

February 14, 2024

The Mayor and Council
The Town of Plympton-Wyoming
546 Niagara Street
Wyoming, ON
N0N 1T0

Gentlemen and Mesdames:

Re: Confederation Line East Drain, Norman Street South Drain and Extension of the King-Anderson Drain 2024

In accordance with your instructions, R. Dobbin Engineering has undertaken an examination with regards to a petition for drainage by the owner of Confederation Line and Norman Street in the Town of Plympton-Wyoming.

Authorization under the Drainage Act

This is an Engineer's Report that has been prepared under Section 4 of the Drainage Act. R. Dobbin Engineering Inc. was appointed by council on November 25, 2022.

A petition for the drainage by means of a drainage works of an area requiring drainage as described in the petition may be filed with the Clerk of the local Municipality in which the area is situate by,

- (a) the majority in number of the owners, as shown by the last revised assessment roll of lands in the area, including the owners of any roads in the area;
- (b) the owner or owners, as shown by the last revised assessment roll, of lands in the area representing at least 60 per cent of the hectarage in the area;
- (c) where a drainage works is required for a road or part thereof, the engineer, road superintendent or person having jurisdiction over such road or part, despite subsection 61(5);
- (d) where a drainage works is required for the drainage of lands used for agricultural purposes, the Director. R.S.O. 1990, c.D.17, s.4(1).

This petition was deemed to be valid under Section 4 (c).

Existing Conditions

The storm sewers on Norman Street and Confederation Line east of Broadway Street are both Town owned infrastructure. The Town has petitioned to have Norman Street incorporated under the Drainage Act and for the storm sewer on Confederation Line to be replaced under the Drainage Act as part of a road reconstruction project. The existing storm sewer on Confederation Line outlets into the Broadway Street Drain. The storm sewer on Confederation Line has been videoed and is in poor condition. The storm sewer on Norman Street was installed as part of the development between 2003 and 2008. The storm sewer on Norman Street south of #474 Norman Street drains southerly to Confederation Line. The storm sewer on Norman Street north of #474 Norman Street drains northerly to the King-Anderson Drain.

Site Meeting

A site meeting for this drain was held on November 15, 2023 in council chambers. The following were present at the meeting:

- Josh Warner (R. Dobbin Engineering)
- Elizabeth Cummings (Drainage and Engineering Coordinator, Town of Plympton-Wyoming)
- Adam Sobanski (Chief Administrative Office, Town of Plympton-Wyoming)
- Josh Booth (Engineering Coordinator)
- Al Little (Operations Coordinator)
- Jessica Wilson (Drainage Clerk)
- Gary Atkinson (Mayor and Landowner, #771 Broadway, Thelma Street Properties)
- John Vanklaveren (Council representative and Landowner, #4527 Confederation Line)
- Gerry Murray (Landowner, #583 Norman Street)
- Moe Steadman (Landowner, #755 Norman Street)
- Maureen Steele (Landowner, #755 Norman Street)
- Jim Verhoeven (Landowner, #751 Norman Street)
- Janice Devlugt (Landowner, #4572 Confederation Line)
- Robert Cassells (Landowner, #733 Norman Street)
- Max Boyd (Landowner, #731 Norman Street)
- Joan Guthrie (Landowner, #732 Norman Street)
- Andy Klapak (Landowner, #749 Norman Street)
- Anne Klapak (Landowner, #749 Norman Street)
- Barb Robinson (Landowner, #723 Norman Street)

- John Robinson (Landowner, #723 Norman Street)
- Brandon Neville (Landowner, #725 Norman Street)

The following is a brief summary of the first meeting:

- Adam Sobanski presented an overview of the proposed reconstruction project on Confederation Line and that the storm sewer portion was being completed through the Drainage Act.
- Josh Warner made a presentation outlining the details of the road reconstruction project (Phase 1 in 2024 and Phase 2 in 2025) and outlined the below details as it relates to the Drainage Act portion:
 - Drainage Act is a user pay system with assessments being broken down into benefit and outlet.
 - Went through the Drainage Act process
 - Discussed the three separate projects:
 - Extension of the King-Anderson Drain: incorporate the existing storm sewer along the north part of Norman Street and develop future maintenance specifications. Engineering to be assessed if no other work.
 - Norman Street South Drain: incorporate the existing storm sewer along the south part of Norman Street and develop future maintenance specifications. Stated that properties draining through this system would be assessed an outlet assessment for the improvements on Confederation Line and engineering to incorporate the infrastructure.
 - Confederation Line East Drain: replacement of the existing infrastructure and assessing out the cost. All properties are to be provided with a storm service.
- Landowners generally expressed concerns with maintaining access to their properties. It was stated that 24 to 48 hours notice will be sent for any disruption (water, road, sanitary, etc.) and that they will be kept to a minimum.
- A Landowner expressed concern with a small radius at Norman and Confederation Line. Josh Warner was to investigate.
- Josh Warner stated that assessments will depend on the location and size of their property. The following ranges were given based on the drain a property is abutting:
 - Extension of King-Anderson Drain: less then \$100
 - Norman Street South Drain: \$400-\$800
 - Confederation Line East Drain: \$3,000-\$6,000

Draft Report

A draft report, dated February 1, 2024 was sent to all the affected Landowners and a meeting was held on February 13, 2024 to go over the report and address any questions and concerns related to the draft report. The following were present at the meeting:

- Josh Warner (R. Dobbin Engineering)
- Elizabeth Cummings (Drainage and Engineering Coordinator, Town of Plympton-Wyoming)
- Paul DaSilva (Director of Public Works, Town of Plympton-Wyoming)
- Jessica Wilson (Drainage Clerk)
- Gary Atkinson (Mayor and Landowner, #771 Broadway, Thelma Street Properties)
- John Vanklaveren (Council representative and Landowner, #4527 Confederation Line)
- Suzanne LePage (Landowner, #721 Broadway Street)
- Gerry Murray (Landowner, #583 Norman Street)
- Maurice Steadman (Landowner, #755 Norman Street)
- Maureen Steadman (Landowner, #755 Norman Street)
- Marleen Carlton (Landowner, #750 Norman Street)
- Rick Lambley (Landowner, #4545 Confederation Line)
- Janice Devlugt (Landowner, #4572 Confederation Line)
- Jeff Devlugt (Landowner, #4572 Confederation Line)
- Robert Cassells (Landowner, #733 Norman Street)
- Jan Cassells (Landowner, #733 Norman Street)
- Eiko Korvermaker (Landowner, #4557 Confederation Line)
- Mike S. (Landowner, #4526 Confederation Line)
- Joan Guthrie (Landowner, #732 Norman Street)
- Andy Klapak (Landowner, #749 Norman Street)
- Jo-Anne Klapak (Landowner, #749 Norman Street)
- Barb Robinson (Landowner, #723 Norman Street)
- John Robinson (Landowner, #723 Norman Street)
- Brandon Neville (Landowner, #725 Norman Street)

The following is a brief summary of the meeting:

- No major concerns with the drainage project were brought forward.

Design

The storm sewer on Confederation Line has been designed utilizing a 2-year storm sewer design.

Recommendations

It is therefore recommended that the following work be carried out:

- 1) **King-Anderson Drain Extension:** Incorporation of the existing storm infrastructure on the north portion of Norman Street. This includes the storm sewer from STM 12 to STM 17, the storm services to the property line, catch basins and the catch basin leads. Future maintenance specifications shall be developed for the drain. The King-Anderson Drain maintenance assessment shall be updated to reflect the developed properties.
- 2) **Norman Street South Drain:** Incorporation of the existing storm infrastructure on the south portion of Norman Street. This includes the storm sewer from STM 5 to STM 11, the storm services to the property line, catch basins and the catch basin leads. Future maintenance specifications shall be developed for the drain.
- 3) **Confederation Line East Drain:** The existing storm infrastructure on Confederation Line from Broadway Street to #4577 Confederation Line shall be replaced. Each property is to receive a storm service and low boulevard areas shall have a basin. The storm sewer from STM 1 to STM 7, the storm services to the property line, catch basins and catch basin leads (in boulevard and roadway) shall form part of the drainage works.
- 4) The maintenance schedule for the McAusland-Williams Drain Extension shall be revised to reflect the updated areas and lots.

Estimate of Cost

It is recommended that the work be carried out in accordance with the accompanying Specification of Work and Profile that forms part of this Report. There has been prepared an Estimate of Cost in the amount of \$702,049.00, including engineering of the report, attending the Meeting to Consider the Report, attending the Court of Revision and estimates for tendering, construction inspection and contract administration. Appearances before appeal bodies have not been included in the cost estimate.

A plan has been prepared showing the location of the work and the approximate drainage area. A profile is included showing the depths and grades of the proposed work.

Assessment

As per Section 21 of the Drainage Act, the Engineer in his report shall assess for benefit and outlet for each parcel of land and road liable for assessment.

Lands, roads, buildings, utilities, or other structures that are increased in value or are more easily maintained as a result of the construction, improvement, maintenance, or repair of a drainage works may be assessed for benefit. (Section 22)

Lands and roads that use a drainage works as an outlet, or for which, when the drainage works is constructed or improved, an improved outlet is provided either directly or indirectly through the medium of any other drainage works or of a swale, ravine, creek, or watercourse may be assessed for outlet. The assessment for outlet shall be based on the volume and rate of flow of the water artificially caused to flow into the drainage works from the lands and roads liable for such assessments. (Section 23)

The Engineer may assess for special benefit any lands for which special benefits have been provided by the drainage works. (Section 24)

A Schedule of Assessment for the lands and roads affected by the work and therefore liable for the cost thereof will be prepared as per the Drainage Act. Also, assessments may be made against any public utility or road authority, as per Section 26 of the Drainage Act, for any increased cost for the removal or relocation of any of its facilities and plant that may be necessitated by the construction or maintenance of the drainage works. Items to be assessed under Section 26, as specified, shall be tendered separately with the actual cost plus a portion of the engineering (25% of the construction cost).

The cost of any fees for permits or approvals or any extra work required by any affected utility or road authority shall be assessed to that organization requiring the permit, approval, or extra work.

The proposed work has generally been assessed in the following manner, including all estimated fees, taxes and disbursements:

1. A benefit assessment of \$2,400 has been assessed to all private properties abutting the drain on Confederation Line. This assessment includes the cost associated with a storm service connection from the Landowner's lot line to the drain.
2. The catch basins and leads have been assessed to the road authority as per Section 26 of the Drainage Act.

3. The remaining costs of the drainage works has generally been assessed with 90% of the cost applied as a benefit assessment to the road authority and the remainder of the cost assessed as an outlet assessment to upstream lands and roads based on equivalent hectares.

All final costs included in the cost estimate of this report shall be pro-rated based on the Schedule of Assessment. Any additional costs shall be assessed in a manner as determined by the Engineer.

Allowances

Under Section 29 of the Drainage Act, the Engineer in his report shall estimate and allow in money to the Owner of any land that it is necessary to use for the construction or improvement of a drainage works or for the disposal of material removed from drainage works. This shall be considered an allowance for right-of-way.

Under Section 30 of the Drainage Act, the Engineer shall determine the amount to be paid to persons entitled thereto for damage, if any, to ornamental trees, lawns, fences, land and crops occasioned by the disposal of material removed from a drainage works. This shall be considered an allowance for damages.

Allowances have been made, where appropriate, as per Section 29 of the Drainage Act for right-of-way for the potential re-sloping that would increase the area occupied by the drain and as per Section 30 of the Drainage Act for damages to lands and crops. Allowances for right of way are based on a land value of \$50,000.00 per hectare (approximately \$20,000.00 per acre). Allowances for crop loss are based on \$2,000.00 per hectare for the first year and \$1,000.00 for the second year (\$3,000.00 per hectare total).

Access and Working Area

Access to the site for construction and future construction and maintenance of the drain shall be from Confederation Line, Norman Street and through the town owned sewer easement at the north end of Norman Street.

The working area for the construction and future construction and maintenance of the drain shall be within Confederation Line, Norman Street and the sewer easement at the north end of Norman Street. The working area shall extend 2m into private property at the storm services for a width of 5m.

