

Engineering Plan Set Requirements

Developer's Engineer is to include each of the following items listed in each section as applicable:

DRC MEETING - ENGINEERING

Date:

Project Name or Location:

Owner Information:

Step 1: DRC

General Submittals

<u>Description</u>	Required	N/A
Storm Drainage Design and Calculations - Detention/Retention	<input type="checkbox"/>	<input type="checkbox"/>
Stormwater Maintenance Agreement complete with attachments (if project is greater than 1-acre in size, part of a plan of common development, or using underground storage)	<input type="checkbox"/>	<input type="checkbox"/>
GCP, CPOD, NOI and SWPPP if project 1-acre or is a part of a plan of common development	<input type="checkbox"/>	<input type="checkbox"/>
Survey and topographical map	<input type="checkbox"/>	<input type="checkbox"/>
Geotechnical Report - Required for two or more lots, where underground stormwater will be stored, liquefaction or other conditions falling under MKZ Section 19.75.050	<input type="checkbox"/>	<input type="checkbox"/>
Geologic Hazards Ordinance / Fault Study - See Millcreek Map Gallery 'Geologic Features' map online, then MKZ 19.75	<input type="checkbox"/>	<input type="checkbox"/>
Traffic Study - As required per Planning or Engineering	<input type="checkbox"/>	<input type="checkbox"/>
UDOT Permit if work will be performed within any UDOT Right-of-Way	<input type="checkbox"/>	<input type="checkbox"/>
Stream Alteration Permit - see Salt Lake County Code of Ordinances Title 17.08.040	<input type="checkbox"/>	<input type="checkbox"/>
Salt Lake County Flood Control Permit - Title 17 of Salt Lake County Code of Ordinances	<input type="checkbox"/>	<input type="checkbox"/>
CLOMR/LOMR Filed Application - applies if building in the 100-year Floodplain	<input type="checkbox"/>	<input type="checkbox"/>
Irrigation Approval Letter (If a canal, ditch, etc. is effected by the subject property)	<input type="checkbox"/>	<input type="checkbox"/>
Conveyance of Easements	<input type="checkbox"/>	<input type="checkbox"/>
Deed conveying property dedication for Right-of-Way or other purpose where required	<input type="checkbox"/>	<input type="checkbox"/>
Other Items:	<input type="checkbox"/>	<input type="checkbox"/>
Civil plans will be required for review once plat is approved.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>

Engineering Plan Set Requirements

For All Steps	All Sheets	Description	COMPLETE	N/A
		Drawing number and title		
		"Call Before You Dig" logo		
		North arrow, legend and drawing scale (not to exceed 1:40)		
		Abbreviations and legend		
		Stamp and signature of licensed professional engineer or surveyor		
		References to specific Standard Plans as applicable		

Step 2: Plans	Title Sheet	Description	COMPLETE	N/A
		Reference to Millcreek Design Standards, General Notes and APWA when needed		
		Project owner's name, address and contact information		
		Contact information for all project team members		
		Vicinity map with north arrow		
		Sheet index for all sheets and index figure		

Include for all Subdivisions	Subdivision Plat	Description	COMPLETE	N/A
		Names of adjacent property owners		
		Location of survey by Quarter Section, Township and Range		
		Signed, stamped, and dated Surveyor's Certificate		
		Scale of drawing and north arrow		
		Total acreage of development and acreage of each lot		
		Proposed streets (names and coordinates) and adjacent streets		
		Point of beginning and basis of bearing		
		The distance and course to two (2) or more Section corners (including Township and Range) or identify existing monuments within subdivision		
		Applicable warnings and recommended mitigation measures for potential geotechnical problems		
		All bearings, angles and distances along the boundary and lot lines and boundary closure to 0.01 feet with all radius, length, chord distance, and chord bearing		
		Show and call out any no build areas		
		Location of street monuments with bearing and distance labeled, monument-to-monument, and location with respect to corners		
		Written boundary description of property surveyed		
		Existing and proposed easements, R-O-Ws, buffer zones and public spaces shown with references to Salt Lake County Recorder's book and page numbers		
		FIRM Flood Zone and Panel number		
		All lots (including common lots) numbered and addressed		
		Right-of-Way Dedication with written description to be dedicated		
Required signature blocks per Planning Department				
All agreements with recording information clearly shown (Ditch Companies, SWMA, etc.)				
All existing and proposed easements to be recorded				
Identify canals and canal ownership				

STEP 3: Include in all Plan Sets	Site Plan	Description	COMPLETE	N/A
		Title Block		
Project name, address and type of development (Subdivision, PUD, CUP, etc.)				
Licensed Surveyor (Name, address, telephone)				
Professional Engineer's Stamp				
Project Location				
Project Description				
Project owner's name, address and contact information				
Street Names				
Drawn by name, designed by name, checked by name				
Date				
Scale of drawing and north arrow				
Revision Block				
Sheet # of Total Sheets				
Geological hazard, canals, water bodies, flood plain designation				
Proposed streets (names, coordinates, and center line) and adjacent streets				
Buildable Areas				
Proposed layout of development				
Trash Bin location where necessary				
Amenities with labels				
Center line of all adjacent streets				
Distance from road center line to property line				
ADA Accessible Routes and applicable features (i.e. ramps)				
Any land dedications clearly identified				
Line types and fonts legible with legend				
Streetlights (public roads follow Millcreek standard, power boxes etc. use APWA)				
Site triangles per AASHTO/ Clearviews				
Parking stalls showing all dimensions with radius of curbs within the site				
Parking blocks where needed				

