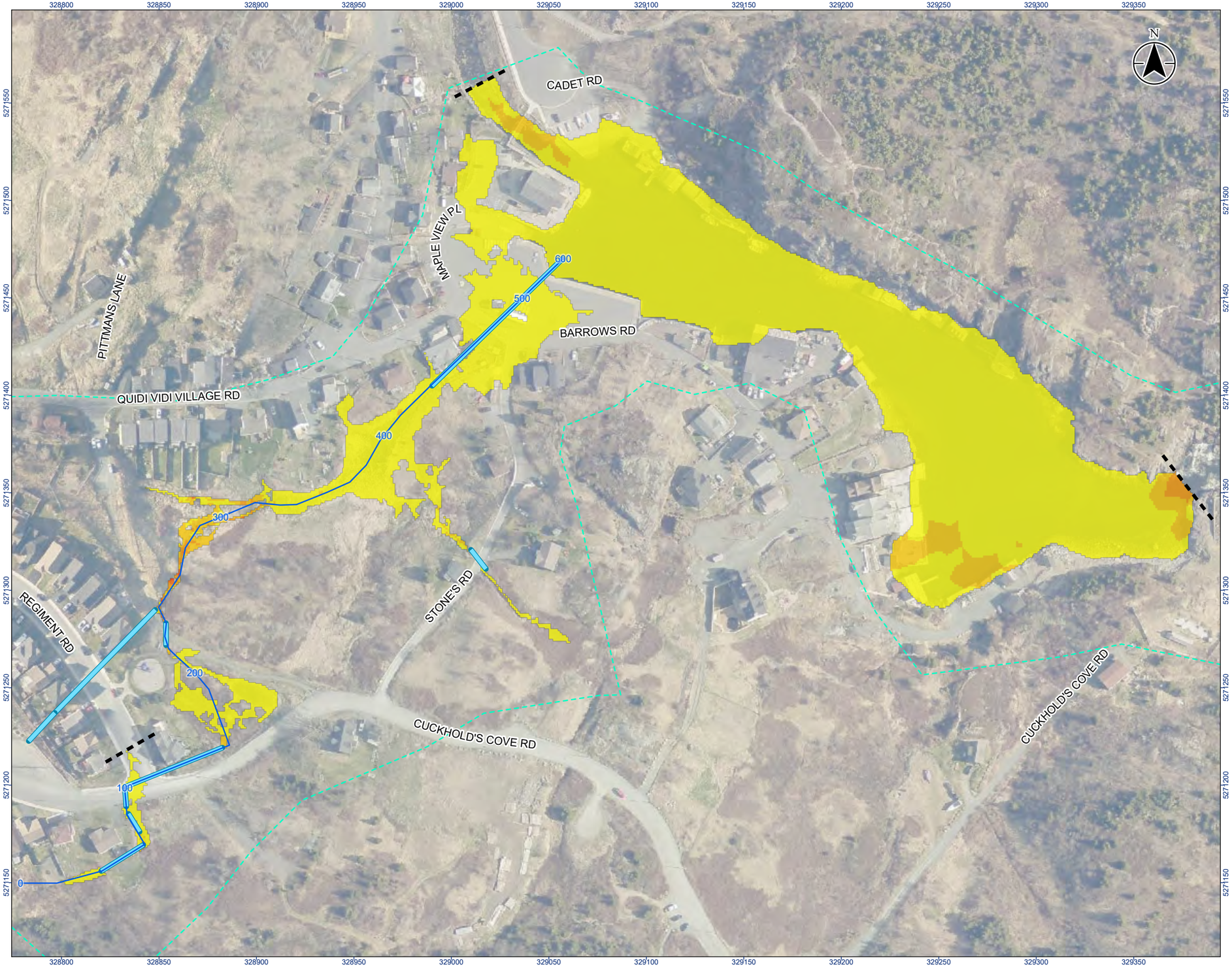
Appendix E-3 Velocity Maps



Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
43-0

Title
Current Climate Condition
20-Year Velocity - Barrow Road Stream

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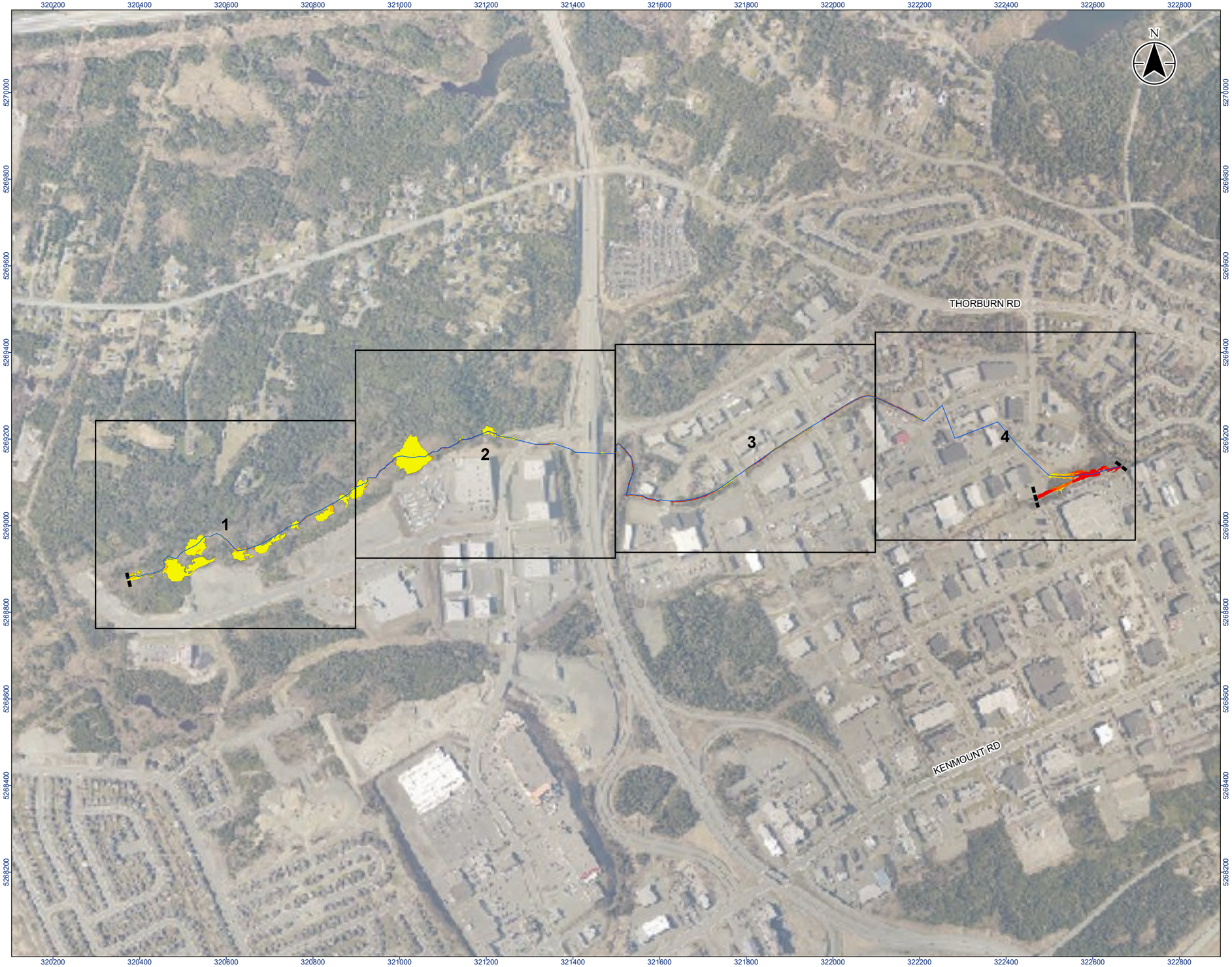

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 175 350 m

1:9,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
44-0

Title
Current Climate Condition
20-Year Velocity - Holes In Marsh Brook
Overview Map

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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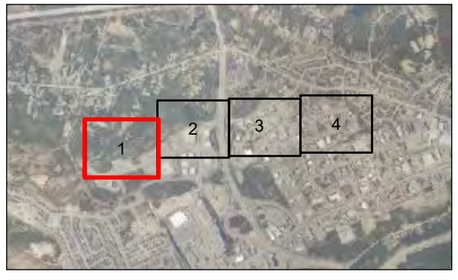

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
44-1

Title
Current Climate Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 1 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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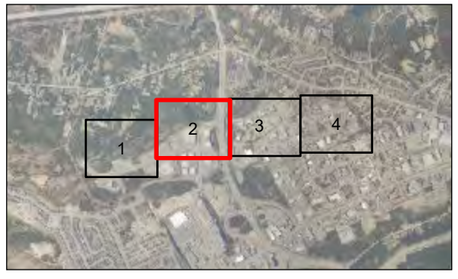

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
44-2

Title
Current Climate Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 2 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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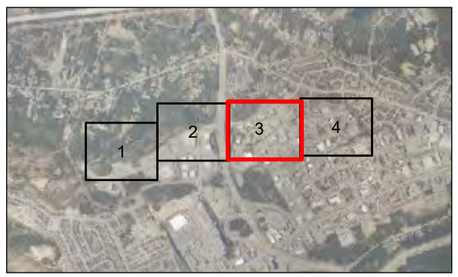

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
44-3

Title
Current Climate Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 3 of 4

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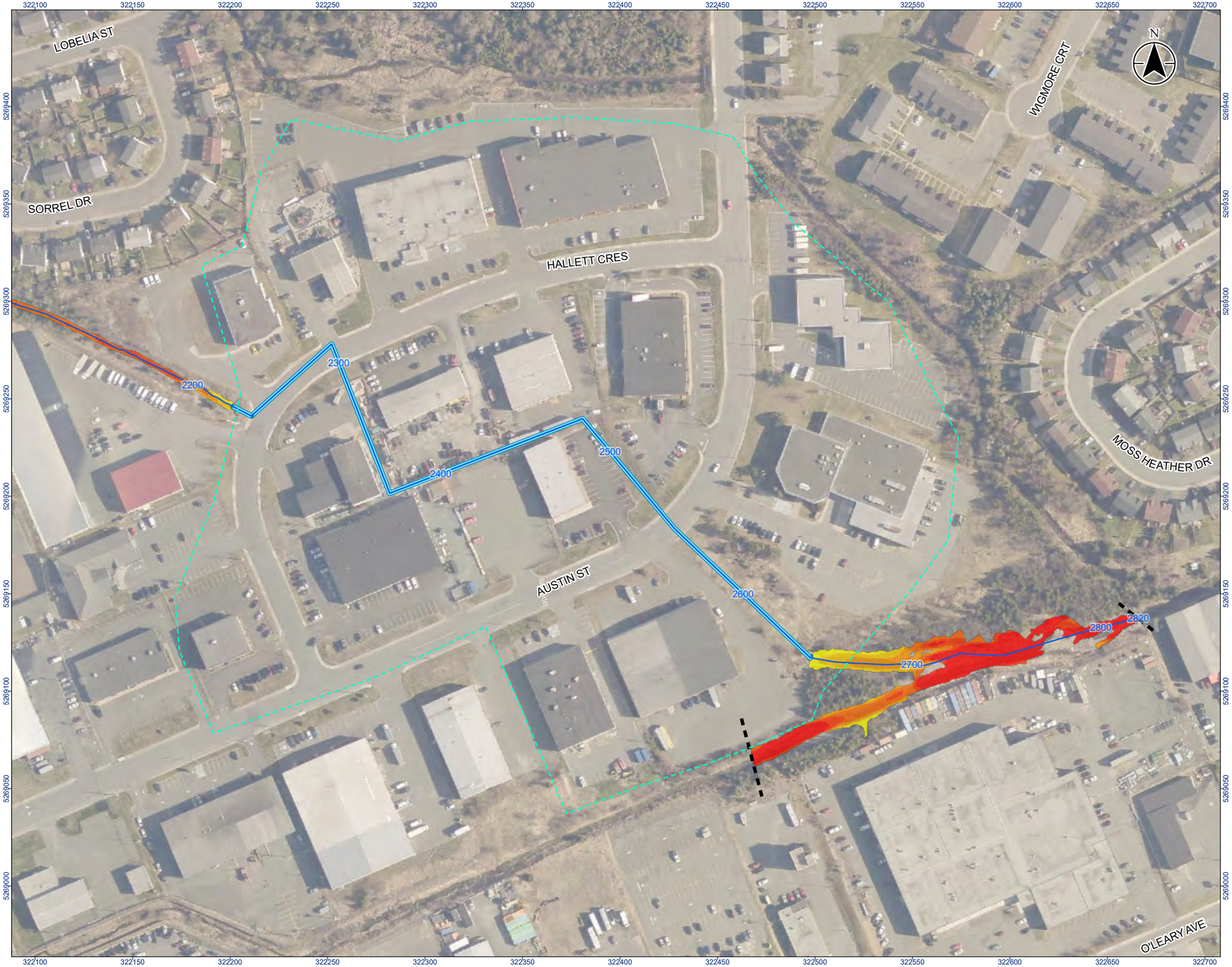

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
44-4

Title
Current Climate Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 4 of 4

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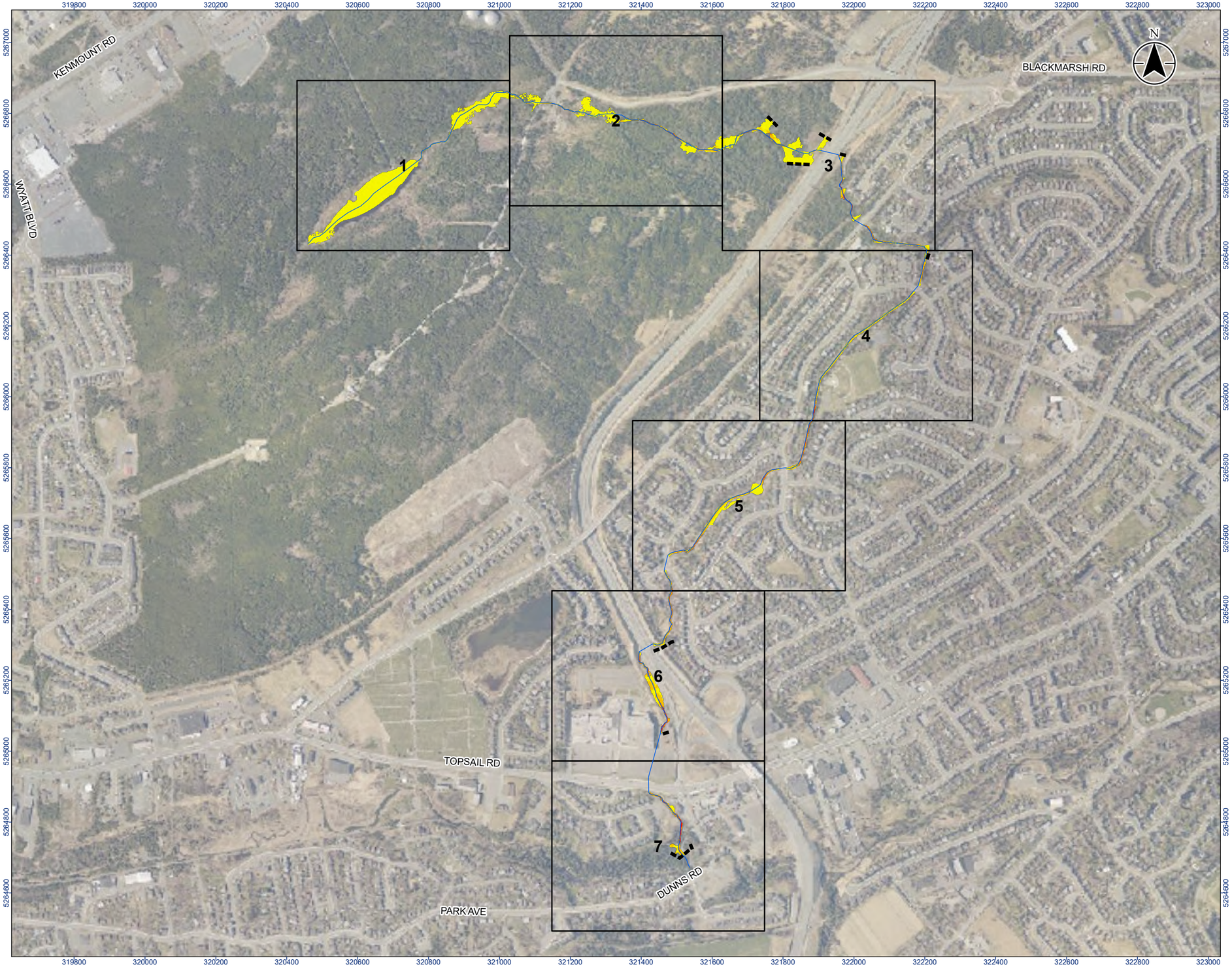