This can be changed under direction of the Drainage Superintendent or Engineer at the time of construction or maintenance.

Restrictions

No trees and shrubs shall be planted nor shall permanent structures be erected within 2 metres of the proposed drain without prior written permission of Council.

Attention is also drawn to Sections 80 and 82 of the Drainage Act, which refer to the removal of obstructions in a drain and damage caused to a drain.

Agricultural Grant

If available, it is recommended that application for subsidy be made for eligible agricultural properties. Any assessments against non-agricultural properties are shown separately in the Schedule of Assessment.

The agricultural property has been assessed based on providing the capacity of the grantable coefficient.

Maintenance

The assessments for maintenance and repair of the Confederation Line East Drain, Norman Street South Drain and the Extension of the King-Anderson Drain shall be in the relative portions as contained in the applicable Schedule of Maintenance enclosed within this report unless otherwise specified below or altered under provisions of the Drainage Act.

The King-Anderson Drain maintenance schedule shall be updated to reflect the Section 65 report contained within this report.

The storm services (from the main to the property line) to an individual property shall be assessed with 60% assessed to the road authority and the remainder to the property it services. The catch basins and catch basin leads within the boulevard and road shall be maintained at the expense of the road authority.

Any subdrains below the curb and at the manholes shall not form part of the drainage works.

Yours truly,



Josh Warner, P. Eng.
R. Dobbin Engineering Inc.



Confederation Line East Drain
Town of Plympton-Wyoming
Feburary 14, 2024

ALLOWANCES

Allowances have been made as per Sections 29, 30 and 31 of the Drainage Act for right of way, damages to lands and crops and existing drainage infrastructure.

Conc.	Lot or part	Address	Roll Number	Owner	Section 29 (\$)	Section 30 (\$)	Total (\$)
3	Pt. of Lot 16	#717 Broadway Street	01-166	172965 Canada Limited	-	100	100
	Pt. of Lot 16	#721 Broadway Street	01-228	J.G. Lepage	-	100	100
	Pt. of Lot 16	#4515 Confederation Line	01-167	J. Morreau	-	100	100
	Pt. of Lot 16	#4517 Confederation Line	01-167-01	S. Millier	-	100	100
	Pt. of Lot 16	#4519 Confederation Line	01-168	N. Fisher	-	100	100
	Pt. of Lot 16	#4527 Confederation Line	01-169	Vanklavern Auctions Inc.	-	100	100
	Pt. of Lot 16	#4537 Confederation Line	01-209-01	J. Hamel	-	100	100
	Pt. of Lot 16	#4545 Confederation Line	01-210	R. Lambley	-	100	100
	Pt. of Lot 16	#4557 Confederation Line	01-210-01	E. Korvemaker	-	100	100
	Pt. of Lot 16	#4565 Confederation Line	01-211	C. Brinston	-	100	100
	Pt. of Lot 16	#4569 Confederation Line	01-218-01	D. Herdman	-	100	100
	Pt. of Lot 16	#4571 Confederation Line	01-218	M. Moffatt	-	100	100
	Pt. of Lot 16	#4577 Confederation Line	01-217-01	L. Sipkens	-	100	100
	Pt. of Lot 16	#4510 Confederation Line	01-273	B. Visscher	-	100	100
	Pt. of Lot 16	#4518 Confederation Line	01-272	E. Plangger	-	100	100
	Pt. of Lot 16	#4524 Confederation Line	01-271	Wyoming Christian Reformed	-	100	100
	Pt. of Lot 16	#4536 Confederation Line	01-269	C. Boere	-	100	100
	Pt. of Lot 16	#4540 Confederation Line	01-268-01	T. Gillespie	-	100	100
	Pt. of Lot 16	#4550 Confederation Line	01-239	M. Moesker	-	100	100
	Pt. of Lot 16	#4554 Confederation Line	01-238	B. Johnson	-	100	100
	Pt. of Lot 16	#4572 Confederation Line	01-237-20	J. Devlugt	-	100	100
	W 1/2 E 1/2 Lot 16	#4576 Confederation Line	01-237	J. Devlugt	-	100	100
	Pt. of Lot 16	#716 Toronto Street	01-170	M. Feeley	-	100	100
	Pt. of Lot 16	#717 Toronto Street	01-209	D. Vandenbergh	-	100	100
TOTAL ALLOWANCES					\$0	\$2,400	\$2,400

Estimate of Cost

<u>Item Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost (\$)</u>	<u>Total (\$)</u>
<u>Phase 1 (Broadway to Toronto Street)</u>				
Remove and Dispose of Existing Concrete Storm Sewer (All Sizes)	203	m	48	9,744
Remove and Dispose of Existing Catch Basin Leads (All Sizes)	18	m	80	1,440
Remove and Dispose of Existing Storm Leads (All Sizes)	20	m	15	300
Remove and Dispose of Existing Catch Basins	4	each	300	1,200
Remove and Dispose of Existing Manholes	4	each	2,000	8,000
Connect New Storm Sewer into STM1	1	LS	4,500	4,500
Supply and Install STM1 (1500mm) c/w Connections	1	LS	14,000	14,000
Supply and Install STM2 (2400mm) c/w Connections	1	LS	35,000	35,000
Supply and Install STM3 (1500mm)	1	LS	14,000	14,000
Supply and Install STM4 (1500mm)	1	LS	14,000	14,000
Supply and Install Catch Basins in Roadway (600x600mm)	4	each	3,950	15,800
Supply and Install Catch Basins in Boulevard c/w Connections (600mmx600mm)	2	each	3,950	7,900
Supply and Install 825mmø Concrete Storm Sewer	172	m	850	146,200
Supply and Install 750mmø Concrete Storm Sewer	22	m	625	13,750
Supply and Install 600mmø Concrete Storm Sewer	10	m	495	4,950
Supply and Install 250mmø PVC DR35 Catch Basin Leads	32	m	325	10,400
Supply and Install 150mmø PVC DR28 Storm Services c/w 100mmø cleanout at Property Lines (10 cleanouts)	114	m	245	27,930
Reconnect Existing Storm Services	2	each	350	700
Connect Existing 450mm East to proposed 750mmø	1	LS	1,500	1,500
Contingency	1	LS	15,000	15,000
<u>Phase 2 (Toronto Street to #4579 Confederation Line)</u>				
Remove and Dispose of Existing Concrete Storm Sewer (All Sizes)	175	m	30	5,250
Remove and Dispose of Existing CSP Culverts at Station 0+440 and 0+470	2	ea	500	1,000
Remove and Dispose of Existing Catch Basin Leads (All Sizes)	8	m	50	400
Remove and Dispose of Existing Storm Leads (All Sizes)	10	m	50	500

<u>Item Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Cost (\$)</u>	<u>Total (\$)</u>
Remove and Dispose of Existing Catch Basins	7	each	400	2,800
Remove and Dispose of Existing Manholes	2	each	1,000	2,000
Remove Connection to 750mmø Storm	1	LS	800	800
Supply and Install STM5 (1800mm)	1	LS	15,500	15,500
Supply and Install STM6 (1200mm)	1	LS	9,000	9,000
Supply and Install STM7 (1200mm)	1	LS	9,000	9,000
Supply and Install Catch Basins in Roadway (600x600mm)	4	each	3,950	15,800
Supply and Install Catch Basins in Boulevard c/w Connections (600mmx600mm)	11	each	3,950	43,450
Supply and Install 750mmø Concrete Storm Sewer	58	m	750	43,500
Supply and Install 450mmø Concrete Storm Sewer	75	m	500	37,500
Supply and Install 375mmø PVC Storm Sewer	72	m	275	19,800
Supply and Install 600mmø Concrete Storm Sewer towards Norman	9	m	550	4,950
Connect Existing 450mmø to proposed 600mmø at Norman and Confed	1	LS	350	350
Supply and Install 250mmø PVC DR35 Catch Basin Leads	149	m	340	50,660
Supply and Install 150mmø PVC DR28 Storm Services c/w 100mmø cleanout at Property Lines (14 cleanouts)	147	m	245	36,015
Reconnect Existing Storm Services	6	each	450	2,700
Connect existing 150mmø to STM5	1	LS	350	350
Contingency	1	LS	25,000	25,000
				346,314
				326,325
				2,400
				9,930
				2,000
				2,000
				-
				420
				570
				689,959
				12,090
				\$ 702,049

SCHEDULE OF ASSESSMENT

Conc.	Lot or Part	Address	Affected Hectares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
Municipal Lands								
	Confederation Line		0.82		Town of Plympton-Wyoming	579,544	7,865	587,409
	Toronto Street		0.04		Town of Plympton-Wyoming	-	182	182
	Thelma Street		0.28		Town of Plympton-Wyoming	-	1,887	1,887
	Norman Street		0.73		Town of Plympton-Wyoming	6,859	5,062	11,921
	Broadway Street		0.00		County of Lambton	6,728	-	6,728
	Pt. of Lot 16		0.04	01-253-11	Town of Plympton-Wyoming	-	11	11
Total Municipal Lands						593,131	15,007	608,138
Non-Agricultural Lands								
3	Pt. of Lot 16	#717 Broadway Street	0.17	01-166	172965 Canada Limited	2,400	234	2,634
	Pt. of Lot 16	#721 Broadway Street	0.12	01-228	J.G. Lepage	2,400	156	2,556
	Pt. of Lot 16	#771 Broadway Street	0.46	01-235	G. Atkinson	-	957	957
	Pt. of Lot 16	#4515 Confederation Line	0.08	01-167	J. Morreau	2,400	104	2,504
	Pt. of Lot 16	#4517 Confederation Line	0.07	01-167-01	S. Millier	2,400	104	2,504
	Pt. of Lot 16	#4519 Confederation Line	0.17	01-168	N. Fisher	2,400	391	2,791
	Pt. of Lot 16	#4527 Confederation Line	0.08	01-169	Vanklavern Auctions Inc.	2,400	182	2,582
	Pt. of Lot 16	#4537 Confederation Line	0.12	01-209-01	J. Hamel	2,400	260	2,660
	Pt. of Lot 16	#4545 Confederation Line	0.13	01-210	R. Lambley	2,400	885	3,285
	Pt. of Lot 16	#4557 Confederation Line	0.12	01-210-01	E. Korvemaker	2,400	833	3,233
	Pt. of Lot 16	#4565 Confederation Line	0.17	01-211	C. Brinston	2,400	1,172	3,572
	Pt. of Lot 16	#4569 Confederation Line	0.15	01-218-01	D. Herdman	2,400	1,511	3,911
	Pt. of Lot 16	#4571 Confederation Line	0.15	01-218	M. Moffatt	2,400	1,511	3,911
	Pt. of Lot 16	#4577 Confederation Line	0.10	01-217-01	L. Sipkens	2,400	1,016	3,416
	Pt. of Lot 16	#4510 Confederation Line	0.12	01-273	B. Visscher	2,400	156	2,556
	Pt. of Lot 16	#4518 Confederation Line	0.14	01-272	E. Plangger	2,400	182	2,582
	Pt. of Lot 16	#4524 Confederation Line	0.40	01-271	Wyoming Christian Reformed	2,400	912	3,312
	Pt. of Lot 16	#4536 Confederation Line	0.13	01-269	C. Boere	2,400	417	2,817