STEP 4: All Plan Sets	Demolition Plan	Description	COMPLETE	N/A
		Show and label all existing features on the site as surveyed, including but not limited to the following:		
Property lines and lot dimensions				
Primary structure(s) and accessory structures				
Trees				
Pool				
Deck				
Fences				
Clearly indicate features to be removed, replaced, relocated, or to remain in place				

STEP 5: For All Plan Sets	Grading/Drainage Plan	Description	COMPLETE	N/A
		Existing contour lines (in gray scale) and proposed contour lines (in black) at a maximum of (2') two-foot intervals		
Stamped and signed by a Utah-licensed Professional Engineer				
Note: "A Land Disturbance and Grading Permit must be obtained from Millcreek prior to disturbing any vegetation or moving more than any soil greater than 1' in depth or areas over 1-acre."				
Existing contour lines (in gray scale) and proposed contour lines (in black) at a maximum of (2') two-foot intervals				
Salt Lake County benchmark elevation relative to identified Section Corner				
Storm drain system showing pipe sizes with slopes and lengths (15" min. for public R.O.W./system), clean-out boxes, combination boxes and catch basins				
100-year flood overland route clearly shown terminating at acceptable conveyance system or basin				
FEMA Flood Zone delineation and Salt Lake County 100-year and 500-year flood elevation limits with reference to maps or studies used				
Arrows depicting direction of grade and drainage				
Catch basins showing elevations of inlet, outlet, and top of grate for each box				
Overland runoff route for stormwater at all sag points				
Detail showing detention/retention pond typical sections, sized orifice design, spillways, structural BMPs, etc. (may be on separate detail sheet)				
Cul-de-sacs graded to drain away from the bulb where feasible				
Ditch master's name and phone number if altering existing irrigation ditches				
Two-percent (2%) maximum slope along curb returns				
Drainage all calculations and method(s) used for stormwater management system				
Stormwater management system used including detention, retention, or combination used to comply with Millcreek code restrictions (see sections 17.25)				

STEP 6: All Projects	Utility Plan	Description	COMPLETE	N/A
		Stamped and signed by a Utah-licensed Professional Engineer		
Show and label all utilities existing and proposed, with any road cuts in the ROW				
Existing and proposed streetlights shown including power sources, wiring and utility boxes/cabinets				
Location and description of all existing and proposed easements				
A note stating, "A Right-of-Way Encroachment Permit must be obtained from Millcreek prior to doing any work in the right-of-way. Contact Rebecca Hansen at 801-214-2749"				
Utility locations (i.e. manholes) don't conflict with survey monuments				
Locations of existing and proposed power poles				
Sewer, storm drain and irrigation systems to the next manhole beyond subdivision boundary				
Streetlights at 200' spacing (240' max.) on local residential roads located on lot lines wherever possible and placed at cul-de-sac ends and street intersections; spacing on collector and arterial roads varies				

STEP 7: Show for Storm Drain	Plan and Profile Sheets	Description	COMPLETE	N/A
		1:30 max. horizontal scale, 1:20 max. vertical scale		
		Stamped and signed by a Utah-licensed Professional Engineer		
		Pavement profiles per geotech report (min. 8"-UBC, 3"-asphalt on local streets, 10"-UBC 4"-asphalt on all others)		
		Typical road sections per Millcreek Standards/Transportation Master Plan		
		Storm drain plan and profile pipe size, type, length and slope between manholes		
		Storm drain boxes and manholes with rim and flow-line elevations		
		Minimum size of 15" RCP within City right-of-way		
		Catch basins provided at all intersections and double wide catch basins with two grates at sag points in all public right-of-way		
		Storm Drain, Sewer and Irrigation systems		
Vertical alignment of street tying into existing improvements				

STEP 8: For All Projects	Erosion Control Plan	Description	COMPLETE	N/A
		Location, design, and details of stabilized construction entrances and exits		
		Location, and securement of portable restroom facilities		
		Location of all silt fence or straw wattle to be used including length in feet		
		Designation of concrete washout location with detail attached		
		Identify all storm water inlets onsite and offsite that will be affected by drainage from site		
		Inventory of all post-construction storm water controls		
		Description of the routine maintenance required for each control		
		Schedule for inspection and maintenance of each control/BMP		
		Details for each BMP/control feature used - can be shown on same sheet or details sheet		

I have personally reviewed this submittal and verify that it is complete. I attest that all items have been addressed, initialed, and comply with current Millcreek Standard Specifications and Plans.

Responsible Engineer's Signature

Date

Printed Name