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 210 420 m

1:11,000 (At original document size of 11x17)

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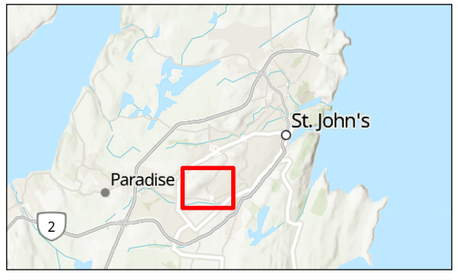

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-0

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Overview Map

\\ca0217-ppfss01\work_group\01656\active\163401903\GIS\Maps\Report\163401903_VL_Overview_Mapbooks.aprx\163401903_Fig'-0_VL_20-yr_Current_Overview Revised on 12/20/2024 9:54 AM by jacwalker

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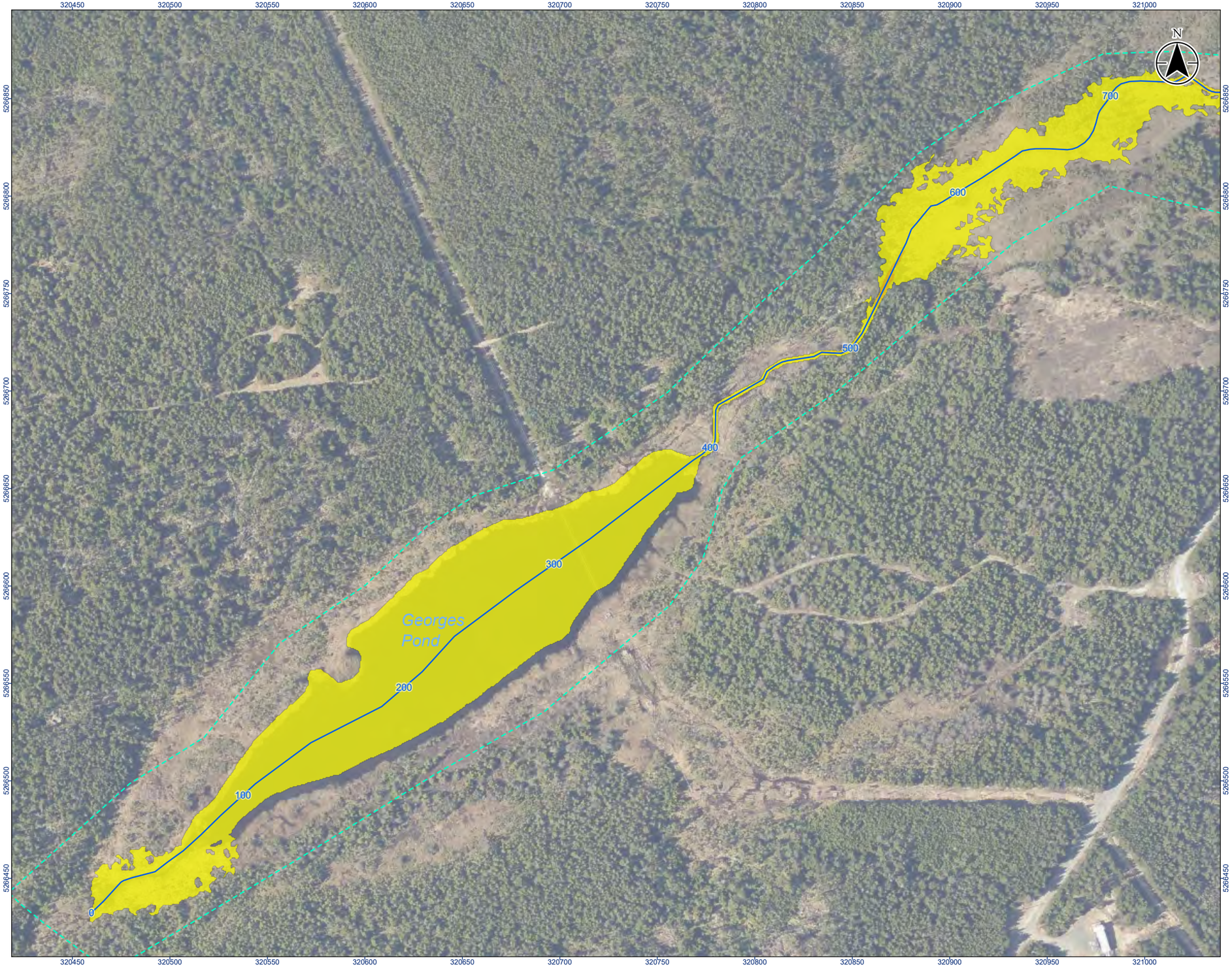

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-1

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 1 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-2

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 2 of 7

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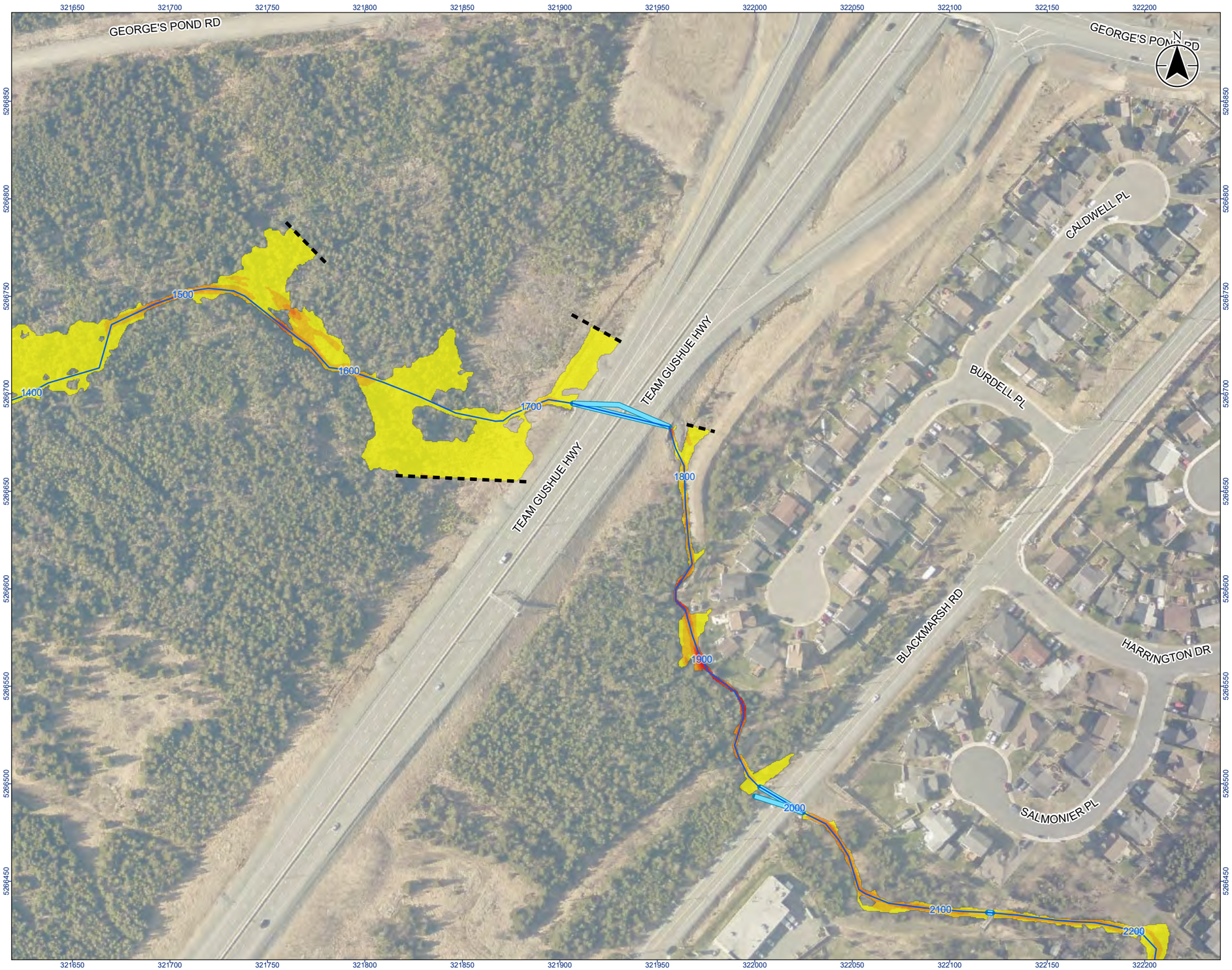

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-3

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 3 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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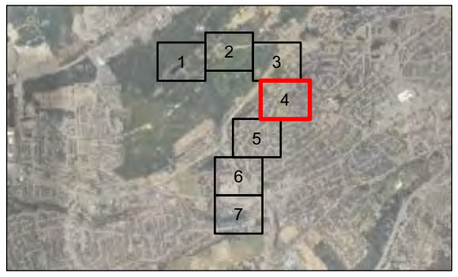

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-4

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 4 of 7

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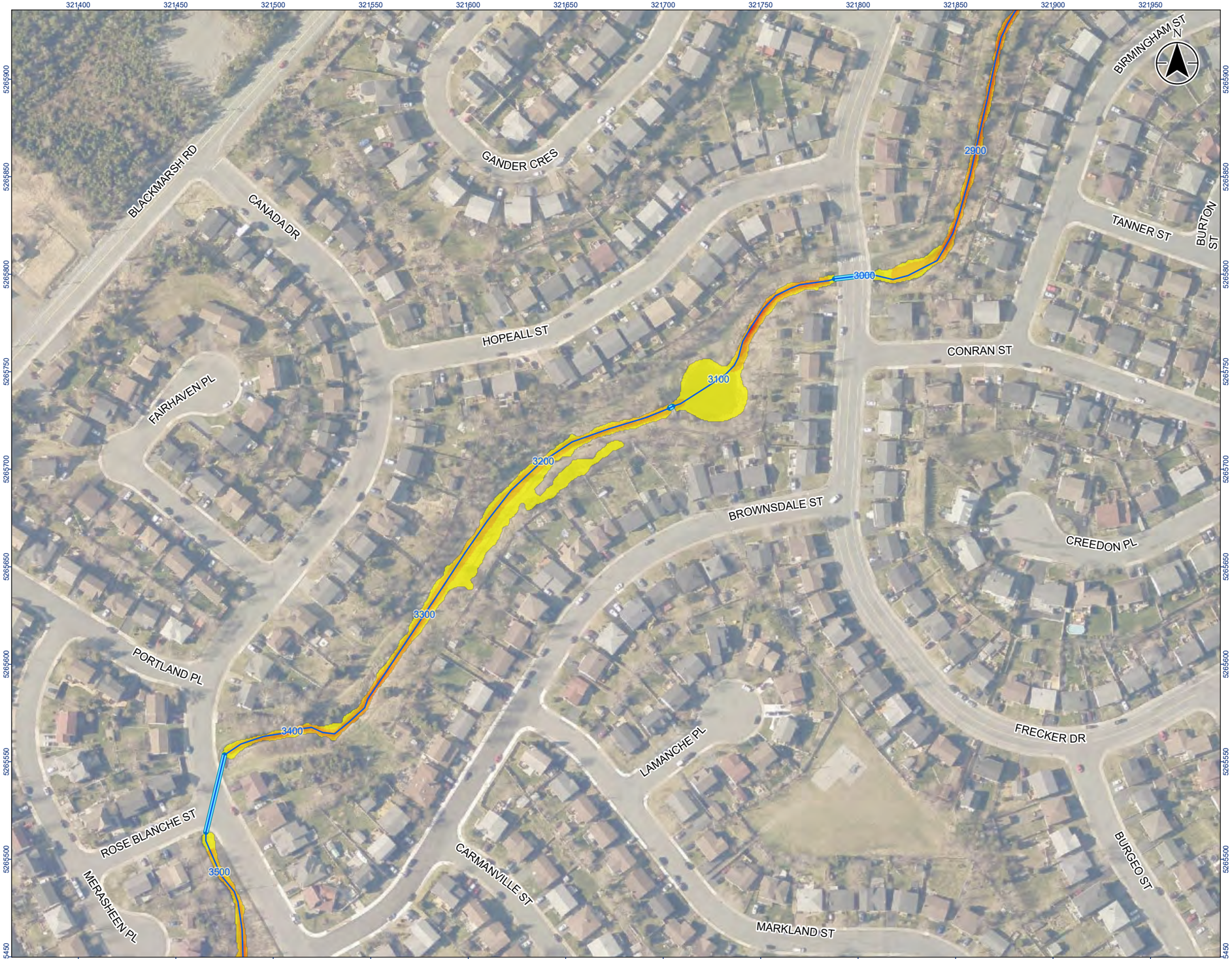

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-5

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 5 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-6

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 6 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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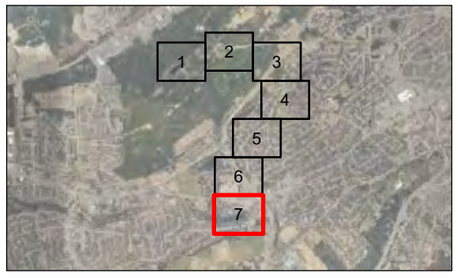

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
45-7

Title
Current Climate Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 7 of 7

