

10 South Parkway Avenue, Suite 102 | Battle Ground, WA 98604 | (360) 723-0392 | www.jolmadesign.com

September 25, 2021

Hearings Examiner City of Camas 616 NE 4<sup>th</sup> Ave. Camas, WA 98607

Re: Hall Fourplex (CUP21-02) Water Main Extension

Mr. Hearings Examiner:

The purpose of this letter is to request relief from the City of Camas's condition of approval that the Hall Fourplex applicant construct a 6-in. water main to serve three new dwelling units (existing residence plus three additional attached dwelling units). This requirement is not supported by our engineering calculations and may constitute disproportionate public improvements that are not allowed under the Supreme Court of the United States' *Dolan v. City of Tigard* ruling.

## Statement of the Facts

- The applicant is proposing to construct a residential fourplex by remodeling and adding three attached dwelling units to an existing single-family residence located at 124 SE Everett St. in Camas, Washington (Subject Site).
- Based on comments (Exhibit A) provided by the City of Camas (City) in response to the applicant's Conditional Use Permit (CUP21-02) application submittal, the City is requiring upsizing of an existing water main currently serving the Subject Site from 2 in. to 6 in. The new main will also serve neighboring properties we assume are also currently serviced by the existing 2-in. water main.
- In a series of email correspondence with Anita Ashton, the City Development Engineer reviewing the project (Exhibit B), the applicant requested relief from the water main improvement requirement and supported this request with technical reasoning and our concerns regarding compliance with the Dolan v. City of Tigard case law. We also requested codified substantiation supporting the City's position. The City's response addressed some of our questions; however, Ms. Ashton's response to questions regarding the water main upsizing was to reiterate the City's position and state that the water main upsizing did not fall under the proportionality rules (it is unclear whether the City's legal counsel was consulted in this matter). Following Ms. Ashton's response, I left a voicemail with Curleigh (Jim) Carothers, the City Engineer Manager, expressing my concerns and summarizing my correspondence with Ms. Ashton. Mr. Carothers called and left a voicemail affirming Ms. Ashton's decisions.
- According to Ms. Ashton's email, the City has no plans to extend the water main south through the railroad right-of-way, and the applicant would not have a right to be compensated for the improvement costs via latecomer hookup fees.
- In accordance with Washington State law (WAC 246-290-230[5]), the City is required to maintain a minimum pressure of 30 psi throughout its distribution system; therefore, it is reasonable to assume the existing 2-in. water main has at least 30 psi at the Subject Site point of service. It is worth noting that according to the City website (<a href="https://www.cityofcamas.us/utilities/faq/why-do-we-have-low-water-pressure-can-you-increase-it">https://www.cityofcamas.us/utilities/faq/why-do-we-have-low-water-pressure-can-you-increase-it</a>), the City is only required to provide a minimum of 20 psi; we are not sure why this does not align with current Washington State law).

#### Legal Argument for Relief from the City's Water Main Upsizing Requirement

Due to my lack of knowledge with respect to case law interpretation and its interpretation, I have refrained from presenting legal arguments in support of our position; however, we respectfully request, Mr. Examiner, that you consider and make a ruling on this matter in light of the *Dolan v. City of Tigard* and other applicable case law.

# Technical Argument for Relief from the City's Water Main Upsizing Requirement

Using EPANET, a commonly used water system modeling program developed and administered by the United States Environmental Protection Agency, we performed a hydraulic analysis of the existing water system to determine whether the 2-in. water main will provide adequate domestic water services to the Subject Site. The water system analysis was based on the Washington State Department of Health (DOH) Water System Design Manual (Publication 331-123, Revised June 2020) requirements and recommendations. Said calculations are presented in Exhibit C.

Following is a summary of findings and conclusions resulting from the hydraulic analysis:

- Assuming the pressure at the Subject Site point of connection to the existing 2-in. water main meets the required state minimum of 30 psi, the 2-in. main will supply the calculated peak hour demand, the key parameter used to size domestic water distribution systems.
- The evaluation results indicate the existing 2-in. water main will serve the peak demand of at least 10 residential units.

