
APPENDIX A

Existing Conditions Figures





Buildings

Roads

Parcels

Six Mile Creek

Study area

1:4,500

NAD83(CSRS) / UTM zone 17N

0100200 m

MONTROSE

ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

Study Area

Date:

December, 2025

Project No:

36481

Submitter:

J. Arce-Rodriguez

Reviewer:

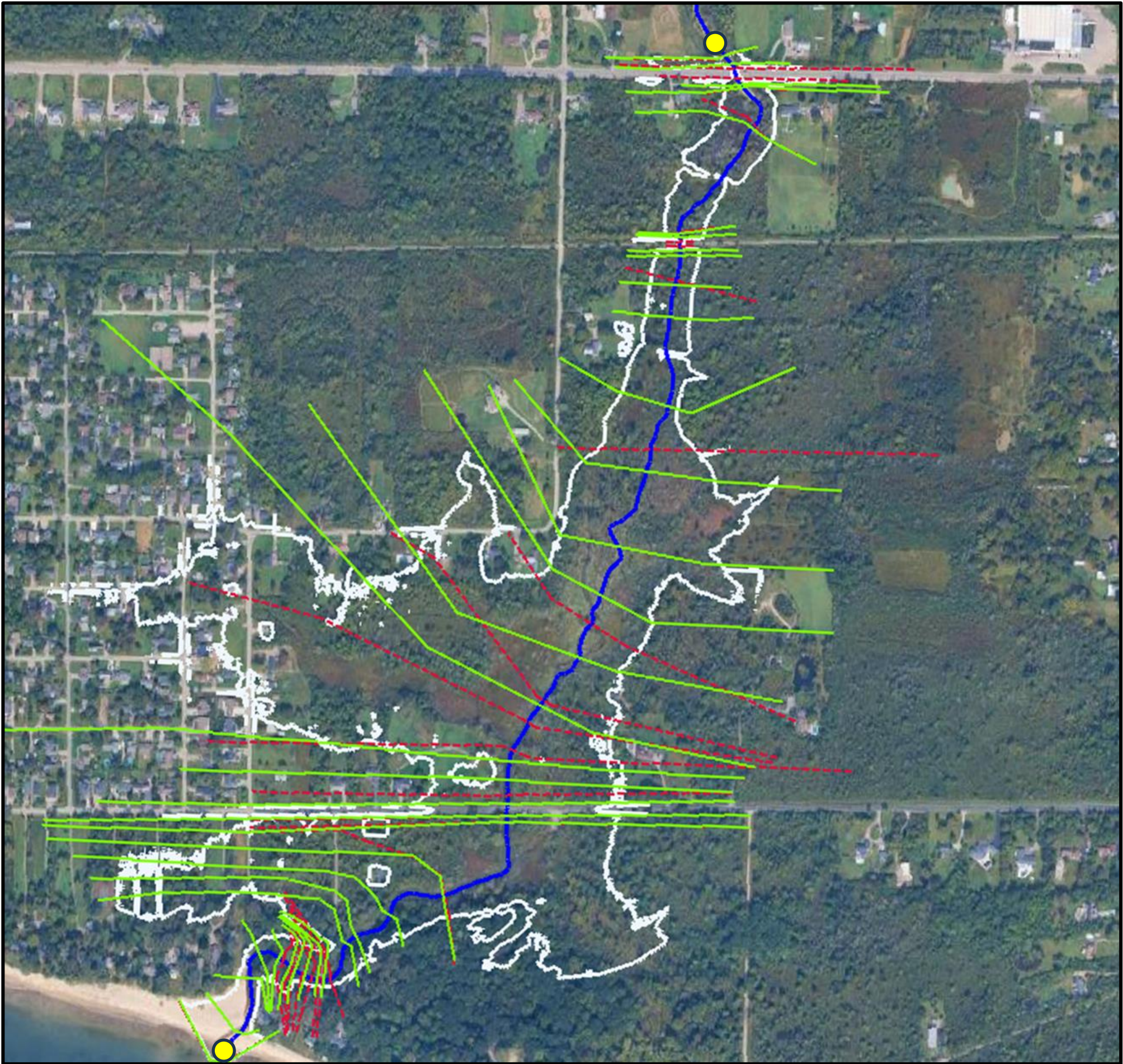
A. Mckay

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Figure:

