



## MEMO

Date ~~March 3, 2022~~ April 11, 2022

BY: Logan McInnis, Deputy Director of Public Works for Utilities

RE: Methodology for Proposed Mullan BUILD Water and Sewer Special Development Fees

### OVERVIEW

This memo discusses how the costs of water and sewer mains and service stubs installed in conjunction with the Mullan BUILD project will be financed initially by the City's water and wastewater utilities but will be paid back over time by property owners benefitting from the utility installation. The Water and Sewer Special Development Fees (WSSDF's) adopted by City Council will be charged to each property benefitting directly from the utilities. The City will collect the WSSDF's when a property is developed and connects to the infrastructure installed as part of the Mullan BUILD project.

The standard practice in Missoula is for developers requiring water and sewer main extensions to pay for those extensions as part of their development project. The developer typically hires an engineer to design the main extension and a contractor to install the extensions. The Mullan BUILD project will follow a slightly different path in that the County, in partnership with the City, will hire and pay the engineers and contractors to design and install the infrastructure. The cost for this work will then be charged to the properties through which the various segments of water and sewer main run, as a latecomer's fee through WSSDF's.

In some instances, these costs also include the portions of main that run across adjacent rights-of-way to tie-in to existing mains. In two locations, the City will be paying the cost difference to upsize from the 12-inch main size required by a particular development to a 16-inch main that can provide transmission capacity required for future well sites. The City will not collect WSSDF's until the property owner develops their property and requires connection to the system. This method offers two advantages as compared to the standard development process. First, by constructing the main extensions ahead of development, the City can avoid piecemeal construction, reduce overall costs, and provide better predictability for development. Second, individual property owners do not have to finance the cost of extending sewer and water mains to get these mains to their property, and the cost of financing main extensions through their property is deferred until they need to connect.

Exhibit 1 shows the segments of water main to be installed as part of the Mullan BUILD project. Generally, the project will install 12-inch mains in order to accommodate future commercial and multifamily developments as required by Missoula Water's specifications. In Mary Jane Boulevard south, Missoula Water desired a larger 16-inch main that could better accommodate flows from future wells anticipated to be drilled in the area. Missoula Water will pay the cost difference between a 16-inch and 12-inch main. Smaller mains will be installed in the following instances:

- Mary Jane South from Station 0+00 to 2+50 will be 8-inch main tying into an existing 8-inch main
- A segment of existing 10-inch main in Mary Jane North will be replaced with 10-inch main

Exhibit 1 also outlines each parcel that is subject to the Water Special Development Fee (Water SDF). For brevity, the parcels were given a name and number based on the BUILD Grant road that the property faces. For example, the parcels fronting George Elmer Drive that will have a Water SDF are labeled GE1, GE4 and GE5. The property owners are also listed on Exhibit 1.



Exhibit 2 shows the segments of sewer main to be installed. Eight-inch mains are generally adequate; but the sewer segment in George Elmer North required an 18-inch pipe in order to utilize the shallower slope allowed for that pipe size. The City will pay the upsize cost difference to upsize from an 8-inch pipe to an 18-inch pipe.

Exhibit 2 also outlines each parcel that is subject to the Sewer Special Development Fee (Sewer SDF). For brevity, the parcels were given a name and number based on the BUILD grant street that the property faces. For example, the parcels fronting George Elmer Drive that will have a Sewer SDF are labeled GE1, GE4 and GE5. The property owners are also listed on Exhibit 2.

#### PROPOSED APPROACH

The calculation of WSSDF's for each parcel started with a detailed review of the BUILD Project Released for Construction (RFC) plan set and DJ&A's "Bid Schedule A-Funding Split Table" dated 2/18/22, based on the Contractor's (Kiewit's) Guaranteed Maximum Price. Public Works staff assembled quantities for each water or sewer bid item, including service line stubs, associated with a particular road segment and parcel. The detailed quantities and cost of water and sewer bid items by road segment and parcel are shown in Exhibits 1A and 1B. The road segments are numbered from (1) through (14).

For example, Exhibit 3A shows that the portion of George Elmer north running through the parcel labeled as GE4 on Exhibit A-2 is called road segment (2). Parcel GE4 is responsible for the water infrastructure on Sheet K2 from Station 6+80 to 8+00 and Sheet K3 from Station 8+00 to 13+75 and the sewer infrastructure on Sheet L4, Line C, Station 4+17 to 11+00.

