



City of Aspen Water Review for Pitkin County Permits

Submission Packet

Documentation Requirements

City of Aspen Water

500 Doolittle Drive

Aspen, CO 81611

(970) 920-5110

Projects that propose adding, removing, or changing any plumbing fixtures (e.g. faucets, toilets, dishwashers, hose bibs, etc.) are subject to the ECU/Fixture Count component of the review, and the following documents are required:

ECU/FIXTURE COUNT REVIEW REQUIREMENTS:

- ❑ An architectural set showing current (if applicable) and proposed water fixtures; AND
- ❑ A completed Residential ECU Calculator v.2018:

PERMIT OVERVIEW

1. Clear all input values in this spreadsheet prior to entering values. Click the button below to the left to clear input. Note: this button will clear all values entered. Only click this button if desired outcome is to ERASE your input values.

2. Enter values into the requested cells below.

= APPLICANT INPUT CELL
 = INSPECTOR INPUT CELL

3. Input cells for FIRE SUPPRESSION SYSTEM REQUIRED?, SERVICE AREA, DESCRIPTION OF WORK, DOMESTIC SERVICE LINE SIZE and WATER SERVICE LINE SIZE AT MAIN have drop down menus. Select a value from the drop down menu.

4. Refer to the tables and image to the right for SERVICE AREA and SERVICE LINE SIZE.

5. Click the "Generate Spreadsheet" button below the Contact Information. Select the next sheet that shows up and follow the directions.

[Click here to clear all input values](#)
(Note: Macros need to be enabled)



THE CITY OF ASPEN WATER DEPARTMENT
139 SOUTH GALENA STREET

Permit No.
U.C.P.No.

DISCLAIMER: The fees calculated here are estimates only and may not be the final fees charged. Your final fee estimate will be determined at the issuance of permit.

PERMIT INFORMATION				
JOB ADDRESS				PERMIT DATE
LEGAL DESCRIPTIO	LOT	BLOCK	SUBDIVISION	PARCEL ID
ACCOUNT NUMBER	# OF METERS	FIRE SUPPRESSION SYSTEM REQUI	SERVICE AREA	
DESCRIPTION OF WORK				
BEST CONTACT PERSON				
NAME			PHONE NUMBER	
EMAIL ADDRESS				
MAILING ADDRESS				

Click the "Generate Spreadsheet" button to the right

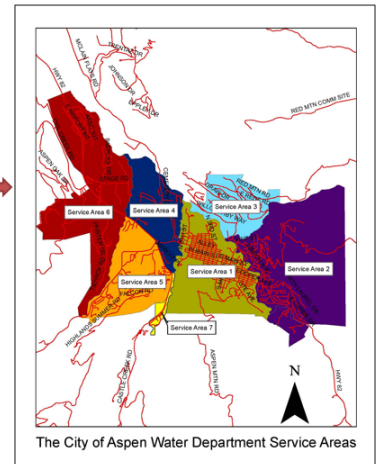
Generate Spreadsheet

Continue to the next spreadsheet found at the bottom of the screen.

FINAL INSPECTION

SERVICE AREA COSTS	
SERVICE AREA 1	\$ 5,736.00
SERVICE AREA 2	\$ 11,590.00
SERVICE AREA 3	\$ 11,590.00
SERVICE AREA 4	\$ 7,243.75
SERVICE AREA 5	\$ 10,141.25
SERVICE AREA 6	\$ 11,590.00
SERVICE AREA 7	\$ 8,692.50

METER SIZING CHART	
SERVICE LINE SIZE	MINIMUM ECU
3/4"	1.0
1"	2.0
1 1/2"	4.0
2.0"	8.0





Documentation Requirements

Projects that require a Major Grading and Drainage Report, and/or projects that propose any changes to an existing City Utility must submit an existing and proposed Utility Plan. The following are minimum requirements for all Utility Plans.

CITY UTILITY PLAN REQUIREMENTS:

- Show all existing utilities on the survey.
- Provide utility abandonment plan. Reference appropriate utility abandonment standards.
- Show all utilities planned for the final configuration. Include both proposed utilities and existing utilities to remain.
- Provide a specific utility trench detail if applicable.
- Show all utility easements.
- New easements must be acquired for proposed transformers within the City of Aspen service area. Transformer easements shall be sized to include adequate clearance zones.
 - An existing easement that does not meet standard dimensions will need to be revised and updated.
- Show adequate utility separation distance from trees or call out tree removal. Ensure proper tree removal permits are in place.
- Provide a utility and landscaping overlay. Ensure there is no conflict with proposed plantings in easements or in close vicinity to proposed or existing utilities.
- The Utility Plan shall clearly call out the following in regards to a proposed water service line:
 - Line size
 - Line type
 - Alignment in plan view
 - Valve configuration including curb stop if applicable
 - Tap location
 - A profile of the water service line may be requested if there are possible complications.
- In addition to the above items, line sizes 4" or larger shall include the following:
 - Demonstrate all design requirements for a water main are met. Reference the COA Water Distribution Standards.
 - Call out adequate restraint at all bends.
 - Provide a profile of the proposed service line. Show all utility crossings and call out separation distances.
 - Provide a detail showing how the service line enters the building. Call out elevations.
 - Ensure adequate restraint is provided and shown on the plan set for the first bend within the building.
- Include in the Civil set the COA Water Standard Detail sheet.
- The COA recommends water service lines be placed a minimum of 7' from all onsite stormwater infrastructure including drywells, pervious pavers, and bioretention areas.
- Demonstrate there is adequate separation from existing and proposed utilities. Refer to the Engineering Design Standards for minimum separation requirements.
 - Potholing at the location of utility crossings is required for all utilities in the ROW to verify adequate separation. A ROW permit is required for all potholing activities.
- For structures that will have a fire suppression system, provide fire suppression calculations demonstrating the requested water service line size is appropriate.
 - Fire suppression calculations for one-line size smaller than requested may be required to demonstrate the smaller line size fails, and the requested line size is needed.



