Proposed LCUASS Modifications

Proposed	LCUASS Modifica	tions		Last updated: 12/23/19
Chapter	Page Number	Section	Proposed Changes	Technical Revision or Policy Related
2	Page 1-18 Page 2-1	Section 1.9.2.B.2 Section 2.1.2	Edit language for On-Site Criteria and Off-Site Criteria to be easier to read  Move "Construction Traffic Control Plans" to Section 2.2.6 for more appropriate chapter locatior	Technical Revision Technical Revision
2	Page 2-1	Section 2.2.2	Change title from Public Improvement Construction Plans to Civil Construction Plans. More discussion needec	Technical Revision
2	Page 2-2 Page 2-3	Section 2.2.3 Section 2.2.11	Revise Section B to indicate "Landscape Plans to comply with Local Entity's current requirements'  Mylar Requirements. "Refer to each Local Entity for the specific mylar requirements'	Technical Revision Technical Revision
2	Page 2-4	Section 2.2.12	Minor Field Change Request Form. Other jurisdictions may use. More discussion needed	Technical Revision
2	Page 2-6 Page 3-1	Section 2.3.2 Section 3.1.2	Text removed and instead reference Loveland Municipal Code Title 18  Change "Final Mular Deswings" to "Final Deswings" and undate to keep up with between young after More discussion on electronic scan of mulars poods.	Technical Revision Technical Revision
3	Page 3-1	Section 3.1.2	Change "Final Mylar Drawings" to "Final Drawings" and update to keep up with technology updates. More discussion on electronic scan of mylars neede  Vertical Datum. Change to "Local Entity's Vertical Datum"	Technical Revision
3	Page 3-1	Section 3.1.4	Expiration of Plan Set - Change title to be consistent with what title is decided for Section 2.2.:	Technical Revision Technical Revision
3	Page 3-2 Page 3-3	Section 3.2.2 Section 3.2.6	22"x34" Plans as an option so 11"x17" can be true half-size  Remove "wet stamped" plan requirements & allow electronic PE stamps per Colorado Board of Registration requirement	Technical Revision
3	Page 3-4	Section 3.2.7	Instead of 1"=30' for all Signing & Striping Plans. "Plans should be legible as determined by the Local Entity Engineer	Technical Revision
3	Page 3-4 Page 3-4	Section 3.2.7 Section 3.2.12	Remove scale requirements for Key Map & Vicinity Map. Instead Key Map & Vicinity Map shall be legible Legend of Symbols. Each symbol & linetype should be on the cover sheet or each shee	Technical Revision Technical Revision
3	Page 3-5	Section 3.3.1	Idemnification Statement. For Loveland, use signature block instead	Technical Revision
3	Page 3-5 Page 3-9	Section 3.3.1.F Section 3.3.4.A.7	Preamble (Project Title) - Layout doesn't follow what FC uses for Utility Plans. Does FC need their own section? More discussion neede  Add language "Shall conform to local, state, and federal requirements including SB18-167"	Technical Revision Technical Revision
3	Page 3-9	Section 3.3.4.D	Cross-Sections - Two sections (e. and f.) should be COL only.	Technical Revision
5	Page 5-2 Page 5-4	Section 5.2.1.C Section 5.4.1	Lower values to have a liquid limit greater than 30 and a plasticity index greater than 15 for higher quality fill for ROW grading. Fort Collins only  Fix reference error and reference Table 5.1	Technical Revision? Technical Revision
5	Page 5-5	Section 5.5.1	change PICPs to "Civil Construction Plans"	Technical Revision
5	Page 5-6 Page 5-7	Section 5.6.1.B Section 5.6.2.A	The requested waiver shall be signed and stamped by a Colorado Professional Enginee  Remove low impact development systems from #5 and add to #6. Add low impact development systems, over-watering lawns, subsurface irrigation, etc	Technical Revision Technical Revision
5	Page 5-7	Section 5.6.2.A.9.b	Loveland will check with utilities to see if drain lines may be installed with sanitary sewer trench. I believe Loveland utilities recently said no	Technical Revision
6	Page 6-1 Page 6-2	Section 6.1.1.E Section 6.1.1.F	Change to "Construction Management Plans (Fort Collins only)". Also do we want to include F. "Lane rental fees (Fort Collins only)  Hazardous Materials. Changed wording to "All moving of hazardous materials must be permitted through the State of Colorado	Technical Revision? Technical Revision
6	Page 6-2	Section 6.1.1.I	Delete section I	Technical Revision
