

Project Name: \_\_\_\_\_ Project Number: \_\_\_\_\_

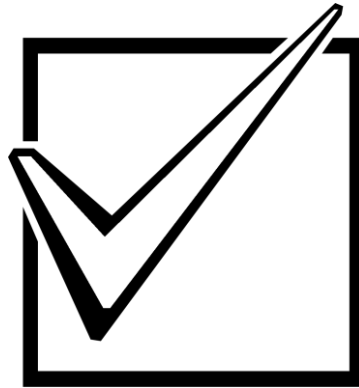
Date Submitted: \_\_\_\_\_ Submitted By: \_\_\_\_\_

**Purpose of Checklist**

This checklist will help to assure that your submitted application is consistent with City of Centennial regulations. On the attached checklist, please check the box when the requirement has been met. When all items are complete, please read and sign the checklist at the bottom and submit it with your application and submittal materials.

**Purpose of Construction Documents**

Construction Documents (CDs) are the plans used by the contractor to build the improvements specified in a Site Plan, MDP, FDP or SDP. CDs should meet the engineering standards used by the City of Centennial and should not deviate substantially from the Site Plan.



# Construction Document Checklist

## Construction Document Checklist

Please check off the following items to assure your application is complete. Sign and submit this checklist with your application.

### All Plan Sheets

Applicant	Staff	
		Key Map
		Title Block (On right side margin or along the bottom edge of the sheet)
		Case number, CD-XX-XXXXX, on bottom left hand corner (will be provided with first review comments)
		Subdivision name and filing number
		Planned Unit Development name (if applicable)
		Type of improvement (Construction Documents)
		Engineer's name, mailing address, and phone number
		Owner/Developer name, mailing address, and phone number
		Sheet title
		Sheet number (consecutive, beginning with cover sheet as 1)
		North Arrow
		Graphic and written scale (Grading plans, site plans etc.: 1"=20' to 1"=100', Engineer's Scale)
		Plan and Profile Maximum Horizontal Scale: 1"=50', Vertical Scale: 1"=5' minimum
		Legend with all line types and map symbols, hatching patterns, linetypes, etc.
		Original date of plan preparation and any subsequent revisions noted and dated
		Seal & signature of a Colorado registered PE (with final, full-sized CD's)

### Cover Sheet

Applicant	Staff	
		Engineer's Certification (obtain from City's website. Must be sealed & signed by a Colorado registered PE when final, full-sized CD's are submitted)
		Vicinity map (Ensure adjacent roads are labeled, visible, and text is legible). Include a scale (typically 1":2000')
		City of Centennial Approval Block in the lower right hand corner (obtain from City's website)
		General Notes (obtain from City's Website) – Can be included in separate sheet if necessary
		Additional notes for roadway plans (if applicable) – Can be included in separate sheet if necessary
		Contact name and phone number for fire district, water district, sanitation district, utility notification, City of Centennial, SEMSWA, etc.
		Sheet Index

# Construction Document Checklist

## **Site Plan / Horizontal Control Plan**

Applicant	Staff	
		Roads with road names labeled. Show centerlines of roadways and existing striping
		Existing & proposed ROW data (show ROW line and dimension)
		Case number, CD-XX-XXXXX, on bottom left hand corner (will be provided with first review comments)
		Adjacent properties labeled
		Boundary line survey information & Basis of Bearing statement
		Property lines
		Locations of existing structures and natural features including buildings, ditches or swales, and curb & gutter, sidewalk, etc. both onsite and offsite within 100 feet of the boundary line
		Location of proposed structures
		2 benchmarks per each 160 acres or part thereof
		Additional notes for roadway plans (if applicable)
		Existing & proposed easements (permanent and temporary) with dimensions and type
		Demolition callouts – Can be included in separate sheet if necessary
		Dimensions from building to property line or benchmark
		Proposed curb data labeled (curb lengths, radii)
		Access and drive aisle widths labeled and dimensioned
		Sidewalk (include labels and dimensions) both proposed and existing
		Sidewalk along all public roadways (required)
		ADA route from the public sidewalk to the building (required)
		Curb ramps with truncated dome warnings at entrances to public roads and ADA routes
		Catch and spill curb & gutter differentiated
		Angle, width and length of parking stalls
		Existing striping in adjacent roadways
		All proposed improvements/structures should be called out and corresponding details should be referenced (where applicable)

