Remedial Action Plan, Risk Management Plan and Site Closure Report

Former Widow Point Mine –
South of West Side Road
Country Harbour, Nova Scotia
Owner: Province of Nova Scotia
NS Department of Natural Resources

Prepared for:

Build Nova Scotia
45 Wabana Court,
Sydney, NS B1P 0B9

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Issuing Office:	**Dartmouth, NS**
Primary Contact:	**Jenny Pittman, P.Geo.** **Project Manager** **902.461.9999** **jpittman@pinchin.com**

Author: Deidra Richards, B.Sc.
Project Technologist

:

Reviewer: Adam Aulenback, P.Eng.
Senior Technical Manager, Environmental Due Diligence & Remediation

EXECUTIVE SUMMARY

Pinchin Ltd. (Pinchin) was retained on September 13, 2024, through a change order signed by Pinchin and Build Nova Scotia (Client), to complete a Remedial Action Plan (RAP) and Closure Reporting for the property located at Former Widow Point Mine – South of West Side Road, (hereafter referred to as the Site).

The Site is undeveloped and forested, free of any permanent structures and/or buildings. The Service Nova Scotia and Municipal Relations (SNSMR) Land Information Centre identifies the Site as a portion of the property (PID 37544913).

The purpose of the work was to assess issues of environmental concern in relation to the former mine operations associated with the Widow Point Gold Mine workings.

Pinchin completed a Phase I ESA in July 2023; as part of the Phase I ESA field visit Pinchin completed limited preliminary sampling. The sampling (i.e. hand dug soil, surface water and sediment sampling) was completed at the Site by Pinchin between July 24th and July 25th, 2023. The results of the Phase I ESA and preliminary sampling completed by Pinchin identified the following potential issues of environmental concern:

- Potential indicators of mine-related impacts include elevated concentrations of aluminum, beryllium, cobalt, iron, manganese and vanadium, and slightly depressed arsenic and pH (as compared to background ranges identified to date).

Based on the above-mentioned findings, Pinchin recommended a sampling program (i.e. Remedial Action Plan, Risk Management Plan and Site Closure Report) scope of work to be conducted at the Site in order to delineate and further assess for the presence of environmental impacts.

The remaining Remedial Action Plan, Risk Management Plan and Site Closure Report field program (i.e. borehole drilling investigation and further hand dug soil sampling) was completed between October 26, 2023 and October 30, 2023, and consisted of the advancement of three boreholes, all of which were completed as groundwater monitoring wells; the collection of twenty-six (26) hand-dug soil samples; three (3) sediment samples and two (2) surface water samples.

Based on Site-specific information, the soil, groundwater, surface water and sediment quality was assessed using the Tier I Environmental Quality Standards (EQSs) of the Nova Scotia Contaminated Sites Regulations (NSCSR) for agricultural (i.e. includes ecological) properties with potable groundwater, as well as the Atlantic Risk-Based Corrective Action (RBCA) Version 4.0 (revised July 2021, updated July 2022) Tier I Ecological EQSs.

Based on the L2 ESA completed, the reported concentrations of aluminum, beryllium, iron and vanadium in four soil samples (HS04, HS11, HS DUP A (a duplicate of HS11), and HS12) submitted for analysis exceeded both the NSCSR Tier I EQSs and inferred background concentrations.

The reported concentrations in all groundwater samples submitted for analysis of standard dissolved metals satisfied the NSCSR Tier I EQSs for groundwater. Some samples exceeded the applicable guidelines for groundwater discharging to surface water; however, these metals are inferred to be representative of background concentrations.

The reported concentrations in the surface water and sediment samples submitted for analysis of standard total metals and general chemistry as well as standard available metals, respectively, satisfied their respective Tier I EQSs or are inferred to be representative of background concentrations.

The Limited (L2) ESA noted that the metals impacts identified in soil as exceeding the NSCSR Tier I EQSs have been delineated and conservatively estimated to be 250 m^2, and the depth of impact is estimated to extend to approximately 0.5 m below ground surface.

Based on the results of the Remedial Action Plan, Risk Management Plan and Site Closure Report, a Human Health and Ecological Risk Assessment (HHERA) was completed on June 18, 2024, and identified potential risks to Outdoor Workers, and mammals and birds, that may be directly exposed to soil contaminants. The HHERA reported these risks are currently being managed by the existing naturally occurring vegetative fill cap distributed across the Site. Potential risks were also identified for future Outdoor Workers who may come into contact with soil contaminants during future ground-intrusive works, but which can be managed with a health and safety plan (HASP). Risk management measures were recommended by the HHERA to address this exposure pathways.

The HHERA did not identify any other potential risks to human or ecological receptors, associated with soil impacts identified on-Site. A Risk Management Plan has been prepared for the Site in accordance with NSCSR protocol PRO-500, "*Remediation Levels Protocol*".

Based on the findings of the Limited (L2) ESA, HHERA and Risk Management Plan, no further assessment work is warranted for the Site at this time. Future development plans should take into account that metals have been detected in some soils at concentrations exceeding applicable guidelines. This will render the soils unsuitable for reuse off-Site.

In accordance with the Nova Scotia Contaminated Site Regulations (NSCSR), Pinchin submitted an FRM-100 Notification of Free Product or Contamination form on May 10, 2024. Nova Scotia Environment and Climate Change (NSECC) responded with an Obligations letter (file# 33000-30-ANT-2024-5872724 dated May 23, 2024. The document entitled "Environmental Site Assessment for Limited Remediation Checklist"

(CHK-200) was been completed for the Site and submitted to NSECC along with the Limited (L2) ESA report on October 22, 2024.

Based on the results of the Limited (L2) ESA, HHERA and Risk Management Plan, all requirements outlined in the Regulations have been met. The documents entitled “Remedial Action Plan Checklist” (CHK-600) and “Record of Site Condition” (CHK-700) for conditional closure have been prepared for the Site and will be submitted to NSECC along with this report.

The process will be considered complete when NSECC acknowledges the RSC in writing. Following acknowledgement, groundwater monitoring wells installed as part of the Limited (L2) ESA will be required to be properly decommissioned.

This Executive Summary is subject to the same standard limitations as contained in the report and must be read in conjunction with the entire report.

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1.0 INTRODUCTION

Pinchin Ltd. (Pinchin) was retained on September 13, 2024, through a change order signed by Pinchin and Build Nova Scotia (Client) to complete a Remedial Action Plan (RAP) and Closure Reporting in connection with the property located at Former Widow Point Mine – South of West Side Road (hereafter referred to as the Site).

