LAB 2 - Levels

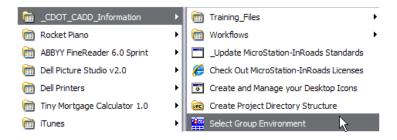
Chapter Objectives:

After completing this exercise you will know how to:

- Attach the appropriate levels by using the Select Group program
- Use Level Display to turn levels on/off
- Use key-ins to turn levels on/off
- Set the active level for placing graphics
- Use shortcuts for turning all levels on/off
- Turn levels off by graphically selecting an element
- Turn different levels on/off in different views
- Customize the Level Display and Level Manager boxes
- Sort levels
- Save a view for later recall
- Access CDOT standard level filters
- Use level filters to manage levels and turn groups of level on/off

Lab 2.1 - Starting MicroStation

1. From your desktop's Start Menu, choose Start > All Programs > _CDOT_CADD_Information > Select Group Environment.



2. In the Select Group Environment box, select xxMulti-Discipline, and then select OK.

CDOT Select Group Environment	
Bridae xxMulti-Discipline	ОК
	Cancel
	About

Note: This will allow you access to all discipline's levels.

3. Start MicroStation and open the design file 12345DES_Model.dgn from the c:\Projects\12345\Design\Drawings\Reference_Files folder.

Look in:	Reference_	Files	👻 🎯 🤌 📂 🖽 🗸	🗋 줄 💼	3D - V8 DGN
(Ha	Name	*	Date modified	Туре	
2	🖊 12345DES_	Align.dgn	6/23/2007 7:12 PM	MicroStat	
ent Places	🕌 12345DES_	Interchange.dgn	11/20/2007 7:46 AM	MicroStat	
	-	Intersec100SH86.dgn	11/20/2007 4:08 PM	MicroStat	
· · · · ·	🕌 12345DES_	Model##.dgn	2/18/2010 7:48 AM	MicroStat	and the second se
Desktop	🕌 12345DES_	Model.dgn	10/26/2010 12:22	MicroStat	_
	🕌 12345DES_	Phasing.dgn	11/20/2007 7:47 AM	MicroStat	
	🕌 12345DES_		11/20/2007 7:47 AM	MicroStat	
Libraries	🖊 Elbert.dgn		11/20/2007 7:47 AM	MicroStat	
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Network	File name:	12345DES_Model.dgn	- (Open	User: CDOT User
	Files of type:	CAD Files (*.dgn;*.dwg;*.dxf)	•	Cancel	Project: 12345
		Open as read-only		Options	Interface: CDOT

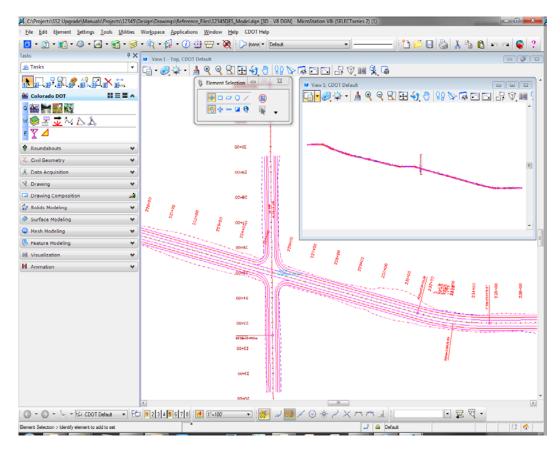
View 1 is a plan view of the entire project that you set up in the last lab.

- 4. Minimize or Close the CDOT Menu.
- 5. Open View 5 from the View Toggles toolbar (lower left).



- 6. Fit View 5.
 - **Note:** If you want to move View 5 to the left screen, select the **Change Screen** option from the view's control menu.

🔍 V	iew 3 - Back, CDOT Default		- • ×
ø	Restore	🛛 🔁 🛟 🕘 🖇 🖉	
	Move		A
	Change Screen		
	Size		
-	Minimize		
	Maximize		
x	Close Alt+F4		
	View Attributes		
	Level Display		
	View Save/Recall		
			-
<u>.</u>			E E



7. In View 1, Window Area around the intersection as shown.

Lab 2.2 - Working with Levels

Sorting Levels

1. Select Settings > Level > Display (or, from the Primary toolbar select Level Display).

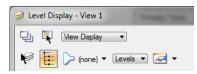
Primary Tools	
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The Level Display box opens. It is used to turn levels on and off.

- 🏓 Level Display View 1 - - X 🕒 関 View Display 🔹 🜾 📴 🏳 (none) 🔻 Levels 💌 📈 🔻 E-Model.dgn 12345SURV_Topo100.dgn Name 1 Number File Logical Used . E Default 12345DES. 0 • ALG_COGO_Points 19001 12345DES. ALG_EVENT_Points 19002 Alignments.dgnlib ALG_EXISTING_Hor-Alignment 19003 Alignments.dgnlib ALG_EXISTING_Hor-Alignment-Sta-Major 19004 Alignments.dgnlib ALG_EXISTING_Hor-Alignment-Sta-Minor 19005 Alignments.dgnlib ALG_EXISTING_Hor-Alignment-Text 19006 Alignments.dgnlib ALG_EXISTING_Hor-Cardinals 19007 Alignments.dgnlib ALG_EXISTING_Hor-Keypoints Alignments.dgnlib 19008 ALG_EXISTING_Hor-Tangent-Lines 19009 Alignments.dgnlib ALG_EXISTING_Hor-Tangent-Text 19010 Alianments.danlib ALG_EXISTING_Ver-Alignment Alignments.dgnlib 19011 ALG_EXISTING_Ver-Alignment-Text 19012 Alignments.dgnlib ALG_EXISTING_Ver-Keypoints 19013 Alignments.dgnlib ALG_EXISTING_Ver-Tangent-Lines 19014 Alignments.dgnlib ALG_EXISTING_Ver-Tangent-Text 19015 Alignments.dgnlib ALG_OTHER_Hor-Alignment 19016 Alignments.dgnlib ALG_OTHER_Hor-Alignment-Sta-Major 19017 Alignments.dgnlib ALG_OTHER_Hor-Alignment-Sta-Minor 19018 Alignments.dgnlib
- 2. In the top left corner on the Level Display box, toggle *off* all of the Views.

With all views off, there are no levels available to turn on/off (the levels are grayed-out).

3. Turn on View Index 1 and leave all other views off.



4. <D> on the column heading Name to sort by name, then <D> on Used to bring the used levels to the top of the list.

🥩 Level Display - View 1	-				X
🖵 🛱 View Display 🔻					
🖗 🧮 🏳 (none) 🔻 Levels 💌 🎑	- 1				
□- <mark>v</mark> 12345DES_Model.dgn ⊕ w 12345SURV_Topo 100.dgn					
Name	Number	File	Logical	Used 🔪	•
Default	0	12345DES		•	E
ALG_COGO_Points	19001	12345DES		•	
ALG_PROPOSED_Hor-Alignment	19029	12345DES		•	
ALG_PROPOSED_Hor-Alignment-Sta	19030	12345DES		•	
ALG_PROPOSED_Hor-Alignment-Sta	19031	12345DES		•	
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES		•	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES		•	
ALG_SECONDARY_Hor-Alignment-S	19043	12345DES		•	
ALG_SECONDARY_Hor-Alignment-S	19044	12345DES		•	
ALG_SECONDARY_Hor-Cardinals	19046	12345DES		•	
DES_ROADWAY_Curb-Top	14041	12345DES		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES		•	
DES_ROADWAY_Lane-Line	14044	12345DES		•	
DES_ROADWAY_Misc	14045	12345DES		•	
DES_ROADWAY_Point-of-Slope-Sel	14046	12345DES		•	
DES_ROADWAY_Shoulder	14047	12345DES		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES		•	
DRAFT_LC-Center_WT-3	22018	12345DES		•	
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib		 	-

Note: The highlight color may vary based on your Windows Theme setting.

5. Scroll through the list of levels.

The levels which are used (those with graphics placed on them) appear in bold text. All other unused levels are from the attached libraries.

Level Display - View 1	-				x
🖵 🕅 View Display 🔻					
(none) 🕶 Levels 💌 🔎	-				
12345DES_Model.dgn					
Name	Number '	^ File	Logical	Used	
Default	0	12345DES		•	
TOPO_SURVEY_Fldbk_Codes	10	Topo.dgnlib			
TOPO_SURVEY_Fldbk_Elevations	11	Topo.dgnlib			
TOPO_SURVEY_Fldbk_Errors	12	Topo.dgnlib			
TOPO_SURVEY_Fldbk_Names	13	Topo.dgnlib			
TOPO_SURVEY_Fldbk_Notes	14	Topo.dgnlib			
TOPO_SURVEY_Fldbk_Symbols	15	Topo.dgnlib			
TOPO_SURVEY_Misc	149	Topo.dgnlib			
TOPO_SURVEY_Symb	199	Topo.dgnlib			
TOPO_CULVERT_Cast-Iron	262	Topo.dgnlib			
TOPO_CULVERT_Perforated-Underdrain-CMP	263	Topo.dgnlib			
TOPO_CULVERT_Perforated-Underdrain-PVC	264	Topo.dgnlib			
TOPO_CULVERT_Reinforced-Concrete-Pipe	265	Topo.dgnlib			
TOPO_CULVERT_Reinforced-Conc-Pipe-Ellip	266	Topo.dgnlib			
TOPO_CULVERT_Corr-Steel-Pipe	267	Topo.dgnlib			
TOPO_CULVERT_End-Sec-RCP	268	Topo.dgnlib			
TOPO_CULVERT_End-Sec-RCP-Ellip	269	Topo.dgnlib			
TOPO_CULVERT_End-Sec-Corr-Stl-Pipe	270	Topo.dgnlib			
TOPO_CULVERT_End-Sec-Cor-Stl-Pipe-Arc	271	Topo.dgnlib			
TOPO_CULVERT_Cor-St-Pipe-Arch-Bit-Ctd-Eq	274	Topo.dgnlib			
TOPO_CULVERT_Cor-Plastic-Pipe	275	Topo.dgnlib			-

6. **<D>** on the column heading **Number** to sort by level number.