Documentation Requirements

Projects that require compliance to the City of Aspen Water Efficient Landscape Standards must submit the following minimum requirements:

WATER EFFICIENT LANDSCAPE STANDARDS REQUIREMENTS

Checklist follows the submission requirements specified in the City of Aspen Water Efficient Landscaping Standards, Ordinance #17, Series 2018. If any conflict occurs between the contents of this document and that of the Ordinance #17, the specifications of the ordinance takes precedence.

- 1) **Water Efficient Landscape Ordinance Information and Documentation Checklist**” signed by WELS Staff
- 2) **Site/Base Plan:**
 - Property Lines
 - Easements and Right-of-Ways
 - Existing and Proposed Structures
 - Surfacing (pervious or impervious)
 - Existing Natural Features (i.e. trees to be preserved)
- 3) **Landscape Plan:**
 - Labeled Hydrozones (identifies water use as low, medium, or high)
 - Indicated Landscape Features:
 - Recreational Areas
 - Edible Gardens
 - Pools and Water Features (indicates type and area, presence of stalled covers, and use of recirculating and/or recycled water)
 - Green-Roofs
 - Stormwater Management Features (includes location and installation details)
 - Areas Using Recycled Irrigation Water
 - Soil Amendment Specifications (indicates type and quality)
 - Mulching Specifications
 - Plant List
 - Landscape Plan Legend
 - Signed Statement
 - Professional’s Approval Signature (Licensed Landscape Architect or Licensed/Certified Landscape Contractor)
- 4) **Irrigation Plan:**
 - Site Plan Base
 - Labeled Hydrozones
 - Water Supply Connection (indicates static pressure and connection point and dynamic pressure for proper system operation)
 - Meter Location
 - Alternative Water Sources
 - Location, Type and Size of Irrigation Components (sensors, heads, lines, etc.)
 - Backflow Prevention Assembly details and location
 - Legend



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- Zone Rates
- Zone Pressures
- Installation Details
- Statements and Signatures
- Professional's Approval Signature (Certified Irrigation Design Specialist)

5) Water Efficient Landscape Worksheet-Water Budget Analysis

		City of Aspen Water Efficient Landscaping Ordinance Pre-Submission Packet Completeness Review		City of Aspen Parks and Recreation Dept. 585 Cemetery Lane Aspen, CO 81611 970-320-5582			
WATER EFFICIENT LANDSCAPE WORKSHEET -- WATER BUDGET ANALYSIS <i>Note: Project Applicant must complete this worksheet as it is a required element of the Landscape & Irrigation Documentation Package.</i>							
Address:			Contact Info:				
CALCULATING GALLONS OF WATER NEEDED BY PLANT CATEGORY AND IRRIGATION TYPE The specific irrigation water needs of each hydrozone in the design should be determined using the following formula and factors:				Directions for Use Fill in these blue sections below. Some columns have drop down menus to assist you in filling out. The formulas will calculate the site average annual water use. Once completed you may either attach this document to the submittal packet or insert it into the design set.			
$\text{Irrigation Water Budget} = [(E_{to} \times \text{Plant Factor}) - R_e] \times \text{Irrigated Area} + \text{Irrigation Efficiency} \times 0.623$							
Where:		Reference Evapotranspiration					
E _{to} = Reference Evapotranspiration in inches/season (May - Sept.)		27.4 inches/year					
Re = Effective Precipitation in inches/season (May - Sept.)		17.1 gallons/square foot					
Irrigated Area = Hydrozone Area in Square Feet		Effective Precipitation					
		6.8 inches/year					
		4.2 gallons/square foot					
		Irrigation Efficiency					
		Irrigation Method Default Efficiency					
		Overhead 75%					
		Drip 90%					
HYDROZONE WATER BUDGET CALCULATION Complete the hydrozone table for each hydrozone. Use as many rows as necessary to provide the square footage of landscape area per hydrozone.							
Hydrozone	Plant Water Use Type(s)	Plant Factor	Irrigation Method	Irrigation Efficiency	Hydrozone Area (Sq. Ft.)	Plant Water Need (gal/season)	
Example	L	0.40	Drip	0.90	2000	5759	
Zone 1						#DIV/0!	
Zone 2						#DIV/0!	
Zone 3						#DIV/0!	
Zone 4						#DIV/0!	
Zone 5						#DIV/0!	
Zone 6						#DIV/0!	
Zone 7						#DIV/0!	
Zone 8						#DIV/0!	
Zone 9						#DIV/0!	
Zone 10						#DIV/0!	
TOTAL					0	#DIV/0!	
AVERAGE IRRIGATION WATER NEED - ALL ZONES* - In gallons/sq. ft./season <i>*The average must be less than the Maximum Applied Water Budget of 7.5 gallons/sq.ft./season.</i>						#DIV/0!	
Total area of irrigated public right-of-way:		Sq. Ft.					
Total area of non-irrigated landscape:		Sq. Ft.					



