

CITY COUNCIL AGENDA

Work Session

August 4, 2025 at 6:00 PM



1) CALL TO ORDER

2) ROLL CALL

3) PUBLIC COMMENT ON AGENDA ITEMS Persons addressing City Council are required to give their name and address for the record when called upon by the Mayor. Members of the public shall be limited to speaking for a maximum of three (3) minutes. Comments shall address AGENDA ITEM topics. Public Hearing items should be addressed during the PUBLIC HEARING portion (Item 10) of the meeting agenda. Non-Agenda items shall be addressed during the PUBLIC COMMENT-NON-AGENDA ITEMS (Item 14) portion of the meeting agenda.

4) DISCUSSION ITEMS

A. WATER AND SEWER CAPACITY FEES

5) PUBLIC COMMENT ON NON-AGENDA ITEMS Persons addressing City Council are required to give their name and address for the record when called upon by the Mayor. Members of the public shall be limited to speaking for a maximum of two (2) minutes. Comments shall address NON-AGENDA ITEM topics. Public Hearing items shall be addressed during the PUBLIC HEARING portion (Item 10) of the meeting agenda. Agenda items should be addressed during the PUBLIC COMMENT-AGENDA ITEMS (Item 6) portion of the meeting agenda.

6) ADJOURNMENT

MAYOR: Scott Wolfersberger CITY MANAGER: Derek N. Perry
COUNCIL MEMBERS: Theresa Chaney-Huggett, Jacob Gates, James Hackworth,
Andrew Scibbe, Ryan Traver, Ryan Underhill
Training Room, 323 W Michigan Ave, Marshall, MI 49068

ITEM: 4.A

ADMINISTRATIVE REPORT



TO: Honorable Mayor and City Council
FROM: Marguerite Davenport, Director of Public Services
Aaron Ambler, Water Superintendent
Alec Egnatuk, Wastewater Superintendent
DATE: August 4, 2025
SUBJECT: **WATER AND SEWER CAPACITY FEES**

The City's current water and sewer rules and regulations permit the assessment of fees for properties seeking to connect to the water distribution and sanitary sewer collection systems. These connection fees—soon to be referred to as Capacity Fees under proposed changes—have been in place since before 2016 and are based on building use, resulting in a total Residential Equivalent Unit (REU) per connection. Moving forward, ambiguity in the calculation will be removed by calculating fees based on meter size. The purpose of this work session is to explain the need for Capacity Fees, outline their justification, and present the basis for the proposed fee amounts.

BUDGET IMPACT:
None

RECOMMENDATION:
The formal recommendation will come at a regularly scheduled City Council meeting following the presentation and discussion during this work session.



City of Marshall, MI

Water and Sewer Capacity Fee Study - Final Report

August 4, 2025





August 4, 2025

Ms. Marguerite Davenport, PE
Director of Public Services
City of Marshall
323 W. Michigan Avenue
Marshall, MI 49068

Re: Water and Sewer
Connection Fee – Final Report

Dear Ms. Davenport,

Stantec is pleased to present this Final Report of the Water and Sewer Capacity Fee Study that we performed for the City of Marshall. We appreciate the assistance provided by all of the members of the City staff who participated in the Study.

If you or others at the City have any questions, please do not hesitate to contact me. We appreciate the opportunity to be of service to the City of Marshall and look forward to working with your team again in the near future.

Sincerely,

Joey Murphy
Principal

1110 Montlimar Drive
Mobile, AL 36609
(251)-450-7786
joey.murphy@stantec.com

Enclosure

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1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

This Executive Summary presents an overview of the results of the comprehensive Water and Sewer Capacity Fee Rate Study (Study) that was conducted for the water and sewer systems of the City of Marshall (hereafter referred to as the City or Utility) by Stantec Consulting Services Inc. (Stantec).

