <i>Taxodium distichum</i>												x			
										Bur Oak , <i>Quercus macrocarpa</i>											x				x
										Chinkapin Oak, <i>Quercus muehlenbergii</i>											x	x			x
				x		x				English Oak , <i>Quercus robur</i>											x				x
										Freeman Maple, <i>Acer freemani</i>											x	x			
						x				Ginkgo, <i>Ginkgo biloba</i>														x	x
					x	x				Hackberry, <i>Celtis occidentalis</i>											x	x	x	x	
										Heritage Oak , <i>Quercus macrocarpa X Quercus robur</i>											x				x
										Horse Chestnut, <i>Aesculus hippocastanum</i>															x
x										Kentucky Coffee Tree, <i>Gymnocladus dioicus</i>											x			x	x
										Lacebark Elm, <i>Ulmus parvifolia</i>															x
					x	x				Red Oak, <i>Quercus rubra</i>														x	
				x		x				Regal Prince Oak, <i>Quercus robur 'Fasitgiata' x Quercus bicolor</i>											x				x
					x					Silver Linden, <i>Tilia tomentosa</i>															x
					x	x				Sugar Hackberry , <i>Celtis laevigata</i>											x	x	x		
					x					Swamp White Oak, <i>Quercus bicolor</i>											x			x	
										Triumph Elm, <i>Ulmus x japonica x Ulmus wilsoniana</i>											x				x

* only disease free/improved cultivars, 'Adirondack', 'Camelot', 'Donald Wyman', 'Luwick', 'Prairiefire', 'Professor Sprenger', 'Sinai Fire', 'Sugar Tyme', and 'Sargent'

† only male clone varieties allowed such as 'Macho', 'Shade master', and 'His Majesty'

Standard Attachment 24.02

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enable two-sided document printing.*

CHAPTER 25: RIGHT-OF-WAY DESIGN AND CONSTRUCTION STANDARDS

Issued June 28, 2023

25.00 Introduction and Administration

25.01 Standards

25.02 Standard Attachments

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enable two-sided document printing.*

25.00 INTRODUCTION AND ADMINISTRATION

- A. **Purpose:** The purpose of this Chapter is to establish standard design and construction specifications for work in the City right-of-way (ROW) in support of the regulations of Chapter 20 of the Urbana City Code for Public ROW and Other Public Places, including but not limited to driveway approaches, sidewalks, sanitary sewers, storm sewers, and other excavation work.
- B. **Scope:** This Chapter shall apply to all persons, contractors, utility companies, and units of government working within the City ROW, according to Chapter 20 of the Urbana City Code.

25.01 STANDARDS

- A. **Referenced Standards:** The design and construction of work in the City ROW that is regulated by Chapter 20 of the Urbana City Code shall be according to this Manual of Practice. Where a conflict exists between the Manual and Chapter 20 of the Urbana City Code, Chapter 20 of the Urbana City Code holds over the Manual of Practice.

25.02 STANDARD ATTACHMENTS

The Standard Details for Utility and ROW Permits are found at the City's website at:
https://www.urbanailinois.us/UROW_Permits

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enable two-sided document printing.*

CHAPTER 26: WATER DISTRIBUTION SYSTEM STANDARDS

Issued June 28, 2023

26.00 Introduction

26.01 Administration

26.02 Standards

26.03 Standard Attachments

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enable two-sided document printing.*

26.00 INTRODUCTION

The purpose of this Chapter is to provide guidance for the design and construction of water distribution systems throughout the City and within the 1½-mile extraterritorial jurisdiction (ETJ).

26.01 ADMINISTRATION

This Chapter applies to the water distribution system within the City limits and the 1½-mile ETJ.

26.02 STANDARDS

A. Referenced Standards: Specific technical aspects of the water distribution system shall be designed in accordance with this Manual and the latest editions of both the Standard Specifications for Water & Sewer Main Construction in Illinois 35 Illinois Administrative Code Subtitle F - Public Water Supplies, and the International Fire Code, as adopted by Article XIII of Chapter 5 of the City Code. All potable water system improvements shall also comply with Illinois American Water Company's "New Development Booklet", current edition.

B. Permit Requirements:

1. Permits Not Required: In general, IEPA construction/operating permits are not required for water services for individual structures. However, the IEPA regulations should be consulted for their specific requirements
2. Permits Required: In general, IEPA construction/operating permits are required for the following construction activities:
 - a. New water distribution system main construction
 - b. Modification or repair to existing water distribution system involving a change in type, capacity or location
3. Regulation Availability: These regulations are available from the IEPA at the address below or on the web through the IEPA web page <http://www.epa.state.il.us/>

Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276
Springfield, IL 62794-9276
217-782-0610

4. Because Illinois American Water Company owns the potable water distribution system in the City, its approval must be obtained on the permit forms.

Illinois American Water Company
1406 Cardinal Court
Urbana, IL 61801
Phone: 217-373-3271

C. General Water Distribution System Design Standards: All developments shall be designed so the proposed water distribution and supply system accomplishes the following:

1. Conforms to Illinois American Water Company's current overall planning goals for its service area that covers the City. Said goals can be obtained by contacting Illinois American Water Company, as listed above.

2. Extends water mains through the proposed development to serve otherwise unserved abutting properties.
3. Provides adequate capacity including maximum fire flows to serve all the lots proposed to be served by the main, plus any additional extensions to the main which might be made to develop the property in the same pressure zone with the type of uses and to the maximum density permitted by the existing Urbana Zoning Ordinance, with respect to the property within the corporate limits and the land use element of the Urbana Comprehensive Plan for proposals outside the corporate limits.
4. Permits private wells for potable water only in the following instances:
 - a. If outside the corporate limits; or
 - b. If in complete conformance with IEPA and Champaign-Urbana Public Health District standards; or
 - c. If a public water supply is not reasonably available.
5. Maintains separation from public or private sewer or septic systems.
6. Loops water mains so as to avoid dead-ends wherever feasible.
7. Requires abandonment of private water supply systems, including but not limited to wells, holding tanks, and piping, which are no longer in active use, in accordance with all State, County, and City regulations. The owner of the property shall provide documentation to the Public Works Department that the system has been properly abandoned.

D. Minimum Water Main Requirements

1. The minimum diameter water main in commercial or industrial developments shall be eight (8) inches.
2. The minimum diameter water main in residential developments shall be six (6) inches, unless otherwise stipulated by Illinois American Water Company.
1. Water mains shall be designed so that looped water mains do not reconnect to the same source main unless there is no alternative, whereupon the connections must be a minimum of 500 feet apart or have a valve located between the two connections.
2. Bedding and initial backfilling: Granular bedding, haunching and initial backfilling is required on all water mains and water service lines. Said pipes shall be bedded, haunched, and initially backfilled to not less than six (6) inches below the bottom of the pipe and twelve (12) inches above the top of the pipe, using IDOT-approved CA-7.
3. For areas within the ROW of an arterial or collector street that require Trench Backfill according to Section 208 of the Standard Specifications, the final backfill shall be controlled low strength material (CLSM), according to Section 593 of the Standard Specifications, and according to Illinois American Water Company standards and details.
4. Identifying tape shall be provided above all water mains, in accordance with Illinois American Water Company standards and details.

5. Tracer wire shall be provided at twelve (12) inches above the tops of all water mains, in accordance with Illinois American Water Company standards and details.

E. Fire Hydrants:

1. The Developer shall provide fire hydrants at each intersection of two or more streets or roadways and additional hydrants needed so that fire hydrants are spaced at the intervals specified in Appendix C of the International Fire Code, as adopted by Article XIII of Chapter 5 of the City Code. The means of measuring the access distance from street elements to the fire apparatus shall be as described in Appendix C of the International Fire Code. The City's Fire Chief or an authorized designee shall be provided with all proposed fire hydrant spacings and may at that person's discretion modify spacing requirements in those cases where buildings have sprinkler systems.
2. Hydrants at locations other than street intersections must be positioned adjacent to the side-yard lot line of two adjoining properties so as to achieve the nearest approximation of hydrant spacing interval required.
3. Hydrants shall not be located closer than ten (10) feet from any streetlight, tree, signpost, or other permanent structure that would impede access to the hydrant or reduce its visibility.
4. The face of the hydrant shall be installed no closer than two (2) feet from the back of the curb or edge of the pavement and within the existing ROW line.
5. Hydrants shall have a four-and-one-half-inch pumper outlet (steamer connection) that faces the street, plus two 2-1/2-inch hose nozzles.

F. Fire Flows: During the plan review process, if the Fire Chief or an authorized designee determines the fire flow to be insufficient, the Developer must furnish and install:

1. Water mains that will provide the "Needed Fire Flow" based on Insurance Services Office (ISO) Fire Suppression Rating Schedule requirements or the minimum required fire flows and durations for buildings, as specified in International Fire Code, as adopted by Article XIII of Chapter 5 of the City Code (whichever is more stringent); or
2. An automatic fire alarm system in compliance with the National Fire Protection Association's National Fire Alarm and Signaling Code (NFPA72); or
3. An automatic sprinkler system in compliance with the National Fire Protection Association's Standard for the Installation of Sprinkler Systems (NFPA13).

G. Protection of Water Mains and Water Service Lines: Water mains and water service lines shall be protected from sources of contamination, which include sanitary sewers, storm sewers, combined sewers, house sewer service connections and drains and the design shall be in accordance with 35 Illinois Administrative Code 653.119. Where water mains and water service lines cross or are proposed to be near said sources, the Site Engineering Plans shall graphically demonstrate compliance with the aforementioned IEPA regulations.

H. Right-of-Way and Easement Dedications: All water mains shall be installed in permanent utility easements or dedicated public ROW. Water services to individual lots, which are to be privately maintained, shall not be located in easements across other lots, except for short distances to reach the public water main located in an easement immediately adjacent to the lot being served, or to reach the public water main located in a front yard easement on the opposite side of, and adjacent to, the street ROW from the lot being served. Easements and ROW shall be of sufficient width, and the water mains shall be installed at locations so as to permit open cut installation, maintenance and repair within the confines of the easement or ROW without relocation or

unreasonable interference with other public utilities located therein, and so as to meet the following minimum standards:

1. A minimum width of fifteen (15) feet, plus five (5) feet for each additional utility; and
2. An additional ten (10) feet of width if a water main is to be installed parallel to a sanitary or storm sewer, so that the two utilities will have at least ten feet of clearance; and
3. Water mains shall not be located under street pavement unless approved by the City Engineer.

26.03 STANDARD ATTACHMENTS

(RESERVED)

CHAPTER 27: LOW IMPACT DEVELOPMENT

Reserved

RESERVED

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enable two-sided document printing.*

APPENDIX A: ELECTRONIC DRAFTING STANDARDS

Issued June 28, 2023

DIGITAL SUBMISSION REQUIREMENTS

Introduction

The governmental members of the Champaign County GIS Consortium – Champaign County; the Cities of Champaign and Urbana; and the Villages of Rantoul, Mahomet, and Savoy – require final subdivision plats to be submitted in digital format in addition to the existing hard copy submission requirements. The intent of this requirement is to enable the hard copy and digital submission to be produced from the same digital data. Some fundamentals of structure such as layer designation and layer name are required. However, there are no database linkage requirements.

Requiring digital submittals of final subdivision plats allows the Consortium's GIS to be as current as possible. A GIS enables multiple users to share computerized or digitized base maps, and link a variety of information to geographic features within the maps. For example, property value information can be linked to parcels, construction information can be linked to utilities, and floodplain information can be layered over districts or census tract information. A GIS also reduces the redundancy in map maintenance.

The submitted digital data may be used for computational purposes in reviewing the map, maintaining digital land bases, or used in a document retrieval system. A disclaimer of liability will be placed on all digital files and file copies. **The recorded hard copy will continue to be the official document.**

Related Documents: Exhibit A and Exhibit B

References: United States National CAD Standard 4.0

The layer names and layer name modifiers found respectively in Exhibit A and Exhibit B are based upon the Version 4.0 of the National CAD Standard.

Purpose

The purpose of this document is to outline the minimum content and format required of final subdivision plats submitted in digital format.

These specifications provide a standard for the transfer of digital media and format of data files for submission to the City. The goal of this requirement is to save the County, Cities, Villages, consultants, and land developers time and money through using and providing a set of easily transferable digital standards. Digital submission standards will allow for easier acquisition, referencing, and compilation of records that detail planned changes to the land structure. Following these standards will provide uniform data that will facilitate maintenance of land parcels and associated boundaries as well as contribute to improved data accuracy.

Timing and Applicability

The Developer shall submit digital plans when final plats are submitted.

Units and Coordinates

The base unit of digital submission of plats and plans shall be the U.S. Survey Foot. While the use of geometric ground coordinates is acceptable, the coordinates shall be Illinois State Plane East Zone (ISPEZ) coordinates derived from the ISPEZ coordinate location of a known survey control point. The datum used shall be the datum currently in use by the Champaign County GIS Consortium.

Printed Map Source

The submitted electronic files must be the source of hard copy submissions to meet established requirements.

Media

The media used to submit the digital files must be in accordance with the standards set forth in Chapter 1 of this Manual or approved by the City Engineer.

Data Format

The format for digital submittals shall be an Autodesk DWG file. The versions of acceptable DWG file formats are determined by the Champaign County GIS Consortium. Contact the City Engineer for a list of supported DWG file versions.

Digital submission in formats other than DWG may be accepted with prior notification to the City Engineer.

