

March 2, 2023

Project: UE.WL

VIA EMAIL

Mayor and Members of Council
Township of West Lincoln
318 Canborough St. Box 400
Smithville, ON
L0R 2A0

Re: Draft OPA 63 Proposed Modifications

SGL Planning & Design Inc. represents the Smithville Landowners Group. The Landowners Group are also being assisted by GEI Consultants Ltd., Terra-Dynamics and BA Group. Individual landowners have also retained other consultants to assist with their review of OPA 63. Our team of consultants has been actively involved in the Smithville Master Plan and have attended the Technical Advisory Committee meetings, the Steering Committee meetings, public open houses, and commented on the previous drafts of OPA 63. We have previously submitted comments:

- June 24, 2022 – OPA 63 Comment Letter (see **Appendix I**)
- December 2, 2022 – Suggested Edits to OPA 63 Via Email (see **Appendix II**);
- December 6, 2022 – Suggested Edits to OPA 63 Comment Letter (see **Appendix III**);
- January 23, 2023 – Suggested Cost Sharing Policy Via Email (see **Appendix IV**); and
- February 16, 2023 – Technical Memorandum for Alternative Engineer Strategy (see **Appendix V**)
- February 24, 2023 – Suggested Edits for Alternative Engineer Strategy (see **Appendix VI**)

We would like to thank Township staff and their consultants for the work to date to advance the OPA 63. We are pleased to see several of our suggestions and concerns have been resolved in the proposed modifications to OPA 63, however, we continue to have significant concerns, which are summarized below.

Densities

The Residential and Medium Density designations provide an appropriate range of permitted building types to address the housing needs in Smithville over the next 30 years. We also appreciate that the wording has been added in the OPA 63 noting the overall designated greenfield area density is a minimum, however, we continue to

reiterate that the density ranges of these two designations are too low to accommodate the full range of housing types permitted. For example, the medium-density residential is too low to permit back-to-back or stacked townhouses, which is a permitted building type. In light of Bill 23, and the significant push to introduce new housing units by 2031, a higher density range is appropriate.

Mixed Use

The Mixed Use policies provide targets to ensure both the Mixed Use Nodes and Medium Density Mixed Use Nodes support a mix of community uses. However, we continue to raise the concern that the percentage requirements for the distribution of residential and non-residential space within a building in these designations is overly prescriptive.

Restoration Areas

We understand and support the goal of restoration in a Natural Heritage System, but have significant concerns with the approach applied in OPA 63. OPA 63 establishes two classes of restoration areas. Potential Restoration Areas and Recommended Restoration Areas. These two classifications provide for the same restoration function, but Recommended Restoration areas are specifically mapped without any analysis demonstrating the necessity of those specific lands to be restored while Potential Restoration Areas are identified schematically.

We appreciate some efforts have been made to address our concerns by permitting an Environmental Impact Study (EIS) to refine the boundaries of Recommended Restoration areas, however, in our opinion, all restoration areas should be identified schematically as Potential Restoration Areas. This would enable each feature to be evaluated in depth through an EIS at the block plan and/or draft plan of subdivision stage, rather than applying an unsubstantiated boundary on the schedules.

Coverage Target

OPA 63 sets out a process for refinements to natural areas, linkages, restoration areas and conceptual buffers. We are supportive of that process. However, OPA 63 further states that refinements to these features shall take into consideration and support the achievement of the natural coverage target. As we have stated previously, the natural coverage target is an aspiration policy target in the Official Plan that is to be applied to the entire watershed and is to be encouraged through voluntary landowner stewardship and restoration. We appreciate the modifications of OPA 63 included revising the definition of the “natural coverage target” to include parks, trail corridors, green utility/service corridors and stormwater management facilities, but only where they overlap or are located adjacent to the NHS.

If an area doesn't contain any NHS features and sufficient parks, stormwater management facilities and other corridors are not planned for the area, an equally sized piece of farmland would need to be included in the NHS to meet the target requirement. In our opinion, this requirement is onerous and not based on any ecological principles or

requirements in any provincial or regional policy or guideline. We request that the policies be revised to apply the natural cover target municipal wide as Section 10.3.2 requires rather than specifically to the Secondary Plan.

Cost Sharing

We requested Cost Sharing Agreement policy be added to OPA 63 to ensure all development proponents contribute equally towards community and infrastructure facilities such as parks, collector roads, water and sanitary infrastructure and stormwater management etc. (**Appendix IV**). This is an essential policy to ensure fair distribution of costs and has been included in many secondary plans in the Greater Golden Horseshoe. This requested policy has not been included, and we are concerned that development may occur unfairly without a Cost Sharing agreement.

Alternative Servicing Strategy

We are concerned that a number of policies in the servicing and transportation section are overly prescriptive and do not provide the flexibility to facilitate development. The policies generally reiterate the direction of the Water and Wastewater Master Servicing Plan, which does not provide flexibility for different approaches and staging of the block plans. To illustrate alternative strategies could work when a more detailed studies come forward, we submitted an alternative engineering strategy that demonstrated another approach that should be considered (see **Appendix V**). In support of this alternative engineering strategy we also provided minor edits to OPA 63 that would introduce the necessary flexibility to ensure an efficient and orderly development for alternative strategies (**Appendix VI**). These policies suggestion would ensure there are no delays caused by requiring an Official Plan Amendment if a different strategy or staging comes forward. Again, with the significant push for introducing housing as a result of Bill 23 and getting shovels in the ground, we recommend these changes be incorporated.


Conclusion

Thank you for the opportunity to comment on Modifications to OPA 63. The Smithville Landowners Group looks forward to working with the Township to implement OPA 63 over the coming decades, but we want to ensure that we get OPA 63 right. The landowners and their consultants have significant concerns, and we request that Council direct staff and their consultants to work with the Smithville Landowners Group to resolve these concerns.

Yours very truly,
SGL PLANNING & DESIGN INC.



Paul Lowes, MES, MCIP, RPP
Principal



Raymond Ziemba, MCIP, RPP
Senior Planner

cc: Brian Treble
Richard Vandezande
Steve Weber, GSP
Tony Miele, Smithville Landowner Group

Cost sharing agreement

The locations of proposed public infrastructure such as roads, stormwater management facilities or the provision of other community facilities identified in this Secondary Plan have been incorporated without regard to property ownership.

To ensure that all affected development proponents contribute equitably towards the provision of community and infrastructure facilities such as parks, collector roads, road improvements, internal and external services, stormwater management facilities, public/private utilities and school sites, the Township shall require that, as a condition of development approval, development proponents enter into one or more developers' group agreements to address the sharing of these costs.

The Trustee of the developers' group cost sharing agreement shall be notified by the Township of any applications for plan of subdivision, zoning or development approval in the Secondary Plan Area. As a condition of approval, the Trustee shall notify the Township that the landowner is a member, in good standing, of the developers' group cost sharing agreement.



S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS

TECHNICAL MEMORANDUM

To:	Mr. Raymond Ziemba	From:	Colin Dougan Steven Frankovich
		Date:	February 16, 2023
Project:	Smithville Urban Boundary Expansion Review	Pages:	8 + Appendix A & B
		Job #:	20040
Re:	Phases 4A, 4B and 4C Wastewater Servicing Strategy		

INTRODUCTION

S. Llewellyn and Associates Limited (SLA) was retained by John Georgakakos and Phelps Homes Ltd. to review and prepare a wastewater servicing memorandum in support of the proposed development located in Smithville, within the Township of West Lincoln (see Figure 1 for location plan). The purpose of this memorandum is to investigate additional alternative routes for wastewater servicing as part of Phases 4A, 4B and 4C within the Smithville Urban Boundary Expansion.