A1

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 1.1



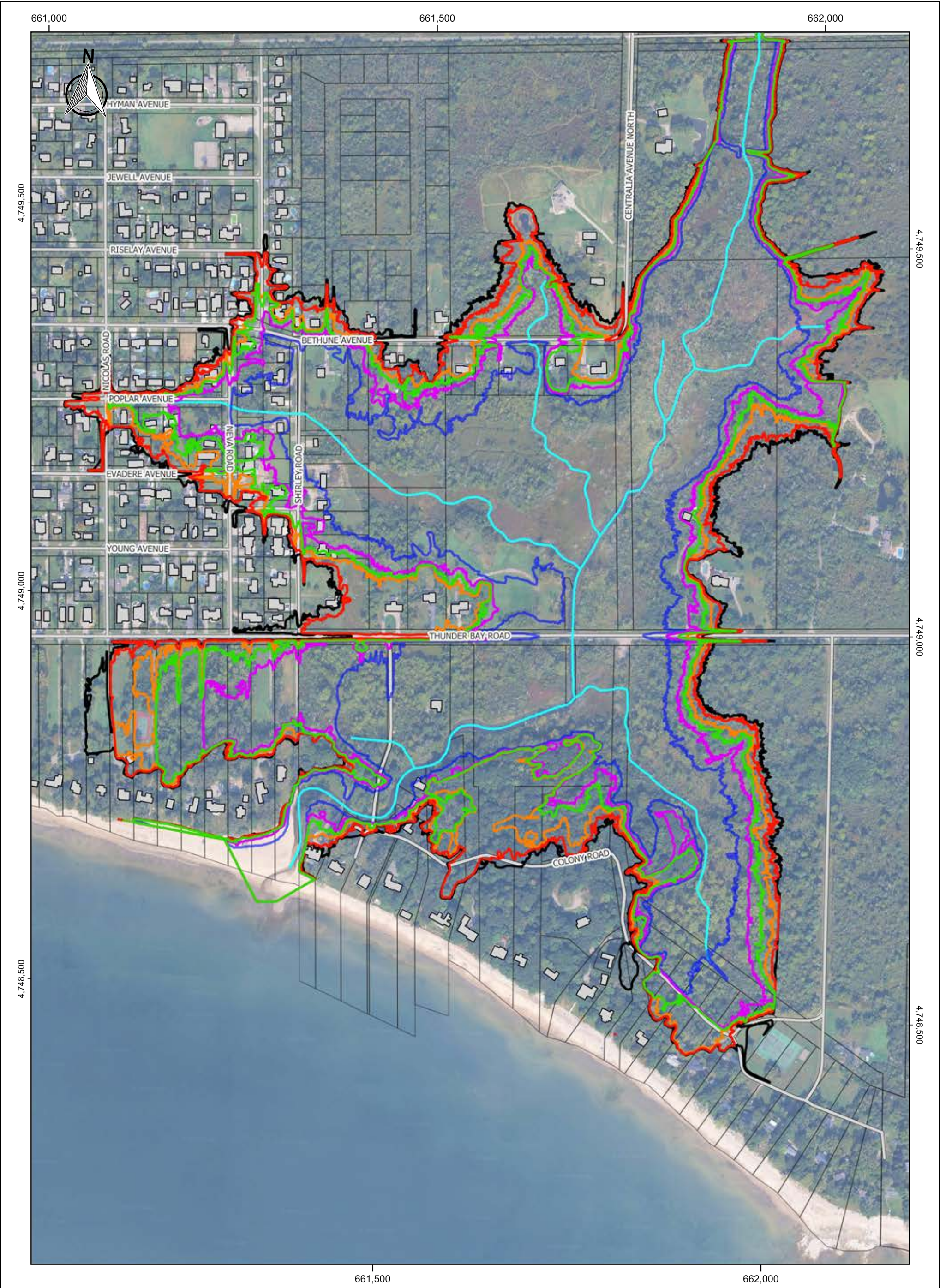
Legend

- Updated Cross-Section
- Original Cross-Section
- 5-year Storm Surge Flood Line
- River Course
- Boundary Condition



Town of Fort Erie
Hydrology and Hydraulics Study

HEC-RAS Model Update Schematics



Six Mile Creek

Buildings

Parcels

Roads

Storm Surge Flood Extent

2-year

5-year

10-year

25-year

50-year

100-year

1:4,500

NAD83(CSRS) / UTM zone 17N

0100200 m

Town of Fort Erie

Six Mile Creek Flooding Project

Flood Extents 2- through 100-year Storm Surge

Date: December, 2025

Project No: 36481

Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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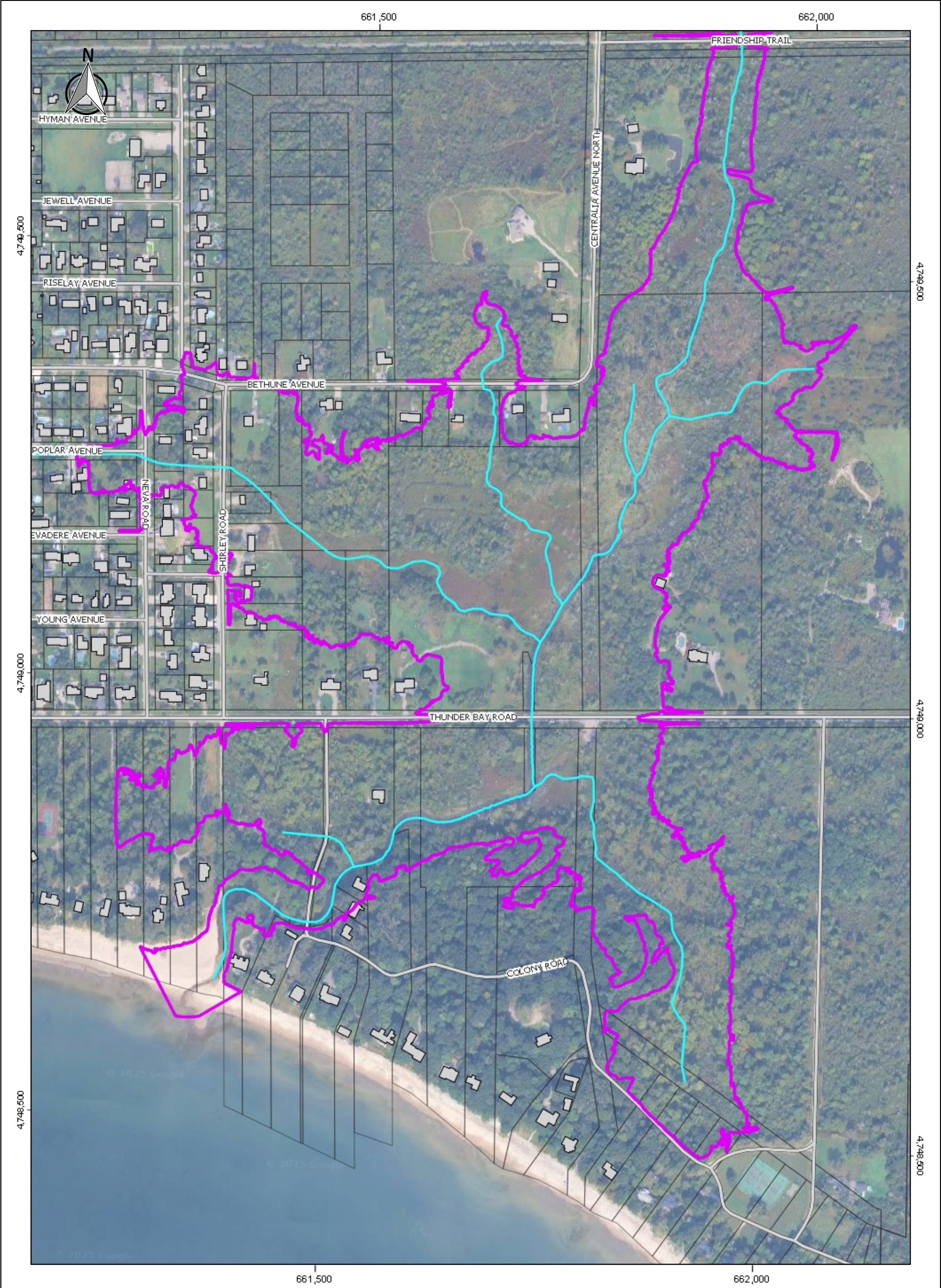
Figure: A3

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 5.1

APPENDIX B

Alternative Solution Figures





Six Mile Creek

Buildings

Parcels

Roads

5-year Storm Surge Flood Extent

This figure must be used in conjunction with the attached memorandum and is subject to the same limitations and conditions stated in the memorandum.

