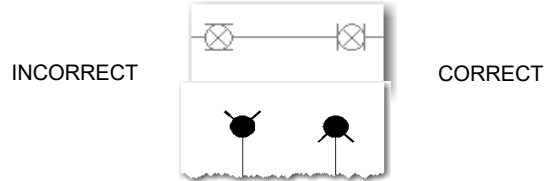


# Appendix A – General Information

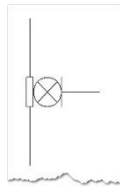
## Symbols/Blocks (for Main Extensions only)

Note: Dynamic blocks do not work with Civil 3D styles.

- Rotate symbols to the proper orientation.



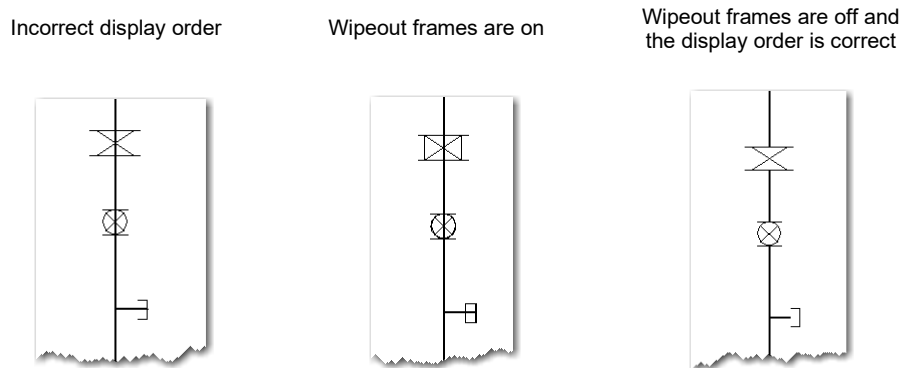
- Adjust the hydrant number as needed.
- Tapping sleeves do not require a tee symbol, place the sleeve portion along the main.



- Graphically place the plug or valve away from the fitting on tees and crosses.



- Adjust symbols with wipeouts as needed.



Note: For wipeouts to be effective, the symbols need to be brought to the front. Turn off wipeout frames before plotting hardcopies, PDFs, and DWFs.

## Plotting (for Main Extensions only)

The provided CTB file shall be used when plotting; however, it is understood this may not be effective when other standards are already in place. If this is an issue, in the provided MainExtensions.dwg the layer colors may be changed; however, the pen widths need to mimic Denver Water's Color Dependent Plot Style Table.

Note: Denver Water will accept plans plotted using another CTB file if the end result is reflective of the standards shown on the Example Sheets (see Appendix C). This allowance is for Main Extension submittals only.

Color Dependent Plot Style Table (DW\_Engineering.ctb)

LnWt (in)	0.005	0.0110	0.0177	0.0236	0.0290	0.0354	0.0417	0.0472	0.0530	0.0140
	1	2	3	4	5	6	7	8	9	10
	11	12	13	14	15	16	17	18	19	20
	21	22	23	24	25	26	27	28	29	30
	31	32	33	34	35	36	37	38	39	40
SCREENED	41	42	43	44	45	46	47	48	49	50
	51	52	53	54	55	56	57	58	59	60
	61	62	63	64	65	66	67	68	69	70
SCREENED	71	72	73	74	75	76	77	78	79	80
	81	82	83	84	85	86	87	88	89	90
	91	92	93	94	95	96	97	98	99	100
	101	102	103	104	105	106	107	108	109	110
	111	112	113	114	115	116	117	118	119	120
	121	122	123	124	125	126	127	128	129	130
	131	132	133	134	135	136	137	138	139	140
	141	142	143	144	145	146	147	148	149	150
SCREENED	151	152	153	154	155	156	157	158	159	160
	161	162	163	164	165	166	167	168	169	170
	171	172	173	174	175	176	177	178	179	180
SCREENED	181	182	183	184	185	186	187	188	189	190
	191	192	193	194	195	196	197	198	199	200
	201	202	203	204	205	206	207	208	209	210
	211	212	213	214	215	216	217	218	219	220
	221	222	223	224	225	226	227	228	229	230
SCREENED	231	232	233	234	235	236	237	238	239	240
	241	242	243	244	245	246	247	248	249	250
SCREENED	251	252	253	254	255	VARIOUS				