BACKGROUND INFORMATION

The following documents were referenced in the preparation of this memorandum:

- Ref. 1: Design Criteria for Sanitary Sewers, Storm Sewer and Force mains for Alterations Authorized under Environmental Compliance Approval (Ministry of Environment, Conservation and Parks, July 2022)
- Ref. 2: Municipal Engineering Standards (Township of West Lincoln, 2022)
- Ref. 3: Smithville Master Community Plan (AECOM, January 2023)
- Ref. 4: Sanitary Sewer Servicing Technical Memorandum (S. Llewellyn & Associates Limited, June 2022)
- Ref. 5: Smithville UBE South Sanitary Servicing Schematic (Landsmith Engineering & Consulting Ltd., May 2022)
- Ref. 6: Baker Road WWTP Pollution Prevention and Control Plan and Master Servicing Plan (GM Blue Plan, November 2021)

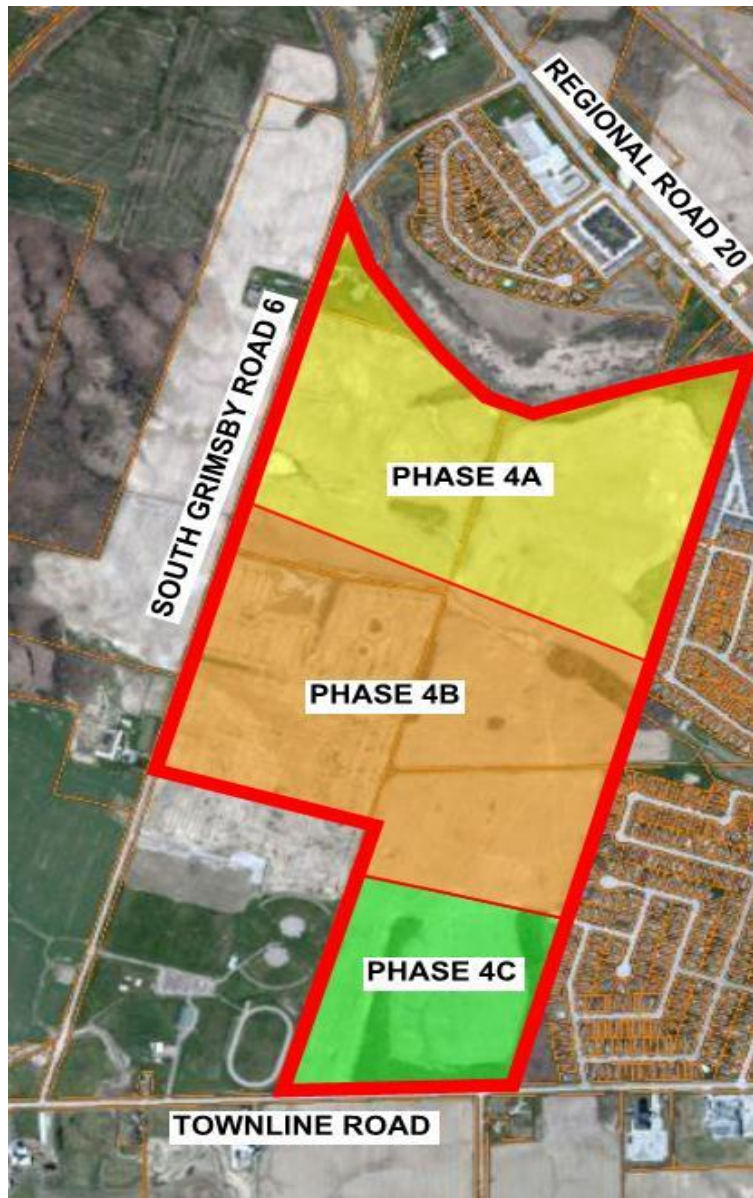


Figure 1 - Location Plan

The subject site is in the Township of Smithville and is bounded by existing residential developments to the east, Townline Road to the south, South Grimsby Road 6 to the west, and Twenty Mile Creek to the north.

AECOM Recommended Strategy

According to the Smithville Master Community Plan (Ref. 3), the recommended wastewater servicing strategy for the subject lands is option “S4WW1 and S4A-FM2”. A schematic of this strategy (Figure 5-2) has been provided in Appendix A. This option includes:

- Sanitary Pumping Station – Northeast Corner of Phase 4A

- Forcemain – SPS to gravity sewer in Phase 4A
- Gravity sewer – Phase 4A to Future Port Davidson Pumping Station (Phase 3B)

Based on our review of the Smithville Master Community Plan (Ref. 3), the construction of Phase 4 will be dependent on the following:

- Upgrades to the Smithville Sanitary Pumping Station
- Future Port Davidson Pumping Station (Phase 3B)
- Sanitary Gravity Sewer – Port Davidson Road
- Phase 3B forcemain (Option “S3FM1B”)
- Engineering Approvals / Available Funding

ALTERNATIVE WASTEWATER SERVICING STRATEGIES

Option 1 (Preferred Strategy)

As part of the Phase 3A lands, further investigation was completed by Landsmith Engineering & Consulting Limited (LECL) to verify another alternative route for sanitary servicing. LECL provided the servicing option for Phase 3A can convey sanitary flows north by gravity sewers through Rock Street Park and ultimately discharging into the Smithville Sanitary Pumping Station. For further information refer to the Smithville UBE South Sanitary Servicing Schematic prepared by LECL in Appendix B. The proposed depth of the sanitary manhole located at the intersection of Rock Street and Townline Road was utilized for Option 1, prepared by SLA.

Option 1 includes:

- Gravity Trunk Sewer – Rock Street and Townline Road intersection to Phase 4A
- Gravity Sewer – Phase 4A, 4B and 4C
- Sanitary Pumping Station – Northeast corner of Phase 4A
- Forcemain – Northeast Pumping Station (Phase 4A) to gravity sewer within Phase 4A

For further details refer to the Option 1 Wastewater Servicing Strategy Schematic prepared by S. Llewellyn & Associates Limited in Appendix A.

Based on Option 1, the construction of Phase 4 will also be dependent on the following:

- Upgrades to the Smithville Sanitary Pumping Station
- Sanitary Gravity Sewer – Phase 3A to Smithville Sanitary Pumping Station as presented in the Smithville UBE South Sanitary Servicing Schematic prepared by Landsmith Engineering & Consulting Limited in Appendix B

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- Engineering Approvals / Available Funding

Option 2

Option 2 contemplates connecting to existing sanitary outlets adjacent to Phase 4. These outlets include:

- Brookside Terrace – 200mmØ sanitary sewer at intersection of Brookside Terrace and Forestview Court
- Manorwood Drive – 200mmØ sanitary sewer at intersection of Manorwood Drive and Forestview Court
- Oakdale Boulevard – 250mmØ sanitary sewer located within existing Stormwater Management Block between Forestview Court and Golden Acres Drive

As-constructed information indicates that Brookside Terrace would be the only viable option as a wastewater servicing outlet. Sanitary sewers in the Township of West Lincoln require a minimum 2.75m depth of cover. To conform to this standard, 2-4m of suitable fill material would be required to lift Phase 4A to promote a gravity sewer.

Option 2 includes:

- Gravity Trunk Sewer – Rock Street and Townline Road intersection to Phase 4A
- Gravity Sewer – Phase 4A to Gravity Trunk Sewer
- Gravity Sewer – Northern portion of Phase 4A to Brookside Terrace
- Gravity Sewer Upgrades – Brookside Terrace to Manorwood Drive
- Smithville Trunk Sewer Upgrades – Manorwood Drive to Smithville Sanitary Pumping Station

It was determined that approximately 23% of Phase 4 would be directed to Brookside Terrace. Table 1 below summarizes the estimated sanitary demand for Phase 4A, which would be supplementary to the existing sanitary sewer network along Brookside Terrace. The estimated population for Phase 4 was taken from Table 1-1 of the Smithville Master Community Plan (Ref. 3).

Table 1 – Phase 4A Sanitary Sewer Discharge						
Location	Area (ha)	Population ^A	Avg. Demand ^B (l/s)	Peaking Factor ^C	Infiltration ^D (l/s)	Peak Flow ^F
Phase 4A	18.63	1,114	3.55	4.89	5.33	22.69
^A Population = 4,845 persons x 23% = 1,114 persons ^B Average Demand = 275 l/cap/day (Ref. 2) ^C Peaking Factor = $5/P^{0.2}$ with P expressed in thousands, $2 < M < 5$ ^D Infiltration flow based on 0.286 l/ha/s x site area ^E Peak Flow = (Average Flow x Peaking Factor) + Infiltration						

As part of the Baker Road WWTP Pollution Prevention and Control Plan and Master Servicing Plan (Ref. 6), it has been recommended that the Smithville trunk sewer be upgraded to increase system resilience to wet weather and provide flexibility for intensification. It was also identified that the creek crossing at Manorwood Drive had a poor I&I (Inflow and Infiltration) performance classification. SLA recommends implementing multiple flow monitoring points within the existing subdivision to identify the location for the on-going I&I. For further details refer to the Option 2 Wastewater Servicing Strategy Schematic prepared by S. Llewellyn & Associates Limited in Appendix A.