1:4,000

NAD83(CSRS) / UTM zone 17N

0100200 m

References: Town of Fort Erie, Ontario GeoHub, LIO
H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_EA_Report.qgz | 5.2

MONTROSE

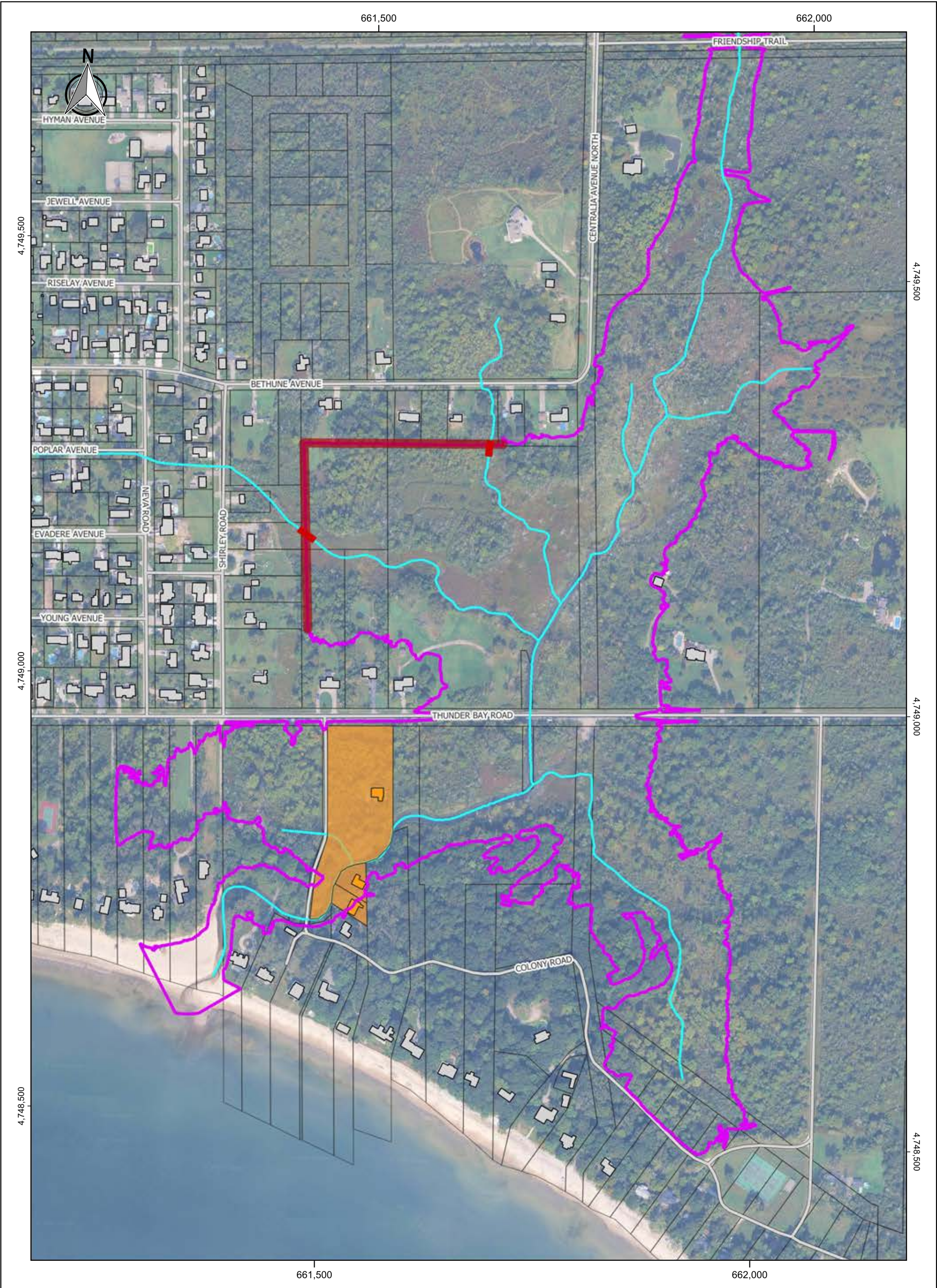
ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

Do Nothing Alternative

Date:	December, 2025	Project No:	36481	Submitter:	J. Arce-Rodriguez	Reviewer:	A. McKay
Disclaimer: Third party materials used in this report have not been independently verified and will not be updated for future changes. Montrose Environmental Solutions Canada Inc. has made customary efforts to ensure the accuracy of such materials at the time of publication, however we do not accept liability for errors, omissions, or inaccuracies in same. Where attached to a report, this figure/drawing is subject to the limitations and conditions stated therein.							Figure: 5.2



Six Mile Creek

Buildings

Parcels

Roads

5-year Storm Surge Flood Extent

Alternative 1

Culvert

Landform Barrier

Optional Property Purchase

1:4,000

NAD83(CSRS) / UTM zone 17N

0100200 m

References: Town of Fort Erie, Ontario GeoHub, LIO

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 5.3

MONTROSE

ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

Alternative 1:

Landform Barrier

Date:December, 2025

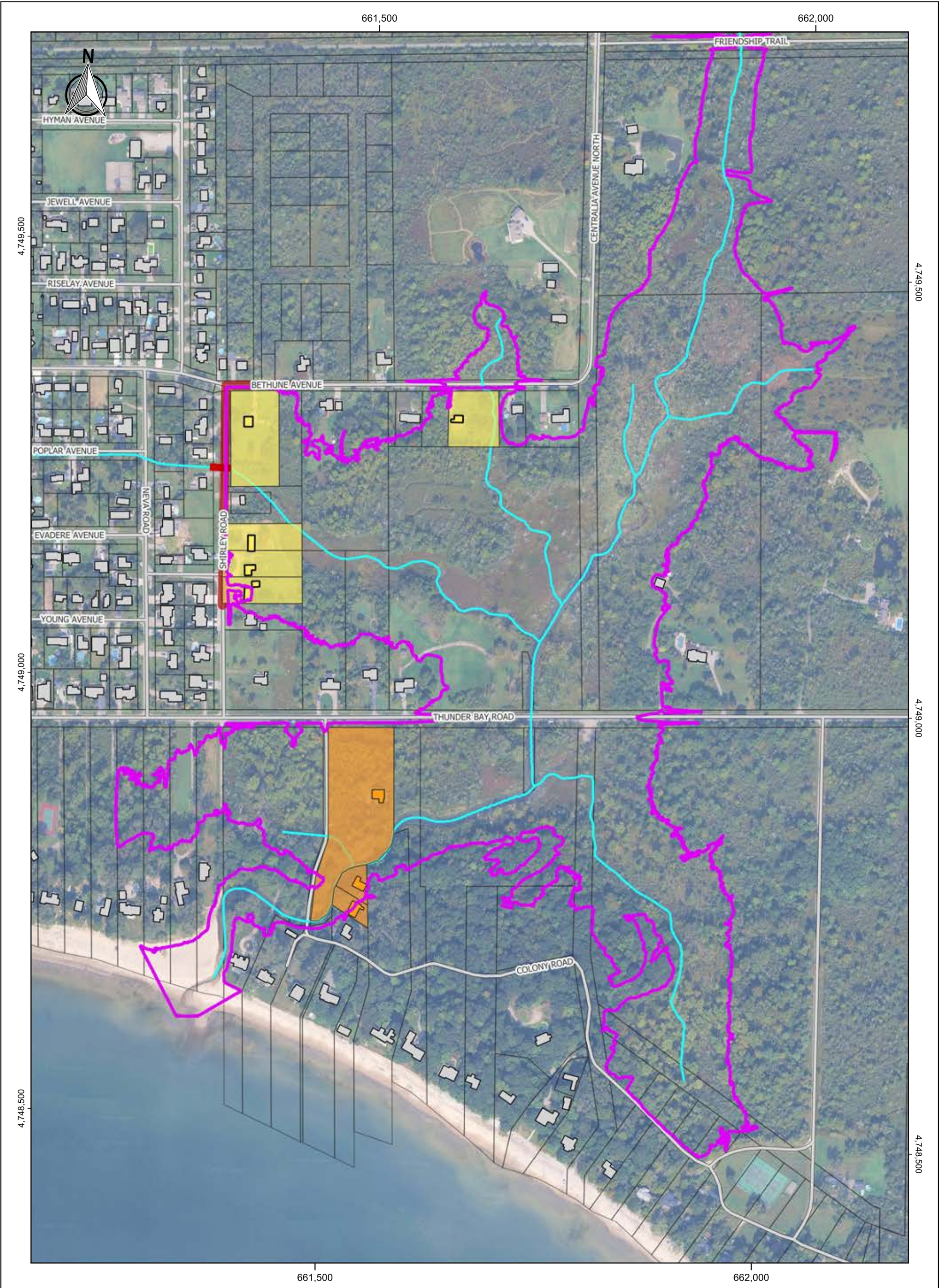
Project No.:36481

Submitter:J. Arce-Rodriguez

Reviewer:A. Mckay

Disclaimer: Third party materials used in this report have not been independently verified and will not be updated for future changes. Montrose Environmental Solutions Canada Inc. has made customary efforts to ensure the accuracy of such materials at the time of publication, however we do not accept liability for errors, omissions, or inaccuracies in same. Where attached to a report, this figure/drawing is subject to the limitations and conditions stated therein.

Figure: B2



Six Mile Creek

Buildings

Roads

Parcels

5-year Storm Surge Flood Extent

Alternative 2

Culvert

Road Re-Profiling

Property Purchase

Optional Property Purchase

1:4,000

NAD83(CSRS) / UTM zone 17N

0

100

200 m

References: Town of Fort Erie, Ontario GeoHub, LIO

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 5.4

MONTROSE

ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

Alternative 2: Road Right-of-Way with Property Purchase

Date: December, 2025

Project No: 36481

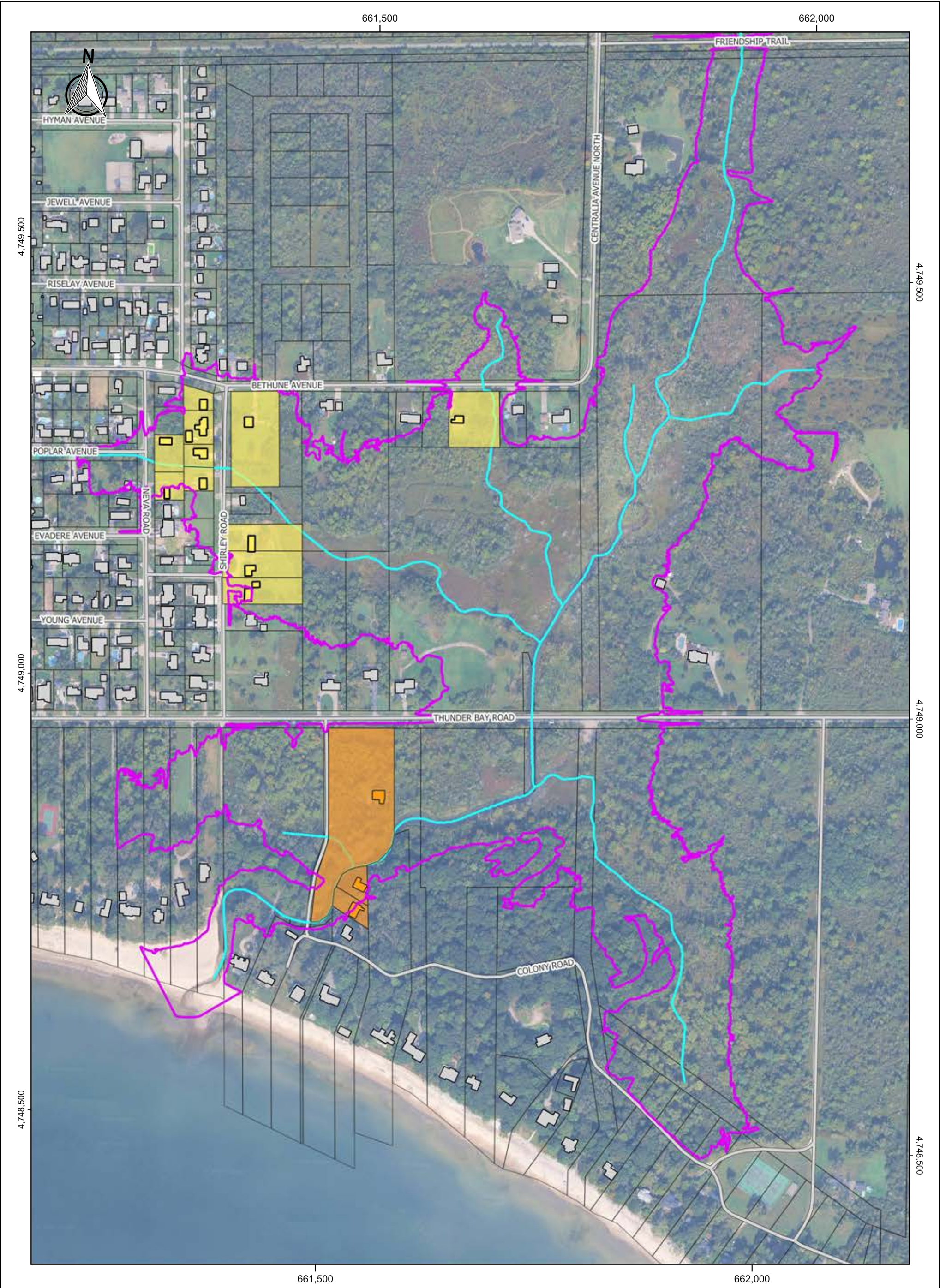
Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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Figure:

B3



Six Mile Creek

Buildings

Parcels

Roads

5-year Storm Surge Flood Extent

Property Purchase

Optional Property Purchase

This figure must be used in conjunction with the attached memorandum and is subject to the same limitations and conditions stated in the memorandum.