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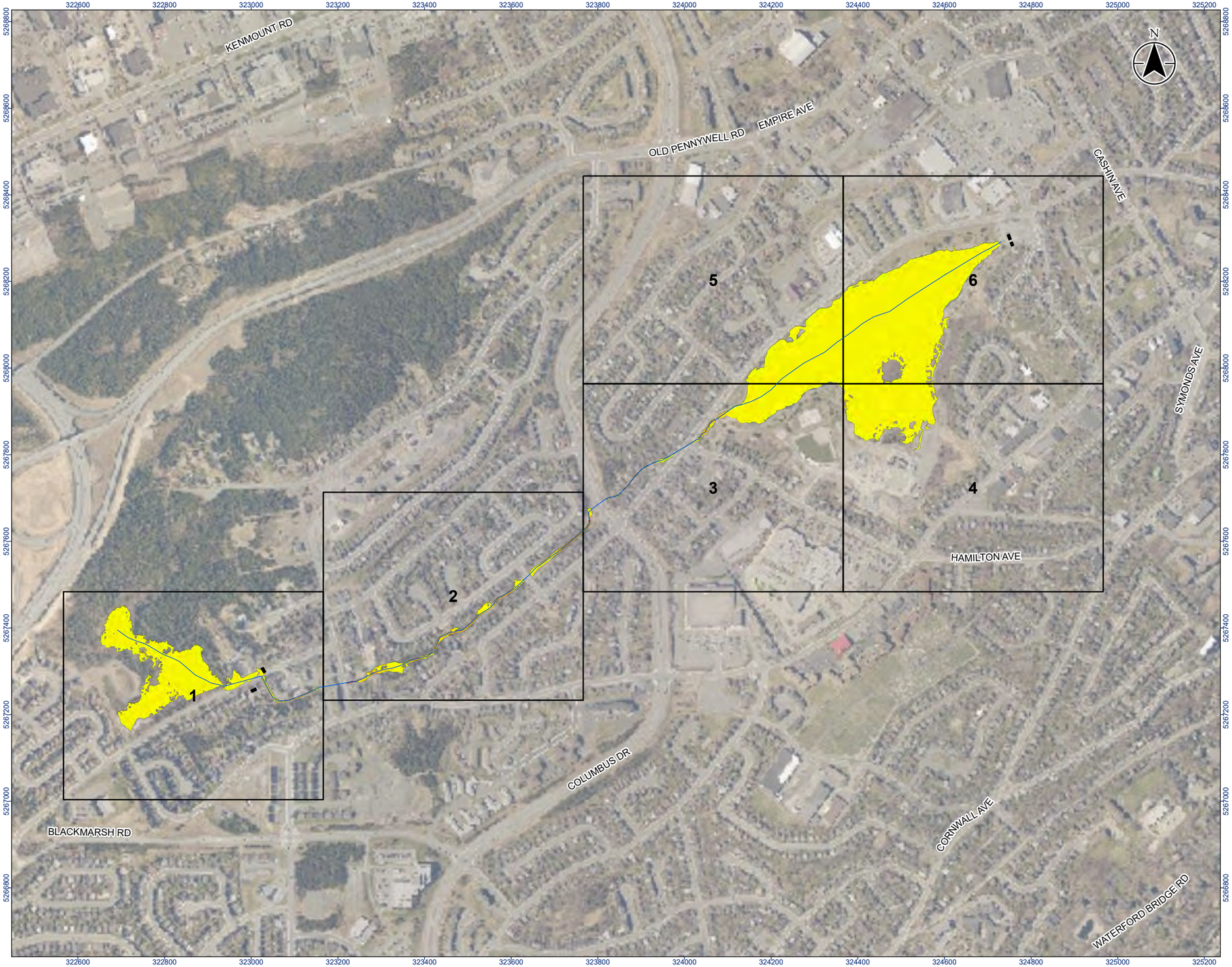

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 175 350 m

1:9,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-05-26

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-0

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook Overview Map

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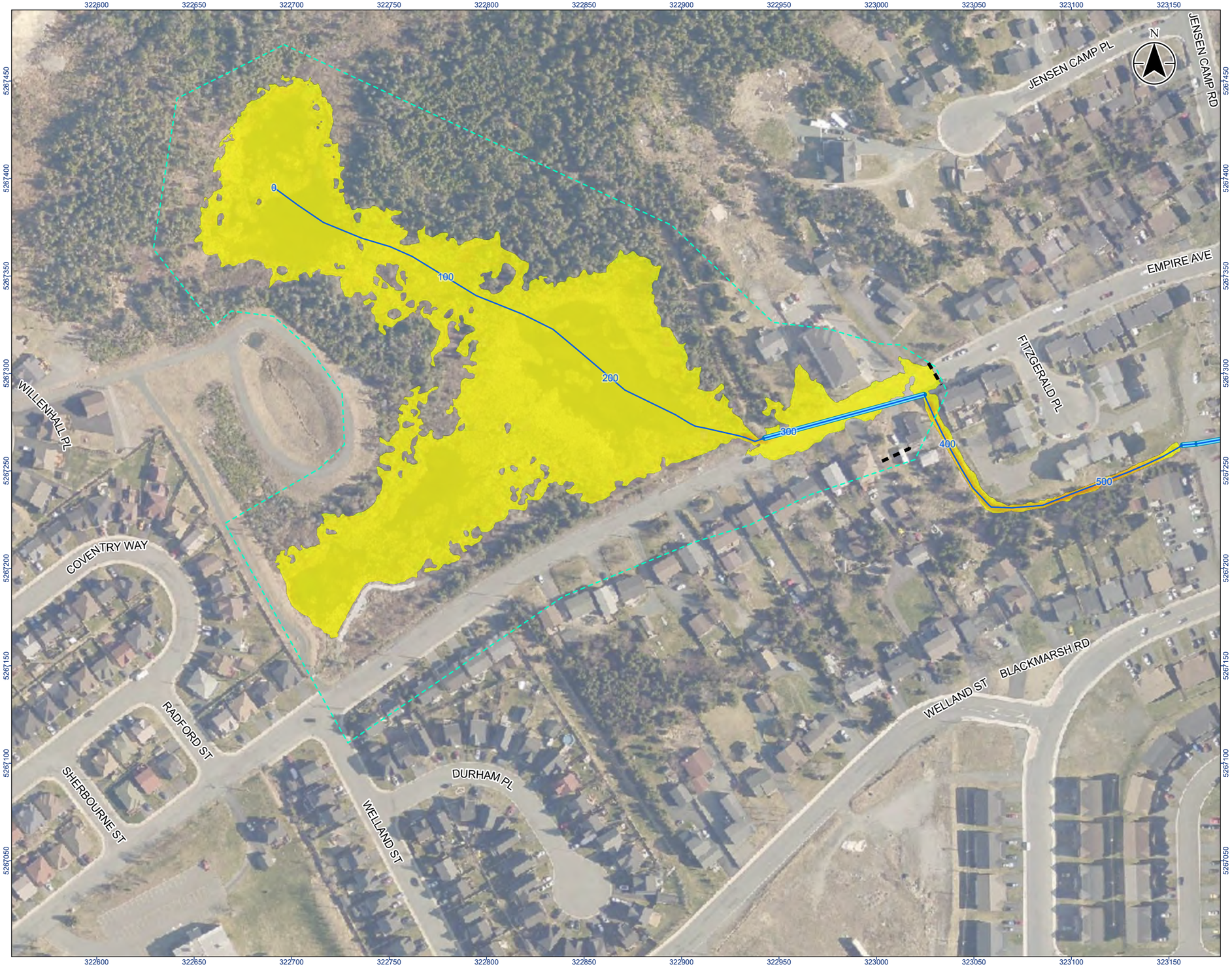

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-1

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook
Sheet 1 of 6

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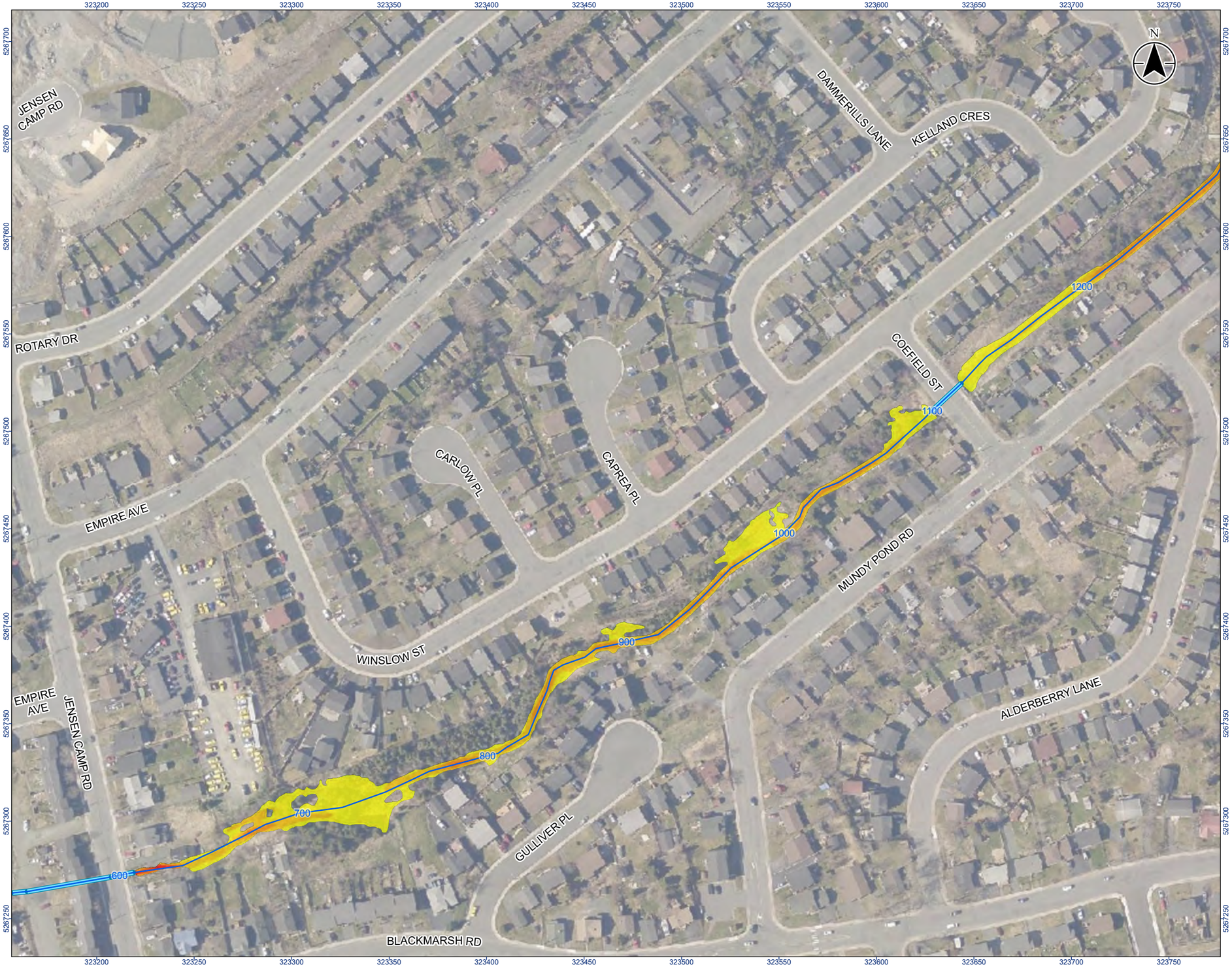

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-2

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook
Sheet 2 of 6

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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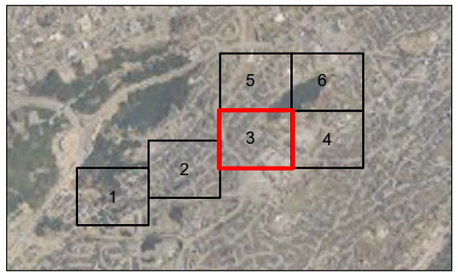

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-3

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook
Sheet 3 of 6

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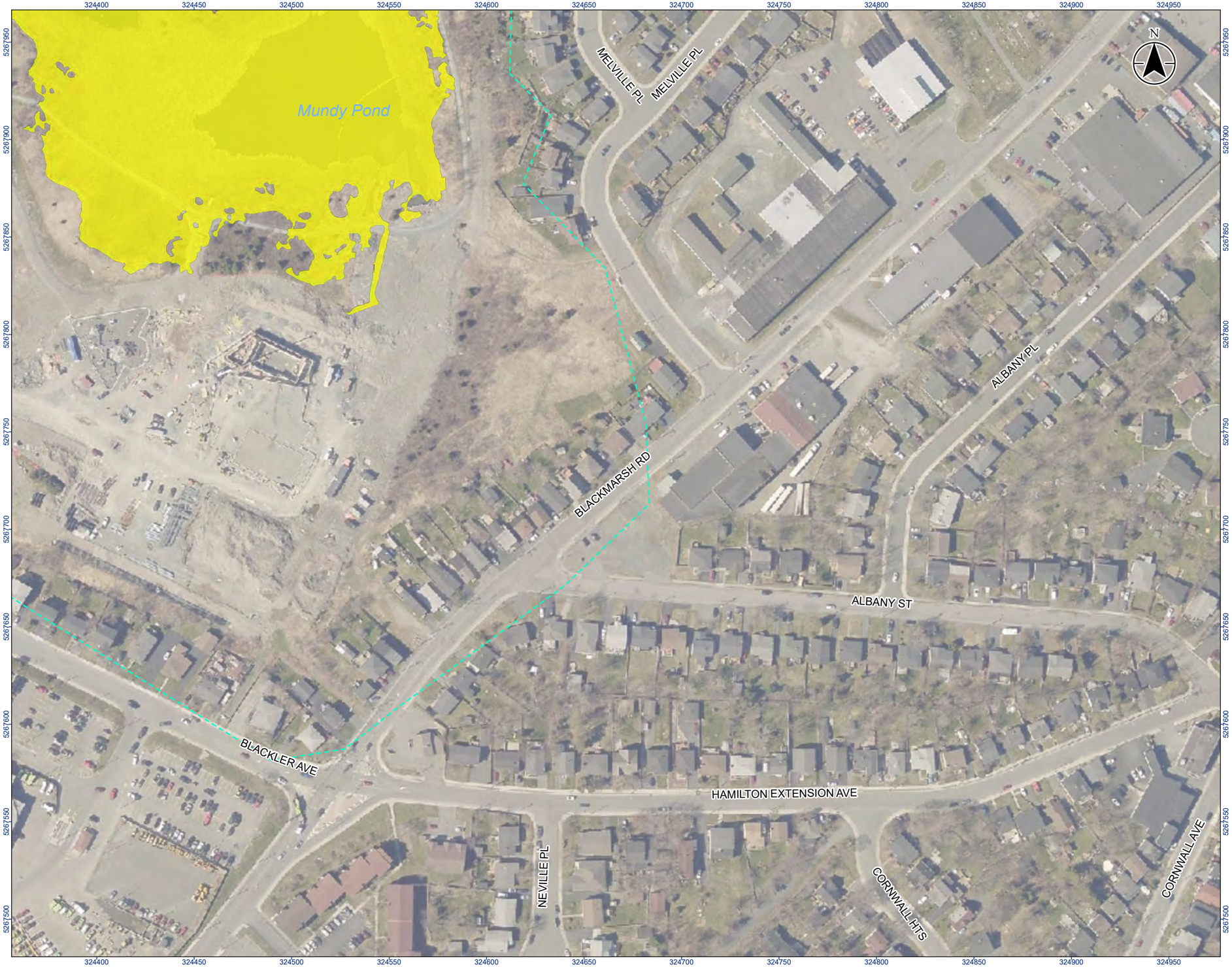

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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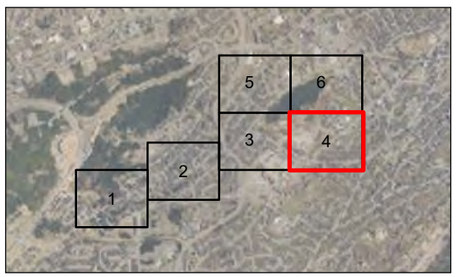

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-4

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook
Sheet 4 of 6

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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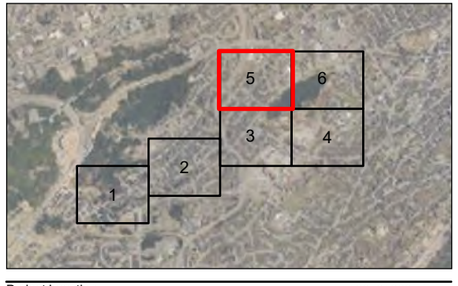