Note that levels are grouped by number. For example, all Roadway Design levels are 14000 series; all Right-of-Way levels are 15000 series, etc.

7. <D> on the column heading Name to sort the levels alphabetically by name and scroll through the level list. (If you toggle the Name column, you will sort A - Z, then Z - A). Toggle Name until you sort A - Z.

Level Display - View 1					х
🖵 🕅 View Display 🔹					
(none) - Levels	-				
(none) 🔻 Levels 💌	~~~ •				
□-12345DES_Model.dgn					
🗄 场 12345SURV_Topo 100.dgn					
Name ^	Number	File	Logical	Used	-
Default	0	12345DES		•	1
ALG_COGO_Points	19001	12345DES		•	
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment-Sta-Major	19004	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment-Sta-Minor	19005	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment-Text	19006	Alignments.dgnlib			
ALG_EXISTING_Hor-Cardinals	19007	Alignments.dgnlib			
ALG_EXISTING_Hor-Keypoints	19008	Alignments.dgnlib			
ALG_EXISTING_Hor-Tangent-Lines	19009	Alignments.dgnlib			
ALG_EXISTING_Hor-Tangent-Text	19010	Alignments.dgnlib			
ALG_EXISTING_Ver-Alignment	19011	Alignments.dgnlib			
ALG_EXISTING_Ver-Alignment-Text	19012	Alignments.dgnlib			
ALG_EXISTING_Ver-Keypoints	19013	Alignments.dgnlib			
ALG_EXISTING_Ver-Tangent-Lines	19014	Alignments.dgnlib			
ALG_EXISTING_Ver-Tangent-Text	19015	Alignments.dgnlib			
ALG_OTHER_Hor-Alignment	19016	Alignments.dgnlib			
ALG_OTHER_Hor-Alignment-Sta-Major	19017	Alignments.dgnlib			
ALG_OTHER_Hor-Alignment-Sta-Minor	19018	Alignments.dgnlib			
ALG_OTHER_Hor-Alignment-Text	19019	Alignments.dgnlib			
ALG_OTHER_Hor-Cardinals	19020	Alignments.dgnlib			

Note: All MicroStation levels are assigned both names and numbers.

8. Right-click in any column heading (Name, Number, etc.) and toggle off the column Logical.

🥩 Level Display - Vie	w 1					x
🖳 🖳 View Disp	olay 🔻					
Non 🔁 🕞	e) 🔻 🛛 Levels 💌 🏹	-				
□-12345DES_Mod	-					
Name ^	Save Layout	▶ umber	File	Logical	Used	-
Default	 Name 		12345DES		•	E
ALG_COGO_Poin	Library	9001	12345DES		•	
ALG_EVENT_Points	Number	9002	Alignments.dgnlib			
ALG_EXISTING_Hor		9003	Alignments.dgnlib			
ALG_EXISTING_Hor	Description	9004	Alignments.dgnlib			
ALG_EXISTING_Hor		9005	Alignments.dgnlib			
ALG_EXISTING_Hor	 Logical 	9006 9007	Alignments.dgnlib			
ALG_EXISTING_Hor ALG_EXISTING_Hor	Color	9007	Alignments.dgnlib Alignments.dgnlib			
ALG EXISTING Hor	Style	9008	Alignments.dgnlib			
ALG EXISTING Hor	Weight	9010	Alignments.dgnlib			
ALG EXISTING Ver	Material	9011	Alignments.dgnlib			
ALG_EXISTING_Ver	Lock	9012	Alignments.dgnlib			
ALG_EXISTING_Ver		9013	Alignments.dgnlib			
ALG_EXISTING_Ver	Plot	9014	Alignments.dgnlib			
ALG_EXISTING_Ver V	 Used 	9015	Alignments.dgnlib			
ALG_OTHER_Hor-A	Elements	9016	Alignments.dgnlib			
ALG_OTHER_Hor-A	New Level	9017	Alignments.dgnlib			
ALG_OTHER_Hor-A	CI AII	9018	Alignments.dgnlib			
ALG_OTHER_Hor-A	Show <u>A</u> ll	9019 9020	Alignments.dgnlib Alignments.dgnlib			-
TALG_OTHER_HORG	<u>L</u> ist	0020	Augriments.dgniib			
	Restore <u>D</u> efaults			_		

You can customize the look of the Level Display box by turning on/off information columns.

Turn levels on/off using Level Display

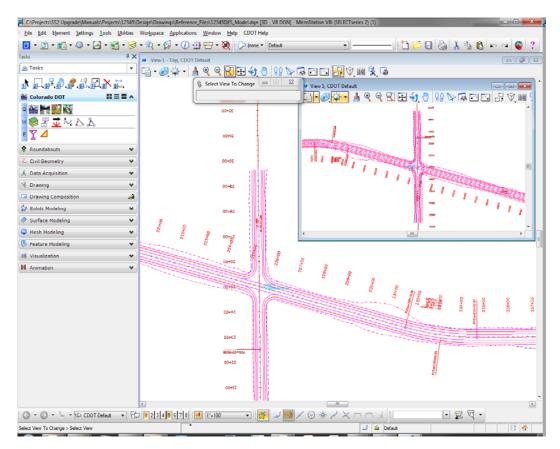
1. With the levels now sorted by name, <D> on the column heading Used until all used levels are brought to the top of the list. This now sorts all used levels alphabetically.

Level Display - View 1					X
🖵 🕅 View Display 🔹					
	-				
(none) 🔻 Levels 💌 📈	- •				
□-12345DES_Model.dgn					
🗄 😡 12345SURV_Topo 100.dgn					
Name	Number	File	Logical	Used 🍸	-
Default	0	12345DES		•	=
ALG_COGO_Points	19001	12345DES		•	
ALG_PROPOSED_Hor-Alignment	19029	12345DES		•	
ALG_PROPOSED_Hor-Alignment-Sta	19030	12345DES		•	
ALG_PROPOSED_Hor-Alignment-Sta	19031	12345DES		•	
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES		•	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES		•	
ALG_SECONDARY_Hor-Alignment-S	19043	12345DES		•	
ALG_SECONDARY_Hor-Alignment-S	19044	12345DES		•	
ALG_SECONDARY_Hor-Cardinals	19046	12345DES		•	
DES_ROADWAY_Curb-Top	14041	12345DES		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES		•	
DES_ROADWAY_Lane-Line	14044	12345DES		•	
DES_ROADWAY_Misc	14045	12345DES		•	
DES_ROADWAY_Point-of-Slope-Sel	14046	12345DES		•	
DES_ROADWAY_Shoulder	14047	12345DES		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES		•	
DRAFT_LC-Center_WT-3	22018	12345DES		•	
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment	19003	Alianments.danlib			

Note: You may have to click Used twice to get all used levels to the top.

2. Scroll up to the top of the list to see the used levels.

Note: Sorting by Used is a handy way to quickly find a level that you want to turn on/off.



3. Window Area around the same intersection location in View 5 as in View 1.

4. From the View Toggles toolbar toggle *off* View Index 1 and toggle *on* View Index 5 and scroll through the level list.



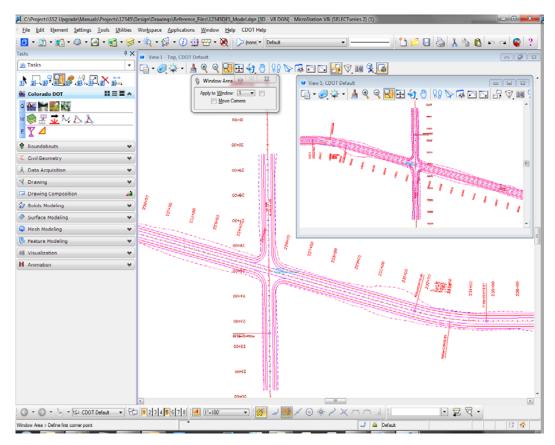
- - X 🥩 Level Display - View 5 🕒 🙀 View Display 🔹 E-Model.dgn 12345SURV_Topo 100.dgn Name Number File Logical Used . Default 0 12345DES_Model.dgn ALG_COGO_Points 19001 12345DES_Model.dgn ALG_PROPOSED_Hor-Alignment 12345DES_Model.dgn ALG_PROPOSED_Hor-Alignment-Sta. 12345DES_Model.dgn 12345DES_Model.dgn ALG_PROPOSED_Hor-Alignment-Sta 19031 12345DES_Model.dgn 12345DES_Model.dgn ALG_PROPOSED_Hor-Alignment-Text 19032 ٠ ALG_PROPOSED_Hor-Cardinals ALG_SECONDARY_Hor-Alignment-S. 12345DES_Model.dgn 19043 ALG_SECONDARY_Hor-Alignment-S. 12345DES_Model.dgn 19044 12345DES_Model.dgn 12345DES_Model.dgn ALG_SECONDARY_Hor-Cardinals 19046 DES_ROADWAY_Curb-Top
 14016
 12345DES_Model.dgn

 14044
 12345DES_Model.dgn

 14045
 12345DES_Model.dgn
 DES_ROADWAY_Edge-Of-Road-Oil DES_ROADWAY_Lane-Line DES_ROADWAY_Misc 14046 12345DES_Model.dgn 14047 12345DES_Model.dgn DES_ROADWAY_Point-of-Slope-Sel... DES_ROADWAY_Shoulder 12345DES_Model.dgn 12345DES_Model.dgn DES_ROADWAY_Toe-of-Fill DES_ROADWAY_Top-of-Cut 14051 14052 12345DES_Model.dgn
- 5. <D> on the level ALG_PROPOSED_Hor-Alignment-Text to turn it off.

