

Filed: 2020-07-24
Section 101
EB-2020-0160

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Energy Board Act, 1998*, S.O. 1998, c. 15 (Schedule B);

AND IN THE MATTER OF an Application by Enbridge Gas Inc. pursuant to Condition 4 from the Ontario Energy Board's Decision and Order, and Section 101 of the *Ontario Energy Board Act, 1998* for authority to construct a work upon, under or over a highway, utility line or ditch in the County of Essex for the purposes of a natural gas pipeline in respect of which the Ontario Energy Board granted leave to construct in EB-2019-0172 to Enbridge Gas Inc.

AFFIDAVIT OF JANE MUSTAC

I, Jane Mustac, of the Town of Essex, in the County of Essex, and Province of Ontario, make oath and say as follows:

Qualifications

1. I am the Director of Infrastructure Services and the County Engineer for the Corporation of the County of Essex (the "**County**"), and, as such, I have knowledge of the matters hereinafter deposed. Where I do not have personal knowledge of the matters to which I hereinafter depose, I state the source of any information set forth and verily believe it to be true.
2. I obtained a degree in engineering from the University of Windsor in 1995, the designation of P.Eng in 1997, and the designation of Qualified Professional in 2004.
3. I have held my Registered Professional Engineer designation for 23 years, and have been employed as the Director of Infrastructure Services/County Engineer since November of 2018. The following is my professional experience from 1994 to the present:

- (1) Materials Engineering – Windsor Mold Group (Emrick) and Quality Safety Systems (QSS) – 1995 to 1997
 - (2) Facilities Engineering – Daimler Chrysler – 1997 to 2001
 - (3) Environmental Engineer – Earth Tech Consulting, Golder Associates, and Amec – 2001 to 2006
 - (4) Environmental Assessment Coordinator – County of Essex – 2006 to 2011
 - (5) Manager of Transportation, Planning, and Development – County of Essex – 2011 to 2018
 - (6) County Engineer – County of Essex – 2018 to present
4. I make this Affidavit in response to the Application for Authority to Construct brought by Enbridge Gas Inc. ("**Enbridge**") in OEB File No. EB-2020-0160 (the "**Application**").

Overview

5. Since in or about 1957 the transmission and distribution of natural gas in the County has been governed by a franchise agreement, dated December 11, 1957 (the "**Franchise Agreement**") with the Union Gas Company of Canada, Limited ("**Union Gas**"). Attached hereto and marked as **Exhibit "A"** to this my Affidavit is a true copy of the Franchise Agreement.
6. The Franchise Agreement provides, among other things, as follows:
- (a) that "pipelines shall be laid across the said highways in locations approved by the" County Engineer;
 - (b) that "pipelines shall be placed underground, if required by the [County Engineer] and shall be so constructed to as no to interfere with the use of the highway...or with works of improvement or repair thereof..."; and
 - (c) that "[i]n the event that the [County] in pursuance of its statutory powers shall deem it expedient to alter the construction of any highway...or other municipal works or improvements thereon or therein and in the course thereof it shall become reasonably necessary that the location of a main, line, pipe or works of the Company laid or operated under this By-law should

be altered at a specified point to facilitate the work of the [County], then upon receipt of reasonable notice in writing from the Clerk of the [County] specifying the alteration desired, the Company shall, at its own expense, alter or re-locate its main, pipe, line or works at the point specified."

7. The transmission and distribution lines of Union Gas are located at various points throughout the County, including along County Road 46.
8. It is my understanding that on or about January 1, 2019, Union Gas merged with Enbridge, following which Enbridge took control of the lines owned by Union Gas in the County and assumed the rights and responsibilities of Union Gas under the terms of the Franchise Agreement.

Project and Related Timeline

9. On or about May 15 2019, Enbridge made a presentation to County Council and advised County Council that it wanted to replace a section of natural gas pipeline between Port Alma and Windsor (the "**Project**"). Enbridge approached County Council as the Project would involve replacing about 30 kilometres of pipeline along County Road 46 (the "**Subject Section**"). County Council was upset that Enbridge had not consulted about the Project with County Administration in advance of making the presentation to County Council. This substantially delayed the County's response on its position on the Project as County Administration had to review the Project before being able to provide any feedback to County Council and to review concerns the County had with the Project with Enbridge.
10. The Subject Section of pipeline is currently located in the right of way of the County and in a number of private easements with individual property owners. However, the proposal of Enbridge was that the new line would be solely in the County right of way with the private easements being abandoned.

11. Upon learning of Enbridge's intention to use the County's right of way solely and abandon its private easements, the County team dealing with the Project advised Enbridge that the County's preference was that Enbridge continue to use its private easements where possible, obtain new easements where possible, and/or use the existing alignment, as the right of way has limited room for all of the infrastructure using it now, and planned infrastructure later.

12. Enbridge was told that the above was required for the following reasons:

- (a) County Road 46 is used as a route for oversized and overweight loads, with both the paved roadway and unpaved shoulder being utilized. As such, any pipeline in either the paved roadway or unpaved shoulder must meet the County's requirements of having at least 1.5 metres of depth of cover;
- (b) It is the County's intention to reconstruct and improve County Road 46, by, among other things, widening the highway, and increasing the number of lanes from the current two (2) lanes. This will result in portions of the pipeline in the Subject Section of the Project being under either the paved roadway or the unpaved shoulder. The unpaved shoulder also forms part of the travelled portion of the roadway, given that, among other things, County Road 46 is used by agricultural users and oversized and/or overweight loads; and
- (c) The expansion of the roadway will result in even less room in the current right of way for infrastructure, necessitating the removal of the sections of the pipeline Enbridge intends to decommission. The reports provided by Enbridge, and further discussed below, seem to indicate that the County should raise its road when reconstructing, but this is neither feasible or reasonable.

