#### CANADIAN TRANSPORTATION AGENCY

## IN THE MATTER OF AN APPLICATION BY

#### CANADIAN NATIONAL RAILWAY COMPANY (CN)

PURSUANT TO SECTION 98 OF THE CANADA TRANSPORTATION ACT
FOR AN ORDER AUTHORIZING THE CONSTRUCTION OF A SPUR TO SERVE BHP CANADA INC.
IN THE PROVINCE OF SASKATCHEWAN

## A. APPLICATION

- 1. Canadian National Railway Company ("CN") hereby applies to the Canadian Transportation Agency ("Agency") pursuant to Section 98 of the *Canada Transportation Act* ("CTA") for an order authorizing the construction of a spur track (the "Line") originating at mile 102 of CN's existing Watrous Subdivision, to connect CN's mainline to the BHP Canada Inc. ("BHP") Potash mine site (the "Mine"), as detailed in section B below. More specifically, the CN proposed Line consists of 47 km of rail and will be located west of the Village of Jansen to the CN Watrous subdivision, east of the Town of Nokomis in Saskatchewan and within the boundaries of the Rural Municipality of Prairie Rose No. 309 and the Rural Municipality of Mount Hope No. 279.
- 2. Section 98 of the CTA provides as follows:

# "Railway lines

- 98 (1) A railway company shall not construct a railway line without the approval of the Agency.
  - (2) The Agency may, on application by the railway company, grant the approval if it considers that the location of the railway line is reasonable, taking into consideration requirements for railway operations and services and the interests of the localities that will be affected by the line.

- (3) No approval is needed for the construction of a railway line
  - (a) within the right of way of an existing railway line; or
  - (b) within 100 m of the center line of an existing railway line for a distance of no more than 3 km."
- 3. The Agency has previously decided that the scope of its mandate under Section 98 of the CTA is to determine whether the location of the line is reasonable and that such mandate does not include a determination of whether the existence of the proposed line or its construction is reasonable.
- 4. For the reasons set out below, CN submits that the location selected for the construction of the Line is reasonable taking into consideration the requirements outlined in Section 98 of the CTA.

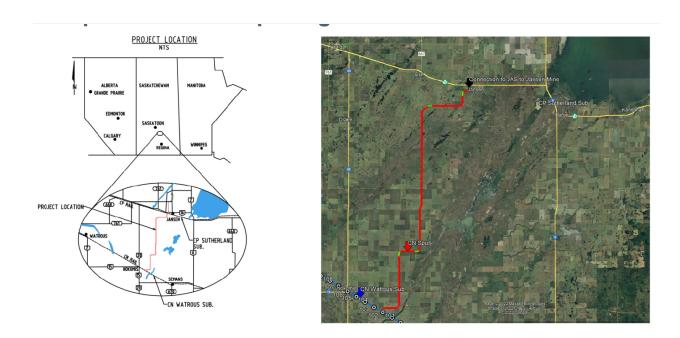
# **B. PROJECT AND SITE**

# I. Existing Location and Infrastructure:

- 5. The CN Watrous subdivision is located in Saskatchewan and measures 247.3 miles long. It is located between the Towns of Melville and Biggar. It is also a mainline which links CN's network for most of the province.
- 6. BHP obtained approval under Saskatchewan's *Environmental Assessment Act* in 2011 to construct and operate a conventional Potash mine between the Village of Jansen and the Town of LeRoy, approximately 140km east of Saskatoon, Saskatchewan. As the crow flies, the nearest distance between the Mine site and the Watrous subdivision is 48.3 km. Information and material respecting the Saskatchewan approval is available at: <a href="http://www.environment.gov.sk.ca/2008-102ReasonForDecision">http://www.environment.gov.sk.ca/2008-102ReasonForDecision</a>.
- 7. The BHP Mine design includes a private rail siding which will provide joint access to CN and CP to the Mine. CP's line (Sutherland subdivision) is located 12 km from the Mine site. BHP obtained approval to construct this joint access spur in 2018 ("Joint Access Spur"), also under the Saskatchewan *Environmental Assessment Act*. On April 27, 2018, pursuant to section 16(2)(a) of *The Environmental Assessment Act*, the Saskatchewan Minister of Environment gave BHP approval to design, implement, operate and maintain the Joint Access Spur, which is approximately an 8-kilometer rail spur and wye that will extend from the BHP onsite rail to a point immediately north of CP's existing Sutherland Subdivision. Information and

material respecting the Saskatchewan approval is available at: <u>Publications Centre</u> (saskatchewan.ca).