Based on Option 2, the construction of Phase 4 will also be dependent on the following:

- Upgrades to the Smithville Sanitary Pumping Station
- Sanitary Gravity Sewer – Phase 3A to Smithville Sanitary Pumping Station as presented in the Smithville UBE South Sanitary Servicing Schematic prepared by Landsmith Engineering & Consulting Limited in Appendix B
- Upgrades to the Smithville trunk sewer
- Upgrades to the existing infrastructure west of the Manorwood Drive creek crossing
- Engineering Approvals / Available Funding

Option 3

As part of Options 1 and 2, a deep gravity trunk sewer is required within Phase 4 and Townline Road. Option 3 is recommended to avoid the need for installing deep gravity sewers. Option 3 includes:

- Temporary/Permanent Sanitary Pumping Station – This pumping would be located in the southeast corner of Phase 4 or further to the east along Townline Road
- Forcemain – Temporary/Permanent Sanitary Pumping Station to Rock Street and Townline Road intersection
- Townline Road Gravity Sewer – Phase 4 to the Temporary/Permanent Sanitary Pumping Station

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- Sanitary Pumping Station – Northeast corner of Phase 4A
- Forcemain – Northeast Pumping Station (Phase 4A) to gravity sewer within Phase 4A
- Phase 4 Gravity Sewer – Phase 4A, 4B and 4C

For further details refer to the Option 3 Wastewater Servicing Strategy Schematic prepared by S. Llewellyn & Associates Limited in Appendix A.

Based on Option 3, the construction of Phase 4 will also be dependent on the following:

- Upgrades to the Smithville Sanitary Pumping Station
- Sanitary Gravity Sewer – Phase 3A to Smithville Sanitary Pumping Station as presented in the Smithville UBE South Sanitary Servicing Schematic prepared by Landsmith Engineering & Consulting Limited in Appendix B
- Available lands to construct the temporary/permanent pumping station further to the east of Phase 4
- Engineering Approvals / Available Funding

Conclusions and Recommendations

Based on the information provided herein, it is concluded that there are three additional solutions to be considered in the servicing scheme for Phase 4. Therefore, these solutions will provide the following key benefits:

Option 1 (Preferred Strategy)

- Phase 4 construction will not be reliant on the development of Phase 3B or Phase 3C lands
- The future Port Davidson Sanitary Pumping Station will receive reduced wastewater flows, which would reduce the overall size of the pumping station
- The Townline Road trunk sewer will provide a service connection for future development west of Phase 4
- The Townline Road trunk sewer will contribute to the Niagara Region's on-going I&I reduction program
- The Townline Road trunk sewer will eliminate the need for a sanitary forcemain along Townline Road
- The northern portions fronting Townline Road within the Phase 3B and 3C lands can convey sanitary flows via gravity to the Townline Road trunk sewer
- Provides the most cost-effective solution for Phase 3B, 3C, 4A, 4B and 4C

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- There will be minimal discarded costs for temporary infrastructure
- The Townline Road trunk sewer will provide additional cost-sharing opportunities for all landowners who are eager to participate in the development process
- Provides less disruption to existing residents by completing road re-construction works along Townline Road within one timeframe

Option 2

- Phase 4 construction will not be reliant on the development of Phase 3B or Phase 3C lands
- The future Port Davidson Sanitary Pumping Station will receive reduced wastewater flows, which would reduce the overall size of the pumping station
- The Townline Road trunk sewer will provide a service connection for future development west of Phase 4
- The Townline Road trunk sewer will contribute to the Niagara Region's on-going I&I reduction program
- Upgrades to the existing infrastructure west of Manorwood Drive creek crossing will contribute to the Niagara Region's on-going I&I reduction program
- Phase 4A does not require a Sanitary Pumping Station
- The Townline Road trunk sewer will contribute to the Niagara Region's on-going I&I reduction program
- There will be minimal discarded costs for temporary infrastructure
- The Townline Road trunk sewer will eliminate the need for a sanitary forcemain along Townline Road
- The northern portions fronting Townline Road within the Phase 3B and 3C lands can convey sanitary flows via gravity to Townline Road trunk sewer
- The Townline Road trunk sewer will provide additional cost-sharing opportunities for all landowners who are eager to participate in the development process

Option 3

- Phase 4 construction will not be reliant on the development of Phase 3B or Phase 3C lands
- Townline Road would not require deep gravity trunk sewers

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- The temporary/permanent sanitary pumping station could be located further to the east of Phase 4 to allow additional lands to be gravity serviced fronting Townline Road

The wastewater servicing scheme for the Urban Boundary Expansion should be flexible with the ability to adapt other potential servicing options based on landowners' willingness to corporate and participate in the development process. As outlined above, Option 1 will be the most cost effective and efficient approach for supporting development in the southern phases. We trust the information enclosed will be passed onto the Township of West Lincoln and Region of Niagara for review and consideration. Should you have any question please do not hesitate to contact our office.

APPENDIX A

OPTIONS 1 & 2 INFORMATION

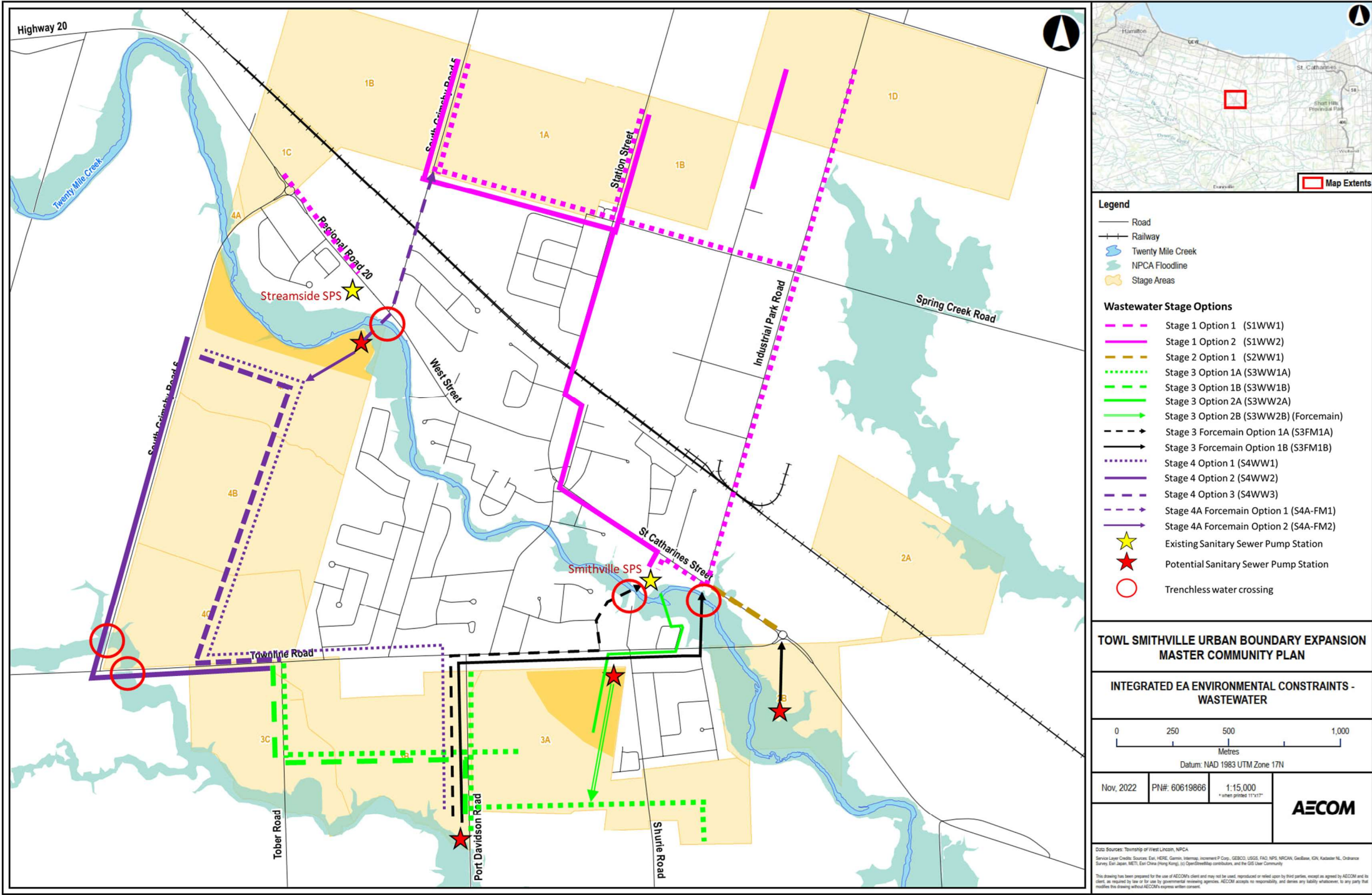
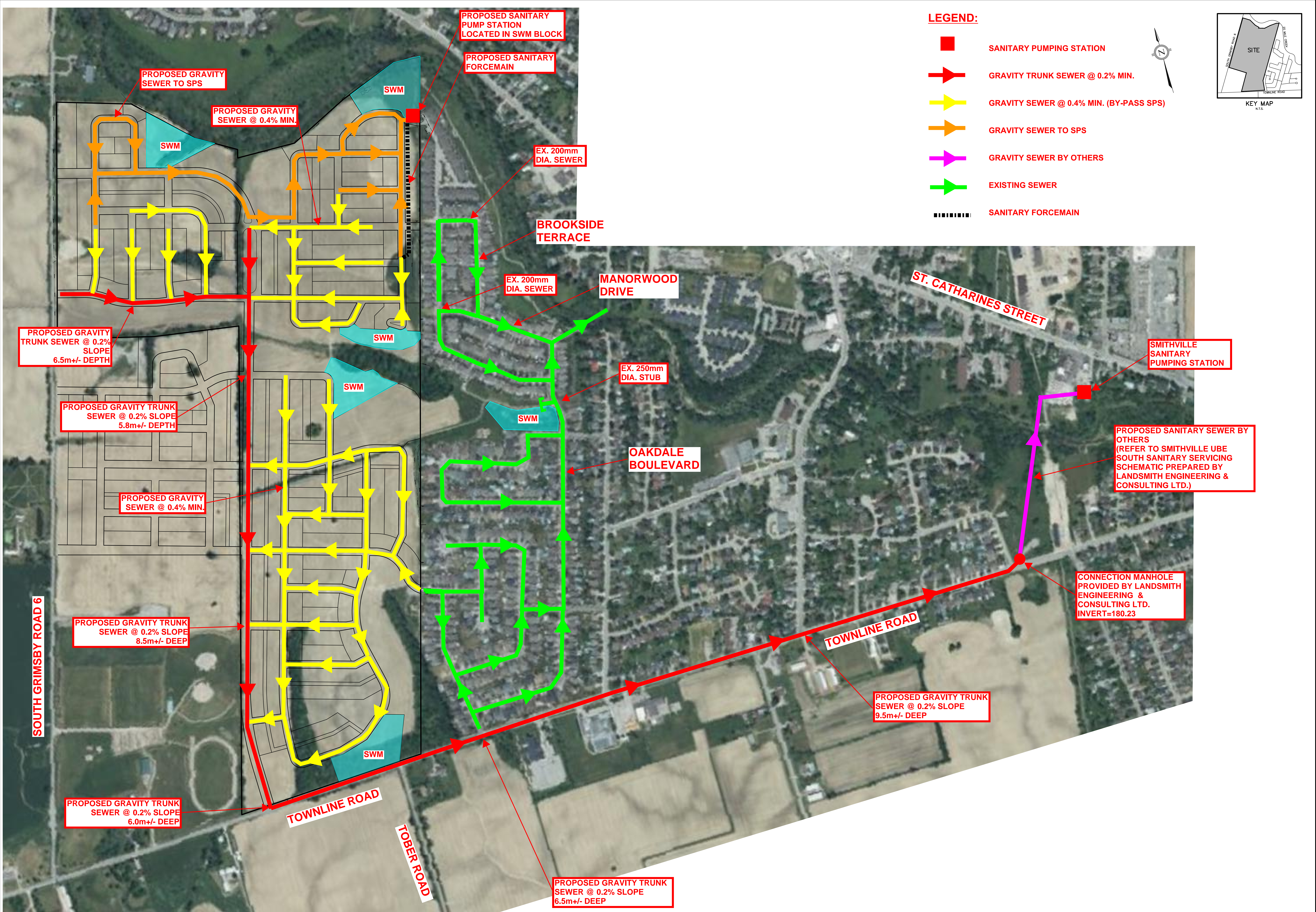


