

Rural Water & Sewer Projects (South) Update

August 23, 2016

Presenters:

Kashif Khan, Program Manager Rural Servicing, Engineering

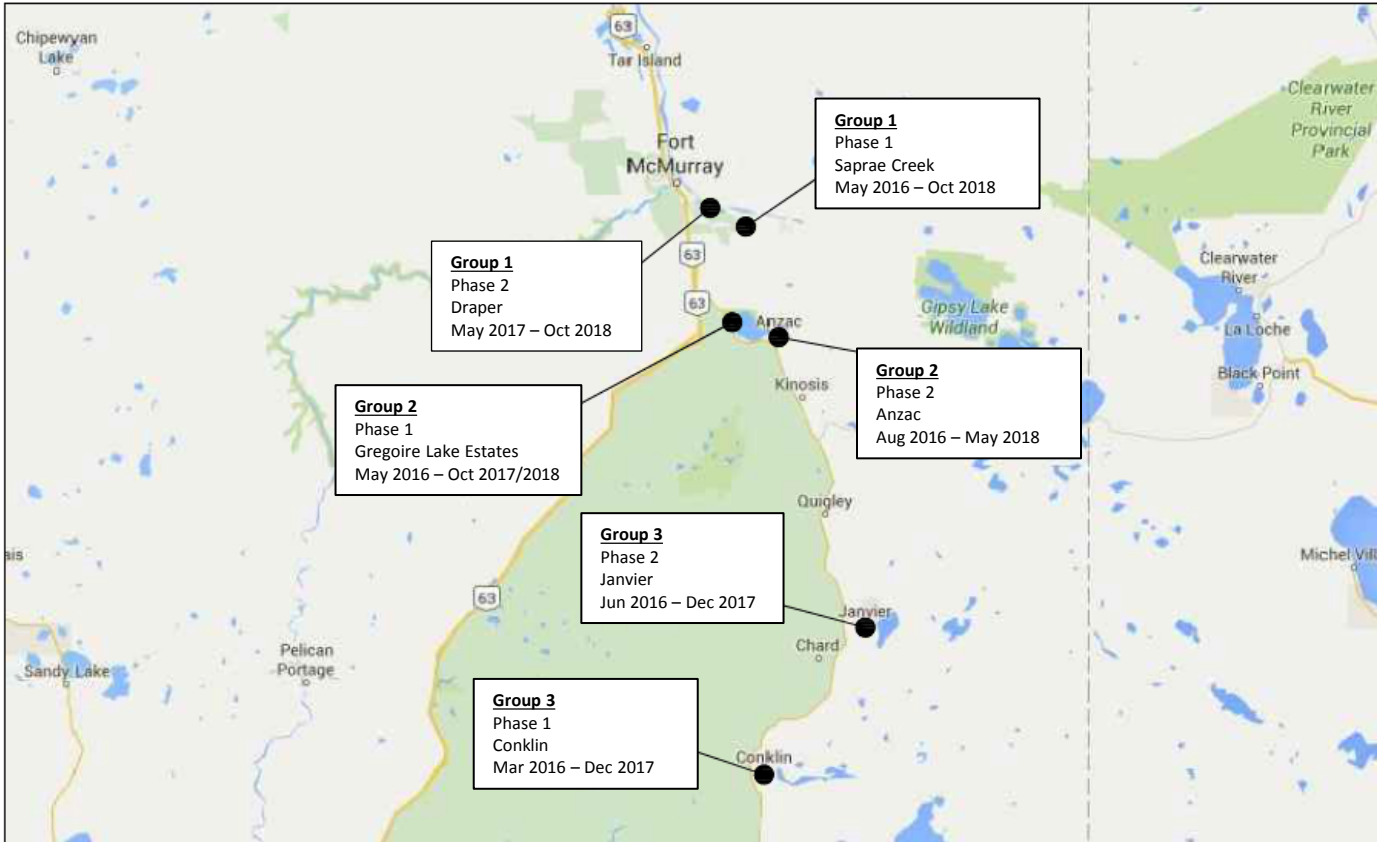
Moges Gebreleoul, Project Manager, Engineering

Introduction

This update is regarding the progress of Rural Servicing Projects in the following Southern Hamlets:

- Anzac
- Conklin
- Draper
- Gregoire Lake Estates
- Janvier
- Saprae Creek Estates