## Monetary Argument for Relief from the City's Water Main Upsizing Requirement

Our estimated range of overall cost to upsize the water main is \$15k to \$20k. This includes installing 150 linear ft of 6-in. ductile iron pipe, installing (3) valves, a full-width pavement restoration of SE Everett St, and other appurtenant costs. These unanticipated, and in our opinion unwarranted, costs will substantially impact the project's economic viability and profitability.

## **Summary and Conclusions**

Byun J. Que

Based on the above-referenced information and supporting attachments we conclude that upsizing existing water main is unwarranted and not commensurate with the project impacts; therefore, Mr. Examiner, on behalf of the applicant we respectfully request you deny the City's request to require water main improvements as a condition of approval.

Sincerely,

Byron Jolma, PE Jolma Design, LLC

Attachments:

Exhibit A—City of Camas Notice of Incompleteness Letter

Exhibit B—Email Correspondence with City of Camas Regarding Water Main Improvements

Exhibit C—Water System Hydraulic Analysis Calculations



#### **COMMUNITY DEVELOPMENT DEPARTMENT**

616 NE 4<sup>th</sup> Avenue Camas, WA 98607 www.ci.camas.wa.us

April 30, 2021

**EXHIBIT A** 

James Hall
Sent via email j.r.hall99@gmail.com

RE: Vom Baur Property (CUP21-02)

Dear James Hall,

Thank you for your application submittal for the Vom Baur Property. There are items that remain to be addressed with your application. The purpose of this letter is to inform you that the above application submitted on January 29, 2021 and resubmitted on April 22<sup>nd</sup> has been deemed incomplete in accordance with Camas Municipal Code (CMC) Section 18.55.130. You have 180 days from the date of application to submit the missing information pursuant to CMC 18.55.130.C. If the below requested information is submitted, staff will again verify whether the application is complete.

## Items necessary for completeness:

1. Preliminary Utility Plan, with the required improvements for upsizing the water main, new water services, new sewer laterals, new driveway approach, etc.

Once the application is deemed complete, the City will begin its review of the project application and provide subsequent comments. If you have any questions, please contact me at (360) 817-7237.

Respectfully,

Madeline Sutherland, Assistant Planner





Byron Jolma <bjolma@jolmadesign.com>

# RE: sewer and water lateral improvements

Anita Ashton <AAshton@cityofcamas.us>

Tue, Jul 27, 2021 at 2:05 PM

To: Byron Jolma <bjolma@jolmadesign.com>

Cc: Cory Vom Baur <coryvombaur@gmail.com>, Madeline Sutherland <MSutherland@cityofcamas.us>, James Hall <j.r.hall99@gmail.com>

Byron,

- The water main is required to be upsized from the existing 2-inch galvanized waterline to a 6-inch ductile iron in order to serve the proposed development and the addition of 3 new dwelling units.
- This is not a new requirement. It has been noted in each pre-app that has been held for that parcel.
- The new waterline will dead-end with a blowoff at the end of NE Franklin.
- The line will not be extend over or under the BNSF railroad property.
- There is not the option of a latecomers agreement.
- The existing homes located on the north side of the proposed development will have a new service tapped off the new waterline.
- The requirement for the upsize on the waterline does not fall under proportionality. In order to proceed with the development, the waterline is required to be upsized.

Thanks, A





Anita Ashton

Community Development Engineering

Project Manager

Desk 360-817-7231

www.cityofcamas.us | aashton@cityofcamas.us

From: Byron Jolma <bjolma@jolmadesign.com>

Sent: Monday, July 26, 2021 3:23 PM

To: Anita Ashton <AAshton@cityofcamas.us>

Cc: Cory Vom Baur <coryvombaur@gmail.com>; Madeline Sutherland <MSutherland@cityofcamas.us>; James Hall

<j.r.hall99@gmail.com>

Subject: Re: sewer and water lateral improvements

Thank you for following up, Anita.