Standards

Data Feature/Layer Requirements:

- A. All submitted DWG files need to follow the Final Plat Layer Name Template guidelines as found in Exhibit A, ensuring the appropriate status field modifiers are used as found in Exhibit B. The Developer shall contact the City Engineer in the event an additional layer is required. All layer usage questions shall be directed to the City Engineer.
- B. All lines, polylines, arcs and points shall be snapped at common or shared features unless the features continue beyond the map extent and are not of critical importance to changes represented in the map.
- C. Annotation shall be identical to the annotation submitted on hard copy maps.
- D. Coordinates at monument locations shall be displayed on the map at a precision of two (2) decimal points.
- E. Distances shall be displayed on the map at a precision of two (2) decimal points.
- F. Each layer must contain only its elements (i.e., C-FENC layer shall only contain site fencing).
- G. All data must be contained in submitted DWG files. Unbound external references are not acceptable.
- H. Should layers overlap, the overlapping or duplicated information shall appear on all relevant layers. An example of this would be lot lines that are coincident with the subdivision boundary. The coincident data shall appear in both layers.
- I. A digital DWG template shall be provided by the City Engineer to the Developer. This template will contain all layers in accordance with Exhibits A and B. In addition, this template will contain block definitions with required attributes. The Developer shall use these defined blocks and required attributes when appropriate. All block usage questions shall be directed to the City Engineer.

Checking Digital Data Submissions

Digital data will be checked for the following criteria:

- A. Layer name compliance in accordance with Exhibits A and B
- B. Required block compliance
- C. Verification of dimensions and bearings
- D. Closure of geometry or features
- E. Verification that digital submission and hard copy maps are consistent
- F. Correct geographic/geodetic position, correct coordinate system
- G. Features properly snapped without any overlaps or gaps

If errors are found, the Developer shall be responsible for updating the subdivision plat to bring it into compliance with the current minimum development requirements within ten (10) working days from the date of notification to correct and resubmit digital files.

Adjustments to Digital Submission Standards

The City Engineer may waive or adjust requirements listed here if he or she determines that they are not strictly applicable or contrary to the long-term maintenance of the Champaign County GIS Consortium's GIS data.

Exhibit A: Final Plat Layer Name Template

Layer Name	Layer Description	Feature Type
A-WALL-INTR	Architectural Wall Interior	Polyline
A-WALL-INTR-DIMS	Building Interior Detail Dimensions - for use with Condominium Subdivision Plats	Dimension or Text
A-WALL-INTR-TEXT	Building Interior Detail Text (Floor, Room Numbers, Notes, etc.) - for use with Condominium Subdivision Plats	Text
C-BLDG-OTLN-*	Building Footprint - exterior wall of the building (* - must separate layer by status)	Closed Polyline
C-BLDG-OTLN-DIMS-*	Building Footprint Dimensions (* - must separate layer by status)	Dimension or Text
C-BLDG-TEXT-*	Building Annotation (* - must separate layer by status)	Text
C-ELEC	Electrical Lines and Appurtenances Points with Annotation	Polyline, Block and Text
C-FENC	Fence (<i>chain-link, chain, wood rail, barbed wire, etc.</i>)	Polyline
C-FENC-TEXT	Fence Annotation - name, type, notes, etc.	Text
C-NGAS	Gas Line & Appurtenances Points with Annotation	Polyline, Block and Text
C-PLAN	General Notes, Signature blocks, legend, title block, Borders	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-ADDR-TEXT-*	Address Annotation (* - must separate layer by status)	Text
C-PROP-DETL	Property Details with Annotation (<i>scaled views depicting detailed areas of property</i>)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-ESMT-MISC-*	Non-utility Easements (* - must separate layer by status)	Closed Polyline
C-PROP-ESMT-MISC-DIMS-*	Non-utility Easement Dimensions	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-ESMT-MISC-TEXT-*	Non-utility Easement Annotation (* - must separate layer by status)	Text
C-PROP-ESMT-UTIL-*	Utility Easements (* - must separate layer by status)	Closed Polyline
C-PROP-ESMT-UTIL-DIMS-*	Utility Easement Dimensions (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-ESMT-UTIL-TEXT-*	Utility Easement Text (* - must separate layer by status)	Text
C-PROP-FDPL	Flood Plain with Annotation	Polyline and Text
C-PROP-LOTS-*	Lot Line (* - must separate layer by status)	Closed Polyline
C-PROP-LOTS-DIMS-*	Lot Line Dimensions - dimensions, property bearing and distance annotation including curve data, chords and tangents (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-LOTS-IDEN-*	Lot Numbers (* - must separate layer by status)	Text
C-PROP-MONU	Property monumentation (includes all monuments found or set, witness corners)	Block
C-PROP-MONU-TEXT	Property Monument Text	Text
C-PROP-PRCL	Existing Parcel Line	Line
C-PROP-PRCL-DIMS	Existing Parcel Dimensions - dimensions, property bearing and distance annotation including curve data, chords and tangents (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-STBK-*	Setback Lines (* - must separate layer by status)	Line
C-PROP-STBK-DIMS-*	Setback Dimensions (* - must separate layer by status)	Text

Exhibit A: Final Plat Layer Name Template (cont.)

Layer Name	Layer Description	Feature Type
C-PROP-SUBD-*	Subdivision Boundary (* - must separate layer by status)	Proposed: Closed Polyline, Existing/Future: Polyline
C-PROP-SUBD-DIMS-*	Subdivision Dimensions - dimensions, property bearing and distance annotation including curve data, chords and tangents (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-PROP-SUBD-IDEN-*	Subdivision Names (* - must separate layer by status)	Text
C-RAIL-BRDG	Railroad Bridge Structure	Polygon
C-RAIL-CTLN	Railroad Centerline	Polyline
C-RAIL-CTLN-TEXT	Railroad Centerline Annotation - name, notes, dimension, etc.	Dimension or Text
C-RVR-*	Stream/River Centerline, Stream/River Edges and Lake Outline (* - must separate layer by status)	Polyline or Closed Polyline
C-RVR-ANNO-*	Streams, Rivers, & Lakes Annotation (* - must separate layer by status)	Dimension or Text
C-ROAD-BRDG-*	Road Bridge with Annotation (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-ROAD-CTLN-*	Public Street Centerline (Pavement Center) Segments - curves, straight segments, etc. (* - must separate layer by status)	Polyline
C-ROAD-CTLN-DIMS-*	Public Street Centerline - distances, bearings and curve data (* - must separate layer by status)	Dimension or Text
C-ROAD-CTLN-IDEN-*	Public Street Names (* - must separate layer by status)	Text
C-ROAD-CTLN-PRVT-*	Private Street Centerline (Pavement Center) Segments - curves, straight segments, etc. (* - must separate layer by status)	Polyline
C-ROAD-CTLN-PRVT-DIMS-*	Private Street Centerline - distances, bearings, curve data (* - must separate layer by status)	Text or Dimension
C-ROAD-CTLN-PRVT-IDEN-*	Private Street Names (* - must separate layer by status)	Text
C-ROAD-GRAL-*	Transportation Road Guardrails with Annotation (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-ROAD-RWAY-*	Right-of-Way (* - must separate layer by status)	Proposed: Closed Polyline, Existing/Future: Polyline
C-ROAD-RWAY-DIMS-*	Right-of-Way Dimensions - dimensions, property bearing and distance annotation including curve data, chords and tangents (* - must separate layer by status)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-ROAD-SIGN-*	Transportation Road Sign with Annotation (* - must separate layer by status)	Proposed: Block with Annotation, Existing/Future: Block

Final Plat Layer Name Template (cont.)

Layer Name	Layer Description	Feature Type
C-SITE-MISC	Other Identified Site Features - data that does not fit in an explicitly defined layer (<i>pedestrian tunnel, bike path, sidewalk, defined trail, etc.</i>)	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-SITE-MISC-TEXT	Other Identified Site Feature Annotation - text that is not in an explicitly named layer	Text
C-SITE-PARK-*	Park Area or Boundary (* - must separate layer by status)	Proposed: Closed Polyline, Existing/Future: Polyline
C-SITE-PARK-TEXT-*	Park Annotation (* - must separate layer by status)	Text
C-SSWR	Sanitary Sewer Lines and Appurtenances Points with Annotation	Polyline, Block and Text
C-STRM	Storm Sewer Lines and Appurtenances Points with Annotation	Polyline, Block and Text
C-STRM-DTCH	Storm Drainage Swales / Ditches	Polyline
C-STRM-DTCH-TEXT	Storm Drainage Swales / Ditches Annotation	Text
C-STRM-POND	Storm Drainage Detention (basins, retention basins)	Polygon
C-STRM-POND-TEXT	Storm Drainage Detention Annotation (basins, retention basins)	Text
C-STRM-UDRN	Storm Drainage Underdrain	Polyline
C-STRM-UDRN-TEXT	Storm Drainage Underdrain Annotation	Text
C-SURV-CTRL-BMFK	Survey Control - Benchmarks	Point
C-SURV-CTRL-BMFK-TEXT	Survey Control - Benchmarks	Text
C-SURV-CTRL-HCPT	Survey Control - Horizontal Points	Block
C-SURV-CTRL-HCPT-TEXT	Survey Control - Horizontal Points	Text
C-SURV-LINE	Survey Base Line	Polyline
C-SURV-LINE-TEXT	Survey Base Line Annotation	Text
C-SURV-PLSS-CFNR	Public Land Survey System Corners	Block
C-SURV-PLSS-CFNR-TEXT	Public Land Survey System Corners Annotation	Text
C-SURV-PLSS-LINE	Public Land Survey System Line	Line
C-SURV-PLSS-LINE-TEXT	Public Land Survey System Line Annotation	Text
C-TOPO-MAJR	Topography Major Contour	Polyline
C-TOPO-MAJR-TEXT	Topography Major Contour Annotation - Elevation Intervals & Depression Tics	Text and Line
C-TOPO-MINR	Topography Minor Contours	Polyline
C-TOPO-MINR-TEXT	Topography Minor Contour Annotation - Elevation Intervals & Depression Tics	Text and Line
C-TOPO-MISC	Miscellaneous Topography Features (breaklines, etc.) without an explicit layer name	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-TOPO-MISC-TEXT	Miscellaneous Topography Annotation Features - annotation not in an explicitly named layer	Block, Text, Polyline, Line, Dimension, Polygon, Point
C-TOPO-SPOT	Topography Spot Elevation	Block or Point
C-TOPO-SPOT-TEXT	Topography Spot Elevation Annotation - elevation, coordinates or name	Text
C-WATR	Water Supply Appurtenance Points with Annotation	Polyline, Block and Text
L-PLNT-TREE	Landscape Plant: Trees & Hedge Rows	Block
L-PLNT-TREE-TEXT	Landscape Plant: Trees & Hedge Rows Annotation (deciduous, coniferous, hedge rows, etc.)	Text

Contact the Subdivision Officer for questions related to proper layer use or inquiries regarding the need for additional layer names

Exhibit B: Status Field Modifiers

Status Code	Description
D	Existing to demolish
E	Existing to remain
F	Future work
N	New work

Explanation of Status Field Modifier Usage

Example: C-PROP-LOTS-*

Layer Name with required Status Modifier	Content Description
C-PROP-LOTS-E	Existing Lot Line
C-PROP-LOTS-F	Future Lot Line
C-PROP-LOTS-N	New (Proposed) Lot Line

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enable two-sided document printing.*

APPENDIX B: PLAT SUPPORTING DOCUMENTS

Issued June 28, 2023

STATE OF ILLINOIS)
) SS
COUNTY OF CHAMPAIGN)

OWNER'S CERTIFICATE

**DECLARATION AND DEDICATION OF _____ SUBDIVISION
CHAMPAIGN COUNTY, ILLINOIS**

The undersigned, _____, does hereby certify that they are the Owner(s) of legal and equitable title to the following described real estate situated in Champaign County, Illinois, to wit:

Legal Description:

[Insert Legal Description]

My/our ownership of this property is evidenced through documents filed with the Champaign County Recorder and/or the Champaign County Circuit Clerk. The said documents bear the following document and/or case numbers, give a description of my/our ownership, and were filed on the following date(s):

<u>Document/Case No.</u>	<u>Title of Document</u>	<u>Date Filed/Recorded</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

and does hereby certify that such land is included in the accompanying plat, and having caused the survey and subdivision to be made thereof by _____, Illinois Professional Surveyor No. _____, as shown on said plat, said subdivision to be known as _____ Subdivision in Champaign County, Illinois, and acknowledges said survey to be correct to the best of their knowledge and belief, and they hereby:

(i) dedicate to the public all rights of way, roads, streets, cul-de-sac areas and bike paths shown on said Plat, to the public use forever, and

(ii) all utility easements as shown by dashed lines and marked utility easement on said Plat are hereby reserved for the use of all public utility companies to install, lay, construct, operate, maintain, renew and/or remove underground water mains, sewer pipes, gas pipelines, electric and telephone cables or conduits with all necessary above ground transformer and service pedestal installations, with the further right to install and maintain overhead electric and telephone pole and wire-line installations with all necessary braces, guy wires, anchors and other appliances for the purpose of serving the subdivision and adjoining properties with water, sewer, gas, electric and telephone service, including the right to use the streets where necessary, together with the right to enter upon the lots at all times to install, operate and maintain said utility facilities.

No permanent buildings shall be placed on said easements, but said easements may be used for gardens, shrubs, landscaping and other purposes that do not interfere with the use of said easements for public utility purposes. The repair and maintenance of all such rights of way, roads, streets, cul-de-sac areas and bike paths shall be the obligation of _____ and the repair and maintenance of all such utility easements shall be the obligation of each such public utility company.

Dated at Urbana, Illinois, this _____ day of _____, 20____ .

Owner's Name

Owner's Name

STATE OF ILLINOIS)
) SS
COUNTY OF CHAMPAIGN)

I, _____, Notary Public in the aforesaid County and State, do hereby certify that each of the persons who signed this petition personally appeared before me and acknowledged that they signed the said instrument as their free and voluntary act for the uses and purposes set forth therein.

Subscribed and sworn to before me this _____ day of _____, 20____ .

Notary Public

(seal)

Prepared By:

[Insert Information]

SAMPLE SCHOOL DISTRICT STATEMENT

[SUBDIVISION NAME]

CHAMPAIGN COUNTY, ILLINOIS

The undersigned, representing [ENTER OWNER'S NAME] as Owner, and pursuant to 765 ILCS 205/1 hereby states that, to the best of his or her knowledge, the school district in which the above described subdivision lies is [ENTER SCHOOL DISTRICT NAME] School District # [ENTER SCHOOL DISTRICT #].