Conc.	Lot or Part	Address	Affected Hectares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
	Pt. of Lot 16	#4540 Confederation Line	0.12	01-268-01	T. Gillespie	2,400	391	2,791
	Pt. of Lot 16	#4550 Confederation Line	0.22	01-239	M. Moesker	2,400	1,511	3,911
	Pt. of Lot 16	#4554 Confederation Line	0.22	01-238	B. Johnson	2,400	1,511	3,911
	Pt. of Lot 16	#4572 Confederation Line	0.62	01-237-20	J. Devlugt	2,400	3,880	6,280
	Pt. of Lot 16	#716 Toronto Street	0.05	01-170	M. Feeley	2,400	104	2,504
	Pt. of Lot 16	#717 Toronto Street	0.06	01-209	D. Vandenberghe	2,400	208	2,608
	Pt. of Lot 16	#721 Norman Street	0.15	01-268	H. Gubbels	4	498	502
	Pt. of Lot 16	#723 Norman Street	0.15	01-267	R. Robinson	4	498	502
	Pt. of Lot 16	#725 Norman Street	0.15	01-266	B. Neville	4	498	502
	Pt. of Lot 16	#727 Norman Street	0.15	01-265	T. Bryce	4	500	504
	Pt. of Lot 16	#729 Norman Street	0.15	01-264	S. Helman	4	500	504
	Pt. of Lot 16	#731 Norman Street	0.15	01-263	M. Boyd	4	500	504
	Pt. of Lot 16	#733 Norman Street	0.15	01-262	R. Cassells	4	500	504
	Pt. of Lot 16	#735 Norman Street	0.15	01-261	N. Carter	4	505	509
	Pt. of Lot 16	#737 Norman Street	0.15	01-260	D. Iverson	4	505	509
	Pt. of Lot 16	#739 Norman Street	0.15	01-259	D. Kovermaker	4	505	509
	Pt. of Lot 16	#741 Norman Street	0.15	01-258	S. Durocher	4	505	509
	Pt. of Lot 16	#745 Norman Street	0.14	01-255	J. Woods	4	485	489
	Pt. of Lot 16	#747 Norman Street	0.14	01-254	C. Visscher	4	485	489
	Pt. of Lot 16	#724 Norman Street	0.15	01-241	C. Major	4	498	502
	Pt. of Lot 16	#726 Norman Street	0.15	01-242	P. Pakalnis	4	500	504
	Pt. of Lot 16	#728 Norman Street	0.15	01-243	D. Lea	4	500	504
	Pt. of Lot 16	#730 Norman Street	0.15	01-244	L. Shea	4	500	504
	Pt. of Lot 16	#732 Norman Street	0.15	01-245	B. Guthrie	4	500	504
	Pt. of Lot 16	#734 Norman Street	0.15	01-246	C. Moesker	4	505	509
	Pt. of Lot 16	#736 Norman Street	0.15	01-247	C. Dwinnell	4	505	509
	Pt. of Lot 16	#738 Norman Street	0.15	01-248	J. Harris	4	505	509
	Pt. of Lot 16	#740 Norman Street	0.15	01-249	M. Armstrong	4	505	509
	Pt. of Lot 16	#742 Norman Street	0.15	01-250	P. Catton	4	505	509
	Pt. of Lot 16	#744 Norman Street	0.16	01-251	Town of Plympton-Wyoming	4	540	544
	Pt. of Lot 16	#746 Norman Street	0.16	01-252	Town of Plympton-Wyoming	4	540	544
	Pt. of Lot 16	Thelma Street	0.14	01-256	G. Atkinson	-	292	292
	Pt. of Lot 16	Thelma Street	0.25	01-257	G. Atkinson	-	531	531

Conc.	Lot or Part	Address	Affected Hecatares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
	Pt. of Lot 16	#749 Norman Street	0.13	01-253-01	A. Klapak	4	59	63
	Pt. of Lot 16	#751 Norman Street	0.15	01-253-02	J. Verhoeven	4	68	72
	Pt. of Lot 16	#753 Norman Street	0.17	01-253-03	G. Murray	4	77	81
	Pt. of Lot 16	#755 Norman Street	0.25	01-253-04	M. Steadman	4	89	93
	Pt. of Lot 16	#757 Norman Street	0.23	01-253-05	C. Callister	4	82	86
	Pt. of Lot 16	#759 Norman Street	0.13	01-253-06	E. Topliffe	4	46	50
	Pt. of Lot 16	#761 Norman Street	0.13	01-253-07	J. Hackett	4	46	50
	Pt. of Lot 16	#763 Norman Street	0.13	01-253-08	C. Gibbins	4	46	50
	Pt. of Lot 16	#748 Norman Street	0.16	01-253-10	G. Devries	4	72	76
	Pt. of Lot 16	#750 Norman Street	0.16	01-253-09	M. Carlton	4	72	76
Total Non-Agricultural Lands						55,340	32,655	87,995
Agricultural Lands (Eligible for Available Grants)								
3	W 1/2 E 1/2 Lot 16	#4576 Confederation Line	1.40	01-237	J. Devlugt	2,400	3,516	5,916
Total Agricultural Lands						2,400	3,516	5,916
Total Municipal Lands						608,138		
Total Non-Agricultural Lands						87,995		
Total Agricultural Lands						<u>5,916</u>		
Total Assessment						\$702,049		

SCHEDULE OF MAINTENANCE - CONFEDERATION LINE EAST DRAIN
To Maintain and Repair the Confederation Line East Drain from STM2 to STM7

Conc.	Lot or Part	Address	Affected Hectares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
Municipal Lands								
	Confederation Line		0.82		Town of Plympton-Wyoming	7,242	302	7,544
	Toronto Street		0.04		Town of Plympton-Wyoming	-	7	7
	Thelma Street		0.28		Town of Plympton-Wyoming	-	71	71
	Norman Street		0.73		Town of Plympton-Wyoming	-	184	184
	Broadway Street		0.00		County of Lambton	360	-	360
	Total Municipal Lands					7,602	564	8,166
Non-Agricultural Lands								
3	Pt. of Lot 16	#717 Broadway Street	0.17	01-166	172965 Canada Limited	20	9	29
	Pt. of Lot 16	#721 Broadway Street	0.12	01-228	J.G. Lepage	20	6	26
	Pt. of Lot 16	#771 Broadway Street	0.46	01-235	G. Atkinson	-	36	36
	Pt. of Lot 16	#4515 Confederation Line	0.08	01-167	J. Morreau	20	4	24
	Pt. of Lot 16	#4517 Confederation Line	0.07	01-167-01	S. Millier	20	4	24
	Pt. of Lot 16	#4519 Confederation Line	0.17	01-168	N. Fisher	20	15	35
	Pt. of Lot 16	#4527 Confederation Line	0.08	01-169	Vanklavern Auctions Inc.	20	7	27
	Pt. of Lot 16	#4537 Confederation Line	0.12	01-209-01	J. Hamel	20	10	30
	Pt. of Lot 16	#4545 Confederation Line	0.13	01-210	R. Lambley	20	34	54
	Pt. of Lot 16	#4557 Confederation Line	0.12	01-210-01	E. Korvemaker	20	32	52
	Pt. of Lot 16	#4565 Confederation Line	0.17	01-211	C. Brinston	20	45	65
	Pt. of Lot 16	#4569 Confederation Line	0.15	01-218-01	D. Herdman	20	58	78
	Pt. of Lot 16	#4571 Confederation Line	0.15	01-218	M. Moffatt	20	58	78
	Pt. of Lot 16	#4577 Confederation Line	0.10	01-217-01	L. Sipkens	20	39	59
	Pt. of Lot 16	#4510 Confederation Line	0.12	01-273	B. Visscher	20	6	26
	Pt. of Lot 16	#4518 Confederation Line	0.14	01-272	E. Plangger	20	7	27
	Pt. of Lot 16	#4524 Confederation Line	0.40	01-271	Wyoming Christian Reformed	20	35	55
	Pt. of Lot 16	#4536 Confederation Line	0.13	01-269	C. Boere	20	16	36
	Pt. of Lot 16	#4540 Confederation Line	0.12	01-268-01	T. Gillespie	20	15	35

Conc.	Lot or Part	Address	Affected Hectares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
	Pt. of Lot 16	#4550 Confederation Line	0.22	01-239	M. Moesker	20	58	78
	Pt. of Lot 16	#4554 Confederation Line	0.22	01-238	B. Johnson	20	58	78
	Pt. of Lot 16	#4572 Confederation Line	0.62	01-237-20	J. Devlugt	20	149	169
	Pt. of Lot 16	#716 Toronto Street	0.05	01-170	M. Feeley	20	4	24
	Pt. of Lot 16	#717 Toronto Street	0.06	01-209	D. Vandenberghe	20	8	28
	Pt. of Lot 16	#721 Norman Street	0.15	01-268	H. Gubbels	-	19	19
	Pt. of Lot 16	#723 Norman Street	0.15	01-267	R. Robinson	-	19	19
	Pt. of Lot 16	#725 Norman Street	0.15	01-266	B. Neville	-	19	19
	Pt. of Lot 16	#727 Norman Street	0.15	01-265	T. Bryce	-	19	19
	Pt. of Lot 16	#729 Norman Street	0.15	01-264	S. Helman	-	19	19
	Pt. of Lot 16	#731 Norman Street	0.15	01-263	M. Boyd	-	19	19
	Pt. of Lot 16	#733 Norman Street	0.15	01-262	R. Cassells	-	19	19
	Pt. of Lot 16	#735 Norman Street	0.15	01-261	N. Carter	-	19	19
	Pt. of Lot 16	#737 Norman Street	0.15	01-260	D. Iverson	-	19	19
	Pt. of Lot 16	#739 Norman Street	0.15	01-259	D. Kovermaker	-	19	19
	Pt. of Lot 16	#741 Norman Street	0.15	01-258	S. Durocher	-	19	19
	Pt. of Lot 16	#745 Norman Street	0.14	01-255	J. Woods	-	18	18
	Pt. of Lot 16	#747 Norman Street	0.14	01-254	C. Visscher	-	18	18
	Pt. of Lot 16	#724 Norman Street	0.15	01-241	C. Major	-	19	19
	Pt. of Lot 16	#726 Norman Street	0.15	01-242	P. Pakalnis	-	19	19
	Pt. of Lot 16	#728 Norman Street	0.15	01-243	D. Lea	-	19	19
	Pt. of Lot 16	#730 Norman Street	0.15	01-244	L. Shea	-	19	19
	Pt. of Lot 16	#732 Norman Street	0.15	01-245	B. Guthrie	-	19	19
	Pt. of Lot 16	#734 Norman Street	0.15	01-246	C. Moesker	-	19	19
	Pt. of Lot 16	#736 Norman Street	0.15	01-247	C. Dwinnell	-	19	19
	Pt. of Lot 16	#738 Norman Street	0.15	01-248	J. Harris	-	19	19
	Pt. of Lot 16	#740 Norman Street	0.15	01-249	M. Armstrong	-	19	19
	Pt. of Lot 16	#742 Norman Street	0.15	01-250	P. Catton	-	19	19
	Pt. of Lot 16	#744 Norman Street	0.16	01-251	Town of Plympton-Wyoming	-	20	20
	Pt. of Lot 16	#746 Norman Street	0.16	01-252	Town of Plympton-Wyoming	-	20	20
	Pt. of Lot 16	Thelma Street	0.14	01-256	G. Atkinson	-	11	11
	Pt. of Lot 16	Thelma Street	0.25	01-257	G. Atkinson	-	20	20
					Total Non-Agricultural Lands	460	1,219	1,679
Agricultural Lands (Eligible for Available Grants)								
3	W 1/2 E 1/2 Lot 16	#4576 Confederation Line	1.40	01-237	J. Devlugt	20	135	155
					Total Agricultural Lands	20	135	155
					Total Municipal Lands	8,166		
					Total Non-Agricultural Lands	1,679		
					Total Agricultural Lands	155		
					Total Assessment	\$10,000		

SCHEDULE OF MAINTENANCE - NORMAN STREET SOUTH DRAIN
To Maintain and Repair the Norman Street South Drain from STM5 to STM11