13. County Road 46 is an increasingly busy east/west corridor for the County, which is the preferred route for oversized and overweight trucks. In 2019 188 permits were issued for oversized and overweight trucks. Of the 188 permits issued in 2019, the following is a breakdown of the types of permits issued:

Annual Permits	79 (unlimited number of trips for these permit holders annually)
Project Permits	18 (number of trips permitted varies by permit)

Single Trip Permits 69 (single trip per permit)

Superload Permits 22 (generally single trip per permit)

Although only 188 permits were issued, the actual number of trips by overweight and/or oversized loads would have been much greater, as the Annual Permits and Project Permits allow for multiple loads to be moved.

14. The percentage of daily traffic and the percentage of heavy truck traffic varies by the section of County Road 46 in question. The following table illustrates that the Average Daily Traffic for the year 2019 varies from a low of 2,012 vehicles to a high of 11,972 vehicles per day, and that the percentage of heavy truck traffic varies from a low of 4.85% of total traffic per day on average to high of 12.39%:

Traffic Station	Location	Speed	HV%	ADT
4601	CR46 between Sexton Sideroad & CR17	80	6.17	7754
4602	CR46 between Lakeshore Rd 203 & Pleasant Park Sideroad	80	9.18	3833
4603	CR46 between O'Brien Sideroad & Lakeshore Rd 217	80	12.39	3204
4604	CR46 between Myers Rd & Lakeshore Rd 231	80	8.8	2012
4608	CR46 between CR43 & 12th Concession Rd	80	4.85	11973

15. The following is a summary of the meetings and communications, together with related correspondence between the County and Enbridge since May of 2019 until the OEB issued its Decision and Order in OEB File No. EB-2019-0172 on April 1, 2020 (the "**Decision**"):

- (a) Enbridge provided a presentation to County Council on May 15, 2019 to introduce the Project at a high level and gain the County's support for Enbridge's Application to the OEB related to the Project. At that time County Council expressed concern that (1) Enbridge had not engaged with County Administration prior to deciding to commence its Application to the OEB and

approaching County Council for its support and (2) that the Project was not designed to accommodate future growth in the County. County Council directed Enbridge to work with County Administration to review the Project. Attached hereto and marked as **Exhibit "B"** to this my Affidavit is a true copy of the Minutes from the May 15, 2019, meeting of County Council;

- (b) On or about May 24, 2019, Enbridge met with County Administration for the first time to review the Project. At that time, Enbridge advised that although 80% of the existing pipeline (Enbridge later clarified that the accurate number is 20%) was located in private easements, that Enbridge intended to build the replacement pipeline entirely in the County Road 46 right of way. The County recommended that the new pipeline should be replaced at the existing location, as it would place the pipeline approximately 9 metres away from the edge of pavement, which would result in the pipeline not restricting the roadway or other infrastructure. The County was concerned with the alignment proposed by Enbridge, which concerns are further outlined below. At that time, Enbridge was advised that there are plans to widen County Road 46, including along the Subject Section, and that having the pipeline in Enbridge's new proposed alignment was going to be an issue;
- (c) On June 27, 2019, Enbridge submitted drawings that showed the old alignment being abandoned, a new proposed alignment within close proximity to the edge of pavement within the majority of the Subject Section, under the unpaved shoulder which is considered a travelled portion of the roadway, and with only a 6" pipeline reflected;
- (d) On or about June 28, 2019, the County's Manager of Transportation, Planning & Development, namely Krystal Kalbol, advised Enbridge that the County had concerns with (1) the proposed alignment and questioned why the pipeline was not being replaced within a private easement (as per the existing alignment), and (2) the proposed size of the pipeline. Attached hereto and marked as **Exhibit "C"** to this my Affidavit is a true copy of the email from Krystal Kalbol to Enbridge, dated June 28, 2019;
- (e) On or about July 3, 2019, Enbridge provided a letter to the County, purportedly responding to the alignment and size concerns communicated

to Enbridge by the County in May of 2019. Krystal Kalbol responded to Enbridge on behalf of the County on or about August 1, 2019, confirming that (1) the County needed more information on the capacity of the pipeline and that (2) the County needed clarification and justification from Enbridge as to why the new pipeline could not be installed within the existing alignment, including the private easements. Attached hereto and marked as **Exhibit "D"** to this my Affidavit is a true copy of the email exchange between Krystal Kalbol and Enbridge;

- (f) On or about July 22, 2019, the County received the Environmental Assessment (the "**EA**") for the Project. The EA included a drawing that simply showed the pipeline alignment being along County Road 46, but not the precise location. The EA only made reference to depth once, namely in Section 4.2, with the following statement:

"The planned excavation depth of the project is approximately 1 m below grade, with the potential to exceed this depth for watercourse and road crossings. Based on the shallow nature of the excavations and the significant depth to bedrock shown in the published information, bedrock is not likely to be encountered. As such, no potential impacts are anticipated."