8. CN will construct the Line from CN's Watrous subdivision up to the south end of the Joint Access Spur. More specifically, the CN proposed Line will be located west of the Village of Jansen to the CN Watrous subdivision, east of the Town of Nokomis in Saskatchewan and within the boundaries of the Rural Municipality of Prairie Rose No. 309 and the Rural Municipality of Mount Hope No. 279. The Line will originate from the CN Watrous Subdivision at mile 102, parallel of Highway 20 and will travel in a northward direction to the BHP Joint Access Spur. The maps below provide a high-level view of the location of the proposed Line.



# II. Proposed Project:

9. CN has identified a need to construct the Line which consists of 47 km (29.20 miles) of railway spur to connect the Joint Access Spur to CN's existing mainline. The land required for the proposed right of way where this Line will be located has been purchased by BHP from landowners after detailed consultation with landowners about preferred alignments to minimize impacts on the local community and environment. BHP has agreed to provide CN with access to the land through an agreement still under negotiation.

- 10. BHP will ship potash to North American and world markets. The proposed Line construction will allow CN to connect with the Joint Access Spur and provide service to the Mine to meet BHP's needs of transporting its product through direct transportation and improved service. This will also support potential future expansions of the Mine, will respond to competitive markets, and will increase service efficiencies to the Mine.
- 11. A total of 47 km (29.20 miles) of rail will be constructed to join CN's mainline to the Joint Access Spur. The Line will travel east for approximately 2 miles, then extend north for approximately 5.5 miles, and then extend east for approximately 2 miles. At this point, it will turn north for approximately 14 miles, then extend east for approximately 4 miles to turn north for approximately 1.5 miles to connect to the Joint Access Spur. Attached as **Appendix 1** is a plan and profile identifying the right-of-way of the proposed railway line, the property lines and names of the owners of the land that the railway line will cross, proposed road and utility crossings, proposed diamond, open drains, road allowances (rights-of-way), the approximate location and alignment of the track, and the profile of the proposed Line.
- 12. No impact assessment is triggered under the federal *Impact Assessment Act* because this Line is not a designated project for the purpose of the *Physical Activities Regulations*.

## C. SITE RATIONALE AND TRACK CONFIGURATION

- 13. Canada is the world's leading producer of potash, and the most significant reserve of Canada's potash is located in the province of Saskatchewan. Most potash mines in Saskatchewan are directly served by two railways. The construction of the Line would, among other things, allow for the connection of the Mine to CN's existing mainline.
- 14. The proposed track location has been selected in consultation with BHP, as it is the most efficient and least disruptive track configuration on the surrounding environment.
- 15. The land required for this project is private land which is currently used predominantly for agricultural purposes.
- 16. Initial route selection for providing CN rail service to the Mine involved an evaluation of the most appropriate corridors for rail transportation. Consideration

was made to connecting to one of the following two existing CN subdivisions in the vicinity of the Mine:

- CN Margo Subdivision located approximately 28 km North-East of the closest point of the Joint Access Spur, utilizing a Jansen-Watson rail corridor
- CN Watrous Subdivision located approximately 37 km South-West of the south end of the Joint Access Spur, utilizing a Jansen-Nokomis rail corridor. This is the corridor for which this application is made.
- 17. The corridor evaluation contemplated a number of factors including minimization of additional infrastructure requirements, operational capabilities and efficiencies, suitability of land and minimization of rail and highway crossings. In terms of length, land suitability and crossing requirements, the corridors to the Margo and Watrous Subdivisions are not materially different:
  - Suitability of land both corridors consist of a mix of agricultural land, with occasional residential and light industrial land uses, along with intermittent water features (lakes, wetlands, areas prone to seasonal flooding). Towns are located at the CN subdivision-end of each corridor.
  - Minimize rail and highway crossings the Jansen-Nokomis corridor to the Watrous subdivision requires crossing the CP Sutherland subdivision via a diamond. Depending on the location of tie-in to CN's Margo subdivision, the Jansen-Watson corridor requires the crossing of the CP Melfort subdivision via a diamond, or a crossing of Saskatchewan Highway 6 via a grade crossing.
- 18. Ultimately, the Jansen-Nokomis corridor connecting to the CN Watrous subdivision was selected as the preferred corridor based on the overall infrastructure requirements and operational suitability of the Watrous Subdivision:
  - Minimization of Infrastructure The Watrous subdivision is located along the same approach as the CP Sutherland subdivision, which reduces the complexity and footprint of BHP yard layouts required to handle traffic from both CN and CP.
  - Operational Capability and Efficiency the Watrous subdivision is CN's primary East-West corridor. It has a modern signaling system, frequent high-capacity sidings, extended sections of double track, and high

