Report

CITY OF
FORT SASKATCHEWAN

City of Fort Saskatchewan

Southfort Levy Report

Schedule “B” to Bylaw C14-17

June 2017

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1 Introduction

1.1 GENERAL

The City of Fort Saskatchewan has identified the Southfort area as being a prime location for development and is currently seeing continued growth within the area. The Southfort Area Structure Plan (ASP) has been developed and updated, in order to assist the City in properly planning and staging this development. The ASP identifies future land uses as well as locations of major infrastructure, which will form the backbone of this community.

The growth and development of a community will generally create some impact on the municipal infrastructure systems. Minimally, development requires an extension of municipal services such as water, sewer, roadways, etc. More extensive and continued growth and development of a community will require the municipal infrastructure systems to be expanded to satisfactorily accommodate such growth.

It is the philosophy of the City of Fort Saskatchewan that development will be responsible for its own municipal infrastructure as well as for its proportionate share of the off-site infrastructure from which it will benefit. This is achieved through the assessment of Development Levies against the individual developers.

In January of 2003, the City of Fort Saskatchewan engaged Associated Engineering Alberta Ltd. to undertake the creation of a clear, concise and defensible model for establishing Development Levies for lands within the Southfort ASP boundaries. The report was updated in January 2017 by the City of Fort Saskatchewan.

1.2 LOCATION

The Southfort area is located on the southeast side of Highway 21, mainly in Sections 29-54-22, 19-54-22, and 20-54-22 and is bounded to the south and east by Strathcona County. It is comprised of existing commercial developments; the Fort Saskatchewan Correctional Facility and agricultural land. Figure 1.1 shows the Southfort area boundary.

1.3 DEVELOPMENT LEVIES

In the context of this report, Development Levies are defined as capital costs, assessed by the City of Fort Saskatchewan, against developing lands for their proportionate share of the costs of municipal infrastructure systems, constructed by the City or other developers, which benefit the development areas.

1.3.1 Off-Site Levies

Under authority of the Municipal Government Act, the City is permitted to impose Off-Site Levies against development to cover the costs 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 and disposal of sanitary sewage.
c) New or expanded storm sewer drainage facilities.
d) New or expanded roads required for or impacted by a subdivision or development.
e) Lands required for or in connection with any facilities described in (a) to (d) above.

1.4 CRITERIA

In this study, lands dedicated as Municipal Reserve (MR) are excluded as a Development Levy contributing area. Traditionally, the City has required the Developer to develop the MR lands in accordance with the City's needs, as negotiated through the Development Agreement. Hence, Development Levies are not applied against such lands, thereby reducing the contributing lands area accordingly.

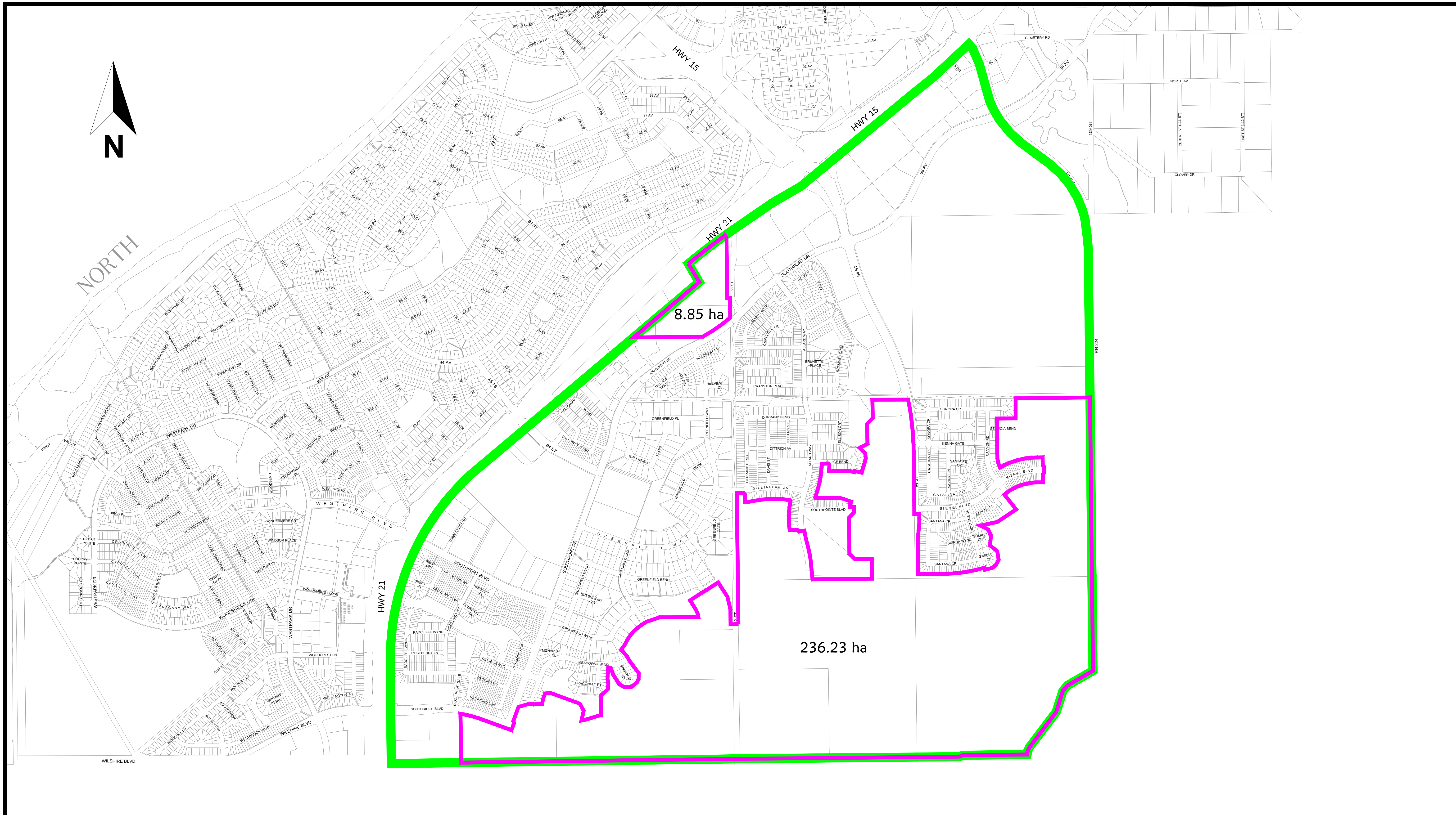
It was also necessary to establish some general assumptions as Development Levy calculation criteria:

