

## **Noblesville Digital As-built Submittal Requirements**

### **1.0 General**

- 1.1.** The requirements of this section apply to all subsequent sections. **1.2.** Files can be zipped and emailed to [mmorris@noblesville.in.us](mailto:mmorris@noblesville.in.us)
- 1.3.** The body of the email shall include the following:
- 1.3.1. Engineering Company Name with prepared by statement
  - 1.3.2. Project Name
  - 1.3.3. Date that data was created
  - 1.3.4. Designate submittal as As-Built
- 1.4.** Overall Files must be submitted in DWG format. The Plan & Profile sheets can be PDF.
- 1.5.** Each file should be for one section of development. Multiple sections will not be accepted in one file and care must be taken to clearly mark existing infrastructure facilities.
- 1.6.** If multiple sections of a project are being submitted, files shall be placed in separate emails.
- 1.7.** File names should make sense to a viewer who may not be familiar with the consulting firms naming conventions and be indicative of the contents of the file.
- 1.8.** All pertinent drawing elements will reside in the overall drawing file. There shall be no cells, nodes, blocks, or reference files (x-refs) attached to the drawing.
- 1.9.** Separate layers for structures, pipes, annotation, etc. with a logical description for each layer.
- 1.10.** Projection shall be referenced to NAD83, Indiana State Plane Coordinate System, East Zone, using International Survey Feet and per the Hamilton County datum. Elevations shall be in the NAVD 88 vertical

datum. The coordinate location of the items listed below shall be obtained by a field survey and with vertical data that meets survey grade accuracy.

**1.11.** Tie into section corners in the Indiana State Plane Coordinate System to insure proper orientation. Section corner tie sheets can be obtained from the Hamilton County Surveyor's web page.

**1.12.** All easements shall be represented and drawn as closed polylines representing aggregate areas.

**1.13.** Must have graphical representation of all off-site platted easements, right-of-ways, lot lines, etc. encompassing infrastructure improvements.

**1.14.** Open Ditches will be As-Built and have the following items:

1.14.1. Open Ditch showing: flow line, toe of slope, top of bank, and sediment basins

1.14.2. Cross sections taken a minimum of every 100 ft. and at any significant bend

1.14.3. Outlet pipes into open ditch showing: size, material and invert

1.14.4. Surface Pipes showing: size, material, and invert

1.14.5. Special Structures showing: size, material, and invert

1.14.6. Tributaries: shown 100 feet upstream and its cross section

1.14.7. Filter Strips and their width

1.14.8. Utilities (pipe lines, gas lines, sewer lines etc.)

1.14.9. Easements (See Section 1.12 & 1.13)

## **2.0** As-Built- Infrastructure

**2.1.** Along with the AutoCad file the submittal should have either Object Data Table (provided on line or contact Noblesville GIS) or ESRI Shapefiles.

2.1.1. We use AutoCad Map, if Civil 3D is used structures must be exploded to blocks and lines need to be polylines.

**2.2.** All BMP's must be submitted according to the Object Data Table.

**2.3.** The digital construction file must be revised to show the exact As-built location of the following items:

2.3.1. Storm water Manholes, Inlets, End Sections, Risers, Pipes

- 2.3.2. Detention-Retention Ponds with Normal Pool Elevation & Top of Bank drawn as a closed polyline
  - 2.3.3. Sub-Surface Drains- street and laterals (street SSD drains must end into the Storm Structure Block insertion point.)
  - 2.3.4. Flow line of swales and ditches with a bottom width of 1 foot or greater.
  - 2.3.5. Sanitary sewer manholes, sewer mains, lift stations, force mains, wyes, laterals
  - 2.3.6. Air/ vacuum relief manholes
  - 2.3.7. Lateral markers
  - 2.3.8. End of stubs
  - 2.3.9. Hand holes and pavement loops
  - 2.3.10. Pipe casing
  - 2.3.11. Water Main lines, laterals, constructed, hydrants, reducers, sleeves, tees, crosses, saddles and valves
  - 2.3.12. BMP's
  - 2.3.13. Underground Detention Facilities
  - 2.3.14. Signage
- 2.4.** The As-Built location of the sewer wyes shall be located on the plans as measurement along the pipe centerline from the nearest downstream manhole.
- 2.5.** Sub-surface drain lateral locations should be located with a proper distance from the nearest structure or property line.
- 2.6.** All storm water and sanitary structures will have top of castings and invert elevations. Design Values for all infrastructures shall be the As-built values and any construction values will be crossed out with the construction data still legible.
- 2.7.** Structures will be cells or blocks and have an appropriate Structure ID using the same attribute field name i.e. STR\_NUM
- 2.8.** All Infrastructure pipes will have a length, pipe size (in inches), material and type (Class III, SDR 35, etc) listed.

**2.9.** Infrastructure line work must be continuous polylines with a beginning and ending at a structure insertion point, connecting only two structures per line. Lines must be drawn with the direction of flow.

**2.10.** The following information shall be provided for the Sanitary Laterals: Lot Number, Address, Type, Main ID, Dist Back to structure, Pipe Length, Diameter, Material and the connection type.

**2.11.** All Storm Structures will be labeled as what the purpose of the structure is (for instance if the structure takes in surface runoff then it is an inlet). Using the NASSCO MACP definition.

### **3.0** Additional Overall Layers

**3.1.** Layers that need to be included in the overall file must include but not limited to:

- 3.1.1. Lot Dimensions
- 3.1.2. Lot Numbers
- 3.1.3. Parcel Lines
- 3.1.4. Perimeter Boundary Lines
- 3.1.5. Right of Way Lines
- 3.1.6. Easements
- 3.1.7. Road Center Lines
- 3.1.8. Lots Square Feet
- 3.1.9. Street Names
- 3.1.10. Monumentation
- 3.1.11. For Commercial- building and parking outlines

**3.2.** The digital file that is sent needs to match exactly the plat that is submitted for recording.

**3.3.** The following sheets are to be submitted in PDF format but not limited to:

- 3.3.1. Cover Sheet
- 3.3.2. Grading plan
- 3.3.3. Sanitary sewer system plan/ profile
- 3.3.4. Storm sewer system plan/ profile
- 3.3.5. Water plan/ profile
- 3.3.6. Lighting plan

- 3.3.7. Erosion/ sediment control
- 3.3.8. Street signs
- 3.3.9. Private utility plan
- 3.3.10. Any additional details specific to the project

Please send all Submittals to:

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Noblesville GIS  
[gis@noblesville.in.us](mailto:gis@noblesville.in.us)