1:4,000

NAD83(CSRS) / UTM zone 17N

0

100

200 m

Town of Fort Erie

Six Mile Creek Flooding Project

Alternative 3:

Property Purchase

Date: December, 2025

Project No: 36481

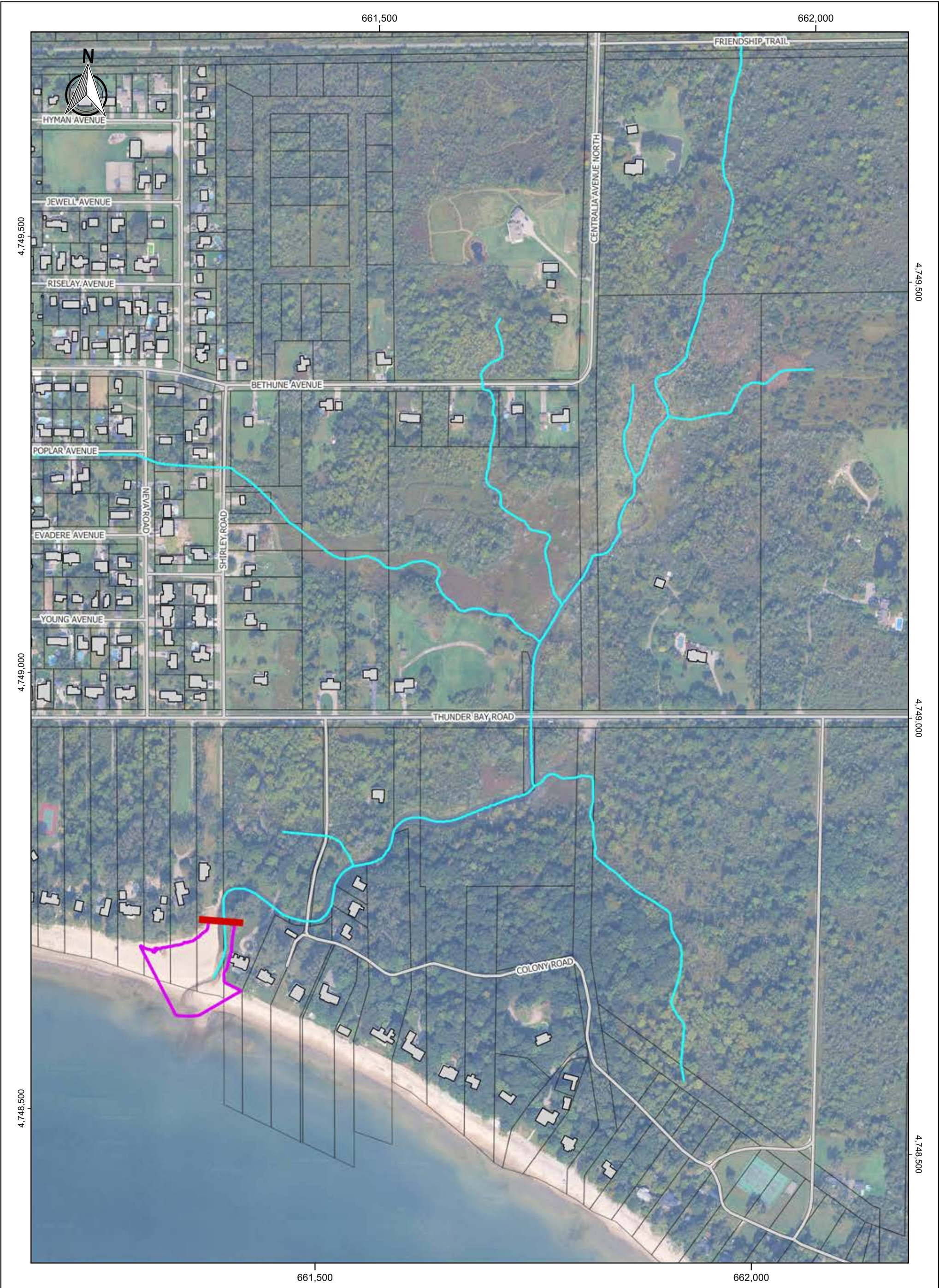
Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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Figure: B4

References: Town of Fort Erie, Ontario GeoHub, LIO
H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 5.5



Six Mile Creek

Buildings

Parcels

Roads

5-year Storm Surge Flood Extent

Alternative 5

Barrier

This figure must be used in conjunction with the attached memorandum and is subject to the same limitations and conditions stated in the memorandum.

1:4,000

NAD83(CSRS) / UTM zone 17N

0100200 m

References: Town of Fort Erie, Ontario GeoHub, LIO

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 5.7

MONTROSE

ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

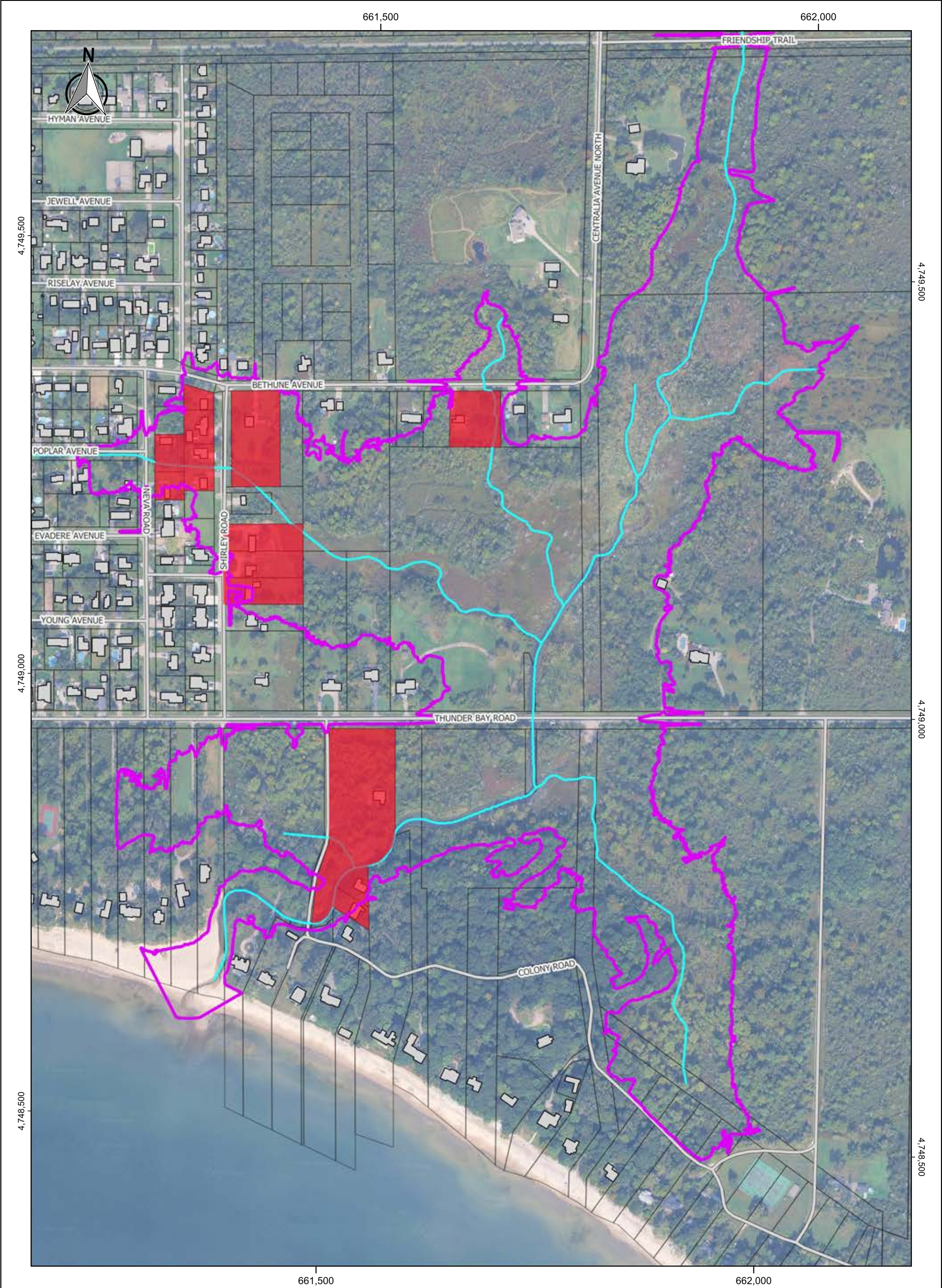
Alternative 5: Lake Front Barrier and Backflow Prevention System