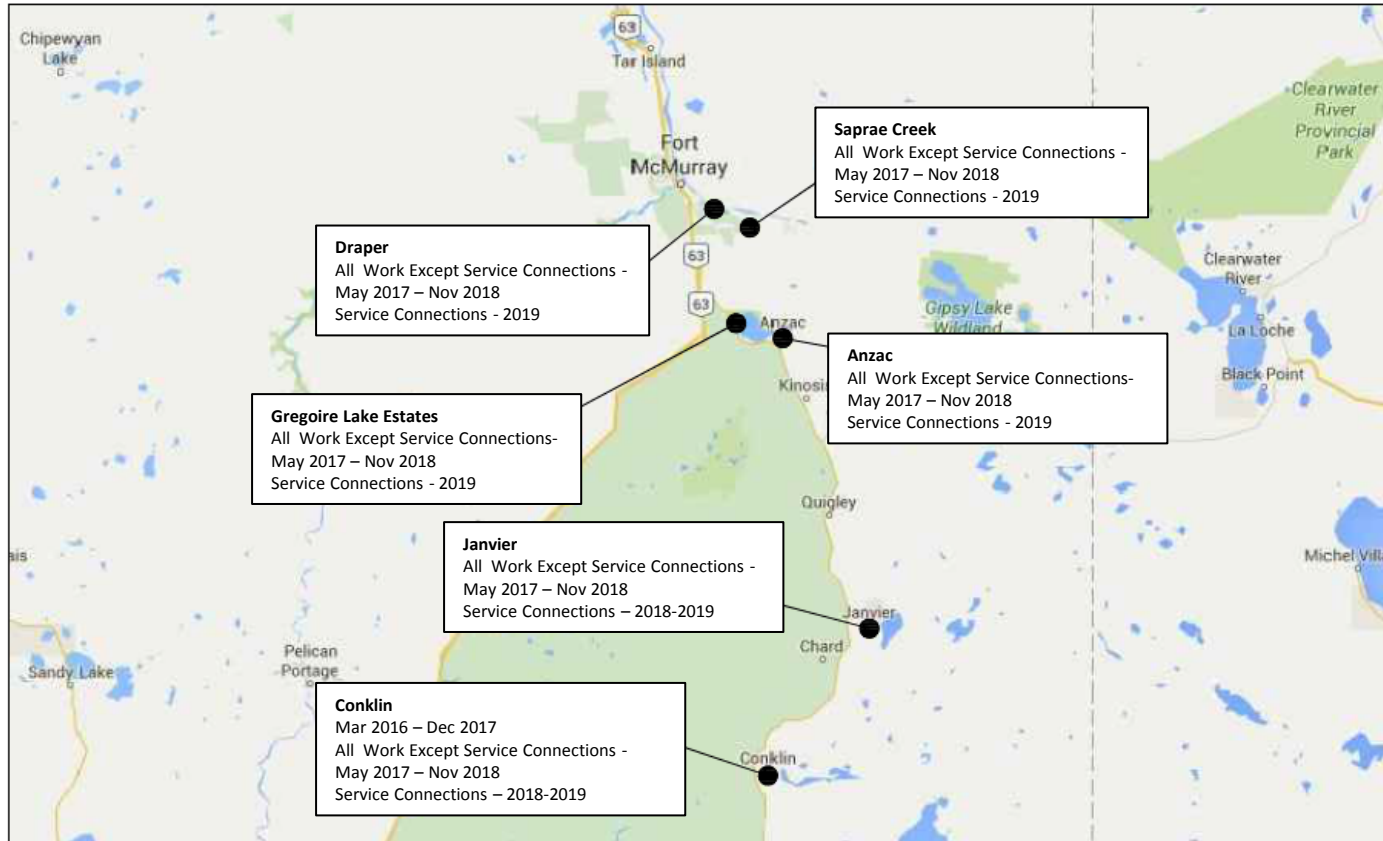
Rural Water & Sewer Servicing – Pre May 3, 2016 Phasing



Impacts of Wildfire and Program Phasing

- Approx. 5% houses heavily impacted in Anzac
- Approx. 26% houses heavily impacted in Draper
- Approx. 31% houses heavily impacted in Sapræe Creek
- Safety Codes providing recommendations for rehabilitation of septic tank/septic field/water cistern in consultation with Engineering department
- Long term measures - Phasing and Staging strategy revised to minimize construction impacts

Rural Water & Sewer Servicing – Post May 3, 2016 Phasing



Rural Servicing Program – Tentative Schedule

Communities	Sub Phases	Design Start Date	Progress from Last Report %	Design % Completed	Construction Start Date	Construction End Date
Saprae Creek	Contract 1: Freestone Way/ Saprae Cr.	Apr. 2015	0	100	May 2018	Nov. 2018
	Contract 2: Community Lane, Sol Park Dr., Weiss Dr.,	Jul. 2015	0	100	May 2017	Nov. 2018
	Contract 3: Sommer Way, Spruce Valley Gate, Ever Green Place, Conifer Way, and Spruce Valley Dr.	Jul. 2015	0	100	May 2017	Nov. 2018
	Contract 4: Force Main/Gravity Mail	Jul. 2015	5	55	May 2017	Nov. 2018
	Contract 5: Service Connections	Jul. 2015	30	50	May 2019	*
Gregoire Lake Estates	Contract 1: Gregoire Ave, Aspen Cres., Poplar Cres.	April 2015	0	100	May 2017	Nov. 2017
	Contract 2: Provincial Crown Land Lift Station and Piping, Water Reservoir	Apr. 2015	30	60	July 15 2017	Nov. 2018
	Contract 3: Force Main GLE to Anzac- in South Utility Corridor (SUC) or Waste Water Storage Tank	Feb. 2016	0	10	July 15 2017	Nov. 2018
	Contract 4: Service Connections	Apr. 2015	0	0	May 2019	*

