CITY OF JOLIET

CITY OF JOLIET ELECTRONIC PLAN SUBMITTAL CHECKLIST

GENERAL REQUIREMENTS

- ☐ All Revisions should include a revision bubble and number for the revision corresponding with dated revision table.
- ☐ Plan sheets on 22” x 34” sheets (minimum).
- ☐ Title block with development name, architect and/or engineer, and developer information.
- ☐ North Arrow with Numerical and Graphic Scale shall be provided per plan sheet.
- ☐ Horizontal Scales shall be 1” = 50’ unless otherwise noted below.
- ☐ USGS datum shall be utilized on all drawings.
- ☐ Property information including property lines, rights-of-way, easements, lot numbers, etc., shall be provided.
- ☐ Key map and Sheet match lines, as required.
- ☐ Streets with street names.
- ☐ Existing conditions shall be grey scaled.
- ☐ Sheet title and number corresponding to provided Sheet Index.
- ☐ Top-right corner of all drawings should have a 4.5” x 4.5” clear space for stamping.
- ☐ All plans shall be in landscape orientation.
- ☐ Layers per page must be 100 or less.
- ☐ All pdfs must be smart or vector files. No raster pdfs or scanned images will be accepted.
- ☐ Files must be electronically stamped by a registered architect, engineer, or design professional per the State of Illinois’ Division of Professional Regulation.

PLAN SECTIONS

- ☐ Cover Sheet
  - ☐ Name and Lot Number of Subdivision
  - ☐ Contact Information for the following:
    - ☐ COJ Building
    - ☐ COJ Planning Department
    - ☐ COJ PU
    - ☐ COJ PW
    - ☐ Fire
    - ☐ Police
    - ☐ Nicor
    - ☐ ComEd
    - ☐ Surveyor
    - ☐ Others as necessary
  - ☐ Vicinity Map
  - ☐ Standard Drainage Certificate
    - ☐ I hereby certify either that the surface water drainage will not be changed by the construction at _____ or if the surface water drainage is changed, provision has been made, consistent

with City regulations, for diversion and collection of such surface water on the site. The adjacent lot owners' site drainage will not be affected by the construction of _____. The existing overland flow routes will conform to the original subdivision grading plan and accepted engineering practice. There will be no increase in the velocity of surface water runoff at any point onto adjacent properties and that the volume of runoff onto adjacent properties will not be increased. All requirements of the City's codes, ordinances and regulations related to stormwater management, soil erosion control and grading shall be satisfied at all times.

Contractor: _____
Date: _____
Engineer: _____
Date: _____
Owner: _____
Date: _____

- ☐ Index of Sheets
- ☐ Date of survey
- ☐ Total site acreage
- ☐ J.U.L.I.E Information

☐ Benchmarks

- ☐ Provide two USGS NAVD88 benchmarks within vicinity.

☐ Alignments and Ties (Roadway Projects)

☐ General Notes

- ☐ Legend (Existing and Proposed)
- ☐ Specifications
  - ☐ City Roadway Specifications
  - ☐ Sanitary Construction
  - ☐ Water Main Construction
  - ☐ Storm Sewer Construction
- ☐ Misc. Notes as needed by Engineer

☐ Typical Sections

- ☐ Overall Plan Sheet (optional)
    - ☐ Floodplain/Floodway Limits
    - ☐ Waterways
    - ☐ Wetland Limits
    - ☐ Parks and Public Open Spaces
    - ☐ Permanent Buildings and Structures
    - ☐ Overland flow routes
    - ☐ Proposed improvements in a heavier line weight than existing.
  - ☐ Construction Phasing

- ☐ Existing Conditions and Demolition Plan
    - ☐ Field Tile Survey
    - ☐ Existing easements and dedications referencing recorded document numbers.
    - ☐ Topography depicted with 1-foot contours extending 100’ beyond the property limits.
    - ☐ Existing utilities extending 100’ beyond the property limits.
    - ☐ Existing Streets and Street names
    - ☐ Trees 6” diameter or greater
    - ☐ 100-year floodplain, floodway, water ways.
    - ☐ Wetland boundaries
    - ☐ Items to be removed and/or abandoned.
    - ☐ Existing structures.
    - ☐ Existing encroachments
    - ☐ Existing overland flow routes.

- ☐ Site Grading Plan
    - ☐ Horizontal Scale: 1” = 30’
    - ☐ Show all lot lines, Right-of-Way lines, building setback lines, sidewalks, curb and gutter and center lines.
    - ☐ Existing and proposed contours shall be shown at 1' intervals. Existing contours should be grey scaled.
    - ☐ Show all underground storm sewer, including sump pump connections/junction boxes and identify the pipe size and type.
    - ☐ Show all storm structure numbers, type, size, frame and grate information, rim elevation, and invert information per pipe.
    - ☐ Top of foundation or finished floor shall be indicated on the footprint for the building.
    - ☐ Proposed street centerline elevations shall be indicated every 50' and at the high and low points.