The work is being completed as the final assessment steps relating to metals impacts in soil exceeding the applicable Tier I Environmental Quality Standards (EQSs) that were encountered during a Limited (L2) Environmental Site Assessment (L2 ESA) completed at the Site between July 2023 and October 2023, and to achieve regulatory closure under the Nova Scotia Contaminated Sites Regulations (NSCSR). The work has been completed in accordance with remediation criteria PRO-500, "Remediation Levels Protocol" of the NSCSR.

The Site is undeveloped and forested, free of any permanent structures and/or buildings. The Service Nova Scotia and Municipal Relations (SNSMR) Land Information Centre identifies the Site as a portion of the property (PID 37544913).

1.1 Site Description

As indicated on Figure 1 (Key Map), the Site is located approximately 175 m south of the intersection of West Side Road and the adjacent logging road in Country Harbour Mines, Nova Scotia. Pinchin observed that the Site and surrounding area appeared to be generally forested with logging/fire roads throughout. Figure 2 illustrates the Site and surrounding area.

1.2 Background

Pinchin completed a Phase I ESA of the Site for the Client, the findings of which were provided in the memo report entitled "*FINAL Phase I Environmental Site Assessment Memo and Field Program Report, Former Widow Point Mine – South of West Side Road, Country Harbour, Guysborough, Nova Scotia (PID 37544913)*", dated October 6, 2023 (the 2023 Pinchin Phase I ESA Report). As part of the Phase I ESA, a preliminary sampling program (i.e. hand dug soil, sediment and surface water sample collection) was completed to provide guidance in developing the final field program scope of work.

The results of the Phase I ESA and preliminary sampling completed by Pinchin identified the following potential issues of environmental concern:

- Potential indicators of mine-related impacts include elevated concentrations of aluminum, beryllium, cobalt, iron, manganese and vanadium, and slightly depressed arsenic and pH (as compared to background ranges identified to date).

Based on the above-mentioned findings, Pinchin recommended a sampling program (i.e. Remedial Action Plan, Risk Management Plan and Site Closure Report) scope of work to be conducted at the Site in order to delineate and assess for the presence of environmental impacts. A portion of the L2 ESA was completed concurrently with the Phase I ESA. The work was completed between July 25, 2023, and October 30, 2023, and is summarized as follows:

- The investigation included the advancement of three boreholes all of which were completed as monitoring wells (MW01 to MW03), the collection of 26 hand-dug soil samples (HS01 to HS26, including one QA/QC field duplicate), as well as the collection of three sediment samples (including one QAQC field duplicate) and two surface water samples.
- Twenty (20) most apparent “worst case” soil samples (including two QA/QC field duplicates), based on field pH analysis, recovered from the hand-dug test pits and each borehole were submitted for analysis of standard available metals including mercury and pH.
- Two (2) samples recovered from hand-dug test pits collected from the tailings area were submitted for leachable metals, including mercury.
- Two (2) samples, one each near AMO1 and AMO2, recovered by hand-dug test pits were submitted for analysis of acid rock drainage (ARD), including modified acid-base accounting (ABA).
- Three (3) samples recovered from hand-dug test pits in areas located outside the inferred former mine operations to provide an indication of background soil conditions of the Site and surrounding area, were submitted for standard available metals including mercury and soluble pH.
- Groundwater samples were collected on October 30, 2023, from each of the three monitoring wells and were submitted for laboratory analysis of standard dissolved metals and general chemistry;
- Groundwater levels at the Site measured on October 30, 2023, varied between 3.05 metres below ground surface (mbgs) (MW02) and 0.82 mbgs (MW01). The inferred groundwater flow direction is to the northeast towards an unnamed stream based on the water table elevations obtained from groundwater monitoring;

Background conditions at the Site were determined from soil samples collected surrounding the Site as well as upgradient sediment and surface water samples. Based on the background data, the reported concentrations of aluminum, beryllium, iron and vanadium in four soil samples (HS04, HS11, HS DUP A

(a duplicate of HS11), and HS12) collected from the north portion of the Site (near AMO1) exceeded both the *Tier I EQSs* and inferred background concentrations.

The reported concentrations in all groundwater samples submitted for analysis of standard dissolved metals satisfied the *Tier I EQSs* for groundwater. Some samples exceeded the applicable guidelines for groundwater discharging to surface water; however, these metals are inferred to be representative of background concentrations.

The reported concentrations in the surface water and sediment samples submitted for analysis of standard total metals and general chemistry as well as standard available metals, respectively, satisfied their respective *Tier I EQSs* or are inferred to be representative of background concentrations.

The L2 ESA noted that the metals impacts identified in soil as exceeding the NSCSR Tier I EQSs have been delineated and conservatively estimated to be 250 m^2, and the depth of impact is estimated to extend to approximately 0.5 m below ground surface.

Sampling locations are illustrated on Figure 3.

In accordance with the NSCSR, Pinchin submitted an FRM-100 Notification of Free Product or Contamination form on May 10, 2024. Nova Scotia Environment and Climate Change (NSECC) responded with an Obligations letter (file# 33000-30-ANT-2024-5872724) dated May 23, 2024. The document entitled “Environmental Site Assessment for Limited Remediation Checklist” (CHK-200) was been completed for the Site and submitted to NSECC along with the L2 ESA report on October 22, 2024.

Based on the results of the L2 ESA, a Human Health and Ecological Risk Assessment (HHERA) was recommended to further assess the identified metals-impacts in soil.

A HHERA was completed on June 18, 2024, and identified potential risks to Outdoor Workers, and mammals and birds, that may be directly exposed to soil contaminants. While the HHERA was not in and of itself considered sufficient to satisfy the Regulations, it was completed following methodologies compliant with the Regulations: the HHERA utilized the NSCSR Tier II PSSs and the Atlantic RBCA Tier II Ecological PSSs to evaluate operational contaminant exposure pathways at the Site. The HHERA reported these risks are currently being managed by the existing naturally occurring vegetative fill cap distributed across the Site. Potential risks were also identified for future Outdoor Workers who may come into contact with soil contaminants during future ground-intrusive works, but which can be managed with a health and safety plan (HASP). Risk management measures were recommended to address these exposure pathways.

The HHERA did not identify any other potential risks to human or ecological receptors, associated with soil impacts identified on-Site. Pinchin recommended that a Risk Management Plan be prepared for the

Site, and that the previously identified metal concentrations in soil at the central portion of the Site which exceeded the generic Tier I EQS be managed in-place.

