

BYLAW NO. 22-1132

BEING A BYLAW OF THE TOWN OF TURNER VALLEY IN THE PROVINCE OF ALBERTA FOR THE PURPOSE OF ESTABLISHING UTILITY OFF-SITE LEVIES

WHEREAS pursuant to section 648 of the Municipal Government Act, RSA 2000, Chapter M-26 as amended, Council may provide for the imposition and payment of an off-site levy in respect of land that is to be developed or subdivided and to authorize agreements to be entered into in respect of the payment of such levy;

WHEREAS the Council of the Town of Turner Valley deems it desirable to impose off-site levies for the purposes described in the Municipal Government Act; and

WHEREAS the Council of the Town of Turner Valley deems it desirable to authorize agreements to be entered into in respect of the payment of off-site levies; and

WHEREAS the Town of Turner Valley and the Town of Black Diamond will amalgamate on January 1, 2023, this bylaw will apply to the current boundaries of the Town of Turner Valley as of December 31, 2022 until the bylaw is replaced or rescinded by the Council of the new amalgamated Town of Diamond Valley, and

THEREFORE, BE IT RESOLVED THAT the Council of the Town of Turner Valley, duly assembled in Council Chambers in Turner Valley, Alberta, enacts as follows:

1.0 TITLE

1.1 This bylaw may be cited as the 'Utilities Off-Site Levy Bylaw'.

2.0 PURPOSE AND INTENT

2.1 This bylaw is intended to:

- a) impose and provide for the payment of a levy to be known as an off-site levy in respect of land that is to be subdivided or developed in the Town of Turner Valley or its successor;
- b) authorize agreements to be entered into in respect of payment of a levy;
- c) set out the objectives of each levy; and
- d) indicate how the amount of the levy was determined.

3.0 INTERPRETATION AND DEFINITIONS

3.1 In this bylaw and any schedules to this bylaw, the following terms, phrases, words and their derivations shall have the following meanings:

- a) **Act** means the Municipal Government Act, RSA 2000, Chapter M-26;
- b) **CAO** means the Chief Administrative Officer of the Town of Turner Valley, or designate;
- c) **Council** means the municipal council of the Town of Turner Valley;
- d) **Development Agreement** means an agreement entered into between an applicant for a development permit or subdivision approval in accordance with the Act;

- e) **Development Permit** means a permit issued by the Town to an applicant authorizing development in accordance with the Act and the Land Use Bylaw in effect in the Town from time to time;
- f) **Off-Site Levy** means an off-site levy imposed by this bylaw in support of utilities for water, wastewater and stormwater;
- g) **Off-Site Levy Fund** means a fund maintained in an account showing deposits to and withdrawals from, and separate from the General Account or any other municipal accounts;
- h) **Town** means the municipal corporation of the Town of Turner Valley or the geographical area within the municipal boundaries of the Town of Turner Valley, as the context may require;
- i) **Utilities** means any one or more of the following:
 - i) facilities for the storage, transmission, treatment, distribution or supply of water;
 - ii) facilities for the collection, treatment, movement or disposal of wastewater;
 - iii) storm sewer drainage facilities and infrastructure.

3.2 Any references in this bylaw to any statutes are to those statutes as amended or replaced from time to time and any amendments thereto.

3.3 Whenever the singular or masculine form of a word is used in this bylaw, it shall include the plural, feminine or neutral form of the word as the context so requires and vice versa.

3.4 The headings in this bylaw do not form part of this bylaw and shall not affect its interpretation.

3.5 The word 'may' when used in this bylaw shall be construed as permissive and empowering, and the word 'shall' when used in this bylaw shall be construed as imperative.

4.0 ADMINISTRATION AND ENFORCEMENT

4.1 Council hereby delegates to the CAO the authority to enforce and administer this bylaw.

5.0 ENACTMENT

5.1 Off-Site Levies are hereby imposed in respect of all land within the Town that is to be developed or subdivided against which off-site levies may be imposed in accordance with the Act.

6.0 AGREEMENTS

6.1 The Town may negotiate and enter into Development Agreements with respect to the payment of Off-Site Levies.

7.0 USE OF OFF-SITE LEVIES

7.1 Off-Site Levies may be used only to pay for all or part of the capital cost of any of the following:

- a) new or expanded facilities for the storage, transmission, treatment or supplying of water;
- b) new or expanded facilities for the treatment, movement or disposal of wastewater;
- c) new or expanded storm sewer drainage facilities;
- d) land required for or relating to any facilities described in clauses a – c.

8.0 PAYMENT OF LEVIES

- 8.1 Off-Site Levies in respect of land that is subject to subdivision shall be paid prior to the endorsement of the plan of subdivision.
- 8.2 Off-site Levies in respect of land that is subject to a Development Permit shall be paid prior to the release of the Development Permit.
- 8.3 Notwithstanding sections 8.1 and 8.2, at the discretion of the CAO, the Town may enter into an agreement with the owner of land that is subject to subdivision or a Development Permit whereby Off-Site Levies shall be paid as follows:
- a) 50% of the Off-Site Levy shall be paid prior to endorsement of the plan of subdivision or release of Development Permit, and
 - b) 50% of the Off-Site Levy shall be paid no later than one year after endorsement of a plan or subdivision or release of Development Permit.
- 8.4 Where the Town enters into an agreement with the owner of land in accordance with section 8.3, the Town may require, at the discretion of the CAO, as a term of the agreement, security in a form and amount sufficient to secure payment of the Off-Site Levy.
- 8.5 The Off-Site Levy rate payable in respect to land that is subject to subdivision or a Development Permit shall be the rate in effect on the date of endorsement of the plan of subdivision or the release of the Development Permit, as applicable.
- 8.6 Where an Off-Site Levy imposed pursuant to this bylaw has been paid and:
- a) the Development Permit is not released; or
 - b) the subdivision approval expires prior to endorsement of a plan of subdivision
- the Off-Site Levy paid as a condition of the Development Permit or subdivision approval may, in the sole discretion of the CAO, be refunded to the party who paid the Off-Site Levy upon the receipt of the written request of that party in accordance with this section. Any request for a refund of an Off-Site Levy payment must be submitted to the CAO in writing and must set out the basis for the refund request. The refund request must be submitted to the CAO within twelve (12) months of the date of payment of the Off-Site Levy.
- 8.7 Where the Off-Site Levy has been refunded in accordance with section 8.6, the Off-Site Levy is no longer considered to have been imposed for collected or the purpose of the Act.
- 8.8 Should an Off-Site Levy not be collected for one or more categories of the bylaw (water, storm or sewer) this will not constitute collection of all categories of the Off-Site Levies. Therefore, imposition of other categories may be imposed in the future for any category not collected.

9.0 DEFAULT OF PAYMENT

- 9.1 If a person fails, neglects or refuses to pay an Off-Site Levy, the Town may:
- a) commence proceedings in court of competent jurisdiction for payment of the Off-Site Levy;
 - b) exercise on the security provided under the associated Development Agreement;
 - c) refuse to endorse a plan of subdivision or release a Development Permit; or
 - d) take any other steps available in law or equity for the failure, neglect or refusal to pay the Off-Site Levy.

10.0 OFF-SITE LEVY FUND

- 10.1 The CAO shall set up and maintain a separate fund for each grouping of facilities as provided in Schedule 'A' in respect of which Off-Site Levies are paid.
- 10.2 Off-Site Levies shall be kept separate from the Town's general account.
- 10.3 Off-Site Levies shall be invested in accordance with the Town's investment policy in force from time to time.

11.0 DIVISION OF TOWN INTO AREAS

- 11.1 The Town is divided into 17 geographical areas as described in Schedule 'A' - Levy Areas.
- 11.2 Off-Site Levies will be imposed according to the geographical areas as shown in Schedule 'B'.

12.0 DETERMINATION OF THE LEVIES

- 12.1 Off-Site Levies for each of the geographical areas as shown in Schedule 'A' shall be as shown in Schedule 'C'.
- 12.2 Notwithstanding clause 12.1, Off-Site Levies in respect of sanitary and water as identified in Schedule 'A' will only be imposed against land if the subdivision or development's proposed servicing uses these facilities.

13.0 INFORMATION ON REQUEST

- 13.1 The Town shall disclose upon request full information regarding Off-Site Levy costs and payments.

14.0 YEARLY REPORT TO COUNCIL

- 14.1 No less than once in each calendar year, the CAO shall provide a report to Council detailing all Off-Site Levies imposed under this bylaw, including collections and expenditures during the previous calendar year, Off-Site Levy fund balances at the end of the previous calendar year, anticipated expenditures during the current calendar year, and any required borrowing required to fund those anticipated expenditures.