- The City will continue to assume responsibility for the provision of those infrastructure systems and facilities which they deem to be a benefit to the City at large and/or a single development parcel.
- The Development Levies are generally based on constructing municipal improvements consistent with the requirements identified in the revised Southfort Area Structure Plan to serve the lands within the plan area.
- The storm drainage infrastructure is based on the Southfort Stormwater Management Plan, prepared for the City of Fort Saskatchewan by Associated Engineering in 2004.
- The Development Levy rates are expressed on a per hectare basis.
- Gross Area is defined as the total area of a parcel(s) of land irrespective of their potential for development or land use.
- Gross Developable Area is defined as the gross area less lands for Municipal Reserve. The Development Levy and charge rates contained in this document are based on Gross Developable Area.
- All costs are estimated in 2016 dollars. These cost estimates should be reviewed annually or no later than every three years, to reflect current year construction costs.
- An inflation factor has been applied to all estimates, to more accurately estimate the construction costs for the projected year of construction. For the January 2017 update, an inflation rate of 2.0% per annum was used.
- Where conditional grants have been secured by the City, towards a specific project, the project cost has been reduced by the amount of the grant.

- Unconditional grants, even though they may have been utilized by the City for financing a project, are not deducted from the final project costs, as it can be rationalized that such funding could have been used for other projects.

Assumptions and/or calculation criteria specific to each Development Levy are further highlighted, in more detail, within each respective section of this report.

It must be clarified what is intended, when it is stated that the City will continue to assume the responsibility for certain infrastructure systems and facilities. Historically the City has designed and constructed sanitary trunk sewer facilities, arterial roadways, water reservoirs, trunk watermains and stormwater management facilities, which serve more than a single development area. Although the City accepts this responsibility, each development agreement can define whether the City or the developer designs and constructs these major facilities. If the development agreement establishes that the developer will undertake this work, then presumably it will also establish the formula and schedule for recovery from other benefiting developments.



Southfort Area Boundary	
Undeveloped Boundary (as of December 31, 2016)	

Gross Area (Total) = 575.00 ha

Gross Area (Developed) = 329.92 ha

Gross Area (Undeveloped) = 245.08 ha

CITY OF FORT SASKATCHEWAN

Figure 1.1
Southfort Area Boundary

Southfort Development Levies		Dwg. No.
Revision: B	Date: January 25, 2017	1.1
NOT TO SCALE	Drawn: CL	

2 Waterworks System

2.1 GENERAL

The City's water supply is treated water, purchased from the City of Edmonton (EPCOR) through the Capital Region Northeast Water Services Commission (CRNWSC). The treated water is distributed by the City, to its customers, through its waterworks system consisting of water storage reservoirs and pumping facilities, primary feeder mains and distribution mains.

2.2 EXPANSION AND FINANCING OF WATERWORKS SYSTEM

Traditionally, the City's philosophy regarding its waterworks system expansion has been that development is responsible, at their entire cost, for the construction of all new distribution mains up to a specified diameter. Primary feeder mains, treated water storage reservoirs and pumping facilities benefit the entire water distribution system and thus, the City has assumed responsibility for their construction. The costs of such facilities are then assessed proportionately against lands through a Water Off-Site Levy.

Capital improvements to the water supply system are the responsibility of the CRNWSC, of which the City of Fort Saskatchewan is a member. The costs of such improvements are assessed proportionately, against the City, through the Commission's water utility rate structure. Therefore, these costs are not included in the City's Water Off-Site Levy.

The Westpark Reservoir and Pumphouse are currently included as an off-site levy for the Westpark Development, proportionate to its projected usage. The remainder of the expenditure will be included in the Southfort Levy costs.

2.3 EXISTING WATER LEVIES

The existing completed waterworks projects can be found in Table 2.1. The table shows the levied costs for the infrastructure.

2.4 WATER SYSTEM DEVELOPMENT LEVIES

In conducting this study, it was necessary to make some basic assumptions, namely:

- Water supply for the City will continue to be from the City of Edmonton through the CRNWSC, who shall continue to be responsible for all capital improvements/expansions to the supply systems. Such costs are therefore not included in the calculation of the City's Water Off-Site Levy.
- The City will be responsible for the construction of the alternate reservoir supply line, off the CRNWSC transmission main. These expenditures will be included as off-site levies to the development of Southfort.

- Development will continue to be responsible, at its entire cost, for the construction of all distribution mains, up to and including 400 mm diameter in size, to serve the Southfort area.
- The City will continue to be responsible for the construction of all primary feeder mains, treated water storage reservoirs and pumping facilities. These expenditures will be included as off-site levies to the development of Southfort.
- Conditional grants, such as those secured through the Alberta Transportation and Utilities Municipal Water and Wastewater Partnership Program*, will be applied to the specific projects, thereby reducing the overall project cost used in calculating the Water Off-site Levy Rate. Currently the level of funding available to the City through this program is approximately 30% of the eligible project costs.
- Unconditional grants, even if applied against waterworks system improvements, will not be considered when calculating the Water Off-Site Levy Rate.