# Linetypes

## DENVER WATER LINETYPES

-----	IRRIGATION LINE
-----	03in-AND_LESS_WATER_LINE
_____	04in-WATER_LINE
-----	06in-WATER_LINE
_____	08in-WATER_LINE
-----	10in-WATER_LINE
-----	12in-WATER_LINE
-----	14in-WATER_LINE
_____	15in-WATER_LINE
-----	16in-WATER_LINE
-----	18in-WATER_LINE
-----	20in-WATER_LINE
-----	24in-WATER_LINE
-----	CONDUIT
_____	FIRE HYDRANT LINE
_____	FIRELINE
_____	DOMESTIC WATER
+++++	TRACKS
~	ABANDONED WATER LINE

## EASEMENTS AND LICENSES LINETYPES

_____	CENTER2
-----	DASHED2
.....	DIVIDE2
_____	DWDROW
-----	DWDPROP
- x - x - x -	FENCELINE3
-----	SEC_16TH
-----	SEC_64TH
-----	SEC_FULL
-----	SEC_QUARTER
-----	RIVER2

## Batch Standards Checker

- Click the *Configure* button located on the *Manage* tab on the *CAD Standards* panel (alternately type *\_standards* in the *Command* line). When the *Configure Standards* window appears, on the *Standards* tab click the + button. Go to the desired DWS file and click *Open*.

NOTE: Use the correct DWS file from the corresponding support files based on submittal type.

- In the *Configure Standards* window, click *Check Standards*. The *Check Standards* window will appear with problems and possible solutions listed in the *Replace with* section. Review the *Problem* and analyze how to fix it with the *Replace with* options. If applicable, select an option from the *Replace with* list and click *Fix*.

NOTE: The DWS files contain the layers provided in the drawing. Run the Standards Checker against Denver Water specific layers to minimize the errors. Newly added layers will not be in the Standards Checker.

- If the *Problem* is an acceptable exception, select *Mark this problem as ignored* and click *Next*. After the problems are fixed or ignored, the *Check Standards – Check Complete* window will appear with a brief explanation, click *Close*. Then click *Close* on the *Check Standards* window.

NOTE: The Standards Checker will generally show errors; this will not be used against the submitter. Denver Water is using the findings to assess issues.

## Standards Audit Report / Save Check File

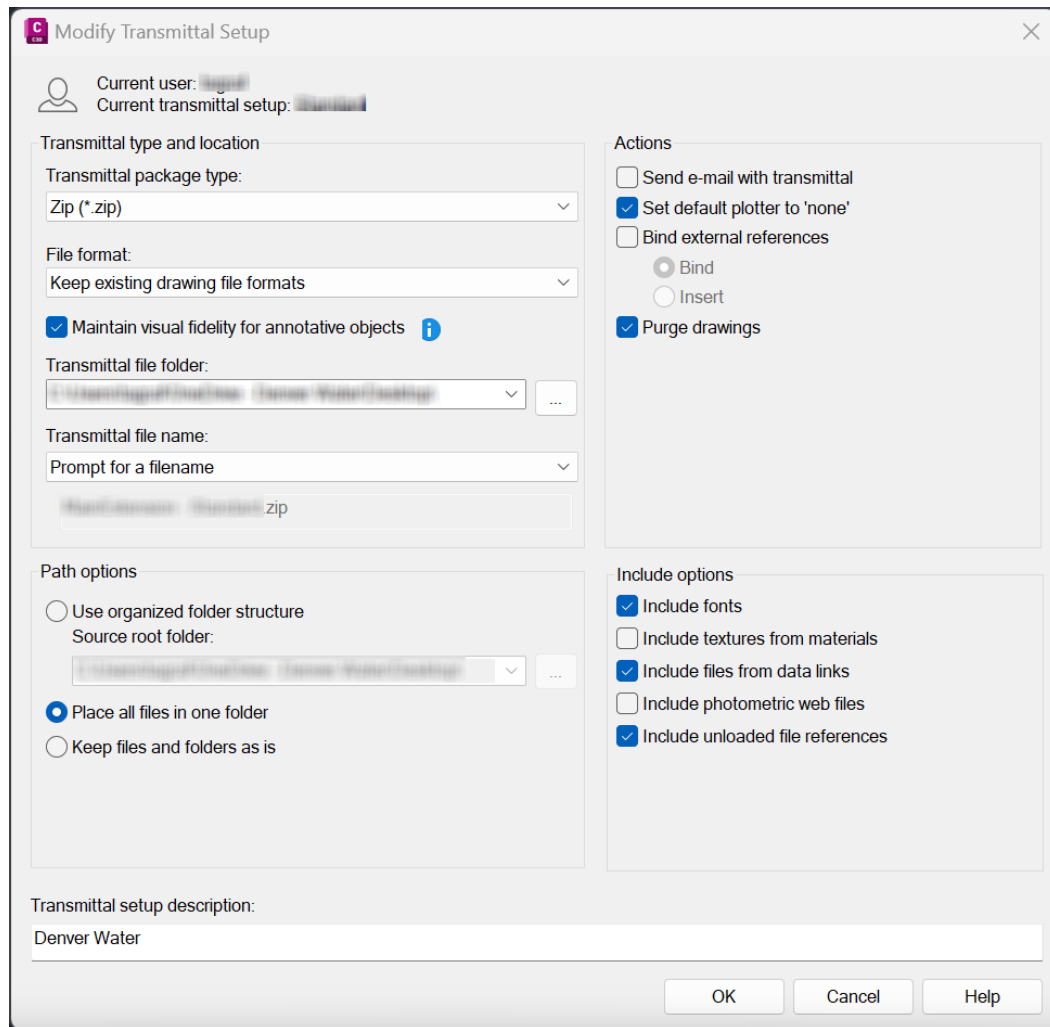
- Click the *Start* button on the Taskbar. In the *Search programs and files* field, type *Batch Standards Checker*. Select it when it appears. On the *Drawings* tab, add applicable drawings by clicking the + button. When the *Batch Standards Checker – File Open Dialog* window appears, find the applicable drawings and click *Open*. The *Drawings to check* column will show the selected drawings. On the *Standards* tab, select the *Check all drawings using the following standards file* option. Click the + button to select the appropriate DWS file then click *Open*.