1.3 Scope of Work

The scope of work for the project was designed to meet the specific requirements of the Nova Scotia *Contaminated Sites Regulations – 2013 (revised September 2021, updated September 2022)* (referred herein as the "Regulations"; NSCSR), the Atlantic Risk Based Corrective Action (RBCA) process and the Client. Based on Site characteristics and the nature of the impacts at the Site, the work was completed following the (L2) Limited Remediation approach as outlined in PRO-200 (Environmental Site Assessment for Limited Remediation Protocol) and PRO-500 (Remediation Levels Protocol) of the Regulations.

The scope of work included the review of the previously completed Phase I ESA, L2 ESA and HHERA for the Site, preparation of this report, complete with RMP, and required forms and Checklists along with a Record of Site Condition (RSC), for submission to NSECC.

2.0 METHODOLOGY

The work completed under this project was performed in general accordance with standard environmental consulting practices, the NSCSR and associated Ministerial Protocols, Atlantic RBCA Version 4 User Guidance and Pinchin's standard operating procedures (SOPs).

3.0 GUIDELINE FRAMEWORK

Analytical data have been assessed in comparison to recognized guidelines. The criteria selected for use in this assessment are detailed in this section.

3.1 Contaminated Sites Regulations – Tier I EQSs

Actions on the Site are governed by the NSCSR.

Metal concentrations in soil were initially assessed using the *Tier I EQSs* (revised September 2021, updated September 2022) as presented in the Notification of Contamination Protocol (PRO-100) of the Regulations. The *Tier I EQSs* provide numerical criteria that are used along with exemption conditions outlined in PRO-100 to determine the need for regulatory notification.

The *Tier I EQSs* have been developed as generic standards that represent a standardized level of risk to human health for contributing exposure pathways, using land use and other factors. The *Tier I EQSs* for

agricultural land use / undeveloped wild lands include direct ecological pathways, in addition to human health exposure pathways, in the derivation of criteria.

3.2 Notification of Contamination Protocol (PRO-100)

The PRO-100 provides requirements for determining the need for regulatory notification of a contaminated Site. The protocol addresses two contamination situations, which include:

- Free product presence in soil; and
- Soil, sediment, surface water or groundwater contamination.

Notification of free product relies on field observations of the affected media, while notification of contamination relies on comparison of sample analytical results with the *Tier 1 EQSs* presented in PRO-100 of the Regulations. The *Tier I EQSs* provide generic numerical criteria that represent a standardized level of risk for contributing exposure pathways using different site scenarios and are used along with exemption conditions outlined in PRO-100 to determine the need for regulatory notification.

Based on the results of the L2 ESA , NSECC was formally notified of the contaminants exceeding the applicable *Tier I EQSs* on May 12, 2024.

3.3 Environmental Site Assessment for Limited Remediation Protocol (PRO-200)

Based on Site characteristics, L2 ESA work was completed following the L2 ESA approach as outlined in Environmental Site Assessment for Limited Remediation Protocol (PRO-200) of the Regulations, and to meet the Minimum L2 ESA Requirements. The document entitled “Environmental Site Assessment for Limited Remediation Checklist” (CHK-200) was completed for the Site and submitted to NSECC along with the L2 ESA report on October 22, 2024.

3.4 Remediation Levels Protocol (PRO-500)

The Remediation Levels Protocol (PRO-500) provides the basis for determining the appropriate numerical remediation levels or long-term exposure management measures applicable to a contaminated site.

PRO-500 provides a tiered approach whereby increasingly site-specific criteria can be used to develop remedial levels for a property. The *Tier I EQSs* outlined in PRO-100 can be used to determine generic Tier I remediation levels. The *Tier I EQSs* have been derived using “default assumptions” related to conditions in Nova Scotia. A site professional can refer to guideline tables that give EQSs for different site scenarios. However, if site conditions differ significantly from conditions defined by the Tier I default assumptions or petroleum concentrations exceed the EQSs applicable to the site, then a Tier II Site-Specific Risk Assessment can be completed to develop Site-Specific Target Levels (SSTLs).

In addition to the *Tier I EQSs*, Tier II Pathway-Specific Standards (PSSs) have been developed which can be applied based on certain site conditions and the absence of one or more exposure pathways. For example, if no building is present on a site, the 'indoor air' exposure pathway is not present. As such, less stringent guidelines that do not take into consideration the indoor air exposure pathway may be referenced. Metal concentrations identified in soil have been further assessed by comparison to the NSCSR *Tier I EQSs and Tier II PSSs* for an agricultural/ undeveloped wild land property with coarse-grained soil.

While not solely satisfying the requirements of PRO-500, the previously completed HHERA was completed in accordance with the Remediation Levels Protocol of the NSCSR.

3.5 Atlantic Risk-Based Corrective Action

Metal concentrations in soil have also been assessed using Atlantic Risk-Based Corrective Action (RBCA) Version 4.0 (revised July 2021, updated July 2022) Tier I Ecological EQSs.

The Atlantic RBCA Site Assessment and Tier I/II Table Checklist was completed as part of the L2 ESA in order to ensure that the use of RBCA is appropriate. A copy of the completed checklist is presented in Appendix III.

3.5.1 Tier I Ecological Environmental Quality Standards

We have used the Tier I Ecological EQS for an agricultural/ undeveloped wild land, potable site with coarse-grained soil. The Ecological EQS values are adopted values that have been derived by other regulatory authorities in Canadian or International jurisdictions. The agricultural/ undeveloped wild land and coarse-grained criteria were applied based on the same rationale used for the *Tier I EQSs*. The coarse-grained soil criteria have been selected because it is the most conservative choice.

3.5.2 Tier II Ecological Pathway-Specific Standards

We have used the Tier II Ecological Pathway Specific Standards (PSS) for an agricultural/ undeveloped wild land, potable site with coarse-grained soil. The Ecological PSS values are adopted values that have been derived by other regulatory authorities in Canadian or International jurisdictions. The agricultural/ undeveloped wild land and coarse-grained criteria have been applied based on the same rationale used for the Tier I EQSs of the Regulations. The coarse-grained soil criteria have been selected because it is the most conservative choice.

4.0 CONCEPTUAL SITE MODEL SUMMARY

The Site is located approximately 175 meters (m) south of the intersection of West Side Road and the adjacent logging road in Country Harbour Mines, Nova Scotia (Figure 1). Pinchin observed that the Site and surrounding area appeared to be generally forested with logging/fire roads throughout and identified as a portion of PID 37544913. Forested land borders the Site in all directions.