Figure 5-2: Wastewater Servicing Strategy Options



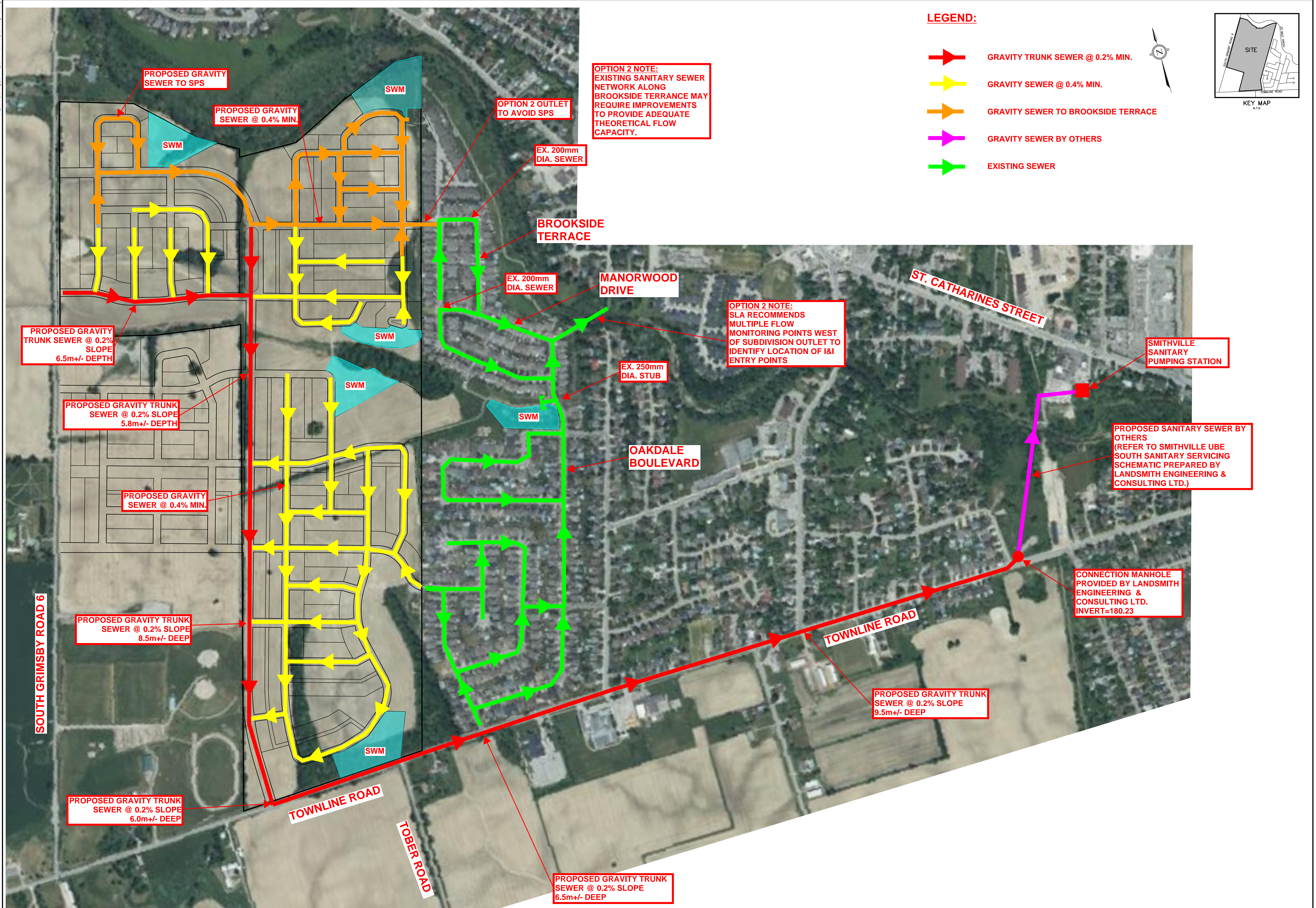
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FEB. 2023			

APPROVALS	
	STAMP

S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS
Tel: (905) 631-6978
Website: www.sla.on.ca
Email: info@sla.on.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

CLIENT: PHELPS HOMES LTD.
166 MAIN STREET WEST GRIMSBY,
ON L3M 1S3
PROJECT NAME: SMITHVILLE URBAN BOUNDARY
EXPANSION PHASE 4
TOWNSHIP OF WEST LINCOLN

TITLE: OPTION 1
WASTEWATER SERVICING
STRATEGY
PROJECT No.: 20040
DRAWING No.: SERV-1
SCALE: 1:2500
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FEB. 2023			

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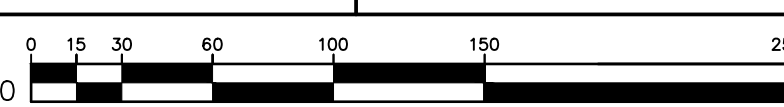
**S. LLEWELLYN & ASSOCIATES LIMITED**
CONSULTING ENGINEERS
Tel: (905) 631-6978
Website: www.sla.on.ca
Email: info@sla.on.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