Rural Servicing Program – Tentative Schedule *Cont.*

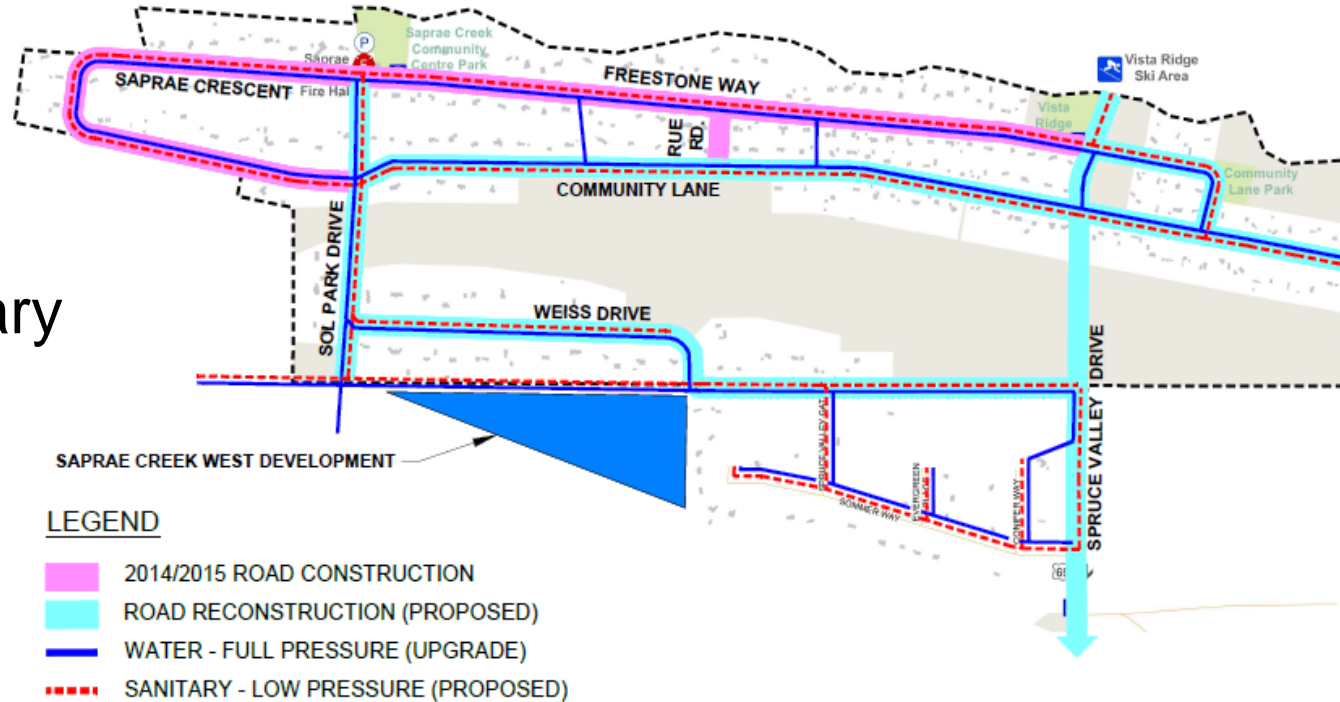
Communities	Sub Phases	Design Start Date	Progress from Last Report %	Design % Completed	Construction Start Date	Construction End Date
Conklin	Contract 1: Northland Drive	Apr. 2015	0	100	Mar 2016	Substantially Completed
	Contract 2: Lift Stations Water Treatment Plant Upgrade, Service Stubs to Northland Drive	Jul. 2015	30	90	Nov 2016	Nov. 2018
	Contract 3: Pine Lane, Poplar Drive, Polar Crs. and Spruce Dr.	Apr. 2015	10	70	May 2017	Nov. 2018
	Contract 4: Christina Lake Dr., and Father Mercredi Trail,	Apr. 2015	0	60	May 2018	Nov. 2018
	Contract 5: Other Lift Stations	Apr. 2015	0	0	May 2018	Nov. 2018
	Contract 6: Conklin Corner	Apr. 2015	0	0	May 2018	Nov. 2018
	Contract 7: Service Connections	Apr. 2015	0	0	May 2018	*
Draper	Contract 1: Water/Sewer/Road Work on Draper Rd.	Aug. 2015	0	50	May 2017	Nov. 2018
	Contract 2: Lift Station and Connections to Waterways System	Aug. 2015	0	50	May 2017	Nov. 2018
	Contract 3: Service Connections	Aug. 2015	50	50	May 2019	*

Rural Servicing Program – Tentative Schedule *Cont.*

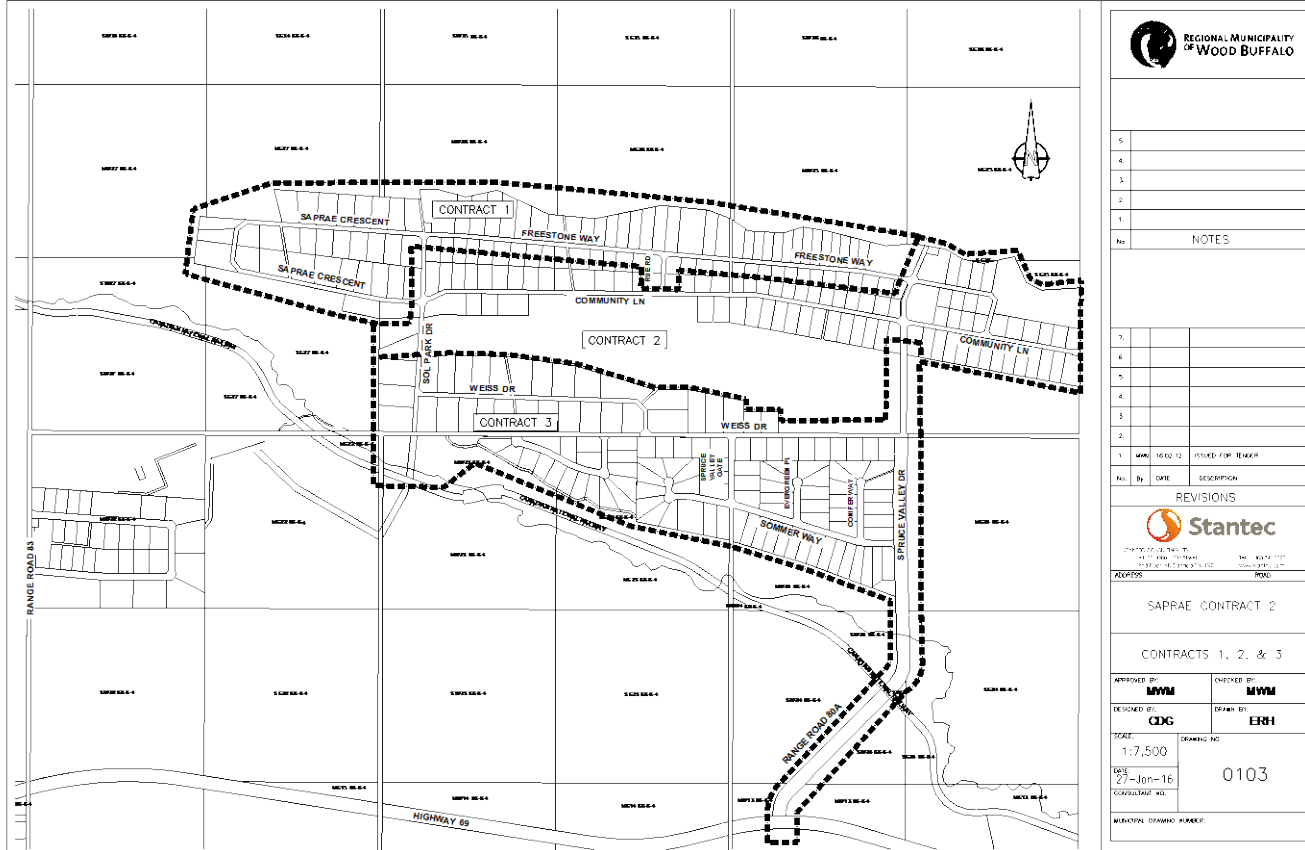
Communities	Sub Phases	Design Start Date	Progress from Last Report %	Design % Completed	Construction Start Date	Construction End Date
Anzac	Contract 1: Highway 881 Lift Station & Stoney Mountain Road Lift Station	Feb. 2016	20	50	May 2017	Nov. 2018
	Contract 2: South Anzac Water & Sewer	Aug. 2015	0	60	May 2017	Nov. 2018
	Contract 3: Cheecham Drive Road Rehabilitation & North Anzac Water & Sewer	Aug. 2015	0	60	May 2017	Nov. 2018
	Contract 4: Service Connections	Aug. 2015	0	0	May 2019	*
Janvier	Contract 1: Main Water & Sewer Line within Roads	Feb. 2015	10	90	May 2017	Nov. 2018
	Contract 2: Janvier Lagoon and Outfall Pipe	Feb. 2015	0	80	Jan. 2017	Nov. 2017
	Contract 3: Service Connections	Feb. 2015	0	50	May 2018	*