_____[OWNER'S SIGNATURE]
Owner Signature

Subscribed and sworn to before me this

_____ day of _____, 20____, A.D.

Notary Public

NOTARY SEAL

SAMPLE TAX CERTIFICATE FORM

STATE OF ILLINOIS)
) SS
COUNTY OF CHAMPAIGN)

COUNTY CLERK AND RECORDER'S CERTIFICATE

[ENTER SUBDIVISION NAME]

I, **[ENTER CLERK'S NAME]**, County Clerk and Recorder in and for the County of Champaign, State of Illinois, and keeper of the records and files of said office, do hereby certify that I find no delinquent general taxes, unpaid current general taxes, delinquent special assessments, or unpaid current special assessments, against the tract of land described below:

Legal Description:

[ENTER LEGAL DESCRIPTION]

Permanent Index No.:

[ENTER PIN(S) HERE]

Given under my hand and seal of said county, at Urbana, Illinois this _____ day of _____, 20____.

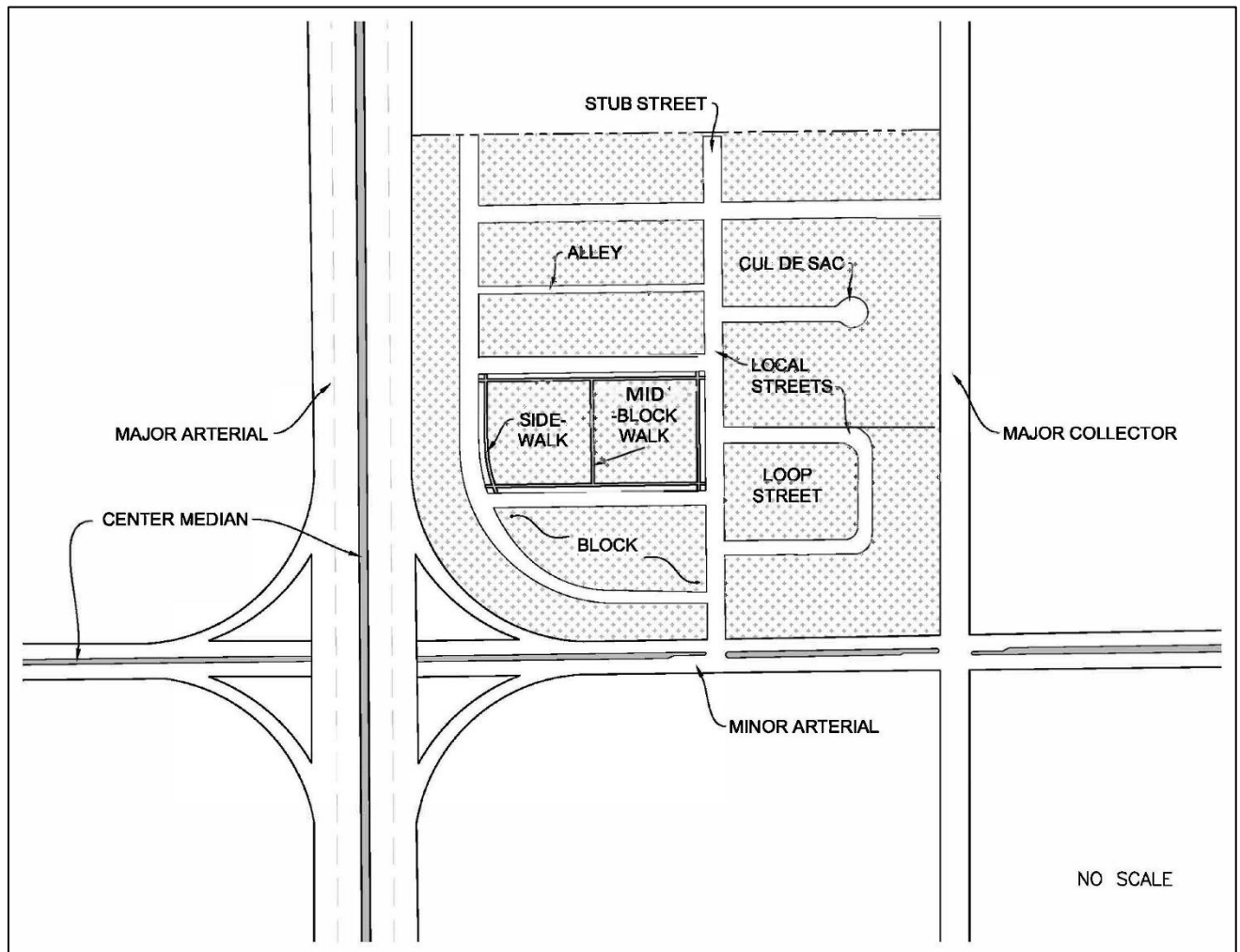
_____ **[CLERK'S SIGNATURE]**

County Clerk and Recorder of Champaign County, Illinois

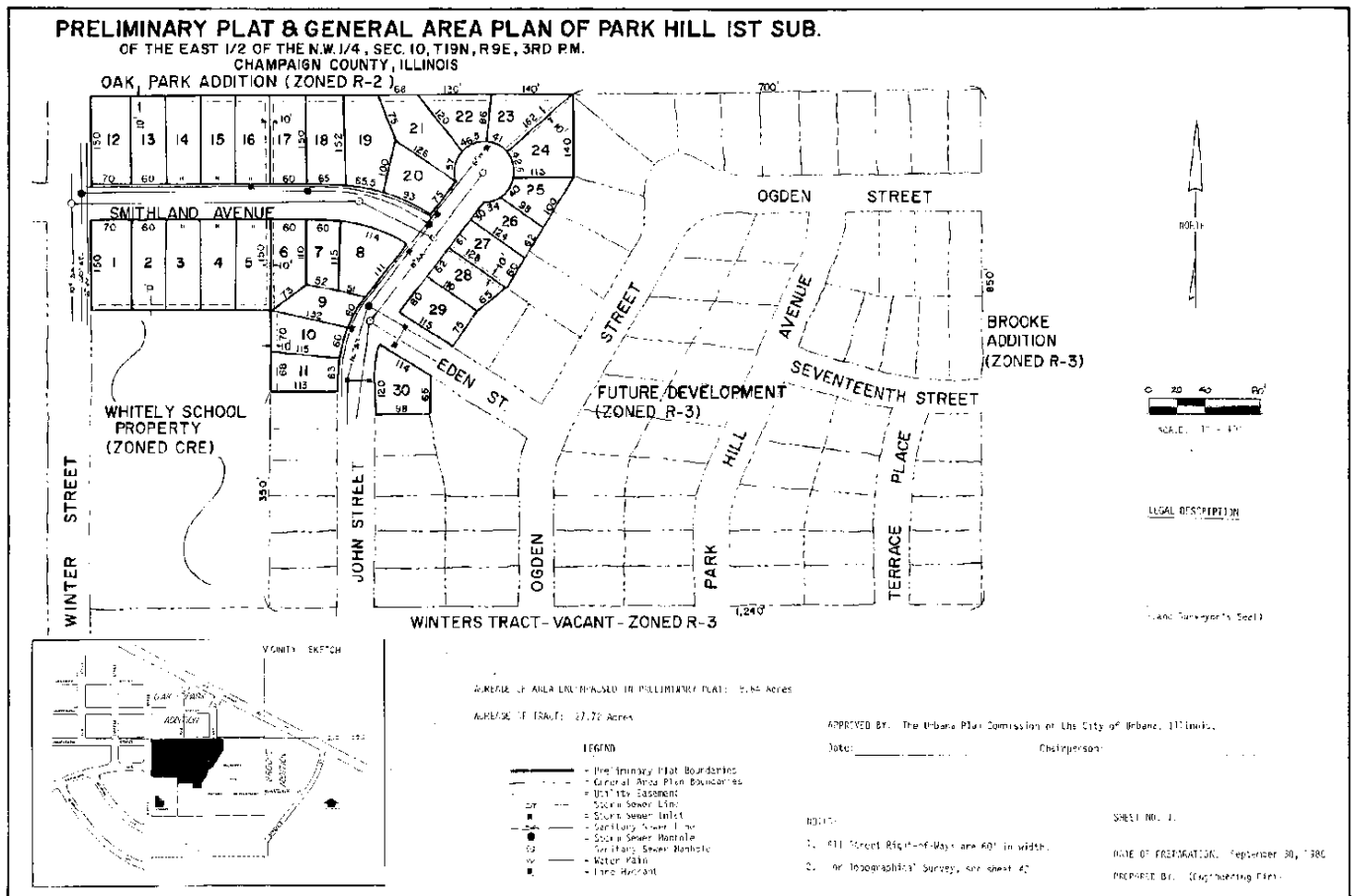
APPENDIX C: DEVELOPMENT PLAN AND PLAT ILLUSTRATIONS

Issued June 28, 2023

ILLUSTRATION #1: STREET DESIGN ELEMENTS



**ILLUSTRATION #3A: EXAMPLE OF A PRELIMINARY PLAT OF A
MAJOR DEVELOPMENT AND GENERAL PLAN -
NOT REQUIRING ANY VARIANCES OR VARIANCE REQUESTS OF REGULATIONS**