* *The AT&U Municipal Water and Wastewater Partnership Program grant funding formula is based on the population of the community. Under the formula, as the population of the community increases, the percentage of cost covered by the program decreases. Therefore, it is prudent to update project costs regularly, to ensure that the off-site levy rates are current and meet the financial requirements of the City.*

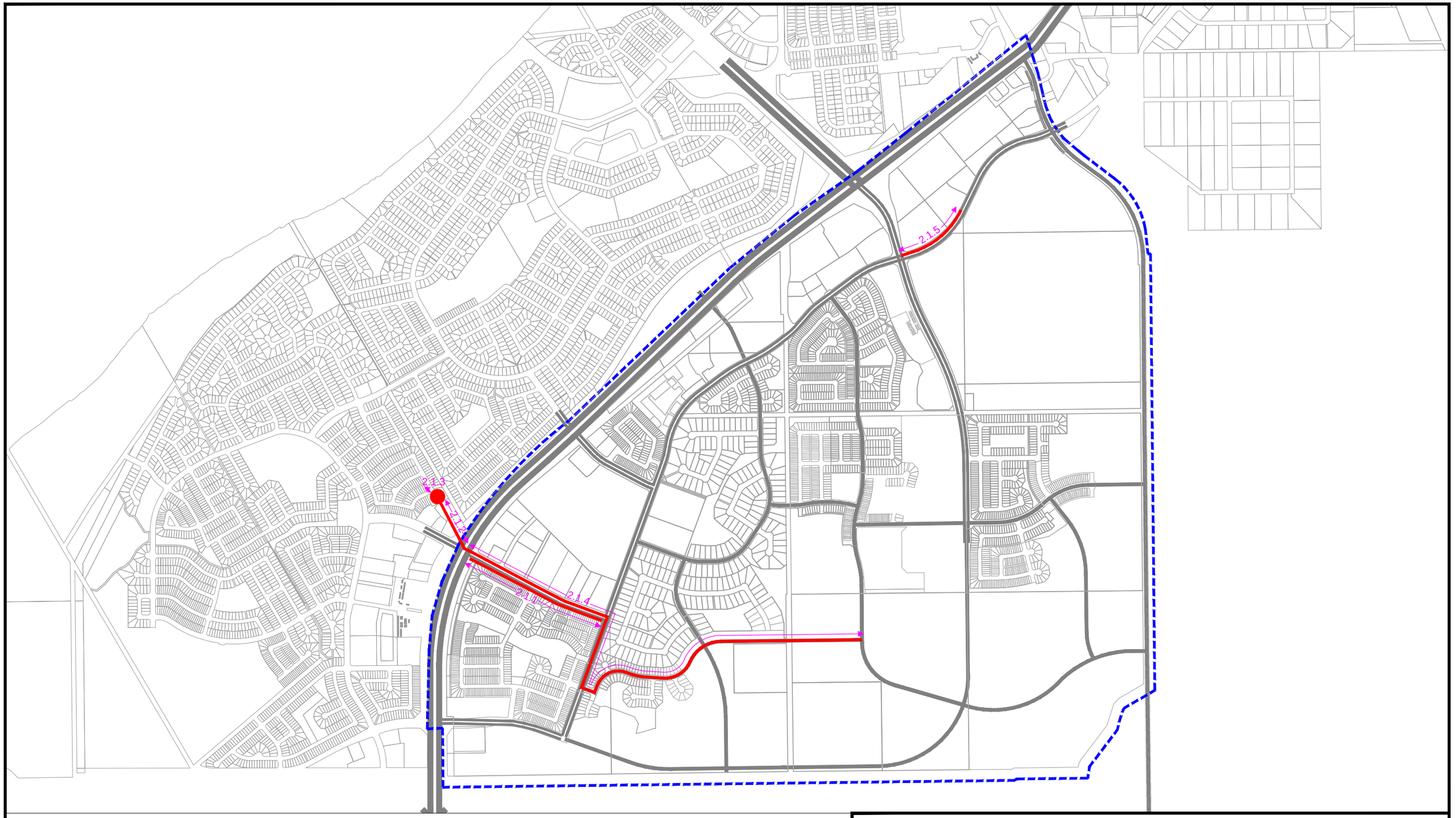
Figure 2.1 represents the Southfort area water system as envisioned in the Southfort ASP and City of Fort Saskatchewan Water Distribution System Master Plan. As per the assumptions previously outlined, the City assumes the responsibility for constructing all watermains greater than 400 mm in diameter. The cost of this construction will be included in the calculation for Water System Development Levies.

Table 2.1 outlines a cost estimate for each improvement based on 2016 dollars and future construction costs, with an inflation rate as indicated. Conditional grants, which had previously been secured for a specific project, have been incorporated to arrive at the estimated net cost to the City.

For future waterworks system improvements, it has been assumed that there will be no grant funding available for such projects. This assumption is based on the fact that the amount of grant funding available to a municipality will continue to be directly related to its population. The need for constructing the future reservoir storage capacities will, to a large degree, be directly related to increases in the population of the City. Such increased population, however, will decrease the amount of grant funding available.

2.5 TABLE 2.1 – WATER INFRASTRUCTURE COSTS

Item	Project Description	Year of Construction	Historical Project Cost Up to Dec 31, 2013	Historical Project Costs from Jan 1, 2014 to Dec 31, 2016	Future Cost Estimate for Remainder of Work	Total
Water						
2.1.1	450mm SOUTHFORT BOULEVARD WATER LINE (66.8% SHARE)	COMPLETE	$815,723.15	$0.00	$0.00	$815,723.15
2.1.2	WESTPARK RESERVOIR & 450mm WATERMAIN (66.8% SHARE)	COMPLETE	$2,452,968.31	$0.00	$0.00	$2,452,968.31
2.1.3	WESTPARK RESERVOIR EXPANSION (66.8% SHARE)	COMPLETE	$216,809.08	$2,847,502.84	$0.00	$3,064,311.92
2.1.4	300 mm WATER SUPPLY LINE (66.8% SHARE)	COMPLETE	$1,031,385.92	$43,598.44	$0.00	$1,074,984.36
2.1.5	300mm 86 AVENUE WATER CONNECTOR	COMPLETE	$72,384.00	$0.00	$0.00	$72,384.00
2.2	MODELLING	COMPLETE	$15,000.00	$0.00	$0.00	$15,000.00
			$4,604,270.46	**$2,891,101.28**	**$0.00**	**$7,495,371.74**



Watermain

Westpark Reservoir

CITY OF FORT SASKATCHEWAN

Figure 2.1
Waterworks System Improvements

Southfort Development Levies

Revision: B	Date: January 20, 2017	Dwg. No. 2.1
Scale: NTS	Drawn: CL	

3 Sanitary Sewer System

3.1 GENERAL

The sanitary sewage collection system in the Southfort area will be comprised of a series of lateral (local), collector and trunk sewers, intercepting wastewater from the various individual contributors and conveying this wastewater to an existing 750 mm diameter main in the northeast corner of the Area Structure Plan (ASP) boundary. The point of discharge for the City sanitary sewage is the Alberta Capital Region Wastewater Commission (ACRWC) Regional Trunk Sewer, which conveys the wastewater to the ACRWC Sewage Treatment Plant.