Date:	December, 2025	Project No:	36481	Submitter:	J. Arce-Rodriguez	Reviewer:	A. McKay
Disclaimer: Third party materials used in this report have not been independently verified and will not be updated for future changes. Montrose Environmental Solutions Canada Inc. has made customary efforts to ensure the accuracy of such materials at the time of publication, however we do not accept liability for errors, omissions, or inaccuracies in same. Where attached to a report, this figure/drawing is subject to the limitations and conditions stated therein.							Figure: B6

APPENDIX C

Alternative Solutions Results Figures





Six Mile Creek

Buildings

Parcels

Roads

5-year Storm Surge Flood Extent

Affected Properties with Buildings

This figure must be used in conjunction with the attached memorandum and is subject to the same limitations and conditions stated in the memorandum.

1:4,000

NAD83(CSRS) / UTM zone 17N

0

100

200 m

References: Town of Fort Erie, Ontario GeoHub, LIO

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 5.2

MONTROSE

ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

Do Nothing Alternative: Resulting Flood Depths During 5-year Storm Surge

Date: December, 2025

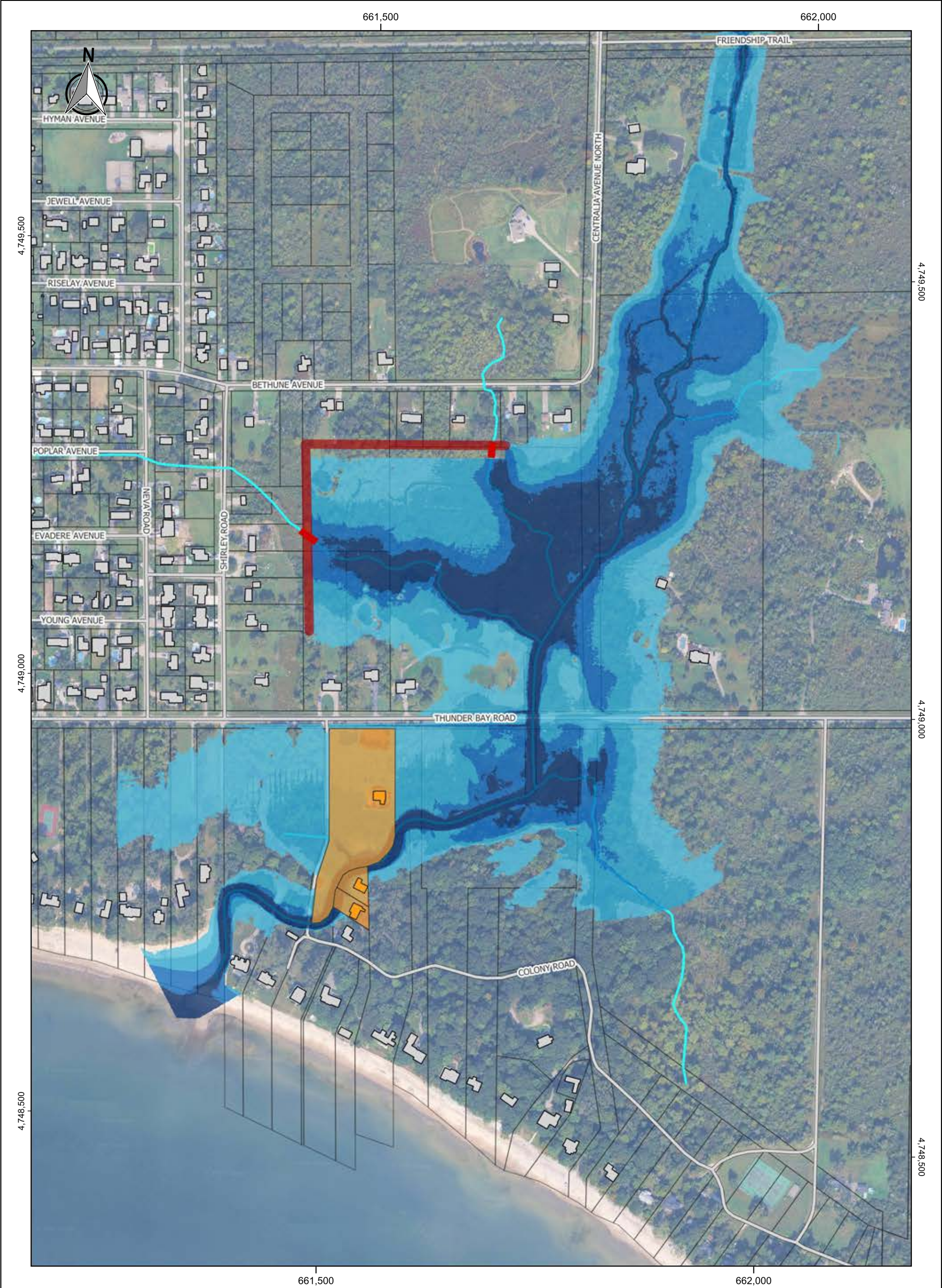
Project No: 36481

Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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Figure: C1



Six Mile Creek

Buildings

Parcels

Roads

Culvert

Landform Barrier

Optional Property Purchase

5 year Storm Surge Depth (m)

<= 0.00

0.00 - 0.50

0.50 - 1.00

1.00 - 1.50

1.50 - 2.00

> 2.00

1:4,000

NAD83(CSRS) / UTM zone 17N

0

100

200 m

References: Town of Fort Erie, Ontario GeoHub, LIO
H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 6.3