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-5

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook
Sheet 5 of 6

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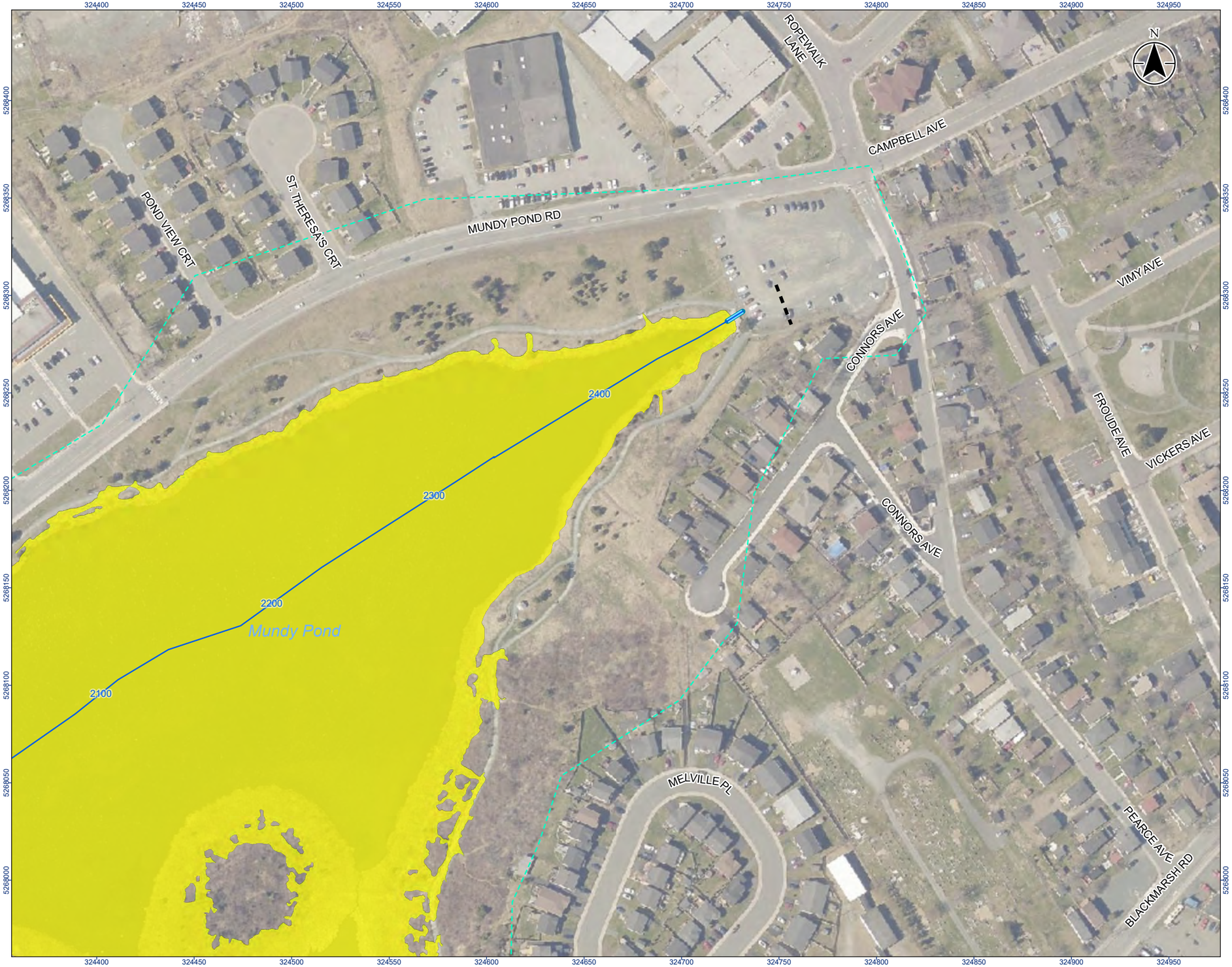

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
46-6

Title
Current Climate Condition
20-Year Velocity - Mundy Pond Brook
Sheet 6 of 6

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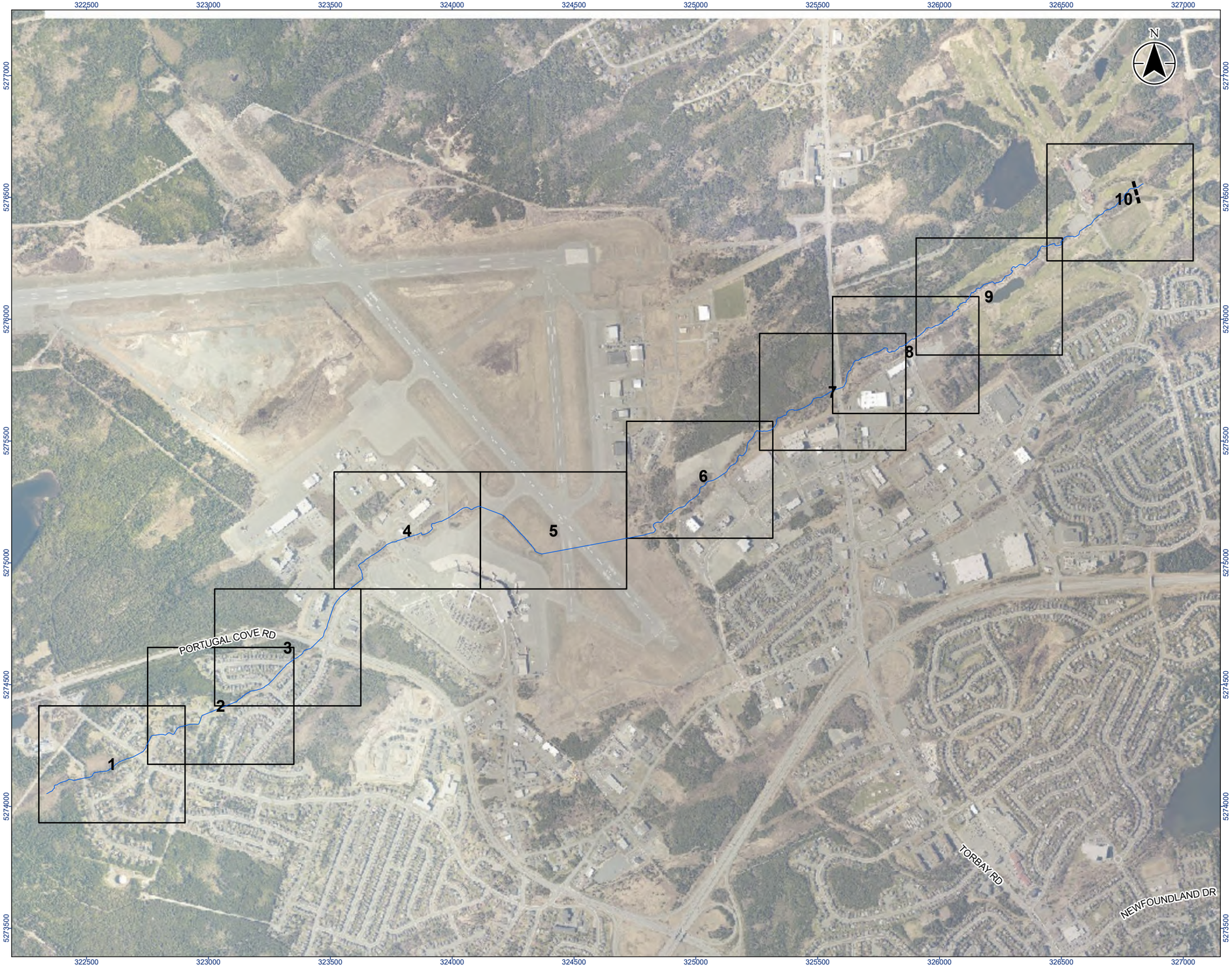

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 310 620 m

1:16,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-0

Title
Current Climate Condition 20-Year Velocity - Outer Cove Brook Overview Map

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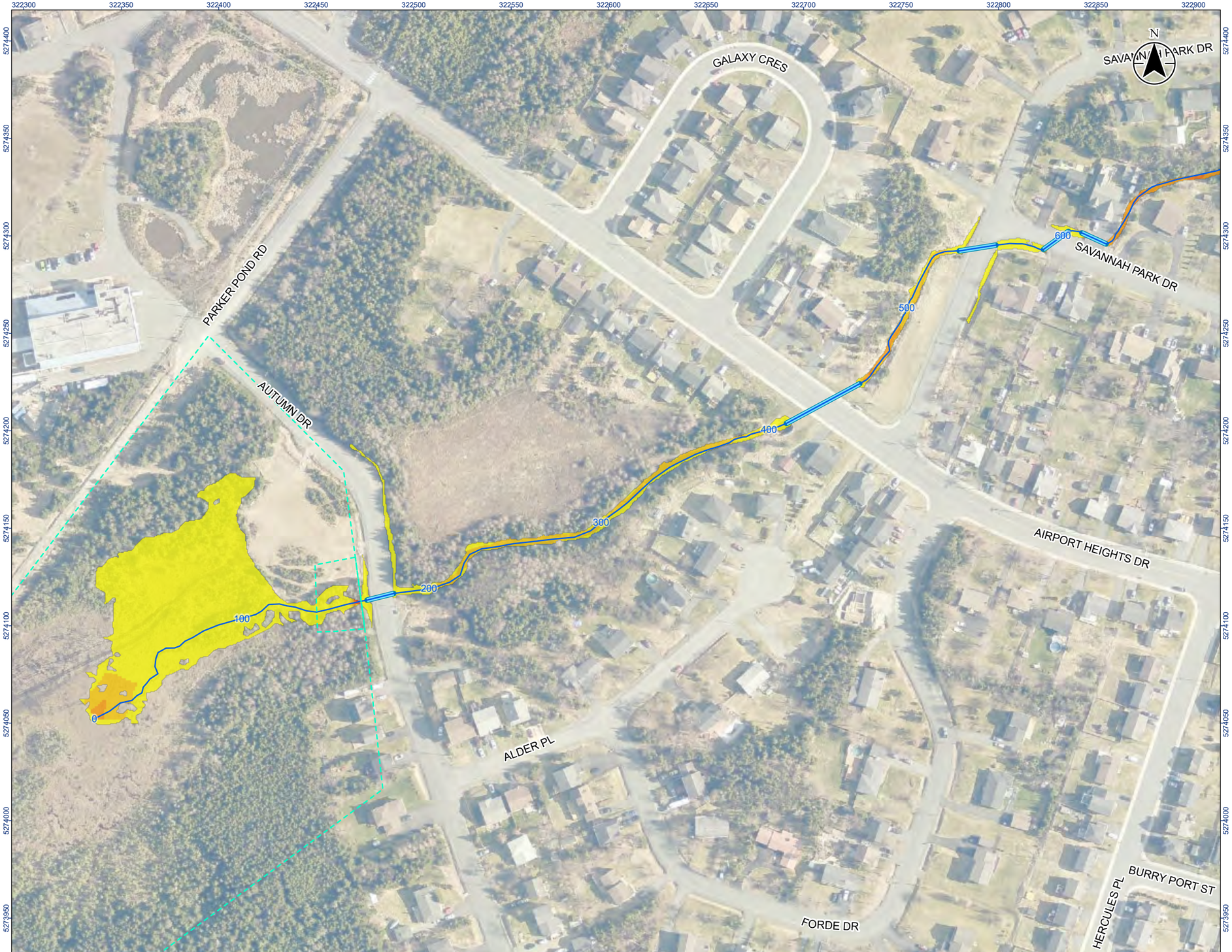

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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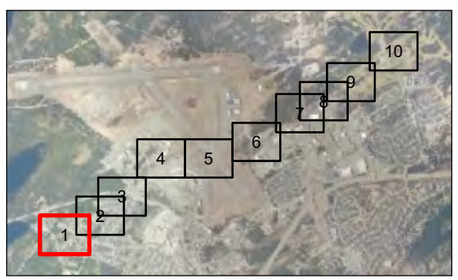

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-1

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 1 of 10

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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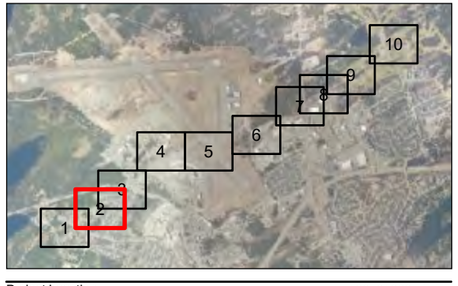

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-2

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 2 of 10

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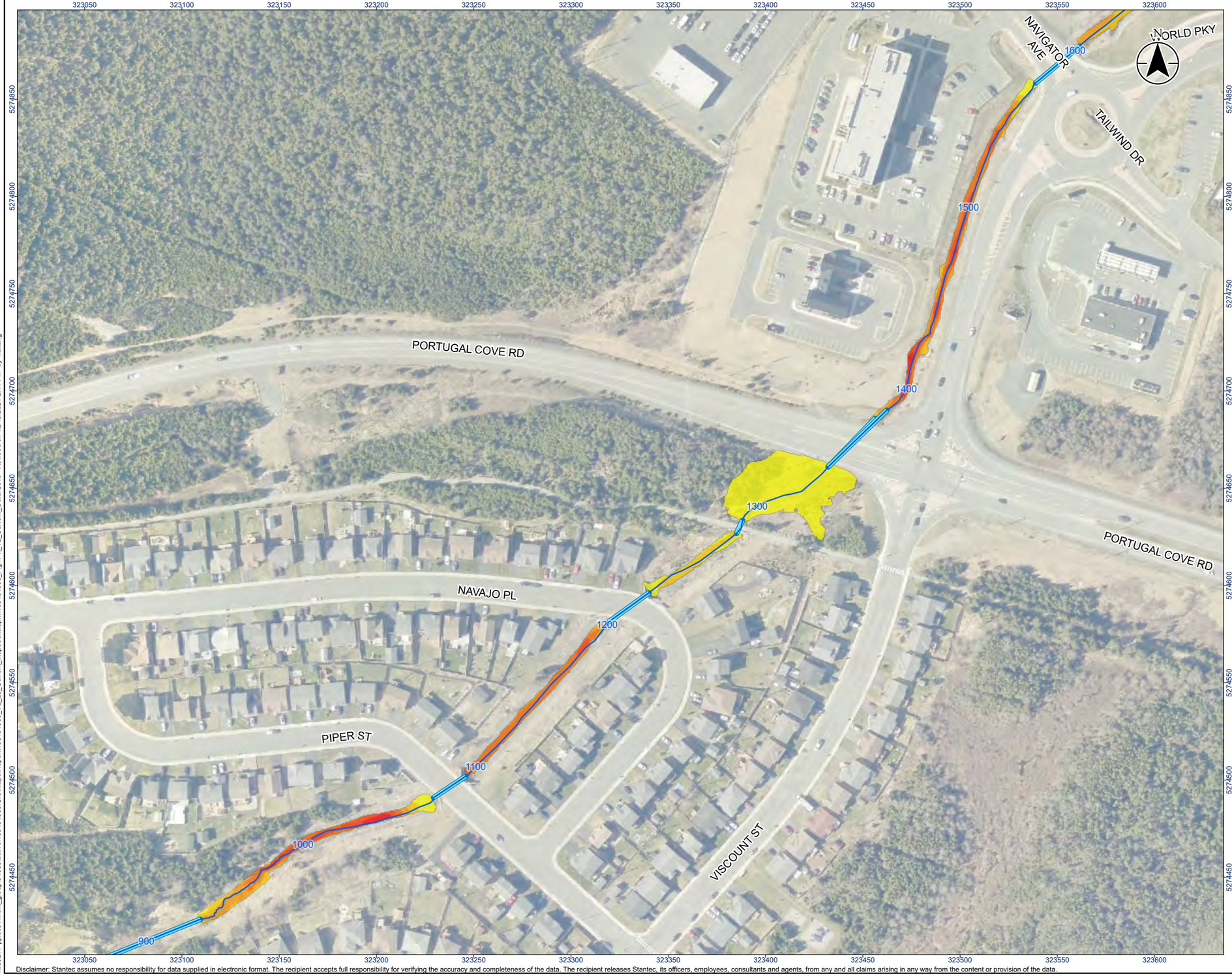