ELECTRONIC FILING STANDARDS

This section includes City of Aspen file preparation standards for electronic drawings and documents. These file preparation standards are designed to ensure not only consistency at the application stage, but consistency in the City's long-term document retention system. If your documents do not follow these preparation standards, your application may be rejected, and the review delayed. More information on City filing standards can be found at [Electronic File Preparation Standards](#)

GENERAL REQUIREMENTS FOR SUBMITTING DOCUMENTS

If you are requesting a review of your application via the City's new electronic review system, Bluebeam, please note the following general requirements:

1. Bring all files to a Permit Coordinator on a flash drive. (Files less than 25 Mb also may be emailed to a Permit Coordinator.) If you have a cloud-based account, such as Dropbox or Google Drive, you may give a Permit Coordinator access to your account to download your application.
2. ALL documents should be submitted in PDF format. No other formats are accepted.
3. Scanned Plan Set sheets are not accepted unless prior permission is obtained.
4. In order to optimize Bluebeam's functionality, TrueType fonts are required for plan sets/drawings. Bluebeam cannot always recognize pixilated fonts, which may cause process errors. Recommended fonts include Ariel, Times New Roman, and Helvetica.
5. The Plan Set can no longer be submitted as one file. You must create a separate file for each sheet designator type (see Plan Set Discipline Files below).
6. You must include an Index Sheet of the Plan Set with your permit application.
7. Documents other than plans, such as the permit application, agreements, reports, etc., must be submitted as separate documents using the files names found in the Document Naming Standards section. These documents may be scanned.
8. If documents require signatures, you may use a digital or electronic signature.
9. Protected documents (containing PDF security) will not be accepted.
10. Do not use red as an ink color in drawings or documents.
11. Applicants submitting electronically will not be required to attend a pre-submittal meeting unless requested by a Permit Coordinator or reviewer.



PLAN SET STANDARDS

INDIVIDUAL SHEETS

Applicants may label individual Plan Set sheets using any standard naming convention. The only requirement is that the sheet label includes a discipline designator and that the sheets within each discipline are numbered sequentially. *Please Note: It is most important that you are consistent in how you label your Plan Set sheets, i.e., you must use the same label for a resubmitted sheet.*

TITLE BLOCK AREA

The Title Block area is that portion of the sheet containing project, client, designer, sheet identification, and sheet management information needed by the user of the sheet. Data blocks should include the following:

- ✓ Designer Identification Block
- ✓ Project Identification Block
- ✓ Issue Block
- ✓ Management Block
- ✓ Revisions Block
- ✓ Reserved Stamp Block
- ✓ Sheet Title Block
- ✓ Sheet Identification Block

The content and formatting of several of these data blocks are critical for permit submission when you submit electronically. It is essential that you are consistent in the approach used to identify sheets. Applications that do not follow these format requirements may be rejected.

REVISIONS BLOCK

Revised sheets should be referenced in the Revisions Block, which is located below your logo and project management information in the Title Block. When re-submitting electronic plan revisions, only submit pages with revisions and additional pages that are required for the needed corrections. Re-submitting a full plan set, unless requested by the plans examiner, may result in your resubmittal being rejected.

RESERVED STAMP BLOCK

Below the Revisions block on each sheet, an area 1" by 2" must be left blank for City purposes only. Most commonly, this space will be used for City stamps.

SHEET TITLE BLOCK

The Sheet Title block is the portion of the title block area that indicates the type of information presented on the sheet.



SHEET IDENTIFICATION BLOCK

The Sheet Identification block is the portion of the title block area that contains the label for each Plan Set sheet. You may include in this block a sheet count and the total number of sheets within the set. The sheet count can be for all sheets in the drawing set or for the count within each discipline.

INDEX SHEET

The Index Sheet is a list of all sheets in the Plan Set. The format should include the Sheet Identification information followed by the Sheet Title Block information.

It is essential that you use the same designations in the Index Sheet as the individual plan sheets.

PLAN SET FILES

To maximize the functionality of Bluebeam during plan review, the plans for each discipline need to be in a separate file. Use the discipline names in Table 1 above to name the file and include the property address and the date. For example, the Civil drawings should be in one file named "Civil.property address.yyyy.mm". Water efficient landscape drawings should be named "LandscapeEfficiency.propertyaddress.yyyy.mm". Please include a separate file for both the Cover Sheet and the Index.