- ☐ Channel or swale flowlines shall be indicated every 50'. Cross-sections are required.
- ☐ Side slopes for swales and berms shall not exceed 4:1.
- ☐ Lowest building opening shall be 2' above 100-year flood elevations, and basement floors shall be at least 2' higher than the normal water level of detention.
- ☐ Top of Foundation (TF) and Lowest Opening shall be 2 feet above any major stormwater conveyance.
- ☐ TF shall be 12" above POP point and 100-year overland flow for minor conveyance.
- ☐ Minimum lot and green area grades shall be 2%.
- ☐ Grades will be given at all property corners, break points, building setback lines, sidewalk, top of curb where lot line intersects, and any location needed to define a drainage pattern.
- ☐ Drainage arrows shall be shown indicating direction of flow.
- ☐ Large arrows shall be used to indicate the overland flood route.
- ☐ Grades shall be shown as a percentage.
- ☐ For residential, label Lookout or Walkout and if Drop Siding is needed.
- ☐ Show all offsite drainage patterns that will affect or be affected by the proposed improvements.

☐ Stormwater Management Facilities Plans shall:

- ☐ Conform to latest Stormwater Management Ordinance
- ☐ Provide normal (NWL) and high-water (HWL) elevations.
- ☐ Provide required and proposed storage volumes.
- ☐ Provide side slopes, above normal water level, of 4:1 or flatter.
- ☐ Provide bottom slopes shall of 0.5% (minimum)
- ☐ Provide 1’ freeboard above HWL
- ☐ Provide overflow weir of either concrete or reinforced turf mat, in accordance to City standard.

☐ Wet/Dry Facilities:

- ☐ 6” diameter underdrain systems required for bottom slopes less than 0.5%
- ☐ Drainage arrows shall be shown.

☐ Wet Facilities:

- ☐ Shall have a 4’ wide safety shelf at a depth of 18” below normal water level.
- ☐ Shall have sedimentation basins at all inlet locations.

☐ Stormwater Management Volume Table

- ☐ Erosion Control Plan
  - ☐ Existing 1’ contours.
  - ☐ Proposed 1’ contours.
  - ☐ Overland flow routes.
  - ☐ NWL and HWL of stormwater management facilities
  - ☐ Erosion Control/Construction Notes.
  - ☐ Silt Fence surrounding the entire perimeter of improvements.
  - ☐ All storm sewer structures, channels, swales, ditches, creeks, waterways, lakes, drainage ways, stormwater management facilities, and excavated material stockpiles shall be shown along with the appropriate erosion control measures and maintenance schedule.
  - ☐ Construction Entrance
  - ☐ Concrete Washout Area

- ☐ Stormwater Pollution Prevention Plan

- ☐ Utility Plan
  - ☐ Watermains, sanitary sewers, storm sewers and sump pump connections shall be shown on one sheet.
  - ☐ All manholes, catch basins, inlets, fire hydrants and valves shall be numbered. Numbers shall correspond with any accompanying reports.
  - ☐ Show connection of all proposed utilities to existing utilities. Indicate all relative information for existing utilities.
  - ☐ Provide utility conflict table detailing vertical separations.

- ☐ Plan and Profile Sheets (Roadways & Utilities) or Site Geometric Plan
  - ☐ Horizontal Scale: 1” = 30’. Vertical Scale: 1” = 5’
  - ☐ Right-of-way dimensions
  - ☐ Easement dimensions
  - ☐ Property line dimensions and lot numbers.
  - ☐ Pavement location and dimensions, including alignment data.
  - ☐ Sidewalk location and dimensions
  - ☐ Bike path “”
  - ☐ Curve radii of approach curb returns
  - ☐ Match lines on all streets.
  - ☐ Street centerline plan and profile
  - ☐ Profile of both existing and proposed ground surface
  - ☐ Show all existing utilities
  - ☐ Street stationing, if applicable
  - ☐ Proposed geometrics

- ☐ Proposed signage, lighting, utility structures (symbols only).
- ☐ Grinding and overlay limits, if applicable.