15.0 GENERAL PROVISIONS AND COMING INTO FORCE

- 15.1 If any term, clause or condition of this bylaw or application thereof is found to be invalid or unenforceable, the remainder of the bylaw or the application of such term, clause or condition shall not be affected and shall remain in force and effect.
- 15.2 This bylaw repeals Bylaw No. 04-880 in its entirety and all amendments thereto.
- 15.3 This bylaw shall come into force and effect on the date of third and final reading.

READ A FIRST TIME on the 7th day of September, 2022

AND ADVERTISED on the Town of Turner Valley website, posted on the 30th day of September, 2022 **AND** in the Okotoks Western Wheel on the 5th day of October, 2022

A PUBLIC HEARING was held in accordance with section 230 of the Municipal Government Act on the 19th day of October, 2022

READ A SECOND TIME on the 7th day of December, 2022

READ A THIRD AND FINAL TIME on the 7th day of December, 2022



Mayor



Chief Administrative Officer

SCHEDULE 'A'

Levy Areas

Table 1: 20 to 30-year Development Areas

Abbreviation	Development	Acres	Hectares
CB	Central Business	6.89	2.79
DC	Decalta Commercial	7.21	2.92
DH1	Dunham #1	2.45	0.99
DH2	Dunham #2	2.62	1.06
EV	Everwood Phase 2	39.07	15.81
GWE	Gateways East	70.40	28.49
GWW	Gateways West	120.17	48.63
MSC	Main Street Commercial	5.54	2.24
RO	Royal Oak	5.21	2.11
TS	Town Square	7.71	3.21
Total		267.27	108.16

Table 2: Future Development Areas (Timing Unknown)

Abbreviation	Development	Acres	Hectares
CAL	Calkins	21.65	8.76
CA	Cannon	19.64	7.95
DI	Decalta Industrial	28.02	11.34
LBR	Lower Bailey Ridge	35.54	14.38
OK1	Okalta #1	28.68	11.61
OK2	Okalta #2	30.13	12.19
SW	Southwest	42.22	17.09
Total		205.80	83.32

SCHEDULE 'B'

Total Common, Water, Wastewater and Stormwater Off-Site Levy

Common Off-Site Levies

Project	Development Abbreviation	Estimated Capital Cost (Town share)	Capacity for Future	Capital (\$) Future	Hectares	Levy/ Hectare
Westend Lagoon Upgrades	ALL	\$1,151,520	100%	\$1,151,520	96.8	\$11,894
Treated Storage Reservoir Expansion	ALL	\$1,005,815	100%	\$1,005,815	108.33	\$7,846

Water Off-Site Levies

Project	Development Abbreviation	Estimated Capital Cost (Town share)	Capacity for Future	Capital (\$) Future	Hectares	Levy/ Hectare
North Feeder Main	RO, DH1, DH2, MSC	\$353,000	16.5%	\$58,245	6.4	\$9,101
Royalite River Crossing & PRV	GWE, GWW, LBR	\$380,00	80.8%	\$307,040	77.12	\$3,981
Southwest Water Trunk Main	SW, GWW, GWE, LBR, CA, OK2	\$712,000	100%	\$712,000	140.34	\$5,073
Okalta Main west of Turner Gate and West River Crossing	SW, GWW, GWE, LBR, CA, OK2	\$672,000	100%	\$672,000	140.34	\$4,788
Imperial Drive Upgrade	GWW, GWE, LBR, SW	\$806,000	85.5%	\$689,130	108.59	\$6,346

Wastewater Off-Site Levies

Project	Development Abbreviation	Estimated Capital Cost (Town share)	Capacity for Future	Capital (\$) Future	Hectares	Levy/ Hectare
Anderson Crescent Gravity Main Upgrade	DH2, RO	\$196,000	11.9%	\$23,324	3.17	\$7,358
North Sewage Lift Station Upgrade	DH1, DH2, RO, MSC	\$901,750	13.7%	\$41,180	6.40	\$6,434
Main Street Gravity Main Upgrade	DH1, DH2, RO, MSC, TS	\$395,000	11.9%	\$47,005	9.52	\$4,937
Sunset Blvd Gravity Main Upgrade	DH1, DH2, RO, MSC, TS	\$679,000	8.1%	\$54,999	9.52	\$5,777

Elected Official Initial



CAO Initial



Wastewater Off-Site Levies (con't)

Project	Development Abbreviation	Estimated Capital Cost (Town share)	Capacity for Future	Capital (\$) Future	Hectares	Levy/ Hectare
Calkins Place Gravity Main, Lift Station, Forcemain	OK1, OK2, CA, SW, DC, EV, LBR	\$711,085	91.2%	\$648,510	90.37	\$7,176
Kennedy Drive Gravity Main Upgrade	EV, LBR, K1, OK2, CA, CB, SW, DI, DC	\$282,000	74.1%	\$208,962	90.37	\$2,312
Sunset Blvd Gravity Main Upgrade	CB, LBR, EV, DH1, DH2, RO, MSC, TS, OK1, OK2, CA, SW, DC, DI	\$682,000	44.2%	\$301,444	105.60	\$2,855
Royalite Way Gravity Main Upgrade	GWW	\$134,000	100%	\$134,000	48.63	\$2,755
Royalite Sewage Lift Station	GWW	\$199,000	100%	\$199,000	48.63	\$4,092
Southwest Sanitary River Crossing	SW, LBR	\$291,000	100%	\$291,000	31.47	\$9,247

Stormwater Off-Site Levies

Project	Development Abbreviation	Estimated Capital Cost (Town share)	Capacity for Future	Capital (\$) Future	Hectares	Levy/ Hectare
Valley Trail (Hwy 22) Storm Main Upgrade	MSC, TS	\$745,000	5.4%	\$148,230	5.36	\$27,655
Main Street Storm Main Upgrade	MSC, TS	\$840,000	5.4%	\$45,360	5.36	\$8,463

Elected Official Initial



CAO Initial



SCHEDULE 'C'

Summary of Common and Site-Specific Off-Site Levy By Development per Hectare

Abbreviation	Development	Hectares	Common (\$/ha)*	Site Specific (\$/ha)	Total per Hectare (\$/ha)
CB	Central Business	2.79	\$19,740	\$5,167	\$24,907
DC	Decalta Commercial	2.92	\$19,740	\$12,343	\$32,083
DH1	Dunham #1	0.99	\$19,740	\$29,104	\$48,844
DH2	Dunham #2	1.06	\$19,740	\$36,462	\$56,202
EV	Everwood Phase 2	15.81	\$19,740	\$12,343	\$32,083
GWE	Gateways East	28.49	\$19,740	\$20,188	\$39,928
GWW	Gateways West	48.63	\$19,740	\$27,035	\$46,775
MSC	Main Street Commercial	2.24	\$19,740	\$65,222	\$84,962
RO	Royal Oak	2.11	\$19,740	\$36,462	\$56,202
TS	Town Square	3.21	\$19,740	\$49,687	\$69,427

CAL	Calkins	8.76	TBD*	N/A	TBD*
CA	Cannon	7.95	TBD*	\$22,204	TBD*
DI	Decalta Industrial	11.34	TBD*	\$5,167	TBD*
LBR	Lower Bailey Ridge	14.38	TBD*	\$41,778	TBD*
OK1	Okalta #1	11.61	TBD*	\$12,343	TBD*
OK2	Okalta #2	12.19	TBD*	\$22,204	TBD*
SW	Southwest	17.09	TBD*	\$37,797	TBD*

* Common Levy for the Westend Lagoon project will be applied to the first 66 hectares to be developed

SCHEDULE 'D'
Reference Documents

Town of Turner Valley Offsite Levies Background Document



an Englobe company



Draft Report for:

TOWN OF TURNER VALLEY

OFF-SITE LEVIES BACKGROUND DOCUMENT

Date: August 22, 2022

Project Number: 2370-155-00

Proud of Our Past... Building the Future

www.mpe.ca

CORPORATE AUTHORIZATION

This report has been prepared by MPE Engineering Ltd. under authorization of the Town of Turner Valley. The material in this report represents the best judgment of MPE Engineering Ltd. given the available information. Any use that a third party makes of this report, or reliance on or decisions made based upon it is the responsibility of the third party. MPE Engineering Ltd. accepts no responsibility for damages, if any, suffered by a third party as a result of decisions made or actions taken based upon this report.

Should any questions arise regarding content of this report, please contact the undersigned.

MPE ENGINEERING LTD.