**ILLUSTRATION #3B: EXAMPLE OF A CONTOUR MAP TO ACCOMPANY A
PRELIMINARY PLAT OF A MAJOR DEVELOPMENT**

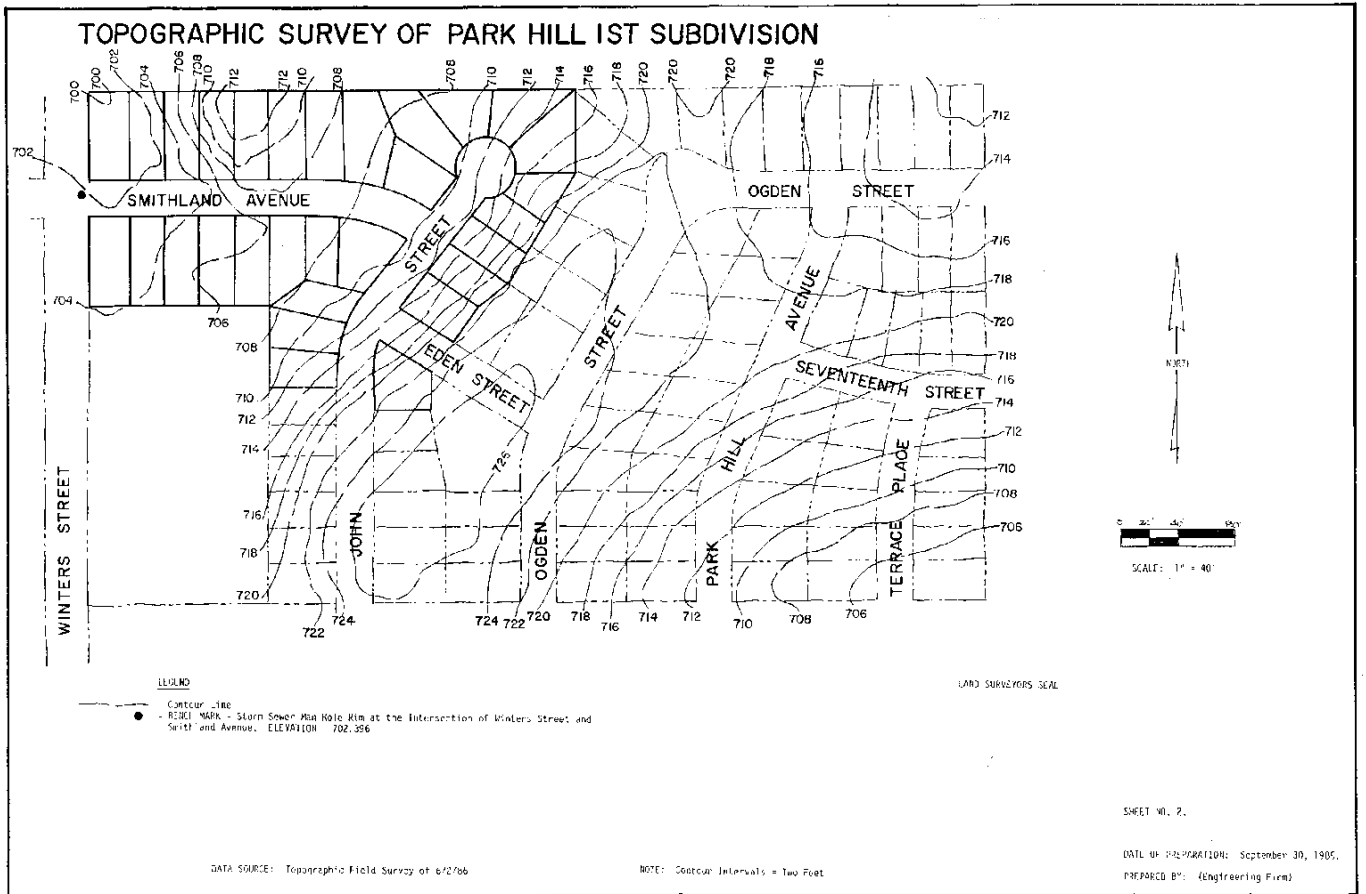


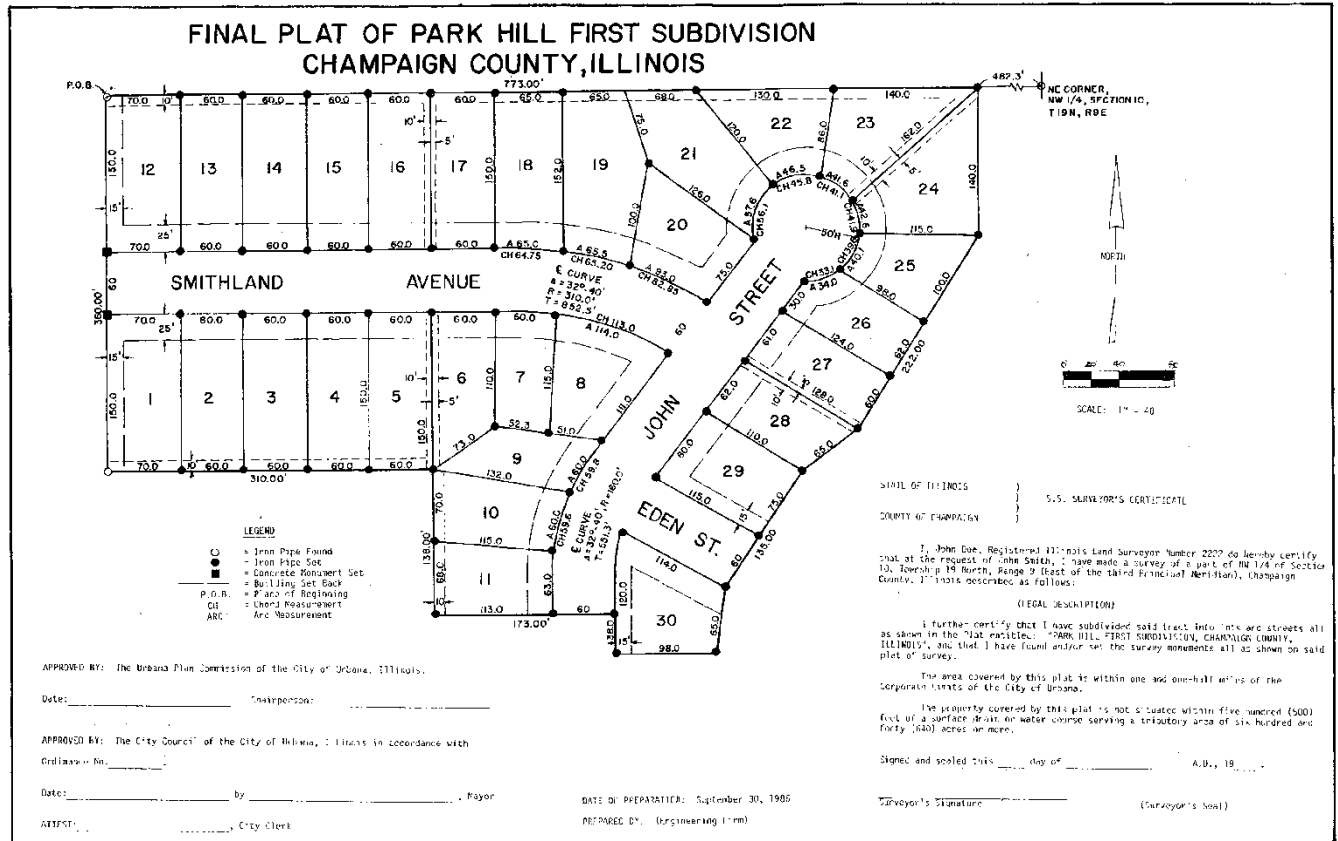
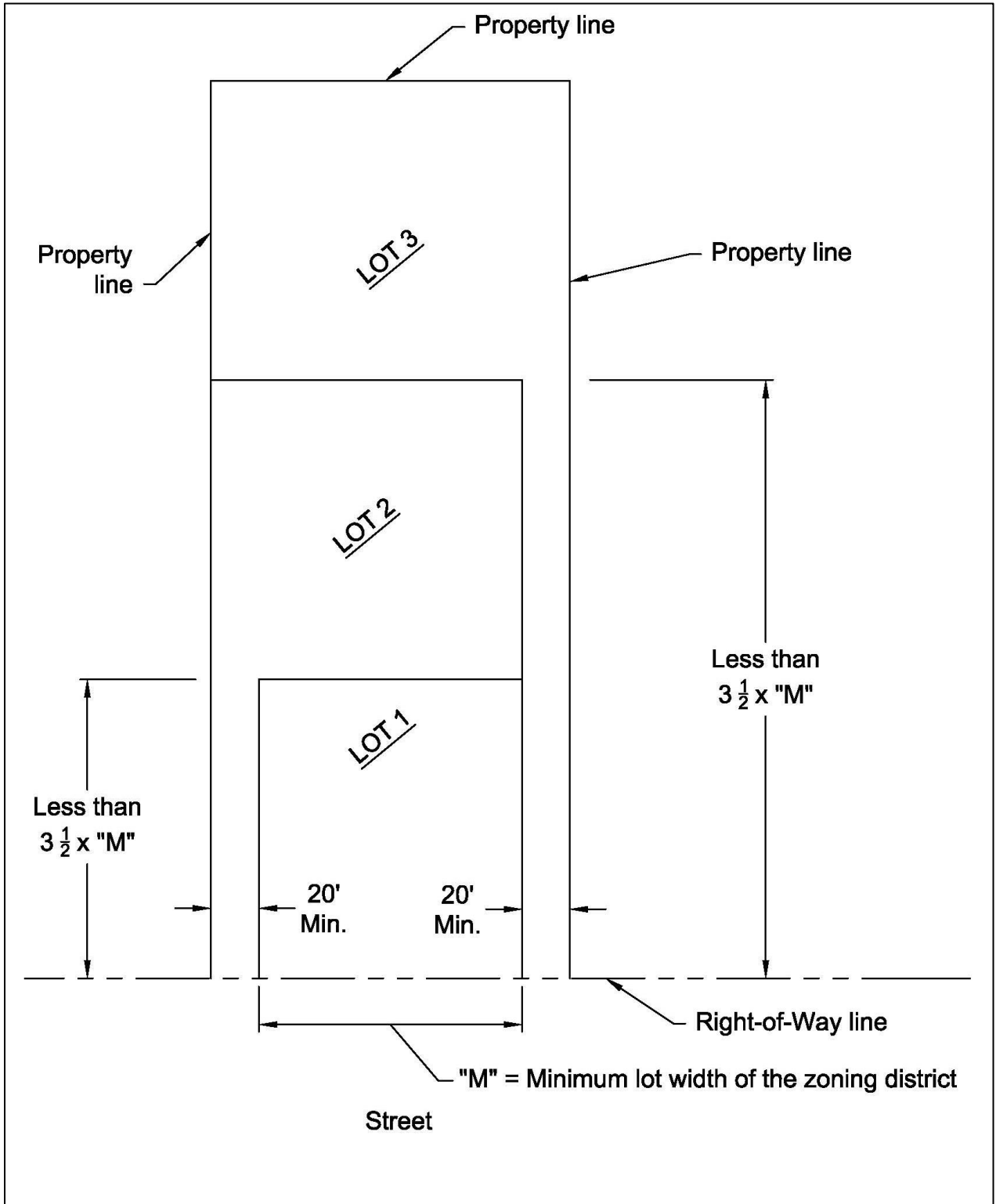
ILLUSTRATION #4: EXAMPLE OF A FINAL PLAT OF MAJOR DEVELOPMENT

ILLUSTRATION #5: EXAMPLE OF FLAG LOT DIMENSIONS



APPENDIX D: DEVELOPMENT PROCESS FLOW CHART AND FORMS

Issued June 28, 2023

A flow chart is included below to illustrate the development process that is outlined in the Land Development Code.

Multiple forms have been created to guide developers and City staff through the development process, including application forms, variance request forms, and checklists. These forms are listed below, and the most recent version of each can be accessed and downloaded from the City's website: <https://www.urbanailinois.us/businesses/planning-zoning-forms/zoning-forms/subdivision>. If you are unable to access the website, please contact the Community Development Services Department, and a staff member will assist you.

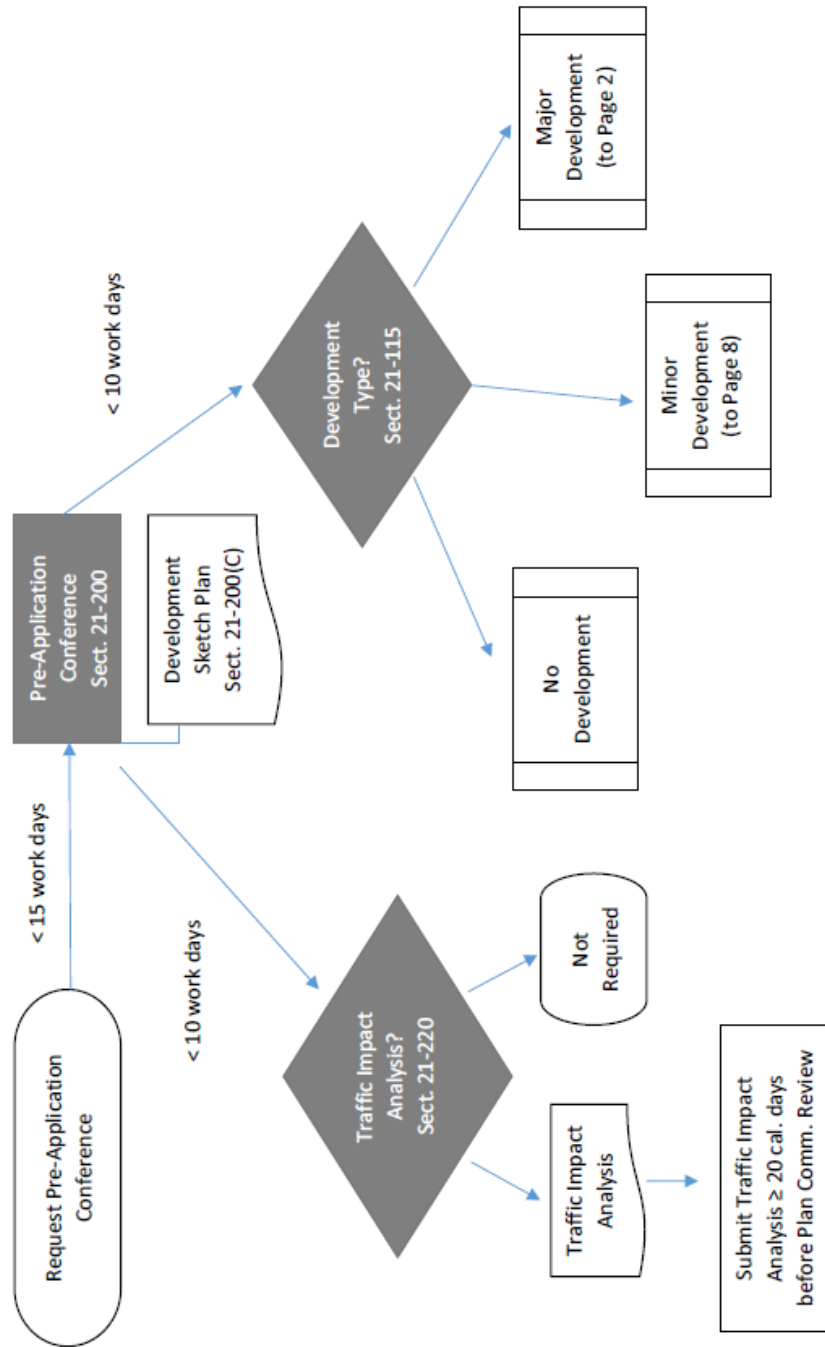
The following forms are currently available on the City website with many of them being fillable forms in the Portable Document Format (PDF). You will need Adobe Acrobat or a similar program to utilize these versions.

1. Development Pre-Application Conference Checklist
2. Development Application Forms:
 - a. Application for Preliminary Plat of Major Development
 - b. Application for Final Plat of Major Development
 - c. Application for Concurrent Preliminary and Final Plats of Major Development
 - d. Application for Minor Development
3. Affidavit for Certificate of Exemption in Lieu of Plat
4. Development Variance Request Form
5. Subdivision Plat Checklists:
 - a. Subdivision Preliminary Plat Checklist
 - b. Subdivision Final Plat Checklist
6. Site Engineering Plan Checklist
7. Final Inspection Checklist for Development Improvements
8. Final Inspection Checklist for Maintenance Bond

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enable two-sided document printing.*

