UNITED CITY OF YORKVILLE

REQUIREMENTS FOR RECORD DRAWINGS

General

- 1. Show any changes in location of the constructed improvements.
- 2. Record Drawings shall be provided in the following formats:
 - a) One (1) bond paper copy; signed and sealed.
 - b) All electronic files required to document the record drawings as defined herein in AutoCAD 2019 (or newer) format on a flash drive, or via e-mail to the address designated by the City Engineer. All electronic files shall be submitted in accordance with the United City of Yorkville 'Requirements for Electronic Submittals'.
- 3. Provide only plan view drawing at preferred scale of 1"=50'. Alternate allowable scales are 1"=40', 1"=30' and 1"=20'. Multiple sheets shall be used as necessary. Large scale details of stormwater restrictor structures and watermain interconnects are encouraged and may be required.
- 4. All structures shall be numbered or lettered using the same system as the approved engineering plans for the subdivision.
- 5. The condition of the Bench Mark shown on the approved engineering plans shall be verified and noted on the record drawings. All elevations shall be referenced to North American Vertical Datum 1988 (NAVD 88) vertical datum using US Survey Feet as units.

Water Distribution System

- 1. Show locations, material and sizes of all mains, valves, hydrants, plugs, b-boxes, elbows, tees, crosses and all other appurtenances required by the engineering plans. Where cover of watermain was other than the standard 5-1/2' due to utility conflicts, show the actual elevation and note the existence of any sleeves around the watermain or other utility line.
- 2. Show rim elevations for all valve vaults and valve boxes, including hydrant auxiliary boxes.
- 3. Show elevation of finished grade at hydrant for all fire hydrants.
- 4. Verify that all structures are visible, at the proper grade, and that all valves and b-boxes are operational prior to submitting record drawings.
- 5. Show as-built dimensions to water shut off.

Storm Sewer and Stormwater Management System

- 1. Show locations, material, sizes and slopes of all culverts and storm sewer lines.
- 2. Show locations, rims and invert elevations and type (i.e. manhole, catch basin, curb inlet, etc.) of all storm structures. For curb inlet structures, show the top of curb elevation. Verify that all structures are visible and at the proper grade prior to submitting record drawings.

- 3. Show as-built topography of all stormwater management basins and certify that restrictor and as-built detention volume meets or exceeds the requirements of the approved engineering plans. Show the asbuilt high water elevation for all basins and the normal water elevation and bottom contours for retention basins.
- 4. Show that critical overflow elevations have been constructed according to the approved engineering plans. Show as-built cross sections of all overflow swales if cross sections were required for capacity calculations on the approved engineering plans.

Sanitary Sewer System

- 1. Show locations, material, sizes and slopes of all sanitary sewer mains and service lines.
- 2. Show locations, rims and invert elevations and type (manhole, drop manhole, wet well, etc.) of all sanitary structures. Verify that all structures are visible and at the proper grade prior to submitting record drawings.
- 3. Show as-built dimensions to sanitary sewer service lines.

Miscellaneous Improvements

- 1. Show location of all street lights and electric lines from street lights to service box.
- 2. Verify that all concrete monuments shown on the Final Plat of Subdivision have been set and are visible. If not, notify Surveyor of Record to have them installed.
- 3. Show parcel boundary lines, road ROW lines, and easement lines per final plat.
- 4. Show road centerlines.
- 5. Show jurisdictional Wetlands / Waters of the U.S. extent.
- 6. Show street sign location.
- 7. Show regulatory sign location and type (stop, yield, etc.).
- 8. Show traffic signal location.
- 9. Show pavement extent.
- 10. Show curb and gutter extent, indicate type.
- 11. Show gravel shoulder extent.
- 12. Show sidewalk extent.
- 13. Show trail / path extent

Certification

1.	The following certification, signed by an Illinois Licensed Professional Engineer, shall be placed on the required plan copies:
	State of Illinois))ss
)ss County of)
	We, <u>(name of engineering firm)</u> , hereby certify that these
	"Record Drawings" have been prepared under our direct supervision and that the information contained
	hereon has been provided and/or verified by us and accurately reflects the existing conditions on
	(date) . We further certify that in our professional opinion, these "Record Drawings"
	adequately depict and substantiate that the improvements constructed as part of this project will function
	in substantial conformance with the design intent of the engineering plans and specifications as accepted
	and approved by the United City of Yorkville.
	By:
	Title:
	Date: seal
	Illinois Licensed Professional Engineer No
	License Expiration Date:

REQUIREMENTS FOR ELECTRONIC SUBMITTALS

Overview

The developer/owner of any project within the United City of Yorkville (City) shall submit a version of the final approved plans in electronic format for incorporation into the City's geographic information system (GIS); in accordance with section 11-5-6 of the City's Subdivision Control Ordinance. This requirement applies to all new developments.

Geodetic Control

In 2008 the United City of Yorkville installed 12 survey control monuments at various locations around the City. These monuments provide a grid network that will facilitate GPS surveying methods. The monuments are tied to the Illinois State Plane Coordinate System, East Zone, NAD83. Vertical Datum is NAVD88.

Coordinate System

The coordinate information contained in the digital drawings or record plans shall be delivered in the Illinois State Plane - East coordinate system using the North American Datum 1983 horizontal datum (Transverse Mercator projection) and North American Vertical Datum 1988 vertical datum using US Survey feet as units. These data shall be produced in real coordinate space with an insertion point of (0,0). Horizontal and vertical accuracy of these data shall meet the minimum industry standards for surveys and maps.

Data Formats

In addition to the final as-built plans submitted in hard copy format a digital data file of the final as-built plans shall be provided to the City in one of the following formats:

- SHP (ESRI ArcView format)
- DWG (AutoCAD format)
- DXF (AutoCAD ASCII drawing exchange file)
- ESRI Personal Geodatabase

An accompanying text file shall be included that describes the Layers along with the Layer Numbers or Layer Names in the digital data file. All digital files shall be mapped to scale and submitted to the City on a flash drive.

Data Layering Requirements

No formal layering scheme is required; however the following elements must be on separate layers:

- Parcel Boundary Lines / Road ROW Lines
- Road Centerline
- Easement Line
- Storm Sewer
- Sanitary Sewer
- Potable Water Line
- Storm Structure
- Sanitary Structure
- Potable Water Structure
- Fire Hydrants
- Ponds / Detention Basins
- Street Lights
- Benchmarks
- Edge of Pavement
- Contours
- Wetlands

Notes:

- For ESRI formats; the Layering Requirements refer to a Layer or Level field in the attribute file of the digital data file.
- Line work for these features shall be continuous and should contain topological consistency with other lines i.e. lines shall not be broken by label text or connected to other lines by marker pins