Saprae Creek – Main Scope

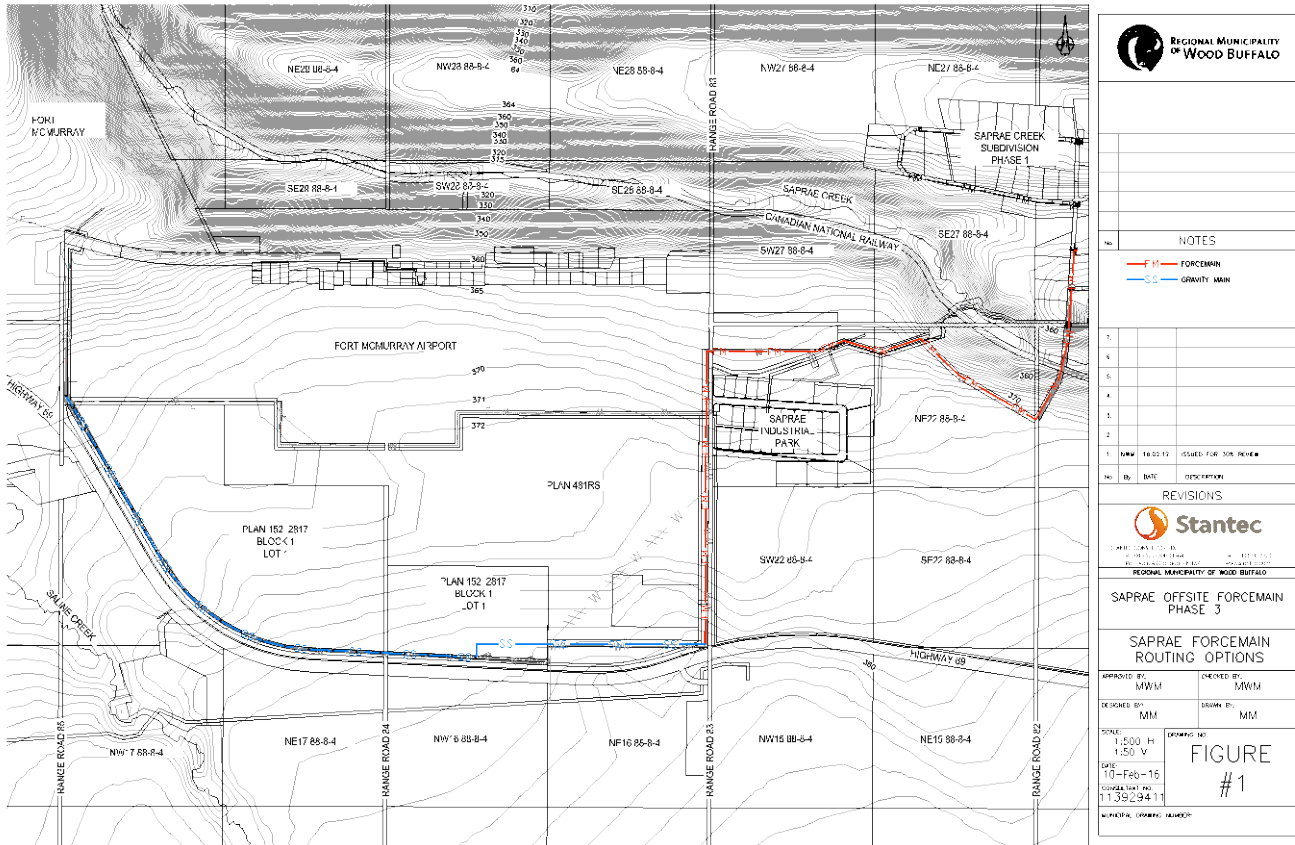
- 5 Contracts
- 10 KM of Water main
- 18 KM of Sanitary
- 1 Lift Station
- 61 Hydrants
- 286 Sanitary Pumps and Service Connections