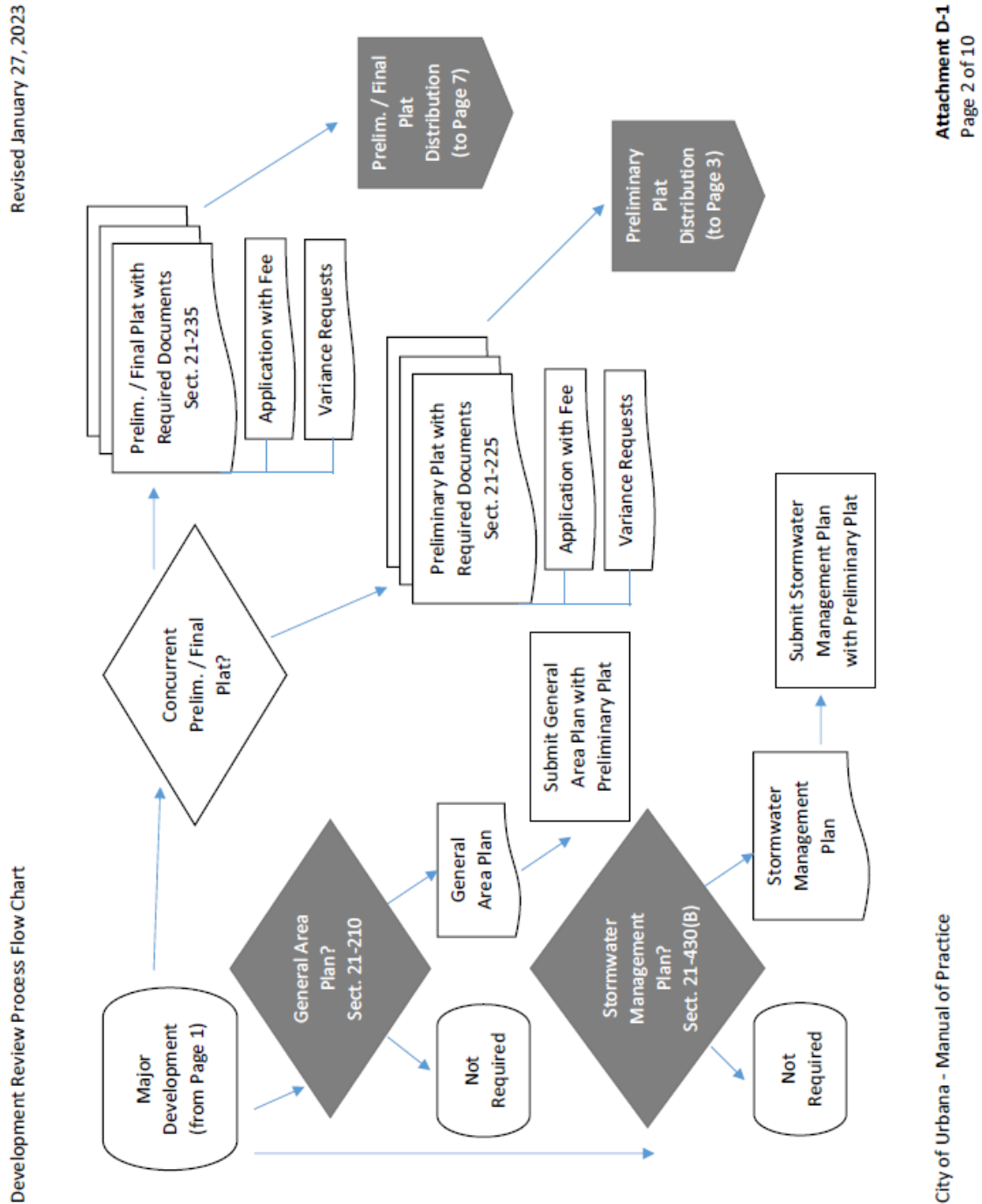
Revised January 27, 2023

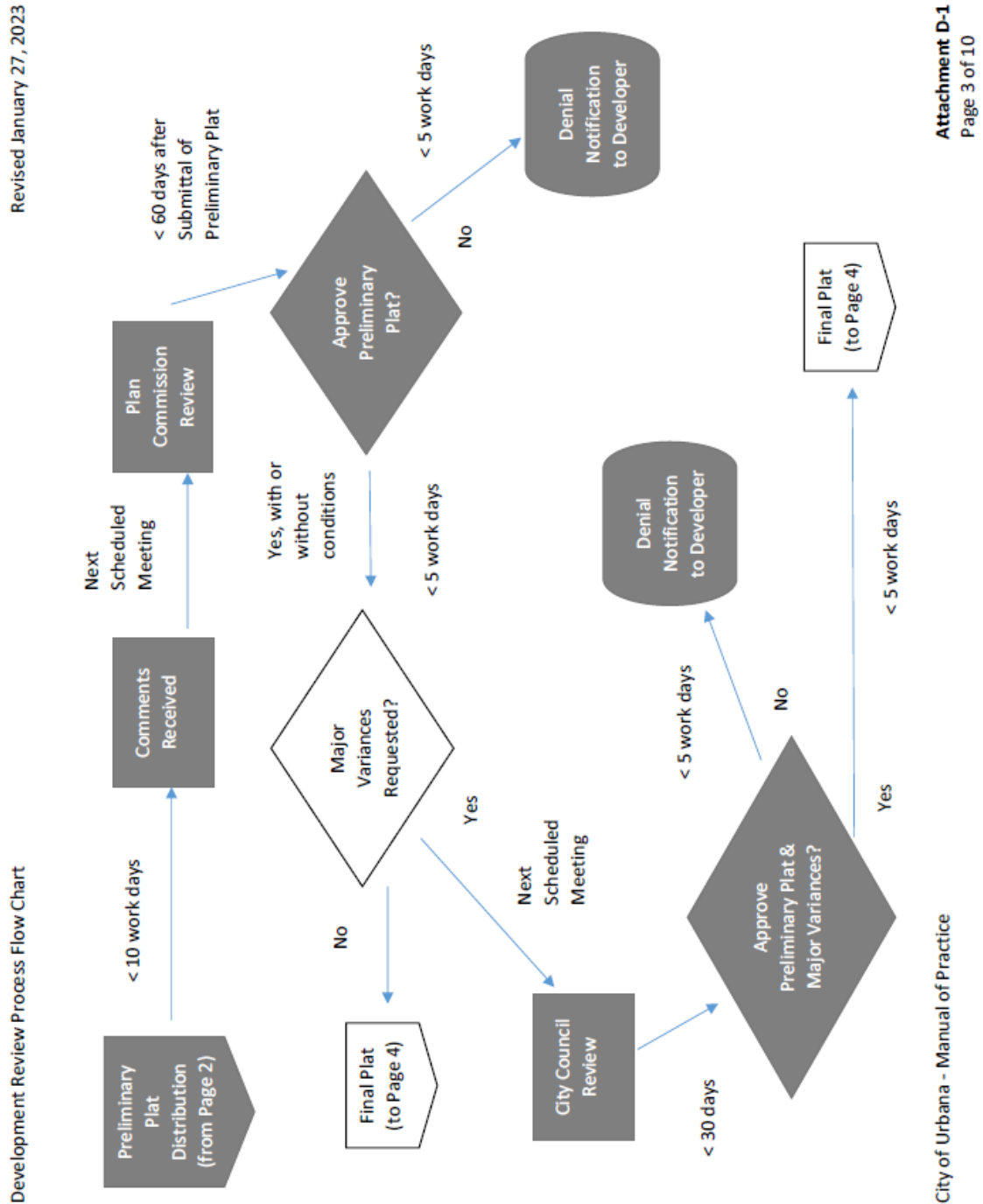
Development Review Process Flow Chart

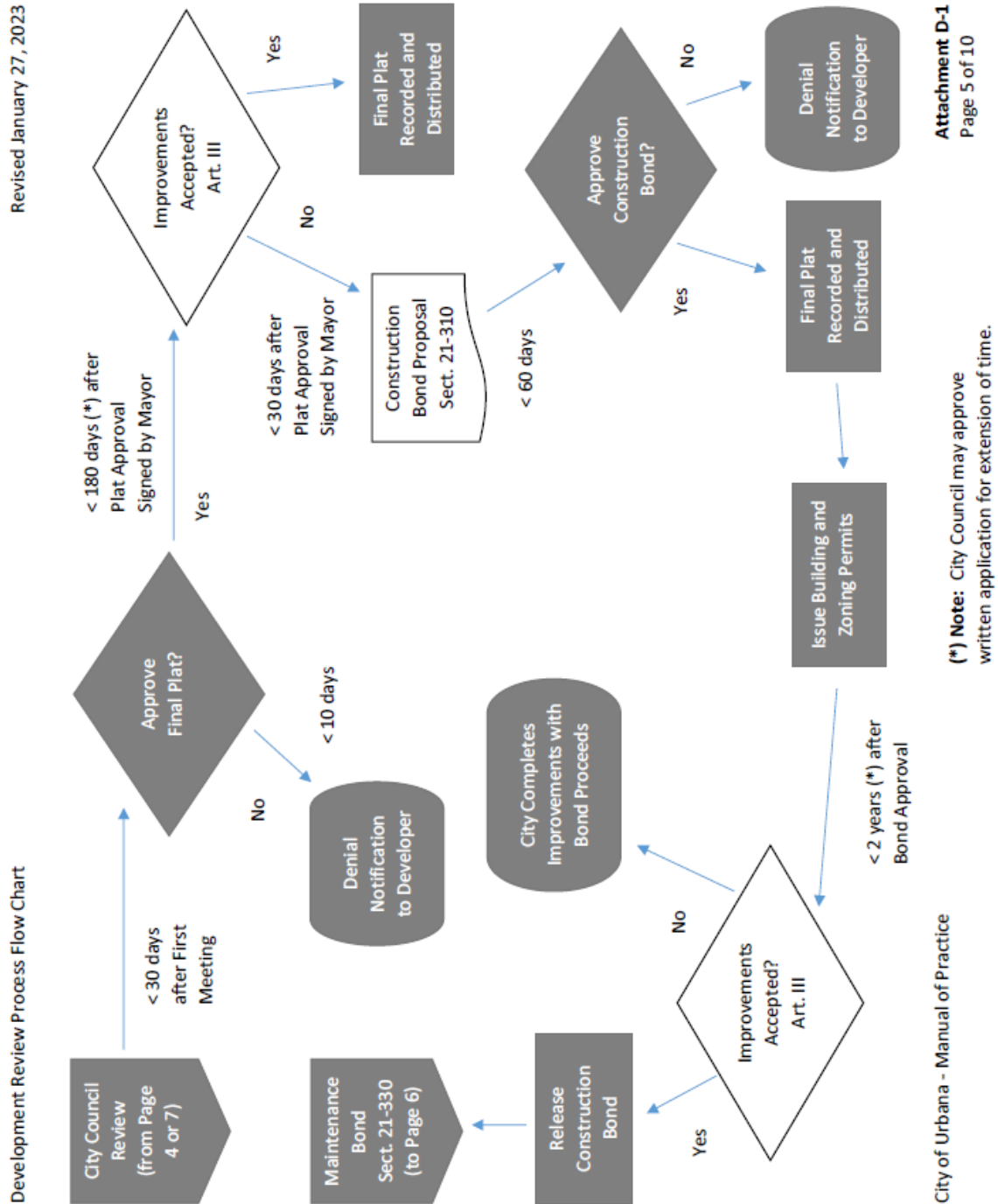


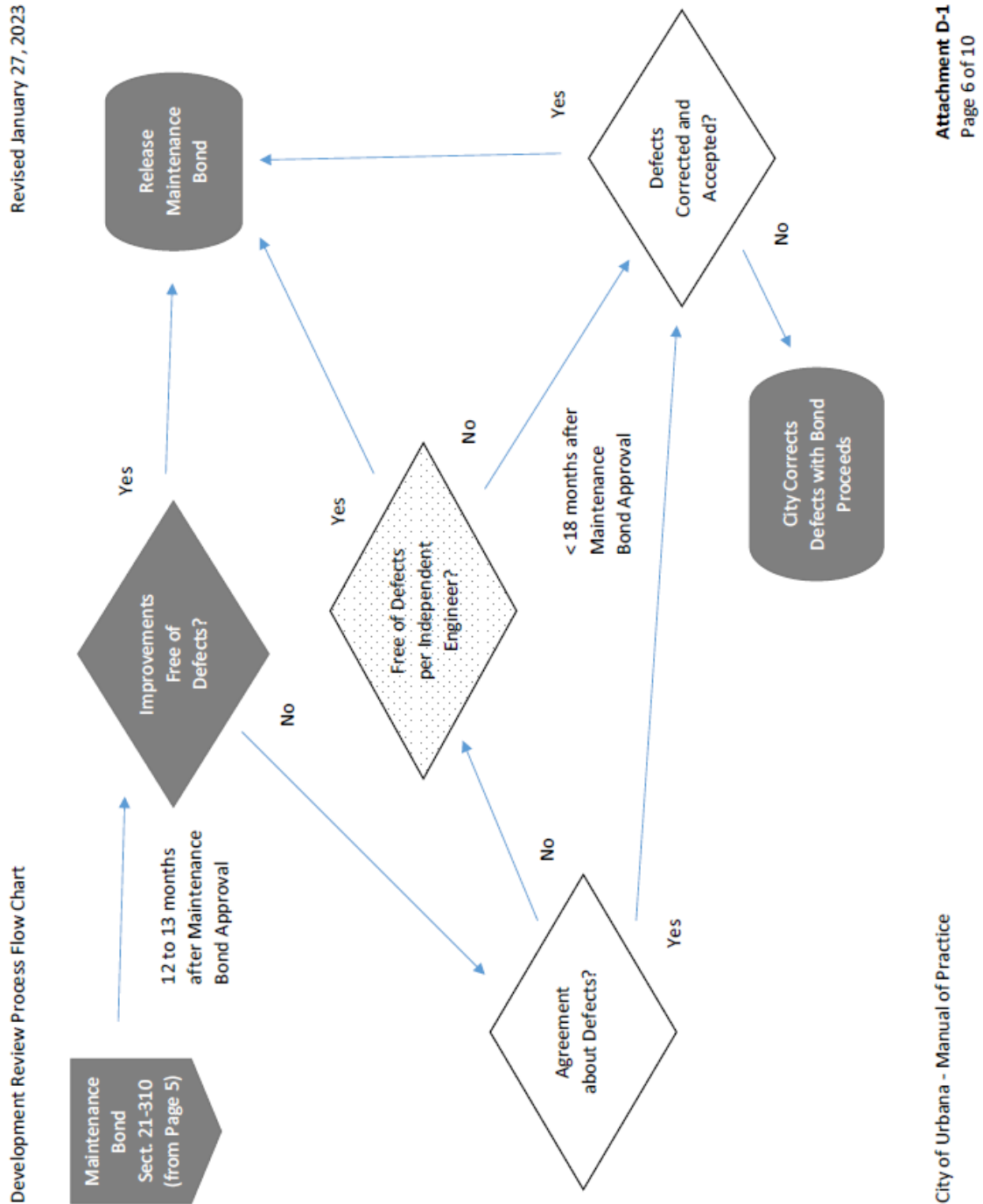
Attachment D-1
Page 1 of 10

City of Urbana - Manual of Practice



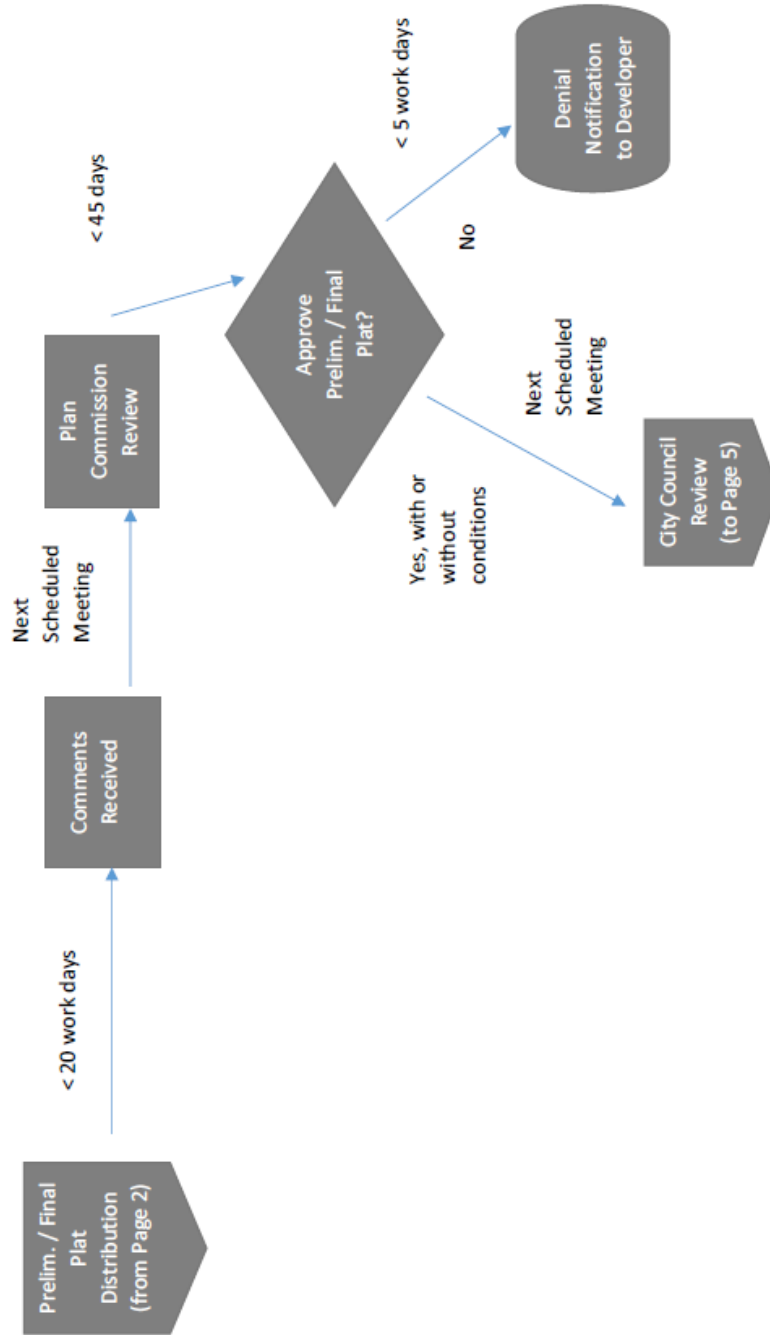






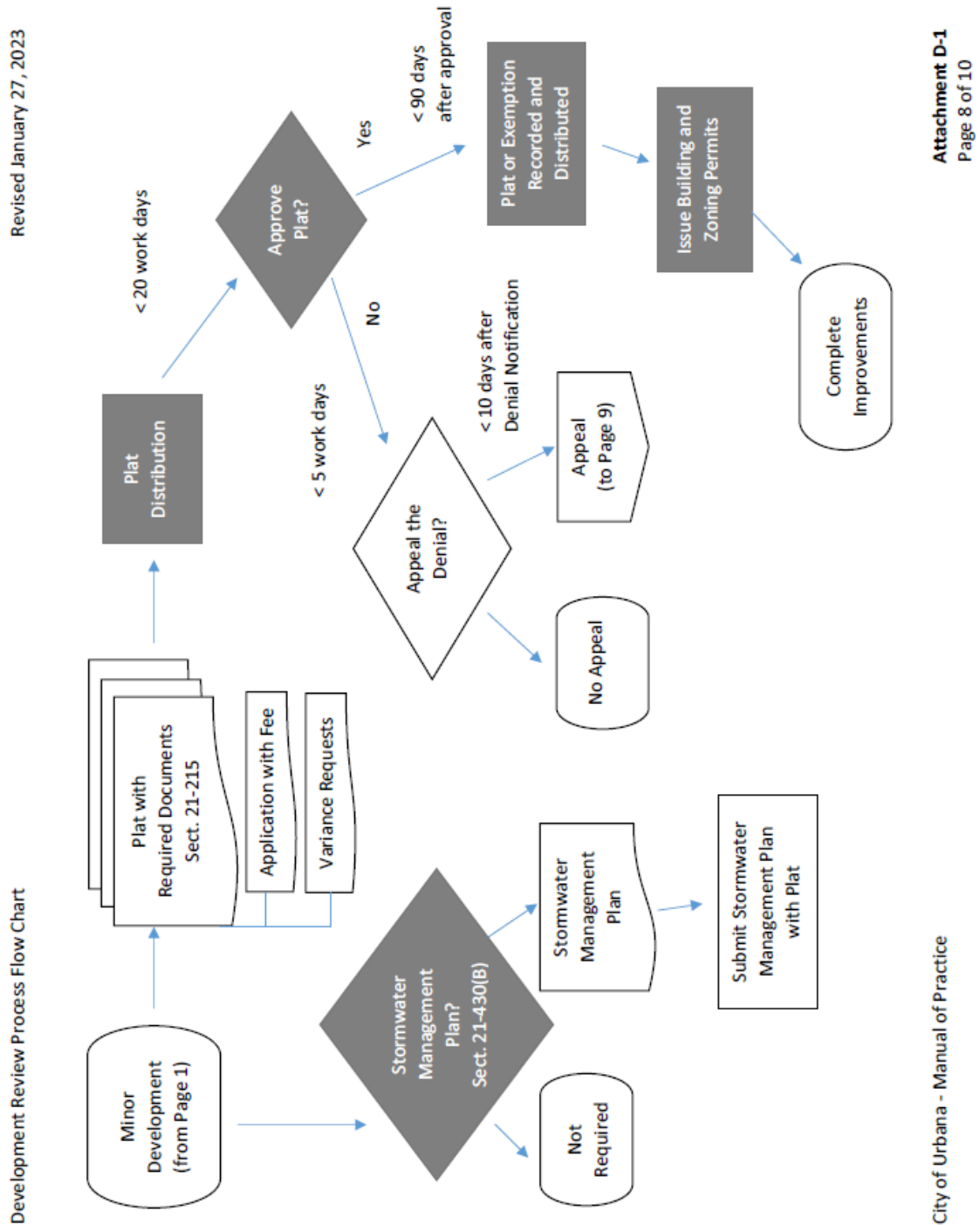
Revised January 27, 2023

Development Review Process Flow Chart



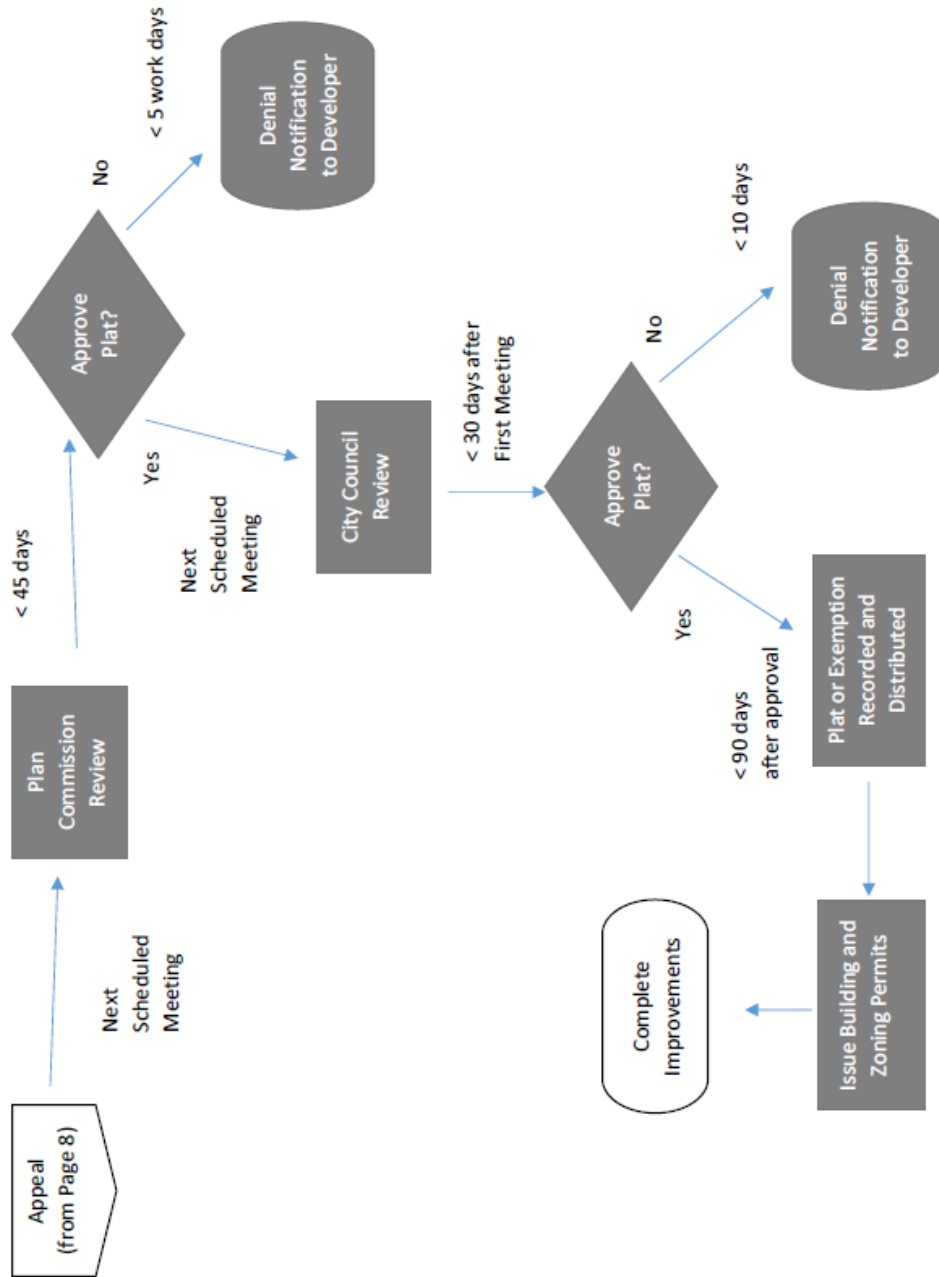
Attachment D-1
Page 7 of 10

City of Urbana - Manual of Practice



Revised January 27, 2023

Development Review Process Flow Chart



Attachment D-1
Page 9 of 10

City of Urbana - Manual of Practice

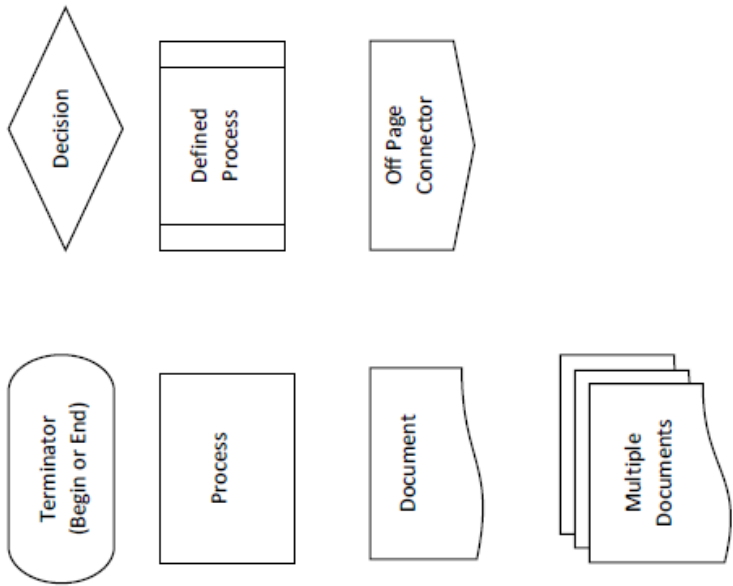
Revised January 27, 2023

Development Review Process Flow Chart

FLOW CHART LEGEND - SHADING



FLOW CHART LEGEND - SHAPES



**APPENDIX E-1: CONSTRUCTION PERFORMANCE BOND FORM
– LETTER OF CREDIT**

Issued June 28, 2023

For Use With

Letter of
Credit Only

DEVELOPMENT PERFORMANCE BOND
FOR
_____ DEVELOPMENT

KNOW ALL MEN BY THESE PRESENTS, that _____, hereinafter called "Principal", is held and firmly bound unto the people of the City of Urbana, Illinois, hereinafter called "City", in the sum of (\$ _____), lawful money of the United States of America, for the payment whereof to the City, the Principal binds itself, its successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, the condition of the foregoing obligation is such that the Principal, jointly and/or severally, shall pay to the City on two (2) years from the date hereof, the sum above written or the sum necessary to correct any deficiency, defective construction or omission, whichever is less, unless prior to the expiration of two (2) years from the date hereof, or any formal extension thereof granted by the City Council, all of the required improvements for the above-named development have actually been constructed, and the