I-70 Mountain Corridor General Information: Getting Started

Use information in the 00 - General folders for background on the project.

- Basic Design Schedule: I-70 Design Schedule.xlsx
- Projectwise Folder Structure: I-70 Design Folder Structure in Projectwise.docx
- CAD File Naming Convention: I-70 File Naming Convention.xlsx
- Project Segment Map: I-70 Mountain Corridor Segment Map.dgn
- Level 1 Design Alternatives: I-70 Design Alternatives Level 1.pdf

CSS Items

Design Criteria: CSS.Engineering Design Criteria.pdf

CSS Guidelines: Front Range Foothills.pdf C-470 – MP 248

Mountain Mineral Belt.pdf MP 248 – 221

Crest of the Rockies.pdf MP 221 – SH 9 Interchange

PEIS Items

Programmatic EIS: Final PEIS.pdf

Record of Decision: Final_I70_ROD.pdf Final_I-70_ROD_Appendix B.pdf

PEIS Alternates Technical Report: Vol2_I-70_Mntn_Corridor_Final_PEIS_AltDevScreen_TR.pdf

PEIS Alternates Transportation Technical Report:

Vol2_I-70_Mntn_Corridor_Final_PEIS_Transportation_Analysis_TR.pdf

Design Files from PEIS: 40 - PEIS Files

Roadway Design

Design Criteria, Typical Sections, InRoads Modeling, etc: Design Criteria

Interchange/ramp connection guidance: Ramp Connections

Existing Data, such as median widths: Existing Information

Quantities, Level 1 Analysis: Quantities Level 1

Bridge Limits based on modeling: Docs

Inroads Information

Preference File to be shared by all segments/alternatives: CDOT_Civil.xin

Template Library to be shared by all segments/alternatives: CDOT_Template-Library.itl

All other Inroads data is segment/discipline specific. Roadway data is under Roadway\CAE:

Alg – under CAE/Geometry

Rwk – under CAE/Projects

Ird – under CAE/Corridors

Dtm – under CAE/Surface/Existing or CAE/Surfaces/Proposed

Previous Submittals

Submittals made to other consultants or to the client should have a record copy kept in the 90 - Publish folder. These files are our internal version of document control accessible to all CAD users – do not update or change once a submittal is made. This includes pdf versions of all exhibits created for meetings.

Follow the format shown to add a folder and copy relevant files as needed.

CAD General Info

Seed files are under 00 - Project Seed Files

Borders are under 01 - Project Borders

Corridor wide general files are under 04 - Project Base Files

Discipline and Sheet Container Files

Container files are essentially an empty file with desired references attached. The container file is attached as a reference with live nesting, nesting depth of 1, allowing one file to be attached instead of multiple. They are typically used in two ways:

1. Sheet Container Files: As a way to better manage sheet production, a container file is attached to each sheet. The container file manages all standard plan references such as roadway, topo, row, etc: all level management (on/off) and plot attributes are done here. The sheet file references the container file, border, and any other needed files (such as profiles). The container file should have Display Overides to Never. This ensures the container file settings are used for plan production. There is typically a different container file for removals, roadway plans, drainage plans, etc based on the specific needs.
2. Discipline Container Files: While sheet container files will have many different disciplines attached, discipline container files have only a specific disciplines files attached. This allows others to reference only one file instead of searching for alignments, plan, profiles, etc.
    a. As of right now, there are some roadway container files established under the 10 - Design\0# - Segments\Segment 0#\Roadway\CAD\ folders. These can be attached to working files and used to manage each segment and alternative.
    b. There are also corridor wide files under CAD which combines all the roadway segment files. These are helpful when looking at the corridor as a whole. If working on design in one segment, consider using segment specific files above.

Typical Folder Structure and Naming Convention:

Files generally follow the CDOT naming convention with a few project specific modifications.

All files to start with the JPC#: 19455_

Add the corresponding Segment information: S1, S2, S3, S4, S5, S6, S7 or CW (for corridor wide)

Very limited use of CW files, most should still be broken into corresponding Segments

Add the sheet description (see Detailed File Name Examples)

Add the Alternative and Option information in place of the ##, see below

##	Description
Alt01_Opt01	2 managed lanes at 65 mph with 55 mph curves where required for General Purpose lanes only (Viaduct needed for independent alignments)
Alt01_Opt02	2 managed lanes with 65 mph curves (including General Purpose lanes)
Alt02_Opt01	3 managed lanes at 65 mph with 55 mph curves where required for General Purpose lanes only (Viaduct needed for independent alignments)
Alt02_Opt02	3 managed lanes with 65 mph curves (including General Purpose lanes)
Alt02_Opt03	3 managed lanes at 65 mph with 55 mph curves where required for General Purpose lanes only (Viaduct continues thru Idaho Springs)
Alt03_Opt01	Minimum program per PEIS with 55 mph curves and 3rd bore at EJMT (no separate managed lanes)
Alt03_Opt02	Minimum program per PEIS with 65 mph curves and 3rd bore at EJMT (no separate managed lanes)
Alt03_Opt03	Minimum program per PEIS with 55 mph curves without 3rd bore at EJMT (no separate managed lanes)
Alt03_Opt04	Minimum program per PEIS with 65 mph curves without 3rd bore at EJMT (no separate managed lanes)
Alt04_Opt01	Maximum program per PEIS with 55 mph curves (no separate managed lanes)
Alt04_Opt02	Maximum program per PEIS with 65 mph curves (no separate managed lanes)
Alt04_Opt03	Maximum program per PEIS with 55 mph curves (add'l lane is a managed lane) EJMT To Floyd Hill
Alt04_Opt04	Maximum program per PEIS with 65 mph curves (add'l lane is a managed lane) EJMT To Floyd Hill
Alt05_Opt01	Peak Period Lane (Hard Shoulder Running) EB and WB C-470 to Silverthorne