With all due respect, I was hoping you would provide some sort of justification as to why 3 additional units warrants upsizing a pipe from 2 in. to 6 in. The flow capacity increase from 2 in. (45 gpm) to 6 in. (800 gpm) is approximately 750 gpm. Are there future plans to extend that water main? Will the existing residences be required to tie into it (i.e., can the applicant recoup some of the costs through a latecomers agreement?) I'm certainly not trying to start off being a thorn in your side; however, I feel compelled to advocate for my client with regard to this issue, as the cost of extending that line is fairly substantial considering the scope of the project. I would appreciate a little more information (e.g., a code section citation or master plan showing extension of that water main) to alleviate my concerns that this requirement aligns with the Dolan v. City of Tigard proportionality ruling.

Respectfully,

On Mon, Jul 26, 2021 at 11:54 AM Anita Ashton <a href="mailto:AAshton@cityofcamas.us">AAshton@cityofcamas.us</a> wrote:

Byron,

Additional comments from staff relate to the sanitary sewer.

- New sanitary sewer laterals are to be provided for each dwelling unit with clean-outs.
- The existing/old sanitary lateral is to be capped and abandoned at the right-of-way.

Thanks, A



**Anita Ashton** 

Community Development Engineering

**Project Manager** 









Desk 360-817-7231

www.cityofcamas.us | aashton@cityofcamas.us

From: Anita Ashton

Sent: Monday, July 26, 2021 11:51 AM

To: 'Byron Jolma' <bjolma@jolmadesign.com>

Cc: Cory Vom Baur <coryvombaur@gmail.com>; Madeline Sutherland <MSutherland@cityofcamas.us>; James Hall

<j.r.hall99@gmail.com>

Subject: RE: sewer and water lateral improvements

Byron,

I've reviewed your comments below and have provided responses below. Thanks, A









#### **Anita Ashton**

Community Development Engineering

**Project Manager** 

Desk 360-817-7231

www.cityofcamas.us | aashton@cityofcamas.us

From: Byron Jolma <bjolma@jolmadesign.com>

Sent: Monday, July 26, 2021 9:43 AM

To: Anita Ashton <AAshton@cityofcamas.us>

Cc: Cory Vom Baur <coryvombaur@gmail.com>; Madeline Sutherland <MSutherland@cityofcamas.us>; James Hall

<j.r.hall99@gmail.com>

Subject: Re: sewer and water lateral improvements

Good morning, Anita.

Have you had a chance to review my email Madeline forwarded last week regarding the fourplex project on SE Everett St? Please confirm you received the email, and any updates you can provide would be much appreciated!

Thank you,

**Byron** 

On Tue, Jul 20, 2021 at 9:40 AM Madeline Sutherland <MSutherland@cityofcamas.us> wrote:

Hi Byron,

I have copied Anita, Engineering Project Manager who can respond to your questions.

Regards,



Madeline Sutherland (She/Her/Hers) Assistant Planner

Desk 360-817-7237

Cell 360-326-5524

www.cityofcamas.us | msutherland@cityofcamas.us

From: Byron Jolma <bjolma@jolmadesign.com>

Sent: Tuesday, July 20, 2021 9:34 AM

To: Madeline Sutherland < MSutherland@cityofcamas.us>

Cc: Cory Vom Baur <coryvombaur@gmail.com>; James Hall <j.r.hall99@gmail.com>

Subject: Fwd: sewer and water lateral improvements

WARNING: This message originated outside the City of Camas Mail system. DO NOT CLICK on links or open attachments unless you recognize the sender and are expecting the content. If you are unsure, click the Phish Alert button to redirect the email for ITD review.

Good morning, Madeline.