I had no specific issues with that statement, or at this time, as a 1.0 metre minimum depth of cover is largely acceptable within the alignment of the existing pipeline, which runs close to the property line or is in private easements with sufficient setbacks from the roadway. A greater depth is only required by the policies of the County, as guided by provincial standards, once the pipeline is closer to the travelled portion of the roadway. Attached hereto and marked as **Exhibit "E"** to this my Affidavit is a true copy of the relevant page from the EA and a copy of one of the sketches included showing the proposed alignment in insufficient detail;

- (g) On or about August 7, 2019, the County learned that Enbridge had not done much with respect to route selection and environmental impact, with the following language found within the EA:

"The route selection process was undertaken in accordance with the OEB Environmental Guidelines which identify the environmental and socio-

economic features, and the routing principles to be considered. Enbridge Gas provided the route for the pipeline replacement, which, focused on the utilization of the existing road allowances along the existing pipeline route, route adjustments were developed to avoid three on easement cross country section of the existing pipeline. A routing study was not completed because the pipeline will be generally replaced within the existing road allowances in the immediate vicinity of the existing pipeline.”

For whatever reason, Enbridge decided not to have a routing study completed.

- (h) On or about August 13, 2019, a site meeting was held between Enbridge, the Town of Lakeshore, and the County. The County confirmed at that meeting that the alignment proposed by Enbridge was too close to the travelled portion of the roadway, especially when considering the future expansion of the roadway. The County requested that Enbridge relocate the alignment closer to the property line, which is further from the roadway. Enbridge was to provide updated drawings with the new alignment.
- (i) On or about September 18, 2019, Enbridge requested that permits be issued for a portion of the Project along the Subject Section of County Road 46. The County's position was that it was premature to be issuing permits, as Enbridge had still not addressed the size and alignment concerns previously raised by the County. Attached hereto and marked as **Exhibit "F"** to this my Affidavit is a true copy of the email exchange between Krystal Kalbol and Enbridge, ending on September 18, 2019.
- (j) On or about September 27, 2019, Krystal Kalbol wrote to Enbridge in response to Enbridge's request for a meeting, and noted that the drawings showing the new alignment discussed at the site meeting on August 13, 2019, had not yet been provided by Enbridge. Attached hereto and marked as **Exhibit "G"** to this my Affidavit is a true copy of the email exchange between Krystal Kalbol and Enbridge, ending on September 27, 2019.
- (k) On or about October 3, 2019, a meeting was held with Enbridge at the County's offices. At that time the following was discussed:

- (i) that Enbridge still had to address the capacity issues raised by the County due to the size of pipe that was being proposed;
- (ii) that the County could not support allowing Enbridge to have an area in the right of way dedicated to an abandoned line and another area in the right of way dedicated to a new pipeline, due to, among other things, the planned widening of County Road 46;
- (iii) that the County would only revisit the alignment issue within the right of way if there were no other options and the growth and alignment issues raised by the County in May of 2019 were addressed by Enbridge; and
- (iv) that Enbridge was to provide a schedule associated with the Project and an expected completion date.

A summary of the meeting was provided by Krystal Kalbol to Enbridge via email on October 18, 2019. Attached hereto and marked as **Exhibit "H"** to this my Affidavit is a true copy of the email exchange between Krystal Kalbol and Enbridge, ending on October 18, 2019.

- (l) On or about November 7, 2019, Enbridge provided comments further explaining why a 6" pipeline was sufficient. The County was not pleased that the rationale continued to give no consideration to future growth, but County Administration ultimately decided to no longer take issue with the size of the pipe, as it was clear Enbridge was never going to address this concern. Attached hereto and marked as **Exhibit "I"** to this my Affidavit is a true copy of an email from Enbridge with attachments, dated November 7, 2019;
- (m) On or about December 5, 2019, a meeting was held between Enbridge and the County, at which time the County continued to advise that it had issues with the alignment and depth of the proposed pipeline and at which time it was confirmed that a Road User Agreement was required by the County as part of the approval process by the County. Attached hereto and marked as **Exhibit "J"** to this my Affidavit is a true copy of an email exchange between the County and Enbridge, ending on December 11, 2019, that relates to the meeting of December 5, 2019;

- (n) At the meeting held on or about December 5, 2019, Enbridge also advised the County that it was proposing County Road 46 be closed for approximately 6 months. The County was and remains opposed to the closure of County Road 46 as it is a major east/west route through the County and is needed for a number of uses. As such, the County denied this request and directed Enbridge to submit a Traffic Control Plan. At all of the meetings prior to the OEB approving the Project, including the December meetings, Enbridge never took issue with the County's concerns related to depth of cover and alignment of the new pipeline;
- (o) On February 6, 2020, County staff met with Enbridge. At that time, the traffic concerns were largely resolved. However, the County again advised Enbridge that in order to proceed with the Project it would either have to agree to a minimum depth of 1.5 metres based on the proposed alignment (given how close the proposed alignment was to the paved edge of the roadway), or use its existing alignment. Attached hereto and marked as **Exhibit "K"** to this my Affidavit is a true copy of an email exchange related to the meeting of February 6, 2020;
- (p) On February 28, 2020 (after the time to participate in the Application to Construct had passed), for the first time the County learned that Enbridge did not want to abide by the County's requirement that the minimum depth of the pipeline be 1.5 metres. Attached hereto and marked as **Exhibit "L"** to this my Affidavit is a true copy of the email from Enbridge, dated February 28, 2020, with related attachments;
- (q) In or about March of 2020, in anticipation of the Project proceeding at some point, the County had a Road User Agreement prepared by the County Solicitor to address the County's concerns with the Project. Attached hereto and marked as **Exhibit "M"** to this my Affidavit is a true copy of the initial Road User Agreement provided to Enbridge on or about April 17, 2020; and
- (r) On or about April 8, 2020, the County completed its technical review of the updated drawing package provided by Enbridge. From the review, the County noted that (1) separation from the Town of Lakeshore's watermain remained an issue and did not meet the Town of Lakeshore's requirements

and (2) that the County requires a minimum depth of cover of 1.5 metres given the nature of the roadway and the use of heavy truck traffic through this corridor. Attached hereto and marked as **Exhibit "N"** to this my Affidavit is a true copy of the email from Krystal Kalbol to Enbridge regarding the technical review, dated April 8, 2020;