- **Note:** Level displays are view dependent you can have different levels on/off in different views.
- 6. In View 5, hold down the data button and drag to turn off all ALG levels except the ALG_PROPOSED_Hor-Alignment level as shown.

🏓 Level Display - View 5				
🖵 🏹 🛛 View Display 🔻				
🌾 📴 🍃 (none) 🕶 Levels 💌 🐱	-			
□-12345DES_Model.dgn 亩-12345SURV_Topo100.dgn				
Name	Number	File	Logical	Used 🔪 🤺
Default	0	12345DES_Model.dgn		•
ALG_COGO_Points	19001	12345DES_Model.dgn		•
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn		•
ALG_PROPOSED_Hor-Alignment-Sta	19030	12345DES_Model.dgn		•
ALG_PROPOSED_Hor-Alignment-Sta	19031	12345DES_Model.dgn		•
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn		•
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn		•
ALG_SECONDARY_Hor-Alignment-S	19043	12345DES_Model.dgn		•
ALG_SECONDARY_Hor-Alignment-S	19044	12345DES_Model.dgn		•
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn		•
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn		•
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn		•
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn		•
DES_ROADWAY_Misc	14045	12345DES_Model.dgn		•
DES_ROADWAY_Point-of-Slope-Sel		12345DES_Model.dgn		•
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn		•
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn		•
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn		•
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn		•
ALG_EVENT_Points	19002	Alignments.dgnlib		
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib		



The intersection text is now off in View 5 but on in View 1.

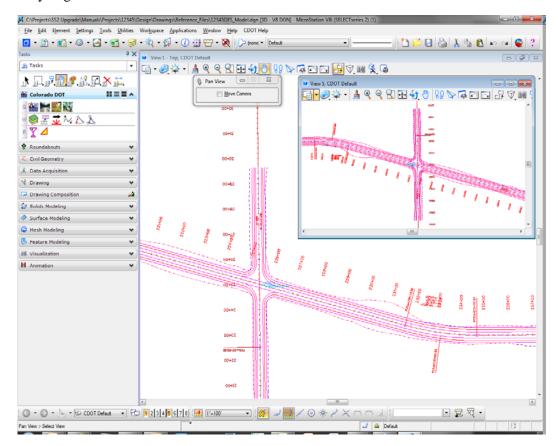
7. Turn *off* View Index 5 and turn View Index 1 back *on*.



Level Display - View 1					×
🖵 🏹 🛛 View Display 🔹					
🔎 🧮 խ (none) 🔹 Levels 💌 🐱 🔹					
E→ M 12345DES_Model.dgn È→ M 12345SURV_Topo100.dgn					
Name	Number	File	Logical	Used	-
Default	0	12345DES_Model.dgn		•	
ALG_COGO_Points	19001	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn		•	
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn		•	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn		•	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn		•	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn		•	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn		•	
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn			
ALG_EVENT_Points	19002	Alignments.dgnlib			

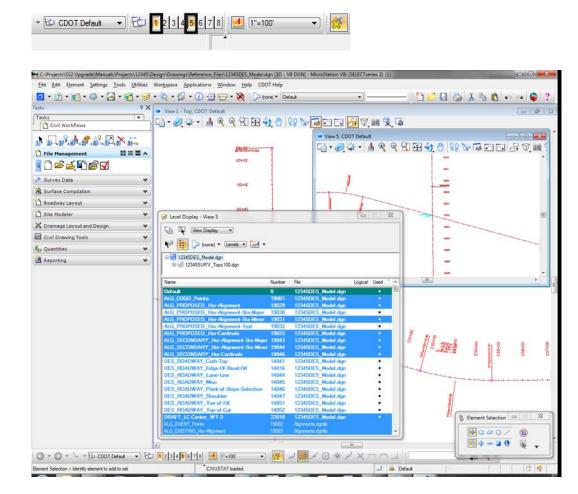
8. Hold down the data button and drag across all DES_ levels to turn them off in View 1.

Only alignment levels are now on in View 1.



9. Turn *off* the levels ALG_PROPOSED_Hor-Alignment-Text_and ALG_PROPOSED_Hor-Alignment-Sta-Major_in View 1.

🔰 Level Display - View 5	E E				x
🖵 🏹 Miew Display 🔻					
🔃 խ (none) 🔻 Levels 🔻 📈 🕶					
E-W 12345DES_Model.dgn E-W 12345SURV_Topo100.dgn					
Name	Number	File	Logical	Used	•
Default	0	12345DES_Model.dgn		•	
ALG_COGO_Points	19001	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn		•	_
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn		•	
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn		•	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn		•	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn		•	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn		•	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn		•	
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn		•	_
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib			Ŧ



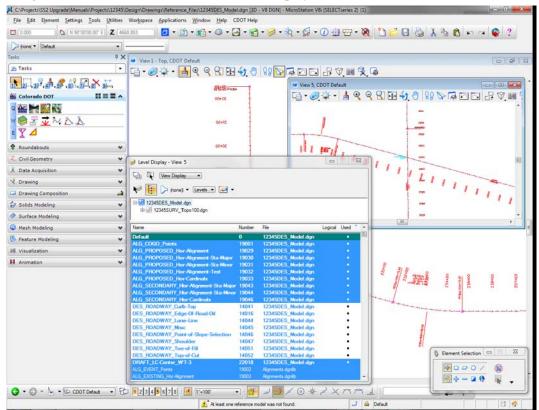
10. Turn *on* View Index 5 so that both View Index 1 and 5 are now *on*.

The Level Display dialog box reflects the active view's settings. The active view is recognized by a change in the color of the view title bar (in this example, View 5).

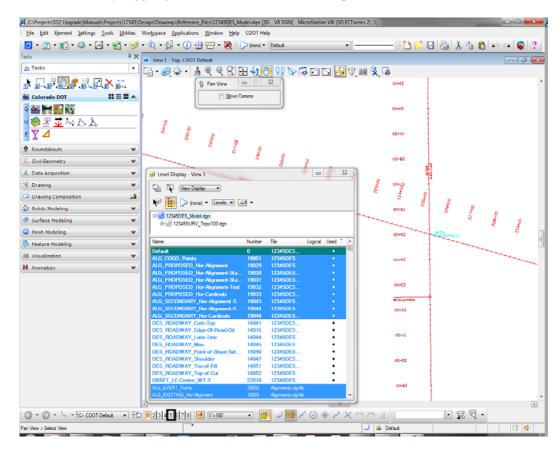
To make the displayed levels in View 5 match those in View 1;

- 11. Make View 1 the active view by left clicking on the View 1 title bar.
- 12. In the *Level Display* dialog box, <D> the Apply to Open Views button.

🥩 Level Display - View 1					X	
View Display						
Apply To Open Views Levels V						
□ 12345DES_Model.dgn						
Name	Number	File	Logical	Used		•
Default	0	12345DES_Model.dgn		•		
ALG_COGO_Points	19001	12345DES_Model.dgn		•		



13. Bring View 5 to the front and notice that the displayed levels match View 1.



14. Close View 5 by toggling off View 5 in the View Groups tool box

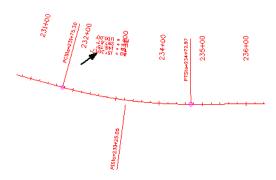
Note: Clicking on the X in the upper right corner of the view window will also close out of View 5

Turn levels on/off By Element

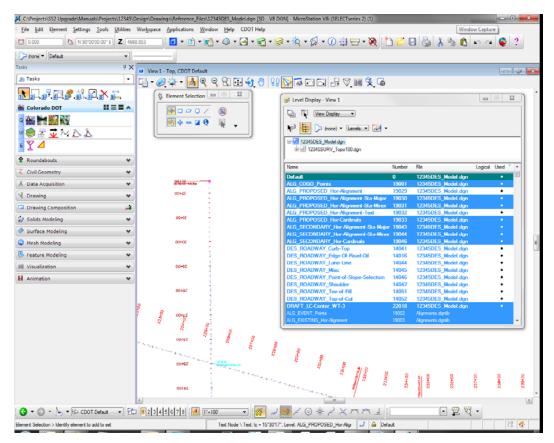
1. The station and alignment text levels are currently *on*. Right-click anywhere over the level names and select Off By Element.

🥩 Level Display - View 1			
🖵 🕅 View Display 🔻			
🔃 🏳 (none) 🕶 Levels 💌 🕶			
☐ 12345DES_Model.dgn ⊕			
Name	Number	File	Logical Used 🍸 🔺
Default	0	12345DES_Model	.dgn •
ALG_COGO_Points	19001	12345DES_Model	.dgn •
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model	.dgn •
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model	.dgn •
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model	dan •
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Mode	Set <u>A</u> ctive
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Mode	Jump To Active Level
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Mode	Create Display Set
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Mode	Create Display Set
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Mode	All On
DES_ROADWAY_Curb-Top	14041	12345DES_Mode	All Off
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Mode	Invert On/Off
DES_ROADWAY_Lane-Line	14044	12345DES_Mode	Invert On/Off
DES_ROADWAY_Misc	14045	12345DES_Mode	Off By Element
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Mode	All Except Element
DES_ROADWAY_Shoulder	14047	12345DES_Mode	An except ciement
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Mode	Save Filter
DES_ROADWAY_Top-of-Cut	14052	12345DES_Mode	
DRAFT_LC-Center_WT-3	22018	12345DES_Mode	Level <u>M</u> anager
ALG_EVENT_Points		Alignments.dgnlib	
ALG_EXISTING_Hor-Alignment		Alignments.dgnlib	

2. **<D>** on the red alignment curve text as shown.