Capital improvements to the regional trunk line are the responsibility of the ACRWC of which the City of Fort Saskatchewan is a member. The costs of such capital improvements are assessed proportionately against the City through the Commission's sewage utility rate structure. Therefore, they are not included in the City's Sanitary Sewer Off-Site Levy calculations.

The Sanitary Servicing Plan, as identified in the Southfort ASP, indicates that the majority of the lands within the ASP boundary generally slope toward the northeast and that a gravity system will service most of the area. The extreme southeast catchment will require a Sanitary Lift Station, to pump the sewage into the proposed gravity system.

3.2 EXPANSION AND FINANCING OF SANITARY SEWER SYSTEMS

Traditionally, the City's philosophy regarding sanitary sewer systems has been that development shall be responsible for the entire cost of constructing laterals and collectors. The City assumes the responsibility for constructing all trunk mains 525 mm in diameter and larger. The cost of this construction will be included in the calculation for Sanitary Sewer System Development Levies.

3.3 EXISTING SANITARY SEWER OFF-SITE LEVY

The existing Ross Creek Sanitary Trunk Sewer was constructed in 1976/1977. The total project cost was established as $2.83 million in 1977. The portion of the total project costs assigned to the Southfort area is 28%, based on total service area. The cost share was calculated on the basis of actual project costs plus actual debenture charges for the financing of the project.

The existing completed sanitary projects are found in Table 3.1. The table shows the levied cost for these infrastructures.

3.4 SANITARY SEWER SYSTEM DEVELOPMENT LEVIES

In conducting this study, it was necessary to make some basic assumptions:

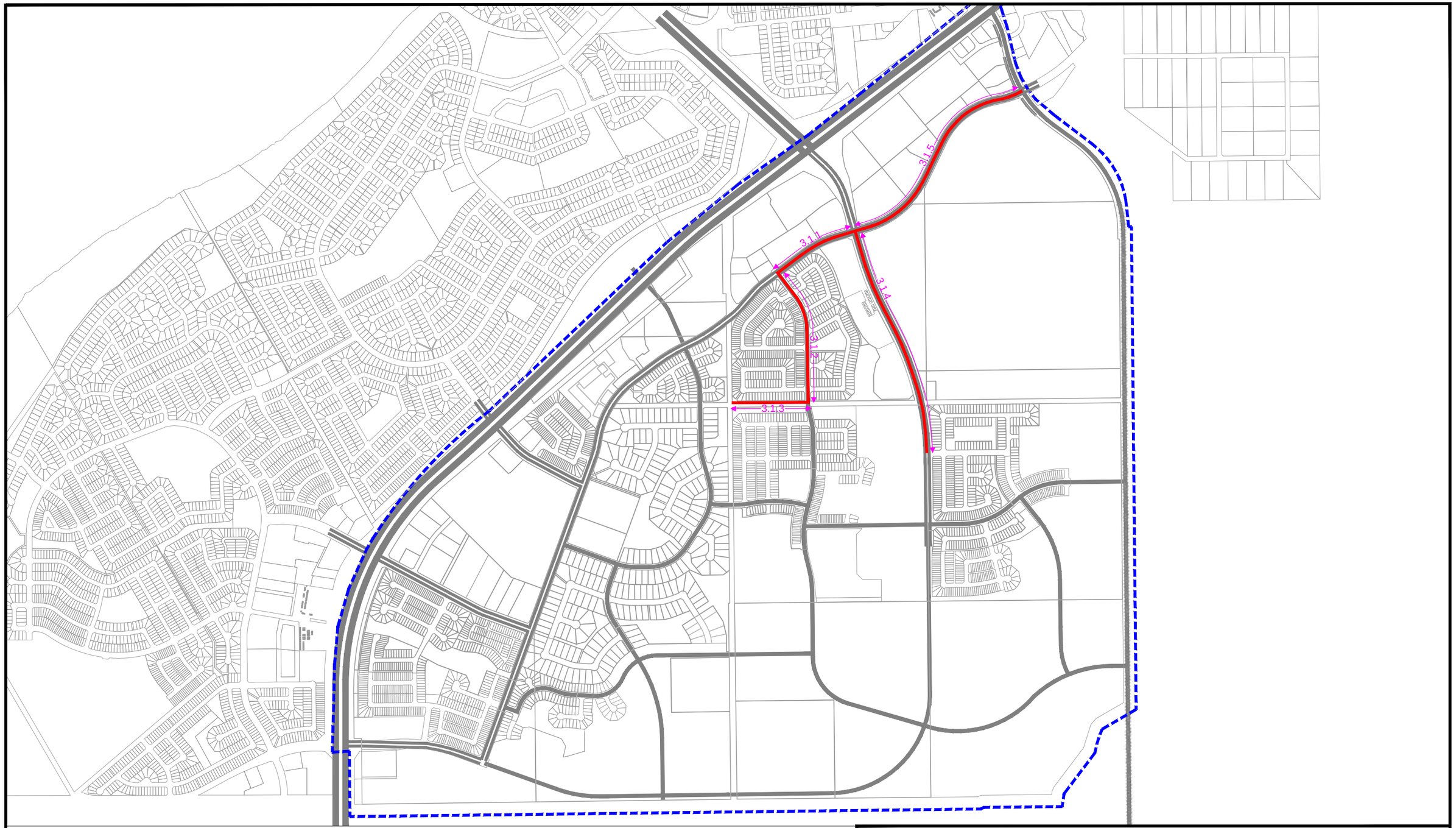
- The Developer will continue to be responsible for the construction of lateral and collector sanitary sewer systems.
- The City of Fort Saskatchewan will continue to be a member of the ACRWC. Any expansion or improvement costs, related to the Commission System, will be assessed against the City by the Commission, through its sewer utility rate structure. Therefore, costs related to the Commission System have not been included in the City's Sanitary Sewer Off-Site Levy calculations.
- Sanitary Sewers 525 mm diameter and larger are considered to be Trunk Sanitary Sewers.
- No grant funding will be available towards the construction of trunk sewer systems.
- The cost of all leviable projects will be applied against all lands within the ASP boundary.