Based on the soil samples recovered during the borehole drilling, three predominant soil types were encountered. A native subsurface material underlying the site consisted of a brown silty sand with clay and organics as observed in hand-dug test pits between 0.0 to 0. 3 mbgs. A grey/brown silty sand with clay was observed in soil samples collected from boreholes located in the vicinity of the inferred tailings area that extended to the maximum borehole completion depth of 5.39 mbgs. In addition, a black sand with clay was identified in soil samples collected between AMO1 and AMO2

Potential waste rock and inferred tailings at the ground surface were observed during the preliminary field assessment; however, no conclusive subsurface evidence of waste rock or mine tailings was observed during completion of the Limited ESA. No odours, or staining were observed in the soil samples collected during the sampling program.

Groundwater is expected to conform to the principles of unconfined flow and flow direction will generally follow trends in surface topography. No underground services are present at the Site. The Site is generally sloped down to the northeast. Topographic mapping of the area indicates that regional drainage is to the northeast towards Country Harbour, located approximately 200 m northeast of the inferred tailings area. The depth to groundwater in the monitoring wells ranged from 3.05 to 0.82 mbgs when measured on October 30, 2023, and groundwater flow at the Site has been calculated to be in a north-easterly direction with an average horizontal hydraulic gradient in of approximately 0.562 m/m (56.2%).

One groundwater sampling event was completed in October 2023; based on the encountered Site conditions, including the established background concentrations, as well as the duration elapsed since the introduction of the source of metals-impacted soils and the absence of physical remediation, Pinchin considers the sampling data to be sufficiently representative of the Site and seasonal conditions. Metals concentrations in groundwater are inferred to be steady-state.

Background concentrations of some metals in soil, groundwater, sediment and/or surface water were identified as exceeding the Tier I EQSs.

The reported concentrations of aluminum, beryllium, iron and vanadium in four soil samples submitted for analysis exceeded both the NSCSR Tier I EQSs and established background concentrations. Metals have been delineated to the applicable guidelines in soil; the area of metals in soil exceeding the NSCSR Tier I EQSs has been conservatively estimated to be 250 m^2 and at depths of 0.5 m. Bedrock was not

encountered. Metals impacts above background concentrations were not detected in groundwater, surface water or sediment.

Potential receptors for the identified metals in soil include two streams observed immediately north and approximately 36 m southeast of AMO1. The streams were observed to be oriented in a southwest to northeast direction with surface water flow within the streams observed to be northeasterly.

The 2024 HHERA identified potential risks to Outdoor Workers, and mammals and birds, that may be directly exposed to soil contaminants. However, these risks are currently being managed by the existing naturally occurring vegetative fill cap distributed across the Site. Potential risks were also identified for future Outdoor Workers who may come into contact with soil contaminants during future ground-intrusive works, but which can be managed with a health and safety plan (HASP). Risk management measures (see Section 5.0) were recommended to address the exposure pathways. As a result, the metal concentrations in soil exceeding the Tier I EQSs are not considered a concern.

Based on the results of the assessment work completed at the Site to-date (as noted above), there are no immediate actions necessary to protect people, property or the environment relating to the metals impacts to soil identified at the Site.

5.0 RISK MANAGEMENT PLAN

As soil with concentrations of metals exceeding applicable Tier I guidelines will be managed in place at the Site. In accordance with the NSCSR protocol PRO-500, "*Remedial Levels Protocol*", the following measures will be undertaken to manage the potential risks associated with remaining metals-impacts in soil at the Site:

- Maintain the existing vegetative cover (i.e., caps) which includes the naturally vegetated areas and sloped creekbank along the north and southeast portion of the Site, which has the visual appearance of a thriving ecosystem of diverse plant species underlain by layers of naturally decomposing material that will contribute to an increasingly robust future organic soil cap and are presumed to act as suitable fill covers that are already mitigating potential risks. The dense vegetation present along the creekbank is also presumed to be acting as a natural erosion control, reducing surface soil from entering the adjacent water body.
- Should the soil impacts be disturbed in the future, measures should be implemented to prevent harm to the environment, including but not limited to soil erosion controls along the two unnamed tributaries, fencing, natural habitat restoration, capping of soil impacts with suitable hard or fill caps, and/or soil remediation/off-Site disposal.

- Any future construction workers who may come into contact with the impacted soil (i.e., for any redevelopment, utility, earth works, or other subsurface activities anticipated to take place at the Site) should be notified of the presence of soil contaminants. In addition to the health and safety measures that would routinely be required for these undertakings in the absence of environmental contaminants, a Site-specific component to the contractors Health and Safety Plan (HASP) is recommended to address potential exposure of workers to the identified metals-impacted soil.
- The Site-specific HASP should require the use of personal protective equipment (PPE) such as gloves, long sleeves and pants, and boots, and hygienic safe work procedures, to prevent contact with metals-impacted soil.
- Complete annual inspections of the Site to confirm the absence of any soil erosion within the managed area (see Figure 4). Should any erosion (i.e. ruts, holes, etc.) be identified, those areas should be filled/reinstated with appropriate material; and
- Future development plans should take into account that metals have been detected in some soils at concentrations exceeding applicable guidelines. This will render the soils unsuitable for reuse off-Site.

6.0 FINDINGS AND CONCLUSIONS

Based on the L2 ESA completed, the reported concentrations of aluminum, beryllium, iron and vanadium in four soil samples (HS04, HS11, HS DUP A (a duplicate of HS11), and HS12) submitted for analysis exceeded both the NSCSR Tier I EQSs and background concentrations.

The reported concentrations in all groundwater samples submitted for analysis of standard dissolved metals satisfied the NSCSR Tier I EQSs for groundwater. Some samples exceeded the applicable guidelines for groundwater discharging to surface water; however, these metals are inferred to be representative of background concentrations.

The reported concentrations in the surface water and sediment samples submitted for analysis of standard total metals and general chemistry as well as standard available metals, respectively, satisfied their respective Tier I EQSs or are inferred to be representative of background concentrations.

Pinchin notes that the metals impacts noted in soil as exceeding the NSCSR Tier I EQSs have been delineated and conservatively estimated to be 250 m^2, and the depth of impact is estimated to extend to approximately 0.5 m below ground surface.

Based on the results of the L2 ESA, a HHERA was completed on June 18, 2024, and identified potential risks to Outdoor Workers, and mammals and birds, that may be directly exposed to soil contaminants.