Professional Stamp

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Corporate Permit

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1.0 INTRODUCTION

1.1 Overview

The Town of Turner Valley (Town) retained MPE Engineering Ltd. (MPE) to develop an off-site levy for the Town. An Off-Site Levy Bylaw allows for new development to be charged an appropriate rate for the cost of infrastructure which is not located directly on their development site or that is oversized for future development. This allows the Town to recover the costs associated with impacts of development for infrastructure.

The existing Town of Turner Valley Off-site Levy Bylaw No. 04-880 is currently in effect until a new off-site levy bylaw is passed by Council or is withdrawn completely. This report serves to provide the background documentation to establish a new bylaw to be passed by Council.

1.2 Legislation

Off-site Levies are governed through the Municipal Government Act, RSA 20000, Chapter M-26, Section 648 as follows:

- “(1.1) For the purposes referred to in subsections (2) and (2.1), a council may by bylaw*
- (a) Provide for the imposition and payment of a levy in respect of land that is to be developed or subdivided, and*
 - (b) Authorize an agreement to be entered into in respect of the payment of the levy.”*

“(2) An off-site levy may be used only to pay for all or part of the capital cost of any or all of the following:

 - (a) New or expanded facilities for the storage, transmission, treatment or supplying of water;*
 - (b) New or expanded facilities for the treatment, movement or disposal of sanitary sewage;*
 - (c) New or expanded storm sewer drainage facilities;*
 - (c.1) new or expanded roads required for or impacted by a subdivision or development;*
 - (c.2) subject to the regulations, new or expanded transportation infrastructure required to connect, or to improve the connection of, municipal roads to provincial highways resulting from a subdivision or development;*
 - (d) land required for or in connection with any facilities described in clauses (a) to (c.2)*

(2.1) In addition to the capital cost of facilities described in subsection (2), an off-site levy may be used to pay for all or part of the capital cost for any of the following purposes, including the cost of any related appurtenances and any land required for or in connection with the purpose:

 - (a) new or expanded community recreation facilities;*
 - (b) new or expanded fire hall facilities;*
 - (c) new or expanded police station facilities;*
 - (d) new or expanded libraries.”*

1.3 Town Levies

For the purposes of the Town of Turner Valley, a review of the Water, Wastewater and Stormwater infrastructure was completed with regards to the new developments. Documentation to support

transportation and recreation facilities is not readily available at this time to justify an off-site levy; however, may be reviewed and implemented in future off-site levy bylaws.

The infrastructure projects throughout the Town have been reviewed to determine the application of:

- “site-specific” levies: referring to a component of infrastructure that is specific to a particular subdivision and only benefits a certain development(s).
- “common” levies: referring to a component of infrastructure that benefits the entire community resulting in a portion of the costs to be applied between the benefitting development in addition to the Town that benefits the existing community.

New developments would be subject to all common levies, whereas site-specific levies would only be applied to infrastructure that supports the new development.

2.0 TOWN DEVELOPMENT

The Turner Valley was initially incorporated as a village on February 23, 1920 and subsequently incorporated as a town on September 1, 1977. Due to the proximity of the Town of Black Diamond, there are several ties (infrastructure, economic and social) throughout the communities which has led to an amalgamation which will occur on January 1, 2023.

The intent is to pass individual off-site levy bylaws within each of the Towns prior to the amalgamation which would apply to the existing boundaries for each community. For the purposes of the Town of Turner Valley, off-site levies when referring to "the town" means the developments within the existing Town of Turner Valley Town limits prior to amalgamation.

In May 2016, Turner Valley and Black Diamond commissioned a *Joint Growth Strategy* (JGS) for both Towns, as prepared by O2 Planning & Design Inc., Coriolis Consulting Corp., Urban Systems and MPE Engineering Ltd. The study reviewed several growth scenarios based on population and development capacity and a vision for the future. This document has been used as supporting documentation to determine future growth rates.

2.1 Turner Valley Growth

Population trends were reviewed in the JGS looking at both a low and high rate of growth. With a Turner Valley 2015 population of 2,511 (2015 municipal census), the forecast for the Town was between 9,500 and 12,800 by 2075. Federal census results showed a population of 2,559 in 2016 with an increase to 2,611 in 2021.

For the purposes of the Off-site Levy, projections were reviewed over a 25-year period up to 2047. Based on the JGS projections, approximately 66 Hectares of residential land would be required in the next 25 years to support growth as shown in **Table 1**.

Table 1: 25-year Residential Growth

Year	Population	Growth	Population Growth	People /Unit	Additional Res Units	Units/ Acre	Acres	Hectares
2021	2,611							
2035	3,689	2.5%	1,078	2.4	499	5.5	90.7	36.7
2047	4,818	2.25%	1,129	2.4	470	6.5	72.3	29.3
Total			2,207		969		163.0	66.0

2.2 Developable Areas

In review of the land within the Town boundaries, the JGS identified 263.9 acres (257.5 acres for residential, 6.4 acres for commercial) of land available for urban development. While the areas with higher potential to develop were identified in the JGS there are additional areas that have been identified within the Town boundaries where development may have the potential to occur.

Through discussions with the Town, several potential developable areas were identified and are illustrated on Drawing 1 in **Appendix A**. As the land area is significantly higher than the projected growth identified above the areas were reviewed to determine which areas are more likely to develop within the next 20 to 30 years. This is based on proximity to existing infrastructure. While certain areas were identified as more likely to develop, this does not preclude other areas from development.

Table 2: 20 to 30 year Development Areas

Abbreviation	Development	Acres	Hectares	ER (est.)	Developable Acres	Developable Hectares
CB	Central Business	6.89	2.79	-	6.89	2.79
DC	Decalta Commercial	7.21	2.92	-	7.21	2.92
DH1	Dunham #1	2.45	0.99	-	2.45	0.99
DH2	Dunham #2	2.62	1.06	-	2.62	1.06
EV	Everwood Phase 2	39.07	15.81	-	39.07	15.81
GWE	Gateways East	70.40	28.49	-	70.40	28.49
GWW	Gateways West	120.17	48.63	-	120.17	48.63
MSC	Main Street Commercial	5.54	2.24	-	5.54	2.24
RO	Royal Oak	5.21	2.11	-	5.21	2.11
TS	Town Square	7.71	3.12	-	7.71	3.12
Total		267.27	108.16	-	267.27	108.16

Table 3: Future Development Areas (Timing Unknown)

Abbreviation	Development	Gross Acres	Gross Hectares	ER (est.)	Developable Acres	Developable Hectares
CAL	Calkins	21.65	8.76	-	21.65	8.76
CA	Cannon	19.64	7.95	-	19.64	7.95
DI	Decalta Industrial	28.02	11.34	-	28.02	11.34
LBR	Lower Bailey Ridge	44.43	17.98	20%	35.54	14.38
OK1	Okalta #1	35.85	14.51	20%	28.68	11.61
OK2	Okalta #2	37.66	15.24	20%	30.13	12.19
SW	Southwest	52.78	21.36	20%	42.22	17.09
Total		240.03	97.14		205.88	83.32

Where Environmental Reserves (ER) have been identified throughout the Town, they have not been included in the development areas noted in **Tables 2 and 3**. For new developments, it is anticipated that future ERs will be designated; however, the exact areas are unknown at this time. Prior to development an Environmental Impact Assessment Study is recommended to be completed to identify any ERs on the proposed development property. This study should be completed as part of the Land Use designation stage.

Given that Sheep River crosses through the Town, it is anticipated that several areas will likely have ER areas identified, particularly on those developments that are adjacent to the River including Okalta #1 and #2, Southwest, and Lower Bailey Ridge. For the purposes of the off-site levies, it is estimated that approximately 20% of the land will be designated as ERs. Off-site levies are not proposed to be applied to the ER lands.

3.0 CALCULATION OF LEVIES

Levies are generally determined by dividing the capital cost of a particular project by a benefitting area. The capital costs may be associated with future projects that will be needed for advancing development within the Town or may already have been constructed and cost accrued on projects that benefit future development.

The capital costs within this document have been determined in several ways. As some of the projects have already been constructed, the actual costs to complete the project have been identified.

In determining future projects, several documents have been used to identify those projects that benefit future development including various Area Structure Plans, Servicing Documents and the Town Infrastructure Management Plan. Where project costs were identified within the documents, they have been evaluated and updated using 2022 numbers based on recent tenders and updated supplier costs where available. A 20% contingency and 15% engineering has been applied to each project to account for fluctuations in costs.

No grant funding or inflation costs have been added for future projects. Where grant funding is obtained, the Town will determine the allocation that may be applied to a benefitting project depending on the grant obtained.