Figure 3.1 shows the sanitary servicing plan, as developed in the Southfort ASP.

Table 3.1 outlines a cost estimate for each improvement based on 2016 dollars and future construction costs, with an inflation rate as indicated.

3.5 TABLE 3.1 – SANITARY INFRASTRUCTURE COSTS

Item	Project Description	Year of Construction	Historical Project Cost Up to Dec 31, 2013	Historical Project Costs from Jan 1, 2014 to Dec 31, 2016	Future Cost Estimate for Remainder of Work	Total
Sanitary						
3.1.1	675mm SOUTHFORT DRIVE SANITARY TRUNK	COMPLETE	$233,840.00	$0.00	$0.00	$233,840.00
3.1.2	675mm ALLARD WAY SANITARY TRUNK	COMPLETE	$360,240.00	$0.00	$0.00	$360,240.00
3.1.3	525mm 92 ST. GREENWAY SANITARY TRUNK	COMPLETE	$284,400.00	$0.00	$0.00	$284,400.00
3.1.4	525mm 94 STREET DEEP SANITARY	2020	$1,448,969.44	$0.00	$430,362.29	$1,879,331.73
3.1.5	750mm 86 AVE SANITARY TRUNK	COMPLETE	$850,000.00	$0.00	$0.00	$850,000.00
3.1.6	EXISTING 86 AVE TRUNK DEBENTURE	COMPLETE	$118,114.00	$0.00	$0.00	$118,114.00
3.1.7	SANITARY MODEL	COMPLETE	$15,000.00	$0.00	$0.00	$15,000.00
			$3,310,563.44	**$0.00**	**$430,362.29**	**$3,740,925.73**



Sanitary Line

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Figure 3.1
Sanitary System Improvements

Southfort Development Levies

Revision: A	Date: December 2016	Dwg. No. 3.1
Scale: NTS	Drawn: MK/SK	

4 Transportation System

4.1 GENERAL

The City of Fort Saskatchewan maintains a roadway classification system generally consistent with the definitions for arterial, collector and local roads contained in the "Geometric Design Standards for Canadian Roads and Streets," a manual published by the Transportation Association of Canada.

In the hierarchy of roadway classifications, the principle function of arterial roads is to provide for the efficient movement of people, goods and services between the primary traffic generation areas of a community. Typically, arterial roadways are designed as relatively free-flowing facilities, intersected by other arterial or major collector type roadways but provide no direct access to individual properties. Arterial roadways are generally considered to be a greater benefit to the City at large rather than directly to individual developers. However, this does not negate developers' responsibility to contribute their proportionate share towards the cost of these arterials, since to a large degree development generates the need for these arterial roadways.

An updated Transportation Study for the Southfort Area Structure Plan was completed in September 2015.

4.2 EXISTING ROADWAY LEVIES

The existing transportation projects completed are found in Table 4.1. The table shows the levied cost for these infrastructures.

4.3 ROADWAY DEVELOPMENT LEVIES

In conducting this study, it was necessary to make certain assumptions:

- Arterial roadways included in the Transportation Off-Site Levy calculations are those highlighted in Figure 4.1.
- Arterial roadways will typically be constructed to an ultimate 4-lane, divided, paved urban structure and are the standards upon which the cost estimates are based.
- Arterial roadways will typically be constructed in two stages with the first or initial stage being a two-laned urban roadway complete with street lighting and the ultimate stormwater drainage system. The second stage is all works remaining to complete the arterial roadway. Additional improvements may be required depending on pace of growth and need.
- A blanket assessment levy for roads is recommended against all development irrespective of land use.
- Right-of-ways to facilitate construction of arterial roadways will be acquired through the subdivision development process.

Table 4.1 outlines the cost estimates for the Transportation Off-Site Levy rate.