The HHERA reported these risks are currently being managed by the existing naturally occurring vegetative fill cap distributed across the Site. Potential risks were also identified for future Outdoor Workers who may come into contact with soil contaminants during future ground-intrusive works, but which can be managed with a health and safety plan (HASP). Risk management measures were recommended to address the exposure pathways.

The HHERA did not identify any other potential risks to human or ecological receptors, associated with soil impacts found on-Site.

A Risk Management Plan has been prepared for the Site in accordance with NSCSR protocol PRO-500, "*Remediation Levels Protocol*".

Based on the findings of the L2 ESA, HHERA and Risk Management Plan, no further assessment work is warranted for the Site at this time. Future development plans should take into account that metals have been detected in some soils at concentrations exceeding applicable guidelines. This will render the soils unsuitable for reuse off-Site.

In accordance with the Nova Scotia Contaminated Site Regulations (NSCSR), Pinchin submitted an FRM-100 Notification of Free Product or Contamination form on May 10, 2024. Nova Scotia Environment and Climate Change (NSECC) responded with an Obligations letter (file# 33000-30-ANT-2024-5872724) dated May 23, 2024.

Based on the results of the L2 ESA, HHERA and Risk Management Plan, all requirements outlined in the Regulations have been met and the remedial objectives have been achieved. The document entitled "Environmental Site Assessment for Limited Remediation Checklist" (CHK-200) has been completed for the Site and submitted to NSECC along with the L2 ESA report on October 22, 2024.

The documents entitled "Remedial Action Plan Checklist" (CHK-600), "Confirmation of Remediation Checklist" (CHK-700) and "Record of Site Condition" (FRM-700) for conditional closure have been prepared for the Site and submitted to NSECC along with this report and the 2024 HHERA.

The process will be considered complete when NSECC acknowledges the RSC in writing. Following acknowledgement, monitoring wells installed on the Site as part of the L2 ESA will be required to be properly decommissioned.

7.0 REFERENCES

1. Geological Map of the Province of Nova Scotia, Map ME 2000-1 (1:500,000), 2000, Nova Scotia Department of Natural Resources, Mines and Energy Branches.
2. Surficial Geology of the Province of Nova Scotia, Map 92-3 (1:500,000), 1993, Nova Scotia Department of Natural Resources, Minerals and Energy Branch.

3. Nova Scotia LiDAR Data Set Index 2018-2019. Leading Edge Geomatics, Nova scotia Data Locator – Elevation. nsgi.novascotia.ca/datalocator/elevation
4. Nova Scotia Contaminated Sites Regulations – 2013.
5. Atlantic Risk-Based Corrective Action (RBCA) Version 4 (revised July 2021, updated July 2022).
6. Nova Scotia Environment and Climate Change, Ministerial Protocols of the Regulations (September 2022).
7. Service Nova Scotia and Municipal Relations
8. Letter report titled "*FINAL Phase I Environmental Site Assessment Memo and Field Program Report, Former Widow Point Mine – South of West Side Road, Country Harbour, Guysborough, Nova Scotia (PID 37544913)*", prepared by Pinchin for Build Nova Scotia and dated October 6, 2023.
9. Report titled "*REVISED Limited (L2) Environmental Site Assessment and Remedial Options Analysis, Former Widow Point Mine – South of West Side Road, Country Harbour, Nova Scotia*", prepared by Pinchin, prepared for Build Nova Scotia and dated February 23, 2024.
10. Report titled "*FINAL Human Health and Ecological Risk Assessment, Former Widow Point Mine – South of West Road, Country Harbour, Nova Scotia*", prepared by Pinchin, prepared for Build Nova Scotia and dated June 18, 2024.

8.0 TERMS AND LIMITATIONS

The Remedial Action Plan, Risk Management Plan and Site Closure Report was performed for Build Nova Scotia (Client) in order to address environmental impacts at Former Widow Point Mine – South of West Side Road in Country Harbour, Nova Scotia (Site). The Remedial Action Plan, Risk Management Plan and Site Closure Report does not quantify the extent of the current and/or potential environmental impacts or the cost of any remediation.

Conclusions derived are specific to the immediate area of study and cannot be extrapolated extensively away from sample locations. Samples have been analyzed for a limited number of contaminants that are expected to be present at the Site, and the absence of information relating to a specific contaminant does not indicate that it is not present.

No environmental site assessment can wholly eliminate uncertainty regarding the potential for environmental impacts on a property. Performance of the Remedial Action Plan, Risk Management Plan

and Site Closure Report to the standards established by Pinchin is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental impacts on the Site and recognizes reasonable limits on time and cost.