Saprae Creek – Three Main Contracts

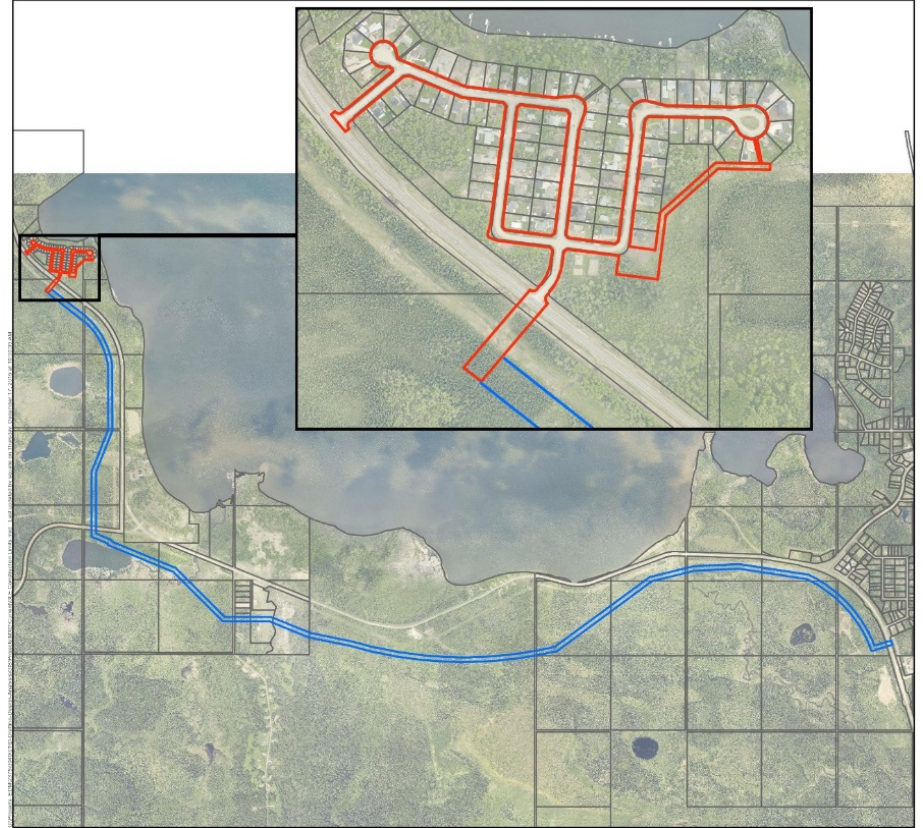


Saprae Creek – Force Main & Gravity Main



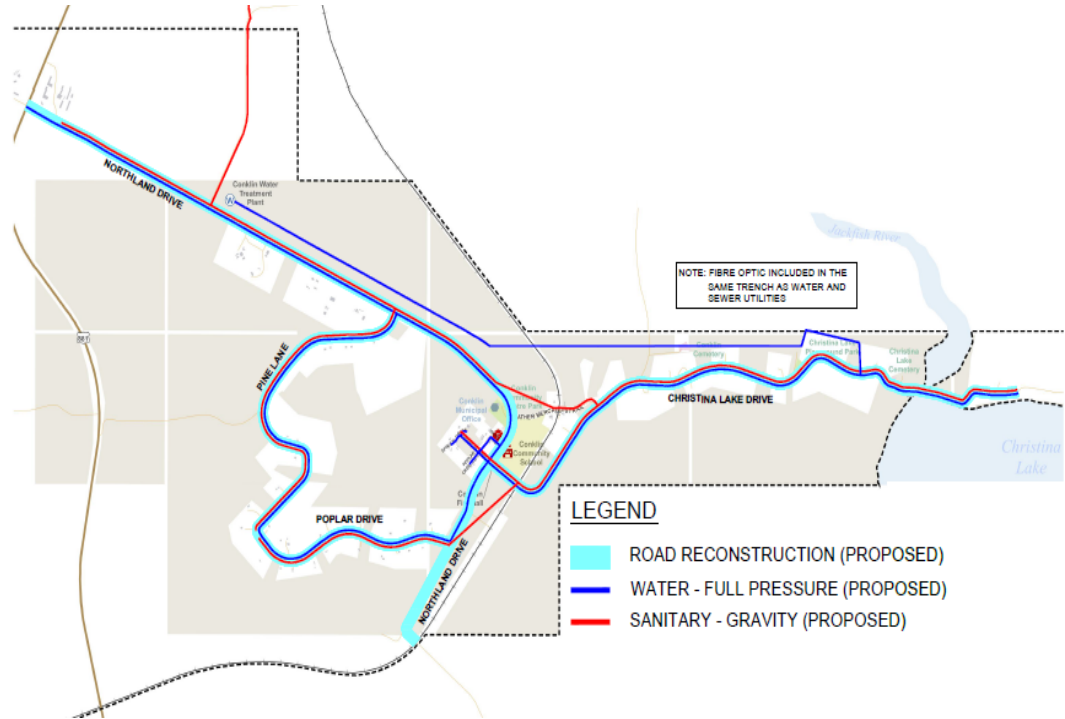
Gregoire Lake Estates – Main Scope

- 4 Contracts
- ATCO Gas & Electric work, Telus Work
- 2 Km of Water main
- 2 Km of Sanitary
- 14 Km Forcemain
- 11 Hydrants , 1-Reservoir
- 1 Lift station
- 24 Manholes
- 84 Service Connections