- (s) On or about April 8, 2020, Enbridge arranged for a telephone conference with the County, at which time Enbridge advised the County that it had obtained the Decision and that it wanted to commence construction on May 7, 2020. The County reiterated with Enbridge at that time that the County's consent would be granted through a Road User Agreement that adequately addressed all of the County's concerns; and
- (t) On the telephone conference with Enbridge on April 8, 2020, the County described the corridor to Enbridge along with the County's concerns with the construction of a high pressure gas line in the planned future right of way. Several issues were discussed including alignment, depth, abandoned pipe, and the need for a Road User Agreement and a Traffic Control Plan.
- (u) As a result of the telephone conference, the County agreed to provide leniency on the Traffic Control Plan to allow some limited lane closures on the right of way. In turn, Enbridge agreed to provide a professional engineer's report, signed and sealed, that confirmed the project would not cause issues to the existing roadway and/or the planned future roadway

16. On behalf of the County, as the County Engineer, I ultimately decided not to make submissions on the Application of Enbridge related to approval for the Project, as:

- (a) Enbridge had never objected to the County's concerns related to depth, which ultimately was the solution proposed by the County to address Enbridge's refusal to utilize a location in close proximity to the existing pipeline and/or to utilize existing or obtain new private easements and/or an alternative alignment closer to the property line/further from the roadway edge;
- (b) The Application did not make mention of depth of cover, other than in a single paragraph of the EA, as discussed above in this my Affidavit;

- (c) The OEB requires that Enbridge obtains municipal approval prior to proceeding with construction;
- (d) The Franchise Agreement provides the County Engineer with discretion about the placement of pipelines; and
- (e) The County had made it very clear to Enbridge that the County required (1) that the minimum depth of the pipeline be at least 1.5 metres if the pipeline was within 6.0 metres of the existing paved edge of the roadway and (2) that Enbridge would be required to enter into a Road User Agreement reflecting the County's various requirements related to the Project. As can be seen from the correspondence referred to above and appended as Exhibits to this my Affidavit, Enbridge did have concerns about entering into a Road User Agreement, but never said they would not do so prior to the Decision being obtained from the OEB.

17. The following is a summary of the events that occurred once the County learned that the Decision had been granted by the OEB with respect to the Project:

- (a) Enbridge provided alignment drawings on April 23, 2020, which drawings proposed an alignment of between 2.1 to 6.0 metres from the edge of pavement within the Town of Lakeshore. The County advised Enbridge that the minimum setback from the edge of the pavement is 3.0 metres, but to date Enbridge has not confirmed whether or not it intends to comply with this requirement. This is in addition to the issues of depth which have continued to be ignored by Enbridge;
- (b) The County undertook extensive negotiations with Enbridge related to the Road User Agreement, and ultimately agreed on all terms except for the minimum depth of cover with 6 metres of the paved edge of the roadway;
- (c) The County agreed to provide approval for a minimum depth of cover of less than 1.5 metres **IF** Enbridge could have a qualified engineer certify that a depth of cover of less than 1.5 metres would not negatively impact the roadway, as it is the duty of the County as the designated Road Authority to ensure the protection of its roadways;

- (d) Enbridge failed to provide an engineering report to confirm that the depth of cover they were proposing would not negatively impact the roadway or future plans for widening the roadway;
- (e) Enbridge did provide a report on or about May 1, 2020, which was referred by the County to a third party engineering firm, Haddad Morgan & Associated Ltd. ("**Haddad Morgan**") to review and comment on. Attached hereto and marked as **Exhibit "O"** to this my Affidavit is a true copy of the report provided by Enbridge, dated May 1, 2020 (the "**First Enbridge Report**"). Attached hereto and marked as **Exhibit "P"** to this my Affidavit is a true copy of the response of Haddad Morgan to the First Enbridge Report, dated May 7, 2020 (the "**First Haddad Morgan Response**"). The Haddad Morgan Response provided, among other things, as follows:
 - (i) that the Transportation Association of Canada guidelines (the "**TAC Guidelines**") provide for a depth of 1.5 metres for new non-encased pipelines below paved surfaces and not less than 1.0 metre below ground elevation;
 - (ii) that the proposed pipeline will be located in some cases within 2 metres of the existing road edge, but that (1) County Road 46 will be widened over the life of the pipeline bringing the pipeline under the paved portion and (2) that the pipeline will be installed in the existing shoulder which is considered a travelled portion based on use;
 - (iii) that the TAC guidelines form the established standards for works within the County Road 46 right of way;
 - (iv) that the First Enbridge Report used a 2015 CSA standard and not the more recent 2019 CSA standard;
 - (v) that the First Enbridge Report had made assumptions about the soil in the area rather than actually testing the soil, and that this could impact the capacity of the pipeline;
 - (vi) that the TAC Guidelines, which are the standards utilized by the County in approving work along its highways, provide that the location of gas lines is dependent, among other things, public safety and future stage improvements for the road;