completion of such construction is evidenced by a certification from the Urbana City Engineer that the said required improvements have been completed. The required improvements, as referred to herein, shall be deemed to be each item of all those improvements and other acts required by Chapter 21 of the Urbana City Code, and each item of all improvements as shown on the approved plans and specifications on file with the City Engineer except any such improvements as shall have been expressly waived by resolution of the City Council.

The obligations of this bond are further secured by the Irrevocable Letter of Credit attached hereto and made a part hereof.

This obligation may also be released in the following manner: If the Professional Engineer certifies that each item of all construction has been completed in accordance with the approved plans and specifications and the City Engineer declines to certify, if the Principal requests, then the City Engineer and the Professional Engineer shall select another engineer (hereinafter called "Third Engineer"), acceptable to both, to make an independent investigation. The Third Engineer shall investigate and certify her/his findings concerning construction being completed in conformity with the approved plans and specifications on file with the City Engineer. The findings and implementation of the recommendations of the Third Engineer contained in the report for the above-named development shall be binding as to the question of whether the required improvements have been constructed sufficiently to void the obligation of this bond. The Principal shall pay one-half (½) of all fees and expenses in relation to the Third Engineer, and the City shall pay remainder.

The City Engineer may release this bond upon the request of the Principal that she/he be permitted and allowed to substitute therefor, a bond in a lesser amount as provided in Chapter 21 of the Urbana City Code.