Conc.	Lot or Part	Address	Affected Hecatares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
Municipal Lands								
	Confederation Line		0.00		Town of Plympton-Wyoming	360	-	360
	Thelma Street		0.28		Town of Plympton-Wyoming	-	191	191
	Norman Street		0.73		Town of Plympton-Wyoming	7,245	432	7,677
	Total Municipal Lands					7,605	623	8,228
Non-Agricultural Lands								
3	Pt. of Lot 16	#771 Broadway Street	0.46	01-235	G. Atkinson	-	98	98
	Pt. of Lot 16	#721 Norman Street	0.15	01-268	H. Gubbels	20	14	34
	Pt. of Lot 16	#723 Norman Street	0.15	01-267	R. Robinson	20	14	34
	Pt. of Lot 16	#725 Norman Street	0.15	01-266	B. Neville	20	14	34
	Pt. of Lot 16	#727 Norman Street	0.15	01-265	T. Bryce	20	28	48
	Pt. of Lot 16	#729 Norman Street	0.15	01-264	S. Helman	20	28	48
	Pt. of Lot 16	#731 Norman Street	0.15	01-263	M. Boyd	20	28	48
	Pt. of Lot 16	#733 Norman Street	0.15	01-262	R. Cassells	20	28	48
	Pt. of Lot 16	#735 Norman Street	0.15	01-261	N. Carter	20	51	71
	Pt. of Lot 16	#737 Norman Street	0.15	01-260	D. Iverson	20	51	71
	Pt. of Lot 16	#739 Norman Street	0.15	01-259	D. Kovermaker	20	51	71
	Pt. of Lot 16	#741 Norman Street	0.15	01-258	S. Durocher	20	51	71
	Pt. of Lot 16	#745 Norman Street	0.14	01-255	J. Woods	20	82	102
	Pt. of Lot 16	#747 Norman Street	0.14	01-254	C. Visscher	20	82	102
	Pt. of Lot 16	#724 Norman Street	0.15	01-241	C. Major	20	14	34
	Pt. of Lot 16	#726 Norman Street	0.15	01-242	P. Pakalnis	20	28	48
	Pt. of Lot 16	#728 Norman Street	0.15	01-243	D. Lea	20	28	48
	Pt. of Lot 16	#730 Norman Street	0.15	01-244	L. Shea	20	28	48

Conc.	Lot or Part	Address	Affected Hectares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
	Pt. of Lot 16	#732 Norman Street	0.15	01-245	B. Guthrie	20	28	48
	Pt. of Lot 16	#734 Norman Street	0.15	01-246	C. Moesker	20	51	71
	Pt. of Lot 16	#736 Norman Street	0.15	01-247	C. Dwinnell	20	51	71
	Pt. of Lot 16	#738 Norman Street	0.15	01-248	J. Harris	20	51	71
	Pt. of Lot 16	#740 Norman Street	0.15	01-249	M. Armstrong	20	51	71
	Pt. of Lot 16	#742 Norman Street	0.15	01-250	P. Catton	20	51	71
	Pt. of Lot 16	#744 Norman Street	0.16	01-251	Town of Plympton-Wyoming	20	94	114
	Pt. of Lot 16	#746 Norman Street	0.16	01-252	Town of Plympton-Wyoming	20	94	114
	Pt. of Lot 16	Thelma Street	0.14	01-256	G. Atkinson	-	30	30
	Pt. of Lot 16	Thelma Street	0.25	01-257	G. Atkinson	-	53	53
Total Non-Agricultural Lands						500	1,272	1,772
Total Municipal Lands						8,228		
Total Non-Agricultural Lands						<u>1,772</u>		
Total Assessment						\$10,000		

SCHEDULE OF MAINTENANCE
 To Maintain and Repair the King-Anderson Drain Extension from STM17 to STM12

Conc.	Lot or Part	Address	Affected Hecatares	Roll No.	Owner	Benefit (\$)	Outlet (\$)	Total (\$)
Municipal Lands								
	Norman Street		0.23		Town of Plympton-Wyoming	5,548	918	6,466
	Pt. of Lot 16		0.04	01-253-11	Town of Plympton-Wyoming	-	57	57
Total Municipal Lands						5,548	975	6,523
Non-Agricultural Lands								
3	Pt. of Lot 16	#749 Norman Street	0.13	01-253-01	A. Klapak	20	293	313
	Pt. of Lot 16	#751 Norman Street	0.15	01-253-02	J. Verhoeven	20	338	358
	Pt. of Lot 16	#753 Norman Street	0.17	01-253-03	G. Murray	20	383	403
	Pt. of Lot 16	#755 Norman Street	0.25	01-253-04	M. Steadman	20	443	463
	Pt. of Lot 16	#757 Norman Street	0.23	01-253-05	C. Callister	20	408	428
	Pt. of Lot 16	#759 Norman Street	0.13	01-253-06	E. Topliffe	20	230	250
	Pt. of Lot 16	#761 Norman Street	0.13	01-253-07	J. Hackett	20	230	250
	Pt. of Lot 16	#763 Norman Street	0.13	01-253-08	C. Gibbins	20	230	250
	Pt. of Lot 16	#748 Norman Street	0.16	01-253-10	G. Devries	20	361	381
	Pt. of Lot 16	#750 Norman Street	0.16	01-253-09	M. Carlton	20	361	381
Total Non-Agricultural Lands						200	3,277	3,477
Total Municipal Lands						6,523		
Total Non-Agricultural Lands						3,477		
Total Assessment						\$10,000		

King-Anderson Drain
 Town of Plympton-Wyoming
 February 14, 2024

Engineers Report dated September 4, 2009

As per Section 65 of the Drainage Act, I recommend that the maintenance assessment as contained in **Schedule 'C' - Schedule of Assessment** of the report be apportioned as follows:

Address	Roll Number	Hectares Affected	Owner	Benefit	Outlet	Total	
Existing Assessment							
	001-253	<u>1.750</u>	O. Redick & R. McGeachy	<u>24,132.00</u>	<u>4,482.00</u>	<u>28,614.00</u>	
		1.750		24,132.00	4,482.00	28,614.00	
Proposed Assessment							
#749	Norman Street	01-253-01	0.13	A. Klapak	2,413.20	346.82	2,760.02
#751	Norman Street	01-253-02	0.15	J. Verhoeven	2,413.20	400.18	2,813.38
#753	Norman Street	01-253-03	0.17	G. Murray	2,413.20	453.54	2,866.74
#755	Norman Street	01-253-04	0.25	M. Steadman	2,413.20	666.96	3,080.16
#757	Norman Street	01-253-05	0.23	C. Callister	2,413.20	613.61	3,026.81
#759	Norman Street	01-253-06	0.13	E. Topliffe	2,413.20	346.82	2,760.02
#761	Norman Street	01-253-07	0.13	J. Hackett	2,413.20	346.82	2,760.02
#763	Norman Street	01-253-08	0.13	C. Gibbins	2,413.20	346.82	2,760.02
#748	Norman Street	01-253-10	0.16	G. Devries	2,413.20	426.86	2,840.06
#750	Norman Street	01-253-09	0.16	M. Carlton	2,413.20	426.86	2,840.06
Pt. of Lot 16		01-253-11	<u>0.04</u>	Town of Plympton-Wyoming		106.71	106.71
			1.68		24,132.00	4,482.00	28,614.00

Total Assessment for Main Drain: \$ 129,300

McAusland-Williams Drain Extension
 Town of Plympton-Wyoming
 February 14, 2024

Engineers Report dated November 13, 1972

As per Section 65 of the Drainage Act, I recommend that the maintenance assessment as contained in the **Schedule of Assessment** of the report be revised as follows:

Concession	Lot or Part	Roll Number	Acres Affected	Owner	Benefit	Outlet	Total	Notes
Existing Assessment								
2	Pt. Lot 15		0.64	K. Gray	87.00	13.00	100.00	Severed into 01-232 and 01-232-01
	Pt. Lot 15		0.20	I. Symington		14.00	14.00	Removed from Drainage Area
	Pt. Lot 15		0.21	Christian Reformed Church Manse		14.00	14.00	Removed from Drainage Area
	Pt. Lot 15		2.200	Christian Reformed Church Manse	254.00	89.00	343.00	} Merged to form 01-271 and Area Changed
	Pt. Lot 15		0.750	N. Reddick	70.00	77.00	147.00	
R.P.	567: Lots 5 to 10 14 & 15		1.540	Homex Realty Development Co. Ltd..	35.00	157.00	192.00	Removed from Drainage Area
			0.410	N. Atkinson	21.00	29.00	50.00	Severd into 01-256 and 01-257
			<u>4.900</u>		<u>467.00</u>	<u>393.00</u>	<u>860.00</u>	
Proposed Assessment								
2	Pt. of Lot 16	01-232	0.60	M. Piggott	44.00	8.00	52.00	
	Pt. of Lot 16	01-232-01	0.41	M. Reynolds	43.00	5.00	48.00	
	Pt. of Lot 16	01-271	2.42	Wyoming Christian Reformed	324.00	136.00	460.00	
	Pt. of Lot 16	01-256	0.05	G. Atkinson	2.00	3.00	5.00	
	Pt. of Lot 16	01-257	0.40	G. Atkinson	19.00	26.00	45.00	
			<u>2.87</u>		<u>432.00</u>	<u>178.00</u>	<u>610.00</u>	

1170 Previous Total Assesment
 920 Revised Total Assessment

Confederation Line East Drain, Norman Street South Drain and Extension of the King-Anderson Drain 2024
Town of Plympton-Wyoming
February 14, 2024

SPECIFICATION OF WORK

1. Location

The location of the proposed and future work contained in this specification is located on Confederation Line, Norman Street and the storm easement at the north end of Norman Street.

2. Scope of Work

The work to be included in this specification includes, but is not limited to, the following:

- Supply and Installation of Storm Drain
- Supply and Installation of Catch Basins and Manholes

3. General

Each tenderer must inspect the site prior to submitting their tender and satisfy themselves by personal examination as to the local conditions that may be encountered during this project. The Contractor shall make allowance in their tender for any difficulties which they may encounter. Quantities or any information supplied by the Engineer is not guaranteed and is for reference only.

All work and materials shall be to the satisfaction of the Drainage Superintendent who may vary these specifications as to minor details but in no way decrease the proposed capacity of the drain.

If the Construction document has not identified Measurement for Payment Clauses, the Contractor must notify the Town of Plympton-Wyoming and request clarification 2 days prior to pricing the project.

The Contractor shall provide for the maintenance of flow in all sewers and maintenance holes at all times.

4. Plans and Specifications

This Specification of Work shall take precedence over all plans and general conditions pertaining to the Contract. The Contractor shall provide all labour, equipment, and supervision necessary to complete the work as shown in the Plans and described in these specifications. Any work not described in these specifications shall be completed according to the Ontario Provincial Standard Specifications and Standard Drawings.

5. Health and Safety

The Contractor at all times shall be responsible for health and safety on the worksite including ensuring that all employees wear suitable personal protective equipment including safety boots and hard hats.

When applicable the Contractor shall be responsible for traffic control as per the Ontario Traffic Manual Book 7 – Temporary Conditions (latest revision).

The Contractor shall be responsible to ensure that all procedures are followed under the Occupational Health and Safety Act to ensure that work sites are safe and that accidents are prevented. In the event of a serious or recurring problem, a notice of non-compliance will be issued. The Contractor will be responsible for reacting immediately to any deficiency and correcting any potential health and safety risk. Continuous disregard for any requirement of the Occupational Health and Safety Act could be cause for the issuance of a stop work order or even termination of the Contract.

The Contractor shall also ensure that only competent workers are employed onsite and that appropriate training and certification is supplied to all employees.

The Contractor shall submit their traffic control plan within 10 working days of notice of award. Road closures will not be permitted on this project without the approval of the Town of Plympton-Wyoming.

6. Workplace Safety and Insurance Board

The Contractor hereby certifies that all employees and officers working on the project are covered by benefits provided by the Contractor. The WSIB Clearance Certificate must be furnished prior to the execution of the Contract and updated every 90 days.

7. Traffic Control

Access and driveways to private properties shall not be obstructed longer than the minimum time necessary for the work and shall be reinstated as soon as possible all to the satisfaction of the Engineer. The Contractor shall schedule any obstruction of existing driveways with the owners at least two full working days in advance. All Landowners must be contacted at least 48 hours prior to a road closure. The Traffic Plan must be approved by the Town and County prior to the commencement of any road closures.