☐ Sanitary Sewer
- ☐ Refer to Public Utilities Standards

☐ Water Main
- ☐ Refer to Public Utilities Standards

☐ Storm Sewer
- ☐ Minimum main size 12” ID
- ☐ Sump pump conveyance lines shall be 6”
- ☐ Direct connections of sump pumps to the storm sewers shall be:
  - ☐ Blind sump pump connections shall not be allowed
  - ☐ Through a neatly bored hole with a tapping collar.
  - ☐ The pipe does not extend more than 1" into the pipe.
  - ☐ The pipe is firmly grouted.
- ☐ Pipe shall be RCP unless otherwise allowed.
- ☐ Inlets at intersections shall be located upstream of sidewalk crossing.
- ☐ Grade, length, size and type of pipe shall be shown.
- ☐ Minimum depth of cover shall be 1.0' below aggregate base. If not under paved surface minimum cover shall be 1.0'.
- ☐ Rim and invert elevations shall be shown in plan and profile.
- ☐ Storm sewer main line will be shown in plan and profile views.
- ☐ The maximum distance between manholes shall not exceed 300'.
- ☐ No more than 300 feet from one direction draining to an inlet.
- ☐ The storm sewer system shall be designed in accordance with the rational method using a 10-year design storm frequency.

☐ Roadways
- ☐ All centerline stationing shall be shown.
- ☐ All vertical and horizontal curve information shall be shown.
  - ☐ Vertical curve required for grade difference greater than 1.0%.
  - ☐ Minimum length of curve shall be 100’.
  - ☐ Minimum K value = 25.
- ☐ Corner curb radius shall be:
  - ☐ 50’ for major streets
  - ☐ 35’ for local, industrial, commercial, and minor collector streets.
  - ☐ 30’ for residential streets including cul-de-sacs.
- ☐ Direction of flow along curbs shall be indicated with arrows.

- ☐ No surface water is carried across or around any street intersection for a distance greater than 300'.
- ☐ Grades and gradients shall be as follows:
  - ☐ 0.5% minimum, 3% maximum on industrial and commercial streets.
  - ☐ 0.5% minimum, 6% maximum on cul-de-sac, residential, and collector streets.
  - ☐ 0.5% minimum, 4% maximum on major streets.
- ☐ All streets must be bounded by integral concrete curbs and gutters.
  - ☐ Curbs shall be Type M-3.12 on residential streets only.
  - ☐ Curbs shall be Type B-6.12 unless otherwise specified.
- ☐ Minor streets shall be laid out such that their use by through traffic will be discouraged.
- ☐ Centerline offsets must be at least 200'.
- ☐ Clear visibility shall be provided as follows:
  - ☐ 300' on major streets
  - ☐ 200' on collector streets
  - ☐ 100' on all other streets.
- ☐ Alleys are not permitted unless deemed necessary.
- ☐ Cul-de-sacs are discouraged, but if approved shall meet the following guidelines:
  - ☐ Maximum length of cul-de-sac shall be 600' measured along the centerline of the right-of-way, through the center of the bulb, and to the far end of the right-of-way.
  - ☐ Minimum length of cul-de-sac shall be 275.'
  - ☐ Cul-de-sac shall be nearly circular shape.
  - ☐ Cul-de-sac shall have a minimum outside diameter of 150' and a minimum paved width of 100' face to face of curb.
- ☐ Turnarounds shall be provided at all dead-end streets.
- ☐ Refer to City Code for additional requirements.

☐ Intersection Details

- ☐ Scale shall be 1" = 10'
- ☐ Drainage arrows with percent grade.
- ☐ Spot elevations shall be provided.
- ☐ ADA ramp configurations and slopes
- ☐ Proposed utility structure locations.
- ☐ Proposed intersection geometry callouts.

- ☐ Site/Street Lighting Plan
  - ☐ Streetlight maximum spacing shall be in accordance with IES requirements and/or ComEd standards.
    - ☐ One streetlight is required at each intersection, curve, and cul-de-sac.
    - ☐ Streetlight shall be located on the property line and on the opposite side of the street from the watermain.
    - ☐ Streetlights shall be a minimum of 3’ from the back of the curb to the face of the pole.
  - ☐ City/ComEd details
- ☐ One Line Wiring Plan
- ☐ Photometric Plan
  - ☐ Conform to City Site Lighting Ordinance.

- ☐ Pavement Marking and Signage Plan
  - ☐ Signage and striping shall conform to MUTCD and IDOT specifications.
  - ☐ All proposed public and private pavement marking and signage, showing type, size, and location.
  - ☐ All striping shall be recessed as directed by the Director of Public Works.

- ☐ Traffic Signal, Interconnect, and Wiring Plan (Roadway Projects)
  - ☐ Plan should conform to MUTCD and IDOT specifications.

- ☐ Traffic Control Plan (Roadway Projects)
  - ☐ Traffic control layout shall conform to IDOT standards.
  - ☐ Temporary traffic control indicating signage, striping, or flaggers.

- ☐ Construction Detour Plan (Roadway Projects)
  - ☐ Construction detour shall be coordinated with City Traffic Engineer.