This obligation may also be released upon the valid vacation of the plat of subdivision for which this bond is applicable.

The Principal herein expressly agrees that the representatives of the City Public Works Department and representatives of the Developer's Professional Engineering Firm may visit the real

estate covered by this bond at any reasonable time for purposes of observation of the public improvements covered by this bond.

Principal acknowledges that the City may be obligated to a third party purchaser of lots within the development covered by this bond. The Principal acknowledges that acts by the City, including but not limited to the following, will not be construed or considered as acts of acceptance of any of the improvements covered by this bond:

1. Erecting and maintaining street signs or traffic control signs, or signals beyond the requirements of this Manual of Practice.
2. Painting curbs for traffic control.
3. Clearing pavements of ice and snow to facilitate traffic, provided, however, that no chemicals shall be applied to any of the new construction.
4. Rodding and flushing of a sewer to eliminate a blockage.
5. Use of ROW by Municipal vehicles for purposes of inspection, fire protection and police control.
6. Issuance of permits for driveways or driveway turnouts on the publicly dedicated ROW. (It is evident, however, that no permit is authorized for the modification or removal of any improvement without the Principal's concurrence.)
7. Issuance of excavation permits to excavate within the dedicated street ROW. (However, no permit shall be issued for connection to a sewer improvement under the control of the Principal.)
8. Planting and care of trees along street ROW. (However, no such planting shall be done without concurrence of tree location by Principal.)
9. Mowing.
10. Annexation of all or any part of the real estate covered by this bond.
11. In addition to the foregoing, the City of Urbana may do any act reasonably necessary to protect the public safety and, in doing such, may recover the reasonable cost of such work.

IN WITNESS WHEREOF, said _____, as Principal, has executed this instrument and caused their representative corporate seal to be hereto affixed this, the ____ day of _____, A.D. 20_____.

Principal

Principal

This Performance Bond is hereby accepted by the City Engineer and City Attorney of the City of Urbana on the ____ day of _____, 20_____.

City Engineer

City Attorney

**APPENDIX E-2: CONSTRUCTION MAINTENANCE BOND FORM
– LETTER OF CREDIT**

Issued June 28, 2023

For Use With

Letter of Credit Only

DEVELOPMENT MAINTENANCE BOND
FOR
_____ DEVELOPMENT

KNOW ALL MEN BY THESE PRESENTS, that _____, hereinafter called "Principal", is held and firmly bound unto the people of the City of Urbana, Illinois, hereinafter called "City", in the sum of (\$ _____), lawful money of the United States of America, for the payment whereof to the City, the Principal binds itself, its successors and assigns, jointly and severally, firmly by these presents.

NOW, THEREFORE, the condition of the foregoing obligation is such that the Principal, jointly and/or severally, shall pay to the City on eighteen (18) months from the date hereof, the sum above written or the sum necessary to correct any construction omission or deficiency, defective construction, or design omission or deficiency, whichever is less, unless prior to the expiration of eighteen (18) months from the date hereof, or any formal extension thereof granted by the City Council, all of the required improvements for the above-named development have actually been constructed, and the completion of such construction is evidenced by a certification from the Urbana City Engineer that the said required improvements have been completed. The required improvements, as referred to herein, shall be deemed to be each item of all those improvements and other acts required by Chapter 21 of the Urbana City Code, and each item of all improvements as shown on the approved plans and specifications on file with the City Engineer except any such improvements as shall have been expressly waived by resolution of the City Council.

The obligations of this bond are further secured by the Irrevocable Letter of Credit attached hereto and made a part hereof.

This obligation may also be released in the following manner: If the Developer's Professional Engineer certifies that each item of all construction has been completed in accordance with the approved plans and specifications and the City Engineer declines to certify, if the Principal requests, then the City Engineer and the Professional Engineer shall select another engineer (hereinafter called "Third Engineer"), acceptable to both, to make an independent investigation. The Third Engineer shall investigate and certify her/his findings concerning construction being completed in conformity with the approved plans and specifications on file with the City Engineer. The findings and implementation of the recommendations of the Third Engineer contained in the report for the above-named development shall be binding as to the question of whether the required improvements have been constructed sufficiently to void the obligation of this bond. The Principal shall pay one-half (½) of all fees and expenses in relation to the Third Engineer, and the City shall pay remainder.

The City Engineer may release this bond upon the request of the Principal that she/he be permitted and allowed to substitute therefor, a bond in a lesser amount as provided in Chapter 21 of the Urbana City Code.

This obligation may also be released upon the valid vacation of the plat of subdivision for which this bond is applicable.

The Principal herein expressly agrees that the representatives of the City Public Works Department and representatives of the Developer's Professional Engineering Firm may visit the real

estate covered by this bond at any reasonable time for purposes of observation of the public improvements covered by this bond.

Principal acknowledges that the City may be obligated to a third party purchaser of lots within the development covered by this bond. The Principal acknowledges that acts by the City, including but not limited to the following, will not be construed or considered as acts of acceptance of any of the improvements covered by this bond:

1. Erecting and maintaining street signs or traffic control signs, or signals beyond the requirements of this Manual of Practice.
2. Painting curbs for traffic control.
3. Clearing pavements of ice and snow to facilitate traffic, provided, however, that no chemicals shall be applied to any of the new construction.
4. Rodding and flushing of a sewer to eliminate a blockage.
5. Use of ROW by Municipal vehicles for purposes of inspection, fire protection and police control.
6. Issuance of permits for driveways or driveway turnouts on the publicly dedicated ROW. (It is evident, however, that no permit is authorized for the modification or removal of any improvement without the Principal's concurrence.)
7. Issuance of excavation permits to excavate within the dedicated street ROW. (However, no permit shall be issued for connection to a sewer improvement under the control of the Principal.)
8. Planting and care of trees along street ROW. (However, no such planting shall be done without concurrence of tree location by Principal.)
9. Mowing.
10. Annexation of all or any part of the real estate covered by this bond.
11. In addition to the foregoing, the City of Urbana may do any act reasonably necessary to protect the public safety and, in doing such, may recover the reasonable cost of such work.

IN WITNESS WHEREOF, said _____, as Principal, has executed this instrument and caused their representative corporate seal to be hereto affixed this, the ____ day of _____, A.D. 20_____.

Principal

Principal

This Performance Bond is hereby accepted by the City Engineer and City Attorney of the City of Urbana on the ____ day of _____, 20_____.

City Engineer

City Attorney

**APPENDIX F-1: CONSTRUCTION PERFORMANCE BOND FORM –
COMMERCIAL SURETY**

Issued June 28, 2023

For Use With

Commercial Surety Only

**DEVELOPMENT PERFORMANCE BOND
FOR**

_____ **DEVELOPMENT**

KNOW ALL MEN BY THESE PRESENTS, that _____,
hereinafter called "Principal" and _____ of _____, State of _____
hereinafter called "Surety", are held and firmly bound unto the people of the City of Urbana, Illinois,
hereinafter called "City", in the sum of _____ (\$ _____), lawful
money of the United States of America, for the payment whereof to the City, the Principal binds itself, its
successors and assigns, and the Surety, binds itself, its successors and assigns, jointly and severally,
firmly by these presents.

NOW, THEREFORE, the condition of the foregoing obligation is such that the Principal and
Surety, jointly and/or severally, shall pay to the City on two (2) years from the date hereof, the sum
above written or the sum necessary to correct any deficiency, defective construction or omission,
whichever is less, unless prior to the expiration of two (2) years from the date hereof, or any formal
extension thereof granted by the City Council, all of the required improvements for the above-named
development have actually been constructed, and the completion of such construction is evidenced by a
certification from the City Engineer that the said required improvements have been completed. The
required improvements, as referred to herein, shall be deemed to be each item of all those
improvements and other acts required by Chapter 21 of the Urbana City Code, and each item of all
improvements as shown on the approved plans and specifications on file with the City Engineer except
any such improvements as shall have been expressly waived by resolution of the City Council.

This obligation may also be released in the following manner: If the Developer's Professional
Engineer certifies that each item of all construction has been completed in accordance with the
approved plans and specifications and the City Engineer declines to certify, if the Principal requests,
then the City Engineer and the Developer's Professional Engineer shall select another engineer
(hereinafter called "Third Engineer"), acceptable to both, to make an independent investigation. The
Third Engineer shall investigate and certify her/his findings concerning construction being completed in
conformity with the approved plans and specifications on file with the City Engineer. The findings and
implementation of the recommendations of the Third Engineer contained in the report for the above-
named development shall be binding as to the question of whether the required improvements have
been constructed sufficiently to void the obligation of this bond. The Principal and Surety shall pay one-
half (½) of all fees and expenses in relation to the Third Engineer, and the City shall pay remainder.

The City Engineer may release this bond upon the request of the Principal and Surety that
she/he be permitted and allowed to substitute therefor, a bond in a lesser amount as provided in Chapter
21 of the Urbana City Code.

This obligation may also be released upon the valid vacation of the plat of subdivision for which
this bond is applicable.

The Principal and Surety herein expressly agrees that the representatives of the City Engineering Division and representatives of the Developer's Professional Engineering Firm may visit the real estate covered by this bond at any reasonable time for purposes of observation of the public improvements covered by this bond.

Principal and Surety acknowledge that the City may be obligated to a third party purchaser of lots within the development covered by this bond. The Principal and Surety acknowledge that acts by the City, including but not limited to the following, will not be construed or considered as acts of acceptance of any of the improvements covered by this bond:

1. Erecting and maintaining street signs or traffic control signs, or signals beyond the requirements of this Manual of Practice.
2. Painting curbs for traffic control.
3. Clearing pavements of ice and snow to facilitate traffic, provided, however, that no chemicals shall be applied to any of the new construction.
4. Rodding and flushing of a sewer to eliminate a blockage.
5. Use of ROW by Municipal vehicles for purposes of inspection, fire protection and police control.
6. Issuance of permits for driveways or driveway turnouts on the publicly dedicated ROW. (It is evident, however, that no permit is authorized for the modification or removal of any improvement without the Principal's concurrence.)
7. Issuance of excavation permits to excavate within the dedicated street ROW. (However, no permit shall be issued for connection to a sewer improvement under the control of the Principal.)
8. Planting and care of trees along street ROW. (However, no such planting shall be done without concurrence of tree location by Principal.)
9. Mowing.
10. Annexation of all or any part of the real estate covered by this bond.
11. In addition to the foregoing, the City of Urbana may do any act reasonably necessary to protect the public safety and, in doing such, may recover the reasonable cost of such work.

IN WITNESS WHEREOF, said _____, as Principal and _____, and as Surety have executed this instrument and caused their representative corporate seal to be hereto affixed this____, the day of_____, A.D. 20_____.

Principal

Principal

Surety

Surety

This Performance Bond is hereby accepted by the City Engineer and City attorney of the City of Urbana on the ____ day of _____, A.D. 20_____.

City Engineer

City Attorney

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enable two-sided document printing.*

**APPENDIX F-2: CONSTRUCTION MAINTENANCE BOND FORM
– COMMERCIAL SURETY**

Issued June 28, 2023

For Use With

Commercial Surety Only

**DEVELOPMENT MAINTENANCE BOND
FOR**

_____ **DEVELOPMENT**

KNOW ALL MEN BY THESE PRESENTS, that _____,
hereinafter called "Principal" and _____ of _____, State of _____,
hereinafter called "Surety", are held and firmly bound unto the people of the City of Urbana, Illinois,
hereinafter called "City", in the sum of _____ (\$ _____), lawful
money of the United States of America, for the payment whereof to the City, the Principal binds itself, its
successors and assigns, and the Surety, binds itself, its successors and assigns, jointly and severally,
firmly by these presents.

NOW, THEREFORE, the condition of the foregoing obligation is such that the Principal and
Surety, jointly and/or severally, shall pay to the City on eighteen (18) months from the date hereof, the
sum above written or the sum necessary to correct any construction omission or deficiency, defective
construction, or design omission or deficiency, whichever is less, unless prior to the expiration of
eighteen (18) months from the date hereof, or any formal extension thereof granted by the City Council,
all of the required improvements for the above-named development have actually been constructed, and
the completion of such construction is evidenced by a certification from the City Engineer that the said
required improvements have been completed. The required improvements, as referred to herein, shall
be deemed to be each item of all those improvements and other acts required by Chapter 21 of the
Urbana City Code, and each item of all improvements as shown on the approved plans and
specifications on file with the City Engineer except any such improvements as shall have been expressly
waived by resolution of the City Council.

This obligation may also be released in the following manner: If the Developer's Professional
Engineer certifies that each item of all construction has been completed in accordance with the
approved plans and specifications and the City Engineer declines to certify, if the Principal requests,
then the City Engineer and the Developer's Professional Engineer shall select another engineer
(hereinafter called "Third Engineer"), acceptable to both, to make an independent investigation. The
Third Engineer shall investigate and certify her/his findings concerning construction being completed in
conformity with the approved plans and specifications on file with the City Engineer. The findings and
implementation of the recommendations of the Third Engineer contained in the report for the above-
named development shall be binding as to the question of whether the required improvements have
been constructed sufficiently to void the obligation of this bond. The Principal and Surety shall pay one-
half (½) of all fees and expenses in relation to the Third Engineer, and the City shall pay remainder.

The City Engineer may release this bond upon the request of the Principal and Surety that
she/he be permitted and allowed to substitute therefor, a bond in a lesser amount as provided in Chapter
21 of the Urbana City Code.

This obligation may also be released upon the valid vacation of the plat of subdivision for which
this bond is applicable.

The Principal and Surety herein expressly agrees that the representatives of the City Engineering Division and representatives of the Developer's Professional Engineering Firm may visit the real estate covered by this bond at any reasonable time for purposes of observation of the public improvements covered by this bond.

