

RED HILL VALLEY PARKWAY INQUIRY

AFFIDAVIT OF CHARLIE LAURICELLA (affirmed September 1, 2022)

I, **CHARLIE LAURICELLA**, of the City of Hamilton, in the Province of Ontario,
MAKE OATH AND SAY:

1. I am a Senior Project Manager of Technical Services in Engineering Services, Public Works Department at the City of Hamilton. I have held this position since 2015. My role is split into two actions: one, I support the capital program through the creation of pre-engineering CAD drawings for capital works, and two, I also use GIS (Geographic Information Systems) and applications such as SPIDER to look up design and as built drawings.

2. In addition to these roles, I am the administrator for various software programs used by Engineering Services, including ProjectWise, Microstation and InRoads. As such I have knowledge of the matters set out below, except where this knowledge is based on information and belief, in which case I state the source of that information and verily believe it to be true.

3. The Public Works department does not have a dedicated IT person. Engineering Services will put requests into the City's IT department where appropriate. However, the City's IT department does not have expertise with software programs such as

ProjectWise, Microstation and InRoads used by Engineering Services. ProjectWise specifically was extensively vendor supported.

4. Engineering Services staff would typically come to me if they had an issue with ProjectWise and I would assist if I was able to or direct their inquiries to the vendor.

5. Engineering Services staff also had access to various network drives, outside of ProjectWise on the City's IT system. I am not familiar with any of the permissions of the network drives. The drives were all set up by IT.

6. I believe that Gary Moore regarded me as someone with technical knowledge. As such, he would contact me on occasion to assist him with IT problems informally.

ProjectWise

7. ProjectWise is a document management system geared to engineering-related documents. ProjectWise was first deployed in 2007. I was a draftsman at the time but was interested in the system, so I volunteered to help with its initial implementation. My role generally was to assist with project management. I helped set up the groups that were going to be established in ProjectWise, which roughly mimicked the organizational structure in Engineering Services at the time, and I organized bringing in Bentley Systems to do the initial installation with IT. I also helped develop some PDF documents and quick guides for Engineering Services staff. There is no formal training for new users of ProjectWise in Engineering Services. The software is fairly intuitive.

8. I have been the ProjectWise software administrator since 2015 and I have several direct reports who assist me. My team provides access to software for staff members who

join Engineering Services within Public Works. After receiving a request, my team will create a user ID and complete the installation on the new user's machine. Typically, whichever member of my team is installing ProjectWise for a user will also show the user how to navigate the software.

9. Engineering Services resolves any software issues with ProjectWise directly with the software provider, Bentley Systems. The City's IT department was and is not involved with ProjectWise other than in initially standing up the server to host ProjectWise and to provide the location for the database to be housed. However, Bentley Systems now hosts the City's entire on-premise ProjectWise deployment on their cloud. The switch to the cloud occurred in 2020.

10. When ProjectWise was first implemented by the City in 2007, it was intended to be used by Engineering Services staff for capital projects. Staff were to save all CAD drawings, supporting documents, Excel, Word, Outlook, image files, PDF files, and other correspondence in ProjectWise. The goal was to make the documents easily locatable for other staff working on or supporting that project.

11. In a linear capital project, such as a road reconstruction or resurfacing, or a sewer or water main replacement, information is gathered in the field by our survey crews and then it works down Engineering Services' capital flow. When ProjectWise was implemented, we did not have a standard operating procedure, but it was understood that information flowed from the crews to Geomatics, to Design and then Construction. ProjectWise facilitated this flow. Geomatics staff would work on documents and save

them in ProjectWise where they would they be picked up by Design, worked on and saved in ProjectWise and then subsequently by Construction who did the same.

12. There was no formal expectation but it was best practice to use ProjectWise in this manner so that staff could go into the folder and see all the information from the other groups in the flow. It took some time for people to switch over from the practice of saving on network drives.

13. When I became administrator in 2015, there was no policy or expectation about the consistent use of ProjectWise as a general document storage system. Over time, I believe some staff adopted it on an *ad hoc* basis because they realized it made sense to have the project documents saved all together.

14. We are currently working with a Senior Project Manager in Continuous Improvement to help ensure that ProjectWise becomes the repository for capital projects.

ProjectWise Access and Permissions

15. ProjectWise is a license-based software, meaning each user requires a license. Because each license comes with an associated cost, the City tries to manage the number of users accordingly. User profiles, with a username and ID, must be created for each City staff member to log into ProjectWise. My team does that.

16. Engineering Services staff do not automatically have access to ProjectWise although if they require it, they are granted access. Access requests typically are made by email to me. Other staff within Public Works could also request access to ProjectWise although I do not recall any such request during my tenure.

17. ProjectWise is also a permission-based software. Each user profile in ProjectWise is associated with certain read, write and view permissions for documents and folders and users are assigned to certain groups. This means that only a particular staff member or group can read, write, or view particular documents. In my estimation, ninety-nine percent of staff are able to move files from one folder to another and delete files if they have permissions to work in that folder.

18. I am responsible for setting up these permissions in ProjectWise. However, the owner of the folder can also set up permissions.

19. If someone moves roles or departments within the City I do not review their permissions.

20. I do track and disable the ProjectWise accounts of staff members who leave the City. ProjectWise users need to be logged into the City network in order to access ProjectWise. This means former City employees should not be able access ProjectWise, even with an active ProjectWise account.

21. At the time of Mr. Moore's retirement from the Director of Engineering Services in May 2018, I removed his access to ProjectWise. There is no one else who would have been responsible for changing Mr. Moore's access except me.