- a) The Contractor shall supply, erect and maintain all detour signs and special signs necessary for detours to divert traffic from the area under construction as directed by the Drainage Superintendent or Engineer. All this work shall be at the Contractor's expense.
- b) The Contractor shall be responsible for supplying, erecting and maintaining all signs, supports, barricades, flashers, cones, etc. in the construction area and at the boundaries of the work as part of the above detours, all to the satisfaction of the Engineer or Drainage Superintendent. All this work shall be done by the Contractor at their own expense.
- c) The Contractor shall not be allowed to proceed with construction activities unless proper signage and flagmen are present. Flagging procedures, signage and detours shall conform to the recommendations of Book 7, Temporary Conditions, Ontario Traffic Manual, issued by the Ministry of Transportation. Conformance shall be enforced by the Ministry of Labour Inspector.

8. Benchmarks

The benchmarks are based on geodetic elevations. Elevations are available at the locations shown on the Profile drawings.

The Contractor is required to complete a benchmark loop prior to construction to verify the benchmarks. If discrepancies exist the Contractor must notify the Drainage Superintendent and Engineer prior to completing any work.

9. Access and Working Area

Access to the site for construction and future construction and maintenance of the drain shall be from Confederation Line, Norman Street and through the town owned sewer easement at the north end of Norman Street.

The working area for the construction and future construction and maintenance of the drain shall be within Confederation Line, Norman Street and the sewer easement at the north end of Norman Street. The working area shall extend 2m into private property at the storm services for a width of 5m.

This can be changed under direction of the Drainage Superintendent or Engineer at the time of construction or maintenance.

10. Utilities

The Contractor is responsible for organizing locates and exposing all the utilities along the length of the drainage works. If any utilities interfere with the proposed drainage works in a manner not shown on the accompanying Estimate of Cost or profile the Contractor shall notify the Drainage Superintendent and Engineer.

The Contractor is responsible for coordinating the replacement of additional utilities with the utility company if they interfere with the proposed drain. All costs for the utility to replace their services will be outside of this report and shall be borne by the utility as per Section 26 of the Drainage Act.

All additional costs to work around and organize replacement of the utilities not included in the estimate shall be tracked separately and the cost plus a portion of the engineering (25% of the cost) shall be borne by that utility.

11. Brushing and Tree Removal (FUTURE)

All brush, trees, woody vegetation, stumps etc. within the working area of the proposed improvements and as determined by the Contract Administrator shall be removed and disposed of offsite by the Contractor.

12. Removal of Existing Storm Sewer, Storm Leads, Catch Basin Leads and Culverts

For the unit price bid the Contractor shall supply all labour, equipment and materials to remove and backfill existing storm sewers as indicated on the contract drawings and as determined by the Contract Administrator at the time of construction.

The unit price bid shall also include the granular backfill material. Backfill to be compacted to a minimum dry density of 100%.

Excavated material and storm sewer pipe shall be disposed of offsite by the Contractor with the cost of this work being included in the unit price bid.

13. Pressure Grout Existing Culverts and Storm Sewer

The Contractor shall supply all labour, equipment and materials for the injection of grout to completely fill the existing sewers and culverts as indicated in the drawings or that cannot be removed. Any grout spilled shall be cleaned up by the Contractor immediately.

14. Removal of Existing Maintenance Holes and Catch Basins

The Contractor shall supply all labour, equipment and material required to excavate, remove and dispose of the maintenance holes and catch basins shown on the drawings or as indicated by the Contract Administrator at the time of construction. The Contractor shall backfill the excavation with Granular B Type I, compact the excavation and dispose of all debris to the satisfaction of the Contract Administrator. All existing frames and grates removed are the property of the owner and shall be delivered to the owner's yard at the Contractor's expense. It will be the Contractor's responsibility to seal off any existing pipes or reconnect to new outlets.

15. Supply and Install Storm Drain and Catch Basin Leads

For the unit price bid, the Contractor shall supply all labour, equipment and materials for the complete installation and testing of the storm sewers as indicated on the contract drawings and as outlined by OPSS 410.

Material

OPSS 410.05 materials is amended to accept the following pipe material for storm sewers:

- (a) Concrete Sewer Pipe (Rigid)
 - 450 mm or greater reinforced– CSA certified to A257.2, 65-D
- (b) Polyvinyl Chloride (PVC) Pipe (Flexible)
 - Class SDR 35 or Class V (320 kPa)
 - Annular ribbed profile for ribbed pipe
 - 200mm to 375mm Inclusive Class SDR35 or Class V (320kPa)
- (c) Catch Basins Laterals Polyvinyl Chloride (PVC) Pipe (Flexible)
 - 250mm to 300mm as specified in the Form of Tender – CSA Certified SDR35

If pipe material selected differs from that specified in the Form of Tender, the Contractor shall, upon request, supply the Contract Administrator with proof of CSA

certification for both the pipe and the elastomeric gaskets, all at the expense of the Contractor.

The Contractor shall supply the pipe in the size and strength designated, as noted in the Form of Tender or approved equivalent by the Contract Administrator.

Catch Basin Leads with flexible mainline sewer pipe shall be connected with factory manufactured tees. Service tees for use with rigid mainline sewer to be factory installed “Inserta” tees or approved equal. “Inserta” tees to be the same diameter or larger than the servicing piping. All required reducers shall be included in the unit price bid for this item.

Bedding and Backfill

Bedding detail shall apply to all sewers and services requiring OPS Granular ‘A’ bedding and cover material to 300mm above the pipe. The Granular ‘A’ is not required to be 100% crushed limestone, quarry stone material conforming to OPSS 1010 is acceptable. Compacted to 100% SPMDD as per the Geotechnical Report.

All excavated excess native material deemed acceptable shall be stockpiled on site at a designated location for re-use.

All service piping (watermain and storm sewers) within the County of Lambton (Broadway Street/CR 21) road allowance shall be backfilled with OPS Granular ‘A’ from 300mm above the pipe to the underside of the proposed asphalt pavement.

Backfill shall be placed in uniform layers not exceeding 300mm in thickness for the full width of the trench and compacted to the specified density before a subsequent layer is placed.

The unit price bid shall include the cost of all granular bedding, embedment cover material and the backfilling noted herein.

All excavated material not required for backfill shall be disposed offsite at the expense of the Contractor.

Field Testing

OPSS.MUNI 410.07.16 – Field Testing has been amended as follows:

410.07.16.05-Deflection Testing of Pipe Sewers is always a requirement when using flexible pipe. The unit price bid for the flexible pipe shall include all costs of this testing.

410.07.16.06-Closed Circuit Television Inspection of Pipelines is a requirement of the contract. All work shall be in accordance with OPSS 409-Construction Specification for Closed-Circuit Television Inspection of Pipelines. The unit price bid for the sewer installation shall include the cost of the CCTV inspection.

The Contractor shall engage a Closed-Circuit Television Inspection Contractor and coordinate the work to have it completed prior to achieving substantial performance for the contract.

The General Contractor will be responsible for hiring the Closed-Circuit Television Inspection Contractor directly, however, the Closed-Circuit Television inspection work will be carried out to the satisfaction of the Contract Administrator.

Should deficiencies be identified upon review of the camera inspection video, the deficiencies shall be promptly corrected and re-inspected with CCTV inspection. All costs associated with the CCTV inspections shall be borne by the Contractor.

Compaction shall be as per OPSS.MUNI 501 – Construction Specification for Compacting. The type of compaction equipment used shall be suited to the material to be compacted, degree of compaction required, and space available. Selection of compaction equipment shall be determined by the Contractor with a list of the proposed equipment being submitted at the pre- construction meeting.

Backfill shall be placed to a minimum depth of 900mm above the crown of the pipe before power operated rolling equipment shall be used for compacting.

All costs of compaction and water used for compaction shall be included in the unit price for sewer.

Connecting Sewers

For the unit price bid, the Contractor will be required, to make all connections to new and existing catch basins, maintenance holes, culverts, or sewers (regardless of pipe material) in a manner set out in the contract drawings or as determined by the Contract Administrator at the time of construction.

The proposed 750mm dia. storm sewer shall be connected to the existing 450mm dia. storm sewer at the end of Phase 1 and the proposed 600mm dia. storm sewer shall be connected to the existing 450mm dia. storm sewer with a concrete collar approved by the Contract Administrator. The 750mm dia. and 450mm dia. storm connection shall be removed at the start of Phase 2 and the 750mm dia. storm sewer shall be removed as determined by the Contract Administrator.

16. Supply and Install Storm Manholes

The Contractor shall supply all labour, equipment and materials for the complete installation of the structures and in accordance with OPSS 407. The sizes of the structures are as noted on the Form of Tender and on the contract drawing.

The lump sum price shall include excavation, supply and installation of precast concrete storm manholes per OPSD-701 series complete with precast adjustment units, “Kor-n-Seal” boots or approved equivalent and frame and grates per OPSD-401.01 Type A. Benching and channeling shall be per OPSD-701.021.

Backfill shall be clean, select, native material compacted to 98% Standard Proctor Maximum Dry Density (SPMDD) with the upper one meter compacted to 98% SPMDD.

The Contractor shall excavate to the required grade, supply the necessary granular bedding and backfill and compact the material in accordance with OPSS.MUNI 402.

Steel reinforcement shall be according to OPSS.MUNI.1440. Steel reinforcement for precast concrete components shall be:

- a) Steel bars, 400MPa minimum yield strength
- b) Welded steel wire, 500 MPa minimum yield strength
- c) Welded deformed steel wire, 500 MPA minimum yield strength

The Contractor shall supply and install frames and grates as listed on the drawings to the grade established at the time of construction. Adjustment of the frame and grate to grade shall be achieved using precast concrete adjustment units. The Contractor shall supply ladder rungs and all materials to make all connections to existing sewers. All surfaces on the frames and grates shall be painted in the shop with one coat of asphalt or tar base paint having a minimum softening point of 71°C. All joints shall be thoroughly coated.

Where new maintenance holes are to be constructed on existing sewers, the Contractor will be required to maintain the sewage flow by either piping through the maintenance hole location or providing by-pass pumping around the maintenance hole site. Prior to the commencement of work, the Contract Administrator shall approve the method proposed by the Contractor for maintaining flow.

Parging

The precast adjustment units will be grouted into place by means of an approved mortar mix and shall be parged inside and outside with 12 mm thick mortar coat.

The outside of the precast adjustment units shall be completely wrapped with Denso LT Tape/Denso Paste. The Denso material shall completely cover the adjustment units and overlap onto the frame and concrete structure. All Denso products shall be applied as per the Manufacturer's recommendations.

Compaction shall be as per OPSS.MUNI 501 – Construction Specification for Compacting. The type of compaction equipment used shall be suited to the material to be compacted, degree of compaction required, and space available. Selection of compaction equipment shall be determined by the Contractor with a list of the proposed equipment being submitted at the pre- construction meeting.

Payment for the structure shall be 80% of the unit price for the installation and 20% of unit price upon completion of parging, removal of debris from the bottom of the structure and benching when applicable.

17. Supply and Install Catch Basins

For the unit price bid, the Contractor shall supply all labour, equipment and materials for the complete installation of the structures as indicated on the contract drawings and in accordance with OPSS 407, and OPSD 705.010 complete with precast adjustment units, and frame and grates per OPSD-400.02. The sizes of the structures are as noted on the Form of Tender and on the contract drawing.

The Contractor shall excavate to the required grade, supply the necessary granular bedding and backfill and compact the material in accordance with OPSS.MUNI 402.

The Contractor shall supply and install frame and grates as listed on the contract drawings to the grade established at the time of construction. Adjustment of the frame and grate to grade shall be achieved using precast concrete adjustment units and shall include the cost of connecting new basins to existing sewers as determined at the time

of construction. All surfaces on the frame and grates shall be painted in the shop with one coat of asphalt or tar base paint having a minimum softening point of 71°C. All joints shall be thoroughly coated.

Parging

The precast adjustment units will be grouted into place by means of an approved mortar mix and shall be parged inside and outside with 12 mm thick mortar coat.

Compaction shall be as per OPSS.MUNI 501 – Construction Specification for Compacting. The type of compaction equipment used shall be suited to the material to be compacted, degree of compaction required, and space available. Selection of compaction equipment shall be determined by the Contractor with a list of the proposed equipment being submitted at the pre- construction meeting.