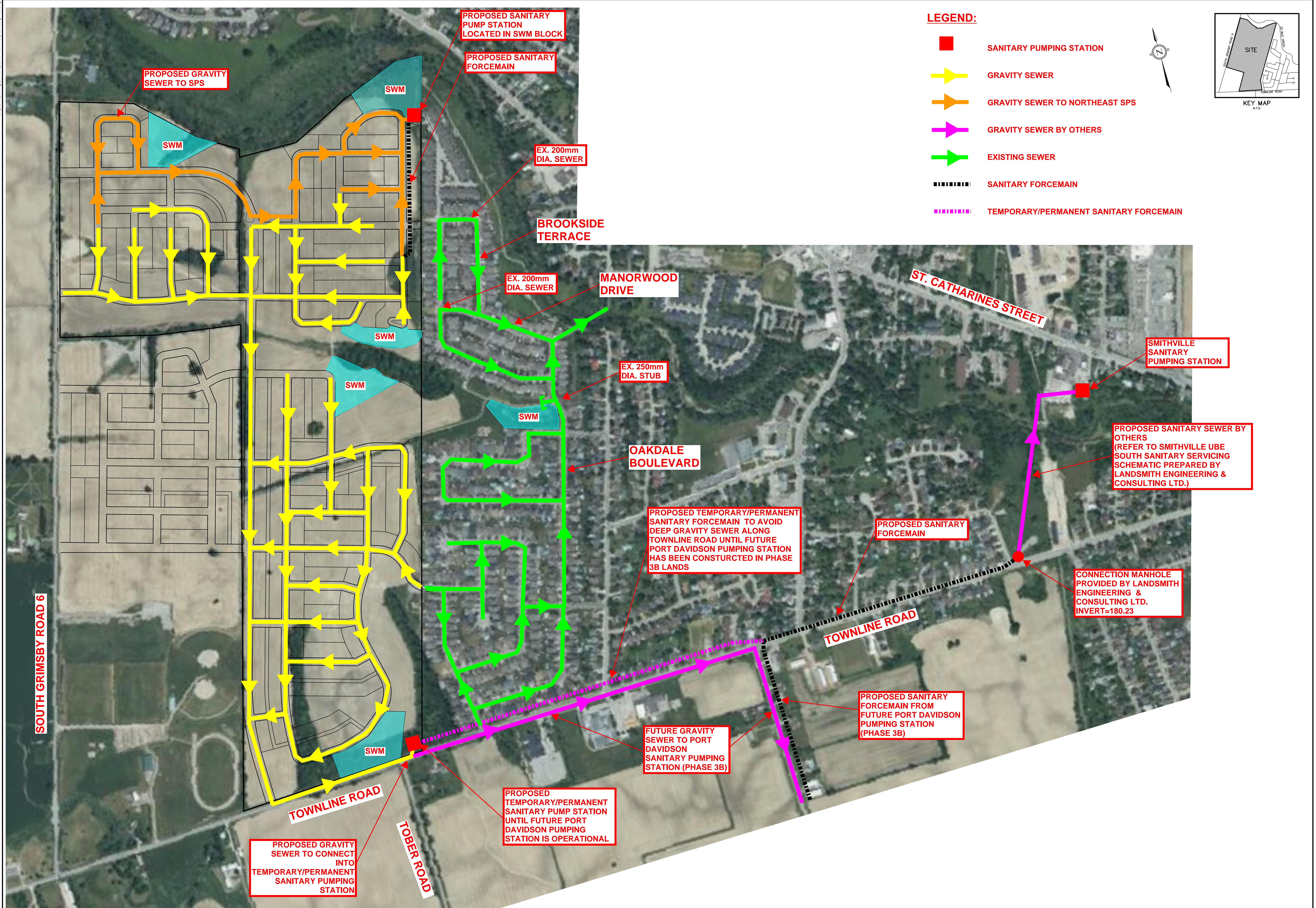
CLIENT
PHELPS HOMES LTD.
166 MAIN STREET WEST GRIMSBY,
ON L3M 1S3

PROJECT NAME
**SMITHVILLE URBAN BOUNDARY
EXPANSION PHASE 4
TOWNSHIP OF WEST LINCOLN**

TITLE
**OPTION 2
WASTEWATER SERVICING
STRATEGY**

PROJECT No. 20040
DRAWING No. SERV-1

SCALE
1:2500




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FEB. 2023			

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S. LLEWELLYN & ASSOCIATES LIMITED
CONSULTING ENGINEERS
Tel: (905) 631-6976
Website: www.sla.on.ca
Email: info@sla.on.ca
3228 South Service Road, Suite #105 East Wing, Burlington, Ont., L7N 3H8

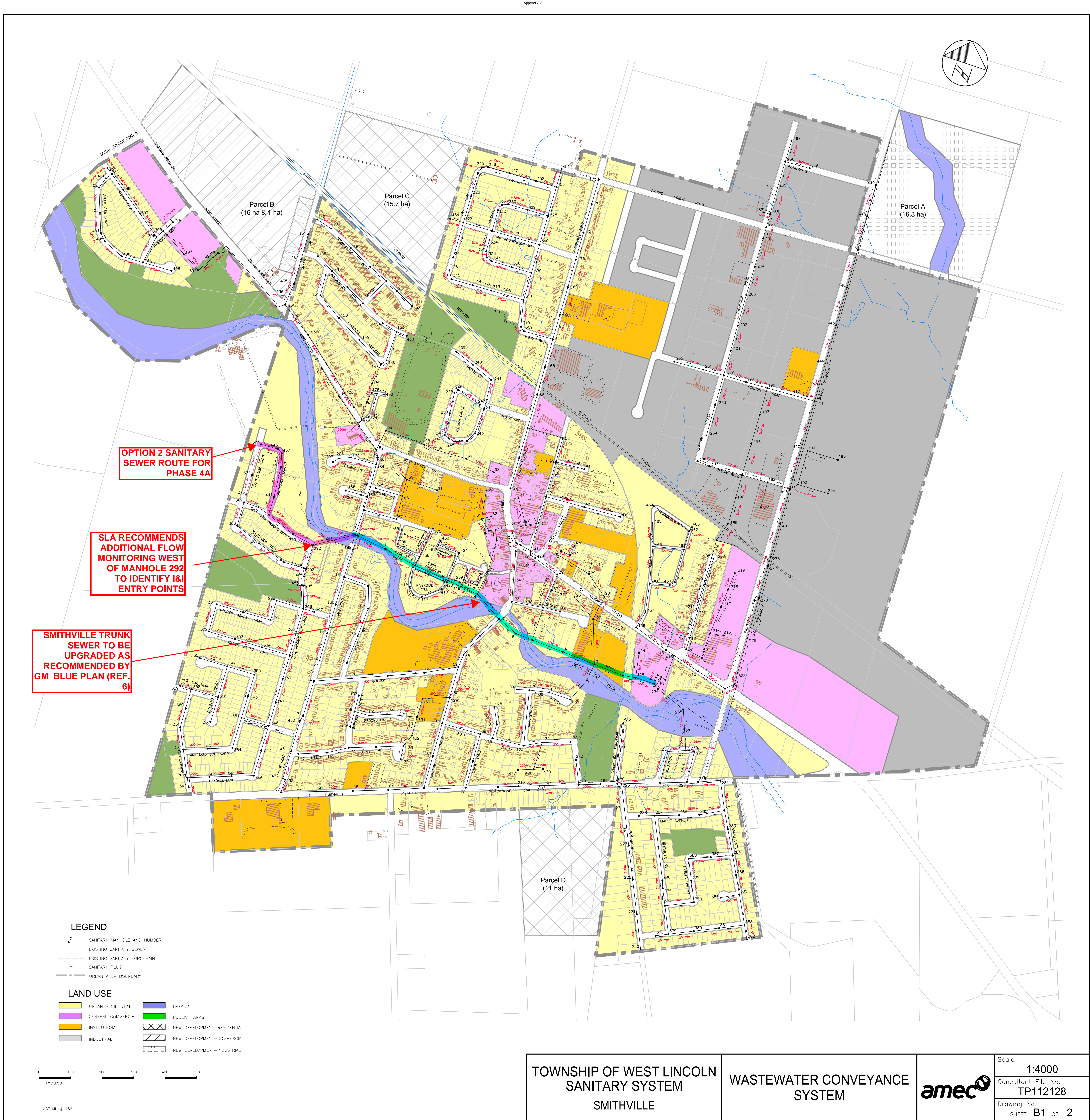
CLIENT
PHELPS HOMES LTD.
166 MAIN STREET WEST GRIMSBY,
ON L3M 1S3

PROJECT NAME
**SMITHVILLE URBAN BOUNDARY
EXPANSION PHASE 4
TOWNSHIP OF WEST LINCOLN**

TITLE
**OPTION 3
WASTEWATER SERVICING
STRATEGY**

PROJECT No. 20040
DRAWING No. SERV-1

SCALE
1:2500



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LAST MH # 482

TOWNSHIP OF WEST LINCOLN SANITARY SYSTEM SMITHVILLE	WASTEWATER CONVEYANCE SYSTEM		Scale
			1:4000
			Consultant File No. TP112128
			Drawing No. SHEET B1 OF 2

Jun 07/13 - dina.kuvandykova

APPENDIX B

LANDSMITH ENGINEERING & CONSULTING LTD.