In the case where project costs have not been reviewed in the various documents since the 2004 bylaw, such as for the treated water reservoir, an inflation rate has been used based on the recorded historical inflation rates for Canada (www.rateinflation.com/inflation-rate/canada-historica-inflation-rate/).

3.1 Collection of Levies

Several of the projects identified in the 2004 bylaw have been completed while others are proposed to be carried over to the latest revision of the off-site levies. The Town previously collected levies for Water, Sanitary and Transportation. **Table 4** lists the water and sanitary projects from 2004 and their status.

Table 4: 2004 Levy projects

Project	Status	2004 Estimated Capital Cost	Project to carry over into new bylaw
Raw Water Reservoir	Constructed 2006-2008	\$2,358,500	No
North Exploratory Well & Decommission Old Wells	Complete	\$31,500	No
Raw Water Infiltration Gallery	Raw Water Infrastructure part of SRRUC no longer Town	\$447,300	No
Water Treatment Plant Upgrade 1999	Constructed 1999	\$1,998,000	No
Water Treatment Plant Upgrade (future)	Constructed in 2015	\$787,500	No
Treated Storage Reservoir Expansion		\$745,500	Yes
Westend Sewage Treatment, Pumping, Forcemain (1995)	Constructed 1995	\$886,077	No
North Water Feeder	Constructed in 2004	\$353,000	Yes
Dunham Water Trunk		\$325,500	No
Royalite River Crossing & PRV	Constructed in 2005	\$443,100	Yes
Southeast Water Trunk Main		\$255,150	Yes
North Sewage Lift Station Upgrade	Constructed in 2015	\$276,150	Yes
Okalta Sanitary Trunk System		\$939,750	Yes
Royalite Sanitary System	Constructed in 2008	\$95,225	Yes

Where levy dollars collected under the 2004 bylaw for projects which are no longer considered required (Raw Water Infiltration Gallery and Water Treatment Plant Upgrade (future)) due to Common Water servicing now provided through the Sheer River Regional Utility Corporation (SRRUC), amounts collected will be applied to future source water and water treatment projects as identified moving forward through SRRUC.

Developments that have been completed since 2004 are now considered to be part of the existing Town population and area and those levies collected will be applied to the projects identified as part of the Town applicable costs for the project.

4.0 COMMON LEVIES

Infrastructure capital projects that have the potential to impact the entire Town including the existing population in addition to new and future developable areas were reviewed.

4.1 Project: Westend Lagoon Upgrades

Description and Cost:

The Westend Regional Sewage Services Commission (WRSSC) owns and operates the lagoon system for treatment of wastewater from the Towns of Turner Valley and Black Diamond. To meet new effluent requirements required by Alberta Environment and Parks (AEP) and to provide additional capacity for the continuously growing communities, upgrades will be occurring to the system in 2022/2023 at an estimated cost of \$17,340,000. Grant funding in the amount of \$12,715,422 has been secured with an amount of \$4,624,578 to be funded through the municipalities. The proposed upgrades are designed for a calculated population of 10,649 assuming a current population of 5,341 (Turner Valley: 2,611, Black Diamond: 2,730) or 50.15% of the projected population. The remaining 49.85% or \$2,303,040 would be split between the two municipalities with Turner Valley's portion being \$1,151,520.

Estimated Capital Cost	Town Share		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$1,151,520	100%	\$1,151,520	%100	\$1,151,520	\$11,894

Benefiting Areas:

The benefiting area for this improvement is approximately 96.8 hectares of future development, excluding ER, in addition to the existing Town population. The area is based on the population that may be serviced through the upgrade.

4.2 Project: Treated Water Reservoir

Description and Cost:

The volume of storage currently available to the Town of Turner Valley is 500,000 lgal from a single concrete reservoir on the west side of Town. To accommodate future development, an additional 500,000 lgal of reservoir storage was estimated to cost \$710,000 in 2002 (IMP, 2006). This upgrade would be anticipated once a population of 3,730 is reached (IMP 2015). Based on an inflation rate of 1.85% since 2002, the anticipated cost for this project is \$1,005,815.

Estimated Capital Cost	Town Share		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$1,005,815	100%	\$1,005,815	100%	\$1,005,815	\$7,846

Benefiting Areas:

The benefiting area for this improvement is future development as the existing reservoir can support the existing community. The proposed new reservoir would be able to support 128.2 hectares which would be beyond the 20 to 30-year time frame.

5.0 WASTEWATER LEVIES

The Town of Turner Valley is divided into several sewage zones, as identified in the 2015 IMP. With each new development, the sewage contributing zone areas will be adjusted to accommodate the new developments. Where the new site-specific infrastructure benefits an existing sewage zone, this has been reflected in the levies which assigns a portion of the infrastructure costs to the Town. **Table 5** reflects the existing zones in Town and the projected zones within the community.

Table 5: Town Sewage Contributing Zones

Abbreviation	Existing Sewage Zones*			Development added to Sewage Zones			Total projected Sewage Zones	
	Acres	Hectares	% Total	Acres	Hectares	% Total	Acres	Hectares
Zone 1	24.39	9.87	81.5	5.53	2.24	18.5	29.92	12.11
Zone 2	55.50	22.46	84.4	10.28	4.16	15.6	65.78	26.62
Zone 3	82.80	33.51	100	N/A	N/A	N/A	82.80	33.51
Zone 4	90.69	36.70	100	N/A	N/A	N/A	90.69	36.70
Zone 5	21.62	8.75	38.2	34.92	14.13	61.8	56.54	22.88
Zone 6	45.34	18.35	27.4	120.17	48.63	72.6	165.51	66.98
Zone 7	19.77	8.00	100	N/A	N/A	N/A	19.77	8.00
Zone 8	21.65	8.76	12.9	145.54	58.90	87.1	167.19	67.66
Zone 8A	N/A	N/A	N/A	42.23	17.09	100	42.23	17.09
Zone 8B	N/A	N/A	N/A	35.43	14.34	100	35.43	14.34
Zone 9	N/A	N/A	N/A	70.40	28.49	100	70.40	28.49
Total	361.76	146.40	43.8	464.50	187.98	56.2	826.26	334.38

*Existing Sewage Zones based on IMP 2015

The individual wastewater capital projects are discussed in the following sections and are illustrated on Drawing 2 in **Appendix A**.

5.1 Project: Anderson Crescent Gravity Main Upgrade to 250 mm

Description and Cost:

Based on the projected population increase of 535 (IMP, 2015) in Zone 2 of the Town's sanitary system, the pipe section between Dunham Lane and Anderson Crescent will need to be increased from 200 mm to a 250 mm pipe. This section is 150 m in length and is located in a grassed utility right-of-way and through a portion of a graveled laneway.

The estimated cost in 2022 dollars is \$196,000 with engineering and contingency, but without GST. The percentage of the capital to be recovered in the offsite levies has been determined at 11.9%. This takes into account the existing Zone 2 sewage contributing area (26.62 hectares). No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$196,000	100%	\$196,000	11.9%	\$23,324	\$7,358

Benefiting Areas:

Future sewage contribution and benefitting areas for this upgrade includes Royal Oak (RO) and Dunham #2 (DH2). The total developable area is 3.17 hectares.

5.2 Project: North Sewage Lift Station Upgrade**Description and Cost:**

The North Lift Station was upgraded in 2015 to increase the capacity to a population of 1,500 with a portion of the costs being grant funded. Upgrades included refurbishing the wetwell, installing a permanent bypass, Electrical and SCADA upgrades, replacement of piping and upgrading of pumps.

The total capital cost was \$901,750, of which the Town paid one third. The Lift Station prior to the upgrade was at capacity with the calculated population of 876.

The percentage of the capital to be recovered in the offsite levies has been determined at 13.7%. This takes into account sewage contributing areas Zones 1, 2 and 7 (46.73 hectares).

Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$901,750	33%	\$300,583	13.7%	\$41,180	\$6,434

Benefiting Areas:

Future areas contributing sewage to the North Lift Station and benefitting from the upgrades include Royal Oak (RO), Dunham #1 (DH1), Dunham #2 (DH2) and the Main Street Commercial (MSC) area. The total developable area is 6.4 hectares.

5.3 Project: Main Street Gravity Main Upgrade, MH 24 to 20**Description and Cost:**

With an increase of equivalent population of 692 (IMP, 2015), the downstream sanitary gravity main between manholes 24 to 20 will need to be increased from a 250 mm to 300 mm pipe for 190 m.