## **Grading Plan**

Applicant	Staff	
		Existing & proposed property line & ROW line with dimensions
		Proposed topography at 2-foot contour intervals (heavy, solid)
		Existing topography at 5-foot intervals (lightened or dashed)
		Limits of clearing and grading or daylight line
		Locations of existing structures and natural features including buildings, ditches or swales, and curb & gutter, sidewalk, etc. both onsite and offsite within 100 feet of the boundary line

# Construction Document Checklist

		Location of proposed structures
		Elevations, location, extent, and slope of all proposed grading
		Slope arrows with slope in percent over all parking areas and sidewalks
		Slope arrows with slope in V:H format over all steep landscape areas
		Cross section for retaining walls
		Top and Bottom of Wall elevations for retaining walls Show and label all existing and proposed easements
		Two benchmarks per 160 acres
		Catch and spill curb & gutter differentiated
		Call out where proposed structures tie into existing structures with the existing elevation
		Basic drainage improvement information (swale location and slopes, inlets, storm sewer called out, etc.)
		Provide the follow note: "These Construction Documents are not complete without the accompanying, most recently approved Grading, Erosion and Sediment Control (GESC) Plan drawings."

**Street Plan & Profile**

**Plan**

Applicant	Staff	
		Existing & proposed property line & ROW line with dimensions
		Existing & proposed easements & tracts with dimensions and type
		Survey lines and stations based on centerline
		Roads with road names labeled
		Proposed and existing roadway cross-sections. Include pavement thickness (consistent with geotechnical report), cross-slope, and sub-base information. Include stationing if sections vary within one consistent roadway
		Existing and proposed utility surface features including, but not limited to:
		Water valves
		Fire hydrants
		Sanitary and storm sewer manholes
		Storm drainage facilities
		Telephone
		Fiber optic cable
		Gas
		Electric
		Ditches or swales
		Curbs and gutters
		Pavement limits
		Bridges or culverts
		Guardrails
		Station and critical elevation (flowline, invert etc.) of all existing & proposed utility or drainage appurtenances in the right-of way or in drainage easements. Location of utilities dimensioned horizontally and vertically from roadway centerline profile grade

## Construction Document Checklist

		Storm drainage flow direction arrows at intersections
		Match-lines (if necessary)
		Station and elevation of all curb returns: existing and proposed horizontal PC, PT etc.; high or low point of all vertical curves
		Existing and proposed curb return radii
		Mid-block handicap ramp locations at "T" intersections
		Complete horizontal curve data: Radius (R)
		Degree of curvature (D)
		Point of curvature (P.C.)
		Point of tangency (P.T.) Tangent length (L)
		Centerline stations of all intersecting roads
		Typical cross-sections for all existing and proposed roads
		Profile grade design point (centerline, flowline, TOC, etc.)
		Classification of road
		Road width (flowline to flowline)
		Type of curb, gutter and sidewalk
		Pavement cross slope
		Existing construction and lane details for any existing arterial improvements (only if road intersects an arterial)
		Basis of elevations for plan and profile match (flowline, top of curb, etc.)

### Profile

Applicant	Staff	
		Existing ground (dashed) and proposed ground (heavy, solid)
		Elevations based on centerline, top of curb, lip of gutter or flowline. Basis of elevations must be the same basis as the profile
		Continuous stations for entire portion of road shown in corresponding plan view
		Elevation and location of all utilities in the immediate vicinity
		Station & elevation of existing and proposed vertical grade breaks
		Distance and grade/slope between grade breaks
		Complete vertical curve data: High or low point
		Point of intersection (P.I.)
		Point of curvature (P.C.)
		Point of tangency (P.T.)
		Length of curve (L)
		Algebraic difference in slopes in percent (A)
		$K = L/A$ labeled
		Station & elevation of all horizontal curve data (P.C., P.T. etc.)
		Profiles for all curb returns (except medians)

