

# STORM DRAIN IMPACT FEE ANALYSIS

December 2020

Prepared by:



**BOWEN COLLINS**  
& ASSOCIATES

Prepared for:



# STORM DRAIN IMPACT FEE ANALYSIS

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2/11/2021

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## **EXECUTIVE SUMMARY**

### **INTRODUCTION**

Herriman City has retained Bowen Collins & Associates (BC&A) to prepare an impact fee analysis (IFA) for its storm drain system based on a recently completed impact fee facility plan. An impact fee is a one-time fee, not a tax, imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. The purpose of an IFA is to calculate the allowable impact fee that may be assessed to new development in accordance with Utah code.

### **WHY ASSESS AN IMPACT FEE?**

As new users join a system, they add demands that must be satisfied through new facilities or use of excess capacity in existing facilities. Until all required projects are completed and new development is utilizing the full capacity of existing facilities, the City can assess an impact fee to recover its cost of latent capacity available to serve the future development. The general impact fee methodology divides the available capacity of existing and future capital projects between existing and future users based on their projected demands.

### **HOW ARE IMPACT FEES CALCULATED?**

A fair impact fee is calculated by dividing the cost of existing and future facilities by the amount of new growth that will benefit from the unused capacity. Only the capacity that is needed to serve the projected growth within the next ten years is included in the fee. Costs used in the calculation of impact fees include:

- New facilities required to maintain (but not exceed) the proposed level of service identified in the IFFP; only those expected to be built within ten years are considered in the final calculations of the impact fee.
- Historic costs of existing facilities that will serve new development
- Cost of professional services for engineering, planning, and preparation of the impact fee facilities plan and impact fee analysis

Costs not used in the impact fee calculation

- Operational and maintenance costs
- Cost of facilities constructed beyond 10 years
- Cost of facilities funded by grants, developer contributions, or other funds which the City is not required to repay
- Cost of renovating or reconstructing facilities which do not provide new capacity or needed enhancement of services to serve future development

### **IMPACT FEE CALCULATION**

Impact fees for this analysis were calculated by dividing the proportional cost of facilities required to service 10-year growth by the amount of growth expected over the next 10-years. This is done for each of the major components in the storm drain system. Calculated impact fees are

summarized in Table ES-1. For impact fee purposes, the Herriman storm drain system includes two service areas, Main Herriman and the Town Center. The impact fees for both storm drain service areas are included in the table.

**Table ES-1**  
**Impact Fee Calculation**

| <b>Storm Drain System Components</b> | <b>Total Cost of Component</b> | <b>% Serving 10-Year Growth</b> | <b>Cost Serving 10-Year Growth</b> | <b>10-Year Acres Served</b> | <b>Cost per Acre</b> |
|--------------------------------------|--------------------------------|---------------------------------|------------------------------------|-----------------------------|----------------------|
| <b><i>Main Herriman</i></b>          |                                |                                 |                                    |                             |                      |
| Existing Facilities                  | \$10,833,337.59                | 21.5%                           | \$2,331,011.80                     | 2,282                       | \$1,021.43           |
| 10-Year Projects                     | \$14,021,999.38                | 25.2%                           | \$3,527,419.93                     | 2,282                       | \$1,545.69           |
| Impact Fee Studies                   | \$117,380.98                   | 85%                             | \$99,773.83                        | 2,282                       | \$43.72              |
| <b>Subtotal</b>                      | <b>\$24,972,717.95</b>         |                                 | <b>\$5,958,205.56</b>              |                             | <b>\$2,610.84</b>    |
| <b>Impact Fee For Main Herriman</b>  |                                |                                 |                                    |                             | <b>\$2,610.84</b>    |
| <b><i>Town Center</i></b>            |                                |                                 |                                    |                             |                      |
| Existing Facilities                  | \$1,524,757                    | 6.3%                            | \$95,853.42                        | 24                          | \$4,044.45           |
| 10-Year Projects                     | \$0.00                         | -                               | \$0.00                             | -                           | \$0.00               |
| Impact Fee Studies                   | \$1,219.02                     | 85%                             | \$1,036.17                         | 24                          | \$43.72              |
| <b>Subtotal</b>                      | <b>\$1,525,976.02</b>          | -                               | <b>\$96,853.59</b>                 | -                           | <b>\$4,088.17</b>    |
| <b>Impact Fee For Town Center</b>    |                                |                                 |                                    |                             | <b>\$4,088.17</b>    |

The impact fee is separate from any additional charges levied by the City for hookup costs or for other reasonable permit and application fees.