- (vii) that the TAC Guidelines provide for a best practice of determining "the initial requirements and select the dimensions so as to allow for future expansion";
- (viii) that the TAC Guidelines place an emphasis on the Road Authority, in this case the County, to regulate the use of the right of way by utilities "in a manner that ensures the safety, traffic-carrying ability and physical integrity of their installations";
- (ix) that "[a]s a member of the Association the County must as a measure of good practice assess, and as appropriate, apply the recommendations and" TAC Guidelines";
- (x) that although the intended audience for TAC Guidelines, includes "Consulting engineers practicing in the highway/utility field" it does not appear that Enbridge referenced the TAC Guidelines in preparing for the Project;
- (xi) that the TAC Guidelines recognize that "[t]he minimum utility depths specified by a road authority may be greater when installed within freeway rights-of-way";
- (xii) that the County could actually insist on more than a minimum depth of cover of 1.5 metres, but has not done so;
- (xiii) that the County could accept a minimum depth of cover of 1.2 metres if the pipeline was encased;
- (xiv) that the most recent version of the CSA Standards, namely the 2019 CSA Standards, being the guidelines that specifically govern Enbridge, "note a minimum depth of bury, 'below travelled surface (road)' of 1.2m; a value which is more than that currently proposed by Enbridge";
- (xv) that emphasis must be placed on the term "minimum" when considering the CSA Standards and the TAC Guidelines, and that in the presence of competing guidelines, that "the most stringent should be considered in the interest of best engineering practice and public safety";

- (xvi) that the CSA Standards specifically provides that "cover requirements for buried pipelines shall not be less than" 1.2 metres, whereas Enbridge is proposing less;
 - (xvii) that the proposal of Enbridge fails to meet either the TAC Guidelines or the CSA Standards;
 - (xviii) that the "failure to follow guidelines does create a situation of increased risk and liability";
 - (xix) that the failure of the County to adhere to the TAC Guidelines it applies to all work done along County Roads, would be a failure to follow an established standard, which would increase liability exposure; and
 - (xx) that Enbridge should comply with the TAC Guidelines in completing the Project.
- (f) Following the First Haddad Morgan Response being provided to Enbridge, Enbridge provided an email response on May 14, 2020 (the "**Second Enbridge Report**"), which again failed to address the County's concerns in relation to protection of the roadway. Attached hereto and marked as **Exhibit "Q"** to this my Affidavit is a true copy of the Second Enbridge Report;
- (g) The Second Enbridge Report was provided to Haddad Morgan to conduct a review and provide a response. Haddad Morgan provided its response to the Second Enbridge Report on May 19, 2020 (the "**Second Haddad Morgan Response**"). Attached hereto and marked as **Exhibit "R"** to this my Affidavit is a true copy of the Second Haddad Morgan Response. The Second Haddad Morgan Response provided as follows:
- (i) that the absence of past issues with Enbridge not following TAC Guidelines is irrelevant, as it does not speak to potential issues with failing to follow TAC Guidelines;
 - (ii) that good practice is to follow the more stringent guideline when there are competing guidelines;
 - (iii) that it is within the right of a Road Authority (the County) to apply an industry standard or recommendation within its jurisdiction;

- (iv) that the CSA Standards require a minimum depth of cover of at least 1.2 metres for any pipeline within 7 metres of the edge of pavement;
 - (v) that the position of Enbridge in the Second Enbridge Report is based on conditions that may not exist in the field and fails to "account for the disturbed condition commonly found within right of ways due to past works;
 - (vi) that the TAC Guidelines applicable to the County notes that it is the "County's responsibility to adhere to the most updated version of recommendations being made"; and
 - (vii) that "the proposed 1.5 m depth would provide the abilities [sic] to modify cover without concern during the road expansion and regrading process.
- (h) On May 19, 2020, Enbridge provided a further report (the "**Third Enbridge Report**") which again failed to address the County's concerns. Attached hereto and marked as **Exhibit "S"** to this my Affidavit is a true copy of the Third Enbridge Report;
- (i) The Third Enbridge Report was provided to Haddad Morgan to conduct a review and provide a response. Haddad Morgan provided its response to the Third Enbridge Report on May 29, 2020 (the "**Third Haddad Morgan Response**"). Attached hereto and marked as **Exhibit "T"** to this my Affidavit is a true copy of the Third Haddad Morgan Response. The Third Haddad Morgan Response provided as follows:
- (i) that the Third Enbridge Report continued to rely on the 2015 CSA Standards and not the 2019 CSA Standards;
 - (ii) that road reconstruction and expansion can result in elevation decreases which would further impact on the 1.0 metre depth of cover being proposed by Enbridge;
 - (iii) that the Third Enbridge Report continued to fail to account for disturbed soil conditions;
 - (iv) that the Third Enbridge Report fails to state that the application of TAC Guidelines is not appropriate, and notes that the TAC Guidelines are applied in other jurisdictions "at a location of an actual

or anticipated future conflict, where additional depth of bury has been required";

- (v) that the position of the County is "that the additional depth is required [to] avoid future conflicts as...road expansion is anticipated in the life span of the pipeline";
 - (vi) that the Third Enbridge Report is flawed in assuming that a roadway is raised during reconstruction, when roadway grades are often decreased during construction, which would result in an even lower cover for the pipelines under the new roadway; and
 - (vii) that the Third Enbridge Report fails to speak to the mandate placed on Enbridge by the OEB "to obtain approval for construction from the Road Authority", and that as Enbridge refuses to adhere to the TAC Guidelines required by the County, it has failed to meet this mandate.
- (j) Given that the County wants to see the Project proceed, and that I as the County Engineer was satisfied with all of the terms and conditions negotiated between the County and Enbridge, **except for** the issue of minimum depth of cover, I recommended to County Council that they approve entering into a Road User Agreement with Enbridge with respect to the Project. Attached hereto and marked as **Exhibit "U"** to this my Affidavit is a true copy of my Administrative Report to Council, dated May 20, 2020;
- (k) County Council agreed with my recommendation and adopted By-law Number 2020-23 authorizing the Warden and the County Clerk to enter into the Road User Agreement and authorizing Enbridge to complete the Project along the Subject Section of County Road 46 following Enbridge entering into the Road User Agreement. Attached hereto and marked as **Exhibit "V"** to this my Affidavit is a true copy of By-law 2020-23;
- (l) Notwithstanding County Council granting the consent of the County to the Project on May 20, 2020, subject to Enbridge executing the Road User Agreement in the final form approved by County Council, Enbridge commenced the Application in this matter.

