

Engineering and Capital Projects

Civil 3D Survey Deliverables Checklist at 60% 90% 100% Date: _____

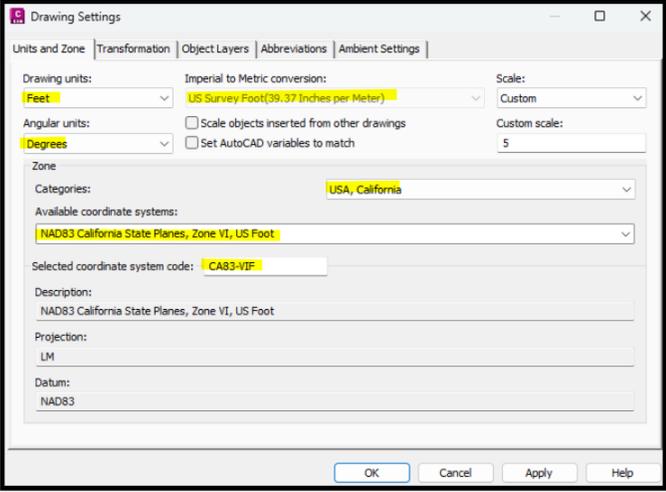
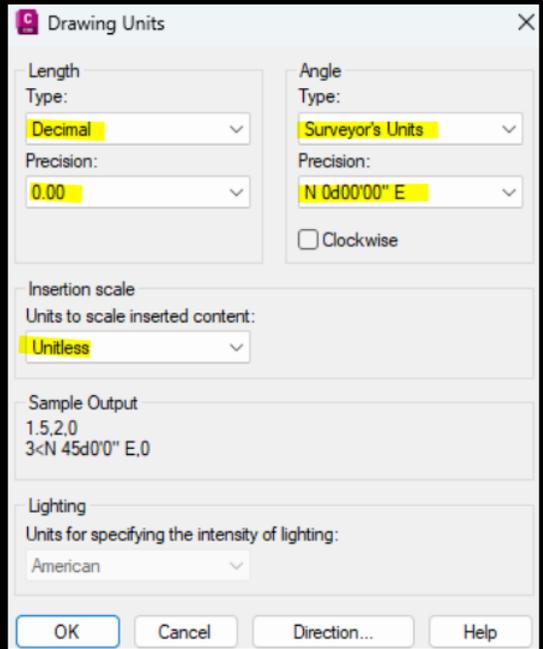
Project Name:

WBS#:

Drawing#:

Project Manager:

Project Engineer:

DESIGN				
YES	NO	N/A	ITEMS	COMMENTS
			<p>1.The appropriate City Civil 3D Template has been utilized as required by Citywide CADD Standards.</p> <p>Note: City CADD resource files can be accessed at the following link: https://www.sandiego.gov/ecp/edocref/drawings</p>	
			<p>2.Drawing Settings Units and Zone are set to US Survey Feet (CA83-VIF) as follow:</p> 	
			<p>3. Drawing Units are set as follows:</p> 	

		4. The file naming convention is WBS#_Proposed Asset Type .dwg.(e.g. B18181 B18182 Prop WTR.dwg, B18181 B18182 Prop SWR.dwg, B18181 B18182 Prop CURB.dwg, B18181 B18182 Prop SD.dwg, etc.).	
		5. The design file and all external reference files are included in an ETRANSMIT zip file.	
		6. The design file is geospatially correct and referenced with the preliminary topographic survey file for the project.	
		7. Design line work is on the correct layer for its specific asset type. See naming convention in 4 above.	
		8. Design line work is precise. Only the most current design line work is shown, with no gaps or overlaps on lines that are intended be connected.	
		9. The civil design dwg file contains horizontal alignments and vertical profiles for the proposed design line work.	
		10. The horizontal alignment data in the dwg file matches the plan annotations. (Notes, Callouts, Tables, etc.)	
		11. Alignments are free of gaps and overlaps.	
		12. Horizontal alignments, with their active profiles, have been provided in an xml file. (LandXML)	
		13. Coordinates shown on the plans have been assigned unique point numbers and are annotated on the plans.	
		14. Numbered points are shown in a coordinate table on the plans. (Format PNEZD)	
		15. The civil design .dwg file contains the points shown on the plans.	
		16. An xml file, xlsx, or csv file containing the points on the plans, formatted PNEZD, has been provided.	
		17. Right of way lines are based on field survey measurements and a boundary analysis by a Licensed Land Surveyor.	
		18. Preliminary Topographic files have been provided. These include, but are not limited to, the following file extensions: .job, .dwg, .xml (surface file), .pdf, .docx, .csv (Format PNEZD).	

COVER SHEET				
YES	NO	N/A	ITEMS	COMMENTS
			19. Topography Source. (Work Order Number, Topo Name, Company Name and Date of the topographic survey on which the design is based). If multiple topographic sources are used, include the corresponding information on each applicable plan sheet.	
			20. Basis of Bearings is tied to ROS 14492, based on CCS 1983, Zone 6 and must be taken from the topographic survey on which the design is based.	
			21. Benchmark information shall be taken from the topographic survey on which the design is based and shall correspond to a benchmark listed in the City of San Diego Vertical Bench Book. The vertical datum shall be NGVD 29.	

TITLE BLOCK				
YES	NO	N/A	ITEMS	COMMENTS
			22. The names of the DCE, PM, PE are provided in the Title Block.	

LEGEND				
YES	NO	N/A	ITEMS	COMMENTS
			23. Survey monuments are clearly depicted on the improvement plans using appropriate symbols to distinguish between well monuments and property markers. These symbols must be defined in a legend, which may be placed either on the cover sheet or directly on the Survey Monumentation Sheet. A separate monumentation sheet is not required if all monuments are adequately shown and labeled on the improvement plan sheets.	
			24. Monumentation Note is on the cover sheet or on its own Monumentation sheet.	