The level ALG_PROPOSED_Hor-Alignment-Text_is turned *off* by graphically picking an element on that level.



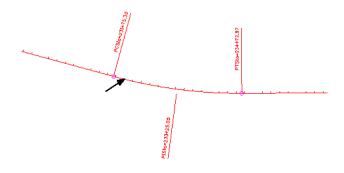
3. Turn off the Level DRAFT_LC-Center_WT-3.

🔰 Level Display - View 1					x
🖵 🕅 View Display 🔹					
🖗 📴 🍃 (none) 💌 Levels 💌 💌					
➡ 12345DES_Model.dgn					
Name	Number	File	Logical	Used	•
Default	0	12345DES_Model.dgn		•	1
ALG_COGO_Points	19001	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn		٠	
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn		•	
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn			
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn		•	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn		•	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn		•	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn		•	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn		•	
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn		•	
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment		Alignments.dgnlib			

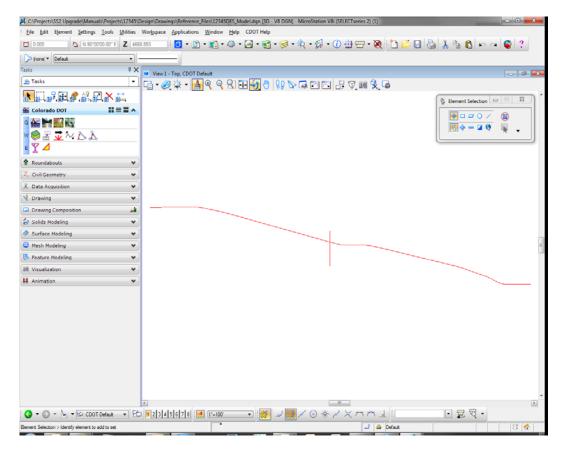
4. Right-click again anywhere in the Level Display box and select All Except Element.

🔰 Level Display - View 1			
🖵 🏹 View Display 🔹			
🖗 🚺 🏳 (none) 🔻 Levels 💌 🛹 🗸			
12345DES_Model.dgn 12345SURV Topo 100.dgn			
Name	Number	File	Logical Used 🎽
Default	0	12345DES_Model.	dgn •
ALG_COGO_Points	19001	12345DES_Model.	dgn •
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model	dan 🔹
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model	Set <u>A</u> ctive
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model	Jump To Active Level
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model	Create Display Set
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model	Create Display Set
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model	All O <u>n</u>
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model	All Off
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model	Invert On/Off
DES_ROADWAY_Curb-Top	14041	12345DES_Model	Invention/on
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model	Off By Element
DES_ROADWAY_Lane-Line	14044	12345DES_Model	All Except Element
DES_ROADWAY_Misc	14045	12345DES_Model	, in except element
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model	Save Filter
DES_ROADWAY_Shoulder	14047	12345DES_Model	1 114
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model	Level <u>M</u> anager
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model	
DRAFT_LC-Center_WT-3	22018	12345DES_Model.	dgn •
ALG_EVENT_Points		Alignments.dgnlib	
ALG_EXISTING_Hor-Alignment	19003	Alianments.danlib	

5. **<D>** on the SH 86 (mainline) red-centerline.



6. Fit View 1.



All elements except the centerlines are turned off in the view. The **Off By Element** and **All Except Element** are handy options to turn levels on/off without knowing the level names or number.

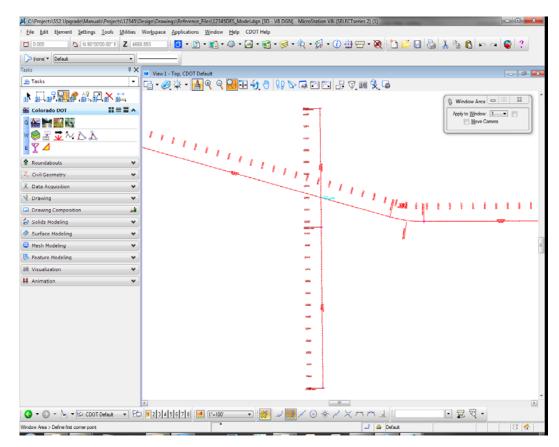
Note: You can also use the **Change Level** command, with the **Level** option set to **Display Only** or **Display Off**, to accomplish the same task.



Turn *on* all of the alignment levels (data point <D> and drag across all ALG levels.

🥩 Level Display - View 1		C Cargonal			x
🔁 🏹 🛛 View Display 🔻					
📔 📴 🎾 (none) 🔻 Levels 💌 🛹 🗸					
12345DES_Model.dgn					
Name	Number	File	Logical	Used 🍸	-
Default	0	12345DES_Model.dgn		•	
ALG_COGO_Points	19001	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn		•	
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn		•	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn		•	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn		•	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn		•	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn		•	
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn		•	
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib			Ŧ

7. Window in to the intersection as shown.



Save a view

- 1. **<D>** in the **Key-in** box to set the focus.
- 2. Key in *sv=intersect,intersection alignments* and press <Enter>.

Note: Always press <Enter> or <Tab> after key-ins.

- 3. **<D>** in View 1 to select it as the view to save.
- 4. Verify you saved the view. Select Utilities > Saved Views.



- **Note:** The **Saved Views** dialog box opens and the saved view shows in the list. The **Saved Views** dialog is used to manage your saved views (create and delete views, edit view names and descriptions, and recall saved views).
- 5. Close the Saved Views dialog box.

You may recall this saved view in upcoming labs.

Turn all levels on/off

1. Right-click again in Level Display and select All On.

🥩 Level Display - View 1	-		— — X
및 🖏 View Display 🔹			
🔃 🍃 (none) 🕶 Levels 💌 💌 🕶			
□-12345DES_Model.dgn ⊕-12345SURV_Topo100.dgn			
Name	Number	File	Logical Used
Default	0	12345DES Model.dgn	
ALG COGO Points	19001	12345DES Model.dgn	Set <u>A</u> ctive
ALG PROPOSED Hor-Alignment	19029	12345DES Model.dgn	Jump To Active Level
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn	Create Display Set
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn	Create Display Set
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn	All O <u>n</u>
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn	All Off
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn	Invert On/Off
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn	inter ony on
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn	Off By Element
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn	All Except Element
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn -	· · · · · · · · · · · · · · · · · · ·
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn	Save Filter
DES_ROADWAY_Misc	14045	12345DES_Model.dgn	Level Manager
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn	cerei <u>m</u> anagei
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn	•
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn	•
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn	•
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn	•
ALG_EVENT_Points	19002	Alignments.dgnlib	
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib	

All levels are turned on in View 1.

2. Fit View 1.

Level Display - View 1	-		
🖵 🕅 View Display 🔹			
🔁 խ (none) 🔹 Levels 🔹 💌			
I2345DES_Model.dgn			
Name	Number	File	Logical Used 🔪
Default	0	12345DES_Model.dgn	•
ALG_COGO_Points	19001	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn	Set <u>A</u> ctive
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn	Jump To Active Level
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn	Create Display Set
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn	All O <u>n</u>
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn	All Off
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn	Invert On/Off
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn -	
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn	Off By Element
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn	All Except Element
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn	Save Filter
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn	Level Manager
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn	<u></u> anager
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn	•
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn	•
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn	•
ALG EVENT Points		Alignments.dgnlib	
ALG EXISTING Hor-Alignment	19003	Alignments.dgnlib	

3. Right-click in the level display box and select All Off to turn all levels off in View 1.

Note: You can also turn all levels on or off with the key-ins **on=all** and **of=all**.

- 4. Turn all levels back *on* in View 1.
- 5. Window in to the end of the project as shown.

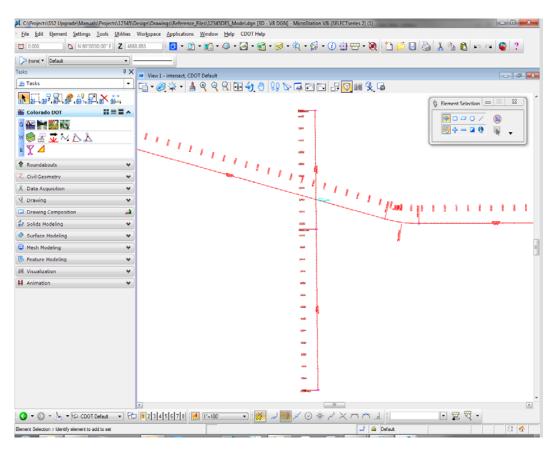
363+00	364+00	365+00	366+00	366+61

Recall the saved view

1. In the Key-in box, key in *vi=intersect*.

Don't forget to <Tab> or <Enter> after key-ins.

2. **<D>** in View 1.

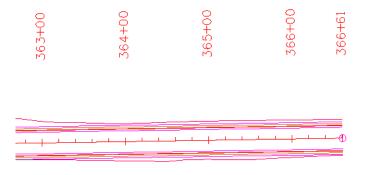


The saved view of the alignment and stationing is recalled in View 1. The appropriate levels from the saved view are turned on/off.

3. From the View Control toolbar, select View Previous.



The previous view of the beginning of the project is recalled. Notice that all levels are turned back on from this previous view.