4.4 TABLE 4.1 – TRANSPORTATION INFRASTRUCTURE COSTS

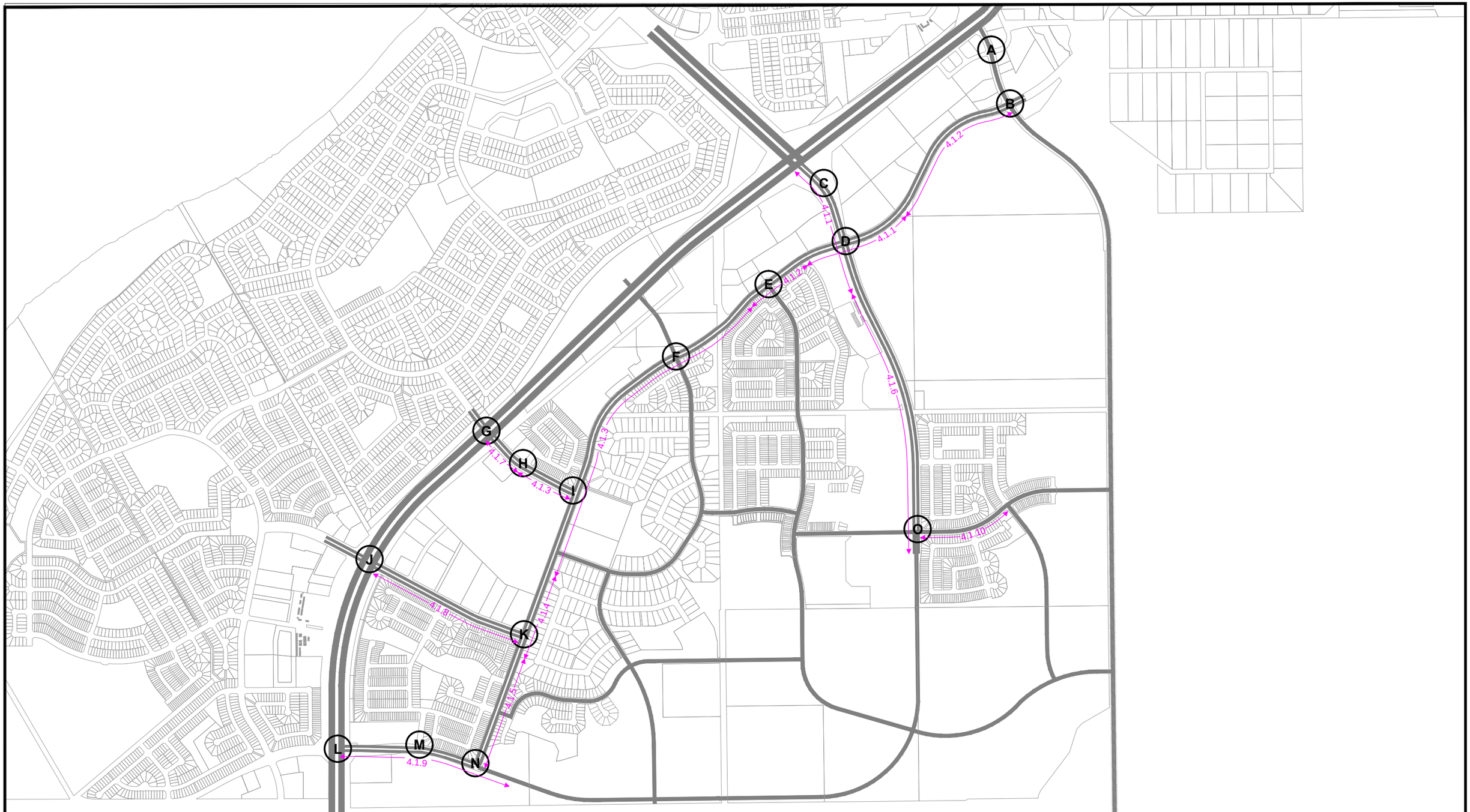
(continued on following page)

Item	Project Description	Year of Construction	Historical Project Cost Up to Dec 31, 2013	Historical Project Costs from Jan 1, 2014 to Dec 31, 2016	Future Cost Estimate for Remainder of Work	Total
Transportation						
4.1.1	WIDENING SOUTHFORT DRIVE & 94TH STREET - PHASE 1 INCLUDING INTERSECTION D SIGNALIZATION	COMPLETE	$5,690,445.78	$10,129.30	$0.00	$5,700,575.08
4.1.2	WIDENING SOUTHFORT DRIVE / 86TH AVENUE - PHASE 1 INCLUDING INTERSECTION E	COMPLETE	$2,306,934.01	$2,231,738.92	$0.00	$4,538,672.93
4.1.3	WIDENING SOUTHFORT DRIVE FROM ALLARD WAY TO SOUTH GREENFIELD WAY & 84TH STREET FROM SOUTHFORT DRIVE TO GALLOWAY WYND INCLUDING INTERSECTION F & I SIGNALIZATION	2017	$0.00	$0.00	$4,250,000.00	$4,250,000.00
4.1.4	WIDENING SOUTHFORT DRIVE FROM SOUTH GREENFIELD WAY TO SOUTHFORT BOULEVARD	2020	$0.00	$0.00	$1,000,000.00	$1,000,000.00
4.1.5	WIDENING SOUTHFORT DRIVE FROM SOUTHFORT BOULEVARD TO SOUTHRIDGE BOULEVARD	2023	$0.00	$0.00	$2,200,000.00	$2,200,000.00
4.1.6	WIDENING 94TH STREET FROM HOSPITAL TO SIENNA BOULEVARD	2020	$0.00	$0.00	$2,850,000.00	$2,850,000.00
4.1.7	WIDENING 84TH STREET FROM HWY 21 to GALLOWAY WYND INCLUDING INTERSECTION G	COMPLETE	$1,394,397.11	$0.00	$0.00	$1,394,397.11
4.1.8	WIDENING SOUTHFORT BOULEVARD FROM HWY 21 TO SOUTHFORT DRIVE	2021	$0.00	$0.00	$2,500,000.00	$2,500,000.00
4.1.9	SOUTHRIDGE BOULEVARD INCLUDING INTERSECTION L	2017	$404,093.54	$1,871,812.44	$231,964.60	$2,507,870.58
4.1.10	SIENNA BOULEVARD WIDENING	COMPLETE	$0.00	$264,239.66	$0.00	$264,239.66
4A	88TH AVENUE AND 101 STREET INTERSECTION A SIGNALIZATION	2030	$0.00	$0.00	$388,081.99	$388,081.99
4B	86TH AVENUE AND 101 STREET INTERSECTION B SIGNALIZATION	COMPLETE	$200,000.00	$0.00	$0.00	$200,000.00
4C	94TH STREET & CORNERSTONE/SOUTHPOINTE COMMERCIAL INTERSECTION SIGNALIZATION	2017	$0.00	$0.00	$300,000.00	$300,000.00
4H	GALLOWAY WYND AND 84TH STREET INTERSECTION K SIGNALIZATION	2019	$0.00	$0.00	$312,120.00	$312,120.00
4K	SOUTHFORT DR AND SOUTHFORT BLVD INTERSECTION SIGNALIZATION	2020	$0.00	$0.00	$318,362.40	$318,362.40
4M	RIDGEPOINT GATE AND SOUTHRIDGE BLVD INTERSECTION SIGNALIZATION	2027	$0.00	$0.00	$365,698.33	$365,698.33

TABLE 4.1 – TRANSPORTATION INFRASTRUCTURE COSTS

(continued from previous page)