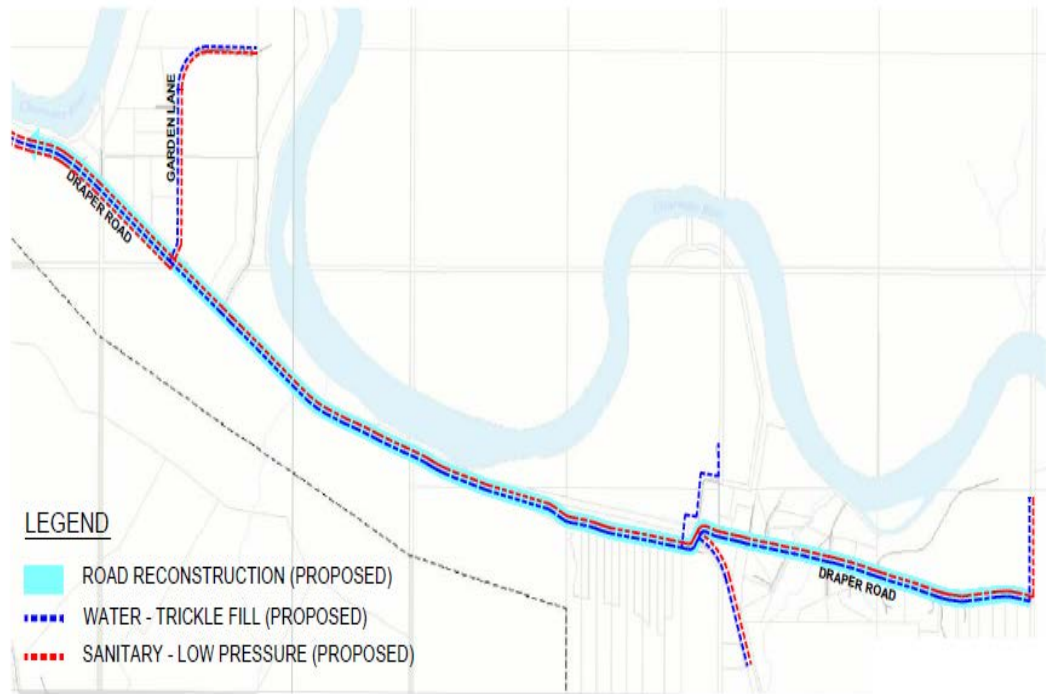
Conklin – Main Scope

- 7 Contracts
- 14 Km of Water main
- 17 Km of Sanitary
- 100 Hydrants
- 5 Lift Stations
- 148 Manholes
- 172 Service Connections



Draper – Main Scope

- 2 or 3 Contracts -TBD
- 11 Km of Water main
- 9 Km of Sanitary
- 89 Water Cistern
- Sanitary Pumps
- 1 Lift Station
- 89 Service Connections



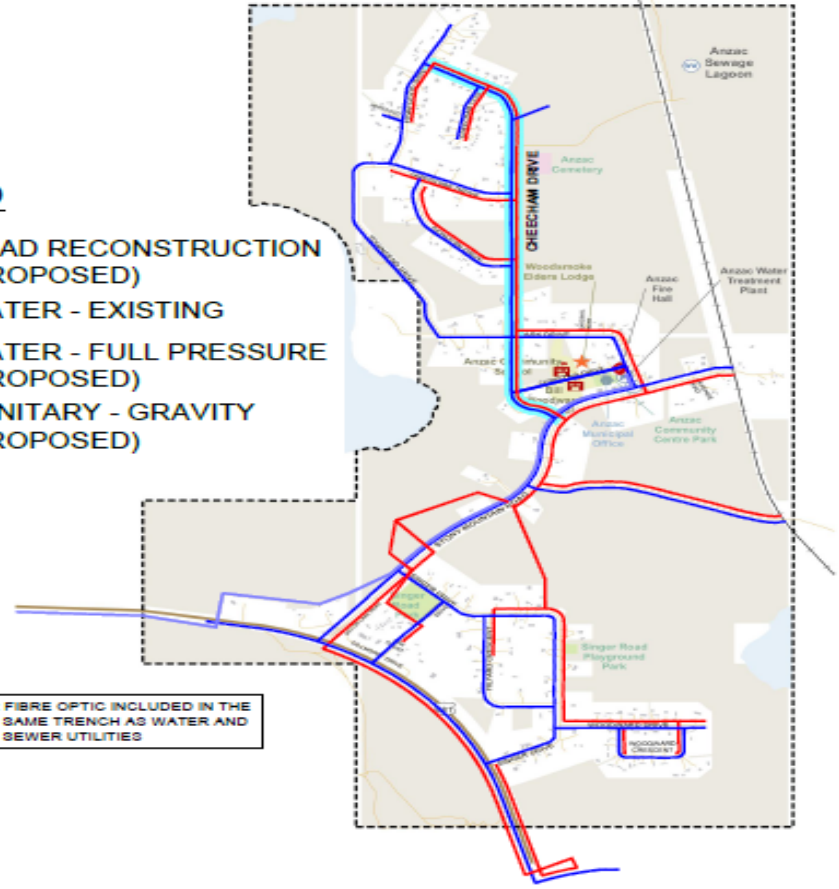
Anzac – Main Scope

- 4 Contracts
- 9 Km of Watermain
- 17 Km of Sanitary
- 135 Hydrants
- 7 Lift Station
- 118 Manholes
- 246 Service Connections