1.2 STUDY OBJECTIVES

The objective of this study is to establish an equitable, understandable, defensible cost recovery philosophy and charge structure for customers connecting to the City's water and/or sanitary sewer systems. The water and sewer capacity fee calculation in this study used a Combined (recoupment and capital planning) approach based on the demand that a new connection places on the City's systems.

Charges were calculated in accordance with industry standards, primarily those endorsed by the American Water Works Association, and established professional best practices. The next section identifies the recommendations of the analysis. Following the recommendations section, the report provides general background related to the capacity fee charge development followed by an analysis of water and sanitary sewer capacity charges.

1.3 RECOMMENDATIONS

The City currently charges a water and a sewer capital charge for new utility customers connecting to the water and sewer systems. The capacity fees have not been reviewed or updated for several years. The City requested that Stantec review the current charges and update the calculations to confirm that the capacity fees are appropriately set to recover cost of providing water and sewer system capacity to new connections. Based on the detailed analysis outlined in subsequent sections of this Report, Stantec recommends that the City increase the water capacity fee and the sewer capacity fee. The proposed capital charges are presented in Table 1-1 and are shown per Residential Equivalent Unit (REU).

Table 1-1 Proposed Fiscal Year 2026 Water and Sewer Capital Charges per REU

Per REU	Water Capital Charge	Sewer Capital Charge
Proposed Capacity Fee	\$ 960	\$ 1,840
Current Capacity Fee	\$ 600	\$ 1,500

2. CAPACITY FEE ANALYSIS

2.1 BACKGROUND

Capacity fees are often referred to by different names such as capital charges, recovery fees, impact fees, system development charges, or connection fees. These charges operate as a “one-time” charge to recover the cost of capacity to serve new development and are widely applied by water and sewer utility providers. Such charges are the mechanism by which new growth can “pay its own way,” mitigating the extent to which existing residents bear the cost of new or expanded facilities necessitated by new development. Capacity fees are typically based upon the costs of the major backbone infrastructure necessary to provide service to all customers (i.e. water supply facilities, water and sewer treatment facilities, material and equipment, disposal facilities, and water and sewer transmission mains).

2.2 METHODOLOGY

There are three primary approaches for the calculation of capacity fees within the utility industry:

- **Buy-In** – This approach uses the value of the utility’s existing assets as the basis for the fee calculation. This approach is most appropriate for a system with capacity such that most new connections to the system will be served by that existing available capacity.
- **Incremental** – This approach uses the planned multi-year capital improvement program (CIP) that is associated with the provision of additional system capacity as the cost basis for the fee. This approach is most appropriate where 1) the existing system has limited capacity to accommodate growth, 2) the CIP has a significant number of projects that provide additional system capacity for each functional system component to be representative of the cost of capacity for an entire system, or 3) information on existing infrastructure by functional component is not readily available.
- **Combined** – This approach uses the system’s existing assets as well as the growth-related CIP as the cost basis for the fee calculation. This approach is most appropriate to use when 1) there is limited capacity in the current system that will accommodate some growth, but additional capacity is needed in the relative short-term as reflected in the CIP, and 2) the CIP includes a significant amount of projects that will provide additional system capacity, but does not necessarily have a sufficient amount of projects in each functional component to be reflective of a total system.

The City has identified and proposed over \$54 million in the Capital Improvement Program (CIP) for the water and sewer systems over the next planning horizon of six to seven years. A majority of the proposed CIP (approximately \$34 million) is related to renewal and rehabilitation, and as such, would be excluded from inclusion in the capacity fee calculation. Of the remaining approximately \$21 million in expansion-related funds. With the extensive expansion planned in the water and sewer system, the City of Marshall has determined that the Combined Method (buy-in recoupment plus incremental cost for required expansion) is the most appropriate capacity fee collection method. By using this method, the City can

accurately allocate costs based on actual system usage and investment needs, while maintaining ratepayer equity and supporting long-term capital planning.