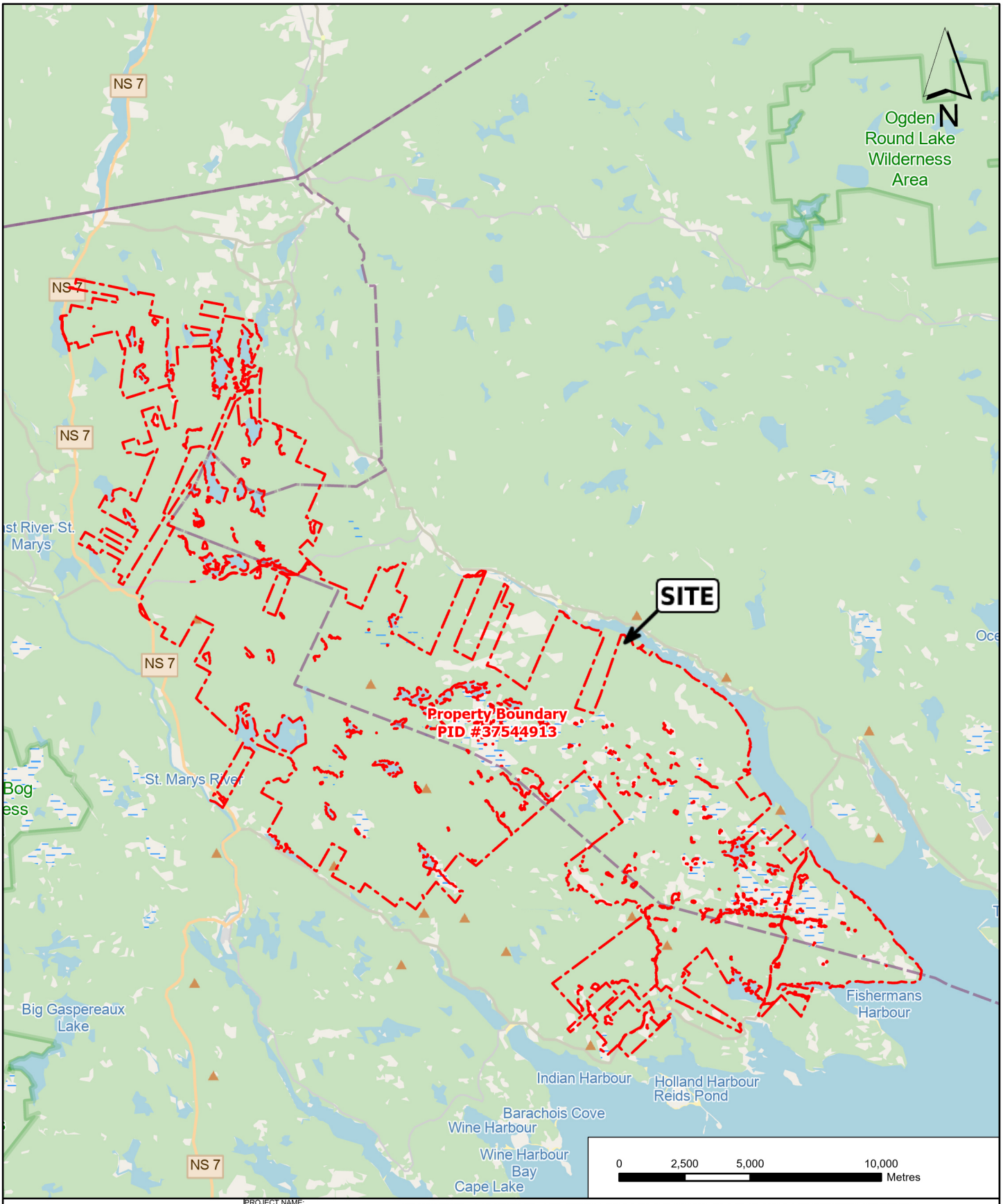
The Remedial Action Plan, Risk Management Plan and Site Closure Report was performed in general compliance with currently acceptable practices for environmental site investigations, and specific Client requests, as applicable to this Site.

This report was prepared for the exclusive use of the Client (Build Nova Scotia), subject to the terms, conditions and limitations contained within the duly authorized work plan for this project. Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, is the sole responsibility of such third parties. Pinchin accepts no responsibility for damages suffered by any third party as a result of decisions made or actions conducted.

If additional parties require reliance on this report, written authorization from Pinchin will be required. Pinchin disclaims responsibility of consequential financial effects on transactions or property values, or requirements for follow-up actions and costs. No other warranties are implied or expressed. Furthermore, this report should not be construed as legal advice. Pinchin will not provide results or information to any party unless disclosure by Pinchin is required by law.

Pinchin makes no other representations whatsoever, including those concerning the legal significance of its findings, or as to other legal matters touched on in this report, including, but not limited to, ownership of any property, or the application of any law to the facts set forth herein. With respect to regulatory compliance issues, regulatory statutes are subject to interpretation and these interpretations may change over time.

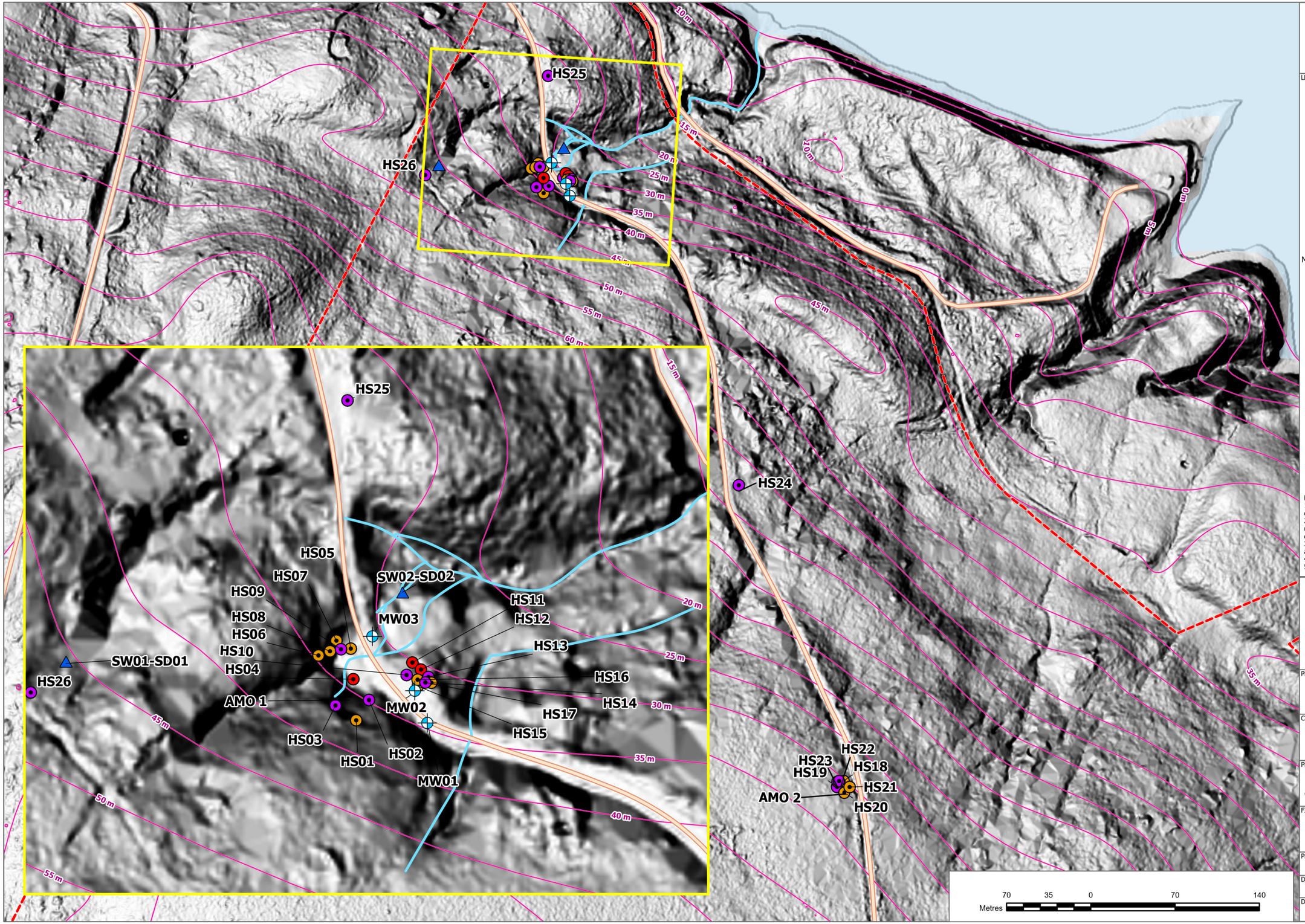
APPENDIX I
Figures



PINCHIN

PROJECT NAME:	REMEDIAL ACTION PLAN, RISK MANAGEMENT PLAN AND SITE CLOSURE REPORT
CLIENT NAME:	BUILD NOVA SCOTIA
PROJECT LOCATION:	FORMER WIDOW POINT MINE - SOUTH OF WEST SIDE ROAD, COUNTRY HARBOUR, NOVA SCOTIA
FIGURE NAME:	KEY MAP
FIGURE NUMBER	1