INFORMATION

Colin Dougan

From: Colin Dougan
Sent: January 31, 2023 11:56 AM
To: Colin Dougan
Subject: FW: Smithville UBE - South Lands, Sanitary Infrastructure

From: Andrew Smith
Sent: June 14, 2022 9:31 AM
To: Grueneis, Karl <Karl.Grueneis@aecom.com>; 'Adi Irani' <adi.irani@ajclarke.com>
Cc: Tony Miele <tony@mieledevelopments.com>; Wan, Benny <Benny.Wan@aecom.com>; 'anastasiagrove anastasiagrove' <anastasiagrove@sympatico.ca>; Lambert, Phill <Phill.Lambert@niagararegion.ca>
Subject: Smithville UBE - South Lands, Sanitary Infrastructure

Good Morning Gentlemen,

Thank you for taking the time last week to discuss the infrastructure constraints and opportunities for the Smithville south Urban Boundary Expansion areas. I have attached a drop box link below which contains a .PDF of the topographic information and sanitary sewer invert elevations which we measured in the field in the areas in question. It also contains the Topographic survey in AutoCAD format, reference to the horizontal and vertical control points used and the map of the existing Smithville Sanitary System.

<https://www.dropbox.com/sh/knz4zmhb01q30g5/AAAayl4webv3j2bXvd5HHNwZa?dl=0>

As we discussed via our Zoom meeting, we had concerns with the layout for the southern sanitary trunk sewers which was described during TAC Meeting 7; and we are suggesting an alternative route / solution which we believe has numerous benefits from both life-cycle cost and initial constructability perspectives. This route would entail crossing 20-Mile Creek at the Rock Street Park and connection to Sanitary Manhole A2, or another new manhole in that general vicinity. We recognize that this solution would require either the upgrading of the sewers from A2 to the SPS, or the twinning of these sanitary sewers along the same route.

We had not investigated the other alternative route discussed at the meeting, which was the potential use of the easement which runs between Saint Catharine Street and Townline Road as noted by AECOM staff. On first review, to me this seems to also be a better alternative than the original route, however I believe that the Rock Street park option is even better still and that this will become evident through the assessments completed by AECOM. We will leave that analysis to Karl and his team as he discussed entering the alternatives into their decision-making matrix which will objectively review all constraints and opportunities.

With that said, some of the **key benefits** for your consideration, that we see for the Rock Street Park alternative are as follows:

1. 460m of Sanitary Sewer to get to Townline & Rock Street intersection vs. 860m to get from Saint Catharine Street and Townline Road intersection to the same point (saves 400m of sewer length)

2. There is no clear benefit that we can see for bringing the sanitary sewer down Townline Road from Saint Catharine Street westerly to Rock Street; there is already sanitary sewer on Townline to just east of Anderson Crescent and from that point to Saint Catharine Street there are no proposed connections.
3. The crossing of 20 Mile Creek will dictate the elevations for all downstream sewers from that point to the Sanitary Pumping Station (SPS) – were the crossing to be done along Townline Road, the distance to the SPS is approximately 1km and the depth of the sewer along Saint Catharine street would be difficult to construct, varying from 6m to 8m depth along an existing right of way, and significant disturbance to the new turning circle at the Saint Catharine Street & Townline Road intersection
4. We expect that the cost to come through Rock Street Park will be much lower as it can be done quickly, without traffic control and with east of restoration; as opposed to construction within the right-of-way of the existing streets; there would also be less disruption to the local community
5. There is an opportunity to service the entire lands south of Townline and East of Port Davidson Road by gravity sewers, there will be some depth to the sanitary sewer coming through the Kingma lands, however this will be in Greenfield areas, not along existing streets and it will most likely be possible in the engineering to lower the peak grades and reduce the cut to the sewer depth
6. Under this arrangement the expected force-main along Port Davidson Road could be entirely eliminated – discharge from the new South Sanitary Pumping station can be completed to the gravity sewer immediately east of Port Davidson Road. It appears that the lift-station would still be required, but the discharge point would be much closer.
7. There is an opportunity to service the lands south of Cherry Avenue, along the extension of Shurrie Road and Alma Drive through new gravity sewers, properly sized, on the lands to the west between Shurrie Road and Port Davidson Road, this would avoid routing sanitary flows from this development area through the existing neighbourhood where capacity is unknown (Note: there is a need to further investigate the southernmost reaches of the lands south of Shurrie Road to ensure all can go northerly, but a new sewer coming from the west can be significantly lower than a connection to the existing sewers on Shurrie Road and Alma Drive)
8. We acknowledged that it will still be required to install new sanitary on St. Catharine Street southerly, to the employment lands, but this can be significantly shallower and smaller in size
9. We would suggest that direct boring under the Creek can avoid environmental concerns.

Karl – if there are any questions regarding the attached materials within the Dropbox link I would be happy to go through these with you or with one of your team members.

If there are any questions regarding the above points / information from anyone else in this group please do not hesitate to reach out.

Thank you for your consideration of this matter.

Best Regards,

Andrew Smith, P. Eng.
289-775-9374



From: Andrew Smith
Sent: June 10, 2022 1:17 PM
To: Grueneis, Karl <Karl.Grueneis@aecom.com>; 'Adi Irani' <adi.irani@ajclarke.com>
Cc: Tony Miele <tony@mieledevelopments.com>; Wan, Benny <Benny.Wan@aecom.com>; 'anastasiagrove anastasiagrove' <anastasiagrove@sympatico.ca>
Subject: RE: Smithville UBE - Stantec report

Thanks Adi and Karl,

I will have my drawing sent over to Karl for early next week (Monday) together with the topographic information and some explanation of the analysis that we have completed thus far. I will make myself available if there are any questions regarding our work.

Thanks again for taking the time to review the sanitary items together, I am confident that we can work together to find the optimal solution and I am glad that there is still time to evaluate some of these alternatives.

Best Regards,

Andrew Smith, P. Eng.
LandSmith Engineering & Consulting Ltd.
289-775-9374

From: Grueneis, Karl <Karl.Grueneis@aecom.com>
Sent: June 10, 2022 12:21 PM
To: 'Adi Irani' <adi.irani@ajclarke.com>
Cc: Andrew Smith <andrew@landsmithec.com>; Tony Miele <tony@mieledevelopments.com>; Wan, Benny <Benny.Wan@aecom.com>; 'anastasiagrove anastasiagrove' <anastasiagrove@sympatico.ca>
Subject: RE: Smithville UBE - Stantec report

Thanks Adi

Yes was very good meeting. Thank you for your analysis and sharing information.

We will connect again when we complete the EA alternatives evaluation.

Regards

Karl

From: Adi Irani <adi.irani@ajclarke.com>
Sent: June-10-22 11:47 AM
To: Grueneis, Karl <Karl.Grueneis@aec.com>
Cc: Andrew Smith <andrew@landsmithec.com>; Tony Miele <tony@mieledevelopments.com>
Subject: [EXTERNAL] Smithville UBE - Stantec report

Hi Karl

Thank you for helping us at the subTAC meeting for engineering infrastructure this morning.

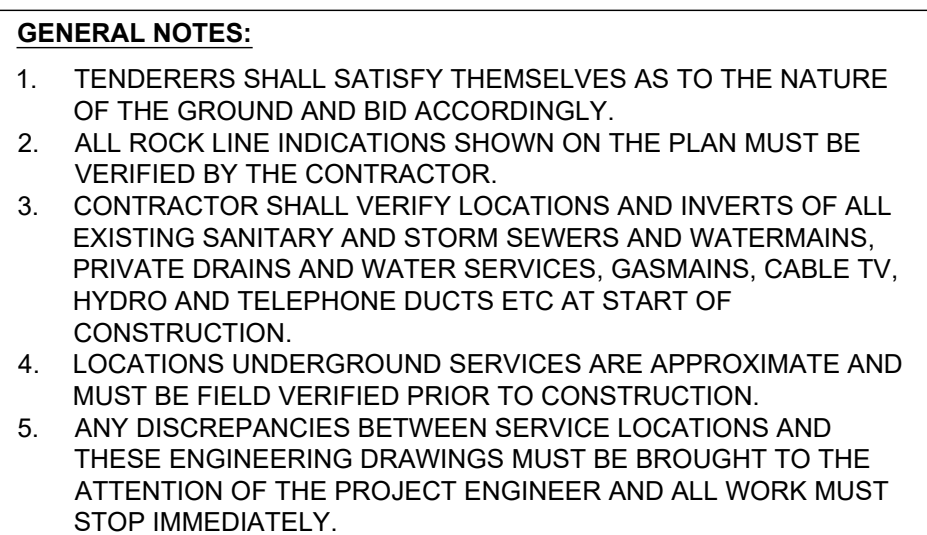
I thought it was very useful.