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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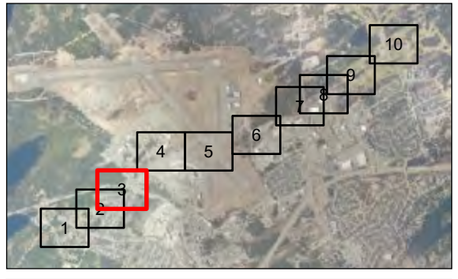

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-3

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 3 of 10

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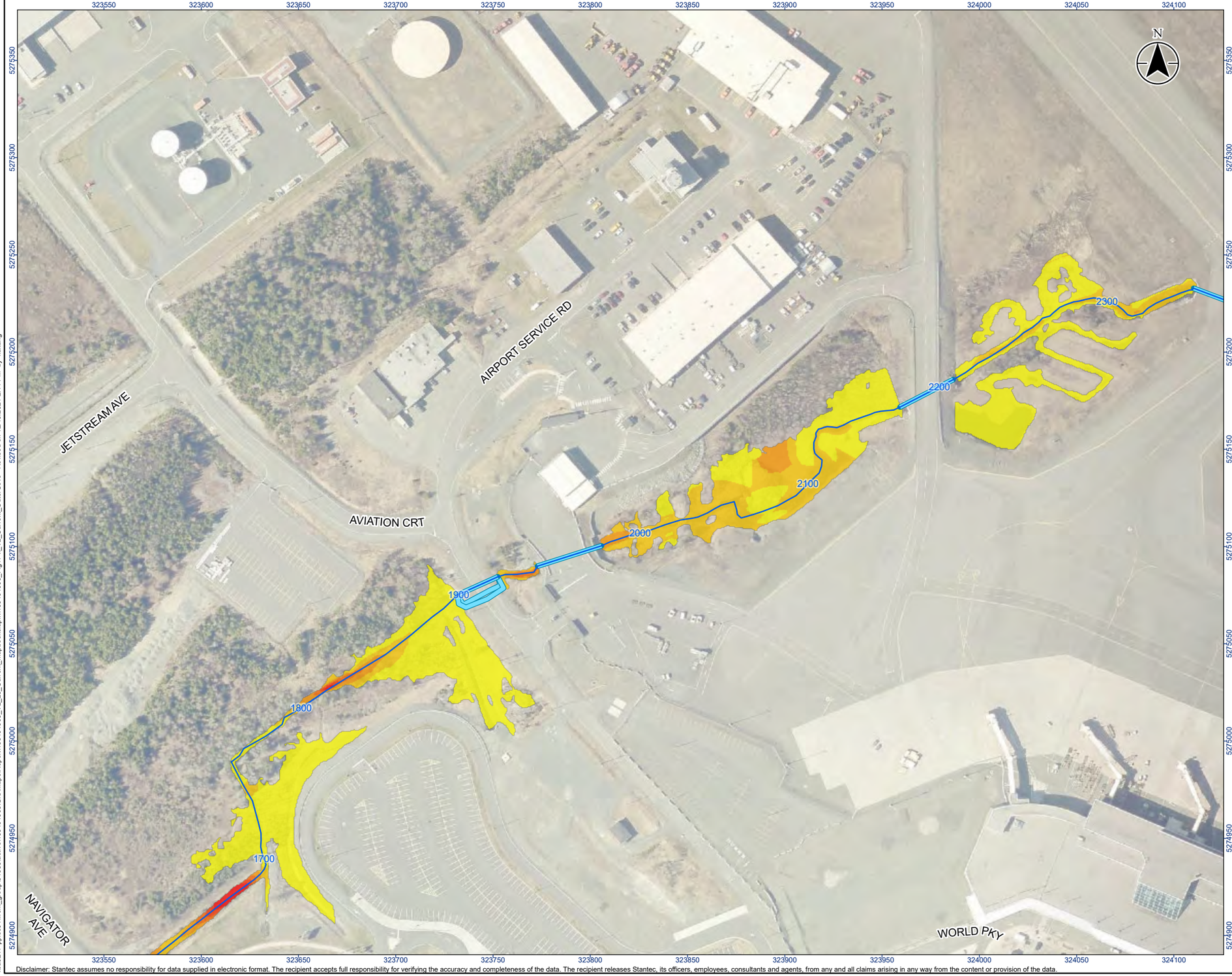

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40
m
1:2,000 (At original document size of 11x17)

Notes

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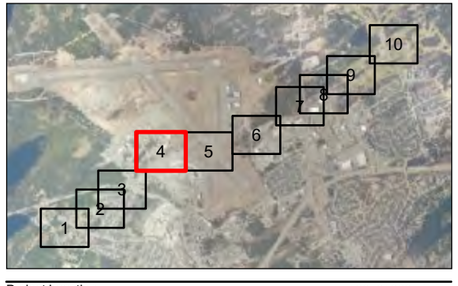

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-4

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 4 of 10

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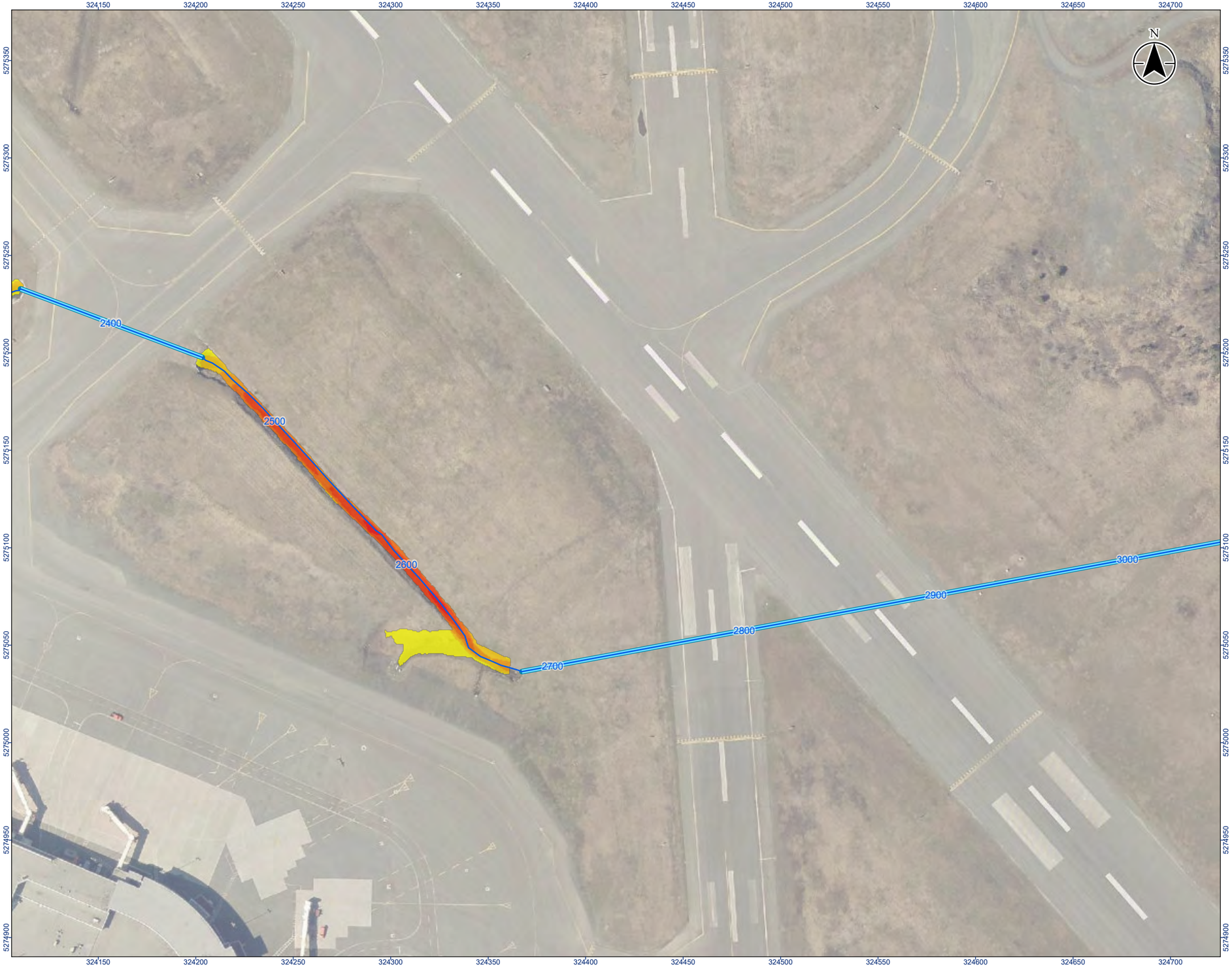

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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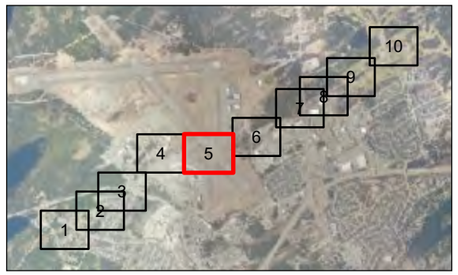

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-5

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 5 of 10

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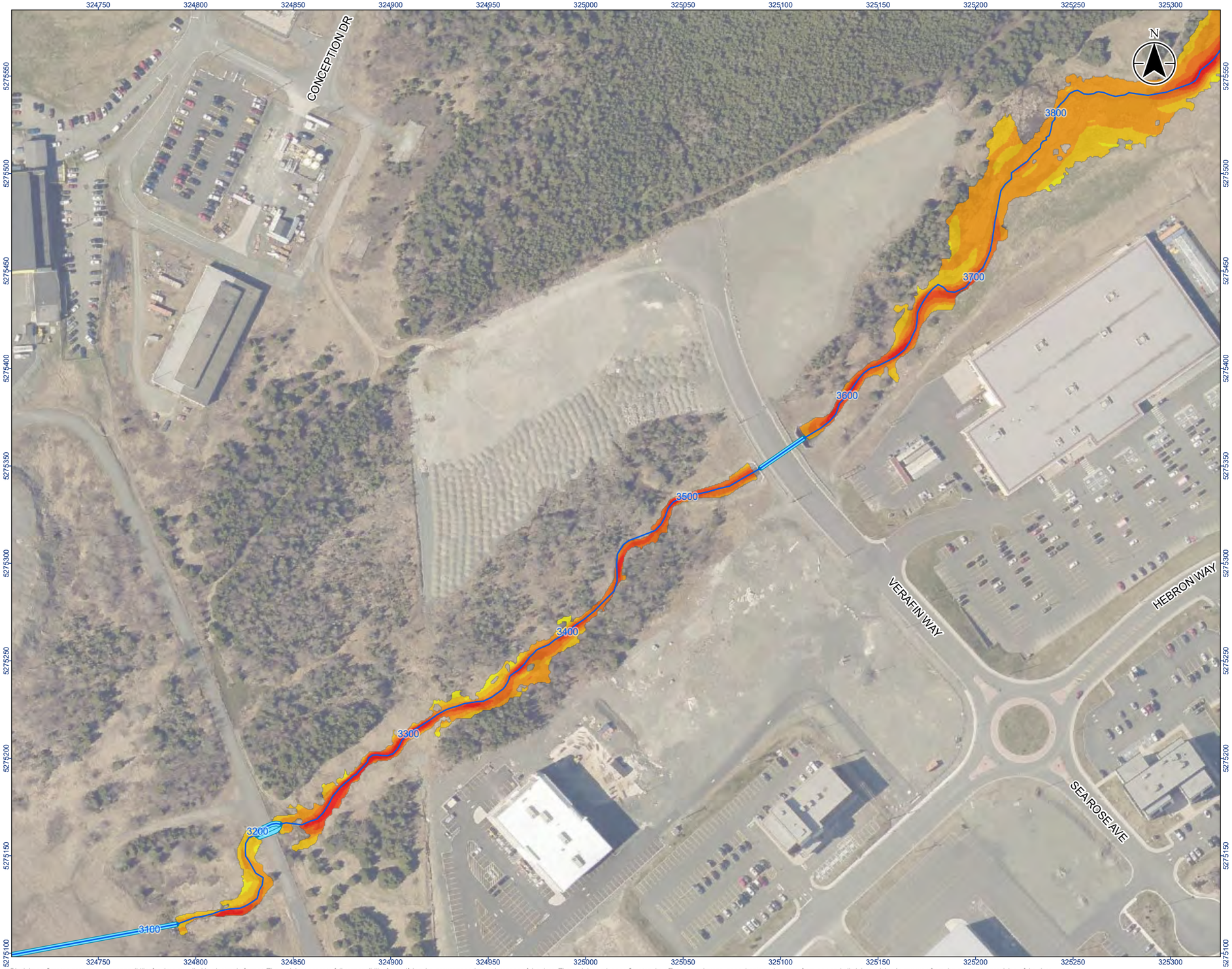

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-6

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 6 of 10

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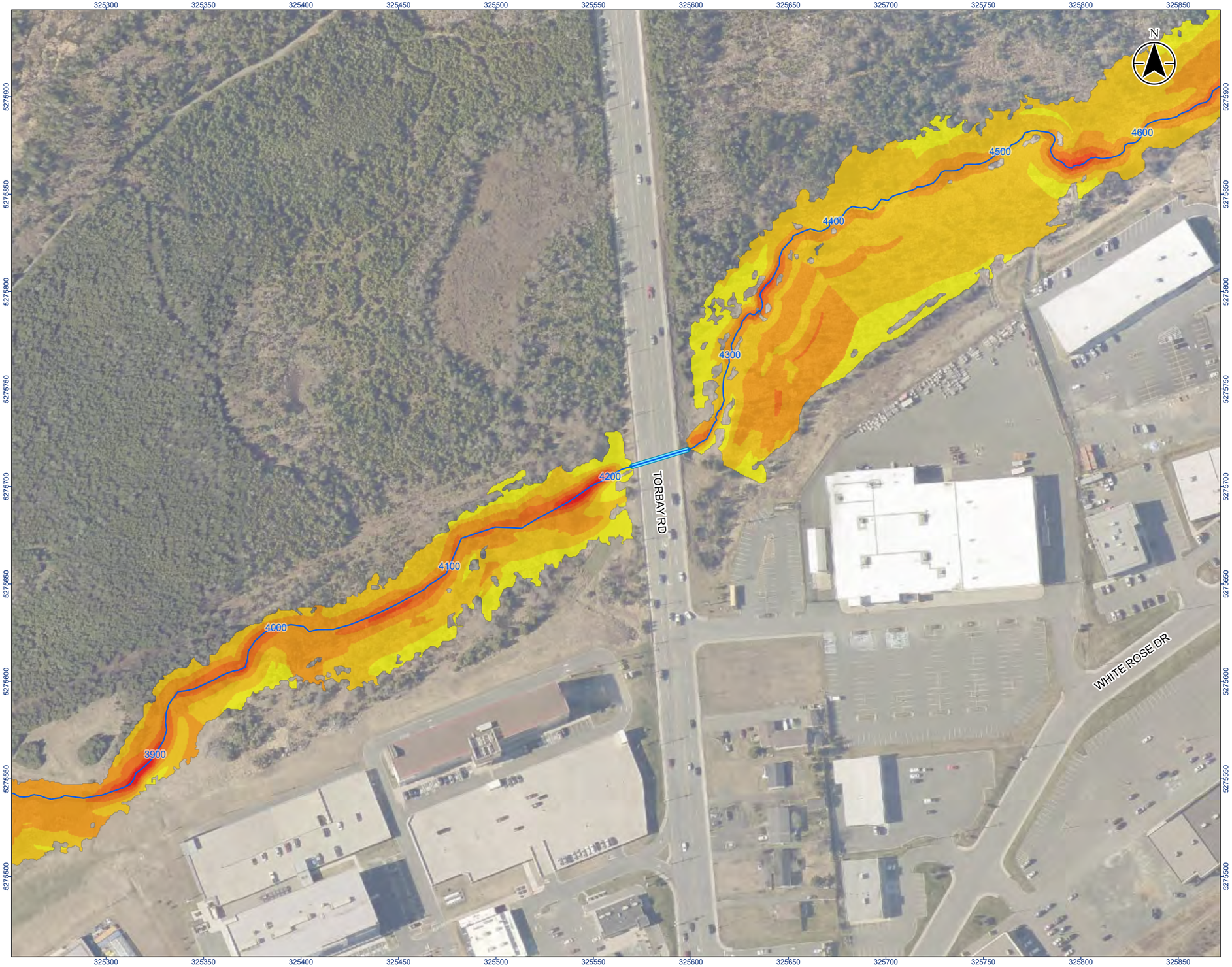