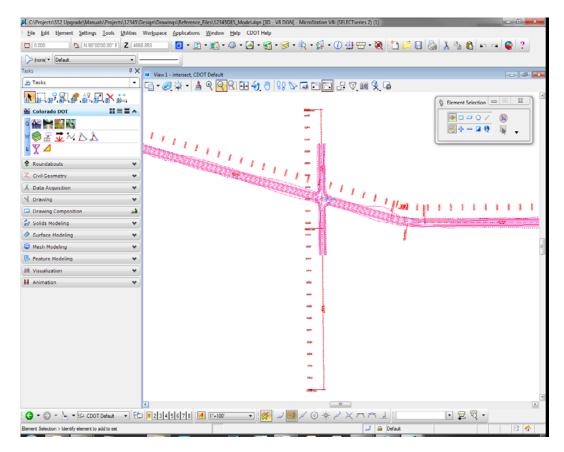
4. Select View Next.



This recalls the intersection view again with the design levels turned off.

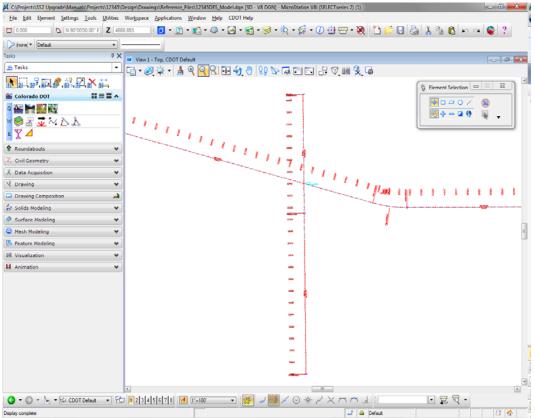
Use key-ins to turn level on/off

- 1. Key in **on=all**, then **<Tab>** or **<Enter>**.
- 2. <D> in View 1 to turn all level back on in this view.



- **Note:** Levels are view-dependent. When using key-ins, you must select the view with a data point <D> to tell MicroStation which view to turn levels on or off.
- 3. Key in **of=des***.

4. **<D>** in View 1 to select View 1.



All **DES_** levels are turned off in view 1. You can use wild cards with key-ins to turn a group of levels on or off.

Set the active level

1. In the Level Display box, double-click on the level ALG_PROPOSED_Hor_Alignment to set it active.

🔰 Level Display - View 1				-	x
🖵 🖏 View Display 🔹					
🌾 📴 🍃 (none) 🕶 Levels 💌 🐱 🕶					
Name	Number	File	Logical	Used 🔪	
Default	0	12345DES_Model.dgn		•	=
ALG_COGO_Points	19001	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn			
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn		•	
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn		•	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn		•	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn		•	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn		•	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn		•	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn		•	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn		•	
DES_ROADWAY_Top-of-Cut	14052	12345DES_Model.dgn		•	_
DRAFT_LC-Center_WT-3	22018	12345DES_Model.dgn			
ALG_EVENT_Points	19002	Alignments.dgnlib			
ALG_EXISTING_Hor-Alignment	19003	Alignments.dgnlib			Ŧ

The background color changes to green.

Note: You can also use the *lv*= key-in to set the active level.

The active level is also reflected in the Attributes toolbar at the top of the screen.



2. Turn all levels *off* in View 1.

C:\Projects\SS2 Upgrade\Manuals\Projects\12345\	esign\Drawings\Reference_Files\12345DES_ModeLdgn [3D - V8 DGN] - MicroStation V8i (SELECTseries 2) (1)	- 0 - X -
<u>File Edit Element Settings Tools Utilities</u>	Workspace Applications Window Help CDOT Help	
1 0.000 🗅 🗅 N 90'00'00 00" E Z 466	1883 🗾 🖸 • 🗈 • 🕼 • 🖓 • 🔗 • 🥞 • 🖗 • 🕼 • 🕼 • 🕖 🖶 🐨 • 🍋 👗	ිං 🛍 🗠 ය 🧕 ?
ALG_PROPOSED_Hor-Alignment		
Tasks 🕴 🛪	View 1 - Top, CDOT Default	
🔊 Tasks 🔹	⊑ • ∅ ⅔ • ≜ ९ ९ ९ ⊞ �[0] ₩ № ቩ ⊠ ⊡ 문 ⊽ № % ₲	
▖▖▖▖▖▖▖▖▖▖		Pan View
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e Y 🖊		
Roundabouts		
Z Civil Geometry 👻		
🕅 Data Acquisition 👻		
🧏 Drawing 👻		
🗖 Drawing Composition 🛁		
🛃 Solids Modeling 🔍 👻	Sevel Display - View 1	
Surface Modeling *		
😫 Mesh Modeling 👻		E
🕓 Feature Modeling 👻	V (none) • Levels • 🖂 •	
If Visualization 👻		
Animation 👻	⊕ 12345SURV_Topo 100.dgn	
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	Default 0 12345DES_Model.dgn ALG_COGO_Points 19001 12345DES_Model.dgn	
	ALG_PROPOSED_Hor-Alignment 19029 12345DES_Model.dgn	
	ALG_PROPOSED_Hor-Nignment-Sta-Major 19030 12345DES_Model.dgn	
	ALG_PROPOSED_Hor-Nignment-Sta-Minor 19031 123/5DES_Model.dgn ALG_PROPOSED_Hor-Nignment-Text 19032 123/5DES_Model.dgn	
	ALG_PROPOSED_Hor-Cardinals 19033 12345DES_Model.dgn	
	ALG_SECONDARY_Hor-Alignment-Sta-Major 19043 12345DE5_Model.dgn	
	ALG_SECONDARY_Hor-Alignment-Sta-Minor 19044 12345DES_Model.dgn ALG_SECONDARY_Hor-Cardinals 19046 12345DES_Model.dgn	
	DES_ROADWAY_Curb-Top 14041 12345DES_ModeL.dgn +	
	×	
		-
] 😰 🤻 •
Pan View > Select View		8 🛠

All levels are turned off except the alignment centerline because it is the active level.

Note: The active level is always displayed provided the option **Display Active Level in** All Views is toggled on in Workspace > Preferences > Operation. If this option is turned off, you can also turn the active level on/off.

- K C/Projects/SS2 Upgrade/Manuals/Projects/12345/Design/Drawings/Reference_Files/12345DES_Model.dgn [3D V8 DGN] MicroStation V8i (SELECTseries 2) (1) Eile Edit Element Settings Tools Utilities Workspace Applications Window Help CDOT Help 10.000 | 🕒 N 970700 07 E | Z | 4555 553 🔄 🚺 = 🛐 = 🚳 = 🙆 = 🚰 = 🥰 = 🥳 = 🌾 = 🌾 = 🌾 = 🌾 = 🏹 = 🎊 🗋 🖆 = 🎊 🕺 🐧 👘 🛥 🚳 ? > (none) - DES_ROADWAY_Toe-of-Fill -7 X View 1 - Top, CDOT Default 🔎 Tasks └─│┌╕ - @|☆ - | ≜ �, �, ͡͡/ ☶ �; ♡ | \$2 ▷ ଢ ⊡ ⊡ /; ♡ ini 🎗 ଢ N2 37 47 47 67 67 77 77 Element Selection 23 태르콜 스 💒 Colorado DOT 🔮 🗆 🗢 🔾 🗡 a 💒 🐂 🌌 💐 🗑 💠 🗕 🖉 🙀 🍣 🗄 😼 24 📐 🛣 e 🍸 ⊿ Roundabouts Z Civil Geometry ~ 🕅 Data Acquisition 23 Level Display - View 1 V Drawing 🖵 🙀 View Display 💌 Drawing Col 📢 📴 🎾 (none) 🕶 Levels 💌 🕶 🕶 🛃 Solids Modeling 12345DES_Model.dgn
 12345SURV_Topo100.dgn Surface Modeling 😳 Mesh Modeling Number File 5 Feature Modeling Name Lo -III Visualization H Animation V. Toward B 🔇 = 🕘 - 🌭 = 🔂 CDOT Defauk - 🚽 🔂 🛙 2 3 4 5 6 7 8 🛃 11-100 1 🔜 🖉 🕢 🔆 🖉 🗶 📩 4 💽 🛱 🖣 2 DES_ROADWAY_To
- 3. Key in *lv=14051*, to change the active level to the Toe-of-Fill level.

This level is automatically turned on in the view and now shows with a green background in the Level Display box.

4. Close the Level Display box.

Lab 2.3 - Working with the Level Manager

The Level Manager shows all of the level libraries that are attached to your design file, level names, numbers, descriptions, etc. The Level Manager also displays each level's ByLevel symbology – the color, line style and weight assigned to that level, which conforms to CDOT's CADD standards. Additional information such as if the level is used, frozen, available for plotting, etc. are also shown in the Level Manager.

1. Open the Level Manager. Select Settings > Level > Manager or on the Primary toolbar select Level Manager.



2. Sort the Level Manager on Used to bring all the used levels to the top of the list, you may need to scroll over to the right to see the column Used.