PLAN VIEW				
YES	NO	N/A	ITEMS	COMMENTS
			25. Record width of right-of-way are shown on the plans, including all pertinent easements, vacations and dedications where applicable.	
			26. Record, non-record monuments, and Benchmarks shall be shown on the plans. When boundary analysis is required for the project, monuments control the boundary determination. The monuments are shown on a Monumentation Map, and all monuments within construction limits are shown (see City of San Diego Bulletin 591).	
			27. Monuments in the topo survey files are in the "Found Points" layer.	
			28. Proposed improvements are designed within the right-of-way or easements.	
			29. Easements are in place for proposed infrastructure crossing into private or city owned property.	
			30. Plans show survey data for Easements, Temporary construction areas, jurisdictional waterways delineations (if applicable), etc.	
			31. Linear objects not parallel with centerline have independent layout line alignments. e.g. Curb Return layout lines.	
			32. Horizontal alignments are provided for proposed linear objects such as sewer, water, storm drain, face of curb, walls, street centerline, etc.	
			33. Horizontal alignment reports and vertical profiles are shown on the plans.	
			34. Station callouts are within the station range of an alignment. (Extend alignment to reach all station callouts.)	
			35. Appurtenances are drawn in the .dwg file and called out on the plans.	
			36. Storm drain cleanouts, inlets and structures are drawn to scale.	
			37. Storm drain alignments run along centerline of pipe and through the center of structure via the ends of pipe at the inside face of structure.	

		38. Alignment Reports are shown on plans. (Stations, Coordinates and Course Data with Bearings and Angles formatted to Degrees, Minutes, and Seconds)																																									
		<table border="1"> <thead> <tr> <th colspan="8">ALIGNMENT: SEMINOLE DR CL</th> </tr> <tr> <th>Number</th> <th>BEGIN STATION</th> <th>END STATION</th> <th>BEGIN N/E</th> <th>END N/E</th> <th>ELEMENT</th> <th>BRG/DELTA</th> <th>DIST/LENGTH</th> </tr> </thead> <tbody> <tr> <td>L2</td> <td>10+00.00</td> <td>11+80.42</td> <td>N: 1857995.07 E: 6312277.82</td> <td>N: 1858155.49 E: 6312278.04</td> <td>STRAIGHT</td> <td>N00°33'55"W</td> <td>D = 180.42</td> </tr> <tr> <td>C4</td> <td>11+80.42</td> <td>12+70.09</td> <td>N: 1858155.49 E: 6312278.04</td> <td>N: 1858255.04 E: 6312315.22</td> <td>R = 142.50'</td> <td>DELTA = 44°05'43"</td> <td>L = 109.67</td> </tr> <tr> <td>L3</td> <td>12+70.09</td> <td>19+42.97</td> <td>N: 1858255.04 E: 6312315.22</td> <td>N: 1858742.88 E: 6312778.65</td> <td>STRAIGHT</td> <td>N43°31'48"E</td> <td>D = 672.88</td> </tr> </tbody> </table>	ALIGNMENT: SEMINOLE DR CL								Number	BEGIN STATION	END STATION	BEGIN N/E	END N/E	ELEMENT	BRG/DELTA	DIST/LENGTH	L2	10+00.00	11+80.42	N: 1857995.07 E: 6312277.82	N: 1858155.49 E: 6312278.04	STRAIGHT	N00°33'55"W	D = 180.42	C4	11+80.42	12+70.09	N: 1858155.49 E: 6312278.04	N: 1858255.04 E: 6312315.22	R = 142.50'	DELTA = 44°05'43"	L = 109.67	L3	12+70.09	19+42.97	N: 1858255.04 E: 6312315.22	N: 1858742.88 E: 6312778.65	STRAIGHT	N43°31'48"E	D = 672.88	
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		39. Station and Offset callouts are shown on plans appropriately.																																									
		40. Station equations are shown at locations where alignments connect or have a defined relationship with another alignment.																																									
		41. Top of curb profiles have been provided for Proposed Curb that has designed elevations.																																									
		42. Curb alignment stationing is along Face of Curb line.																																									
		43. Curb Stations for the horizontal events are called out on the plan view.																																									
		44. Curb Stations for the centerlines of ramps and driveways, at Face of Curb, are called out on the plan view.																																									
		45. Curb Station and Offset at the back of landing for the centerline of directional curb ramps are shown on the plan view.																																									
		46. Curb Station, Offset and design elevation, for the horizontal and vertical events of the back of sidewalk, along with cross slope percentages are shown on the plan view.																																									
		47. Standard drawing numbers are provided.																																									
		48. Driveway widths are called out on the plan view.																																									

PROFILE VIEW				
YES	NO	N/A	ITEMS	COMMENTS
			49. All tie in points are taken from the preliminary topo. (No GIS data).	
			50. Vertical Profiles on plans are stationed and match their horizontal alignments.	
			51. Profiles show design stations and elevations at vertical event points and slope percentages between them. Exception: water distribution lines, if minimum depth governs.	
			52. Slope percentage is shown to 2 decimal places.	
			53. Standard Curb Ramps on designed proposed curb alignments may be represented by "Hypothetical" Top of Curb Profiles.	
			54. Special Design Curb Ramps on designed proposed curb alignments are represented by designed "True" Top of Curb Profiles.	
			55. Profiles specify which part of the asset is being elevated. (e.g. TC, FL, IE, TW, TF, FS, etc.)	
			56. Storm drain profiles show stations and IE grades at all vertical events, including ins and outs of structures.	