PROJECT NUMBER:	SCALE:	DRAWN BY:	REVIEWED BY:	DATE:
327768.003	AS SHOWN	CF	AA	DECEMBER 2024



N

LEGEND

- MONITORING WELL LOCATIONS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- SOIL SAMPLE LOCATION (NOT SUBMITTED FOR ANALYSIS)
- SOIL SAMPLE LOCATION (SAMPLE SUBMITTED FOR ANALYSIS)
- SOIL SAMPLE EXCEEDING TIER 1 EQSS
- OBSERVED WATER BODY
- ELEVATION CONTOURS (MASL)
- ROAD NETWORK
- PROPERTY BOUNDARY

MASL = METERS ABOVE SEA LEVEL

NOTES:
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2) This drawing may have been reduced. All scale notations indicated are based on a 11"x17" format drawings.
3)Legend is color dependent. Non-colour copies may alter interpretation.
4) Coordinate system: NAD 1983 CSRS UTM Zone 20N.
5) Source: Pinchin Ltd., .

PINCHIN

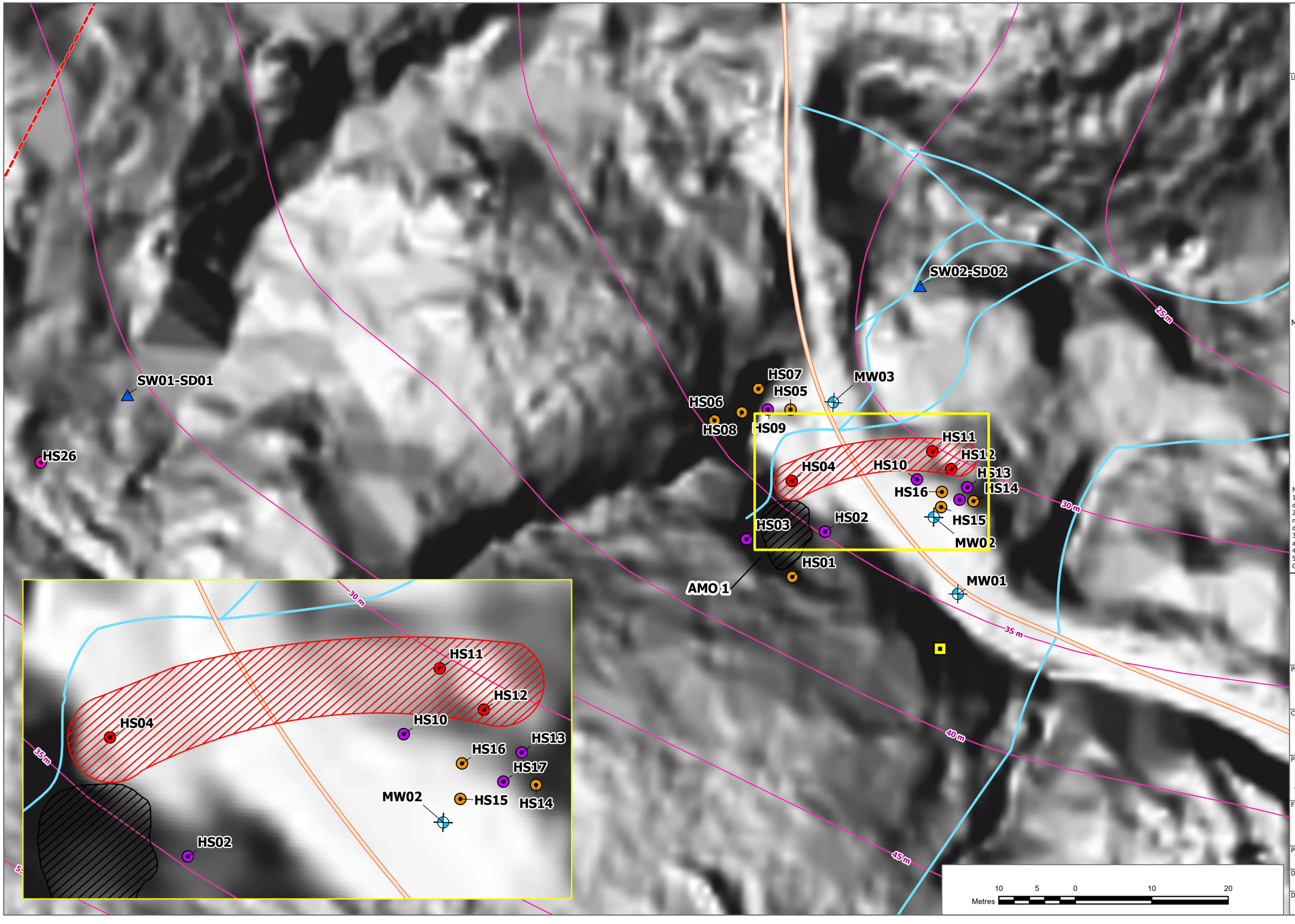
PROJECT NAME
REMEDIAL ACTION PLAN, RISK MANAGEMENT PLAN AND SITE CLOSURE REPORT

CLIENT NAME
BUILD NOVA SCOTIA

PROJECT LOCATION
FORMER WIDOW POINT MINE – SOUTH OF WEST SIDE ROAD, COUNTRY HARBOUR, NOVA SCOTIA

FIGURE NAME
SITE DETAILS

PROJECT NUMBER:	SCALE
327768.003	AS SHOWN
DRAWN BY: CF	REVIEWED BY: JP
DATE: DECEMBER 2024	FIGURE NUMBER: 2



N

LEGEND

- MONITORING WELL LOCATIONS
- SURFACE WATER AND SEDIMENT SAMPLE LOCATION
- SOIL SAMPLE LOCATION (NOT SUBMITTED FOR ANALYSIS)
- SOIL SAMPLE LOCATION (SAMPLE SUBMITTED FOR ANALYSIS)
- SOIL SAMPLE EXCEEDING TIER 1 EQSS
- DNRR AMO LOCATION (NOT OBSERVED)
- OBSERVED WATER BODY
- ELEVATION CONTOURS (MASL)
- ROAD NETWORK
- PROPERTY BOUNDARY
- AREA OF METALS IN SOIL > TIER I EQS AND BACKGROUND CONDITIONS
- OBSERVED AMO LOCATIONS

MASL = METERS ABOVE SEA LEVEL

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4) Coordinate system: NAD 1983 CSRS UTM Zone 20N.
5) Source: Pinchin Ltd., Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community.