2.3 SYSTEM VALUE

The first step in calculating the capacity fees involved establishing the cost basis for each system function. The net system value for use in determination of the capital charges is calculated using the following approach:

- 1) The City's accounting records for the Utility's existing and in-service assets were analyzed and used as the basis to determine the replacement cost new less depreciation (RCNLD) of each of the Utility's systems.
- 2) Any donated assets and/or assets not funded by the City (funded by grants, developer contributions, etc.) are removed from the cost basis of existing plant-in-service.
- 3) The resulting cost basis is divided by the total available capacity to determine the capital charge.

2.3.1 Fixed Assets

Stantec evaluated the Utility's fixed asset listing and accounting records which included an asset description, purchase date or year in service, original cost, useful life, and accumulated depreciation for each asset, as of June 30, 2024. In addition, estimated capital construction in progress project values were included if substantially completed. To determine the current value for each component of the Utility, the net book value of each asset was escalated to estimate the current day replacement cost utilizing the Engineering News Record (ENR) Construction Cost Index, based upon the year the asset was placed in service. In this way, the RCNLD was developed for each asset and then allocated between water and sewer systems, and to each system's respective functional components.

2.3.2 System Credits

Upon determination of the replacement costs and planned capital, certain credits must be factored in recognition that certain assets were contributed to the City at no cost or funded via a grant and therefore should not be considered in the cost basis. It is also appropriate for utility systems to deduct debt obligations related to capital project funding from the cost basis, recognizing that the annual debt service payments are primarily paid for from user rates after customers are connected. The present value of the total outstanding debt service for both water and sewer is deducted from the asset base to calculate the capital charge.

2.3.3 Summary of Cost Basis

Tables 2-1 and 2-2 present the resulting net system values for the water and sewer systems, respectively, with the application of each of the components discussed in the preceding sections. The resulting net system value was used as the numerator and cost basis in capacity fee calculations.

Table 2-1 Water Net System Value

Description	Water System
Replacement Cost New Less Depreciation (RCNLD) of Existing Assets	\$60,758,980
Capital Construction Work in Progress	\$421,902
Capital Improvement Plan – planned expenditure	\$3,861,000
Less: Outstanding Principal	(\$7,246,400)
Less: Asset Contributions/Exclusions	(\$43,500,000)
Net System Value	\$14,295,482

Table 2-2 Sewer Net System Value

Description	Collection
Replacement Cost New Less Depreciation (RCNLD) of Existing Assets	\$21,641,008
Capital Construction Work in Progress	\$1,723,599
Capital Improvement Plan – planned expenditure	\$16,765,000
Less: Outstanding Principal	(\$1,475,000)
Less: Asset Contributions / Exclusions	(16,000,000)
Net System Value	\$22,654,607

2.4 DETERMINATION OF SYSTEM CAPACITY

Once the total cost basis was determined, the next step was to determine the water and sewer system capacities as stated in terms of residential equivalent units (REUs). Expressing the system capacities in terms of REUs allows for the development of the unit pricing of capacity which is essential for the determination of capital charges. The total system capacity stated in MGD for each system, divided by the level of service stated in terms of gallons per day (GPD), is equal to the total number of REUs that the Utility can serve with existing infrastructure outlined herein.



2.4.1 System Capacity

Treatment, supply, and disposal capacities are generally accepted to be either the physical or regulatory permitted capacity of such facilities and are typically readily available. The treatment capacities for the water and sewer systems were obtained from City staff. While capacity estimates for treatment, supply, and disposal functions are often readily available, transmission and other system component capacities are typically more difficult for a Utility to quantify. As such, for purposes of the Analysis, water transmission/distribution and sewer transmission/collection system capacity estimates were assumed as a function of the overall treatment capacities of the system. This approach reflects the expectation that the water and sewer transmission systems are generally aligned with treatment system capacities and will need to be sized accordingly.

Table 2-3 presents the system capacity identified for the water and sewer systems.