Item	Project Description	Year of Construction	Historical Project Cost Up to Dec 31, 2013	Historical Project Costs from Jan 1, 2014 to Dec 31, 2016	Future Cost Estimate for Remainder of Work	Total
Transportation						
4N	SOUTHFORT DR AND SOUTHRIDGE BLVD INTERSECTION SIGNALIZATION	2023	$0.00	$0.00	$337,848.73	$337,848.73
4O	SIENNA BLVD AND 94TH ST INTERSECTION SIGNALIZATION	2020	$0.00	$0.00	$318,362.40	$318,362.40
4.2	TRANSPORTATION MODELLING	COMPLETE	$30,000.00	$0.00	$0.00	$30,000.00
4.3	TRANSPORTATION MASTER PLAN	COMPLETE	$34,650.00	$0.00	$0.00	$34,650.00
4.4	AREA STRUCTURE PLAN	COMPLETE	$35,000.00	$0.00	$0.00	$35,000.00
4.5	AREA STRUCTURE PLAN UPDATE	2027	$0.00	$0.00	$70,000.00	$70,000.00
			$10,095,520.44	**$4,377,920.32**	**$15,442,438.45**	**$29,915,879.21**



Arterial Roadway

A — Intersection Improvement

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Figure 4.1
Transportation Improvements

Southfort Development Levies

Revision: B	Date: January 17, 2017	Dwg. No. 4.1
Scale: NTS	Drawn: CL	

5 Stormwater Drainage System

5.1 GENERAL

Management of stormwater is an important component in the development of a community. It must be handled effectively, to preserve and promote the general health, welfare, security and economic well-being of the public. Traditionally, in urban centres, stormwater is handled in keeping with the minor/major drainage concept wherein:

- Minor systems are designed and implemented to accommodate drainage to avoid property damage and flooding and to minimize inconvenience to the public from 1 in 5 year rainfall events.
- Major systems are designed and implemented for flood control to avoid loss of life, injuries and significant damage to property, from events greater than 1 in 5 year return, producing unusual, high intensity rainfall and/or large volume runoff.

Minor systems are typically comprised of underground piping, manholes, catch basins and outfall structures but can also be designed as a rural-type drainage system consisting of ditches and culverts.

Major systems can be large diameter underground piping, open channels, stormwater detention/retention ponds, natural streams or any combination thereof, capable of conveying runoff from events up to and including a 1 in 100 year return period, to the ultimate receiving stream or water body.

5.2 SOUTHFORT AREA STORMWATER MANAGEMENT PLAN

The Southfort Area Structure Plan (ASP) identified several stormwater ponds and trunk sewers within the ASP boundary. Much of the area north of 94th Street forms part of a separate basin with a portion (Penitentiary Lands) being outside of the Gross Developable Area as identified in this study.

There are two separate outfalls which ultimately discharge to Ross Creek.

A Southfort Stormwater Management Plan (SWMP) was undertaken by Associated Engineering in 2004/2005. The development of this SWMP involved input from the engineering consultants for the major developers in the area, in addition to the City Public Works department. Option 4 of this SWMP has been recommended. Development Levies related to the major infrastructure presented in Option 4 have been incorporated into this document.

5.3 EXISTING STORMWATER LEVIES

The existing stormwater projects completed are found in Table 5.1. The table shows the levied cost for this infrastructure.

5.4 STORMWATER DEVELOPMENT LEVIES

In conducting this study, it was necessary to make certain assumptions:

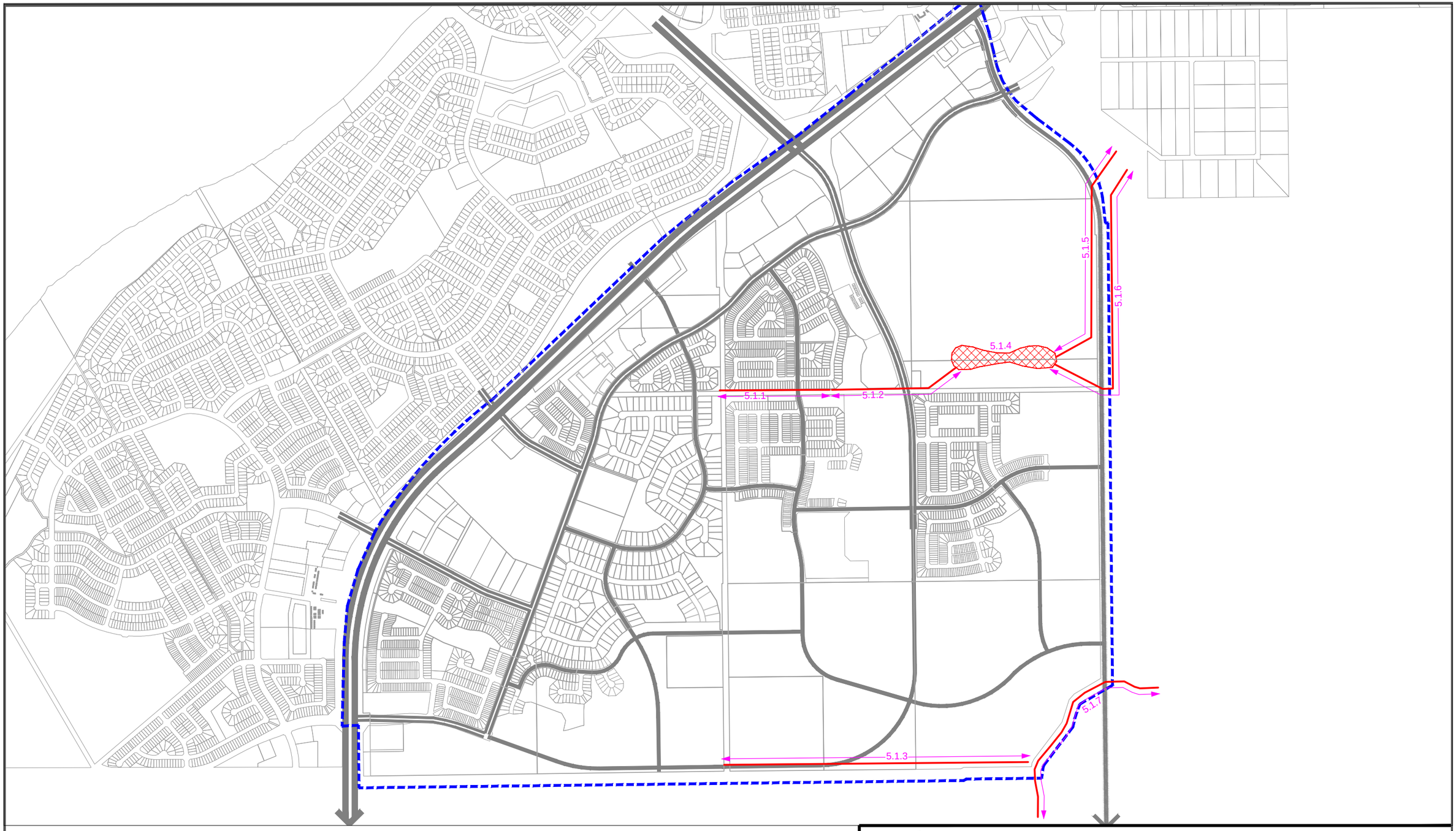
- The Developer will continue to be responsible for the construction of catch basins and storm sewers up to and including 1200 mm diameter in size.
- Storm sewers greater than 1200 mm diameter in size are considered to be trunk sewers. The costs of these sewers will be included in the Stormwater Development Levies.
- There is no grant funding available towards the construction of trunk sewer systems.
- All stormwater management ponds will be the responsibility of the developer, with the exception of Wetland E. Each stormwater management basin area is considered to be responsible for the stormwater management pond serving that basin area.
- Drainage parkways I and II, Wetland E, the Outfall Ditch and Overflow to Ross Creek, the Yorkville Ditch upgrade, the 2005 Southfort Stormwater Management Plan and the Ross Creek Floodplain study are all considered to be cost recoverable against the entire Southfort Development Area.
- Note: If storm sewers larger than 1200 mm diameter are constructed in lieu of parkways, these costs will be assessed against the entire Southfort Development Area.