Note: For Capital Projects only – Do not explode title blocks or overwrite attribute fields with text. To add text, refer to the Sheet Set Manager (SSM); to add company logos insert them as a block on the G-ANNO-LOGO layer and situate them in the designated area of the title blocks.

- The *Standards used for checking all drawings* column will show the selected DWS file. On the menu bar, click *File* and select *Save Check File*. Save the CHX file in the desired location; name it appropriately. On the menu bar, click *Check* and select *Start Check*. The *Progress* tab will display and the internet browser will open, displaying the *Standards Audit Report*. To review the standards violations previously reviewed in CAD, select *Problems*. The report is no longer required for the submittal process but for reference ONLY.

## eTransmit

- To use eTransmit, click the *Application Menu* in AutoCAD, select *Publish*, and select *eTransmit* (or type *ETRANSMIT* in the *Command* line). The *Create Transmittal* dialog box will appear with information for the current drawing only. To add more drawings to the submittal, click *Add File*. When the dialog window appears, go to the additional file location(s), select the files to be included in the transmittal, and click *Open*. (Specific settings shall be maintained when submitting to Denver Water.) Click *Transmittal Setups* and in the window that appears, select *Standard* and click *Modify*. The *Modify Transmittal Setup* window will appear; the following example shows the *required* options:



- Close the *Transmittal Setups* window; in the *Create Transmittal* window click *OK*. When the *Specify Zip File* window appears, go to where the ZIP file will be stored and name it appropriately; click *Save*. Review the *Command* line.

### PDF Files (for Main Extensions only)

- To create a PDF file in AutoCAD, click the *Application Menu*, select *Export*, and select *PDF* (or type `_EXPORTPDF` in the *Command* line). Use the *DWG to PDF* preset when exporting a PDF. When the *Save As PDF* window appears, click the *Options* button, change *Type* to *Multi-sheet file*, change *Layer information* to *Include* and click *OK*. Layers and screening must be viewable in the PDF.
- Alternatively, the *DWG To PDF.pc3* plotter may be used to export PDFs with the following Plot Options checked: *Plot with plot styles*, *Plot object lineweight*, *Plot transparency*. Layers and screening must be viewable in the PDF.

Note: If *Type* will not change, type `EXPORTSETTINGS` in the *Command* line to adjust the options.

- Review the current settings, select where to save the file, and name it as described in the [CAD Standards External Requirements](#).

Note: Create PDF files from the layout tabs; zoom extents in the layout tab before publishing. Note: Do not use hatching, solids, or wipeouts to mask text (see Text in Section 1: Main Extensions).