### **RECOMMENDED IMPACT FEE**

The total calculated impact fee is summarized in Table ES-1. This is the legal maximum amount that may be charged as an impact fee. A lower amount may be adopted if desired, but a higher fee is not allowable under the requirements of Utah Code.

## **SECTION 1 INTRODUCTION**

Herriman City has retained Bowen Collins & Associates (BC&A) to prepare an Impact Fee Analysis (IFA) for its storm drain system based on a recently completed impact fee facility plan. An impact fee is a one-time fee, not a tax, imposed upon new development activity as a condition of development approval to mitigate the impact of the new development on public infrastructure. The purpose of an IFA is to calculate the allowable impact fee that may be assessed to new development in accordance with Utah code.

Requirements for the preparation of an IFA are outlined in Title 11, Chapter 36a of the Utah code (the Impact Fees Act). Under these requirements, an IFA shall accomplish the following for each facility:

1. Identify the impact of anticipated development activity on existing capacity and system improvements required to maintain the established level of service
2. Demonstrate how the impacts are reasonably related to anticipated development activity
3. Estimate the proportionate share of:
  - a. Costs of existing capacity that will be recouped
  - b. Costs of impacts on system improvements that are reasonably related to the new development activity
4. Identify how the impact fee was calculated
5. Consider the following additional issues
  - a. Manner of financing improvements
  - b. Dedication of system improvements
  - c. Extraordinary costs of servicing newly developed properties
  - d. Time-price differential

The following sections of this report have been organized to address each of these requirements.

## SECTION 2

### IMPACT ON SYSTEM (11-36a-304.1(a)(b))

Growth within the City's service areas, and projections of storm water flows resulting from said growth is discussed in detail in the City's Master Plan and Impact Fee Facilities Plan. Growth in developed acres projected for each service area (as identified and discussed in the Impact Fee Facilities Plan) is summarized in Table 2-1.

**Table 2-1**  
**Existing and Projected Developed Acreage**

| <b>Development Type</b>                  | <b>Main<br/>Herriman</b> | <b>Town<br/>Center</b> |
|--|--------------------------|------------------------|
| Existing Development (Acres)             | 5,554                    | 292.6                  |
| 10-Year Development (Acres)              | 2,282                    | 23.7                   |
| Greater than 10-Year Development (Acres) | 1,965                    | 60.7                   |
| <b>Total</b>                             | <b>9,801</b>             | <b>377.0</b>           |

As indicated in the table, projected growth for the 10-year planning window of this impact fee analysis is 2,282 acres for the Main Herriman service area and 23.7 acres for the Town Center service area. In order to maintain the established level of service, projected future growth will be met through a combination of available excess capacity in existing facilities and construction of additional capacity in new facilities.

### SECTION 3

## RELATION OF IMPACTS TO ANTICIPATED DEVELOPMENT

### (11-36a-304.1(c))

To satisfy the requirements of state law, it is necessary to show that all impacts identified in the impact fee analysis are reasonably related to the anticipated development activity. This has been documented in detail in the City's storm drain Impact Fee Facilities Plan. In short, only that capacity directly associated with demand placed upon existing system facilities by future development has been identified as an impact of the development. The steps completed to identify the impacts of anticipated development are as follows.