- operating speeds while the Margo subdivision is CN's secondary East-West corridor, with restrictions on capacity and speed limitations.
- 19. Following the selection of the Jansen-Nokomis corridor, potential routes within this corridor considered stakeholder feedback. Consultation took place with the adjacent landowners, community members and the rural municipalities of Prairie Rose and Mount Hope. We enclose as **Appendix 2** (drawing 40001-RL-DWG-61255) for a diagram of alternate routes considered for the Line, which were previously shared at open-house events, and adjusted to proposed track alignment based on feedback received.
- 20. Factors that were considered when determining alternative route locations included the following:
  - Minimize route length
  - Minimize crossings of other Railways, Highways, and Municipal Roadways
  - Feasibility of connection to the Joint Access Spur, including the following constraints:
    - Location of crossing Hwy 16 (Yellowhead Highway)
    - Location of crossing CP Sutherland subdivision, e.g. with a diamond track section
    - Maintain ability to connect the Joint Access Spur to the CP Sutherland subdivision with the previously proposed CP Wye tracks
  - Connection to CN Watrous Subdivision locate the CN Wye track in a suitable location. This location is constrained by:
    - the Town of Nokomis, minimum of 500m from village to reduce noise effects
    - the Peter Lake, a Quill Lakes overflow outfall
    - surrounding lowlands due to potential flood risks
  - Minimize splitting of land parcels/land usage/land ownership
  - Maximize setback from existing residential properties
  - Avoid Quill Lakes and other overland flow/flood zones
  - Minimize or avoid impact to Environmentally Sensitive areas:

- Avoided crossing provincially or federally designated lands
- Avoided areas of previously identified heritage or cultural sensitivities
- Avoided crossing lakes or rivers
- Route through the best possible ground conditions and level terrain
- Minimize ruling grade
- Minimize utility crossings and/or relocations
- 21. The proposed Line and wye alignment were selected as other options would have required construction through permanent waterbodies, the construction of a second railway diamond crossing, or other additional construction of public crossings. For these reasons, the proposed alignment is the least disruptive and most efficient option.
- 22. Accordingly, it was determined that the location of the track now proposed would be the preferred location as it would provide strategic access to customers and be the least intrusive on the environment.

## D. PROPOSED TRAIN OPERATIONS

- 23. Once constructed, the Line and wye will provide rail services by CN to the Joint Access Spur. For information purposes, the current plan is to initially have up to four unit trains per week. Train lengths will vary but are expected to consist of up to 177 cars. Under the current design, train speed will be posted at maximum 25 mph. As train service configurations are depending on customer needs the actual train operations may vary to meet customer requirements.
- 24. Most of the Line will operate under Transport Canada Occupancy Control System (OCS) rules, which allows to proceed onto the Line via radio communication by CN's Network Operations Centre. Centralized Traffic Control (CTC) signaling will be in operation at the north and south extremities of the Line. The CTC signaling will control the diamond crossing with CP's Sutherland subdivision and the CN wye. Within CTC territory, track circuits will detect the presence of trains, and lineside signals will operate to show proceed/stop aspects to approaching locomotive operators. The CTC territory at the CN wye will be manually controlled at CN's Network Operations Centre.

## E. PROPOSED CROSSINGS

## I. ROAD CROSSINGS

#### a) PUBLIC CROSSINGS

25. CN's proposed right-of-way will be 50.3m (165 ft) wide and will cross, at grade, seventeen (17) Rural Municipality roads as detailed in **Appendix 3**. All crossings will meet applicable regulatory standards. Crossing protection will be completed in accordance with Transport Canada's *Grade Crossing Regulations*.