Table 2-3 System Capacity

Description	Water	Sewer
System Capacity (MGD)	3.86	3.0

2.4.2 Level of Service

In the evaluation of the capital facility needs for providing water and sewer utility services, it is critical that a level of service (LOS) standard be developed. LOS means an indicator of the extent or degrees of service provided by a facility, based on the operational characteristics of the facility. For water and sewer service, the level of service that is commonly used in the industry is the amount of capacity allocable to an REU expressed as the amount of usage in gallons on an average daily basis, plus a system defined peaking factor. The peaking factor accounts for the fact that water and sewer systems must be designed to handle peak demand, not just average daily use. This allocation would generally represent the amount of capacity allowable to the REU. Table 2-4 presents the level of service standards used in the calculation of the capital charges.

Table 2-4 Level of Service (LOS)

Description	Water	Sewer
Level of Service (GPD)	125 gpd design capacity 1.97 observed peaking factor. 246 gpd LOS	125 gpd design capacity 1.85 observed peaking factor. 231 gpd LOS

2.5 RESULTS

The identified capital costs for each system's functional components were divided by the capacity for each component stated in terms of REUs to determine the capacity cost per REU for water and sewer. Based upon the cost and capacity information provided by the City and the Analysis described herein, the water capacity charge is calculated to be \$960 per REU as compared to the existing fee of \$600. The resulting

sewer capacity charge is calculated to be \$1,840 per REU as compared to the existing fee of \$1,500. A comparison of the existing and proposed capital charges is presented in Table 2-5.

Table 2-5 Proposed Capacity Charge per REU

System	Existing	Calculated*	\$ Change	% Change
Water	\$ 600	\$ 960	\$ 360	59%
Sewer	\$ 1,500	\$ 1,840	\$ 340	22%
Total	\$ 2,100	\$ 2,800	\$ 700	33%

*Calculated capacity charges rounded to nearest \$10

3. RECOMMENDATIONS

This section of the report presents the recommendations developed as part of the Study.

3.1 CAPACITY CHARGE ANALYSIS

Stantec recommends that the City update the current capacity charges for water and sewer to reflect the calculated capacity charges of \$960 for water and \$1,840 for sewer. These charges are presented below along with a comparison to the current capacity charges.

Table 3-1 Proposed Capacity Charge per REU

System	Existing	Calculated	\$ Change	% Change
Water	\$ 600	\$ 960	\$ 360	59%
Sewer	\$ 1,500	\$ 1,840	\$ 340	22%
Total	\$ 2,100	\$ 2,800	\$ 700	33%