The total estimated capital cost in 2022 dollars is \$395,000 with engineering and contingency, but without GST. As this main services contributing Zones of 1, 2, 3, and 7 (80.24 Hectares), the percentage of the capital to be recovered in the offsite levies has been determined at 11.9%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$395,000	100%	\$395,000	11.9%	\$47,005	\$4,937

Benefiting Areas:

Future areas contributing sewage to the main on Main Street which benefit from this upgrade includes RO, DH1, DH2, MSC and the Town Square (TS) area. The total developable area is 9.52 Hectares.

5.4 Project: Sunset Blvd Gravity Main Upgrade, MH 20 to 6**Description and Cost:**

With an increase of population of 692 (IMP 2015), the downstream main between manholes 20 and 6 will need to be increased from a 250 mm to 300 mm pipe for 400 m.

The total estimated capital cost in 2022 dollars is \$679,000 with engineering and contingency, but without GST. As this main will continue to service contributing Zones of 1, 2, 3, 4 and 7 (116.94 Hectares), the percentage of the capital to be recovered in the offsite levies has been determined at 8.1%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$679,000	100%	\$679,000	8.1%	\$54,999	\$5,777

Benefiting Areas:

Future areas contributing sewage and benefitting from the upgraded main include RO, DH1, DH2, MSC and TS. The total developable area is 9.52 Hectares.

5.5 Project: Calkins Place Gravity Main, Lift Station, Forcemain**Description and Cost:**

The Calkins Place Gravity Main, Lift Station and Forcemain was built for a population of 2,000 in 2008 assuming the development of the Okalta/Southwest Area would develop. This project was 66% funded through grants with the Town paying one third.

This infrastructure is currently only servicing the small population located on Calkins Place and the Water Treatment Plant; however, would also service sewage zones 8, 8A and 8B (99.09 Hectares) in the future, the percentage of the capital to be recovered in the offsite levies has been determined at 91.2%.

Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$2,154,804	33%	\$711,085	91.2%	\$648,510	\$7,176

Benefiting Areas:

Future areas contributing sewage to and benefitting from the completed works includes Everwood Phase 2 (EV), Okalta #1 (OK1), Okalta #2 (OK2), Cannon (CA), Southwest (SW), Lower Bailey Ridge (LBR) and Decalta Commercial (DC). The total developable area is 90.37 hectares.

5.6 Project: Kennedy Drive Gravity Main Upgrade to 300 mm, MH 9 to 6**Description and Cost:**

Future areas contributing sewage into the Kennedy Drive sanitary main includes Everwood Phase 2, Okalta #1, Okalta #2, Cannon, Southwest, Decalta Commercial and Industrial, Lower Bailey Ridge and the existing Calkins Place subdivision. The Calkins Place Lift Station and Forcemain discharge into the Kennedy Drive gravity sewer main, and based on the additional projected population of 2,000, will require an upgrade from 250 mm to 300 mm (IMP, 2015). Sewage Zones that would be serviced include 5, 8, 8A and 8b (121.97 hectares). The total estimated capital costs in 2022 dollars is \$282,000 with engineering and contingency, but without GST. As this infrastructure is only currently servicing the small commercial population located on Kennedy Drive and on Calkins Place, the percentage of the capital to be recovered in the offsite levies has been determined at 74.1%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$282,000	100%	\$282,000	74.1%	\$208,962	\$2,312

Benefiting Areas:

The benefiting areas for this upgrade include EV, OK1, OK2, CA, Decalta Industrial (DI), Central Business (CB), LBR and SW. The total developable area is 90.37 hectares.

5.7 Project: Sunset Blvd Gravity Main Upgrade, MH 6 to MH 2**Description and Cost:**

The Sunset Boulevard gravity main is the trunk main for the sewage collection system to all sewage on the west of the Sheep River (Sewage Zones 1, 2, 3, 4, 5, 7, 8, 8A & 8B – 238.91 hectares). With the addition of the future developable areas, the 250 mm diameter section between MH 6 and MH 3 will require upgrades to a 300 mm diameter pipe and MH 3 to MH 2 will require upgrades to a 375 mm pipe for an increased serviceable population of 5,857 (IMP, 2015). The total estimated capital cost for this upgrade is \$682,000 in 2022 dollars with engineering and contingency, but without GST. The percentage of the

capital to be recovered in the offsite levies has been determined at 44.2%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$682,000	100%	\$682,000	44.2%	\$301,444	\$2,855

Benefiting Areas:

The benefiting areas for this upgrade include EV, OK1, OK2, CA, DI, DC, TS, CB, MSC, DH1, DH2, RO, LBR and SW. The total developable area is 105.60 hectares.

5.8 Project: Royalite Way Gravity Main Upgrade

Description and Cost:

The Gateways of Turner Valley has a total developable area of 77.12 hectares. For the purposes of the off-site levies, the future subdivision has been divided into the Gateways West, consisting of 48.63 hectares and Gateways East, consisting of 28.49 hectares. In 2008, the Town upgraded the existing 150 mm Royalite Way sanitary sewer to 250 mm to accommodate the future sewage contribution from the Gateways West area. The project upsizing costs in 2008 was \$134,000. By upgrading the main to 250 mm, the population capacity was increased by 815. This main services sewage Zone 6 (66.98 hectares). The Royalite Way sewer main was replaced as part of the ongoing infrastructure replacement program. 100% of the upgrade costs is directly related to future development. There were no grants available for this project.

Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$134,000	100%	\$134,000	100%	\$134,000	\$2,755

Benefiting Areas:

The benefiting area for this upgrade Gateways of Turner Valley West (GWW). The total developable area is 48.63 hectares

5.9 Project: Royalite Sewage Lift Station Upgrade

Description and Cost:

The Gateways of Turner Valley has a total developable area of 77.12 hectares. For the purposes of the off-site levies, the future subdivision has been divided into Gateways West, consisting of 48.63 hectares, and Gateways East, consisting of 28.49 hectares. The Royalite Lift Station currently services a population of 375 from the Diamond Valley Villas, Kana Villas, Bailey Ridge and Royalite areas (Zone 6 – 66.98 hectares). The Lift Station wet well was built to accommodate an ultimate population of 1,275, with the pumping staged to service a 460 population with 3 hp pumps and allowing for upgrading the pumps

to 7.5 hp to service the ultimate population. The total capital cost to upgrade the pumps is \$175,000 in 2015 dollars with engineering and contingency (IMP, 2015), but without GST. Using an inflation rate of 1.85% per year cost upgrade is \$199,000 in 2022 dollars. The percentage of the capital to be recovered in the offsite levies has been determined at 100%. No grant funding is assumed.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$199,000	100%	\$199,000	100%	\$199,000	\$4,092

Benefiting Areas:

The benefiting area for this upgrade is Gateways of Turner Valley West (GWW). The total developable area is 48.63 hectares.

5.10 Project: Southwest Sanitary River Crossing

Description and Cost:

The Cuffling Flats Sanitary River Crossing system includes a siphon which is proposed to be installed under the Sheep River in the undeveloped road right-of-way between Cuffling Flats and the Calkins Place. This will service the Southwest (17.09 hectares) and Lower Bailey Ridge (14.38 hectares). The siphon will discharge into the Calkins Place gravity system and lift station. The total estimated cost for this improvement in 2022 dollars is \$291,000 with engineering and contingency, but without GST. The capital to be recovered through offsite levies has been determined at 100%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$291,000	100%	\$291,000	100%	\$291,000	\$9,247

Benefiting Areas:

The benefiting areas for this improvement is SW and LBR. The total developable area is 31.47 hectares.

6.0 WATER LEVIES

The Town of Turner Valley water distribution is fed from the treated reservoirs on the west side of Town which is gravity fed throughout the Town. To service new developments several distribution projects have been identified as detailed in the following sections.

The individual water capital projects are discussed in the following sections and are illustrated on Drawing 3 in *Appendix A*.

6.1 Project: North Feeder Main

Description and Cost:

The North Feeder Main extends from the Treated Water Reservoir northeast to Dunham Lane. The Main is required to improve fire flows in the Dunham area, plus the existing commercial core and existing school (38.81 hectares). Constructed in 2004 at a total estimated capital cost of \$353,000, no grants were available.

Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) For Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$353,000	100%	\$353,000	16.5%	\$58,245	\$9,101

Benefiting Areas:

The benefiting areas for this upgrade include DH1, DH2, RO, and MSC. The total developable area is 6.4 hectares.

