

October 18, 2022

Duluth Public Utilities Commission  
411 W 1<sup>st</sup> Street  
Duluth, MN 55802

RE: Moline Machinery, LLC and Walsh Building Products et al v. City of Duluth

Dear Commissioners:

We provide this public comment in response to the September 13, 2022 memorandum Public Works & Utilities Director James Benning provided to this Commission (the "Benning memorandum"). As you may know, Moline Manufacturing and Walsh Building Products have filed a lawsuit against the City of Duluth for issues relating to stormwater utility billing. This comment is being submitted from Walsh Windows, as well as on behalf of other owners of non-residential property in the City of Duluth.

The Benning memorandum references a July 27, 2021 memorandum authored by Short Elliott Hendrickson, Inc., ("SEH"). In early 2021, the City of Duluth commissioned SEH to study the stormwater utility billing methodology the City had used since 1998. The City spent more than \$30,000 in taxpayer money for SEH to provide its analysis and recommendations.

The SEH memorandum was presented to this Commission on August 17, 2021. More than a year later, the Benning memorandum stated:

Unfortunately, those results were reported prior to City staff having completed our review of their report. An in-depth review revealed that it had failed to take into account the requirements of the City Code.

Those statements are not accurate, and the Commission should receive a full record about this topic. SEH worked closely with City staff for more than six months before the July 27, 2021 report was issued. City Engineer Tom Johnson and his staff (including Chief Engineer Eric Shaffer) were provided drafts of the report before it was issued. SEH incorporated Mr. Johnson's edits and suggestions in the July 27, 2021 report. As you can see from the attached email exchange from July 21, 2021, Mr. Benning was also provided a draft of the report before it was issued. Mr. Benning stated: "I don't have any comments. Looks good to me."

Those emails alone show that the statement in the Benning memo that the SEH "results were reported prior to City staff having completed our review of their report" is not true. The sworn testimony of the engineer at SEH who did this work and who drafted the July 27, 2021 report provides further insight. He testified:

Q: . . . This document was the result of the work that SEH did, the communications, conversations that you had with the City of Duluth and all of the input that was provided from the end of March 2021 until July 27, 2021. Correct?

A: Correct.

Q: And when SEH issued this report, the report, in SEH's opinion, was accurate and valid. Correct?

A: Correct.

Q: And it was well researched and thorough and done pursuant to industry standards. Correct?

A: Correct.

(Deposition of Jeremy Walgrave, pp. 59-60). The ERU methodology used in the July 27, 2021 report was endorsed by the experts at SEH, Tom Johnson, and Jim Benning all **before** that report was issued. The ERU calculation of 3,099 sf was accepted by SEH and City representatives as the correct calculation **before** the July 27, 2021 report was issued.

After the Moline lawsuit was filed, the City directed SEH to amend its July 27, 2021 report. The amended report, dated August 4, 2022, now uses a never-before-applied "weighted average" to reduce the ERU to 2,228 sf. If adopted, this ERU value will continue to result in owners of non-residential properties being charged unfair and unlawful stormwater fees.

The ERU value set out in the July 27, 2021 report—which was reviewed and approved by Tom Johnson and Jim Benning—should be used by the City. As shown in the sworn testimony of the SEH engineer responsible for the project, the methodology used to generate that ERU value was well researched, thorough, and done pursuant to industry standards.

Sincerely,

A handwritten signature in black ink, appearing to be "Gary Lane", written over a horizontal line.

Gary Lane

Attachment

cc: Shawn Raiter  
JD Feriancek  
John Baker



Message

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**From:** Tom Johnson [tjohnson@duluthmn.gov]  
**Sent:** 7/21/2021 6:37:19 PM  
**To:** Jim Benning [jbenning@duluthmn.gov]  
**CC:** Eric Shaffer [eshaffer@duluthmn.gov]  
**Subject:** RE: Draft ERU Determination Letter from Consultant

I will send back to SEH to finalize and submit letter to be added to PUC packet.

**Tom Johnson** | Senior Engineer P.E. | Public Works and Utilities | City of Duluth  
411 West First Street, Room 240, Duluth, MN 55802 | P.E. Lic. in Minnesota  
[tjohnson@duluthmn.gov](mailto:tjohnson@duluthmn.gov)

**From:** Jim Benning  
**Sent:** Wednesday, July 21, 2021 1:37 PM  
**To:** Tom Johnson  
**Cc:** Eric Shaffer  
**Subject:** Re: Draft ERU Determination Letter from Consultant

I don't have any comments. Looks good to me

James J. Benning II, P.E.  
Director, Public Works & Utilities  
City of Duluth  
[411 W 1st Street - Room 211B](#)  
[Duluth, MN 55802-1191](#)  
Office: [218-730-5200](tel:218-730-5200)  
Direct: [218-730-5105](tel:218-730-5105)  
PE License MN & WI  
e-mail: [jbenning@duluthmn.gov](mailto:jbenning@duluthmn.gov)

On Jul 21, 2021, at 12:47 PM, Tom Johnson <[tjohnson@duluthmn.gov](mailto:tjohnson@duluthmn.gov)> wrote:

Jim and Eric,  
Please review the attached letter from SEH regarding the study to determine a new ERU value. This will go to the PUC in August.