We have been retained by Cory Vom Baur to assist with the civil engineering related to the multi-family development project at 124 SE Everett St (CUP21-02). The City's review comments italicized below were forwarded by the applicant. We did the stormwater plan; however, the remaining civil-related elements were prepared by another engineer and I'm still trying to get up to speed. I have some questions/comments which I've highlighted in red below. The applicant is anxious to keep this moving forward, and your prompt attention to this matter would be greatly appreciated.

Regards,

Byron Jolma

----- Forwarded message -----From: James Hall < j.r.hall99@gmail.com> Date: Wed, Jun 2, 2021 at 9:06 AM

Subject: sewer and water lateral improvements To: Cory Vom Baur <coryvombaur@gmail.com>

The city has asked for this, "Preliminary Utility Plan, with the required improvements for upsizing the water main, new waterservices, new sewer laterals" (see attached incompleteness letter). Our civil engineer has asked to have a third party advise on the necessary improvements to the water and sewer laterals.

There is currently a 3/4" water line from the meter. I suggest that we need to upgrade that to a 1" line for the amount of new water fixtures in the new units.

The only sewer line information I can find is what I found in the basement. I can see a 4" cast iron pipe leaving the house.

We are looking for what improvements need to be made to the water line and sewer lines in regards to the addition of the three attached units to the house. Will a new 1" water line be enough? Does the sewer line need to be improved? This information needs to be included on the preliminary utility plan for city review.

I have attached the letter, civil plans and basic building floor plans for your reference.

From the city, this is what we will need to do on the street side:

#### Water:

- · There is an existing 2-inch galvanized water main in SE Everett Street. The existing water main is not sufficient to accommodate 3 additional services. See response to next item. See response below.
- · The applicant will be required to replace approximately 175-linear feet of existing 2-inch galvanized water main with a 6-inch ductile iron water main, including a blow off valve located at the south end of SE Everett St. Extending the water main to serve the additional service points will be costly and does not seem proportional to the project, especially considering the unlikelihood that the main will be extended across the railroad tracks and SE 6th Ave. Will the City allow the applicant to install multiple pressure tanks to provide the storage needed to provide service to the new improvements? The existing 2-inch galvanized water main is not sufficient to accommodate 3 additional services. The applicant will be required to replace the existing 2-inch with a 6-inch DIP water main. Multiple pressure tanks is not approved.
- · Trenching and surface restoration, on NW 7th Ave., will be per CDSM Details G2 and G2A. · The applicant will be required to provide water services to the 4-plex. See comment above. Trenching and surface restoration is to be per CDSM Details G2 and G2A.
- · A 10-foot separation shall be maintained, within the right-of-way, between water and sanitary sewer lines.
- · Taps are to be performed by a tapping Contractor approved by the City's Water/Sewer Dept. · There is an existing hydrant located approximately 140-feet from the development on the southwest corner of SE Everett St. and East First.

#### Sanitary Sewer:

- · There is an existing 6-inch gravity sanitary sewer main in SE Everett Street that flows to a manhole located in the intersection of SE Everett St. and East First.
- · The applicant will be required to provide sewer laterals to the 4-plex.
- · A 10-foot separation shall be maintained, within the right-of-way, between water and sanitary sewer lines.
- · Trenching and surface restoration will be per CDSM Details G2 and G2A.
- er CDSM Details SG1,

The taps on the existing gravity sanitary sewer main can be performed by the Contractor, pe SG2, and SG5.
Thank you for your assistance.
-
James Hall
Sustainable Zen LLC
Architecture and Landscape Design
971-219-5349