18. It is my understanding that despite not obtaining the consent of the County, Enbridge has commenced construction of the Project in the areas outside of the jurisdiction of the County.

Response

19. I have the following specific responses to the submissions made by Enbridge in its Application in this matter:

- (a) In response to paragraph 2 of the Application for Authority to Construct, I note that it was made clear to Enbridge by the County prior to Enbridge obtaining approval from the OEB for the Project that compliance with County's depth requirements was required. If there are "significant and costly departures" from Enbridge's desire to complete the Project along the Subject Sections of County Road 46 in the fashion that it wants to, these costs are the fault of Enbridge. Enbridge could and should have submitted a plan and cost analysis to the OEB when seeking approval for the Project and the cost recovery for the Project that was in compliance with the County's requirements;
- (b) In response to paragraph 3 of the Application for Authority to Construct, I note that Enbridge's original Application with respect to the Project showed the route, but did not reflect the desired depth of the pipeline specific to the pipeline's proximity to the road. I further note that the Decision of the OEB in approving the Project required that Enbridge obtain municipal consent. Again, it is a condition of the consent of the County that Enbridge construct the pipeline along County Road 46 in compliance with the County's standards;
- (c) In response to paragraph 4 of the Application for Authority to Construct, I note that the County also wants to have the Project completed as soon as possible. However, the County is not willing to sacrifice safety and a deviation from the standards the County uses to do so. Again, the County requires that the County's requirements, which include the TAC Guidelines, be adhered to;

- (d) In response to paragraph 11 of the Application for Authority to Construct, I note that it is not "unusual" for the County to insist on the requirements imposed on Enbridge. The County requires Road User Agreements be entered into by all parties seeking to use the right of way and requires that the County's standards be met for the installation of infrastructure. Further Enbridge took no issue with this requirement prior to obtaining the Decision from the OEB;
- (e) In response to paragraph 11(b) in particular, I note from a review of the County's files, that the last two (2) projects of Union Gas and/or Enbridge that affected County roadways, both required minimum depths of 1.5 metres. In or about 2019 a section of pipeline was laid in the Town of Kingsville. This project ran primarily along the Town's road, but did have to access the County's right of way at certain points. In areas under the County's jurisdiction a minimum depth of 1.5 metres was required. Likewise, a project known as the Panhandle Reinforcement project that occurred in or about 2017 was required to have minimum depth of 1.5 metres when it fell into areas under the County's jurisdiction;
- (f) In response to paragraph 13 of the Application for Authority to Construct, I note that the County **has** demonstrated a safety reason or future conflict with a road project to support the requirement of a minimum depth of cover of 1.5 metres within 6.0 metres of the paved edge of the road. Again, Enbridge has been repeatedly advised that County Road 46 will be widened in the future, and that the County has safety concerns from a deviation away from the County's standards, which includes the TAC Guidelines, to which it adheres. Conversely, Enbridge has failed to satisfy the County that there are no safety concerns in not applying the TAC Guidelines or the most recent CSA Standards. Further, when the Subject Sections of County Road 46 are widened, the pipeline, if installed in the manner chosen by Enbridge, will be under the paved portion of the roadway and not accessible to future service connections;
- (g) In response to paragraph 14 of the Application for Authority to Construct, I note that the right of way is already crowded, there are other future

infrastructure needs, and the County cannot dedicate an area to an abandoned line as well as an active line. This would have been avoided had Enbridge used its current corridor, including its private easements, rather than insisting in being close to the existing roadway;

- (h) In response to paragraph 15 of the Application for Authority to Construct, I note that the County has not demanded any changes to the Project. On the contrary the County has reluctantly agreed to the route and the size of the pipe. The County made it clear to Enbridge throughout that adherence to the County's standards, which include the TAC Guidelines, was required, and thus there has been no change with respect to the depth required by the County;
- (i) In response to paragraph 17 of the Application for Authority to Construct, I note that only reason there is any "change" is that Enbridge failed in its initial Application to the OEB to account for the County's requirements that Enbridge adhere to the County's standards, which in this instance include the TAC Guidelines, and that Enbridge decommission and remove its abandoned line from the County's right of way. Had Enbridge been forthcoming in its initial Application to the OEB, it would not have to allege that there was a "change" after the Decision was released;
- (j) In response to paragraph 18 of the Application for Authority to Construct, I note that the County's position is **not** premised on the CSA Standards. The County's position is premised on the County's standards, which include TAC Guidelines. I further note, that even if the County's position was premised on the CSA Standards, Enbridge has failed to comply with the requirement of the 2019 CSA Standards to adhere to a minimum depth of cover of 1.2 metres;
- (k) In response to paragraph 19 of the Application for Authority to Construct, I note that Enbridge's statement is incorrect. The County has not insisted on a minimum depth of cover of 1.5 metres within 6 metres of the travelled edge of the road way. The County has insisted on a minimum depth of cover of 1.5 metres within 6 metres of the current paved portion of the road way. The rationale for this is (1) that the unpaved shoulder is utilized for

overweight and oversized loads and (2) when the road way is widened it will likely include an additional lane on each side of the roadway of 3.75 metres and a new shoulder on each side of the roadway of 2.0 metres. The additional laneway and new shoulder have been rounded to 6.0 metres from the existing edge of the pavement to protect the planned travelled portion of the roadway;