**Tom Johnson** | Senior Engineer P.E. | Public Works and Utilities | City of Duluth  
411 West First Street, Room 240, Duluth, MN 55802 | P.E. Lic. in Minnesota  
[tjohnson@duluthmn.gov](mailto:tjohnson@duluthmn.gov)

COD0003475

Message

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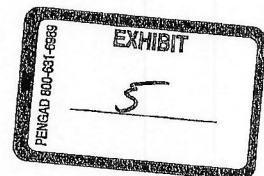
**From:** Jeremy Walgrave [jwalgrave@sehinc.com]  
**Sent:** 7/16/2021 6:45:20 PM  
**To:** Tom Johnson [tjohnson@duluthmn.gov]; Eric Shaffer [eshaffer@duluthmn.gov]  
**CC:** Matt Bolf [mbolf@sehinc.com]  
**Subject:** Stormwater Utility Memo  
**Attachments:** Duluth-SWU-memo-16JUL2021.pdf  
/

Good afternoon,

Please find the DRAFT SWU memo.

Have a great weekend,

Jeremy



COD0003456



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## MEMORANDUM

TO: Eric Shaffer, Tom Johnson  
FROM: Jeremy Walgrave, Matt Bolf  
DATE: July 16, 2021  
RE: Duluth Stormwater Utility Evaluation  
SEH No. 159480 14.00

Stormwater drainage systems are often the last and most expensive public utilities to be developed and funded. The City of Duluth's current stormwater utility method and framework was established in 1997. As such, the City is looking to make changes to the stormwater utility to bring it in line with current data and industry trends.

The City's fee structure for residential homes is based on the average impervious area of residential properties in the City, which is the most common approach to stormwater utility fee structures. The average impervious for residential properties establishes the *equivalent residential unit (ERU)*, where each residential unit is charged a fee for one ERU.

The ERU is then used to establish the fee per acre of impervious surface, which is applied to non-residential properties. The City's current rate/ERU is \$6.75, which results in a fee of \$172.15 per acre of impervious. The equations below show the conversion of the fee per ERU to the fee per acre.

$$\begin{aligned} 1 \text{ ERU} &= 1,708 \text{ sq ft} = \$6.75/\text{ERU} \\ 1 \text{ acre} &= 43,560 \text{ sq ft} \\ 1 \text{ acre} &= 43,560 \text{ sq ft} / 1,708 \text{ sq ft} = 25.5 \text{ ERUs/acre} \end{aligned}$$

$$25.5 \text{ ERU/acre} * \$6.75/\text{ERU} = \$172.15/\text{acre}$$

The City's 1997 study established an average impervious of 1,708 square feet (basis of ERU) through an analysis of developed residential properties, which included single-family, multi-family, condominium, and mobile homes. The average impervious value for single-family residential was determined by measuring the impervious surface from 300 randomly selected parcels, which resulted in an average total impervious surface of 2,145 square feet. The policy discussed in the 1997 study also suggests that single-family, apartments (multi-family), condominiums all be assigned 1 ERU. It should be noted that the current City policy established a different formula for multi-family residential properties.

The City initiated an update study in 2021 to understand if the average impervious developed in the 1997 study is still appropriate. As part of the 2021 study, a proportionate number of single-family residential parcels from each neighborhood in Duluth were identified for measurement. The City used aerial

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photography and GIS to measure the impervious surfaces for over 300 single-family residential properties.

The impervious surface measured as part of the 2021 update study resulted in an average impervious surface of 3,099 square feet. For comparison, Table 1 below summarizes the average impervious area used as a basis for the ERU from various cities in the region.

Table 1: ERU Basis for Cities in the Region

City	ERU (sq ft)
Bemidji	3,700
Cloquet	4,312
Hermantown	9,100
Minneapolis	1,530
Superior	2,933
Duluth	1,708

Table 1 indicates that the City of Duluth's current ERU basis is much lower than other cities in the region, with the exception of Minneapolis. Minneapolis has a significantly higher population density than other cities in the region and should be considered an outlier. Attachment A is a summary of ERU basis developed by APWA for cities in Wisconsin. The APWA summary also indicates that the City of Duluth current ERU basis is low.

A change in the ERU basis will change the fee charged per acre for non-residential properties. Table 2 below shows that changing the ERU basis from 1,708 sq ft to 3,099 sq ft will decrease the fee per acre of impervious by 45%.