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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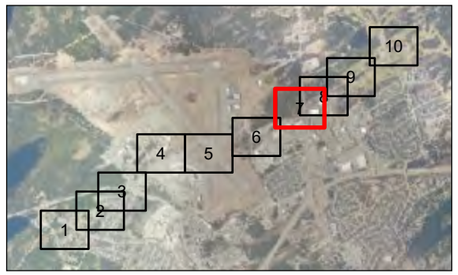

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-7

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 7 of 10

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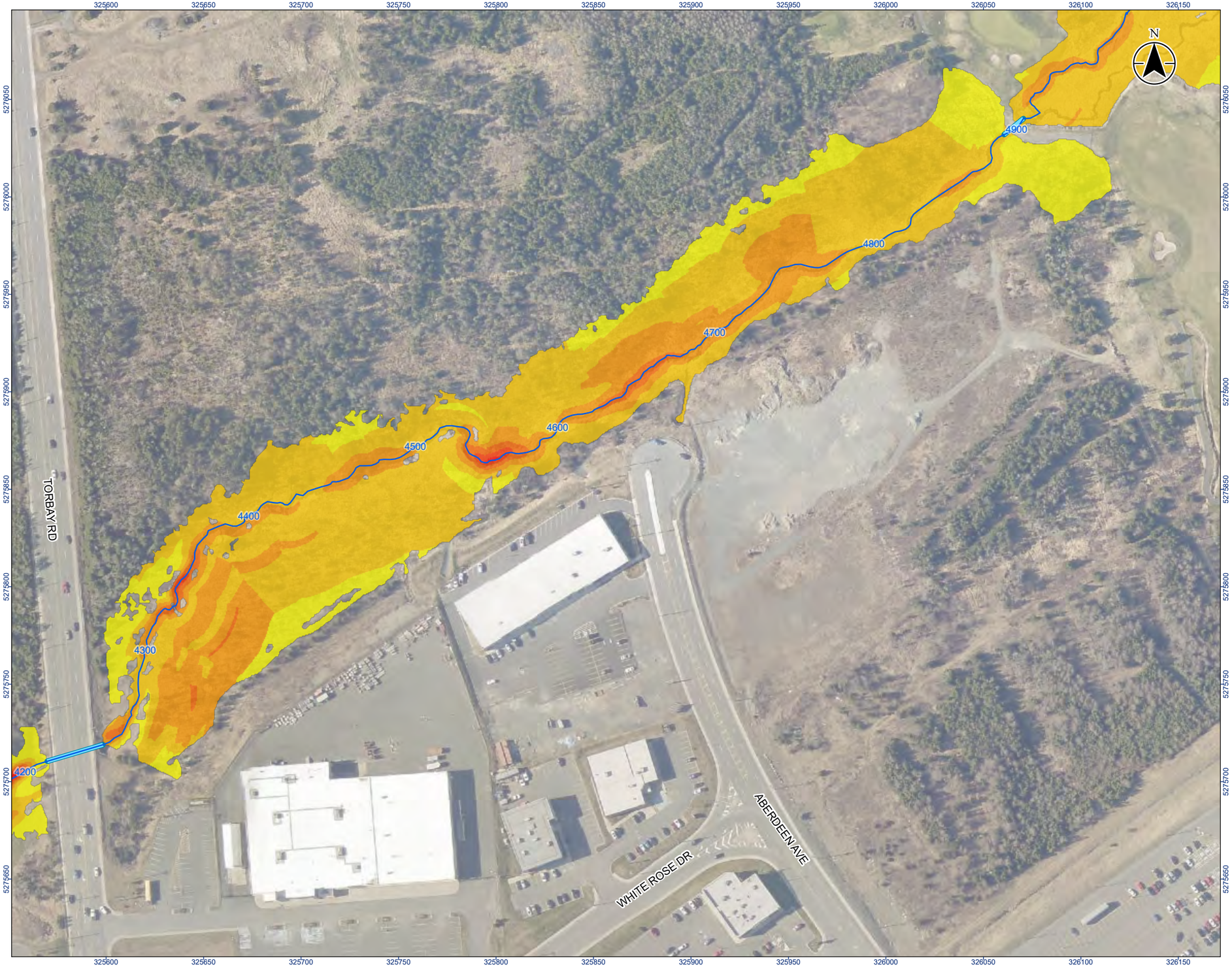

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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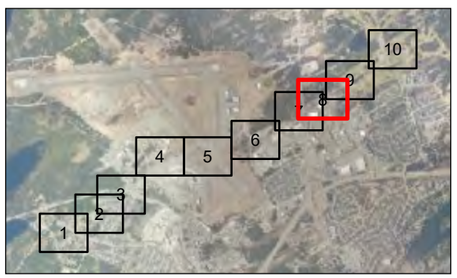

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-8

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 8 of 10

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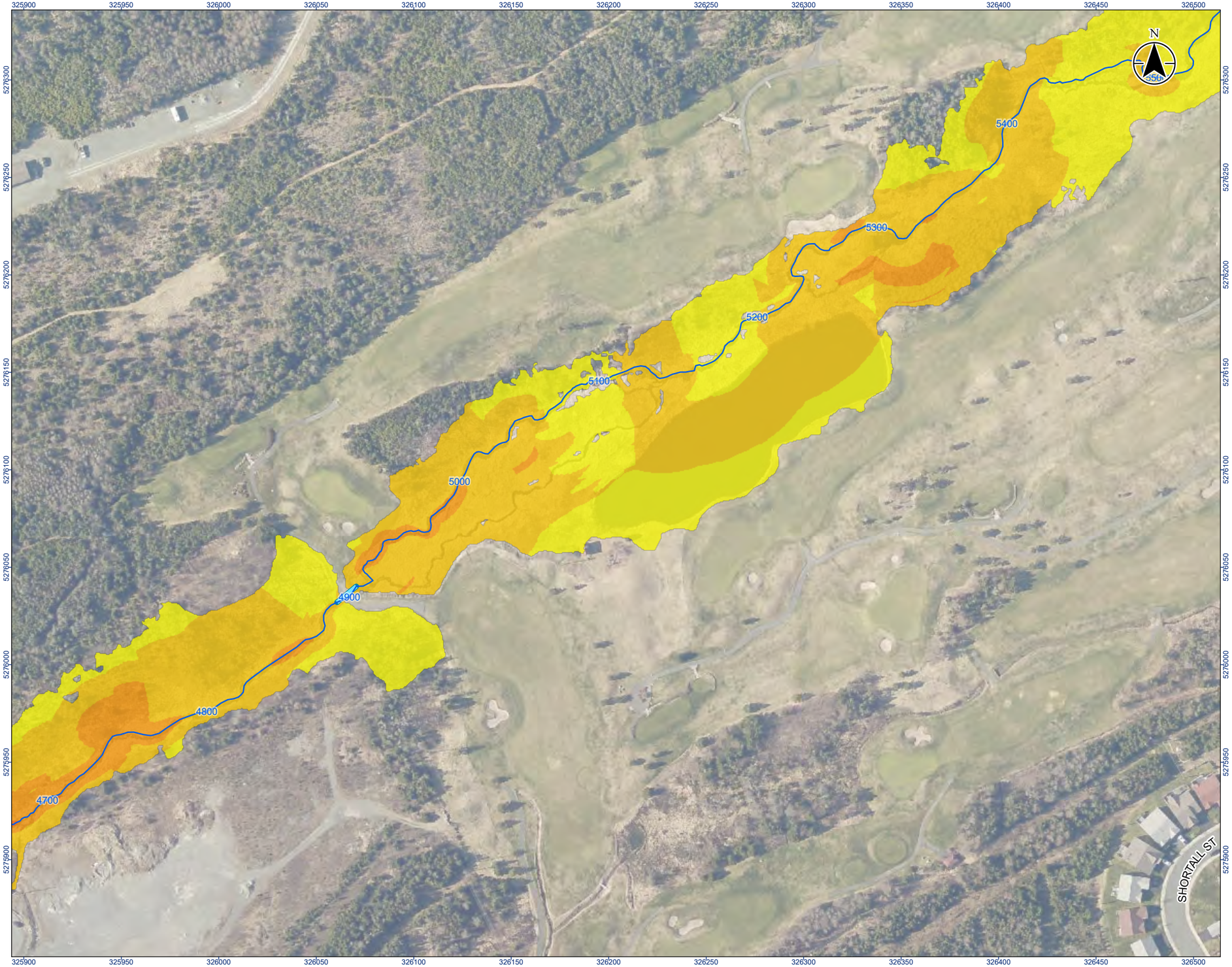

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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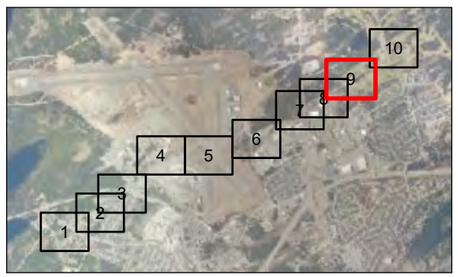

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-9

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 9 of 10

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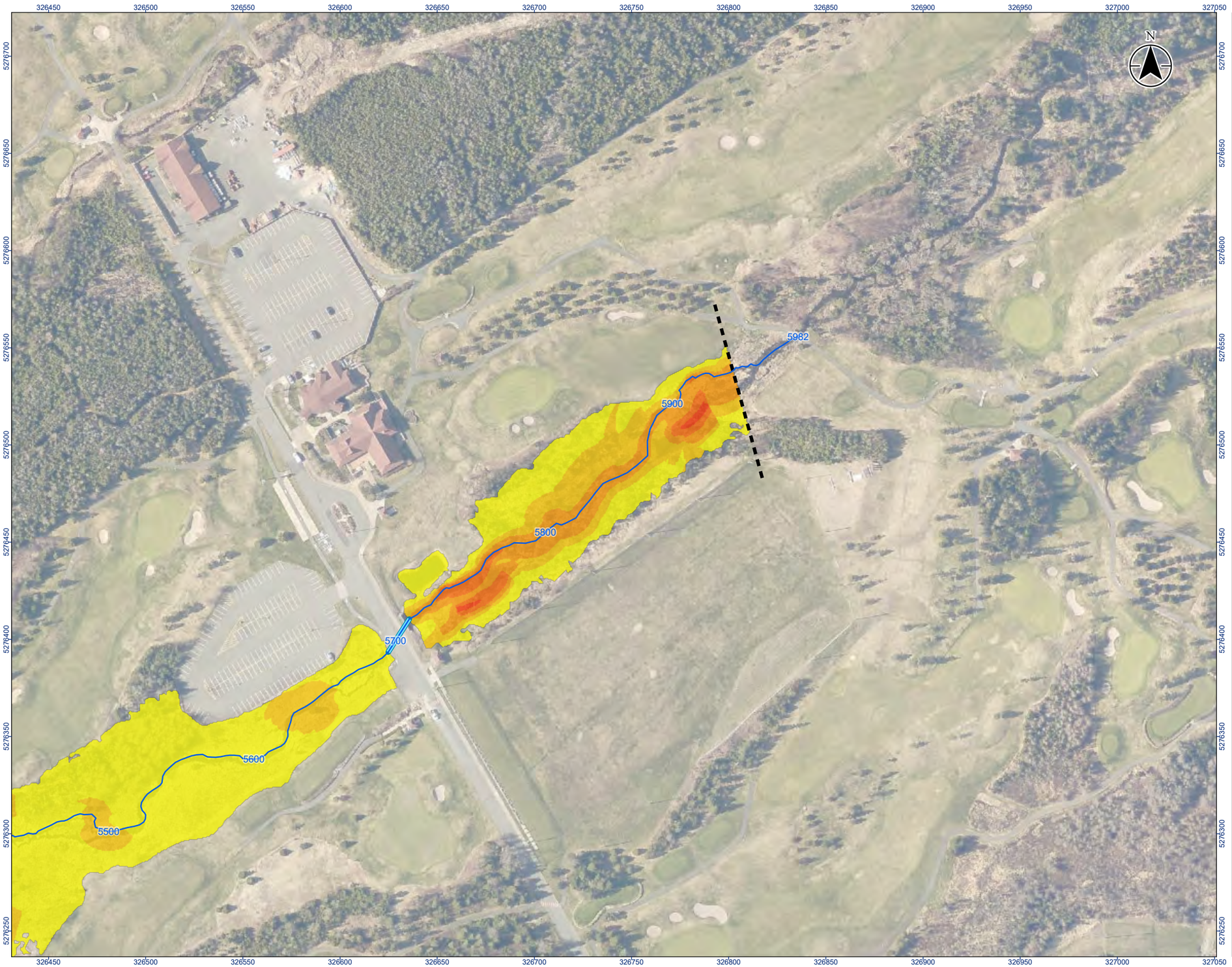

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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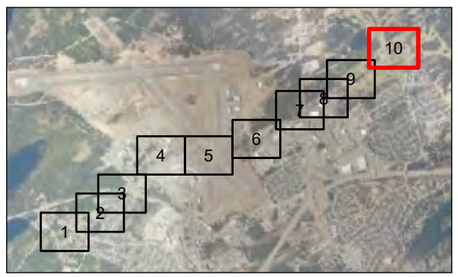

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
47-10

Title
Current Climate Condition
20-Year Velocity - Outer Cove Brook
Sheet 10 of 10