#### BYRON JOLMA PE | JOLMA DESIGN, LLC

o: 360.723.0392 | c: 360.703.1577 | PO Box 1281, Battle Ground, WA 98604

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# EXHIBIT C WATER SYSTEM HYDRAULIC CALCULATIONS

HALL FOURPLEX

124 SE EVERETT ST CAMAS, WA 98607 TAX PARCEL NO. 89235000

**SEPTEMBER 24, 2021** 

SUBMITTED TO: CITY OF CAMAS



# PREPARED FOR:

CORY VOM BAUR CORYVOMBAUR@GMAIL.COM (425) 980-6409

# PREPARED BY:

JOLMA DESIGN, LLC PO BOX 1281 BATTLE GROUND, WA 98604 ADMIN@JOLMADESIGN.COM (360) 723-0392





CALCULATION SHEET							
Project Name:	Project No.:	Parcel No.:	Project Address:				
Hall Fourplex	20131	89235000	124 SE Everett St				
		(Subject Site)	Camas, WA 98607				
Jurisdiction:	Client:		Subject:				
City of Camas	Cory Vom Baur		Existing Water System Hydraulic Analysis				
Calculated By:	Checked By:	Date:	Sheet No.				
BJolma	BJolma	9/24/2021	1 of 1				

#### Notes:

- 1. Assumes a minimum 30 psi at Subject Site point of connection.
- 2. Hazen-Williams equation used in analysis.
- 3. Analysis based on Washington State Department of Health (DOH) *Water System Design Manual* (Publication 331-123, Revised June 2020) requirements, calculations, and guidelines.

#### Objective:

Evaluate existing water main capacity to serve existing, new, and future residential domestic water services' peak demand. Calculations reference DOH Water System Design Manual (Manual).

# **Abbreviations:**

ADD = Average Daily Demand

ERU = Equivalent Residential Unit

 $ERU_{ADD} = ERU ADD$ 

MDD = Maximum Daily Demand

ERUMDD = ERU MDD

DSL = Distribution System Leakage

FS = Factor of Safety

PHD = Peak Hourly Demand

AAR = Average Annual Rainfall

gpd = gallons per day

gpm = gallons per minute

PF = Peaking Factor

# Solution:

- 1. Calculate ERUADD
  - From Figure D-4,  $ERU_{ADD} = (8000/AAR) + 200 \times FS$
  - City of Camas AAR = 61 in.
  - FS = 1.5
  - ERU<sub>ADD</sub> = 497
  - DSL = 10% of ERU<sub>ADD</sub> =  $(497 \times 0.10) \approx 50 \text{ gpd}$
  - System-wide ERU<sub>ADD</sub> = ERU<sub>ADD</sub> + DSL = 497 + 50 = 547 gpd
- 2. Calculate ERUMDD
  - ERUMDD = ERUADD x PF x FS
  - PF = 2, FS = 1.5
  - ERU<sub>MDD</sub> =  $497 \times 2 \times 1.5 = 1,491 \text{ gpd}$
- 3. Calculate PHD
  - From Equation 3-1, PHD =  $(ERU_{MDD}/1440) \times [(C \times N) + F] + 18$
  - From Table 3-1, assuming 10 ERUs, C = 3, F = 0
  - PHD =  $(1,491/1440) \times (3 \times 10 + 0) + 18 = 49 \text{ gpm}$

#### Conclusion:

Using the calculated PHD as the base demand parameter in the EPANET hydraulic model, the existing 2-in. water main will serve the peak demand of at least 10 residential units; therefore, upsizing to a 6-in. water main is not justified.

Page 1 9/24/2021 10:43:46 AM ***********************************									
*	EPANET *								
*	Hydraulic and Water Quality *								
*	Analysis for Pipe Networks *  Version 2.2 *								
***************************************									
<pre>Input File: 20131_HallFourplex_WaterSystem_20210923-02.net</pre>									
Hall Fourplex Water System Analysis									
Link - Node Table:									
Link	Start	End		_	Diameter				
		Node		ft	in				
L1	R1	J1		1	2				
Node Results:									
Node	Demand	Head	Pressure	Quality					
ID	GPM	ft	psi						
J1	49.00	69.15	29.96	0.00					
R1	-49.00	69.25	0.00	0.00	Reservoir				
Link Results:									
Link ID	Flow GPM	-	nit Headlos ft/Kft	s Stat	tus				
L1	49.00	5.00	95.40	0pen					