MONTROSE

ENVIRONMENTAL

Town of Fort Erie

Six Mile Creek Flooding Project

Alternative 1: Resulting Flood Depths During 5-year Storm Surge

Date: December, 2025

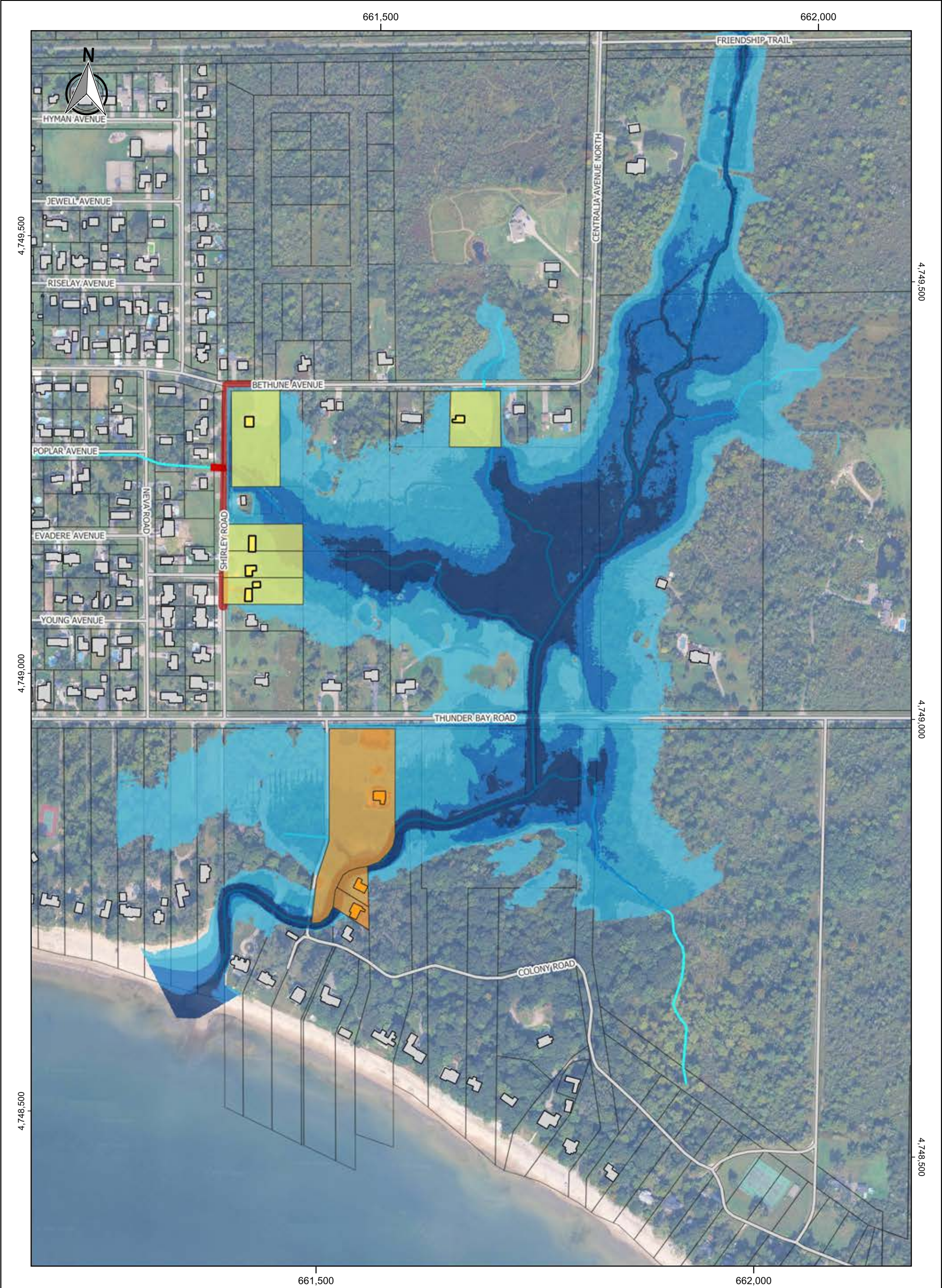
Project No: 36481

Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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Figure: C2



Six Mile Creek

Buildings

Parcels

Roads

Alternative 2

Culvert

Road Re-profiling

Property Purchase

Optional Property Purchase

5 year Storm Surge Depth (m)