LEGEND

- ROAD RECONSTRUCTION (PROPOSED)
- WATER - EXISTING
- WATER - FULL PRESSURE (PROPOSED)
- SANITARY - GRAVITY (PROPOSED)

NOTE: FIBRE OPTIC INCLUDED IN THE SAME TRENCH AS WATER AND SEWER UTILITIES

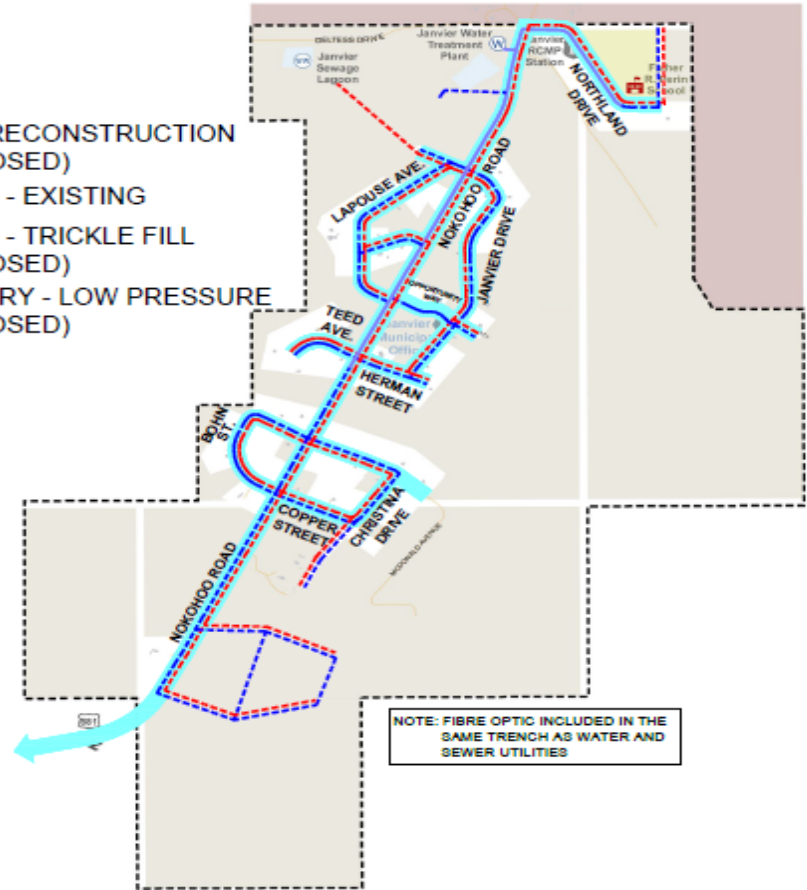


Janvier – Main Scope

- 3 or 4 Contracts -TBD
- 6 Km of Watermain
- 10 Km of Sanitary
- 117 Water Cistern
- Sanitary Pumps
- 117 Service Connections

LEGEND

- ROAD RECONSTRUCTION (PROPOSED)
- WATER - EXISTING
- WATER - TRICKLE FILL (PROPOSED)
- SANITARY - LOW PRESSURE (PROPOSED)

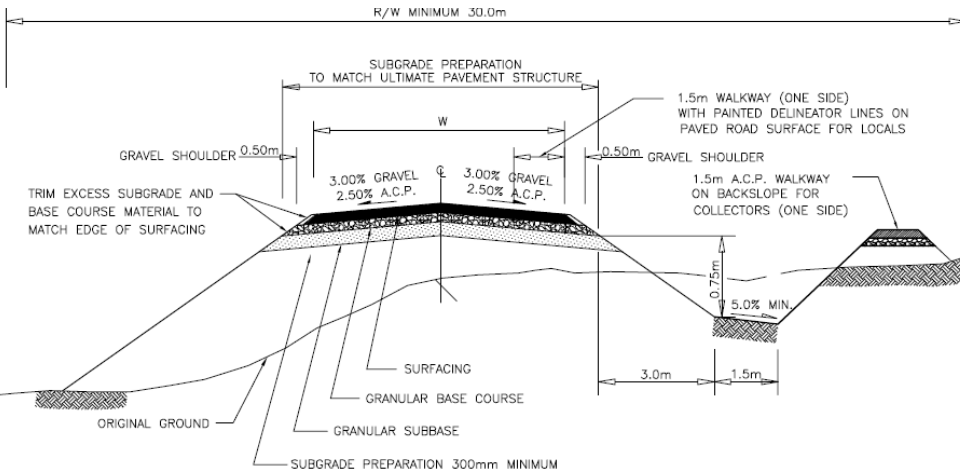


Service Connection – Status

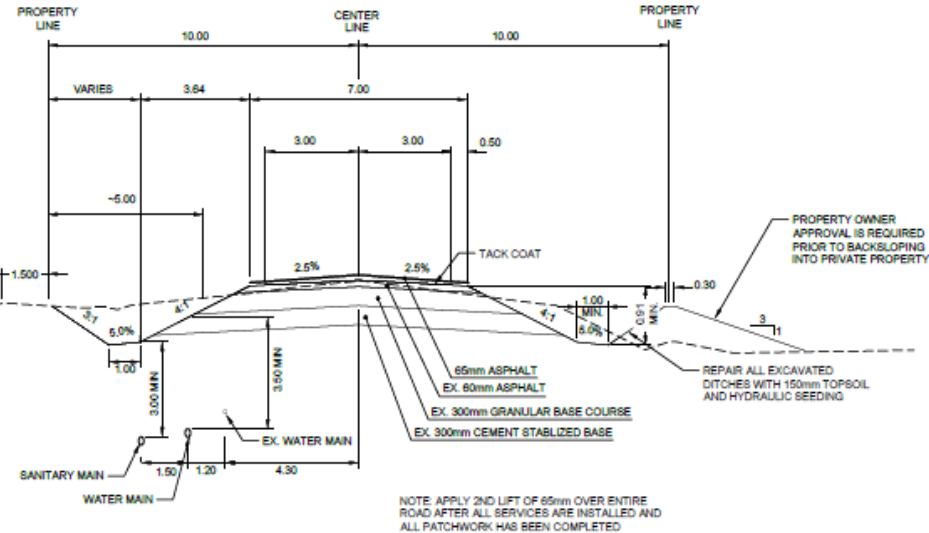
- As per Council's decision on February 2, 2016, capital contribution from the residents of Anzac, Conklin, Draper, Gregoire Lake Estates, Janvier, and Saprae Creek is to be collected through a service connection fee
- Practical aspects of the service connection application process are being analyzed to ensure consistency with the existing process
- Easement agreements for utilities and surface drainage with private property owners will be required before the service connection application. Practical aspects are currently being explored