6.2 Project: Royalite River Crossing & PRV

Description and Cost:

This work was constructed in 2004 to increase the flows to the south side of Turner Valley and provide for future developments. This also provides additional flow capacity for Bailey Ridge, Royalite, and the Villas (18.35 hectares). The total capital cost for this improvement in 2005 dollars is \$380,000, and the recovery through off-site levies has been determined at 80.8%. No grant funding was available.

Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$380,000	100%	\$380,000	80.8%	\$307,040	\$3,981

Benefiting Areas:

The benefiting areas for this upgrade include Gateways of Turner Valley (GWW & GWE). The total developable area is 77.12 hectares.

6.3 Project: Southwest Water Trunk Main

Description and Cost:

This proposed trunk main will provide the water servicing capacity for the Southwest developable lands. The trunk main would also provide future additional looping and flow capacity for Gateways. Proposed work includes connection to the existing water at Bailey Ridge and 150 mm, 200 mm and 250 mm water distribution to the area (MPE 2014). The total estimated capital cost for this improvement in 2022 dollars is \$712,000 with engineering and contingency, but without GST. The recovery through offsite levies has been determined at 100%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$712,000	100%	\$712,000	100%	\$712,000	\$5,073

Benefiting Areas:

The benefiting areas for this improvement includes SW, LBR, OK2, CA, GWW and GWE. The total developable area is 140.34 hectares.

6.4 Project: Okalta Main West of Turner Gate and West River Crossing

Description and Cost:

This proposed 250 mm diameter water main will be triggered by development in the Okalta #2 area. This also provides additional looping and flow capacity for the Southwest and Gateways developable lands. The total estimated capital cost for this improvement in 2022 dollars is \$672,000 with engineering and contingency, but without GST. The recovery through offsite levies has been determined at 100%. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$672,000	100%	\$672,000	100%	\$672,000	\$4,788

Benefiting Areas:

The benefiting areas for this improvement includes SW, LBR, OK2, CA, GWW and GWE. The total developable area is 140.34 hectares.

6.5 Project: Imperial Drive Upgrade – East of Kana Villas to Bailey Ridge River Crossing

Description and Cost:

This proposed 700 m, 250 mm diameter water main will replace the existing 150 mm water main. This may be triggered by development in the Gateways (IMP, 2015). This also provides additional flow capacity for Bailey Ridge, Royalite, and the Villas (18.35 hectares), the future Southwest and Lower Bailey Ridge

developable areas. The total estimated capital cost for this improvement in 2022 dollars is \$905,000 with engineering and contingency, but without GST. The recovery through offsite levies has been determined at 85.5% based on land percentage of existing over future growth area. No grant funding is assumed to be available.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) for Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$806,000	100%	\$806,000	85.5%	\$689,130	\$6,346

Benefiting Areas:

The benefiting areas for this upgrade includes LBR, SW, GWW and GWE. The total developable area is 108.59 hectares.

7.0 STORMWATER LEVIES

The stormwater system in Turner Valley consists of a series of pipelines and outfalls to the Sheep River in addition to overland drainage. Where new developments are proposed, pre-development conditions will need to be maintained by the developer and reviewed during the development stage.

The individual stormwater capital projects are discussed in the following sections and are illustrated on Drawing 4 in *Appendix A*.

7.1 Project: Valley Trail (HWY 22) Storm Main Upgrade

Description and Cost:

Valley Trail (HWY 22) requires the existing sewer pipe that varies 675 mm to 900 mm to be upsized to 1,200 mm from the four-way stop to the east outlet to the Sheep River (IMP 2015). Ideally the recommended pipe size can be reduced by changing the depths and slopes of the existing line. However due to possible conflicts with the pipeline crossings west of Madison Street and with sanitary and water main crossings at the four-way stop, it was recommended that a 1,200 mm sewer be considered.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) For Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$2,745,000	100%	\$2,745,000	5.4%	\$148,230	\$27,655

Benefiting Areas:

The benefiting areas for this upgrade include MSC and TS. The total developable area is 5.36 Hectares.

7.2 Project: Main Street Storm Main Upgrade

Description and Cost:

Main Street (Sunset Boulevard to Edgar Avenue) requires the storm sewer to be replaced as the current size is 300 mm. This section of main is very undersized for the catchment area that is directed to this sewer. It is recommended that the line be increased to a 900 mm pipe from the four-way stop, north to Edgar Avenue and then reduced in size to Royal Avenue. Total catchment area to the Sheep River is 99.38 hectares. The estimated budget for Main Street storm main replacement is \$840,000 in 2022 dollars with engineering and contingency, but without GST.

Estimated Capital Cost	Town Share After Grant		Capacity for Future	Capital (\$) For Future	Levy per Hectare
	Percent (%)	Balance (\$)			
\$840,000	100%	\$840,000	5.4%	\$45,360	\$8,463

Benefiting Areas:

The benefiting areas for this upgrade include MSC and TS. The total developable area is 5.36 Hectares.

8.0 SUMMARY

Levies have been determined based on the information provided in this report and are listed in **Table 6**. Off-site levies should be reviewed and updated regularly as stipulated in the MGA and applied according to the bylaw.

Table 6: Levy Summary

Abbreviation	Development	Hectares	Common (\$/ha)	Site Specific (\$/ha)	Total Per Hectare (\$)
CB	Central Business	2.79	\$19,740	\$5,167	\$24,907
DC	Decalta Commercial	2.92	\$19,740	\$12,343	\$32,083
DH1	Dunham #1	0.99	\$19,740	\$29,104	\$48,844
DH2	Dunham #2	1.06	\$19,740	\$36,462	\$56,202
EV	Everwood Phase 2	15.81	\$19,740	\$12,343	\$32,083
GWE	Gateways East	28.49	\$19,740	\$20,188	\$39,928
GWW	Gateways West	48.63	\$19,740	\$27,035	\$46,775
MSC	Main Street Commercial	2.24	\$19,740	\$65,222	\$84,962
RO	Royal Oak	2.11	\$19,740	\$36,462	\$56,202
TS	Town Square	3.12	\$19,740	\$49,687	\$69,427
CAL	Calkins	8.76	TBD*	-	TBD*
CA	Cannon	7.95	TBD*	\$22,204	TBD*
DI	Decalta Industrial	11.34	TBD*	\$5,167	TBD*
LBR	Lower Bailey Ridge	14.38	TBD*	\$41,778	TBD*
OK1	Okalta #1	11.61	TBD*	\$12,343	TBD*
OK2	Okalta #2	12.19	TBD*	\$22,204	TBD*
SW	Southwest	17.09	TBD*	\$37,797	TBD*

* Common Levy for the Westend Lagoon project will be applied to the first 66 hectares to be developed.

9.0 REFERENCES

Bylaw 92-642; Dunham Area Structure Plan, May 1992.

Bylaw 94-692; Okalta Area Structure Plan, prepared by the Calgary Regional Planning Commission and Brisbin & Sentis Engineering Inc, on behalf of the Town of Turner Valley, April 1995.

IDP, 2002; Town of Black Diamond/Town of Turner Valley/M.D. of Foothills No. 31 Intermunicipal Development Plan, Final Draft, February 2002.

Bylaw 04-880; Town of Turner Valley Off-site Levy Bylaw, August 2004.

MDP, 2004; Town of Turner Valley, Municipal Development Plan, September 20, 2004, Bylaw 04-891.

IMP, 2006; Town of Turner Valley Infrastructure Study Update (DRAFT update to 2006), prepared by MPE Engineering Ltd., December 2002 (With Updates to June 2006).

PAL, 2007; The Gateways of Turner Valley Area Structure Plan, prepared by PAL Development Ltd., on behalf of Turner Valley Gold and Country Club in association with Kana Gateway Developments. Ltd., March 2007.

NOOR, 2010; Calkins place Area Redevelopment Plan, prepared by Noor Architects Planners, on behalf of the Town of Turner Valley, August 2010.