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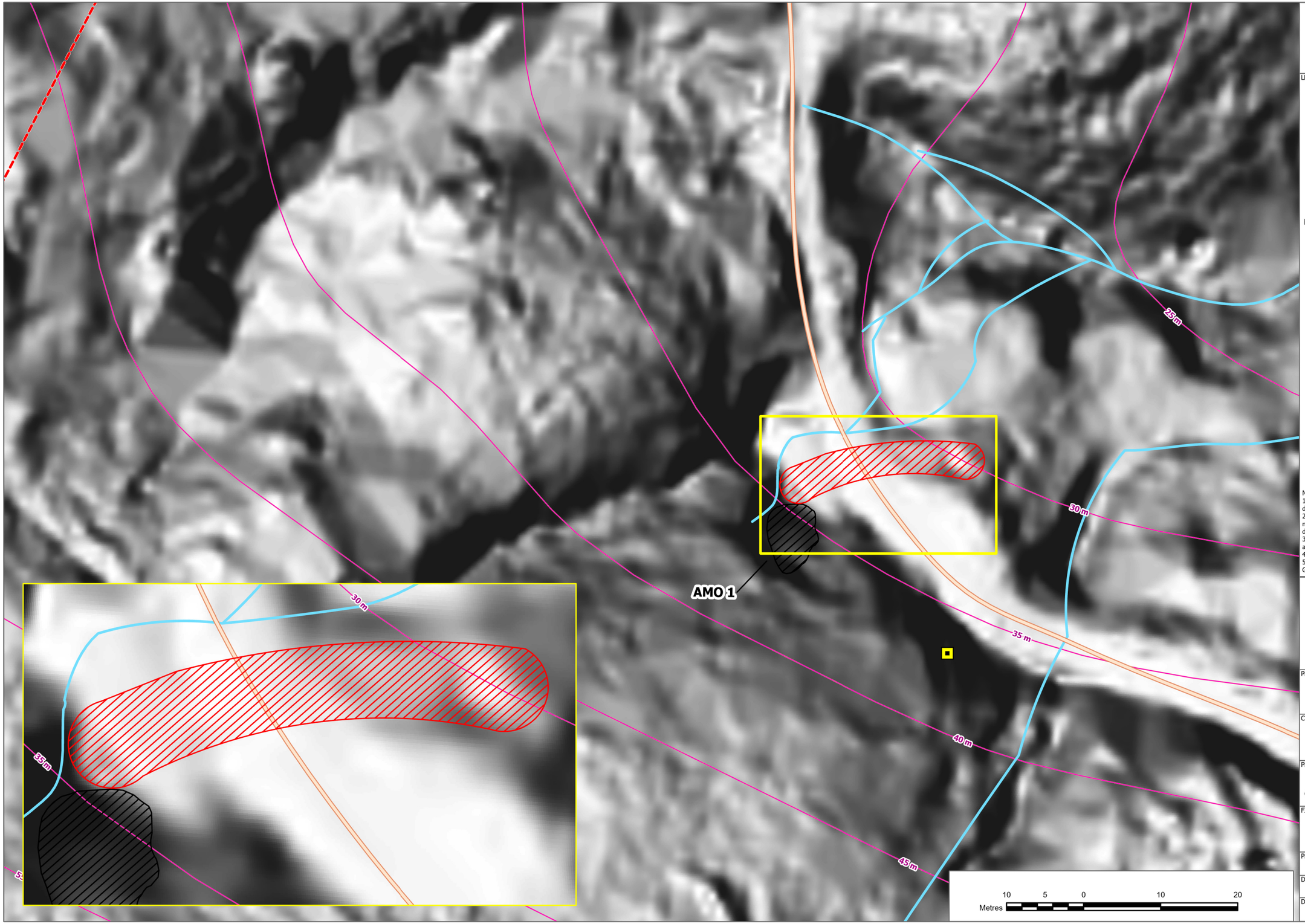
PROJECT NAME
REMEDIAL ACTION PLAN, RISK MANAGEMENT PLAN AND SITE CLOSURE REPORT

CLIENT NAME
BUILD NOVA SCOTIA

PROJECT LOCATION
FORMER WIDOW POINT MINE – SOUTH OF WEST SIDE ROAD, COUNTRY HARBOUR, NOVA SCOTIA

FIGURE NAME
SAMPLING LOCATIONS

PROJECT NUMBER:	SCALE
327768.003	AS SHOWN
DRAWN BY: CF	REVIEWED BY: JP
DATE: DECEMBER 2024	FIGURE NUMBER: 3



N

LEGEND

- DNRR AMO LOCATION (NOT OBSERVED)
- OBSERVED WATER BODY
- ELEVATION CONTOURS (MASL)
- ROAD NETWORK
- PROPERTY BOUNDARY
- AREA OF METALS IN SOIL > TIER I EQS AND BACKGROUND CONDITIONS
- OBSERVED AMO LOCATIONS

MASL = METERS ABOVE SEA LEVEL

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PINCHIN

PROJECT NAME
REMEDIAL ACTION PLAN, RISK MANAGEMENT PLAN AND SITE CLOSURE REPORT

CLIENT NAME
BUILD NOVA SCOTIA

PROJECT LOCATION
FORMER WIDOW POINT MINE – SOUTH OF WEST SIDE ROAD, COUNTRY HARBOUR, NOVA SCOTIA

FIGURE NAME
RISK MANAGEMENT PLAN DETAILS

PROJECT NUMBER:	SCALE
327768.003	AS SHOWN
DRAWN BY: CF	REVIEWED BY: JP
DATE: DECEMBER 2024	FIGURE NUMBER: 4