Discipline Design Project Folder (\Discipline)

Sub-directories

\CAD All Final Model files to be referenced into the sheets (commonly called Reference Files or Master Files)

19455_S#_DesignModel_Alt##_Opt##.dgn
19455_S#_DesignAlignment_Alt##_Opt##.dgn
19455_S#_DesignProfile_Alt##_Opt##.dgn
19455_S#_DesignXS_Alt##_Opt##.dgn

\Exhibits Exhibits for meetings or reports

19455_S#_Exhibit##.dgn

\Sheets Sheet Files – Plan, profile, detail, etc sheets

19455_S#_DetailSheet##.dgn
19455_S#_PlanProfile##.dgn
19455_S#_PlanSheet##.dgn
19455_S#_ProfileSheet##.dgn
19455_S#_TitleSheet##.dgn
19455_S#_TypicalSection##.dgn

Bridges	Masters	Sheets
	19455_<S1-S7>_BridgeModel_<Alt##_Opt##>_<STR#>.dgn	19455_<S1-S7>_Bridge_<STR#>_###.dgn
	19455_<S1-S7>_BridgeProfile_<Alt##_Opt##>_<STR#>.dgn	
Roadway	Masters	Sheets
	19455_<S1-S7>_DesignGeneralNote_<Alt##_Opt##>_##.dgn	19455_<S1-S7>_ApproximateQuantities_###.dgn
	19455_<S1-S7>_DesignModel_<Alt##_Opt##>.dgn	19455_<S1-S7>_EarthworkQuantities_###.dgn
	19455_<S1-S7>_DesignProfile_<Alt##_Opt##>.dgn	19455_<S1-S7>_GeneralNotes_###.dgn
	19455_<S1-S7>_InterchangeLayout_<Alt##_Opt##>_##.dgn	19455_<S1-S7>_PlanProfile_###.dgn
	19455_<S1-S7>_Intersection_<Alt##_Opt##>_###.dgn	19455_<S1-S7>_PlanSheet_###.dgn
		19455_<S1-S7>_ProfileSheet_###.dgn
		19455_<S1-S7>_StandardPlanList_###.dgn
		19455_<S1-S7>_SURVTabSheet_###.dgn
		19455_<S1-S7>_TitleSheet_###.dgn
		19455_<S1-S7>_GeneralNotes_###.dgn
		19455_<S1-S7>_TypicalSection_###.dgn
Hydraulics	Masters	Sheets
	19455_<S1-S7>_HydraulicsModel_<Alt##_Opt##>_###.dgn	19455_<S1-S7>_StructureQuantities_###.dgn
	19455_<S1-S7>_HydraulicsProfile_<Alt##_Opt##>_###.dgn	
Landscape	Masters	Sheets
	19455_<S1-S7>_LandscapeModel_<Alt##_Opt##>_###.dgn	19455_<S1-S7>_Plan_###.dgn
Geotechnical	Masters	Sheets
	19455_<S1-S7>_GeotechnicalModel_<Alt##_Opt##>_###.dgn	19455_<S1-S7>_Plan_###.dgn
ROW Survey	Masters	Sheets
	19455_<S1-S7>_ROWModel###.dgn	19455_<S1-S7>_MonumentationSheet##.dgn
	19455_<S1-S7>_SurveyModel###.dgn	19455_<S1-S7>_ROWOwnershipSheet##.dgn
	19455_<S1-S7>_SurveyTopo##Scale###.dgn	19455_<S1-S7>_ROWSheet##.dgn
	19455_<S1-S7>_SurvTopoCodes##Scale##.dgn	19455_<S1-S7>_ROWTabulationofPropertiesSheet##.dgn
	19455_<S1-S7>_SurvTopoContour##Scale##.dgn	19455_<S1-S7>_ROWTitleSheet##.dgn
	19455_<S1-S7>_SurvTopoElev##Scale##.dgn	19455_<S1-S7>_SURVPlanSheetLSCD##.dgn
	19455_<S1-S7>_SurvTopoNames##Scale##.dgn	19455_<S1-S7>_SURVPlanSheetPCD##.dgn
	19455_<S1-S7>_SurvTopoNotes##Scale##.dgn	19455_<S1-S7>_SURVTitleSheetLSCD##.dgn
	19455_<S1-S7>_SurvTopoSymbols##Scale##.dgn	19455_<S1-S7>_SURVTitleSheetPCD##.dgn