As promised, please find attached the Stantec Report regarding the sanitary sewer system in Smithville.

If you need additional information, please contact me.

Regards.

Adi Irani, P.Eng.
Senior Consultant
A J Clarke and Associates Ltd.
Tel: 905 520-8434



1	May 31 / 22	For Owner Review	
NO.	DATE:		DESCRIPTION:
REVISIONS			
			SEA



TOWNSHIP OF WEST LINCOLN

CLIENT: _____

TITLE: **SMITHVILLE UBE SOUTH
SANITARY SERVICING SCHEMATIC**

SCALE: 1:2000	DATE: May 31, 2022
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CHECKED BY: AS	DESIGNED BY: AS
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DWG No: 22028Kin	SHEET No: 1
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6.11.7.4 Infrastructure & Transportation Systems

1. General Policies

- a) All infrastructure and transportation systems will be planned and developed through appropriate Environmental Assessment (EA) processes to ensure that full regard is had to the Natural Heritage System, to natural hazard features, and to cultural heritage resources.
- b) Infrastructure and transportation systems will be located, designed, constructed, and operated in a strategic, sustainable, and cost-efficient manner that minimizes adverse impacts.
- c) The Township will assess its infrastructure and transportation systems for risks and vulnerabilities, with particular emphasis on those caused by the impacts of climate change.

2. Water & Wastewater

The strategy for providing water services to development in the Smithville MCP Area has been developed to optimize the use of existing and future road corridors and to take advantage of planned improvements to existing roads. The provision of water services to the early development phases of the Smithville MCP Area will be coordinated with the servicing of the Northwest Quadrant Secondary Plan Area, which is adjacent to MCP Block Plan Areas 1, 2, and 3. Meeting the future water demands of development in the expanded Smithville Urban Area will require upgrades to the Smithville Pumping Station to provide additional pumping capacity.

The wastewater servicing strategy for development in the Smithville MCP Area is based on conveying wastewater flows from future development to the existing Smithville Wastewater Pumping Station, once that station has been upgraded to provide the necessary capacity. Wastewater flows will be conveyed by new sanitary sewers that avoid sending flows through the existing sanitary sewer network. If the use of existing sanitary sewers is needed, upgrades will be required. New sanitary sewers will generally use existing and future road corridors, where feasible.

The wastewater servicing strategy proposes ~~three~~ two new pumping stations in the South Community Area, as shown on Schedule "E-10" and "E11". A fourth ~~third~~ station is proposed at Streamside Drive, located to the north of the West Community Area. (The proposed location of this ~~fourth~~ third station is not shown on the schedules.) The location of these pumping stations are conceptual, and The siting of pumping stations will be guided by topography and by the desire to integrate these stations with planned open spaces and stormwater management facilities.

The installation of infrastructure to provide water and wastewater services is anticipated to take place through separate four-phase projects and through the integrated Municipal Class Environmental Assessment (MCEA) process, following the final approval of the Smithville Master Community Plan (OPA 63).

Commented [RZ1]: Schedule E11 to be updated to show the the conceptual location of the 3rd pumping station reflected in Aecom's Preferred Strategy on Northeast Corner of 4A

Water and wastewater servicing systems for the Smithville MCP Area will follow the general direction provided by the Region's Water and Wastewater Master Servicing Plan (WWMSP) and will be captured in future updates to the WWMSP.

The above paragraphs of this subsection are intended as preamble to assist with interpretation of the Secondary Plan and to be read in conjunction with applying the following policies:

- a) All new development in the Smithville MCP Area shall be provided with full municipal water services and full municipal wastewater services according to an approved Master Environmental Servicing Plan (MESP) that has been prepared in accordance with Subsection 6.11.7.6.2 of this Plan.
- b) New development in the Smithville MCP Area may be required to provide for the future connection of adjacent existing uses to full municipal services, as established through an approved MESP, as a condition of development approval, where appropriate and financially feasible.
- c) No development shall proceed in any given Overall Stage Area shown on Schedule "E-14" unless the infrastructure and services to support that development have been constructed, in accordance with the policies in Subsection 6.11.7.6.3 of this Plan.
- d) It is expected that existing uses in the Smithville MCP Area will eventually be connected to full municipal water and wastewater services, but expansions to, or the redevelopment of, an existing use may be permitted on existing private services, provided that:
 - i. the use of private services is appropriate for the proposed expanded or redeveloped use, either because the existing use is located in an area for which there is not yet capacity available in existing water and wastewater systems or because the nature of the proposed expansion or redevelopment does not warrant connection to full municipal services;
 - ii. site conditions are appropriate for the continued provision of such services with no negative impacts; and
 - iii. the existing private services will be used to service only the expanded or redeveloped existing use and will not provide services to more than one property.
- e) Where the connection of an existing use to full municipal services has been provided for under Policy No. 6.11.7.4.2.b) above, expansions to, or the redevelopment of, that existing use shall generally be required to connect to full municipal services, provided that sufficient capacity is available in existing systems.
- f) The Township may exempt minor expansions to an existing use from the requirement to connect to full municipal services set out in Policy No. 6.11.7.4.2.e).
- g) Infrastructure and systems for water, wastewater, and other buried services shall be installed using best management practices to prevent the redirection of groundwater flow.

- h) It is recommended that any construction of municipal services that will require dewatering systems apply for and obtain a Permit to Take Water from the Ministry of the Environment before any construction activities begin, in the event that unexpectedly high flows are encountered.
- i) Backfilling during the decommissioning of any existing sewer lines should consider the use of materials with low hydraulic conductivity to prevent preferential groundwater flow.

6.11.7.6 Implementation

1. Block Plans

- a) Detailed planning for development will occur by Block Plan. Block Plan Areas for community areas are shown on Schedule "E-6".
- b) Block Plans Areas are also shown on Schedule "E-6".
- c) The phasing of employment areas shall be separated from community areas.
- d) The Block Plan Areas on Schedule "E-6" represent the smallest area for which a Block Plan will be accepted by the Township.
- e) The Township may accept a single Block Plan for multiple Block Plan Areas provided that the land within the proposed Block Plan is generally contiguous and is located within the same overall Development Stage.
- f) For the purposes of Section 6.11.7.6:
 - i. references to "Development Stages" shall refer to the "Overall Staging Areas" shown on Schedule "E-14" ("Development Staging Plan");
 - ii. any reference to a "Development Stage" in conjunction with a numeral ("1", "2", "3", or "4") shall be interpreted as referring collectively to all "Sub Phases" shown on Schedule "E-14" whose alphanumeric designation begins with that numeral; and
 - iii. all "Sub Phases" shown on Schedule "E-14" whose alphanumeric designation begins with the same numeral shall be understood as being located in the same overall Development Stage.
- g) All four stages shown on "E-14" can be independently serviced and developed, the numerical order of stages is suggestive and not determinative of the final order of development in accordance with policy 6.11.7.6.3 d);
- h) Prior to the preparation of a Block Plan, a Terms of Reference shall be prepared in consultation with and to the satisfaction of the Township and in consultation with Niagara Region. The Township may prepare and adopt a standard Terms of Reference for the preparation of Block Plans. A Terms of Reference shall identify the required studies and plans required, and the scope thereof, as well as public and agency notice, consultation, review and approval requirements for Block Plans.

- i) Block Plans shall be required to conform with the Smithville MCP and no Block Plans shall be approved until the Smithville MCP is in effect.
- j) Block Plans for Block Plan Areas that are located in the same overall Development Stage shall be prepared in a manner that provides for the coordination of elements such as transportation infrastructure, services, features of the NHS, and other matters as determined through the preparation of a Terms of Reference.
- k) Further to Policy No. 6.11.7.6.1.g), Block Plans for Block Plan Areas 10, 11, and 12 shall be prepared in a manner that provides for the coordination of various elements, as determined through the preparation of a Terms of Reference.
- l) The Township may accept a single Block Plan for Blocks 10, 11 and 12, notwithstanding Policy No. 6.11.7.6.1.c) above and the fact that these Block Plan Areas are located in two different Development Stages.
- m) No applications proposing development in a Block Plan Area shall be approved unless a Block Plan for the area in question has been prepared and has been approved by the Township.
- n) All development in the Smithville MCP Area shall generally conform with and implement the approved Block Plan for the Block Plan Area in which that development is located.
- o) Block Plans shall:
 - i. Illustrate the detailed land uses including the location, type, area, and approximate dimensions of each land use proposed, in conformity with and as a refinement to the land use designations shown on the applicable Land Use Plan in Schedules "E-8" through "E-11";
 - ii. identify the location, distribution, and land areas for required community facilities, parks, and open spaces, in conformity with and as a refinement to the land use designations intended to accommodate such uses shown on the applicable Land Use Plan in Schedules "E-8" to "E-11" and based upon any applicable Township Master Plans;
 - iii. be accompanied and supported by, and based upon, a Master Environmental Servicing Plan (MESP) that has been prepared in accordance with Subsection 6.11.7.6.2 below, with the SWS, and with the MSP and TMP;
 - iv. include a description of the vision and design principles, along with graphics and imagery to illustrate the design intent and to demonstrate conformity with the applicable policies in Section 6.11.7.5 above and in keeping with the applicable Township Design Guidelines.
- p) In addition to the requirements set out in Policy No. 6.11.7.6.1.l), any Block Plan prepared for a Residential Neighbourhood Area, a Commercial Area, or a Mixed Use Neighbourhood Node shall identify the proposed housing mix and calculated densities, provide estimates for population and the number of population-related jobs estimate, conform with the policies

for the applicable land use designations, and demonstrate that the greenfield density target will be achieved.