≤ 0.00

0.00 - 0.50

0.50 - 1.00

1.00 - 1.50

1.50 - 2.00

> 2.00

1:4,000

NAD83(CSRS) / UTM zone 17N

0100200 m

References: Town of Fort Erie, Ontario GeoHub, LIO

H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 6.4

Town of Fort Erie

Six Mile Creek Flooding Project

Alternative 2: Resulting Flood Depths during the 5-Year Storm Surge

Date: December, 2025

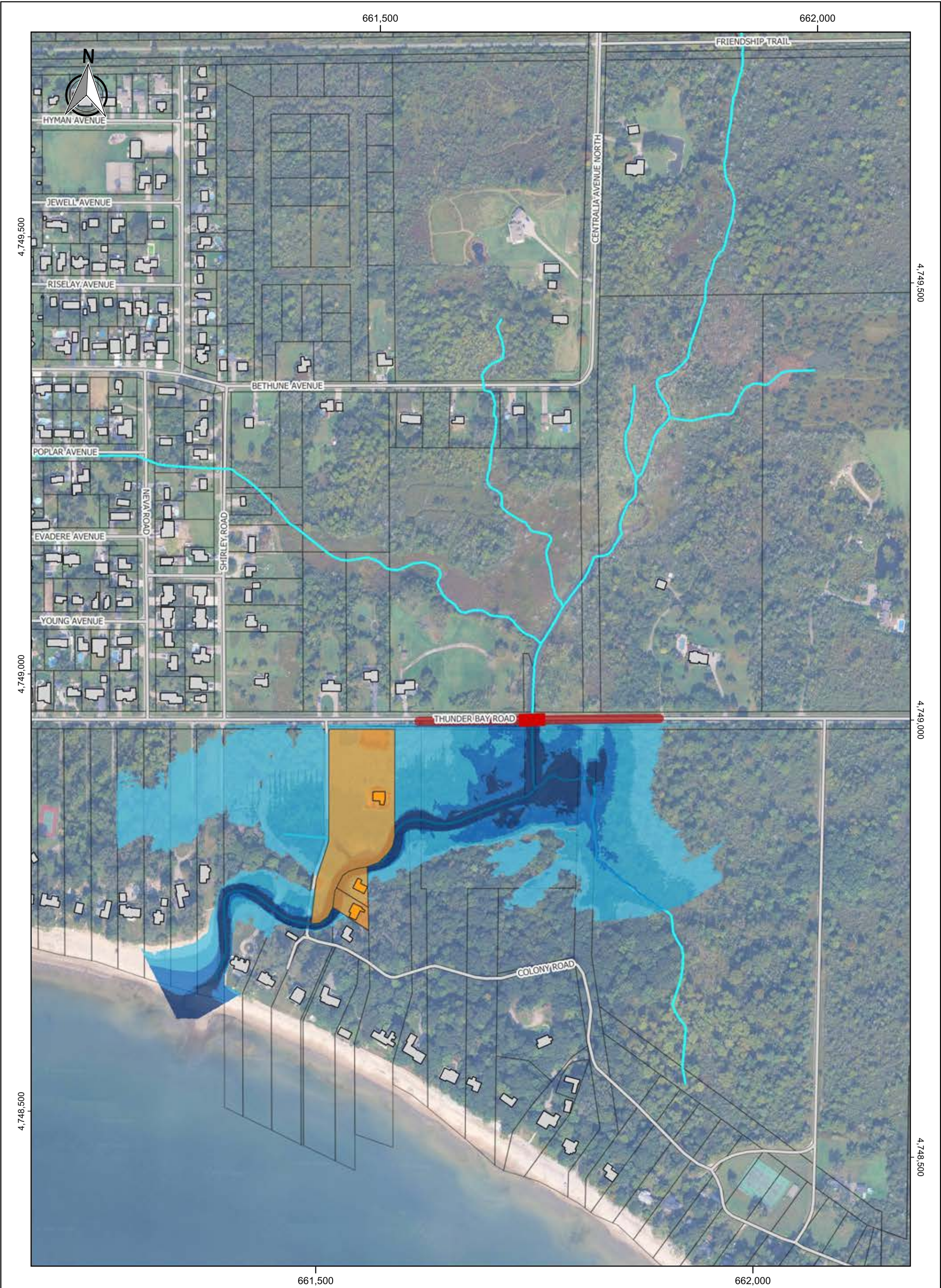
Project No.: 36481

Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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Figure: C3



 Six Mile Creek

 Buildings

 Parcels

 Roads

Alternative 4

 Culvert

 Road Re-profiling

 Optional Property Purchase

5 year Storm Surge Depth (m)

 <= 0.00

 0.00 - 0.50

 0.50 - 1.00

 1.00 - 1.50

 1.50 - 2.00

 > 2.00

1:4,000

NAD83(CSRS) / UTM zone 17N

0

100

200 m

References: Town of Fort Erie, Ontario GeoHub, LIO
H:\36481-SixMile Creek Flood EA\05 Analysis\GIS\QGIS\36481-Six_Mile_Creek-Figures_for_Hydrology_and_Hydraulics_Report.qgz | 6.6



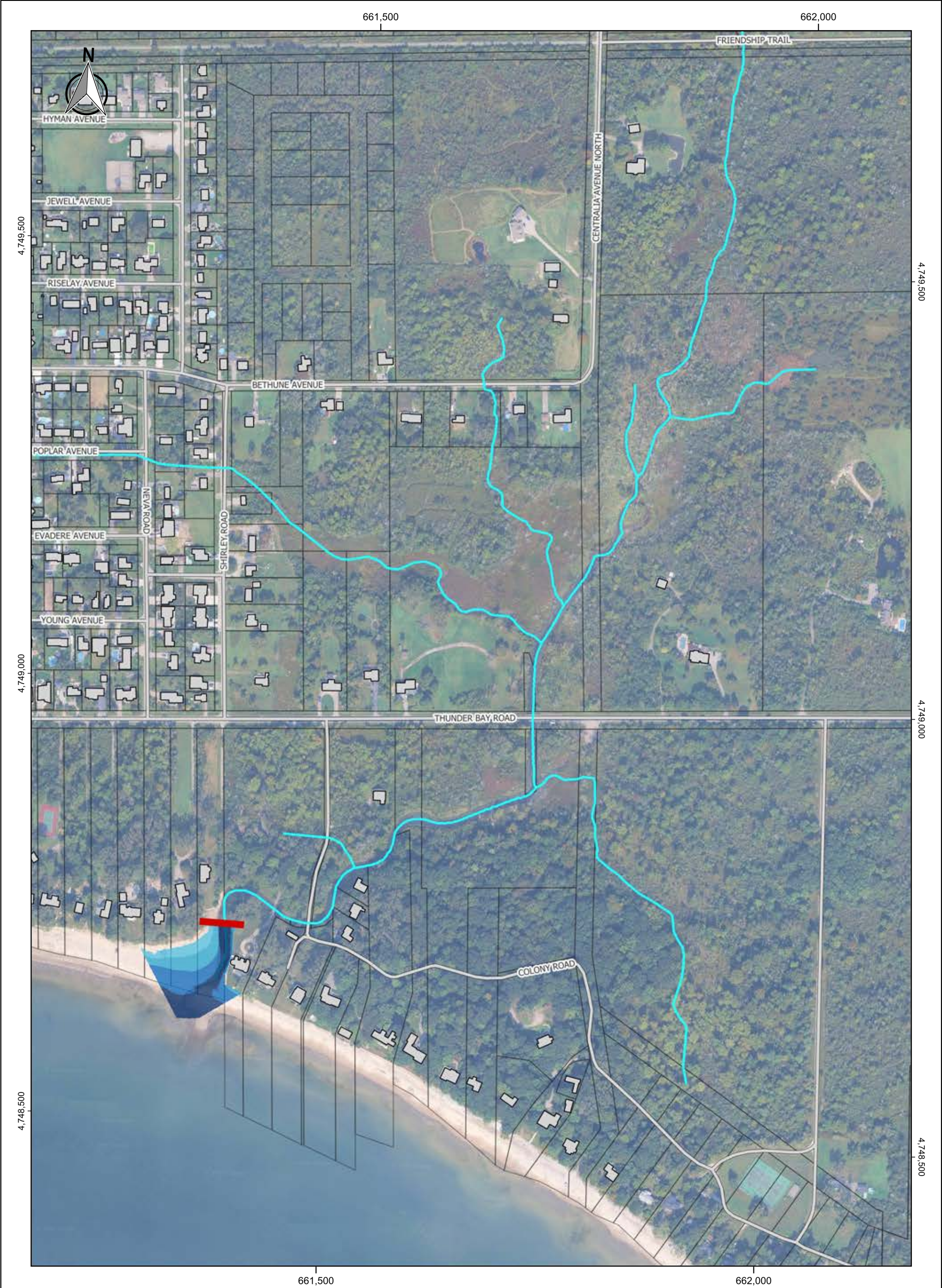
Town of Fort Erie
Six Mile Creek Flooding Project

Alternative 4: Resulting Flood Depths during the 5-Year Storm Surge

Date:	December, 2025	Project No:	36481	Submitter:	J. Arce-Rodriguez	Reviewer:	A. McKay
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Figure: C4



Six Mile Creek

Buildings

Parcels

Roads

Alternative 5

Barrier

5 year Storm Surge Depth (m)

<= 0.00

0.00 - 0.50

0.50 - 1.00

1.00 - 1.50

1.50 - 2.00

> 2.00

1:4,000

NAD83(CSRS) / UTM zone 17N

0

100

200 m

Town of Fort Erie

Six Mile Creek Flooding Project

Alternative 5: Resulting Flood Depths during the 5-Year Storm Surge

Date: December, 2025

Project No: 36481

Submitter: J. Arce-Rodriguez

Reviewer: A. McKay

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Figure: C5