## **b)** PRIVATE CROSSINGS

26. There are forty (40) private crossings that will be constructed along this Line as detailed in **Appendix 3**.

#### c) UTILITY CROSSINGS

- 27. The proposed track will cross thirty-six (36) underground pipe/wire crossings and eleven (11) above-ground wire crossings, as detailed in **Appendix 3**. The utility crossing will meet Transport Canada requirements.
- 28. Considering that crossings create safety risks, efforts will be made to consolidate and/or limit the number of public, private and utility crossings where possible.

## d) RAILWAY LINE CROSSING

29. There is one diamond crossing that will be constructed to cross CP's Sutherland subdivision.

## e) Crossing Agreements

30. In the event that CN is unsuccessful in reaching an agreement for any of the proposed crossings, CN will make the necessary application to the Agency for their approval.

# II. SURFACE WATER MANAGEMENT

31. The proposed Line crosses existing stormwater and drainage structures. To maintain the existing drainage patterns that are affected by the proposed track, ditches and culverts have been designed to maintain continuous flow paths using ditches and culverts. Culverts were sized to convey the 100-year flood flows while limiting the culvert headwater elevation to the toe of the sub-ballast of the track. Given the size of these culverts, no approvals or notices are required under the *Railway Safety Act*.

## F. ENGAGEMENT

## I. PUBLIC ENGAGEMENT

- 32. Throughout the development of its Potash mine, BHP has maintained regular engagement specific to its project with fifty-two (52) stakeholder groups including First Nations, municipalities and non-government organizations building meaningful relationships over the past ten (10) years. BHP provides updates on its project and the Line through direct meetings with local leadership, newsletters, open houses, tours, presentations and with presence of a local BHP office. BHP has allocated significant social investment funding aligned with BHP's Social Investment Program.
- 33. Given the timing of BHP's Potash mine, BHP led early community outreach specific to the Line from late 2017 and throughout 2019 which, in addition to engaging with many of its stakeholder groups, included engagement with several jurisdictions including agencies and departments from the federal, provincial, and municipal governments. In addition to ongoing and proactive jurisdictional engagement by BHP, two rounds of information sessions were held in the central locations of the Town of Nokomis and Village of Jansen. Comments received during these sessions are enclosed as **Appendix 4**. Stakeholders directly affected by the proposed route also formed a landowner group in October 2018. The landowner group worked with BHP in negotiating option agreements with specific concerns identified and addressed by way of agreements with BHP (all option agreements were acquired).
- 34. BHP continues to engage with its stakeholders on an ongoing basis.
- 35. An update on the Line was included in BHP's newsletter distributed to 12,000 local residents, including First Nations, in 2018 and March 2022. Copies of these newsletters are enclosed as **Appendix 5**.

- 36. Throughout the month of April 2022, CN led engagements with local municipalities, First Nations and communities specific to the Line. This included the building of a dedicated microsite (<a href="mailto:cnjansenrailspur.ca">cnjansenrailspur.ca</a>), development of a discussion guide, face to face engagement and hosting two open houses in central locations in the Town of Nokomis and Village of Jansen
- 37. On April 12 and 13, 2022, CN met with leaders at the Rural Municipalities (RM) of Usborne, Prairie Rose and Mount Hope; Towns of Lanigan, LeRoy and Nokomis; and Villages of Drake and Jansen.
- 38. Considering BHP's existing relationship with the six First Nations, BHP coordinated the above engagements to include a brief update on the BHP Jansen Project. Meeting format included: introductions; treaty land acknowledgment; update on the BHP Jansen Project; overview of the proposed CN Line; application process to the CTA; proposed routing with maps provided; contracting opportunities for local and Indigenous organisations; advise and encourage participation in April 26 and 27 open houses and obtain concerns/feedback.
- 39. On April 26 and 27, 2022, CN hosted open houses in the Village of Jansen and Town of Nokomis respectively. In addition to giving advance notice about the open houses to local municipalities and First Nations (as noted above), open house details were communicated through paid advertisements in local newspapers, a postcard mailed to 8 200 homes in the area, email invitations to municipalities and First Nations, a project specific website (cnjansenrailspur.ca) and in local media coverage. This material is filed as **Appendix 6**.
- 40. The April 26 open house in the Village of Jansen was attended by 46 people; the April 27 open house Town of Nokomis had 30 people in attendance. Open house format included: introductions; treaty land acknowledgment; value share; update on the BHP Jansen Project; overview of proposed Line; application process to the CTA; proposed routing with maps provided; contracting opportunities for locals; and a fulsome question-and-answer period.
- 41. The sessions were scheduled for two-hours each, with time set aside for one-on-one and small group discussions, aided by large map displays. Both sessions ended in audience applause, with a strong theme of community collaboration to this point. The presentations during the open houses were led by CN but BHP was involved in the open houses to provide a brief update on the BHP Jansen Project and be present to answer questions. These open houses to discuss the Line proposed by CN follow four BHP-led open houses that took place in Nokomis and