- ☐ Cross Sections (Roadway Projects)
  - ☐ Horizontal Scale: 1” =10’. Vertical Scale: 1” = 5’.
  - ☐ Proposed and existing elevations
  - ☐ True proposed cross-section including sidewalk.
  - ☐ Cross-sections shall be provided at 50’ intervals, and at all driveways and intersections.
  - ☐ Proposed utilities to be shown as necessary.

- ☐ Landscaping Plan
    - ☐ Proposed planting list including species, size, and quantities.
    - ☐ Details and planting schedule.
    - ☐ Existing and proposed utilities superimposed and grey scaled.
    - ☐ Existing (to remain) and proposed freestanding sign locations.
    - ☐ Wall-mounted utility service panels, meters, etc.
    - ☐ Include plan note stating "All deviations from this plan, including those deemed necessary by observed field conditions at the time of planting, must be approved by the Director of Public Works.
  - ☐ Tree Survey and Preservation Plan
    - ☐ Shall conform with Joliet Tree Preservation Ordinance

- ☐ Detail Sheets per Section Above
    - ☐ Refer to IDOT and COJ Standards.
    - ☐ Details utilized shall be provided within plans.

AS-BUILT PLANS

- ☐ General Requirements
  - ☐ Show any changes in location of the constructed improvements.
  - ☐ As-built Drawings shall be provided in the following formats:
    - ☐ One (1) bond paper copy; signed and sealed.
    - ☐ All electronic files required to document the as-built drawings as defined herein in AutoCAD 2021 (or newer) format via the Cities Project Dox online portal. All electronic files shall be submitted in accordance with the City of Joliet 'Requirements for Electronic Submittals'.
  - ☐ 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.
  - ☐ All structures shall be numbered or lettered using the same system as the approved engineering plans for the development.
  - ☐ The condition of the Bench Mark shown on the approved engineering plans shall be verified and noted on the as-built 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
  - ☐ 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.
- ☐ Show rim elevations for all valve vaults and valve boxes, including hydrant auxiliary boxes.
- ☐ Show elevation of finished grade at hydrant for all fire hydrants.
- ☐ Verify that all structures are visible, at the proper grade, and that all valves and b-boxes are operational prior to submitting as-built drawings.
- ☐ Show as-built dimensions to water shut off.

☐ Storm Sewer and Stormwater Management System
- ☐ Show locations, material, sizes and slopes of all culverts and storm sewer lines.
- ☐ 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 as-built drawings.
- ☐ 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 as-built high water elevation for all basins and the normal water elevation and bottom contours for retention basins.
- ☐ 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.
- ☐ Provide As-built Stormwater Volumetric Table
- ☐ Certify that the project is in compliance with the communities Stormwater Ordinance.

☐ Sanitary Sewer System
- ☐ Show locations, material, sizes and slopes of all sanitary sewer mains and service lines.
- ☐ 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 as-built drawings.
- ☐ Show as-built dimensions to sanitary sewer service lines.

☐ Miscellaneous Improvements
- ☐ Show location of all street lights and electric lines from street lights to service box.
- ☐ Verify that all concrete monuments shown on the Final Plat of Subdivision have been set and are visible. If not, notify Surveyor of As-built to have them installed.

- ☐ Show parcel boundary lines, road ROW lines, and easement lines per final plat.
- ☐ Show road centerlines.
- ☐ Show jurisdictional Wetlands / Waters of the U.S. extent.
- ☐ Show street sign location.
- ☐ Show regulatory sign location and type (stop, yield, etc.).
- ☐ Show traffic signal location.
- ☐ Show pavement extent.
- ☐ Show curb and gutter extent, indicate type.
- ☐ Show gravel shoulder extent.
- ☐ Show sidewalk extent.
- ☐ Show trail / path extent
- ☐ Certification
- ☐ The following certification, signed by an Illinois Licensed Professional Engineer, shall be placed on the required as-built drawings:

State of Illinois)
)ss
County of _____)

We, (name of engineering firm) , hereby certify that these "As-built 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 "As-built 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 City of Joliet.

By: (Signature).

Title: .

Date: . seal

Illinois Licensed Professional Engineer No. .

License Expiration Date: .

☐ The developer/owner of any project within the City of Joliet shall submit a version of the final approved plans in electronic format for incorporation into the Joliet's geographic information system (GIS). This requirement applies to all new development that occurs within the City of Joliet.

☐ 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 (NAD_1983_StatePlane_Illinois_East_FIPS_1201 feet) 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 Joliet in one of the following formats:
  - DWG (AutoCAD format)
  - ESRI Feature Class 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 Joliet via Project Dox online portal.

☐ 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
- ☐ Streetlights
- ☐ Benchmarks
- ☐ Edge of Pavement
- ☐ Curb
- ☐ 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.