Payment for the structure shall be 80% of the unit price for the installation and the remaining 20% of the unit price upon completion of parging and removal of debris from the bottom of the structure.

18. Reconnect Existing Drains and Services (up to 250 mm dia.)

For the unit price bid, the Contractor shall supply all labour, equipment and material to excavate for, supply and install, reconnect and backfill all existing drains and/or services encountered at the time of construction. All connections shall be made with approved couplings (Fernco or equivalent).

Payment under this item will only be paid when it is determined by the Contract Administrator that the work is required to:

- Relocate drains and services that conflict with the sewer and/or watermain in horizontal or vertical alignment.
- Repair any drains and services encountered that have not been shown on the drawings.

The Contractor is responsible for replacing all other broken or damaged drains and services encountered in the excavation.

Pipe Material

Pipe material for repairs shall be PVC SDR-28 for 100 mm – 150 mm diameter and PVC SDR-35 for 200 mm – 250 mm diameter.

Bedding, Embedment and Backfill

Bedding shall be as per OPSD 802.010, OPSD 802.013 or 802.014 for flexible pipe and whichever soil type is applicable.

Backfill material shall be Granular A to 300 mm (min) above the top of the pipe.

19. Supply and Install Storm Services

For the unit price bid, the Contractor shall supply all labour, equipment and materials for the complete installation of the storm services as indicated on the contract drawings. The sizes of the services are as noted on the Form of Tender. The unit price bid shall also include the cost of the main line service tee and end cap required for each service.

Service tees for use with flexible mainline sewer pipe shall be factory manufactured tees. Service tees for use with rigid mainline sewer to be factory installed "Inserta" tees or approved equal. Inserta tees to be the same diameter or larger than the servicing piping. All required reducers shall be included in the unit price bid for this item.

The service connections shall be as per OPSD 1006.010 for sewer service connections for main pipe sewer.

Pipe Material

Pipe material for storm sewer services shall be polyvinyl chloride (PVC) SDR-28 (Green colour).

Bedding and Backfill

Bedding and cover shall be as per OPSD 1006.010 for service connections.

Bedding embedment and cover material to 300mm above top of pipe shall be compacted Granular "A". Bedding and cover shall be placed in uniform layers not exceeding 200mm in thickness, loose measurement, and compacted to 95% of the maximum dry density before a subsequent layer is placed.

Backfill of storm service under the road platform shall match mainline storm sewer backfill material. Backfill beyond the road platform shall be select native

material. Native material shall be compacted to a minimum dry density of 95%. If granular material is specified, it shall be compacted to a minimum dry density of 100%. Backfill shall be placed in uniform layers not exceeding 300mm in thickness for the full width of the trench and compacted to the specified density before a subsequent layer is placed.

All excavated material not required for backfill shall be disposed of offsite at the expense of the Contractor.

Compaction shall be as per OPSS.MUNI 501 – Construction Specification for Compacting. The type of compaction equipment used shall be suited to the material to be compacted, degree of compaction required, and space available. Selection of compaction equipment shall be determined by the Contractor with a list of the proposed equipment being submitted at the pre- construction meeting.

All bedding, embedment, cover and backfill materials shall be placed in layers prior to compacting in accordance with OPSS.MUNI 401.07.10.

Installation of Services

For the unit price bid, the Contractor shall include the cost of connecting to existing storm services with the approved fittings and material to make the connection (Fernco or equivalent). The unit price bid shall include all restoration outside the limits of the grading operations of the road reconstruction part of the project, when applicable. Service locations shown in the drawings are for reference only, the Contractor shall confirm their location at the time of excavation.

All services to vacant lots or previously unserviced lots, shall include an end cap and the ends of all services shall be marked by a 50 mm x 100 mm wood post extending from the service to 300 mm above the surface of the ground with the top section painted fluorescent green. The post shall be supplied and placed by the Contractor.

20. Supply and Install Storm Cleanouts

All services shall have a storm cleanout at the property line. For the unit price bid, the Contractor shall supply all labour and materials for the complete installation of service cleanouts.

Cleanouts shall have a 100 mm diameter, cast iron cap, EMCO #DF44 c/w solvent weld bushing or approved equal. Adaptors to be provided as required.

Each cleanout, for a vacant lot or previously unserviced lot, shall be clearly marked with a minimum of 2.0 m of 50 x 100 wooden post. Each cleanout for an occupied property shall be terminated with the cover flush to the surrounding surface.

Basis of Payment

Payment shall be as follows:

- 80% for all piping
- 20% for the installation of the cleanout cap to finish grade

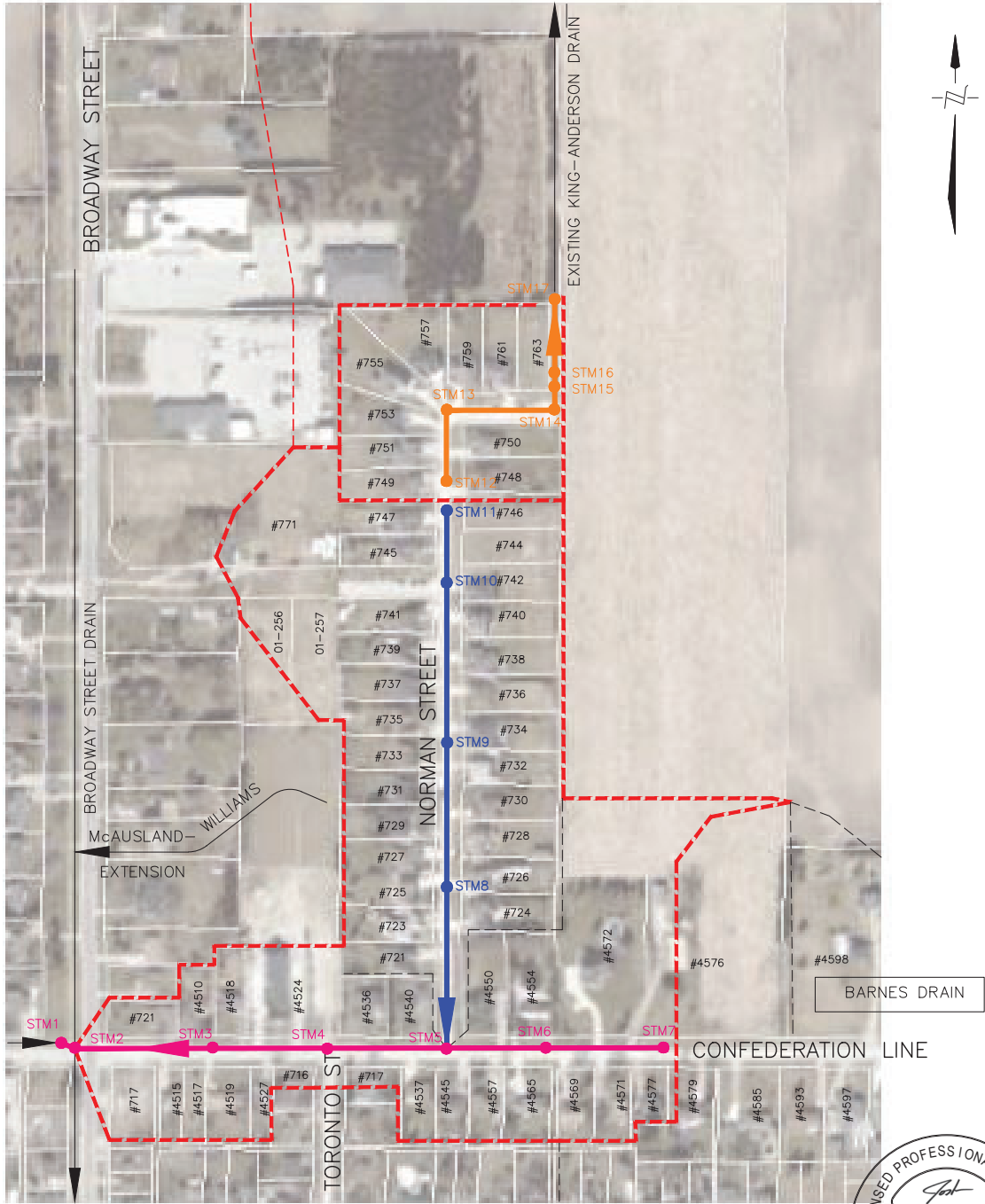
21. Restoration

All areas disturbed by construction shall be restored to their pre-construction state with 100mm of screened topsoil and hydroseed in accordance with the seed mixture, fertilizer and application rate as shown below.

Seed mixture, fertilizer and application rates are as follows:

- Hydraulic mulch (2,999 kg/ha.) type “B” and water (52,700 litres/ha.) in accordance with OPSS 572 (hydroseed).

The above seed mixture shall apply unless otherwise approved by the Contract Administrator.



LEGEND

- EXTENSION OF THE KING-ANDERSON DRAIN
- CONFEDERATION LINE EAST DRAIN
- NORMAN STREET SOUTH DRAIN
- MUNICIPAL DRAIN
- DRAINAGE AREA



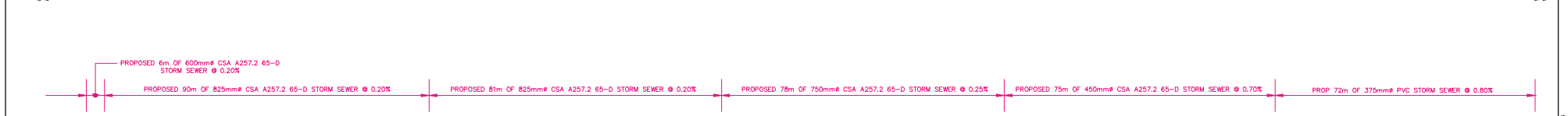
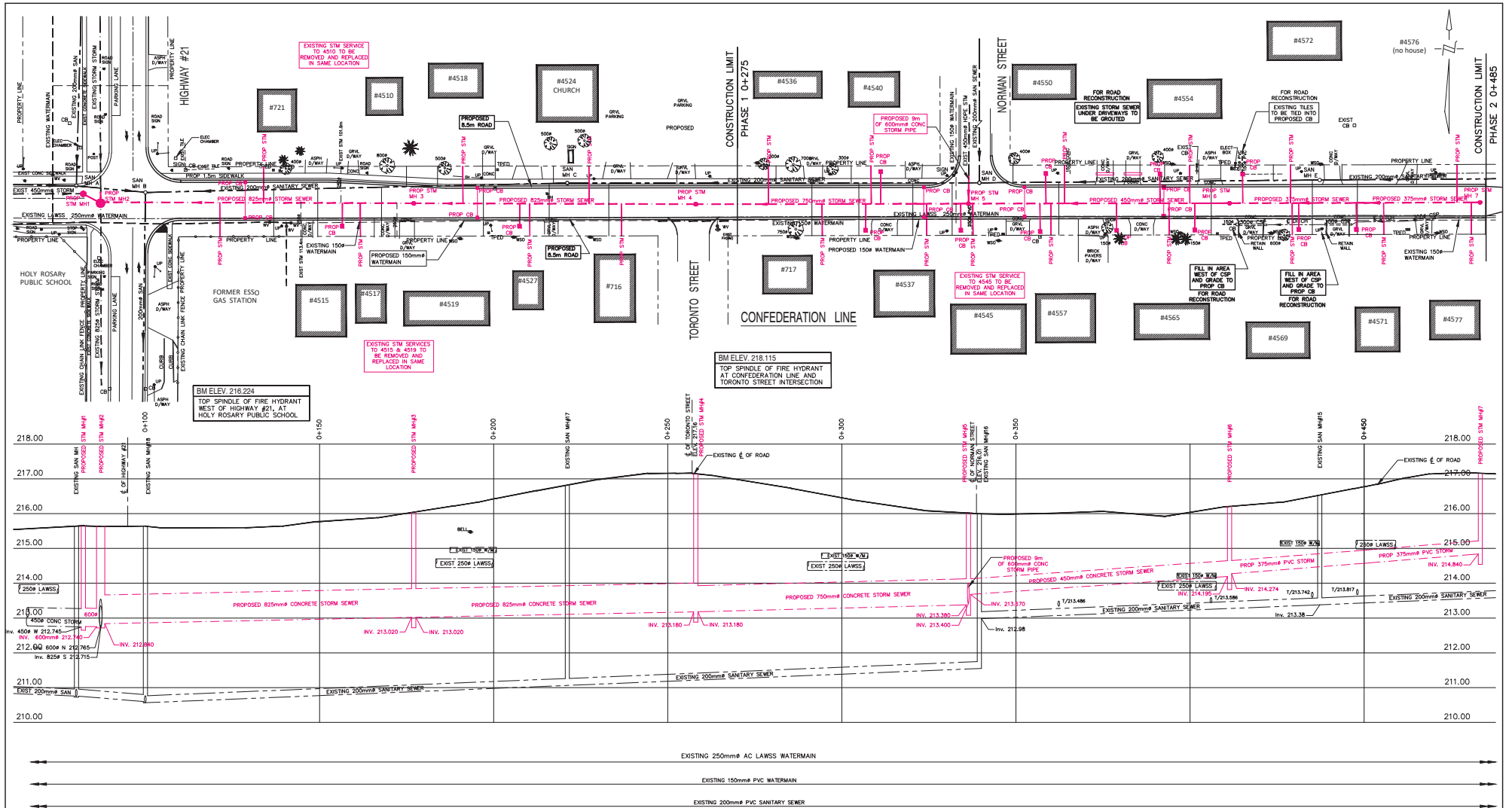
R Dobbin Engineering Inc.
 4218 Oil Heritage Road
 Petrolia Ontario, N0N 1R0
 Phone: (519) 882-0032 Fax: (519) 882-2233
 DRAWING NAME: Confederation Line East, Norman Street South and King-Anderson Drain Plan
 PROJECT No. 2022-1469