1. **Existing Development** – The demand existing development places on the system was estimated based on GIS records and available aerial photography.
2. **Existing Capacity** – The capacities of existing facilities were calculated based on the level of service criteria established for each type of facility in the Impact Fee Facilities Plan.
3. **Existing Deficiencies** – Existing deficiencies in the system were looked for by comparing defined levels of service against calculated capacities. Where existing deficiencies existed, projects were identified to eliminate the deficiencies. Costs associated with existing deficiencies were not assigned to impacts of development.
4. **Future Development** - The demand future development will place on the system was estimated based on development projections as discussed in Section 2.
5. **Future Demand Use of Existing Capacity** – Whenever possible, excess capacity in existing facilities has been used to serve future demands. Where this occurs, the amount of capacity used by future growth has been calculated as described in detail in the Impact Fee Facilities Plan.
6. **Future Deficiencies** – Where excess capacity is inadequate to meet projected demands, future deficiencies in the system were identified using the same established level of service criteria used for existing demands.
7. **Recommended Improvements** – Needed system improvements were identified to meet demands associated with future development.



## SECTION 4

### PROPORTIONATE SHARE ANALYSIS (11-36a-304(d))

A comprehensive proportionate share analysis associated with anticipated future development and its impact on the system was completed as part of the Impact Fee Facilities Plan. A summary of that analysis is contained here with additional discussion of the costs of facilities impacted by growth.

#### EXCESS CAPACITY TO ACCOMMODATE FUTURE GROWTH

The portion of existing capacity used by existing and future development was analyzed in detail as part of the Impact Fee Facilities Plan. Based on the analysis, the calculated percentage of existing capacity in system facilities used by existing users, growth during the 10-year planning window, and growth beyond the 10-year planning window is summarized in Table 4-1.

**Table 4-1**  
**Use of Existing Capacity**

|                        | <b>Main Herriman</b> | <b>Town Center</b> |
|------------------------|----------------------|--------------------|
| Existing Development   | 74.1%                | 77.6%              |
| 10-Year Growth         | 21.5%                | 6.3%               |
| Growth Beyond 10 years | 4.4%                 | 16.1%              |
| <b>Total</b>           | <b>100.0%</b>        | <b>100.0%</b>      |

#### EXISTING SYSTEM INFRASTRUCTURE COSTS

To calculate the value of excess capacity in the existing system, BC&A first looked at the value of all existing facilities. Herriman City has on record the actual construction costs of existing system level components of the City's storm drain system since 2001, which totals \$10,833,337.59 for the Main Herriman service area and \$1,524,757.00 for the Town Center service area. These are actual costs and were obtained from the City.

It should be noted that the impact fee eligible cost identified above represent only a portion of the total system value. System costs not included in the total include facilities with a service life of less than 10 years, project level improvements serving single developments, and improvements not paid for by the City (e.g. projects funded through grants, developer dedications, etc.). In this study, public facility costs already incurred by the City will be included in the impact fee only to the extent that new growth will be served by the previously constructed improvements.

#### REIMBURSEMENT AGREEMENTS

There are no existing reimbursement agreements within the system that will affect the impact fee calculation.



## **FUTURE IMPROVEMENTS**

In addition to using available existing capacity, demand associated with projected future development will be met through the construction of additional capacity in new facilities. A primary focus of the Impact Fee Facilities Plan was the identification of projects required to serve new development. The results of the Impact Fee Facilities Plan are summarized in Table 4-2. Table 4-2 includes improvements for the Main Herriman service area. There are no storm drain system improvement anticipated in the Town Center over the next 10 years. Included in the table are the costs of each required project and the portion of costs associated with development.