**Profile**

Applicant	Staff	
		Based on AASHTO’s Manual on Uniform Traffic Control Devices (MUTCD)
		General location of each sign (by station and side of road)
		Sign inventory table showing type, size and quantity of each sign (MUTCD specifications)
		Typical detail of installation dimensions (height, distance from curb)
		Detail post and base dimensions and installation plan (show wedge or sleeve, depth below surface, materials). Breakaway posts only
		Striping information including: Color designation
		Lane width
		Stall width and length (and angle if applicable)
		Stripe/skip with width
		Material type
		Typical treatment for accel/decel lanes, turn lanes & crosswalks (reference details for striping where applicable)

**Overall Utility Plan**

Applicant	Staff	
		Type, size, and location of all proposed utilities
		Sufficient surface features such as curb, walk, structures etc. to evaluate encroachment and access concerns & potential utility conflicts. Surface features should be faded back to emphasize utilities
		Existing and proposed utilities and structures, including, but not limited to:
		Water valves
		Fire hydrants
		Sanitary and storm sewer manholes
		Storm drainage facilities
		Telephone
		Fiber optic cable
		Gas
		Electric
		Property Lines
		Roads with road names labeled and ROW dimensioned
		Adjacent properties labeled
		Service lines and meter locations
		Storm & sanitary sewer lines with pipe size, length, type and slope
		Angles at alignment changes (if not shown on plan and profile)
		Manhole locations with dimension to nearest gutter lip (minimum of 3’ separation between edge of manhole and gutter on roadways)

**Storm Sewer Plan & Profile**

**Plan**

## Construction Document Checklist

		Sufficient surface features such as curb, walk, structures etc. to evaluate potential utility conflicts. Surface features should be faded back to emphasize utilities
		Type, size, and location of all proposed underground utilities
		Location and type of all existing utilities
		Storm drainage facilities
		Storm sewer lines with pipe size, length, material and slope
		Elevation of all utilities in the immediate vicinity
		Call out all utility crossings

### Profile

Applicant	Staff	
		Label existing ground (dashed) and proposed ground (heavy, solid)
		Manhole designations & locations (should be 3' from gutter at edges)
		Pipe size, length, material, slope between manholes
		Design flow & HGL
		Proposed elevations for all pipe inverts, stubouts and manhole rims
		Existing elevations (field verified) for all pipe inverts, stubouts, & manhole rims
		Vertical distance between utilities at crossings

### Detail Sheets

Applicant	Staff	
		Applicable Standard Details
		Striping details
		Signage details
		Drainage facility details

### Regulatory Approval

Applicant	Staff	
		Appropriate water and sanitary districts
		SEMSWA
		CDOT (for state highways)
		Cherry Creek Basin Water Quality Authority (when applicable)
		Urban Drainage (maintenance eligible projects)

# Construction Document Checklist

## Purpose of Checklist

This checklist will help to assure that your submittal is consistent with City of Centennial regulations. On the attached checklist, please check the box when the materials have been provided. When all items are supplied, please read and sign the checklist at the bottom and submit it with your application and submittal materials. Please note that this checklist was created as guidelines. CD requirements may vary by case.

The following are the *minimum* submittal requirements for a Construction Document submittal. Please check off the following items to assure your application is complete.

Applicant	Staff	
		Construction Documents (PDF format)
		Construction Document Review Fees
		Construction Document Checklist
		Outstanding SEMSWA items (not included with the Land Use Case)

**STAFF WILL NOT ACCEPT SUBMITTAL MATERIALS THAT ARE INCOMPLETE.**

**SUBMITTALS ARE ALL ELECTRONIC. DISKS, USB DRIVES, AND FILE SHARES (VIA EMAIL) ARE ACCEPTED.**

**COORDINATE WITH THE STAFF ENGINEER FOR CD SUBMITTALS.**

I \_\_\_\_\_ state that the above submittal requirements have been provided in completion of the requirements for submission as required by the City of Centennial, and that all documents provided have been submitted in accordance with the requirements and guidelines of the City of Centennial.

I also understand that submitting erroneous information or an incomplete submittal may delay the processing of my application.

\_\_\_\_\_

Signature Date