APPROVED J. WARNER	SCALE	PLAN 1:3,000	
CHECKED B. VAN RUITENBURG	NO.	REVISIONS	DATE BY
	3	FINAL REPORT	FEB. 14, 2024 JW
	2	DRAFT REPORT	FEB. 1, 2024 JW
DRAWN J. WARNER	1	SITE MEETING	NOV. 2023 JW

TOWN of PLYMPTON - WYOMING
CONFEDERATION LINE EAST, NORMAN STREET
BRANCH AND KING-ANDERSON DRAIN
PLAN

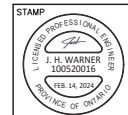
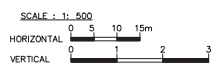
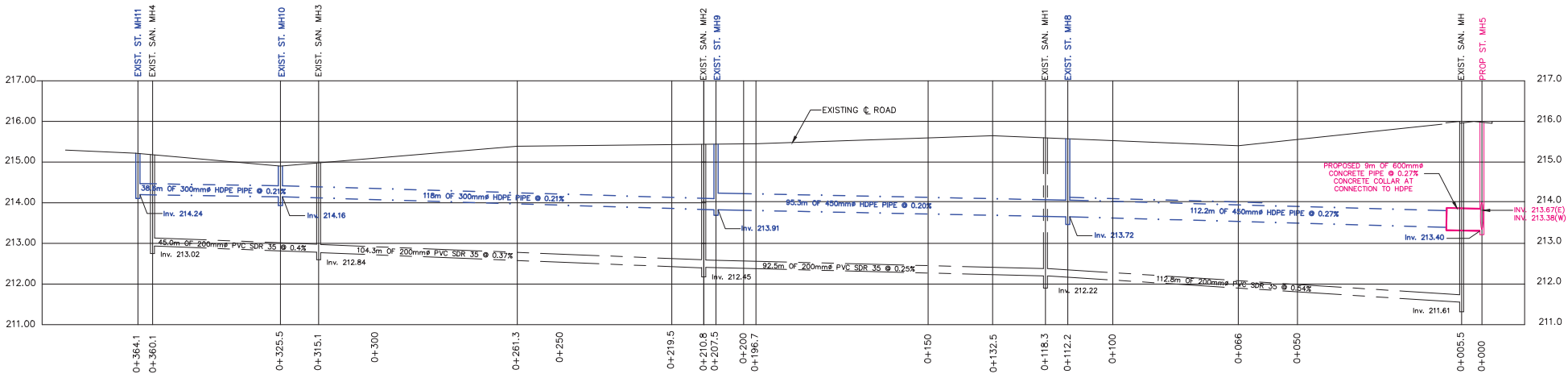
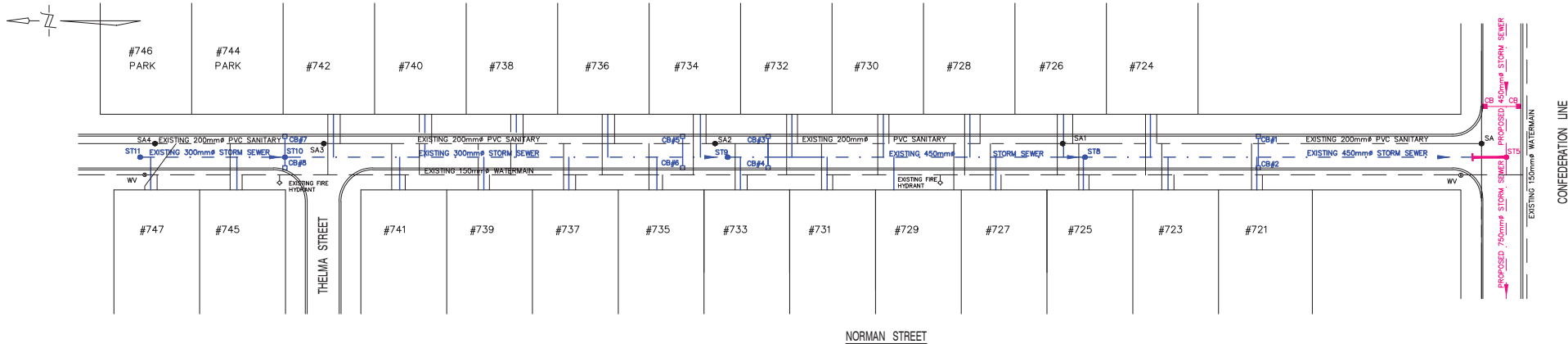
1
OF 5

Last Updated: February 14, 2024



<p>PROPOSED 6m of 600mm CSA A257.2 65-D STORM SEWER @ 0.20%</p> <p>PROPOSED 90m of 825mm CSA A257.2 65-D STORM SEWER @ 0.20%</p> <p>PROPOSED 81m of 825mm CSA A257.2 65-D STORM SEWER @ 0.20%</p> <p>PROPOSED 78m of 750mm CSA A257.2 65-D STORM SEWER @ 0.25%</p> <p>PROPOSED 75m of 450mm CSA A257.2 65-D STORM SEWER @ 0.70%</p> <p>PROP 72m of 375mm PVC STORM SEWER @ 0.80%</p>		<p>EXISTING 250mm AC LAWS WATERMAIN</p> <p>EXISTING 150mm PVC WATERMAIN</p> <p>EXISTING 200mm PVC SANITARY SEWER</p>	
<p>SCALE: 1:500</p> <p>HORIZONTAL: 0 5 10 15m</p> <p>VERTICAL: 0 1 2 3</p>		<p>STAMP</p> <p>L. CHANDLER PROFESSIONAL ENGINEER</p> <p>J. H. WARNER 100320016</p> <p>FEB 14, 2024</p> <p>PROVINCE OF ONTARIO</p>	
<p>R. Dobbin</p> <p>Engineering Inc.</p> <p>4218 Oil Heritage Road Petrolia Ontario, N0M 1R0 Phone: (519) 882-0032 Fax: (519) 882-2233</p>		<p>DESIGN: J. WARNER</p> <p>DRAWN: B. VAN RUITENBURG</p> <p>CHECKED: J. WARNER</p> <p>DATE: FEBRUARY 2024</p>	
<p>2 FINAL REPORT FEB. 14, 2024 BVR FEB 2024</p> <p>1 DRAFT REPORT FEB. 2, 2024 BVR FEB 2024</p> <p>No. REVISION BY DATE</p>		<p>TOWN OF PLYMPTON - WYOMING WYOMING, ONTARIO</p> <p>PROJECT NO. 2022-1469</p> <p>PLAN & PROFILE OF PROPOSED STORM SEWER CONFEDERATION LINE EAST DRAIN</p> <p>DRAWING NO. 2 OF 5</p>	

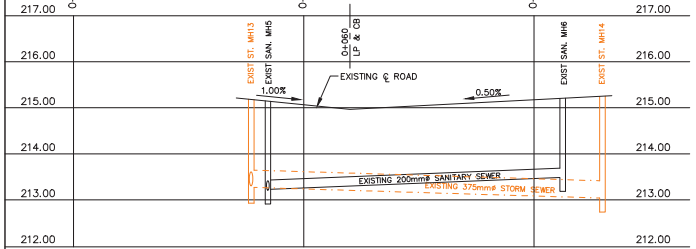
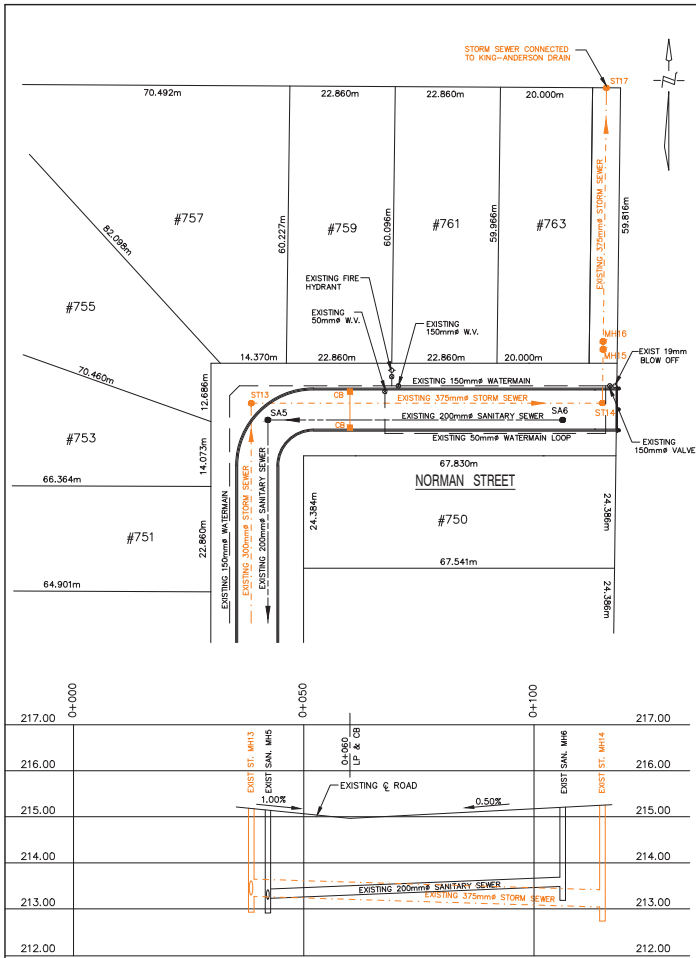
LAST UPDATED: FEBRUARY 14, 2024