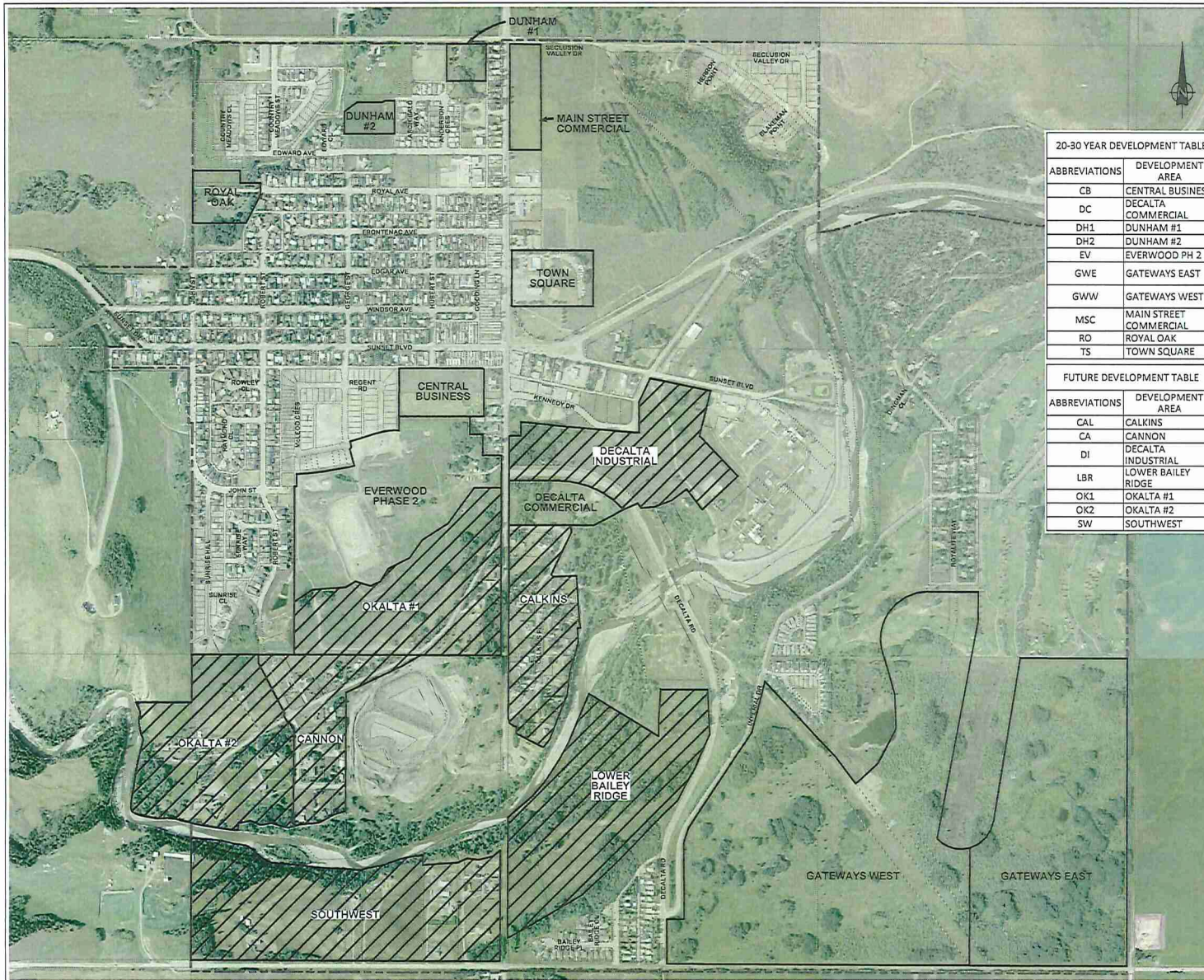
MPE, 2014; Town of Turner Valley, Cuffling Flats: Water and Wastewater Servicing Study, prepared by MPE Engineering Ltd., January 2014.

IMP, 2015; Town of Turner Valley 2015 Infrastructure Management Plan, prepared by MPE Engineering Ltd., February 18, 2016.

Bylaw 16-1060; Okalta-Cuffling Flats Area Redevelopment Plan, prepared by WSP and MMM Group on behalf of the Town of Turner Valley, October 2016.

APPENDIX A



Figures



20-30 YEAR DEVELOPMENT TABLE	
ABBREVIATIONS	DEVELOPMENT AREA
CB	CENTRAL BUSINESS
DC	DECALTA COMMERCIAL
DH1	DUNHAM #1
DH2	DUNHAM #2
EV	EVERWOOD PH 2
GWE	GATEWAYS EAST
GW	GATEWAYS WEST
MSC	MAIN STREET COMMERCIAL
RO	ROYAL OAK
TS	TOWN SQUARE

FUTURE DEVELOPMENT TABLE	
ABBREVIATIONS	DEVELOPMENT AREA
CAL	CALKINS
CA	CANNON
DI	DECALTA INDUSTRIAL
LBR	LOWER BAILEY RIDGE
OK1	OKALTA #1
OK2	OKALTA #2
SW	SOUTHWEST

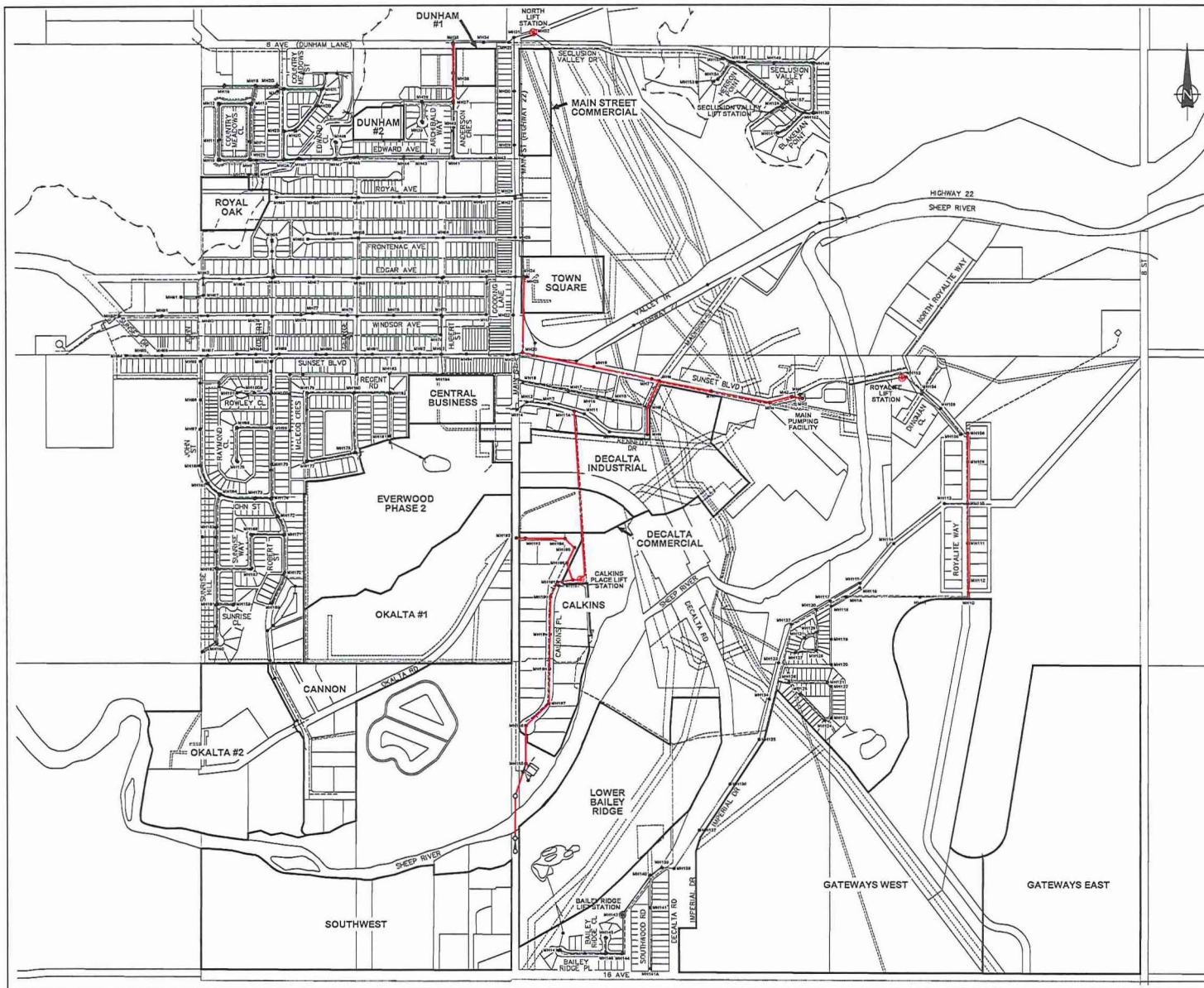
LEGEND

-  20-30 YEAR DEVELOPMENT AREA
-  FUTURE DEVELOPMENT AREA (TIMING UNKNOWN)