- (l) In response to paragraph 20 of the Application for Authority to Construct, I note, as outlined above, that the County has repeatedly explained to Enbridge that the County requires adherence to the TAC Guidelines and that Enbridge is attempting to rely on outdated 2015 CSA Standards that have been replaced by 2019 CSA Standards. The County does not reference CSA guidelines for any road design (do they even exist), rather there are several (TAC, FHWA, OPSS, OTM, etc.) that are typically referenced for right-of-way design, including utility requirements. Finally, I note that the engineering reports provided by Enbridge have not satisfied the concerns of the County and rely on the Haddad Morgan responses outlined above and attached as Exhibits to this my Affidavit;
- (m) In response to paragraph 22 of the Application for Authority to Construct, I note, as outlined above, that the County did not participate in the original Application to Construct of Enbridge to the OEB because (1) Enbridge agreed to work with the County to satisfy the County's concerns, (2) the County reluctantly agreed to the size of the pipe, (3) the County reluctantly agreed to the route of the pipeline, (4) Enbridge had not objected to the minimum depth required by the County until very late in the process, and (5) municipal consent would be required for Enbridge to proceed which would involve Enbridge having to agree to the appropriate depth of cover to obtain consent from the County;
- (n) In response to paragraph 23 of the Application for Authority to Construct, I note that this Project and all future projects proposed by Enbridge within areas under the jurisdiction of the County will require compliance with the County's standards, which currently include the TAC Guidelines;

- (o) In response to paragraph 6 of the Evidence Overview, I note that there does not appear to be any evidence as to why the pipeline is preferred to be in the right of way or that this is common practice. Again, I have no issue with Enbridge placing its pipeline in the right of way, subject to complying with the County's standards, which include the TAC Guidelines, but I note that there appears to be no evidence backing up the **bald** statement in paragraph 6 of the Evidence Overview;
- (p) In response to paragraph 11 of the Evidence Overview, Enbridge has been advised that in order to proceed with any work, it first needs to satisfy the County's concerns as identified in the Road User Agreement. Enbridge has chosen to ignore these requirements;
- (q) In response to paragraphs 13 and 14 of the Evidence Overview, I again note that prior to Enbridge seeking approval for the Project from the OEB it was advised by the County of the requirement of Enbridge to comply with the County's standards if constructing within the County's right of way for County Road 46;
- (r) In response to paragraph 15 of the Evidence Overview, I note that Enbridge provides no evidence as to how the depth requirement will impact or conflict with other utilities, other than making a **bald** assertion that it will. There is an increased potential for conflicts, at any depth, in utilizing the right of way for the placement of infrastructure. However, Enbridge made the choice to utilize this area of the right of way closer to other utilities rather than closer to it's existing alignment and/or the property line further from the roadway and/or its private easements, even after being warned that the right of way is already crowded and likely to become more crowded over time;
- (s) In response to paragraphs 16 through 20 of the Evidence Overview, I note that Enbridge has proposed to bore approximately 9.2 kilometres of the 29 kilometres of pipeline it proposes to install along County Road 46. Enbridge has also failed to demonstrate why it cannot use the boring method for the majority of the remainder of the pipeline. If boring were utilized any comments about the cost of trenching would be irrelevant;

- (t) In response to paragraphs 21 and 22 of the Evidence Overview, I again note that prior to Enbridge receiving approval for the Project from the OEB, the County encouraged Enbridge to use its existing footprint, including the private easements, to avoid any conflict with the existing needs and future needs of the roadway. Enbridge decided to ignore this advice, despite knowing about the County's requirements that Enbridge adhere to the County's standards, including the TAC Guidelines, within the County's right of way;
- (u) In response to paragraph 23 of the Evidence Overview, I note that the County never encouraged Enbridge to utilize areas occupied by municipal drainage. Again, the County encouraged Enbridge to use its existing footprint, including its private easements, which it chose not to do, despite the potential for increased costs;
- (v) In response to paragraph 24 of the Evidence Overview, I note that the analysis of the County is that adherence to a minimum depth of 1.5 metres within 6 metres of the paved edge of the existing roadway, will not have any appreciable difference on separation from other utilities, and I have concerns with future needs in the roadway that should actually call for a depth of greater than 1.5 metres;
- (w) In response to paragraph 25 of the Evidence Overview, my comments are very similar to my comments in subparagraph (q) above. Again, Enbridge provides no evidence as to how the depth requirements will impact or conflict with other utilities, other than making a bald assertion that it will. Again whether the depth is 0.75 metres, 1.0 metre, or 1.5 metres, there is the risk of conflict with other utilities in this area of the right of way. It is very common to deal with conflicts in the field, and to go deeper as necessary to avoid conflicts. Again, Enbridge made the choice to utilize this area of the right of way closer to other utilities rather than its existing alignment, even after being warned that the right of way is already crowded and likely to become more crowded;
- (x) In response to paragraphs 26 through 31 of the Evidence Overview, as previously noted in this my Affidavit above, the right of way is crowded and

there are a number of demands on the right of way by other third parties. As such, the County cannot support a corridor along the right of way being dedicated to a new natural gas pipeline, and another corridor being dedicated to an abandoned pipeline. I further note that the Franchise Agreement grants the County the authority to require Enbridge to "alter or relocate" its pipe. The County's position is that this term includes the County's requirement that Enbridge remove its old pipe once the new pipeline is brought into service;