Table 2: Fee Charged per Acre of Impervious Surface

ERU (sq ft)	Fee/ERU	Fee/acre
1,708	\$6.75	\$172.15
3,099	\$6.75	\$94.88

This evaluation pertains to single-family residential properties. Multi-family, townhomes, and mobile homes were not evaluated as part of this study. The City will continue to bill multi-family, townhomes, and mobile homes per the current City policy.

jjw

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COD0003458

Message

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**From:** Jeremy Walgrave [jwalgrave@sehinc.com]  
**Sent:** 7/27/2021 1:40:38 PM  
**To:** Tom Johnson [tjohnson@duluthmn.gov]; Eric Shaffer [eshaffer@duluthmn.gov]  
**CC:** Matt Bolf [mbolf@sehinc.com]  
**Subject:** SWU Memo  
**Attachments:** Duluth-SWU-memo-27JUL2021.pdf

Good morning,

The attached memo has been updated per Tom's edits. Let us know if you want any other edits or information.

Thanks,

Jeremy



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for All of Us®

## MEMORANDUM

TO: Eric Shaffer, Tom Johnson  
FROM: Jeremy Walgrave, Matt Bolf  
DATE: July 27, 2021  
RE: Duluth Stormwater Utility Evaluation  
SEH No. 159480 14.00

Stormwater drainage systems are often the last and most expensive public utilities to be developed and funded. The City of Duluth's current stormwater utility method and framework was established in 1997. As such, the City is looking to make changes to the stormwater utility to bring it in line with current data and industry trends.

The City's fee structure for residential homes is based on the average impervious area of residential properties in the City, which is the most common approach to stormwater utility fee structures. The average impervious for residential properties establishes the *equivalent residential unit* (ERU), where each residential unit is charged a fee for one ERU.

The storm utility fee charged to non-residential properties is based on the actual amount of impervious surface area a customer has in units of ERUs. The current unit of ERU is 1,708 square feet per ERU. Therefore, the non-residential customer's total impervious surface area is divided by 1,708 to calculate the ERU billing units. The below example shows the calculation for an acre of impervious surface area to ERUs and the monthly fee at the current rate.

1 ERU = 1,708 sq ft = \$6.75/ERU  
1 acre = 43,560 sq ft  
1 acre = 43,560 sq ft / 1,708 sq ft = 25.5 ERU's/acre

25.5 ERU/acre \* \$6.75/ERU = \$172.15/acre

The City's 1997 study established an average impervious of 1,708 square feet (basis of ERU) through an analysis of developed residential properties, which included single-family homes, multi-family, condominiums and mobile homes. The 1997 single-family residential component of the ERU analysis was determined from 300 randomly selected parcels and resulted in an average impervious surface area of 2,145 square feet.

As part of the 2021 study, the decision was made to measure only single-family residential properties and not include multi family, townhome and mobile homes in the calculation. This methodology is consistent with industry standards and other municipalities with storm water utility fees. Similar to the 1997 study, 300 homes were again selected throughout the City for measurement. The City used aerial photography and GIS to measure the impervious surfaces for each home.

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The 2021 update study resulted in an average impervious surface area of 3,099 square feet per single family residential property. An increase in the ERU value was expected, as the 1997 study included multi-family properties which had an average impervious surface area of 909 square feet per dwelling unit. For comparison, Table 1 below summarizes the average impervious area used as a basis for the ERU from various cities in the region.

Table 1: ERU Basis for Cities in the Region

City	ERU (sq ft)
Bemidji	3,700
Cloquet	4,312
Hermantown	9,100
Minneapolis	1,530
Superior	2,933
Duluth	1,708

Table 1 indicates that the City of Duluth's current ERU basis is much lower than other cities in the region, with the exception of Minneapolis. Minneapolis has a significantly higher population density with the majority of the single-family residential properties being traditional older style small lot developments. Again the 1997 study methodology used a different composition of residential dwellings, which included multi-family. Attachment A is a summary of ERU basis developed by APWA for cities in Wisconsin. The APWA summary also indicates that the City of Duluth current ERU basis is low.

A change in the ERU basis will change the fee charged per acre for non-residential properties. Table 2 below shows that changing the ERU basis from 1,708 sq ft to 3,099 sq ft will decrease the fee per acre of impervious by 45%.

Table 2: Fee Charged per Acre of Impervious Surface – Non-residential Properties

ERU (sq ft)	Fee/ERU	Fee/acre
1,708	\$6.75	\$172.15
3,099	\$6.75	\$94.88

This study was conducted to determine an updated ERU value that is used for non-residential billing of the storm utility fee. This new ERU value will not change the way the City currently bills residential properties that include single family, multi-family, townhomes, condominiums and mobile homes.

jjw

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