- Jansen between 2017 and 2018, which were attended by 220 people in total when BHP sought authorization to build the Joint Access Spur.
- 42. During the April 2022 engagements, CN distributed a CN Jansen Rail Spur Discussion Guide, comment form, detailed Line map, CN's Extreme Weather Fire Risk Mitigation Plan, CN's Winter Plan, CN In Your Community publication, CN 2022 calendars and profiled CN's Saskatchewan Community Board and the availability of grants (up to \$25,000) for eligible community projects. This material is filed as **Appendix 7**.
- 43. Overall, during CN's April 2022 engagement, there was vocal support for the Line and no new concerns raised. CN committed to keeping the lines of communication open and to working collaboratively with stakeholders moving forward.
- 44. The CN outreach and engagement follows the similar activities undertaken by BHP since 2017 which were led by BHP previously due to project requirements and BHP internal approval timing of the BHP Jansen Project.
- 45. CN will continue to engage with local stakeholders regularly and proactively as part of the rail spur project. The recent open houses, municipal and Indigenous engagement, has provided useful context for CN and has allowed for the furtherance of key relationships with people and communities who will be impacted by the Line, when it is operational and during construction.
- 46. Comments received during the April engagements, including the open houses, are enclosed as **Appendix 8**.
- 47. As part of this application, CN will advertise in local newspapers of large circulation that this application is available for public viewing and comments at the following website: cnjansenrailspur.ca. Attached as **Appendix 9** are copies of the Public Notices which will appear in the following newspapers:

NEWSPAPER	PUBLICATION DATE
Saskatoon Star Phoenix	June 28, 2022
Regina Leader Post	June 28, 2022
Strasbourg/Lumsden Last Mountain Times	June 27, 2022
Watrous-Manitou	June 27, 2022
Lanigan Advisor	June 27, 2022
Wynyard Advance/Gazette	June 27, 2022
Wadena News	June 27, 2022

CN will provide tear sheets for these publications upon receipt.

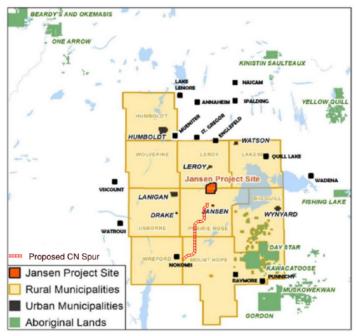
48. CN will provide the Agency with summarized comments received as a result of these further consultations and will indicate how it intends to address concerns as the case may be.

# II. Letters of Support – Local Governments

49. CN files as **Appendix 10**, thirteen (13) letters of support provided by municipalities, and representatives of the Province of Saskatchewan, including the local constituency MLA (Member of the Legislative Assembly).