- q) In addition to the requirements set out in Policy No. 6.11.7.6.1.I), any Block Plan prepared for an Urban Employment Areas shall provide an estimate for the number of jobs and demonstrate that the employment density target will be achieved.
- r) The Township may waive the requirement for a Block Plan for the development of land within the Employment and Commercial land use designations, if the Township is satisfied that all of the required information normally provided as part of a Block Plan will be provided as part of a complete application for development for the entirety of the land within the Block Plan Area. The Region will be consulted regarding the planning process for development proposed in the Employment land use designation.
- s) The Township may waive the requirement for a Block Plan for minor development applications, such as minor variances or site plans related to existing or interim land uses. However, applications involving the development or transition of land in the MCP Area to an urban land use shall be subject to the requirement for an approved Block Plan, except where otherwise permitted by the policies of this Plan.
- t) Block Plans shall be subject to approval by Township Council. Council may delegate this responsibility to an appropriate Township staff person, either for specific Block Plans or generally for all Block Plans.

2. Master Environmental Servicing Plans (MESP)

- a) A Master Environmental Servicing Plan shall be prepared for each Block Plan, and may be prepared for multiple Block Plan Areas, and shall include the following:
 - i. an Environmental Impact Study (EIS) to delineate and confirm the boundaries of the NHS, in conformity with and as a refinement to the NHS shown on Schedule "E-12" and based upon the SWS;
 - ii. proposed water and wastewater servicing plans, along with a review and confirmation of capacity of municipal servicing systems, including water and wastewater system modelling, based upon the MSP;
 - iii. the proposed order or phasing of development and the provision of services, in accordance with the Development Staging Plan and with the policies in Subsection 6.11.7.6.3;
 - iv. a stormwater management strategy that includes the proposed location and sizing of stormwater management facilities and low-impact development measures, preliminary grading plans, and coordination with areas external to the subject Block Plan Area, in conformity with and as a refinement to the conceptual

SWM locations shown on Schedules “E-8” through “E-11” and based upon the SWS;

- v. a Karst Hazard Assessment, where required, based on the presence of identified Karst features and the policies of this Plan;
- vi. a Transportation Impact Study (TIS), prepared in accordance with the recommendations and guidelines of the TMP, that identifies and provides an assessment of connections to the existing road network, as well as the required timing and phasing of upgrades to existing roads and intersections;
- vii. detailed plans showing the street and active transportation network, along with typical street profiles or cross-sections, in conformity with and as a refinement to the Transportation System shown on Schedule “E-13” and based upon the TMP;
- viii. a noise impact assessment with respect to any transportation-related or stationary noise sources, where applicable, based on the location of existing or proposed sensitive land uses and provincial guidelines and requirements;
- ix. an assessment of, and detailed plans for the avoidance and mitigation of, potential land use conflicts with any existing livestock facilities within the MCP Area based on the application of Minimum Distance Separation (MDS I) setbacks;
- x. environmental site assessment(s); and
- xi. archaeological assessments;

3. Development Staging Plans

- a) It is the intent of this Plan that development in the Smithville MCP Area will occur in a logical and orderly manner over the planning period of this Plan.
- b) Development of the Smithville MCP Area shall be staged to align with the planning and implementation of the required infrastructure and transportation systems.
- c) The order of development of the MCP Area shall generally be based on the Development Staging Plan in Schedule “E-14” and on the timing of the provision of the required infrastructure and transportation systems in accordance with the MSP and TMP.
- d) Notwithstanding Policy No. 6.11.7.6.3.c) above, the Township may consider and approve changes to the ordering of the Sub Phases within any Development Stage, or changes to the overall sequencing of Development Stage without an amendment to this Plan, provided that the following requirements are addressed through the Block Plan process and associated MESP, to the satisfaction of the Township:
 - i. There is a demonstrated need for the Block Plan Area to advance to development earlier or in a different order than what is contemplated by the Development Staging Plan, based on the growth forecasts of this Plan, current and forecast average annual

growth expectations and absorption rates, the status of other developments, non-participating landowners, and the available supply and timing of residential units and/or non-residential floor space in the Smithville Urban Area including the MCP Area.

- ii. Development that proceeds according to the altered ordering will not adversely affect the achievement of the intensification target within the built-up area.
- iii. The proposed development of the Block Plan Area according to the altered ordering will provide the necessary roads and infrastructure required for the development of the Block Plan Area, as well as necessary roads and infrastructure external to the Block Plan Area that development within the Block Plan Area will rely upon and provided they area sized to accommodate growth within the Block Plan Area and Block Plan Areas through which it traverses. to provide for the future development of other Block Plan Areas in Sub Phases that under the original Development Staging Plan would have been developed earlier.
- iv. Proposed development in the Block Plan Area will have adequate access to, and will not adversely affect traffic conditions on, existing or new roads or on the future development and transportation needs of other Block Plan Areas in Sub Phases that under the original Development Staging Plan would have been developed earlier.
- v. Any proposed changes to the order of Sub Phases will neither compromise nor adversely affect the provision of the required infrastructure and transportation systems for any other land in the MCP Area in accordance with the MSP and TMP.
- vi. Any improvements or oversizing external to the Block Plan Area will be addressed through development agreements with the Township, Region, and affected landowners, as applicable, which may include front-ending considerations.
- vii. Grading, drainage and stormwater management will be addressed and coordinated with the future development of adjacent Block Plan Areas.
- viii. The required community facilities and parks will be provided to meet the needs of the estimated population growth in the Block Plan Area, or there is adequate capacity within existing community facilities, as determined by the Township based on applicable Master Plans and in consultation with the relevant agencies.
- ix. Adequate reserve infrastructure capacity is or will be available to service development in the Block Plan Area without compromising or negatively impacting the future development of land in Sub Phases that under the original Development Staging Plan would have been developed earlier.
- x. An Environmental Assessment has been prepared and approved as an addendum to the MSP or the TMP, as the case may be,

where changes to the planned infrastructure and transportation systems are proposed or required.

- xi. Any temporary or interim infrastructure, transportation, or other facilities or systems required that are not part of the permanent systems identified in the MSP or TMP are appropriately designed for their future decommissioning and removal, and such decommissioning and removal has been addressed through appropriate development, operational, and maintenance agreements.
- e) The Township will consult and work with the Region to plan for the provision of municipal services in a co-ordinated, timely and financially viable manner, based on the principle that growth pays for growth to the extent permitted by applicable legislation, aligned with Block Plans and complete applications for development as well as the Region's and Township's Master Servicing and Transportation Plans. Infrastructure and transportation projects may be advanced in a Development Stage or a Sub Phase before development is permitted.
- f) Approval of Block Plans and development applications will be based on the timing of the implementation of required infrastructure and available reserve servicing capacity. The Township may adopt and implement a servicing allocation policy to establish the requirements and criteria for obtaining and renewing servicing allocations for development approvals and to ensure infrastructure capacity is reserved and allocated in a manner that supports the implementation of this Plan, the achievement of the intensification target, and other objectives and targets of this Plan.
- g) The Township may use holding provisions, conditions of development approval (including the phasing or staging of development within plans of subdivision), as well as front-ending and credit agreements with extended reimbursement periods, where necessary, to support the logical and orderly development of the MCP Area, manage the pace of growth and development, and ensure development is aligned with the provision and timing of the required infrastructure and transportation systems.
- h) The Township may, at its sole discretion, revise the Development Staging Plan without an amendment to this Plan where circumstances warrant, such as, but not limited to, unreasonable delay by landowner(s), in order to facilitate the planned progression of growth and development in a manner that supports the implementation of the MCP.