**Table 4-2**  
**Impact Fee Eligible Capital Projects**

| <b>Project ID</b> | <b>Project Expense<br/>- 2020 Dollars</b> | <b>10-Year<br/>Growth</b> | <b>Cost Attributable<br/>to 10-Year<br/>Growth</b> |
|-------------------|---|---------------------------|--|
| P 1               | \$ 248,724.00                             | 90.4%                     | \$ 224,855.33                                      |
| P 2               | \$ 96,118.65                              | 77.1%                     | \$ 74,065.09                                       |
| P 3               | \$ 196,767.23                             | 58.7%                     | \$ 115,484.83                                      |
| P 4               | \$ 179,659.82                             | 58.7%                     | \$ 105,444.31                                      |
| P 5               | \$ 114,968.16                             | 77.1%                     | \$ 88,589.74                                       |
| P 9               | \$ 63,918.45                              | 90.4%                     | \$ 57,784.55                                       |
| P 10              | \$ 133,281.45                             | 58.7%                     | \$ 78,224.34                                       |
| P 11              | \$ 180,674.55                             | 0.9%                      | \$ 1,566.59  |
| P 48              | \$ 613,442.88                             | 1.6%                      | \$ 9,834.76  |
| P 50              | \$ 212,905.80                             | 65.1%                     | \$ 138,600.27                                      |
| P 51              | \$ 174,334.95                             | 78.8%                     | \$ 137,375.58                                      |
| P 52              | \$ 219,961.98                             | 12.8%                     | \$ 28,070.84                                       |
| P 54              | \$ 162,614.79                             | 75.4%                     | \$ 122,598.70                                      |
| P 61              | \$ 1,554,513.12                           | 0.0%                      | \$ -   |
| P 62              | \$ 285,307.52                             | 0.0%                      | \$ -   |
| P 64              | \$ 68,179.50                              | 62.9%                     | \$ 68,179.50                                       |
| P 65              | \$ 68,179.50                              | 62.9%                     | \$ 68,179.50                                       |
| P 66              | \$ 68,179.50                              | 62.9%                     | \$ 68,179.50                                       |
| OC 1              | \$ 188,726.40                             | 75.4%                     | \$ 142,284.79                                      |
| OC 2              | \$ 60,879.43                              | 77.1%                     | \$ 46,909.25                                       |
| OC 3              | \$ 449,857.77                             | 37.6%                     | \$ 169,005.59                                      |
| OC 4              | \$ 353,487.17                             | 38.2%                     | \$ 135,140.54                                      |
| OC 5              | \$ 424,157.99                             | 40.7%                     | \$ 172,833.67                                      |
| OC 6              | \$ 308,962.95                             | 36.1%                     | \$ 111,660.31                                      |
| OC 8              | \$ 153,126.09                             | 77.1%                     | \$ 117,987.79                                      |
| OC 9              | \$ 182,091.70                             | 41.7%                     | \$ 75,882.00                                       |
| OC 13             | \$ 132,878.04                             | 45.3%                     | \$ 60,165.31                                       |
| DB 2              | \$ 1,801,200.00                           | 23.0%                     | \$ 415,052.20                                      |
| DB 3              | \$ 5,324,900.00                           | 14.4%                     | \$ 769,436.51                                      |
| <b>Total</b>      | <b>\$ 14,021,999.38</b>                   | <b>25.2%</b>              | <b>\$ 3,527,419.93</b>                             |

## SECTION 5

### IMPACT FEE CALCULATION (11-36a-304.1(e))

Using the information contained in the previous sections, impact fees can be calculated by dividing the proportional cost of facilities required to service 10-year growth by the amount of growth expected over the next 10-years. This is done for each of the major system components identified previously. Calculated impact fees for both the Main Herriman and Town Center service areas are summarized in Table 5-1.