In some instances, a particular segment of main runs in between two different parcels (ex. a portion of England Boulevard runs in between parcels EB2 and EB3). In those instances, the cost of those water or sewer bid items were split equally between the two parcels.

DJ&A developed unit prices for each item based on Kiewit's unit cost for the item, plus the portion of Kiewit's general project costs that were not included in bid items (Risk Contingencies, Construction Management fees, etc.) attributable to the water and sewer installations. Water facilities comprise 12.45% of the total construction bid items and sewer facilities comprise 5.96% of the total construction bid items. Those same percentages were used to distribute Kiewit's general project costs to each water and sewer bid item.

City staff modified DJ&A's unit prices to develop a "loaded unit price" for each water and sewer bid item to include the portions of the following general bid items that are attributable to water and sewer:

- Mobilization (12.45% to water, 5.96% to sewer)
- Contractor Quality Control and Assurance (12.45% to water, 5.96% to sewer)
- Existing water valves to adjust (100% to water)
- Flowable Fill (100% to water)
- Import Trench Backfill (50% to water, 50% to sewer)

The loaded unit prices for each bid item are shown in Exhibits 3A and 3B.

The "extended price" of each item was calculated by multiplying the bid item quantity attributed to the particular parcel by the loaded unit price of the item. In the case of items being upsized, the loaded unit price was the lower loaded unit price for the size attributable to the parcel (ex. the unit price for the 16-inch water main running through parcel MJ1 was replaced with the unit price of a 12-inch water main). The upsize cost to be paid by the City was then calculated by multiplying the quantity of the item being upsized by the difference in loaded unit price between the actual size installed



(16-inch in the example above) and the size attributable to the parcel (12-inch in the example above). Included in the City's portion of the project costs are minor quantity differences that occurred between the City's calculation of quantities by parcel as compared to the total quantities reflected in Kiewit's cost estimate.

In addition to paying the cost of upsizing, the Water Utility will pay the full cost of extending the 16-inch water main across Mullan Road at the Mary Jane Boulevard Roundabout. The City's Master Plan calls for that main to be extended further east in the future to connect to a future water supply well planned at the Clouse property acquired by the City for that purpose. These costs are not included in the WSSDF's.

The costs described previously and shown in Exhibits 3A and 3B are solely contractor-related costs. There are additional project-related costs including engineering design and construction management, City permits and financing costs that also need to be attributed to the water and sewer construction. Those total costs are summarized in Exhibit 4.

The total W~~S~~WSSDF by road segment and parcel is included in Exhibit 5. These totals include the total construction costs as well as the relevant portions of engineering, permitting and financing costs from Exhibit 4. The total W~~S~~WSSDF's are summarized for each parcel in Exhibit 6. The total WSSDF's shown in Exhibit 6 include an estimated number of water and sewer services for each parcel. The actual number of utility services to be installed for each parcel are likely to change during construction as consultations occur between developers and City representatives. The actual WSSDF's to be charged for each parcel will be calculated once construction is complete and the actual number of water and sewer services is finalized.

These W~~S~~WSSDF's will be collected for a particular parcel when the developer or their contractor obtains permits to connect to the utilities, either when a new distribution main is tied into the BUILD main or when the first service line is connected. The Water Special Development Fees will be included in the first water connection or excavation permit for a main or service is issued on that parcel and the Sewer Special Development Fees will be included in the first sewer connection or excavation permit issued on that parcel.

A separate Exhibit has been prepared for each parcel that will have a Water SDF or Sewer SDF. These exhibits are named by the parcel number with a "W" suffix for Water SDF's or a "S" suffix for Sewer SDF's. For example, the Exhibit showing the Water SDF for parcel GE4 is called GE4-W. These exhibits show the boundary of the subject parcel as well as indicate the water main(s) or sewer main that the parcel is responsible for and provide a legal description for the parcel. They also provide a total cost of the W~~S~~WSSDF's associated with the parcel. These exhibits will be recorded in the Missoula County property records for each property to make any future purchaser aware of the W~~S~~WSSDF's. The Mullan BUILD W~~S~~WSSDF's are to be paid in full upon the first connection made within the parcels shown on the attached exhibits; subsequent division of these parcels does not change the fee structure, and no pro rata division of the fee will be made.