

## PREFACE

In order to create a consistency and increase efficiency, Comal County, Comal Appraisal District, New Braunfels Utilities, the City of New Braunfels, and other government entities and utilities have created a set of standards for all digital master plan, plat and construction deliverables. The creation of the standards has become necessary with the rapid growth of the area and the improving mapping capabilities of the entities.

Two major issues are addressed by creating the standards: uniform layer names and the use of three control points to provide the proper georeferenced location of the development.

The layer names were adopted from the Bexar Appraisal District to enable the appraisal districts to share a standard and therefore easily transfer information. All deliverables must have the layer names as identified in the standards; layer names used in-house during construction may be changed prior to delivery. Obviously not all names will be needed. Use only the names appropriate for your project.

The use of three control points in NAD 83 State Plane South Central Texas 4204 (feet) will permit the deliverable to insert properly and immediately into the existing database of the County, City or Utility.

*NBU will not accept digital information that does not meet these standards. Before Final Acceptance is granted, the CAD Deliverables shall be reviewed for adherence to the Submission Standards.*

Please begin to submit digital information using the new standards. We do appreciate your working with us toward the standardization of all our databases. We feel the long-term efficiency and accuracy that will be gained will be greatly beneficial.



# CAD DELIVERABLES SUBMISSION STANDARDS

## SECTION I PURPOSE

These standards were created and approved in an effort to create a consistency throughout the Cities, Counties, Appraisal Districts, and Utilities in the quality and compatibility of plats and other types of deliverables.

This set of standards will provide for the efficient incorporation of the deliverables into the entities' base files, especially that of the Comal Appraisal District who will maintain the parcel information for Comal County. The consistent layer naming will also provide the Comal, Bexar, and Guadalupe Appraisal Districts the ability to interchange files with ease and speed.

NBU will not accept digital information that does not meet these standards. Before Final Acceptance is granted, the CAD Deliverables shall be reviewed for adherence to the Submission Standards.

## SECTION II REQUIREMENTS

- 1. Layer names – Use the following layer names as appropriate for submittal of plats and construction plans. Each layer should include data specific only to that layer. Names are based on the Bexar Appraisal District for compatibility

<b>Parcel Base</b>	
<u>Feature</u>	<u>Layer Name</u>
Survey / Abstract Lines	AbstractLines
Addresses	AddressPoint
Unit Number	UnitNum
Block Number	BlockNum
Lot Number	LotNum
New City Block Number	NCBNum
Coordinates	Dimensions
Subdivision / Unit Boundary	UnitBoundary
All lot lines / parcel lines	Parcel
Railroad	RailRoadCL
Railroad right-of-way	RailRoadROW
Streets / right-of-way – public	StreetROW
Streets / right-of-way – private	StreetROWPrivate
Streets / center line – public	StreetCL
Streets / center line – public	StreetCLPrivate
Streets / pavement – public	StreetPvmt
Streets / pavement – private	StreetPvmtPrivate
Streets names	StreetNames
Subdivision Names*	SubName

<b>Taxing Units</b>	
<u>Feature</u>	<u>Layer Name</u>

Appraisal District	Appraisal District
City	City
County	County
School District	SchoolDistricts
Special District	SpecialDistricts
Tax Increment Financing	Tiffs
Utility District	Utility District
Water District	Water District

**Topo**

<u>Feature</u>	<u>Layer Name</u>
Waterways	Creek
Floodplain	FemaFlood
Easements	*
Contours	Contours
Contour Text	CountourText

**Other**

<u>Feature</u>	<u>Layer Name</u>
Peripheral information (title blocks, signature blocks, logos, borders, north arrow, scale and notes)	Text

\* Specify Subdivision and easement names in appropriate layers as requested by City of New Braunfels and New Braunfels Utilities shown below:

- Subd Name Res
- Subd Name Comm
- Esmt utility
- Esmt drainage
- Esmt non access
- Esmt access
- Esmt pipeline
- Esmt LCRA

If not in U.E., separate into:

- Esmt drainage utility
- ROW drainage utility
- ROW drainage
- Esmt electric
- Esmt NBU electric
- Esmt NBU Water
- Esmt NBU Sewer
- Esmt phone
- Esmt gas

2. **GPS points shall be required from the Developer’s Contractor or Engineer. A minimum of three coordinate points for georeferencing shall be required. The water and wastewater GPS points shall be to survey grade. The electric GPS points shall be to map grade.**

**Water**

- Vertical bends and edge of steel casing (if applicable) prior to backfill
- Horizontal bends prior to backfill
- Tees prior to backfill
- Fittings (reducers and couplings) prior to backfill



Fire hydrants (top of flange)  
Valves  
Meters (top center of box)  
Blow off assembly  
Corner slab of water tank & gate valve on water tank

**Wastewater**

Manholes  
Cleanouts  
Corner slab of lift station

**Electric**

Poles  
Transformers, both above and underground (front lock)  
Pull boxes  
Street lights

3. **Water valves shall be represented with one of the following symbology:**  
4. **State Plane NAD 83 Texas South Central Zone 4204, in feet.**
5. **A minimum three coordinate points for georeferencing shall be required.**
6. **All parcel information must be converted to AutoCAD DXF files.**
7. No three dimensional objects.
8. CAD files shall be submitted on one of the following media:
  - Compact disk (CD-ROM) may be up to 700 MB. CD's may not contain compressed (ZIP or EXE) files.
  - Web Site via file transfer protocol (FTP). Provided by Developer's Consultant.
  - Email if less than 5 MB.
9. One text style to be used; style to be named "Standard."
10. Street Names to be in all capital letters.
11. Any CAD file with xrefs shall be submitted as separate individual DWG files. To eliminate imbedded or bundled files, no xrefs may be inserted into the file. Detach COGO files and other survey files and submit separately.
12. All submissions must be to scale.
13. All drawings and related files, including specifications, CAD drawings, and other materials generated by the contractor or engineer for the project shall be property of NBU upon their delivery to NBU. This applies to content as well as physical media. NBU will not accept disclaimers nullifying this requirement.

**SECTION III CONTACT INFORMATION**

NBU Water Systems Engineering	(830) 608-8971	<a href="mailto:dayala@nbutexas.com">dayala@nbutexas.com</a>
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