6	Page 6-2 Page 6-4	Section 6.1.2 Section 6.1.7.A.6	Add language that indicates Blasting Permits are to be acquired through the local Fire Authority  Add language to Refer to Chapter 25, Reconstruction and Repair for additional informatior	Technical Revision Technical Revision
6	Page 6-4	Section 6.1.7.A.11	Change notification from 24 hours to 48 hours. Fort Collins to check	Technical Revision
6	Page 6-5	Section 6.1.7.B.1 Section 6.1.7.B.3	"Plan" changed to "Traffic Control Plan (Plan)" "Engineer" changed to "Local Entity Engineer"	Technical Revision Technical Revision
6	Page 6-5 Page 6-5	Section 6.1.7.B.4.b	Change text from "One Call" to "Colorado 811"	Technical Revision
6	Page 6-6 Page 6-6	Section 6.1.7.B.7 Section 6.1.7.B.8	"Engineer" changed to "Local Entity Engineer"	Technical Revision Technical Revision
6	Page 6-7	Section 6.1.8.A	"faxing" changed to "emailing"  Stop work fine changed from a specific dollar amount to "Per the Local Entity's requirements	Technical Revision
6	Page 6-7 Page 6-8	Section 6.1.8.B Section 6.1.9.A	Title changed to "Mitigation Expenses for Unsafe or Untimely Performance'  Text changed to "Developer is responsible to provide insurance prior to any work'	Technical Revision Technical Revision
6	Page 6-9	Section 6.1.10	Loveland to be included in Licensing. "Licensing in Fort Collins and Loveland (City Limits)'	Technical Revision
6	Page 6-10	Section 6.2.1 Section 6.2.2.4	Delete Appendix E-6 reference	Technical Revision
6	Page 6-11 Page 6-11	Section 6.2.2.4 Section 6.2.3	Public Improvements Opinion of Cost are to be signed and stamped by a P.E.  Separate preconstruction meetings for utilities, if needed, are the responsibility of the Developer to coordinate	Technical Revision Technical Revision
6	Page 6-11	Section 6.2.3.B	Text changed to "For the items required prior to the DCP meeting, contact the Local Entity Engineer	Technical Revision Technical Revision
6	Page 6-12 Page 6-13	Section 6.2.4 Section 6.2.4	Delete 1 - 4. Already taken care of through the routing process  Added "DCP" text to 11 and 12 (i.e. "Applicant's signature on the DCP"	Technical Revision Technical Revision
6	Page 6-13	Section 6.2.5	Wording changed to improve grammar. "DCP" text also used instead of "permit'	Technical Revision
6	Page 6-14 Page 6-14	Section 6.2.6.B Section 6.2.6.C	Reference surety agreement  Reduction of the surety based on the level of completion of the projec	Technical Revision Technical Revision
6	Page 6-14	Section 6.2.6.C.3	"Engineering Division" changed to "Local Entity Engineer"	Technical Revision
6	Page 6-15 Page 6-15	Section 6.3.1 Section 6.3.2	"Public Improvement Construction Plans" changed to "Civil Construction Plans"  Text changed to "The permit application and information is available on the Local Entity's website'	Technical Revision Technical Revision
6	Page 6-17	Section 6.4	Removed text and instead reference to contract the local entity for the revocable encroachment permit applicatio	Technical Revision
6	Page 6-17 Page 6-18	Section 6.5.1 Section 6.5.2.A	Refer to local entity for permit requirements  Notification of house move changed from 24 hours to 72 hours. Also applicant required to obtain all necessary permits.	Technical Revision Technical Revision
6	Page 6-19	Section 6.5.2.B	Text added. Pemits are issued for a single move, which can contain multiple structures	Technical Revision
6	Page 6-20 Page 6-20	Section 6.6 Section 6.6.A	Permit for house numbers on curbs text deletec "floggers" changed to "flaggers"	Technical Revision Technical Revision
6	Page 6-21	Section 6.6.B	Stockpilling Permit text removed. Instead refer to Local Entity for permit application and requirement:	Technical Revision
6 7	Page 6-22 Page 7-ii	Section 6.7 Section 7.5.1.I	Deleted text on fees. Instead refer to Local Entity for current requirements and fee  Landscaping - Adding language on Waterwise Landscape	Technical Revision Technical Revision
7	Page 7-1	Section 7.2.1	Signs shall be placed at the end of roads planned for future road extension	Technical Revision
7	Page 7-3 Page 7-4	Section 7.2.3.B Section 7.4.1.A.2	No direct access to residential driveways from Collector Streets (Loveland only)  Minimum Tangent Length. In constrained or re-development areas allowed some flexibility on the minimum tangent length (see tex	Technical Revision? Technical Revision
7	Page 7-7	Table 7-2	Table 7-2 Loveland. Detached sidewalks required for all streets other than alleys. 28' wide FL-FL for primary access alley:	Policy Revision?