FUTURE DEVELOPMENT AREAS

SCALE	1:10,000	JOB	2370-155-00
DATE	OCT 2022	DRAWING	1



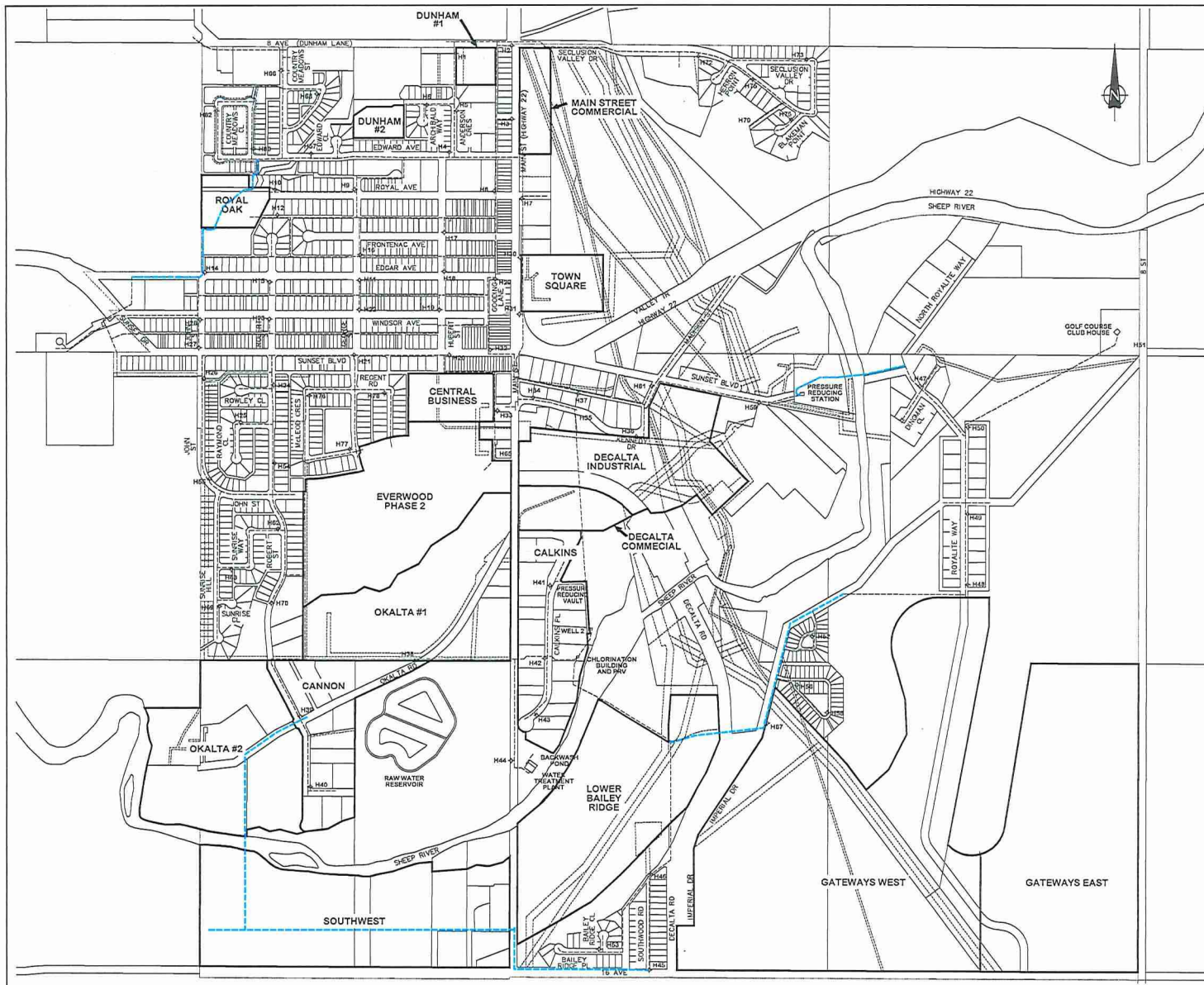
LEGEND

- FUTURE DEVELOPMENT AREA
- EXISTING SANITARY MAIN
- FUTURE SANITARY MAIN
- EXISTING LIFT STATION
- FUTURE LIFT STATION



SANITARY SERVICING CONCEPTS

SCALE	1:10,000	JOB	2370-155-00
DATE	OCT 2022	DRAWING	2



LEGEND

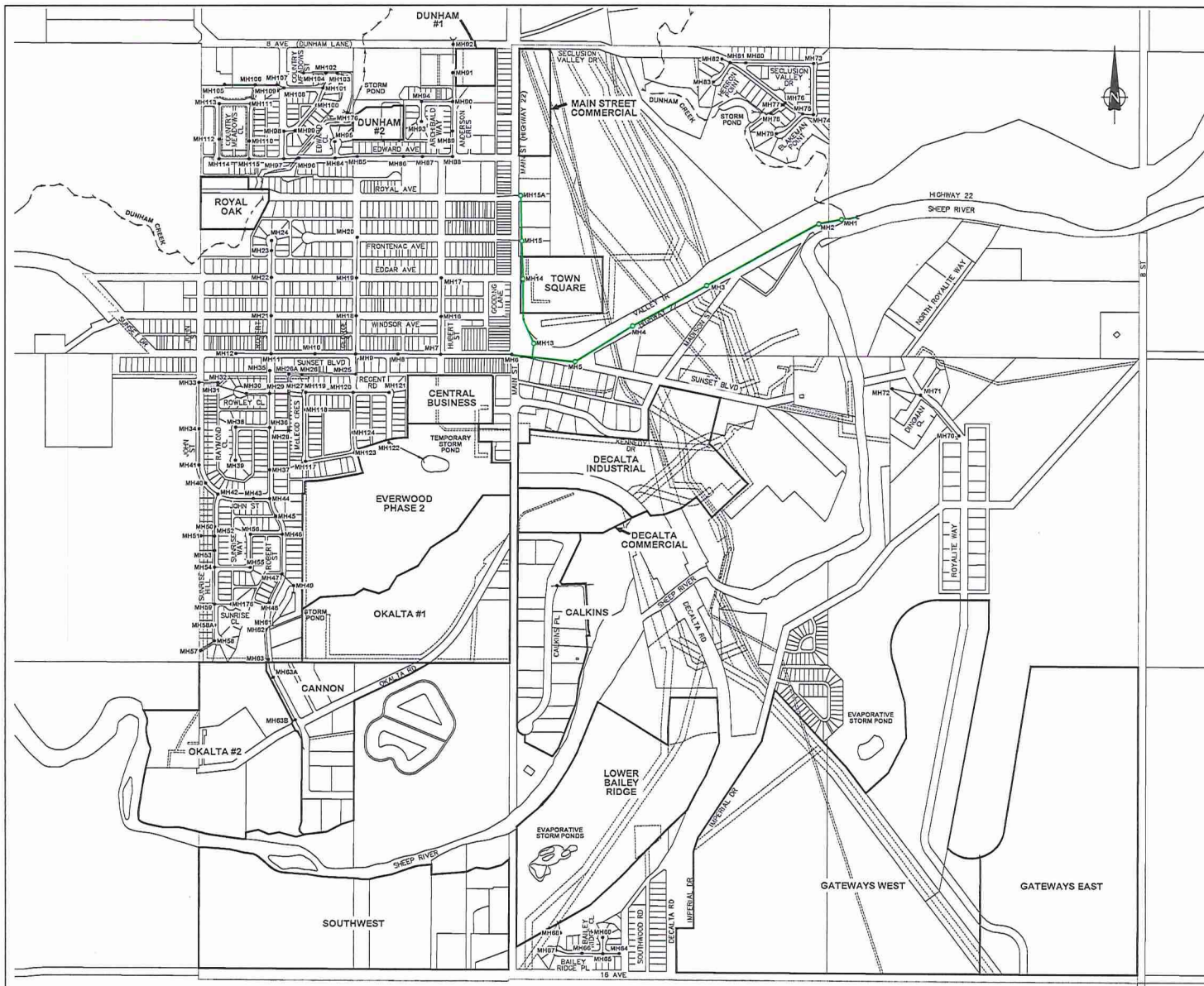
- FUTURE DEVELOPMENT AREA
- EXISTING WATER MAIN
- FUTURE WATER MAIN


Turner Valley


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 Engineering Ltd.

WATER SERVICING CONCEPTS

SCALE	1:10,000	JOB	2370-155-00
DATE	OCT 2022	DRAWING	3



LEGEND

- FUTURE DEVELOPMENT AREA
- EXISTING STORM MAIN
- FUTURE STORM MAIN
- EXISTING STORM OUTFALL
- FUTURE STORM OUTFALL
- EXISTING DRAINAGE COURSE



STORM SERVICING CONCEPTS

SCALE	1:10,000	JOB	2370-155-00
DATE	OCT 2022	DRAWING	4