Available vs. Required Right-of-Way – Saprae Creek

Rural Cross Section as per Engineering Service Standards



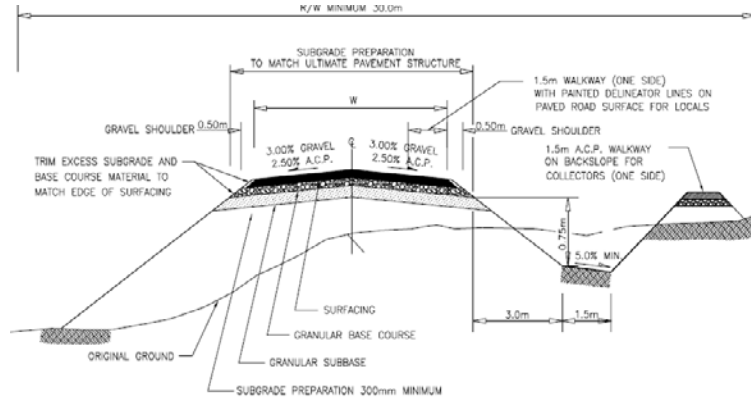
Proposed Design Cross Section



Note: Berm at the end including re-grading of some of the properties is anticipated. The details will be discussed with individual property owners.

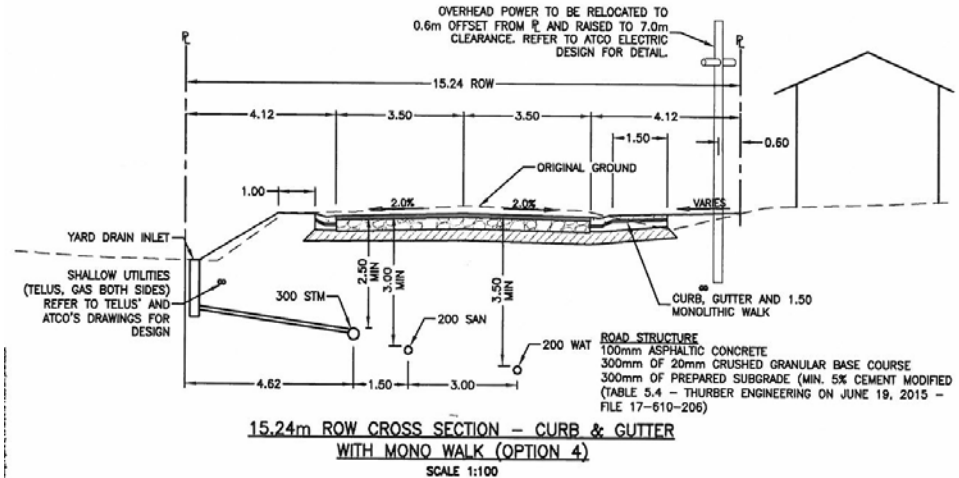
Available vs. Required Right-of-Way – Gregoire Lake Estates

Rural Cross Section as Engineering Service Standards



NOTE: ALL BACK SLOPES 3:1 UNLESS NOTED OTHERWISE

Proposed Curb and Gutter Cross Section



Challenges Rural Water and Sewer Projects:

- Predesign estimate vs. detailed design estimate vs. tender prices
- Capital contribution by commercial lots
- Servicing of commercial lots not in close proximity of the residential lots - desire from private owners to service
- Approvals from Provincial and Federal authorities
- Discussion on installing water service only at the request of residents
- Not paying the capital contribution and installing service connection on their own

Rural Infrastructure Rehabilitation (2015-2017):

- Drainage upgrades through ditches, paved road surface, driveway culvert upsizing
- Administration is reviewing inclusion/exclusion of fiber optic construction in rural rehabilitation project
- To date, there has been no interest from vendors to utilize the proposed fiber optic cables/conduits
- Administration is talking with Province for funding possibilities
- Report on Cost/benefit analysis of the fiber optics construction along with various alternative options to come

Community Engagements:

1. Open Houses

- Anzac and GLE: February 24, 2016
- Conklin: February 18, 2016
- Janvier: March 2, 2016
- Saprae Creek: May 11, 2016 (*cancelled due to fire*)
- Future Open Houses to be held Fall 2016

Rural Water and Sewer Servicing Website:

http://www.rmwb.ca/Municipal-Government/municipal_departments/Public-Operations/Roads/Construction-Updates/Rural-Water-Sewer.htm

Community Engagements (*Cont'd*):

2. Community Newsletters

3. Other Communications

- Rural Social Media Pages
- Pulse Line Calls, Calls & Emails to Construction Hotline & Project Personnel's
- Conversation with Community via Rural Community Development branch
- Future Easement Meetings with Individual Property Owner

Thank You

Questions?