Folders and Emails Within ProjectWise

22. Because ProjectWise grew organically, there was no policy or framework regarding the folder structure to be created in ProjectWise. I believe the Engineering Services' director's administrator set up "Engineering Services Administration" folders. I

created some of these folders, for example Project Management Framework and Geomatics Corridor Management. Some of the folders created at the inception of ProjectWise were likely created by Bentley Systems.

23. The other folders were added when other divisions or sections wanted to use ProjectWise to store files. As well, users may be able to create sub-folders within the first level folders, although this depends on the group and folder permissions. Typically, with project-based work, we allow staff to create sub-folders so they can organize their work better.

24. In addition, other users, typically high-level staff, with permissions to the “Documents” folder, can create these high-level folders. For example, the “Director’s Office (Engineering Services)” folder (“Director’s Folder”) was likely created by a member from the Director’s Office. I have attached to my affidavit a screenshot of the ProjectWise folder tree as **Exhibit A**.

25. The Director’s Folder was created on October 16, 2015. I do not believe I set up this folder. I do not recall whether I granted anyone access to this folder. I do not have any knowledge of what content was intended to be kept in the Director’s Folder. The Director’s Folder would not be visible to those users who did not have access to the folder.

26. I do not recall who had access to the Director’s Folder in 2014. I do not recall who had access to the Director’s Folder in 2018.

27. I do not think there is a way in ProjectWise to determine which particular staff members had access to the Director’s Folder in 2014 or 2018. ProjectWise does not

provide historical information regarding who had access to particular folders. If one right-clicks on a folder in ProjectWise, it only shows who currently has access to the folder. You may be able to infer who historically had access to a folder if the user interacted with a document in the folder, because this would be flagged in the document's audit trail. If the user did not interact with the document, however, there would be no audit trail, and you would not be able to tell whether they had access.

28. Through the administrative login, I can see the groups a user currently belongs to. The group a user belongs to determines the permissions they have. I cannot see the specific folders a user has access to as there are ten of thousands of folders and over 2 million documents in ProjectWise. I cannot see any historical information on what groups a user was formerly a part of.

29. To my knowledge, there are two ways to save emails in ProjectWise. The first is to drag and drop the email into a ProjectWise folder. The second is to save directly from Outlook, using file save as and choosing a ProjectWise folder as the destination folder. The audit trail (addressed below) begins after the email has been saved in ProjectWise.

30. My team maintains archives of all closed projects. This practice started around 2008. After a project is closed, it is moved to the closed project folder so we have an archive of that project and if staff need to go back and look at any drawings or correspondence they can do that. A project is archived two years after the project is completed.

31. To my knowledge if a file is deleted from ProjectWise, it sits in a recycle bin on the ProjectWise server for approximately 60 or 90 days. Within this time, files in the recycle

bin can be restored. We have asked IT to do so in the past. After this period, the recycle bin gets emptied. I am unsure whether there is a way of restoring a document that has been deleted and emptied from the recycle bin.

ProjectWise Audits

32. ProjectWise automatically generates audit trails for each document when certain actions occur on the document, such as when a document is edited. Any user can view the audit trail for a document by right clicking on properties and then the audit trail tab. Bentley Systems can also access audit trails. The audit trail captures actions taken by users, and details which user is interacting with a file, and on what date and identifies if any changes are made to that document. Users can customize what fields are shown in the audit trail.

33. The audit trail includes a comment section. When a user opens a document in ProjectWise, a screen appears where a user can add in their own comments. If populated, these comments will appear in the document's audit trail.

34. There are three ways that a document saved in ProjectWise can be opened without appearing in the document's audit trail: view, read only, and photo preview. All three options allow an email to be opened in Outlook and can be forwarded and/or replied to without appearing in the audit trail. Only certain files, such as PDFs and word documents, can be opened with photo preview within the ProjectWise application. When an email is opened with photo preview, it creates a message file in a temporary folder.

35. HAM0061613_0001 is the audit trail for the Red Hill SMA.msg. If in the audit trail it reads "file not changed" it means the document has not been changed by the user. This would occur, for example, if the user opens it in the native application but no edits were made by the user, the document was closed, and application exited.

36. Audit trails are generated automatically. I was not involved in any investigation or audit involving the document Redhill SMA.msg. I also do not believe I was involved in any aspect of viewing the audit trail for that document.

37. I did not have any involvement with the audit referenced in HAM0028520_0001 and HAM00028521_0001.

38. In my tenure in Public Works, Gord McGuire may have asked me to assist in accessing an audit trail for documents related to the RHVP. I cannot recall if he asked me for assistance in 2018 specifically to access an audit trail. I believe that Mr. McGuire knows how to access audit trails himself.

39. In December 2018 Mr. McGuire asked me to plot some data as part of my CAD role (HAM0035849_0001). Based on this exchange, this looks to have been a discrete task.

40. I cannot recall performing any other tasks related to the Red Hill Valley Project from 2007-2019 other than uploading a couple documents to the file sharing sites FTP and MediaFire (GOL0003808 and HAM0024682) and my general software administrator role. I do not recall whether I uploaded any other RHVP related documents.

41. I first saw the Golder and Tradewind Report when they were made public on the Hamilton Spectator's website. I do not believe prior to this point that anyone asked me to either locate the documents in ProjectWise or to assist them in accessing ProjectWise so they could attempt to locate these documents themselves. I have never looked in ProjectWise for copies of the Tradewind report.

42. I make this affidavit for use in the Red Hill Valley Parkway Inquiry.

Affirmed remotely by Charlie Lauricella of the City of Hamilton before me in the City of Toronto in the Province of Ontario, this 1st day of September, 2022, in accordance with O. Reg. 431/20, Administering Oath or Declaration Remotely



A Commissioner for Taking Affidavits



Charlie Lauricella

Exhibit A

ProjectWise Document Tree