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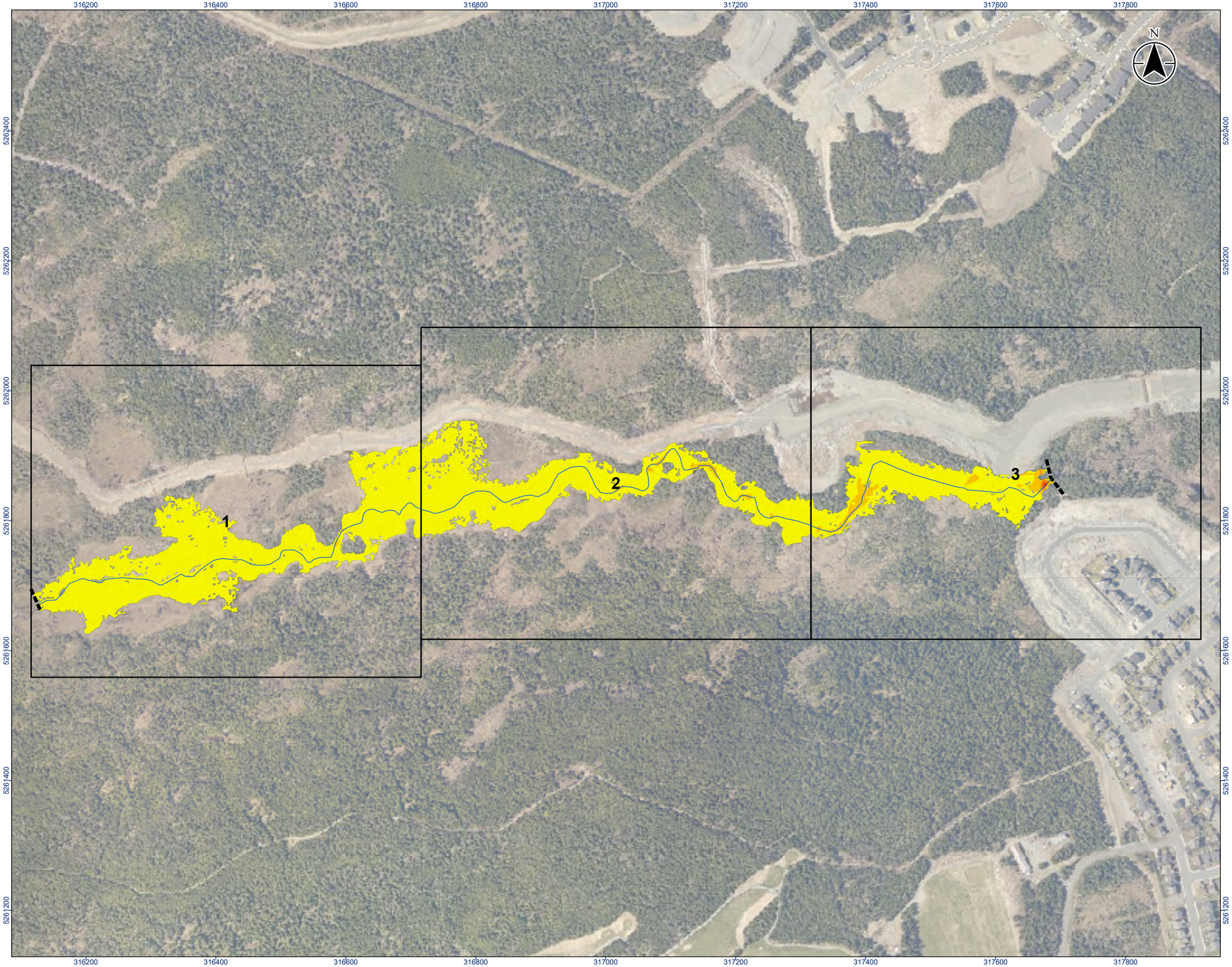

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 110 220 m

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Notes

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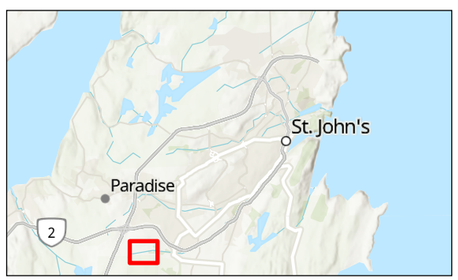

Project Location
City of St. John's

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Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
48-0

Title
Current Climate Condition
20-Year Velocity - South Brook
Overview Map

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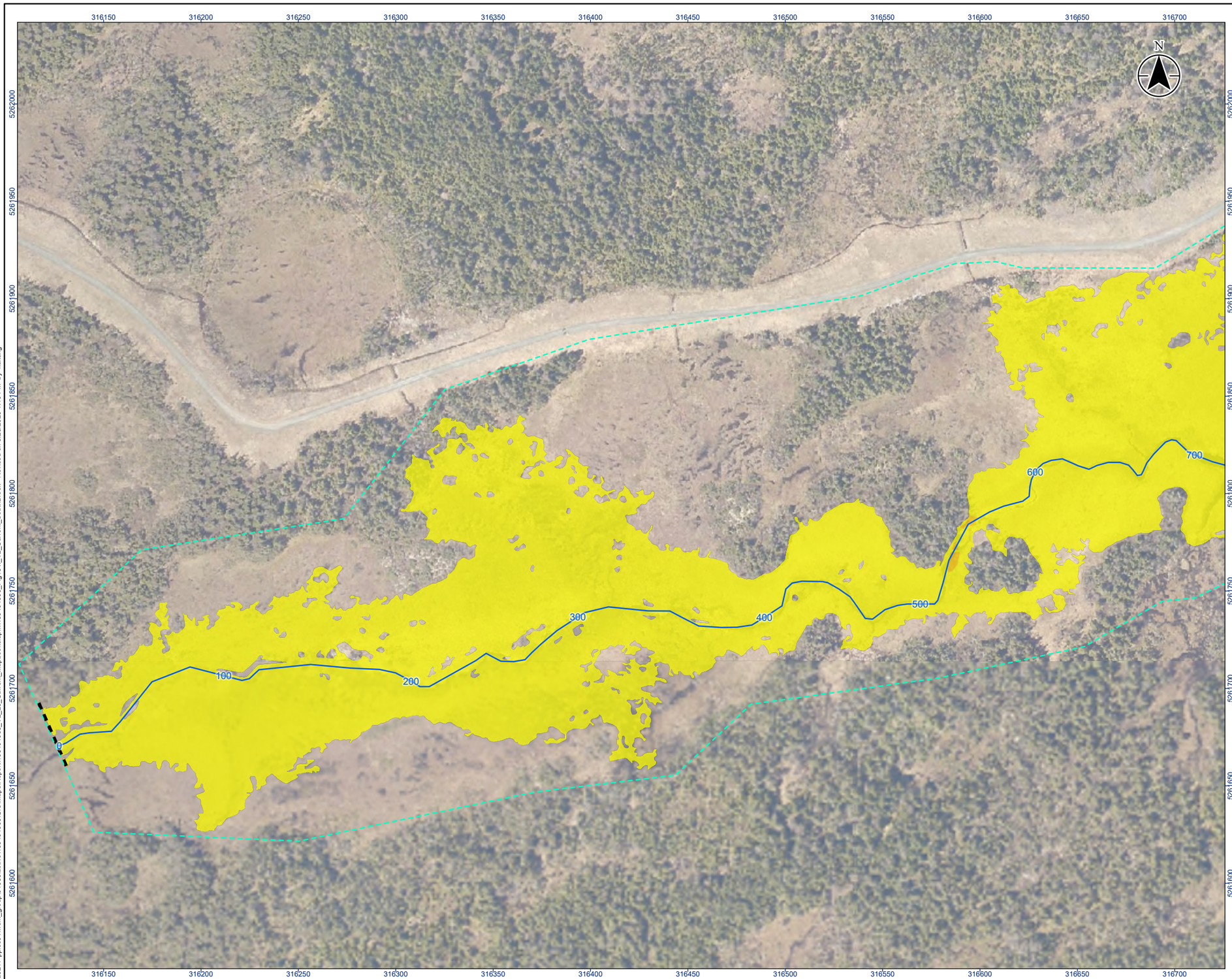

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
48-1

Title
Current Climate Condition
20-Year Velocity - South Brook
Sheet 1 of 3

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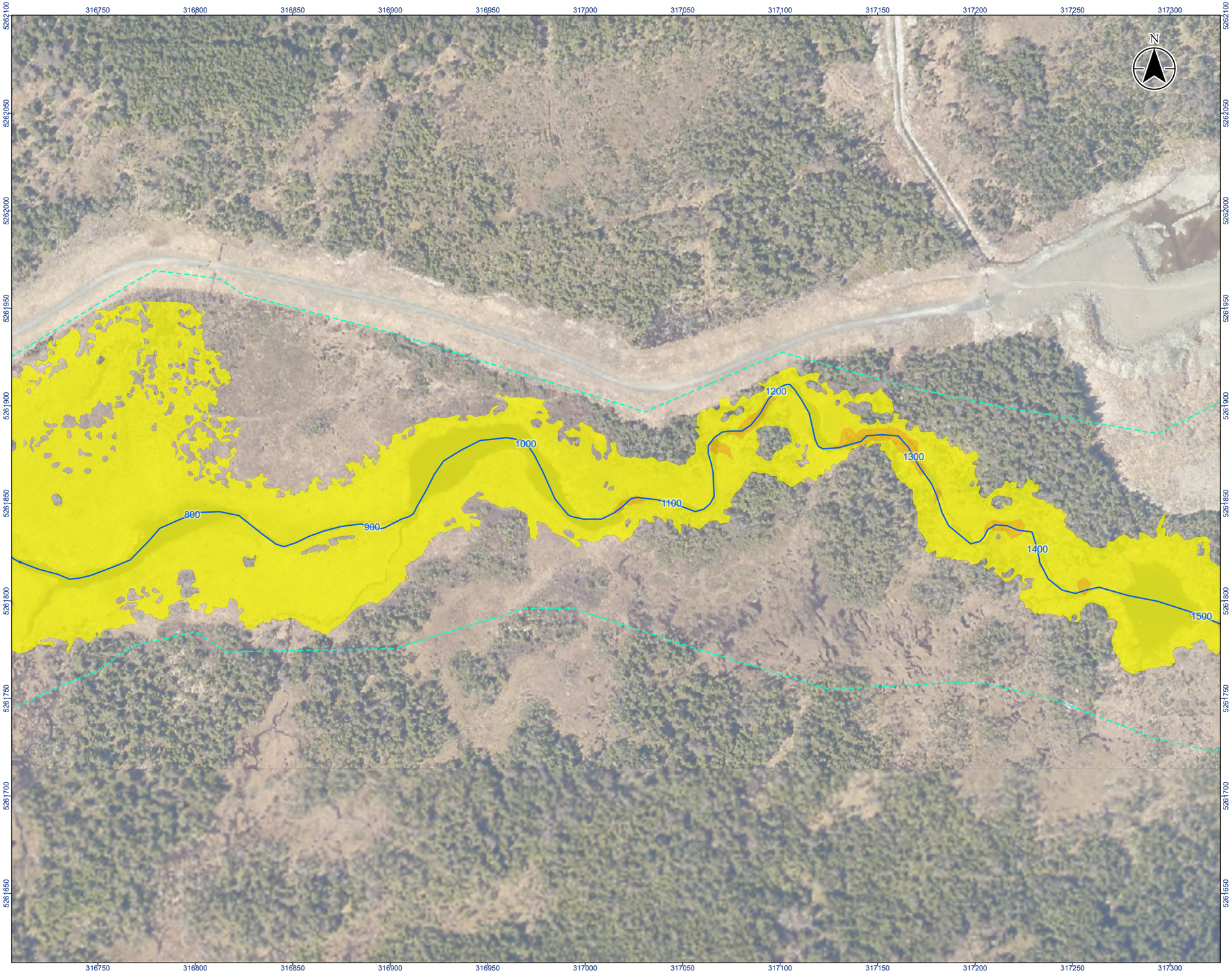

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
48-2

Title
Current Climate Condition
20-Year Velocity - South Brook
Sheet 2 of 3

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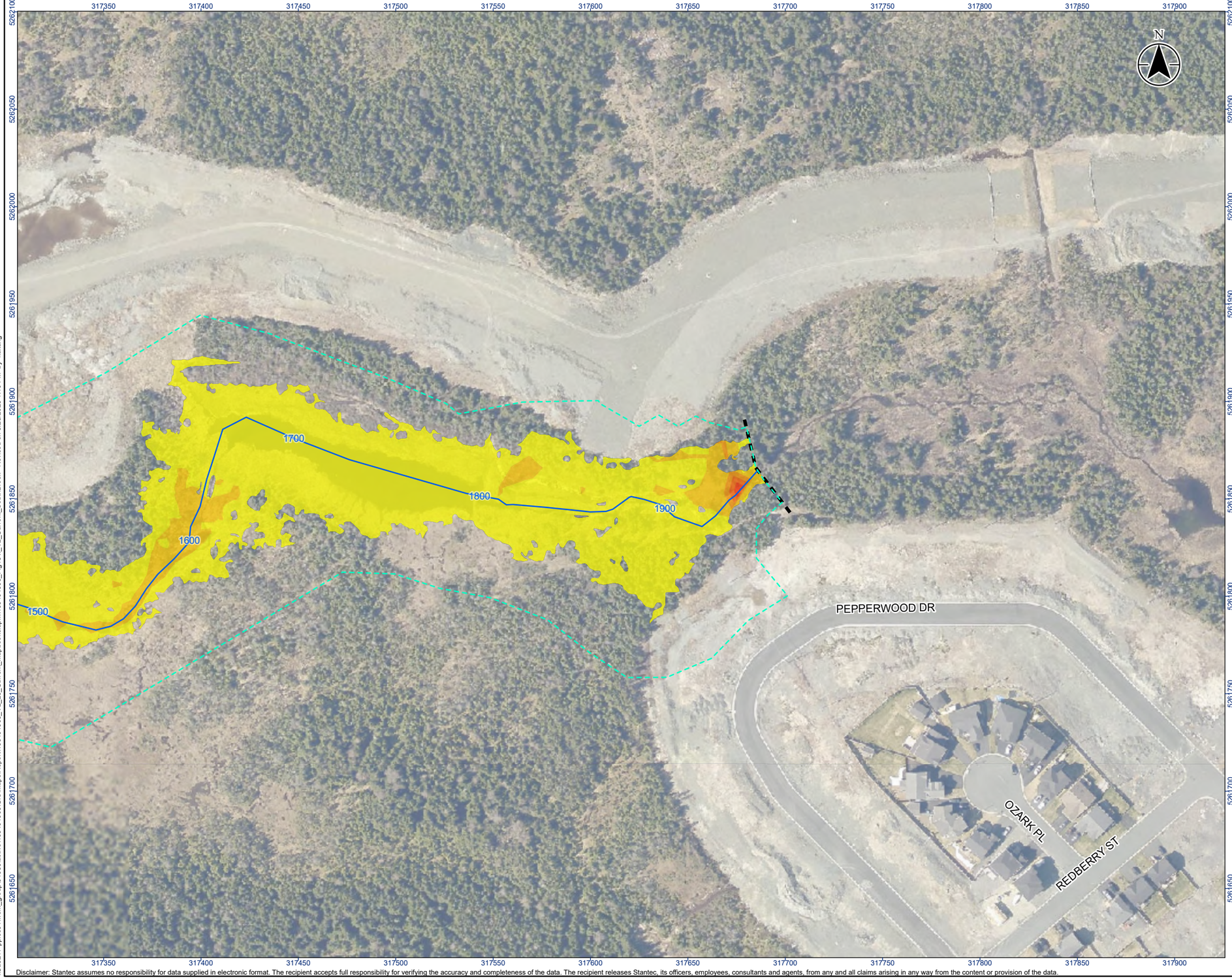

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

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Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
48-3