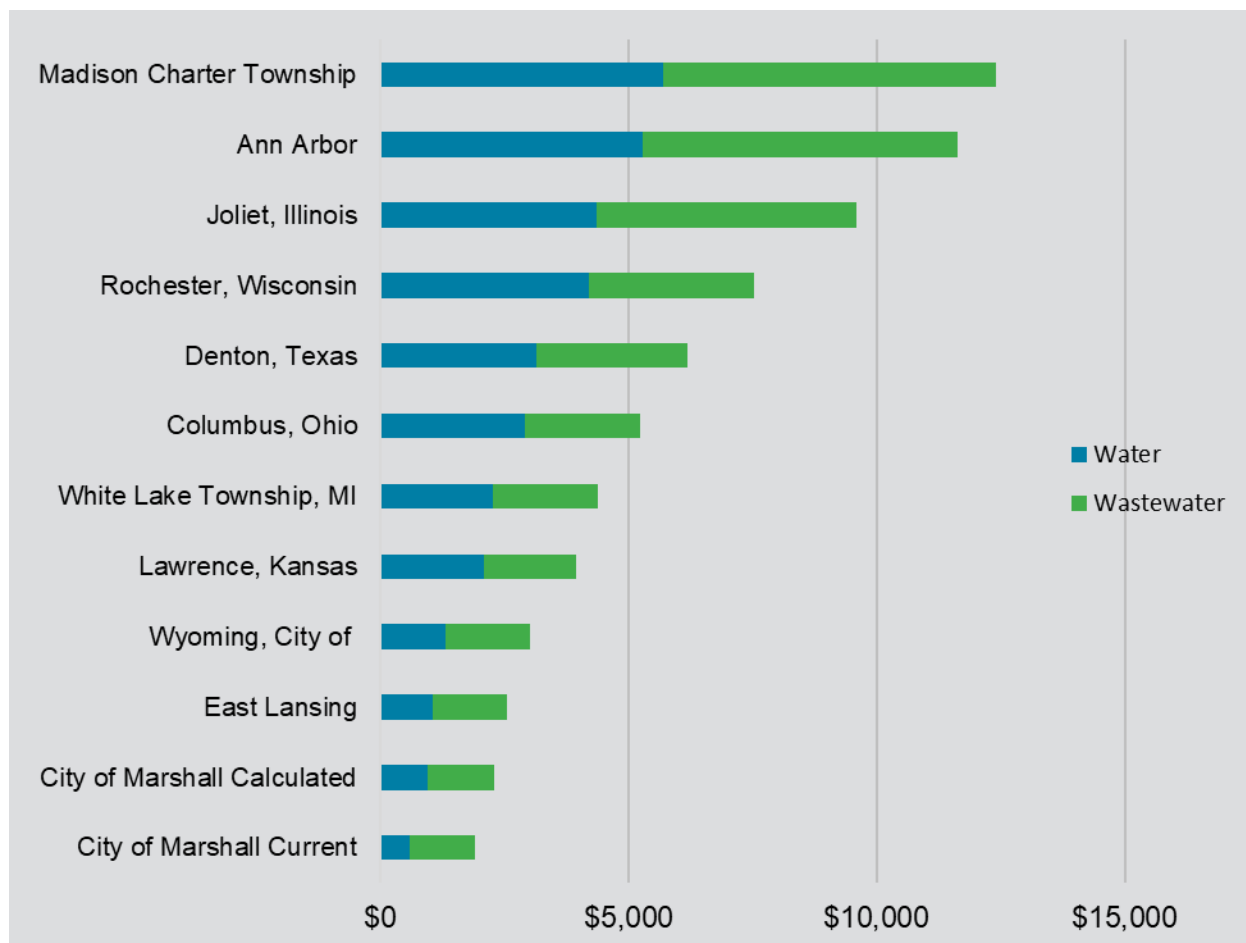
Calculated capacity charges rounded to nearest \$10.

Stantec recommends that the City perform an update to this analysis every three to five years so that cost of providing water and sewer system capacity are reflected in the capacity fees.

3.2 CUSTOMER COMPARISONS

The comparison of current and proposed capacity fee charges for water and sewer with those assessed by surrounding jurisdictions and like sized utilities can provide perspective on the level of cost associated with capacity related fees. The following figures were developed to provide a comparison of what a typical residential customer would pay for water and sewer capacity fees in surrounding jurisdictions. It is important to note that the comparison community bills reflect current rates and do not reflect potential rate adjustments in Fiscal Year 2025, for which data is not yet available.

Figure 3-2 Capacity Fee Comparison – Water and Sewer



Disclaimer

This document was produced by Stantec Consulting Services Inc. ("Stantec") for City of Marshall and is based on a specific scope agreed upon by both parties. In preparing this report, Stantec utilized information and data obtained from City of Marshall or public and/or industry sources. Stantec has relied on the information and data without independent verification, except only to the extent such verification is expressly described in this document. Any projections of future conditions presented in the document are not intended as predictions, as there may be differences between forecasted and actual results, and those differences may be material.

Additionally, the purpose of this document is to summarize Stantec's analysis and findings related to this project, and it is not intended to address all aspects that may surround the subject area. Therefore, this document may have limitations, assumptions, or reliance on data that are not readily apparent on the face of it. Moreover, the reader should understand that Stantec was called on to provide judgments on a variety of critical factors which are incapable of precise measurement. As such, the use of this document and its findings by City of Marshall should only occur after consultation with Stantec, and any use of this document and findings by any other person is done so entirely at their own risk.