7	Page 7-7 Page 7-8	Table 7-2 Table 7-3	Restrict direct access on Minor Collector Streets for residential driveways  Table 7-3 Fort Collins. Use current AASHTO numers for Stopping Sight Distance	Technical Revision? Technical Revision
7	Page 7-8	Table 7-3	Table 7-3 Fort Collins. Use current AASHTO K values for vertical curves	Technical Revision
7	Page 7-10 Page 7-11	Table 7-4 Table 7-5	Table 7-4 Loveland. Loveland to ue current AASHTO K values;  Min. Arc Length for Lanes and primary access alleys = 100'	Technical Revision Technical Revision
7	Page 7-12	Section 7.4.1.B.2	Minimum Flowline Grades. Minimum Fl. grade of cut-de-sacs shall be 1.0 percent	Technical Revision
7	Page 7-12 Page 7-12	Section 7.4.1.B.3 Section 7.4.1.B.6	Grade Breaks. Change from 0.4 perecent to 0.5 percent  Vertical Clearance. Minimum vertical clearance changed from 13.5 feet o 16.5 feet	Technical Revision Technical Revision
7	Page 7-12	Section 7.4.1.C.1	Stopping sight distance changed to be consistent with latest AASHTO requirements	Technical Revision
7	Page 7-13 Page 7-16	Table 7-6 Section 7.5.1.D	Stopping and Passing sight distance changed to be consistent with latest AASHTO requirement:  All barrier curb shall be full depth and not glue down unless otherwise approved by the Local Entity Enginee	Technical Revision Technical Revision
7	Page-7-19	Section 7.6.4.C	Temporary turnariounds shall be paved or an all-weather recycled asphalt surface as approved by the Local Entity Enginee  Temporary turnariounds shall be paved or an all-weather recycled asphalt surface as approved by the Local Entity Enginee	Technical Revision
7	Page 7-20 Page 7-20	Section 7.7.3.B Section 7.7.3.C.1.k	Subdrains systems must be owned and maintained by a private party other than the Local Entit'  Subdrain designer required to show locations of proposed subbdrain and plan to avoid conflicts (i.e. Tree roots, etc.	Technical Revision Technical Revision
7	Page 7-23	Section 7.8.4	Judanani designer required to snow locations or proposed amount and part to 14.0 feet.  Vertical Clearance. Chaerance or to 14.0 feet.	Technical Revision
8	Page 8-2	Section 8.2.5 Section 8.2.6.C	Added definition of vph to "Definitions of Terms" in Section 1.1	Technical Revision Technical Revision
8	Page 8-3 Page 8-3	Section 8.2.7.B	Modiffied text in Section C to further describe Figure 8-19 Modified text in Section B from "want" to "recommend"	Technical Revision
8	Page 8-4	Section 8.2.8.B Section 8.2.8.C	Refer to Local Entity Engineer for which Bus turning template to use	Technical Revision Technical Revision
8	Page 8-4 Page 8-6	Section 8.2.10.B.3	Refer to LCUASS Appendix I for roundabout turning template requirement: Gluedown Curb. Change text from "left-turn lane" to "auxiliary lane" to leave possibilities oper	Technical Revision
8	Page 8-7	Section 8.2.14.B Section 8.2.16	Reworded text to read better Roadway Narrowing may not be used on Major Collectors or Arterials without a Formal Variance per Section 1.9.4	Technical Revision Technical Revision
8	Page 8-8 Page 8-8	Section 8.2.17	Roundabouts shall be designed in accordance with LCUASS Appendix	Technical Revision
9	Page 9-iii Page 9-7	Figure 9-1 Section 9.3.3	Figure 9-1 Access Spacing is mssing from the on-line version Section 9.3.3 Sight Distance - reference the latest AASHTO criteria	Technical Revision Technical Revision
9	Page 9-8	Section 9.3.7.E	Maximum cross slope per latest ADA requirements	Technical Revision