- (y) In response to paragraphs 32 through 41 of the Evidence Overview, I note that the County relies on the timeline and statements outlined above in response to Enbridge's statements;
- (z) In response to paragraph 42 of the Evidence Overview, I disagree with the statement of Enbridge. Again, the County believes that Enbridge should have used its existing footprint, including private easements, but reluctantly agreed to Enbridge using the right of way, subject to Enbridge adhering to the County's requirement that Enbridge comply with the County's standards, which include the TAC Guidelines;
- (aa) In response to paragraph 43 of the Evidence Overview, I disagree with the statement of Enbridge contained therein. The County advised Enbridge, and continues to advise Enbridge, that no permit will be issued by the County until a Road User Agreement to the satisfaction of the County is executed by Enbridge;
- (bb) In response to paragraphs 44 through 57 of the Evidence Overview, I rely on the timeline and statements I have provided above. From March of 2020 until I went before County Council on May 20, 2020, I worked, along with other members of County Administration and the County Solicitor to meet the various demands of Enbridge to address Enbridge's questions and concerns in a timely manner. I put other projects and responsibilities aside, and dealt almost exclusively with the demands of Enbridge with respect to the Project. However, all of the delay was related to Enbridge's continuing refusal to comply with the County's requirement that the County's standards, which include TAC Guidelines, be adhered to;

- (cc) In response to paragraphs 58 through 62 of the Evidence Overview, I again note that prior to Enbridge commencing the Application herein to the OEB, the County and Enbridge had agreed on all terms except for the minimum depth of cover within 6.0 metres of the paved edge of the road. However, I dispute the allegation of Enbridge that they provided a report that demonstrated "that the depth of cover at 1.0 metre was safe and the load analysis was reasonable." The whole purpose of agreeing to a lesser depth if it could be demonstrated that it was safe and reasonable to do so, was to provide Enbridge with an opportunity to demonstrate that a deviation from the TAC Guidelines was reasonable and supportable, with a focus on the viability of the roadway. Enbridge failed to provide any engineering report that gave me the basis, with particular attention on my responsibilities in light of the County being the Road Authority, to deviate from the TAC Guidelines. Rather, once the Haddad Morgan responses were obtained, my position that the TAC Guidelines must be adhered to as a minimum were reinforced;
- (dd) In response to the Pipeline Installation Depth of Cover and Abandonment Standards contained in the Application, I note that the requirements of the County are more stringent than what Enbridge is used to. However, the TAC Guidelines the County is relying on are not unreasonable, and take into consideration the special safety concerns related to roadways, especially when considering the nature and use of County Road 46;
- (ee) In response to the Franchise Agreement submissions of Enbridge contained in the Application, I note that since 2010 the County has required that Road User Agreements be entered into for all installations along County Roads. Enbridge has not previously completed any major installation along County Roads. I further note that in my role as the County Engineer, that I am not satisfied that the current proposal will not interfere with the use of the highways, especially when considering the safety concerns in Enbridge's refusal to comply with the County's depth requirements and future widening that is planned for the Subject Section of County Road 46;

- (ff) In response to the Increased Costs submissions of Enbridge contained in the Application, I note that Enbridge was fully aware of the County's requirement before obtaining the Decision and decided not to bring this to the OEB's attention or submit a proposal on cost to the OEB that took the costs of complying with the County's requirements into consideration; and
- (gg) In response to the Applicable Construction Standards submissions of Enbridge contained in the Application I note that the TAC Guidelines are the applicable standards from the County's perspective in this situation, and are part of the standards the County considers for projects along County Roads. I further note that the County is not relying on the TAC Guidelines in demanding the removal of the existing pipeline once the new pipeline is completed. The County is relying on the requirements for other infrastructure to use the right of way and the language contained in the Franchise Agreement.

My Professional Opinion and Conclusion

- 20. From my background as an engineer, from my review of the opinions provided by Enbridge, from my review of the responses provided by Haddad Morgan, and having consideration to my role as the County Engineer with the duty to ensuring the County meets its requirements as the Road Authority, it is my professional opinion that, given that Enbridge has provided insufficient information to satisfy the County that the minimum standards should not be applied in this situation, there is no basis from which I can ignore the minimum standards imposed by the County's standards, which include the TAC Guidelines, and which apply to projects within and along the County's roadways.
- 21. As such, it is my professional opinion, in light of a number of factors, including, but not limited to, the use of the roadway, safety, future plans, maintenance of the roadway, and the size and pressure of the proposed pipeline, that the minimum depth of cover for the proposed pipeline should be consistent with the TAC Guidelines, namely that the minimum depth of cover be 1.5 metres (or 1.0 metre if

encased) within 6.0 metres of the edge of the paved portion of the roadway and 1.0 metre if greater than 6.0 metres from the paved portion of the roadway.

22. Given the opinion above, if Enbridge submits a proposal for the Project that meets the minimum standards recommended (1.0 metre if encased, 1.5 metres if not, within 6.0 metres of the current paved edge of the roadway), and executes the Road User Agreement approved by County Council, the consent of the County for this Project remains in place, and the Project may proceed along the Subject Sections of County Road 46.

23. I swear this Affidavit to provide information and to outline the grounds the County relies on in responding to the Application of Enbridge in this matter, and for no other or improper purpose.

SWORN BEFORE ME at the Town of)
Essex, in the County of Essex, and in)
the Province of Ontario, this 24th day)
day of July, 2020.)

David Sundin

Signed with ConsignO Cloud (2020/07/24)
Verify with ConsignO or Adobe Reader.



DAVID M. SUNDIN
A Commissioner Etc.

Jane Mustac

Signed with ConsignO Cloud (2020/07/24)
Verify with ConsignO or Adobe Reader.



JANE MUSTAC