🛃 Level Manager									×
Levels <u>Filter</u> Edit									
Symbology	: ByLevel 💌 🏳 (none) 🔻 🖂 🕶								
- Model.dg	∧ Name	Number	Description			19	۲	Used	· •
	Default	0		0	0	O	~	•	
- All Levels	ALG_COGO_Points	19001	COGO Points	5	0	<u> </u>	~	•	_
🗄 🕞 Filters	ALG_PROPOSED_Hor-Alignment	19029	Proposed Horiz. Cent	3	0		~	•	
	ALG_PROPOSED_Hor-Alignment-		Proposed Horiz. Alg	3	0	<u> </u>	~	•	
	ALG_PROPOSED_Hor-Alignment-		Proposed Horiz. Alg	3	0	3	<u> </u>	•	
	ALG_PROPOSED_Hor-Alignment-		Proposed Horiz. CL T	3	0	!	<u>́</u>	•	
	ALG_PROPOSED_Hor-Cardinals ALG SECONDARY Hor-Alignment	19033 -Sta-Maior 19043	Proposed Horiz. Key Secondary Horiz. Alg	3	0	1	<u>`</u>		
	ALG SECONDARY Hor-Alignment		Secondary Horiz. Alg	35	0	3	1		
	ALG SECONDARY Hor-Cardinals		Secondary Horiz, Ke	35	0	1	ž		
	DES ROADWAY Curb-Top	14041	occontacty none. no	3	0	3	2	•	
	DES_ROADWAY_Edge-Of-Road-O	Dil 14016		3	0	<u> </u>	1	•	
	DES_ROADWAY_Lane-Line	14044		4	DES_L	<u> </u>	~	•	
<	DES_ROADWAY_Misc	14045		6	0	<u> </u>	~	•	-
Active Level: DES_ROADWA	Y_Toe-of-Fill 12	58 of 1258 displayed; 1	selected;						

Level Libraries

Level libraries are master templates of levels. The discipline-specific level libraries (Roadway Design, ROW, Alignments, etc.) are attached to your design file via the **Select Group Environment** utility program that you ran before starting MicroStation. The **Select Group** program has two options: **Bridge** and **xxMulti-Discipline**. All groups except Bridge should choose **xxMulti-Discipline** to attach all level libraries. The Bridge option just attaches level libraries needed for the Bridge group.

When a level is set active and graphics are placed on this level, the level is copied from the library file to the active design file.

Used levels that are copied to the design file appear bold in the Level Manager. All unused levels are in the library.

1. Scroll through the list of levels.

All levels have a logical level naming convention according to their library (e.g. all roadway design levels start with **DES**, all alignment levels with **ALG**, topo levels with **TOPO**).

2. Right click in the column headings and toggle Library on.

👌 Level Manager										×
<u>L</u> evels <u>F</u> ilter <u>E</u> dit										
🖉 🔀 🔤 Symbolog	y: ByLevel 💌 🏳 (none) 🔻 🗔	× •								
- Model.dg	∆ Name			Number	Description	_	Save Layout	•	۲	Used
12345SURV_Top	Default			0				0	/	•
- All Levels	ALG_COGO_Points		Alignments	19001	COGO Points	-	Modified	-2	1	•
🗄 🎾 Filters	ALG_PROPOSED_Hor-Alig ALG_PROPOSED_Hor-Alig		Alignments Alignments	19029 19030	Proposed	_	Name		1	:
	ALG_PROPOSED_Hor-Alig ALG_PROPOSED_Hor-Alig		Alignments	19030 19031	Proposed Proposed	_	Library		1	:
	ALG PROPOSED Hor-Alig		Alignments	19032	Proposed	<u> </u>	Number	<u> </u>	Ž	•
	ALG_PROPOSED_Hor-Can	dinals	Alignments	19033	Proposed	~	Description	-1	1	•
	ALG_SECONDARY_Hor-Ali			19043	Secondar		File		~	•
	ALG_SECONDARY_Hor-Al		-	19044 19046	Secondar		Logical	-3	 . 	:
	ALG_SECONDARY_Hor-Ca DES_ROADWAY_Curb-Top		Alignments Roadway	14041	Secondar	~	Color	-1		
	DES ROADWAY Edge-Of		Roadway	14016		~	Style	3	ž	•
	DES_ROADWAY_Lane-Lin		Roadway	14044		~	Weight	-1	1	•
4 III >	•						Material			•
Active Level: DES_ROADWA	Y_Toe-of-Fill	1258 of 1258 dis	splayed; 1 selecte	d;		~	Global Display			
				_			Global Freeze			_
							Lock			
							Plot			
						~	Used			
							Elements			
							Transparency			
								-		
							Show <u>A</u> ll			
							<u>L</u> ist			
							Restore Defaults			

The library name is now shown in its own column in Level Manager.

Name		Number	Description	
DRAFT_LC-Center_WT-3	Standard_Levels	22018		1
DES_ROADWAY_Top-of-Cut	Roadway_Design	14052		13
DES_ROADWAY_Toe-of-Fill	Roadway_Design	14051		10
DES_ROADWAY_Shoulder	Roadway_Design	14047		5
DES_ROADWAY_Point-of-Slope	Roadway_Design	14046		5
DES_ROADWAY_Misc	Roadway_Design	14045		6
DES_ROADWAY_Lane-Line	Roadway_Design	14044		4
DES_ROADWAY_Edge-Of-Road-Oil	Roadway_Design	14016		3
DES ROADWAY Curb-Top	Roadway Design	14041		3

Change the look of the Level Manager box

- 1. Right-click in any column heading (Name, Number, etc.) and select List.
- 2. Toggle heading on or off so that Name, Color, Style, Weight, and Used are on and select OK.

🕺 Show/Hide Tools	×
Click to Show or Hide Tools Modified Name Library Description File Logical Color Style Weicht	QK Cancel

😭 Level Manager					
Levels <u>Filter</u> Edit					
Symbology	r: ByLevel 🔹 🕞 (none) 🔻 🔝 👻				
-Model.dg	Name		50	10	Used 🔪 🔺
	Default	0	0	0	• 🗉
- All Levels	ALG_COGO_Points	5	O	<u> </u>	•
🗄 🕞 Filters	ALG_PROPOSED_Hor-Alignment	3	O	4	•
	ALG_PROPOSED_Hor-Alignment-Sta-Major	3	o	<u> </u>	•
	ALG_PROPOSED_Hor-Alignment-Sta-Minor	3	o	<u> </u>	•
	ALG_PROPOSED_Hor-Alignment-Text	3	o	<u> </u>	•
	ALG_PROPOSED_Hor-Cardinals	3	0	<u> </u>	•
	ALG_SECONDARY_Hor-Alignment-Sta-Majo	r 📕 35	O	<u> </u>	•
	ALG_SECONDARY_Hor-Alignment-Sta-Mino	r 📕 35	o	<u> </u>	•
	ALG_SECONDARY_Hor-Cardinals	35	O	<u> </u>	•
	DES_ROADWAY_Curb-Top	3	O		•
	DES_ROADWAY_Edge-Of-Road-Oil	3	0		•
	DES_ROADWAY_Lane-Line	4	DES_LANE_Skip_existing	1	•
<►	DES_ROADWAY_Misc	6	0	<u> </u>	• •
Active Level: DES_ROADWA	Y_Toe-of-Fill 1258 of	1258 displayed; 1 selected	k		

The Level Manager box updates to reflect the changes.

3. Close the Level Manager box.

ByLevel Symbology

ByLevel symbology ensures that CDOT CADD standards are met by placing graphics **ByLevel** (the color, line style and weight assigned to that level in the level library).

Note: When placing graphics using the CDOT Group Menus, the correct level, along with it's **ByLevel** symbology is automatically set for you.

Analyze an element

1. In the **Key in** box type *vi=intersect*, Enter the keyin and then <D> in view 1 to recall the alignment saved view.

🐨 Key-in	×
vi=intersect	• 🛱 🛱 •

2. From the Primary toolbar, select Element Information.

Primary Tools		
🚺 • 🗈 • 📾 • 🚳 • 🏹 • 爹	• 🥩 • 🔆 • 🕼	• 🕧 🕂 🕁 🗸 📎
		Element Information

3. **<D>** on the horizontal alignment centerline graphic.

Element Information shows that the alignment was placed on ALG_PROPOSED_Hor_Alignment level and placed with ByLevel Symbology.

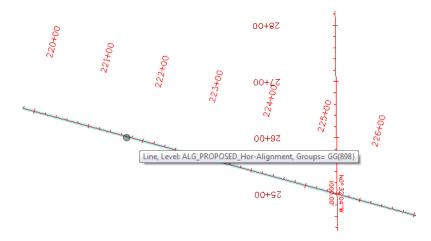
🔑 Element Info	
···· <selection> ···· / Line ···· / Line</selection>	
(Arc / Line (Arc	
General	۵)
Description	Line
Level	ALG_PROPOSED_Hor-Alignment
Color	ByLevel (3)
Line Style	ByLevel (0)
Weight	ByLevel (4)
Class	Pnmary
Template	None
Transparency	0
Geometry	S
Groups	S
Extended	S
Raw Data	S

- 4. Exit out of the Element Information box.
- 5. Open the Level Manager box.
- 6. Find the ALG_PROPOSED_Hor_Alignment level and note the ByLevel Symbology is set up in the Level Manager.