9	Page 9-9 Page 9-10	Section 9.3.7.H Section 9.4.6.A	In Loveland, garage doors that face an alley shall not be in an area that is between 5 feet and 20 feet from the edge of pavement of the alle  Driveways shall be concrete pavement within the public right-of-way	Technical Revision Technical Revision
9	Page 9-11	Section 9.4.10	Change in use updated to be consistant with CDOT State Highway Access Code (SHAC) criteria (20% or 100 total daily trips)	Technical Revision
10 10	Page 10-1 Page 10-3	Section 10.1.2 Table 10-1	Update to reference latest AASHTO. Also added "Mechanistic Empirical" design procedures may be substituted  Added a note 7 to to the Min. Structural Number in Table 10-:	Technical Revision Technical Revision
10	Page 10-6	Section 10.4.2	Referenced 10-1 and deleted alternate composite section text	Technical Revision
10 10	Page 10-7 Page 10-9	Section 10.4.2.A.1 Section 10.5.1.B.3	Changes 1/2" to 0.5 inch (Typical) Referenced latest edition of the CDOT Pavement Design Manua	Technical Revision Technical Revision
11	Page 11-1	Section 11.1.1	Remove old AASHTO structural standards from list	Technical Revision
11 11	Page 11-2 Page 11-2	Section 11.1.3.A Section 11.2.1	Working Stress Design (WSD) text modified  Text modified to clarify for spans greater than 20 feet	Technical Revision Technical Revision
11	Page 11-3	Section 11.2.4.B.3	Pedestrian load reduced from 85 psf to 75 psf per AASHTO Manua	Technical Revision
11 11	Page 11-5	Section 11.2.5.B.2	Design live loads per AASHTO	Technical Revision Technical Revision
12	Page 11-8 Page 12-1	Section 11.3.2 Section 12.1	Raillings per AASHTO City of Fort Collins is looking to revise this graphic showing utilities	Technical Revision
12 12	Page 12-1	Section 12.2.1 Section 12.2.3.A	Add sentence for Loveland see the Water and Wastewater Development Standards latest edition Add language to adjust 1/4 inch below the finished surface per Drawing 1201	Technical Revision Technical Revision
12	Page 12-1 Page 12-1	Section 12.2.3.B	Add language facilities located within the sidewalk should be ADA compliant	Technical Revision
12 12	Page 12-2 Page 12-2	Section 12.2.5.A Section 12.2.5.D	Add language indicating PVC sleeves should extend from ROW to ROW  Private utilities shall be outside of the public ROW unless otherwise approved by the Local Entity Enginee	Technical Revision Technical Revision
12	Page 12-3	Section 12.2.6	Delete Sections A and B since they just refer to other section:	Technical Revision
12 12	Page 12-3	Section 12.2.6.C Section 12.3.2.A	Move this section to "Intersections'	Technical Revision Technical Revision
12	Page 12-4 Page 12-4	Section 12.3.2.A Section 12.3.2.C	Refer to Local Entity's regulations for other systems (Cable TV, telephone, Broadband, Fiber Optic, Wireless Communications, etc.  Pole and sign locations shall conform to the MUTCD and AASHTO requirements	Technical Revision Technical Revision
12	Page 12-5	Section 12.3.3	Include fiber optics, broadband, wireless communications, etc	Technical Revision
13 13	Page 13-1 Page 13-1	Section 13.2.1 Section 13.2.2	Update website link address Update website link address	Technical Revision Technical Revision
	Page 13-1	Section 13.2.3	Include Fort Collins website link address	Technical Revision
13		Table 13-1	Change title to "Standardization of Road Naming Criteria"	Technical Revision Technical Revision
13 13 14	Page 13-2 Page 14-ii	List of Figures		
13 14 14	Page 14-ii Page 14-3	List of Figures Section 14.2.1.B2	Update List of Figures to contain figures referenced in the text  Streetlight fixtures as approved by the Local Entity  Description of the State of	Technical Revision
13 14	Page 14-ii			