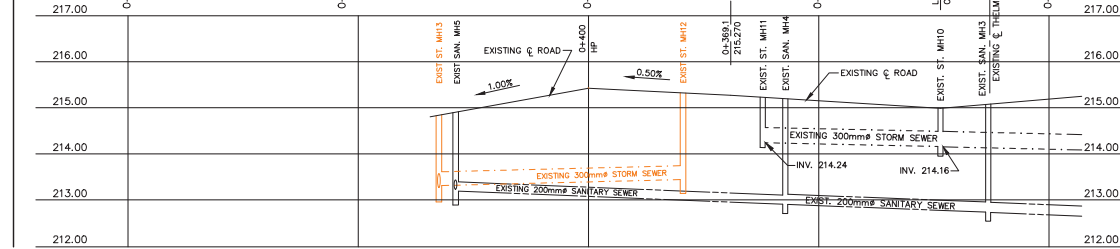
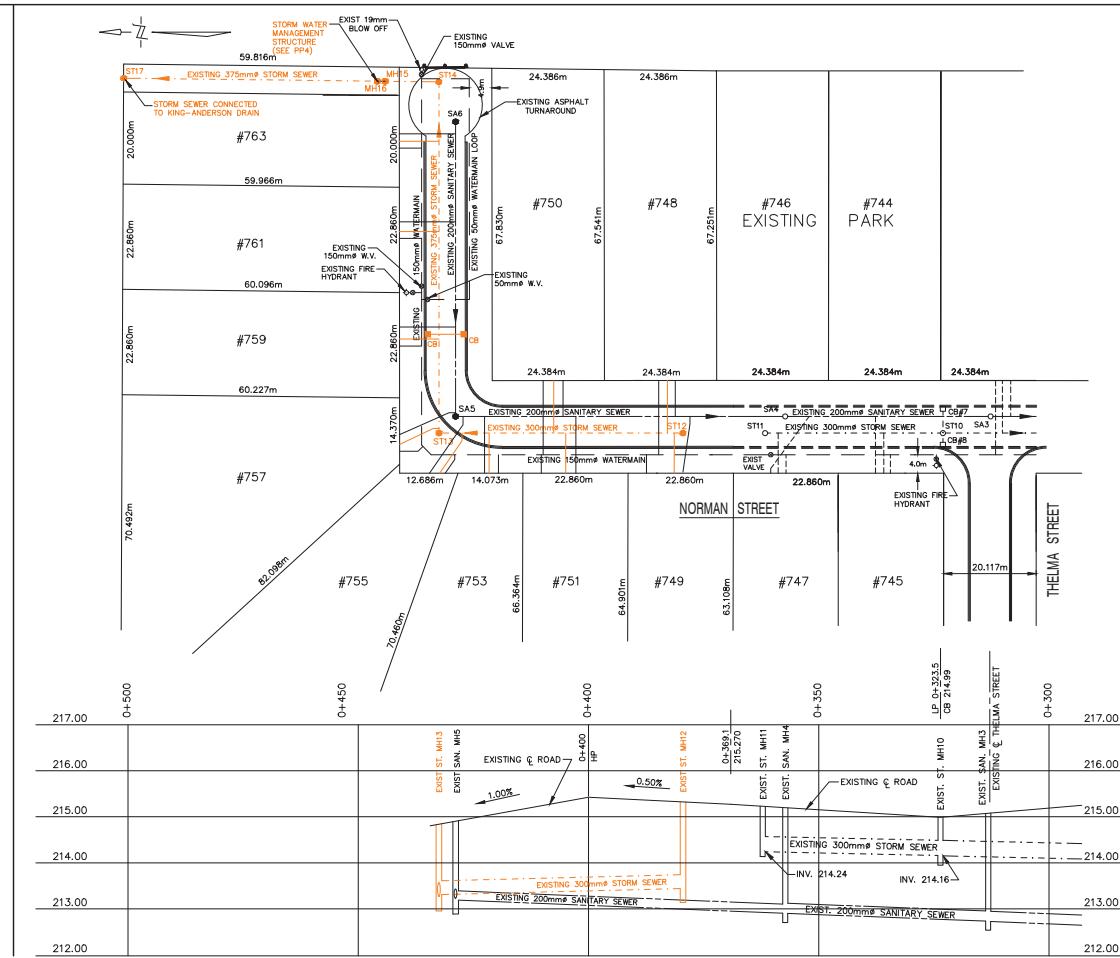
4218 Oil Heritage Road
 Petrolia, Ontario, N0Y 1B0
 Phone: (519) 882-0032 Fax: (519) 882-2233

No.	REVISION	BY	DATE	DESIGN	CHECKED
2	FINAL REPORT FEB. 14	BVR	FEB 2024	J. WARNER	
1	DRAFT REPORT FEB. 1	BVR	FEB 2024	B. VAN RUITENBURG	
				J. WARNER	

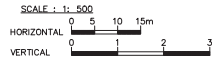
TOWN OF PLYMPTON - WYOMING WYOMING, ONTARIO PLAN & PROFILE OF EXISTING STORM SEWER NORMAN STREET SOUTH DRAIN	PROJECT NO. 2022-1469
	DRAWING NO: 3 OF 5



COL. OF ROAD	EXISTING SANITARY SEWER	EXISTING STORM SEWER
LENGTH & GRADE	EXISTING 64m OF 200mm# PVC SDR 35 @ 0.40%	EXISTING 76.5m OF 375mm# HDPE STORM SEWER @ 0.30%
INVERT ELEVATION	S. INV. 213.90 E. INV. 213.20	S. INV. 213.90 E. INV. 213.70
LENGTH & GRADE	EXISTING 58m @ 0.50%	
INVERT ELEVATION	S. INV. 213.90 E. INV. 213.20	S. INV. 213.90 E. INV. 213.70
GRADES	45.84 @ 1.00%	58m @ 0.50%



EXISTING BENCHMARKS SHOWN ARE TO BE REFERENCED TO NORMAN STREET CONSTRUCTION PHASE 1 TO PHASE 3 ONLY



COL. OF ROAD	EXISTING SANITARY SEWER	EXISTING STORM SEWER
LENGTH & GRADE	EXISTING 71.5m OF 200mm# PVC SDR 35 @ 0.43%	EXISTING 53m OF 300mm# HDPE STORM SEWER @ 0.26%
INVERT ELEVATION	S. INV. 213.20 E. INV. 212.90	S. INV. 213.70 E. INV. 213.50
LENGTH & GRADE	EXISTING 30.9m @ 0.50%	38.6m 300mm# HDPE PIPE
INVERT ELEVATION	S. INV. 213.20 E. INV. 212.90	S. INV. 214.90 E. INV. 214.60
GRADES	45.84 @ 1.00%	30.9m @ 0.50%

- BENCHMARKS**
- BM NO.1 - TOP OF EXISTING FIRE HYDRANT AT HSE #729 NORMAN ST. ELEV.=216.71
 - BM NO.2 - TOP OF EXISTING FIRE HYDRANT AT THELMA ST. & NORMAN ST. ELEV.=216.29
 - BM NO.3 - TOP OF EXISTING FIRE HYDRANT AT LOT 6/7 LOT LINE ELEV.=215.63

R. Dobbin Engineering Inc.
 4318 Oil Heritage Road
 Petrolia Ontario, N0N 1R0
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3	FINAL REPORT FEB. 14	BVR	JEB
2	DRAFT REPORT FEB. 1	BVR	FSH
1	UPDATED STM MH NUMBERS FOR DRAIN REPORT 2023	JW	APR
NO.	REVISION	BY	DATE

TOWN OF PLYMPTON - WYOMING WYOMING, ONTARIO

PLAN & PROFILE OF EXISTING STORM SEWER KING-ANDERSON DRAIN EXTENSION

DRAWN: BVR	DATE: FEB. 14, 2024	DRAWING NO:	4 OF 5
CHECK'D: JW	SCALE: 1:500 (Horizontal) 1:50 (Vertical)	DRAWING NAME:	pp1 Asbuilt
APPR'D: JW			

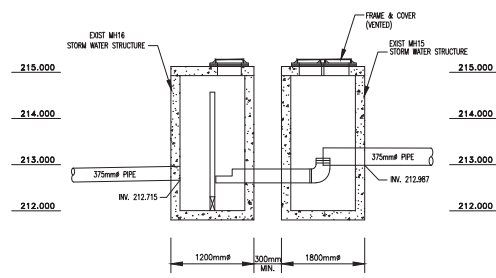
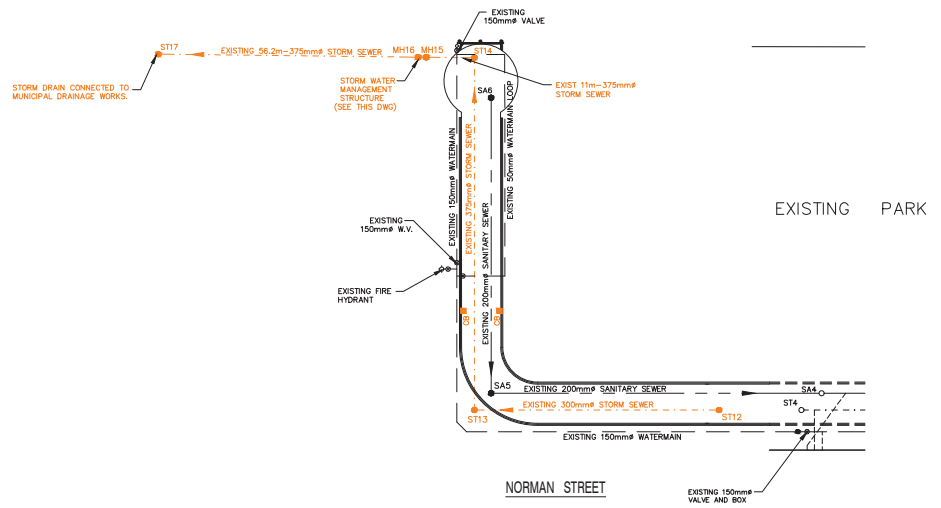
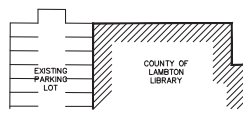


PROJECT NO: 2022-1469

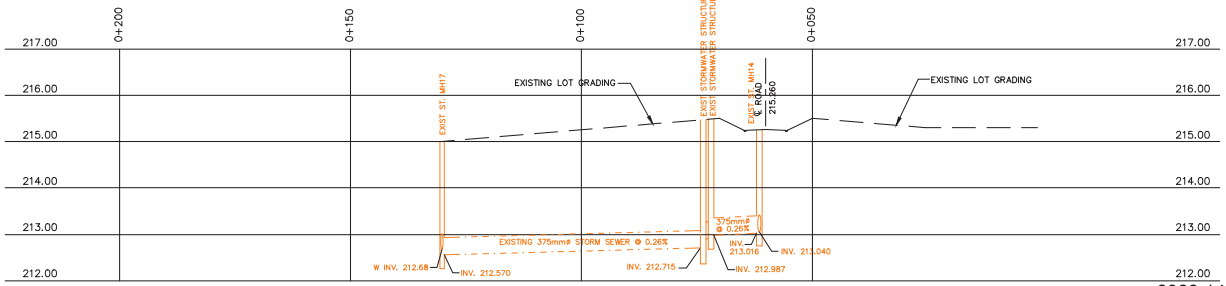
Lot 6/7 of 7



EXISTING 200mm# STORM DRAIN TO REMAIN



STORM WATER MANAGEMENT STRUCTURE
SCALE: 1:50



PROJECT NO: 2022-1469

Robbie Engineering Inc.
4218 Oil Heritage Road
Petrolia, Ontario, N0M 1S0
Phone: (519) 882-0032 Fax: (519) 882-2233

3	FINAL REPORT FEB 14	BVR	FEB 2024
2	DRAFT REPORT FEB 1	BVR	FEB 2024
1	UPDATED STM MH NUMBERS FOR DRAIN REPORT 2023	JW	APRIL 2023
NO.	REVISION	BY	DATE

TOWN OF PLYMPTON - WYOMING
WYOMING, ONTARIO

PLAN & PROFILE OF EXISTING STORM SEWER KING-ANDERSON DRAIN EXTENSION

DRAWN: BVR	DATE: FEB. 14, 2024	DRAWING NO:
CHECK'D: JW	SCALE: 1:500 (Horizontal)	5 OF 5
APPR'D: JW	SCALE: 1:50 (Vertical)	DRAWING NAME: Outlet Asbuilt

BENCHMARKS

- BM NO.1 – TOP OF EXISTING FIRE HYDRANT AT HSE #729 NORMAN ST. ELEV.=216.71
- BM NO.2 – TOP OF EXISTING FIRE HYDRANT AT THELMA ST. & NORMAN ST. ELEV.=216.29
- BM NO.3 – TOP OF EXISTING FIRE HYDRANT AT LOT 6/7 LOT LINE ELEV.=215.63



Lot 10/10/2024 February 14, 2024