Principal and Surety acknowledge that the City may be obligated to a third party purchaser of lots within the development covered by this bond. The Principal and Surety acknowledge that acts by the City, including but not limited to the following, will not be construed or considered as acts of acceptance of any of the improvements covered by this bond:

1. Erecting and maintaining street signs or traffic control signs, or signals beyond the requirements of this Manual of Practice.
2. Painting curbs for traffic control.
3. Clearing pavements of ice and snow to facilitate traffic, provided, however, that no chemicals shall be applied to any of the new construction.
4. Rodding and flushing of a sewer to eliminate a blockage.
5. Use of ROW by Municipal vehicles for purposes of inspection, fire protection and police control.
6. Issuance of permits for driveways or driveway turnouts on the publicly dedicated ROW. (It is evident, however, that no permit is authorized for the modification or removal of any improvement without the Principal's concurrence.)
7. Issuance of excavation permits to excavate within the dedicated street ROW. (However, no permit shall be issued for connection to a sewer improvement under the control of the Principal.)
8. Planting and care of trees along street ROW. (However, no such planting shall be done without concurrence of tree location by Principal.)
9. Mowing.
10. Annexation of all or any part of the real estate covered by this bond.
11. In addition to the foregoing, the City of Urbana may do any act reasonably necessary to protect the public safety and, in doing such, may recover the reasonable cost of such work.

IN WITNESS WHEREOF, said _____, as Principal and _____, and as Surety have executed this instrument and caused their representative corporate seal to be hereto affixed this____, the day of_____, A.D. 20_____.

Principal

Principal

Surety

Surety

This Performance Bond is hereby accepted by the City Engineer and City attorney of the City of Urbana on the ____ day of _____, A.D. 20_____.

City Engineer

City Attorney

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enable two-sided document printing.*

APPENDIX G: ACCESS MANAGEMENT GUIDELINES FOR THE URBANIZED AREA

Issued June 28, 2023

CHAMPAIGN COUNTY REGIONAL PLANNING COMMISSION, CUUATS, APRIL 2013

<http://www.ccrpc.org/wp-content/uploads/2015/03/access-management-2013-04-17-final.pdf>

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enable two-sided document printing.*

APPENDIX H: FUNCTIONAL STREET CLASSIFICATION MAP

Issued June 28, 2023

Functional Classification of Streets within City of Urbana





Date created: October 11, 2022

Created by: Urbana Public Works

Data sources: CCGIS Consortium, IROADS

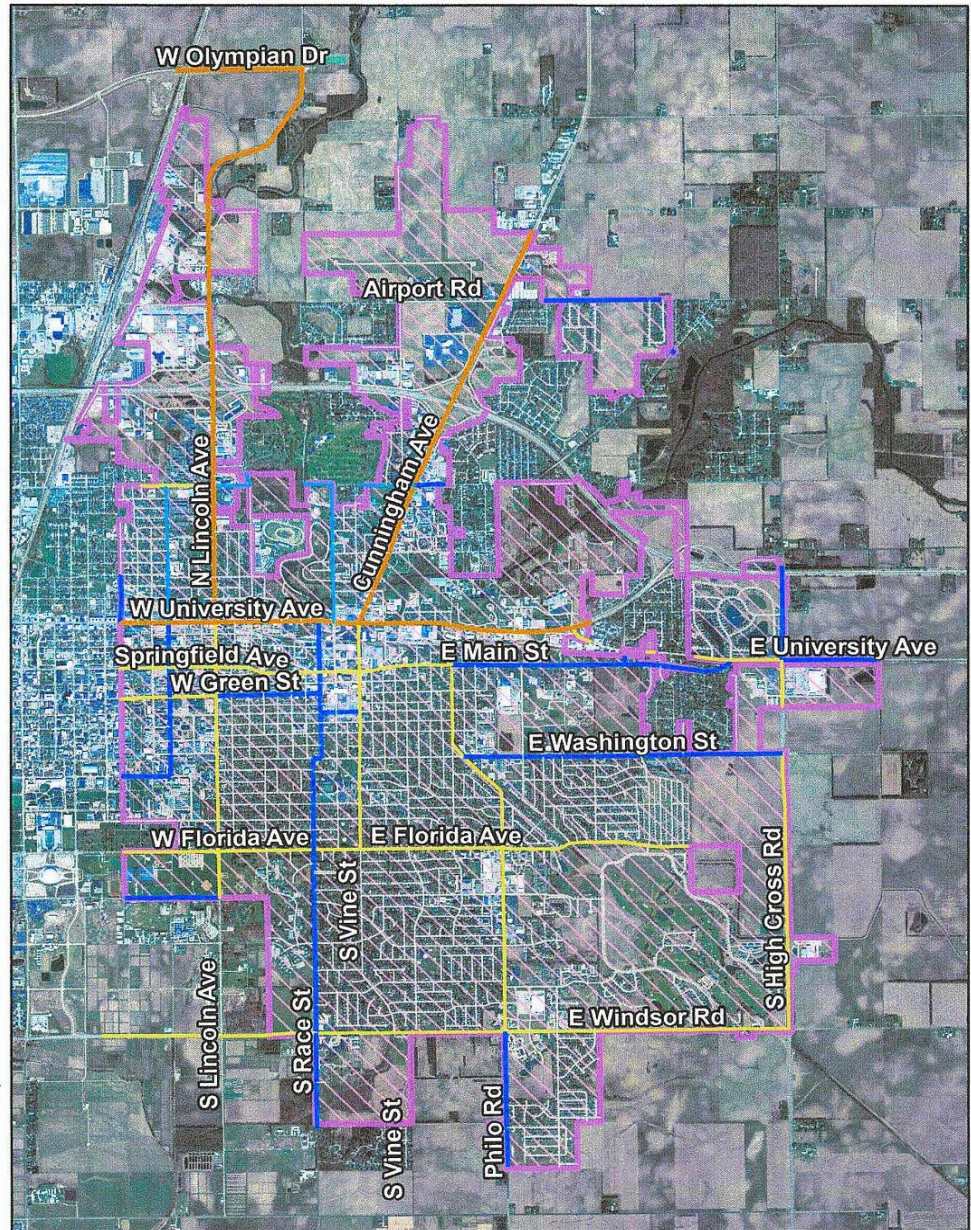
Legend

Functional Classification

-  Local Road or Street
-  Major Collector
-  Minor Arterial
-  Minor Collector
-  Other Principal Arterial
-  Urbana City Limits

Notes:

1. Street lines are trimmed off at Urbana City Limits to indicate typical limits of Urbana jurisdiction. N. Lincoln Ave., Olympian Dr., & W Windsor Rd are notable exceptions where Urbana ROW extends beyond city limits.
2. Some streets shown within Urbana City Limits are owned and/or maintained by IDOT or the University of Illinois.



0 0.5 1 1.5 Miles



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**APPENDIX I: SANITARY SEWER STANDARDS (SSS) – URBANA & CHAMPAIGN
SANITARY DISTRICT AND AFFILIATED COMMUNITIES**

Issued June 28, 2023

This standard is administered by the Urbana & Champaign Sanitary District (UCSD) on behalf of all of the affiliated communities, including the City of Urbana. To obtain an official current copy of said standard, one should consult UCSD's website at: www.u-csd.com. This standard may also be obtained by contacting:

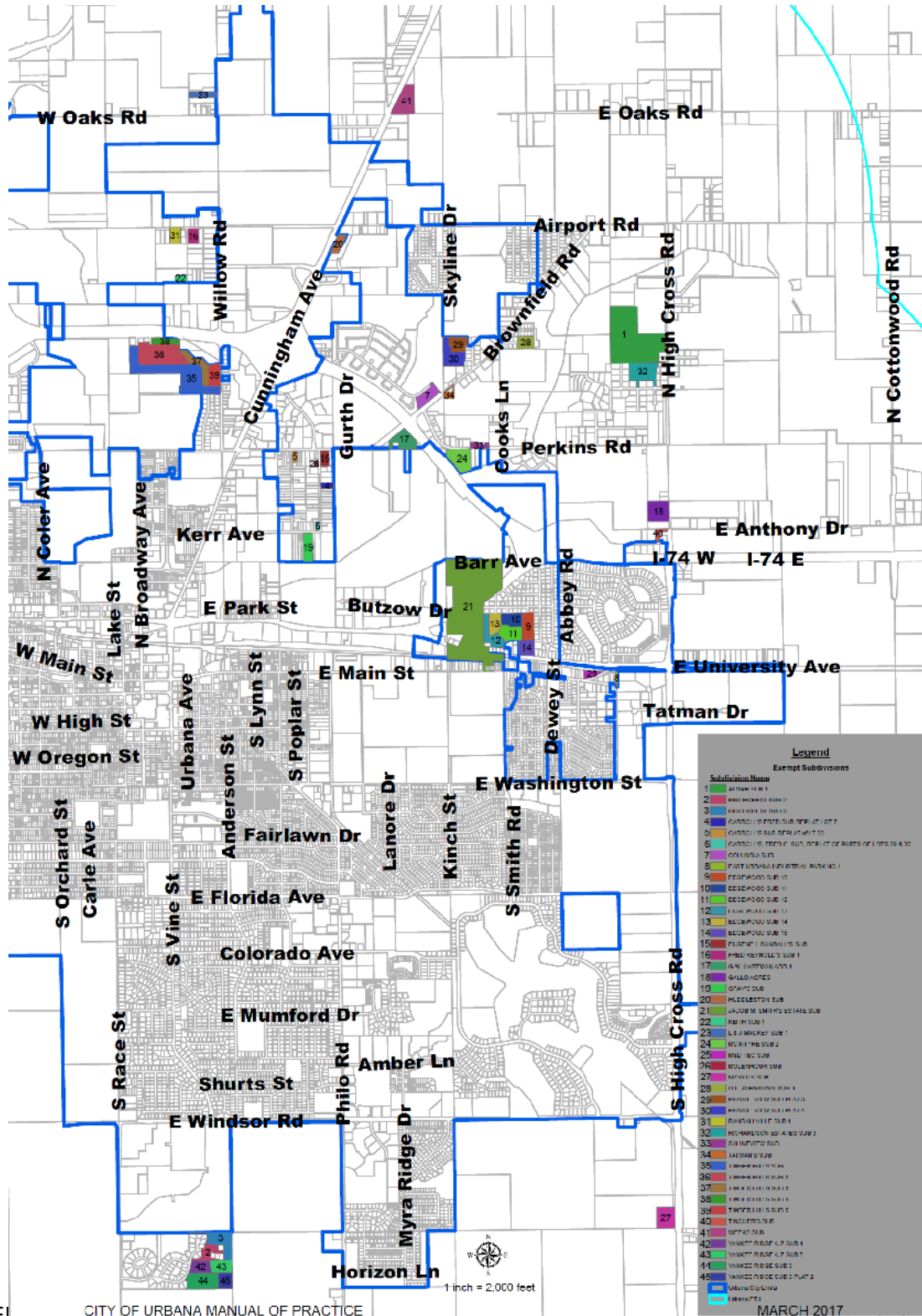
*Urbana & Champaign Sanitary District
Attention: Director of Engineering
P. O. Box 669
1100 East University Avenue
Urbana, IL 61803*

*Email: engineering@u-csd.com
Telephone: 217-367-3409
FAX: 217-367-2603*

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enable two-sided document printing.*

APPENDIX J: SUBDIVISIONS EXEMPT FROM ANNEXATION REQUIREMENTS PER CITY/UCSD AGREEMENT

Issued June 28, 2023



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enable two-sided document printing.*

APPENDIX K: MANUAL OF PRACTICE ADMINISTRATIVE REVISION REQUEST FORM

Issued June 28, 2023

Revision Request: _____

Date: _____

Requesting Party: _____

Summary of Request: _____

Attachments:

Approved By: City Engineer _____

Community Development Services Department Director _____

Secretary of the Plan Commission _____

EFFECTIVE DATE: _____

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enable two-sided document printing.*

APPENDIX L: ADMINISTRATIVE REVISION LOG

Issued June 28, 2023

[illegible]

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APPENDIX M: MINIMUM STREET AND ALLEY DESIGN STANDARDS*Issued June 28, 2023*

<i>Classification</i>	<i>R.O.W. ¹</i>	<i>Roadway Width ²</i>			<i>Minimum Return Radius</i>	<i>Minimum Grade</i>	<i>Maximum Grade</i>	<i>Curb Type</i>
		<i>Parking 2 sides</i>	<i>Parking 1 side</i>	<i>No Parking On Either Side</i>				
Streets								
Local--Private	50 feet	see Footnote 5	see Footnote 5	24 feet	25 feet	0.4%	5.0%	<u>B</u>
Local – Residential	60 feet	36 feet	30 feet	30 feet	25 feet	0.4%	5.0%	<u>B</u>
Collector -- Residential	60 feet	36 feet	30 feet	30 feet	25 feet	0.4%	5.0%	B
Local and collector— Business, commercial and industrial	66 feet	40 feet	34 feet	30 feet	30 feet	0.4%	5.0%	B
Arterial	80-150 feet ³	N/A ⁴	N/A ⁴	N/A ⁴	see Footnote 4	see Footnote 4	see Footnote 4	see Footnote 4
Alleys:								
Residential Multifamily	18 feet	N/A	N/A	18 feet	25 feet	0.4%	5.0%	N/A
Business, commercial and industrial	24 feet	N/A	N/A	24 feet	25 feet	0.4%	5.0%	N/A
One-way alleys	16 feet	N/A	N/A	16 feet	25 feet	0.4%	5.0%	N/A

Footnotes

- ¹ See Chapter 16 of the Manual and Section 21-410 of the Land Development Code.
- ² Roadway width is measured face-to-face of curb. Additional roadway width shall be required to accommodate bicycle lanes where shown on the Bicycle Network Improvements maps in the most recent Urbana Bicycle Master Plan.
- ³ Additional right-of-way may be required at the intersection of two (2) major streets to provide for turning lane(s) in accordance with standards set forth in Chapter 8.
- ⁴ To be designed according to Chapter 8.
- ⁵ As determined by PUD or mobile home park regulations and procedures of applicable City or county Zoning Ordinances.

Abbreviations:

B = Barrier curb, 6-inch height
N/A = Not Applicable
R.O.W. = right-of-way
PUD = Planned Unit Development

END OF MANUAL OF PRACTICE