## III. FIRST NATIONS ENGAGEMENT

50. For the purpose of the approval of the Line, six First Nation communities were selected based on the proximity and potential interest of the Line and the First Nation leadership were advised of the public engagement opportunity and were offered one on one meetings with CN. These communities are Day Star First Nation, Kawacatoose First Nation, Fishing Lake First Nation, Muskowekwan First Nation, George Gordon First Nation and Beardy's and Okemasis' Cree Nation. The following map shows the location of these First Nations relative to the proposed Line:



- As previously mentioned, in April 2022, CN met with Willow Cree Developments (Beardy's and Okemasis' Cree Nation) and George Gordon Developments (George Gordon First Nation). Due to conflicting schedules BHP met with the Chiefs of Day Star and Muskowekwan First Nations and CN will be arranging meetings in the near future. Additionally, CN will be arranging to meet with Kawacatoose First Nation who were unavailable to meet in April.
- BHP coordinated the above engagement to provide a brief update on the BHP Jansen Project. Meeting format included: introductions; treaty land acknowledgment; update on the BHP Jansen Project; overview of proposed CN Line; application process to the CTA; proposed routing with maps provided; contracting opportunities for local and Indigenous organisations; advise and encourage participation in April 26 and 27 open houses and obtain concerns/feedback. First Nation leaders expressed interest in economic opportunities and did not attend the open houses similar to the 2017 and 2018 open houses. A company that has a Joint Venture with George Gordon First Nation engaged with CN attended the 2022 open house held in Jansen. CN sent detailed information packages to each of the six First Nations the week of May 30<sup>th</sup> to assist with additional engagement.

#### IV. CONSULTATION UNDER THE RAILWAY SAFETY ACT

53. CN will issue Section 8 Notices of Work pursuant to the *Railway Safety Act*. As required by the *Notice of Works Regulations*, the notices will be served directly on applicable parties, with a copy to Transport Canada. The notice sets out a 60-day period during which objections pursuant to subsection 8(2) of the *Railway Safety Act* may be filed.

## G. NOISE AND VIBRATION

54. A noise and vibration assessment was completed in 2019-2020 on the basis of the Canadian Transportation Agency (CTA) guidance document, *Railway Noise Measurement and Reporting Methodology (August 2011)*. The vibration assessment approach follows the methods recommended in the *United States (US) Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (FTA 2018)*. The assessment considered 33 residential dwellings closest to the proposed Line. In 2022, the number of residential dwellings were verified and no new dwellings were observed.

- Noise effects due to locomotive pass-by, rail cars pass-by, locomotive whistle, wheel squeal, rail crossover, locomotive idling, and construction were assessed. The predicted noise levels at all receptors are considered to meet the HC change in percent highly annoyed threshold (%HA) of 6.5%. The results indicate that noise effects are below the thresholds at all receptors.
- 56. Vibration effects due to locomotive pass-by and rail cars pass-by were also assessed. The results at all receptors were below the threshold recommended in the FTA 2018 noise and vibration guidance.
- 57. Therefore, no noise and vibration mitigation measures are required for the proposed Line. We enclose as **Appendix 11** the complete noise and vibration study.

## H. ENVIRONMENTAL ASSESSMENT (EA)

58. As previously mentioned, no impact assessment is required for this Line as it is not a designated project under the *Impact Assessment Act*.

## **CONCLUSION**

- 59. In summary, it is CN's submission that the location of the proposed Line is reasonable given:
  - the requirement for railway operations at this location,
  - the proposed location of the new track will provide strategic access to BHP's Joint Access Spur and will provide other potential customers direct access to CN's railway network, and
  - the low impact to the localities affected by the project
- 60. CN therefore respectfully requests that its Application, pursuant to section 98 of the CTA, be granted and that the Agency approves the construction of the Line as shown on **Appendix 1**.

Respectfully submitted this 23<sup>rd</sup> day of June 2022.

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# **APPENDIX 1-PLAN**

# APPENDIX 2- DRAWING 40001-RL-DWG-61255

# **APPENDIX 3-PROPOSED CROSSINGS**

# APPENDIX 4 - BHP PUBLIC ENGAGEMENT

# APPENDIX 5- BHP NEWSLETTERS OF 2018 AND 2022

# **APPENDIX 6- APRIL 2022 OPEN HOUSE NOTIFICATIONS**

# APPENDIX 7- APRIL 2022 OPEN HOUSE MATERIAL

# APPENDIX 8- APRIL 2022 OPEN HOUSE COMMENTS & COMMENTS FROM OTHER ENGAGEMENTS

# APPENDIX 9- PUBLIC NOTICES FOR PUBLIC VIEWING OF SECTION 98 APPLICATION

# **APPENDIX 10- LETTERS OF SUPPORT**

# **APPENDIX 11-NOISE AND VIBRATION**