**Table 5-1**  
**Impact Fee Calculation**

| <b>Storm Drain System Components</b> | <b>Total Cost of Component</b> | <b>% Serving 10-Year Growth</b> | <b>Cost Serving 10-Year Growth</b> | <b>10-Year Acres Served</b> | <b>Cost per Acre</b> |
|--------------------------------------|--------------------------------|---------------------------------|------------------------------------|-----------------------------|----------------------|
| <b><i>Main Herriman</i></b>          |                                |                                 |                                    |                             |                      |
| Existing Facilities                  | \$10,833,337.59                | 21.5%                           | \$2,331,011.80                     | 2,282                       | \$1,021.43           |
| 10-Year Projects                     | \$14,021,999.38                | 25.2%                           | \$3,527,419.93                     | 2,282                       | \$1,545.69           |
| Impact Fee Studies                   | \$117,380.98                   | 85%                             | \$99,773.83                        | 2,282                       | \$43.72              |
| <b>Subtotal</b>                      | <b>\$24,972,717.95</b>         |                                 | <b>\$5,958,205.56</b>              |                             | <b>\$2,610.84</b>    |
| <b>Impact Fee For Main Herriman</b>  |                                |                                 |                                    |                             | <b>\$2,610.84</b>    |
| <b><i>Town Center</i></b>            |                                |                                 |                                    |                             |                      |
| Existing Facilities                  | \$1,524,757                    | 6.3%                            | \$95,853.42                        | 24                          | \$4,044.45           |
| 10-Year Projects                     | \$0.00                         | -                               | \$0.00                             | -                           | \$0.00               |
| Impact Fee Studies                   | \$1,219.02                     | 85%                             | \$1,036.17                         | 24                          | \$43.72              |
| <b>Subtotal</b>                      | <b>\$1,525,976.02</b>          | -                               | <b>\$96,853.59</b>                 | -                           | <b>\$4,088.17</b>    |
| <b>Impact Fee For Town Center</b>    |                                |                                 |                                    |                             | <b>\$4,088.17</b>    |

The total impact fee per acre can be calculated by adding up the fee for each type of system component. The impact fee is separate from any additional charges levied by the City for hookup costs or for other reasonable permit and application fees.

### BONDING INTEREST COSTS

Herriman City does not have any bonds (either existing or planned in the future) that are eligible for reimbursement through impact fees. Correspondingly, no bonding costs are shown in the table.

### IMPACT FEE STUDIES

Utah code allows for the cost of planning and engineering associated with impact fee calculations to be recovered as part of the impact fee. This study includes the actual costs of the master plan, IFFP and IFA as part of the reimbursable impact fee costs. Projected costs of future studies have not been included in this total. However, it is recommended that a comprehensive review of the impact fee study should be performed every three to five years.

## **RECOMMENDED IMPACT FEE**

The total calculated impact fee is summarized in Table 5-1. This is the legal maximum amount that may be charged as an impact fee. A lower amount may be adopted if desired, but a higher fee is not allowable under the requirements of Utah Code.

## **SECTION 6**

### **ADDITIONAL CONSIDERATIONS (11-36a-304.2)**

#### **MANNER OF FINANCING (11-36a-304.2.(a)-(e))**

As part of this Impact Fee Analysis, it is important to consider how each facility has been or will be paid for. Potential infrastructure funding includes a combination of different revenue sources.

##### **User Charges**

Because infrastructure must generally be built ahead of growth, there often arises situations in which projects must be funded ahead of expected impact fee revenues. In some cases, the solution to this issue will be bonding. In others, funds from existing user rate revenue will be loaned to the impact fee fund to complete initial construction of the project and will be reimbursed later as impact fees are received. Consideration of interfund loans should be considered in subsequent accounting of impact fee expenditures.

##### **Credit for User Charges**

In some cases, service providers do not have enough cash reserves to pay for remedying existing deficiencies. When this occurs, user charges are used to pay for portions of projects that benefit existing users. Where this is the case, a credit must be included in the impact fee for the portion of user charges that will be paid by future users to build capacity or remedy deficiencies for existing users. Since future users will pay for their portion of capacity via impact fees, they cannot be expected to pay toward existing users obligations through user charges.

In the case of the Herriman City storm drain system, City reserves exceed the system improvement obligation associated with existing users. As a result, no user charge credit has been included in the impact fee calculation.

##### **Special Assessments**

Where special assessments exist, the impact fee calculation must take into account funds contributed. No special assessments exist for this analysis.

##### **Bonds**

None of the costs contained in the IFFP or IFA included bonding. Where City financial plans identify bonding will be required to finance impact fee eligible improvements, the portion of bond cost and interest expense attributable to future growth has been added to the calculation of the impact fee. The City currently has no eligible storm water bonds.