Figure 5.1 shows the stormwater infrastructure projects included in the Southfort Off-site Levy.

Table 5.1 outlines a cost estimate for each improvement based on 2016 dollars and future construction costs, with an inflation rate as indicated.

5.5 TABLE 5.1 – STORM MANAGEMENT INFRASTRUCTURE COSTS

Item	Project Description	Year of Construction	Historical Project Cost Up to Dec 31, 2013	Historical Project Costs from Jan 1, 2014 to Dec 31, 2016	Future Cost Estimate for Remainder of Work	Total
Storm						
5.1.1	DRAINAGE PARKWAY 2 - POND 9 TO POND 11	COMPLETE	$395,231.83	$0.00	$0.00	$395,231.83
5.1.2	DRAINAGE PARKWAY 2 - POND 11 TO WETLAND E	COMPLETE	$196,203.43	$0.00	$0.00	$196,203.43
5.1.3	DRAINAGE PARKWAY 1	2030	$0.00	$0.00	$2,588,180.88	$2,588,180.88
5.1.4	WETLAND E	2027	$2,581,457.48	$0.00	$1,208,267.27	$3,789,724.75
5.1.5	OUTFALL FROM WETLAND E TO ROSS CREEK	COMPLETE	$1,724,660.73	$436,616.45	$0.00	$2,161,277.18
5.1.6	OVERFLOW FROM WETLAND E TO ROSS CREEK	2027	$0.00	$0.00	$1,206,062.84	$1,206,062.84
5.1.7	YORKVILLE DITCH UPGRADE	2030	$0.00	$0.00	$2,193,603.71	$2,193,603.71
5.1.8	ROSS CREEK FLOODPLAIN STUDY	COMPLETE	$57,750.00	$0.00	$0.00	$57,750.00
5.1.9	STORM MANAGEMENT PLAN	COMPLETE	$70,000.00	$0.00	$0.00	$70,000.00
			$5,025,303.47	**$436,616.45**	**$7,196,114.70**	**$12,658,034.62**



Drainage Parkway or Ditch

Wetland

CITY OF FORT SASKATCHEWAN

Figure 5.1
Storm System Improvements

Southfort Development Levies

Revision: A	Date: December 2016	Dwg. No. 5.1
Scale: NTS	Drawn: SK	

6 Recommendations

Based on the findings of this study, it is recommended that:

- The City of Fort Saskatchewan continues to assume responsibility for the construction of the municipal infrastructure systems which they deem to be of benefit to the City at large.
- The City maintains its current philosophy that development will be responsible for its proportionate share of the cost of municipal infrastructure systems expansion through the assessment of development levies against all benefiting lands.
- The City maintain its existing philosophy regarding storm water drainage systems, wherein the development industry is required to manage stormwater in accordance with the Alberta Environmental Protection guidelines respecting stormwater release rates and the City of Fort Saskatchewan Municipal Engineering Standards requirements.
- The City periodically reviews the Development Levies to ensure that the rates are consistent with the overall City funding requirements.
- The Off-Site Levies be established at:

    - Water Levy $ 14,505.98 / ha
    - Sanitary Sewer Levy $ 7,239.91 / ha
    - Transportation Levy $ 57,896.96 / ha
    - Stormwater Levy $ 24,497.41 / ha

    The combined Southfort Levy will be $ 104,140.26 / ha.

Table 6.1 is a summary of the combined Southfort Levy in 2016 dollars.

6.1 TABLE 6.1 – OFF-SITE LEVIES

Summary			
Development Area	**Hectares**		
TOTAL AREA	575		
UNDEVELOPED AREA (DEC 31/16)	245.080		
10% MUNICIPAL RESERVE	24.508		
LEVIABLE AREA	**220.572**		
Levy Cost Breakdown			
Item	**Total Cost**	**% of Levy Cost**	
WATER	$7,495,371.74	13.93%	$14,505.98
SANITARY	$3,740,925.73	6.95%	$7,239.91
TRANSPORTATION	$29,915,879.21	55.60%	$57,896.96
STORM	$12,658,034.62	23.52%	$24,497.41
TOTAL	**$53,810,211.30**	**100.00%**	**$104,140.26**
Collected			
LEVY FUNDS (DEC 31/16)	$30,022,038.18		
TOTAL INTEREST (DEC 31/16)	$817,746.73		
TOTAL	**$30,839,784.91**		
Total Levy Funds Required			
TOTAL LEVY FUNDS REQUIRED	**$22,970,426.39**		
Current Levy Rate per Hectare			
CURRENT LEVY RATE PER HECTARE	**$104,140.26**		