Evel Manager					
Levels <u>F</u> ilter <u>E</u> dit					
Symbology	r: ByLevel 💌 🎾 (none) 🔻 🔝 👻				
E Model.dg	Name	F	50	5	Used 🔪 🔺
	Default	0	0	0	• =
- All Levels	ALG_COGO_Points	5	0	2	•
🗄 🗁 Filters	ALG_PROPOSED_Hor-Alignment	3	O		•
	ALG_PROPOSED_Hor-Alignment-Sta-Major	3	0		•
	ALG_PROPOSED_Hor-Alignment-Sta-Minor	3	O	<u> </u>	•
	ALG_PROPOSED_Hor-Alignment-Text	3	0	<u> </u>	•
	ALG_PROPOSED_Hor-Cardinals	3	O	<u> </u>	•
	ALG_SECONDARY_Hor-Alignment-Sta-Major	35	O	<u> </u>	•
	ALG_SECONDARY_Hor-Alignment-Sta-Minor	35	o		•
	ALG_SECONDARY_Hor-Cardinals	35	0	1	•
	DES_ROADWAY_Curb-Top	3	o	<u> </u>	•
	DES_ROADWAY_Edge-Of-Road-Oil	3	0		•
	DES_ROADWAY_Lane-Line	4	DES_LANE_Skip_existing	1	•
< <u> </u>	DES_ROADWAY_Misc	6	O	<u> </u>	• •
Active Level: DES_ROADWA	Y_Toe-of-Fill 1258 of 12	58 displayed; 1 selected			

Review Pop-up information

1. Hold your cursor over the centerline of SH 86 (the mainline alignment).



MicroStation's "pop-up" information tells you the type of graphic (line) and the level on which it is placed (ALG_PROPOSED_Hor_Alignment.) Pop-up information is a quick way to determine what level graphics are on.

Level Filters

Level Filters are groups of levels created in the Level Manager by filtering on virtually any level criteria (name, number, color, etc.) and then naming the filter. These level groups can then be turned on/off using the filter.

Review the filters

- 1. In the left pane of the Level Manager box, click on Filters.
- 2. Click on the column name Filter to sort alphabetically by filter name.

<u>L</u> evels <u>F</u> ilter <u>E</u> dit								
🗋 🗙 📳 Symbolog	y: ByLevel 💌 🔎 (non	e) 🔻 🚾 🕇						
- 12345DES_Mode _	Filter ^	Level Group	Δ	Name	-	===	=	Used
	Alignments [Alignments]			ALG_*				
<u>− Al Lev</u> els	Basins [Hydraulics]			BASIN_				
E-> Filters	Bridge-All [Bridge]			BRDG_*, "GEO				
⊕- > Alignments [A] ≡	Bridge [Bridge]	1		BRDG_*, "Default"				
-> Bridge [Bridge	Bridge+Draft [Bridge]	~						
-> Bridge+Draft [Bridge+Draft+Sheet [Bri	1						
	Buildings [Topo]			TOPO_Building_*				
-> Bridge+Draft+	Camping [Topo]			TOPO_Camping_*				
— 🕞 Bridge-All [Bric	Color [Standard_Levels]			_co				
— Construction [Construction [Construction]							
🗄 🖒 GIS [GIS]	Culverts [Topo]			TOPO_Culvert_*				
Hydraulics [Hy	Curb and Gutter [Topo]			TOPO_CurbGutr_*				
H-> Landscape ar	Draft [Standard_Levels]			Draft				
	Easements [ROW]			ROW_Easement_*				
4	Electric [Topo]			TOPO Electric *				

evels <u>Filter E</u> dit	iy: ByLevel 👻 🏳 (non	e) - 🖂 -					
	Filter ^	Level Group	Δ	Name ALG_*	_	Save Layout	Layout 1 d
- All Levels	Basins [Hydraulics] Bridge-All [Bridge]			BASIN_ BRDG_*, "GEO	~	Parent	Layout 3
	Bridge [Bridge]	~		BRDG_*, "Default"	~	Level Group	Layout 4
-> Bridge [Bridge	Bridge+Draft [Bridge] Bridge+Draft+Sheet [Bri					Filter Group	
─▷ Bridge+Draft [─▷ Bridge+Draft+	Buildings [Topo]	•		TOPO_Building_*		Modified	
-> Bridge-All [Bric	Camping [Topo] Color [Standard_Levels]			TOPO_Camping_* _co	~	Name Library	
Construction [GIS [GIS]	Construction [Construction] Culverts [Topo]			TOPO Culvert *		Number	
🕀 🏳 Hydraulics [Hy	Curb and Gutter [Topo]			TOPO_CurbGutr_*		Description	
Landscape ar	Draft [Standard_Levels] Easements [ROW]			Draft ROW_Easement_*		File	
4	Electric [Topo]	1		TOPO Electric *	1	Logical Color	
tive Level: DES_ROADWA	AY_Toe-of-Fill	105 of 105 o	displa	yed; 1 selected;		Style	
					~	Weight	
					~	Material	
					~	Material Global Display	
					~	Material Global Display Global Freeze	
					•	Material Global Display	
						Material Global Display Global Freeze Lock	
						Material Global Display Global Freeze Lock Plot Used Elements	
						Material Global Display Global Freeze Lock Plot Used	
						Material Global Display Global Freeze Lock Plot Used Elements	

3. Turn on the **Number** column.

There are several standard CDOT filters, which are based on name and number. The CDOT standard level naming and numbering convention enables the efficient use of level filters.

evels <u>F</u> ilter <u>E</u> dit								
🕽 🗙 🚔 Symbology:	ByLevel 💌 🔎 (none	e) 🔻 🔀 🔻						
	Filter 🔷	Level Group	Δ	Name	Number	==	Ξ	
	Alignments [Alignments]			ALG_*	19000-1			
- 🦃 All Levels	Basins [Hydraulics]			BASIN_	11000-1			
- 🔁 Filters	Bridge-All [Bridge]			BRDG_*, "GEO				
⊕-> Alignments [A ≡	Bridge [Bridge]	~		BRDG_*, "Default"				
	Bridge+Draft [Bridge]	~						
-> Bridge+Draft [Bridge+Draft+Sheet [Bri	~						
-> Bridge+Draft+	Buildings [Topo]			TOPO_Building_*	1-9999			
	Camping [Topo]			TOPO_Camping_*	1-9999			
	Color [Standard_Levels]			_co	22000-2			
	Construction [Construction]				21000-2			
🕀 🏳 GIS [GIS]	Culverts [Topo]			TOPO_Culvert_*	1-9999			
	Curb and Gutter [Topo]			TOPO_CurbGutr_*				
🗄 🕞 Landscape ar	Draft [Standard_Levels]			Draft	22000-2			
L Materiale and								

- **Note:** Level filters are stored in level libraries (note the library name in brackets beside the filter).
- 4. In the left pane of the Level Manager, Click the + symbol next to the Filters to expand the list.

- 🚮 Level Manager - - × Levels <u>Filter</u> Edit 🗋 🗙 📳 Symbology: ByLevel 🔻 | 🕞 (none) 🔻 🖾 🝷 . Filter ^ Level Group 🛕 Name . - 🕞 Bridge-All [Bridge] Number == = - Construction [Construction] Alignments [Alignments] ALG_* 19000-1. 🗄 ⊳ GIS [GIS] Basins [Hydraulics] BASIN_ 11000-1.. BRDG_*, "GEO... BRDG_*, "Default" Hydraulics [Hydraulics] Bridge-All [Bridge] Bridge [Bridge] Landscape and Environmental [L] Bridge+Draft [Bridge] ~ Materials and Geotechnical [Mate Bridge+Draft+Sheet [Bri.. ~ Roadway Design [Roadway_De Buildings [Topo] TOPO_Building_* 1-9999 Fences TOPO_Camping_* 1-9999 Camping [Topo] Guardrail Color [Standard_Levels] _co 22000-2 Phasing 21000-2. Construction [Construction] Roadway TOPO_Culvert_* Culverts [Topo] 1-9999 TOPO_CurbGutr_* Surface Curb and Gutter [Topo] 1-9999 22000-2. Draft [Standard_Levels] Draft ROW [ROW] Chandard Laurala (Cha Active Level: DES_ROADWAY_Toe-of-Fill 105 of 105 displayed; 1 selected;
- 5. Click the + symbol next to the Roadway Design to expand this list.

6. Click on Roadway to review the levels that make up this filter (all design levels with Roadway in the name).

- 1	(none) 🔻 🔀 🝷						
Δ	Name		:0	10	8	٢	
	DES_Roadway_*						
	DES_ROADWAY	4	D		(none)	1	
	DES_ROADWAY	5			(none)	1	
	DES_ROADWAY	5			(none)	1	
	DES_ROADWAY	3			(none)	1	
	DES_ROADWAY	6			(none)	1	
=	DES_ROADWAY	3			(none)	1	
	DES_ROADWAY	13	B D		(none)	1	
	DES_ROADWAY	10) D		(none)	1	
	DES_ROADWAY_App	3			(none)	1	
	DES_ROADWAY_Cont	4			- (none)	1	
		_			(none)	1	
-	DES_ROADWAY_Curb	7			- (none)	~	
		A Name DES_Roadway_* DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY DES_ROADWAY_Corb DES_ROADWAY_Curb	A Name DES_Roadway_* DES_ROADWAY 4 DES_ROADWAY 5 DES_ROADWAY 5 DES_ROADWAY 3 DES_ROADWAY 3 DES_ROADWAY 3 DES_ROADWAY 12	A Name Image: Second S	A Name DES_Roadway_* DES_ROADWAY 4 DES_ROADWAY 5 DES_ROADWAY 5 DES_ROADWAY 5 DES_ROADWAY 3 DES_ROADWAY 6 DES_ROADWAY 13 DES_ROADWAY 13 DES_ROADWAY 10 DES_ROADWAY 3 DES_ROADWAY 10 DES_ROADWAY 3 DES_ROADWAY 3 DES_ROADWAY 3 DES_ROADWAY 3	▲ Name ■ <td>▲ Name ➡<!--</td--></td>	▲ Name ➡ </td

Note that this filter contains both used levels in the active file and unused levels in the library.