##### **Impact Fee Fund Balance**

The City does carry a current balance in its impact fee fund. In this analysis, the capacity associated with the development that paid these impact fees has been accounted for as part of existing system demand. As a result, it would be inappropriate to use any portion of the current balance towards projects benefiting future growth. It should be noted that the City does have an obligation under the law to spend or encumber these funds within a six year window of their

collection. However, these expenditures will be independent of capacity associated with future growth and are correspondingly not shown as a source of financing for the impact fee eligible expenditures identified in this report.

### **General Taxes**

If taxes are used to pay for infrastructure, they should be accounted for in the impact fee calculation. Specifically, any contribution made by property owners through taxes should be credited toward their available capacity in the system. In this case, no taxes are proposed for the construction of infrastructure.

### **Federal and State Grants and Donations**

Impact fees cannot reimburse costs funded or expected to be funded through federal grants and other funds that the City has received for capital improvements without an obligation to repay. The City has no grants or donations for storm drain infrastructure that need to be included in this analysis. If grants become available for constructing facilities, impact fees will need to be recalculated and an appropriate credit given.

### **DEDICATION OF SYSTEM IMPROVEMENTS (11-36a-304.2(f))**

Developer exactions may be considered in the inventory of current and future infrastructure. If a developer constructs facility or dedicates land, the value of the dedication is credited against that particular developer's impact fee liability.

If the recognized value of the credit is less than the development's impact fee liability, the developer will owe the balance of the liability to the City. If the recognized value of the improvements/land dedicated is more than the development's impact fee liability, the City must reimburse the difference to the developer.

It should be emphasized that the concept of impact fee credits pertains to system level improvements only. For project level improvement (i.e. projects not identified in the impact fee facility plan), developers will be responsible for the construction of the improvements without credit against the impact fee.

### **EXTRAORDINARY COSTS (11-36a-304.2(g))**

The impact fee act indicates the analysis should include consideration of any extraordinary costs of servicing newly developed properties. In cases where one area of potential growth may cost significantly more to service than all other growth, a separate service area may be warranted. No areas with extraordinary costs have been identified as part of this analysis.

### **TIME-PRICE DIFFERENTIAL (11-36a-304.2(h))**

Utah code requires consideration of time-price differential in order to create fairness for amounts paid at different times. Per the requirements of the code, existing infrastructure value is based on actual historical costs.

**NOTICING AND ADOPTION REQUIREMENTS (11-36A-504)**

The Impact Fees Act requires that entities must publish a notice of intent to prepare or modify any IFA. Before the resulting impact fee can be adopted, the City must:

- Provide notice in accordance with Section 10-9a-205 of State Code. This includes reasonable notice of a public hearing published in a local newspaper at least 10 days before the actual hearing.
- A copy of the IFA and proposed impact fee enactment must be made available on the City's website or posted in each public library within the service area during the notice period for public review and inspection.
- Following the noticing period, a public hearing will be held, after which the IFA and impact fee enactment may be adopted, amended and adopted, or rejected.



## SECTION 7 IMPACT FEE CERTIFICATION (11-36A-306.2)

This IFA has been prepared in accordance with Utah Code Title 11, Chapter 36a (the “Impact Fees Act”), which prescribes the laws pertaining to the imposition of impact fees in Utah. The accuracy of this report relies upon the planning, engineering, and other source data, which was provided by the City and their designees.

In accordance with Utah Code Annotated, 11-36a-306(2), Bowen Collins & Associates, makes the following certification:

I certify that the attached impact fee analysis:

1. Includes only the costs of public facilities that are:
  - a. allowed under the Impact Fees Act; and
  - b. actually incurred; or
  - c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. Does not include:
  - a. costs of operation and maintenance of public facilities;
  - b. costs of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents; or
  - c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. Complies in each and every relevant respect with the Impact Fees Act.

*Kameron Ballentine*

Dated: December 17, 2020

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