- 😭 Level Manager - - X Levels Filter Edit 🥪 💓 📳 🛛 Symbology: ByLevel 💌 | 🏳 (none) 🔻 🖾 🔻 ∆ Name - 🕞 Bridge-All [Bridge] . .0 8 ۲ - Construction [Construction] DES_Guardrail_ 🖃 🏷 GIS [GIS] DES_GUARDRAIL_Cable 5 GU. 1 (none) + Hydraulics [Hydraulics] 5 GU., DES GUARDRAIL En... (none) ~ DES GUARDRAIL_Im... . 5 — 5 GU... (none) / 🗠 🕨 Materials and Geotechnical [Mate DES GUARDRAIL Tr... (none) DES_GUARDRAIL_Ty... 5 GU... DES_GUARDRAIL_Ty... 5 GU... (none) ~ Roadway Design [Roadway_Des (none) Fences DES_GUARDRAIL_Symb 5 (none) Guardrail DES_GUARDRAIL_Ty... 5 GU... DES_GUARDRAIL_Ty... 5 GU... ~ (none) Phasing ~ (none) ≽ Roadway DES_GUARDRAIL_Ty... 5 GU.. (none) Surface ROW [ROW] Chandland La Ja ICi Active Level: DES_ROADWAY_Toe-of-Fill 10 of 1574 displayed; 1 selected;
- 7. Click on **Guardrail** to review all design levels with Guardrail in the name.

- *Note:* This filter does not have any used levels in the active design file. All levels are from the library.
- 8. Right-click in any column heading and turn on the **Number** column.
- 9. Click on the upper level **Roadway Design** filter and review levels.

evels <u>F</u> ilter <u>E</u> dit								
🖉 🔀 🔤 Symbology: ByLevel 💌		(none) 🔻 🚾 👻						
-> Bridge-All [Bridge]	Δ	Name [6	:0	20	٨	۲	
-> Construction [Construction]								
🗄 🍃 GIS [GIS]		DES_ROADWAY	4	D		(none)	· ·	
Hydraulics [Hydraulics]		DES_ROADWAY	5			(none)	/	_
🖶 🕞 Landscape and Environmental [L		DES_ROADWAY	5			(none)	~	
⊕-> Materials and Geotechnical [Mate		DES_ROADWAY	3			(none)	1	
🖃 🗁 Roadway Design [Roadway_Des		DES_ROADWAY	6			(none)	~	
- 🕞 Fences		DES_ROADWAY	3			(none)	~	
- 🕞 Guardrail		DES_ROADWAY				(none)	~	
-> Phasing		DES_ROADWAY	10	D		(none)	~	
-> Roadway		DES_BIKEPATH	3			(none)	~	
-> Surface		DES_GUARDRAIL_Cable	_			(none)	1	
			4	FE		(none)	~	
ELS Standard Lovels [Standard Lovel		DES_PHASING	5			(none)	~	

Note that this filter is not filtered on name, but instead contains all levels in the Roadway Design level number range (14000 - 14999). This includes all "children" filter levels like Guardrail and Roadway.

Use level filters to turn levels on/off

The level filters are stored in the level libraries, accessed via the Level Manager. However, to actually use the filters, you need to use Level Display.

1. Close the Level Manager.

2. Open the Level Display box from the Primary toolbar.



- 3. Set the active level to **Default** by **double-clicking** it in the **Level Display** box.
- 4. Turn *off* all levels.
- 5. Change the Show option from Levels to Filters.

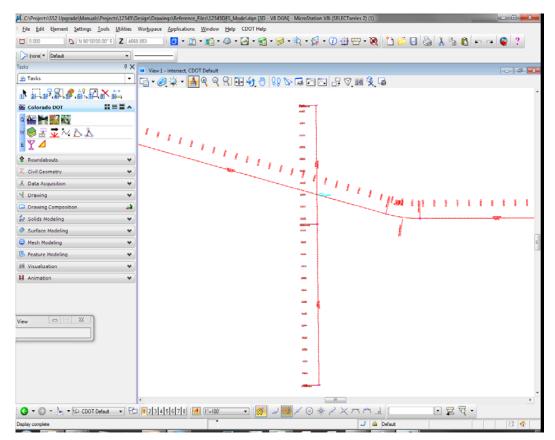
🥩 Level Display - View 1			x
U View Display			
Image: Weight of the second secon			
Name	Number	File	Lo ^
Default	0	12345DES_Model.dgn	E
ALG_COGO_Points	19001	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn	
ALG_SECONDARY_Hor-Alignment-Sta-Major	19043	12345DES_Model.dgn	
ALG_SECONDARY_Hor-Alignment-Sta-Minor	19044	12345DES_Model.dgn	
ALG_SECONDARY_Hor-Cardinals	19046	12345DES_Model.dgn	
DES_ROADWAY_Curb-Top	14041	12345DES_Model.dgn	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn	
DES ROADWAY Top-of-Cut	14052	12345DES Model.dgn	Ŧ
			•

6. Sort the Level filters alphabetically in ascending order.

7. Toggle *on* the Alignments filter.

Image: Wiew Display Image: Wiew
Display State Sta
Name ^
Alignments
Alignments.Existing
Alignments.Other
Alignments.Proposed
Alignments.Secondary
Alignments.Text
Bridge
Bridge-All
Bridge+Draft
Bridge+Draft+Sheet
Construction
GIS
GIS.Roads
GIS.Text
Hydraulics
Hydraulics.Basins
Hydraulics.Pipes
Hydraulics.Profile
Landscape and Environmental
Landscape and Environmental.Erosion
Landscape and Environmental.Wetlands

Only the alignment levels (centerline and stationing levels) are turned on. Choosing the filter turns on all levels in the filter.



Note: If you toggle the filter off, it turns *all levels* on by default. However, selecting the filter again resets the filter and turns on only the filter levels.

Use level filters to select a group of levels

1. With the Alignments filter selected, change the Show option back to Levels.

🥩 Level Display - View 1	
🖓 🕅 View Display	•
🌾 📴 🕞 (none) 🔻	Levels ▶ Filters 📈 ▼

2. Change the List Filter from (none) to Alignments > Proposed.

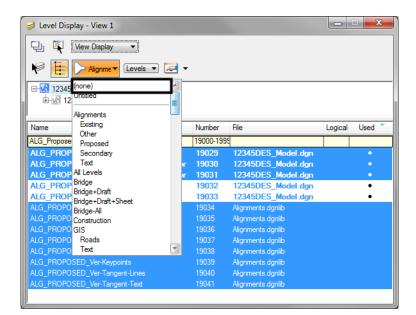
🥩 Level Display - View 1			x
Uiew Display			
⊭ 🕞 (none) 🔻 Levels 🔍 📈			
□ 12345 (none)			
Alignments			
Name Existing Other	Number	File	Lo ^
Default Proposed	0	12345DES_Model.dgn	8
ALG_COGO Secondary	19001	12345DES_Model.dgn	
ALG_PROP Text	19029	12345DES_Model.dgn	
ALG_PROP All Levels	19030	12345DES_Model.dgn	
ALG_PROP Bridge Bridge+Draft	19031	12345DES_Model.dgn	
ALG_PROP	19032	12345DES_Model.dgn	
ALG_PROP Bridge-All	19033	12345DES_Model.dgn	
ALG_SECO Construction jo	or 19043	12345DES_Model.dgn	
	or 19044	12345DES_Model.dgn	
ALG_SECO Roads	19046	12345DES_Model.dgn	
DES_ROAD Text	14041	12345DES_Model.dgn	
DES_ROADWAY_Edge-Of-Road-Oil	14016	12345DES_Model.dgn	
DES_ROADWAY_Lane-Line	14044	12345DES_Model.dgn	
DES_ROADWAY_Misc	14045	12345DES_Model.dgn	
DES_ROADWAY_Point-of-Slope-Selection	14046	12345DES_Model.dgn	
DES_ROADWAY_Shoulder	14047	12345DES_Model.dgn	
DES_ROADWAY_Toe-of-Fill	14051	12345DES_Model.dgn	
DES ROADWAY Top-of-Cut	14052	12345DES Model.dqn	-
			P.

The list of hundreds of levels is filtered down to only a few (the levels contained in the Proposed Alignments filter).

3. Turn off the ALG_Proposed_Hor-Alignment-Text and ALG_Proposed_Hor-Cardinals levels.

Level Display - View 1					x
🖓 🕅 View Display					
Alignme ▼ Levels ▼					
Name	Number	File	Logical	Used	*
ALG_Proposed_*	19000-199	99			
ALG_PROPOSED_Hor-Alignment	19029	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Alignment-Sta-Major	19030	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Sta-Minor	19031	12345DES_Model.dgn			
ALG_PROPOSED_Hor-Alignment-Text	19032	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Cardinals	19033	12345DES_Model.dgn		•	
ALG_PROPOSED_Hor-Keypoints		Alignments.dgnlib			
ALG_PROPOSED_Hor-Tangent-Lines		Alignments.dgnlib			
ALG_PROPOSED_Hor-Tangent-Text	19036	Alignments.dgnlib			
ALG_PROPOSED_Ver-Alignment		Alignments.dgnlib			
ALG_PROPOSED_Ver-Alignment-Text		Alignments.dgnlib			
ALG_PROPOSED_Ver-Keypoints		Alignments.dgnlib			
ALG_PROPOSED_Ver-Tangent-Lines	19040	Alignments.dgnlib			
ALG_FROPOSED_verstangenisunes					

- **Note:** Use Level Filters to improve your MicroStation efficiency when searching for levels. Setting the List Filter is an efficient way to work with levels. Instead of scrolling through hundreds of levels to find a level to turn on, off or set active, the filter breaks the levels down into a logical and manageable group.
- 4. Set the List Filter back to (none) to show all levels in the Level Display list.



- 5. Close the Level Display box.
- 6. Fit View 1.
- 7. Save your settings (File > Save Settings).

8. Exit MicroStation.