Title
Current Climate Condition
20-Year Velocity - South Brook
Sheet 3 of 3

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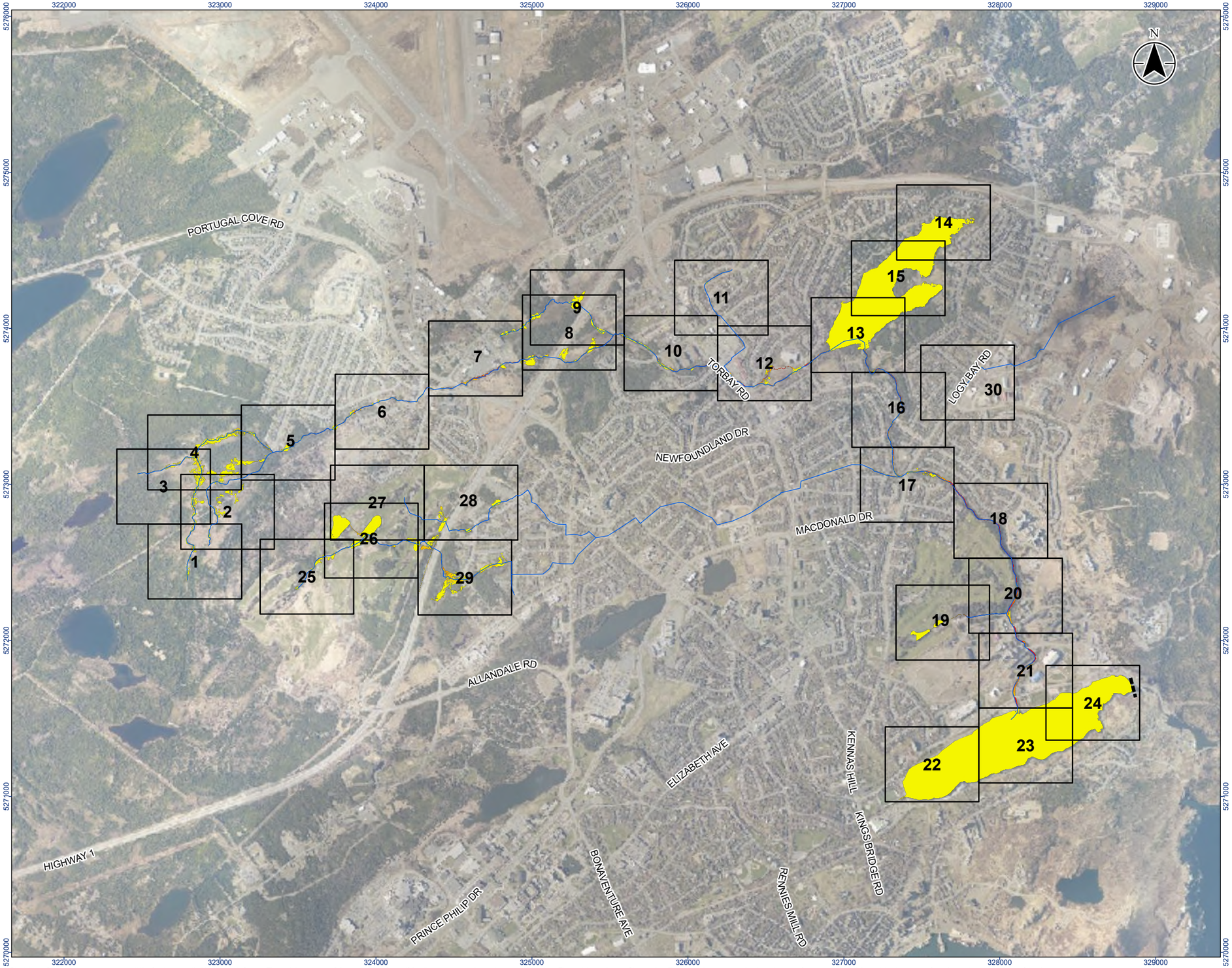

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 490 980 m

1:25,000 (At original document size of 11x17)

Notes

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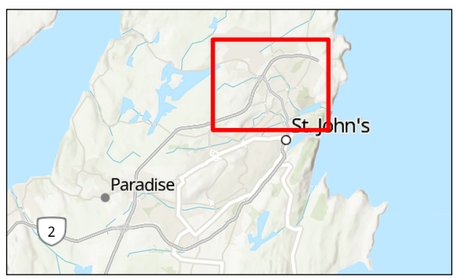

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-0

Title
Current Climate Condition
20-Year Velocity - Virginia River Overview Map

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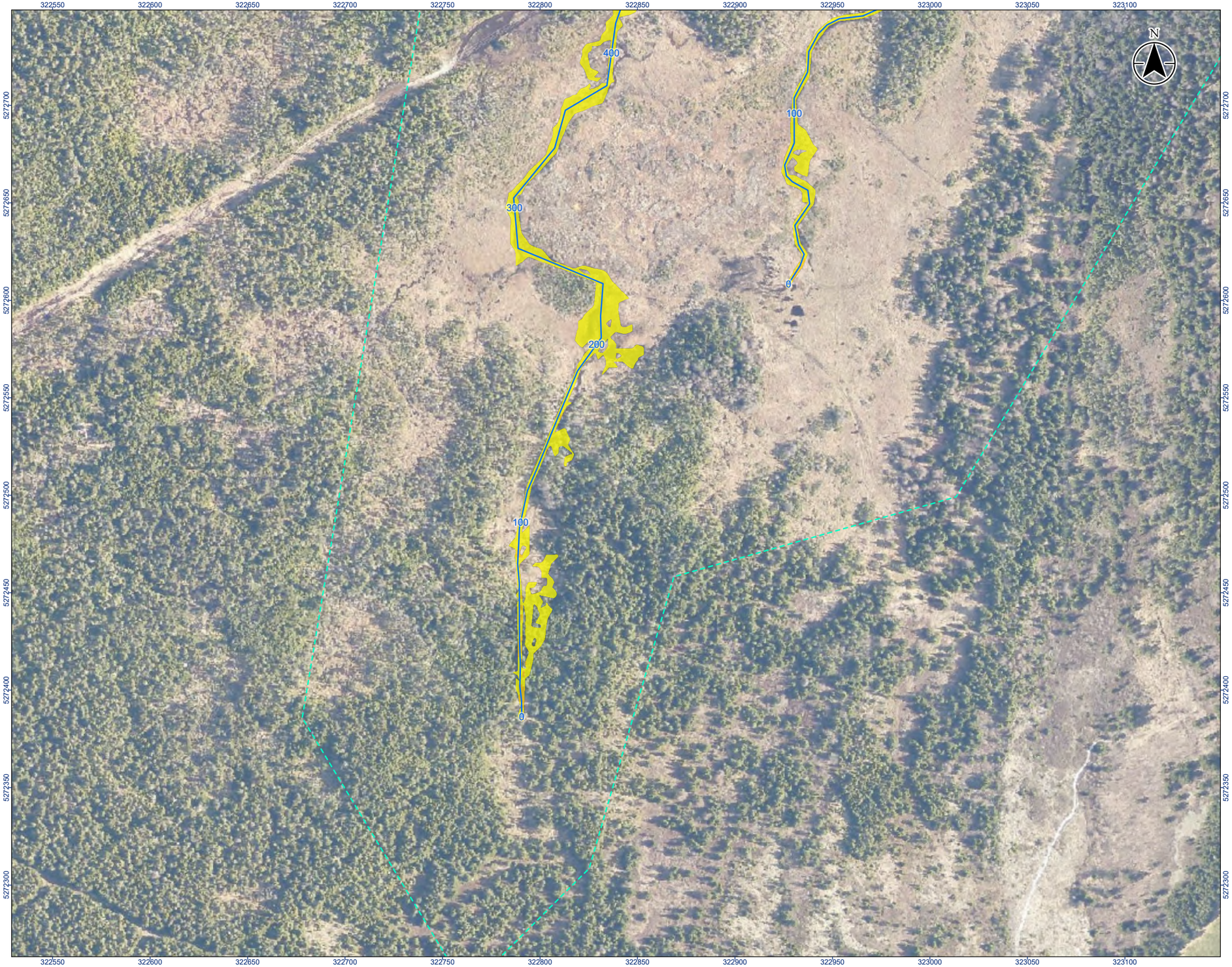

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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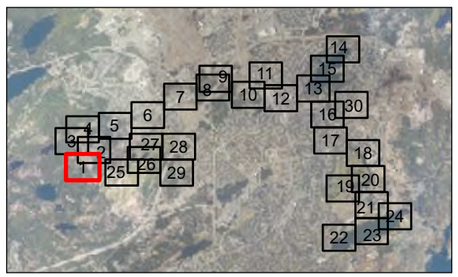

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-1

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 1 of 30

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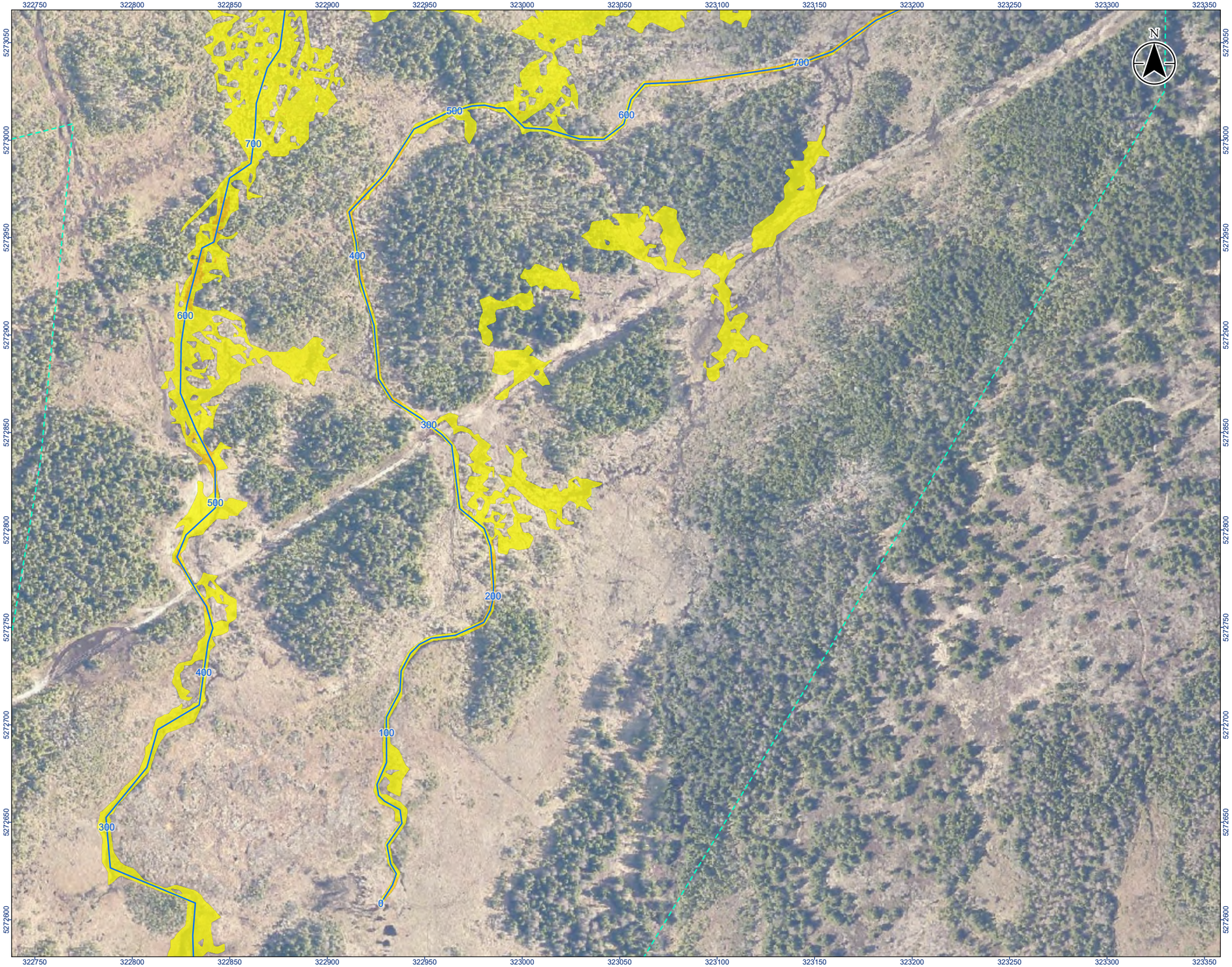

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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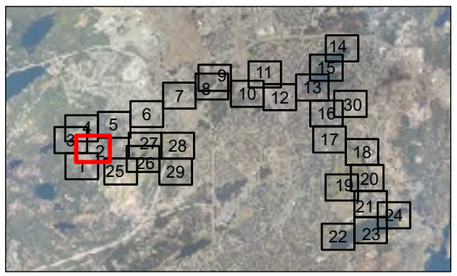

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-2

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 2 of 30

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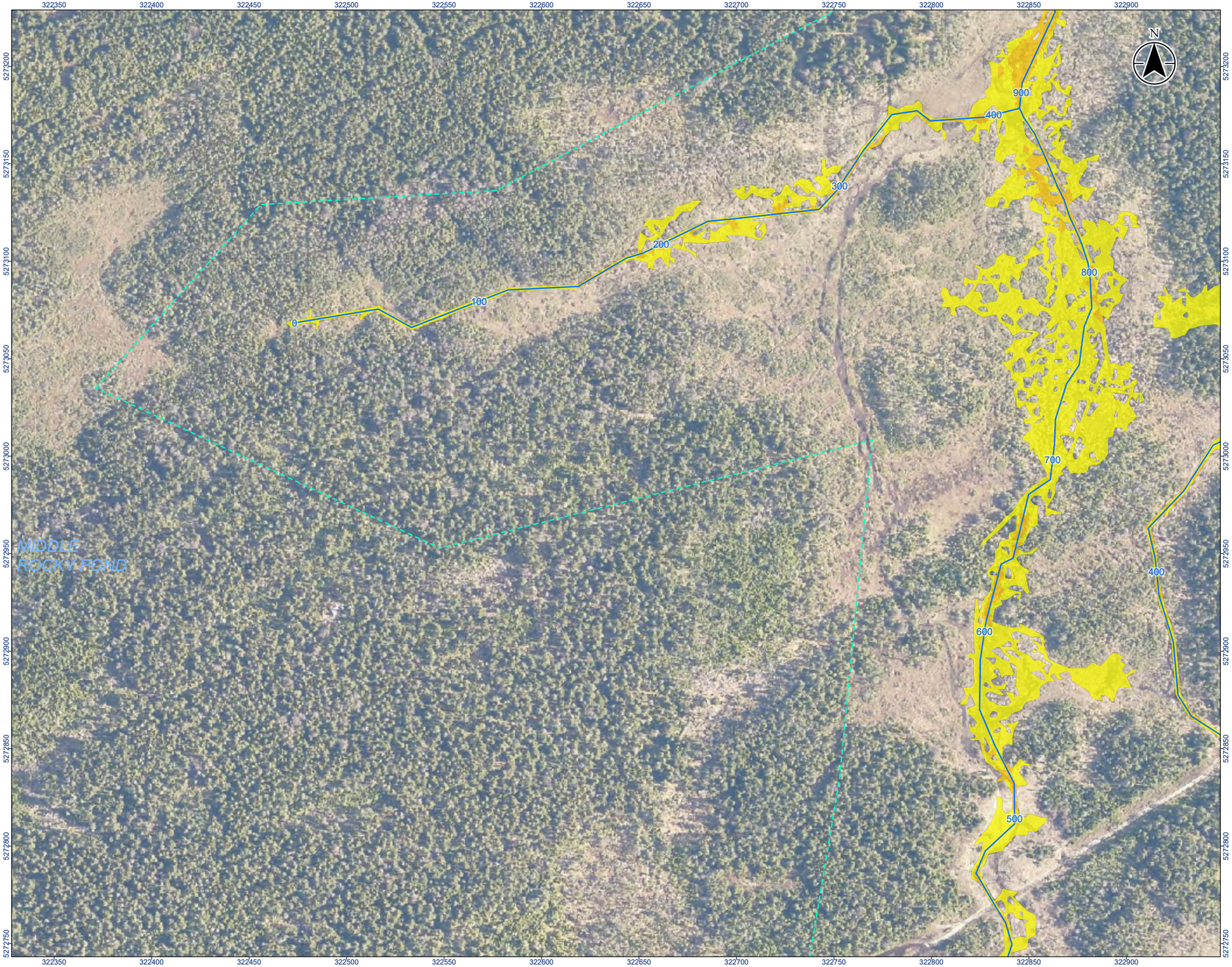

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
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Notes

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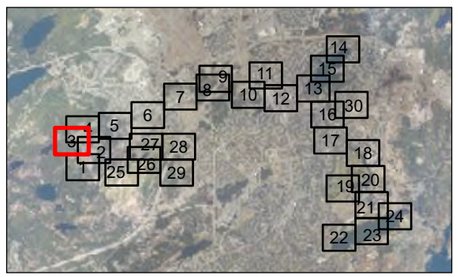

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-3

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 3 of 30

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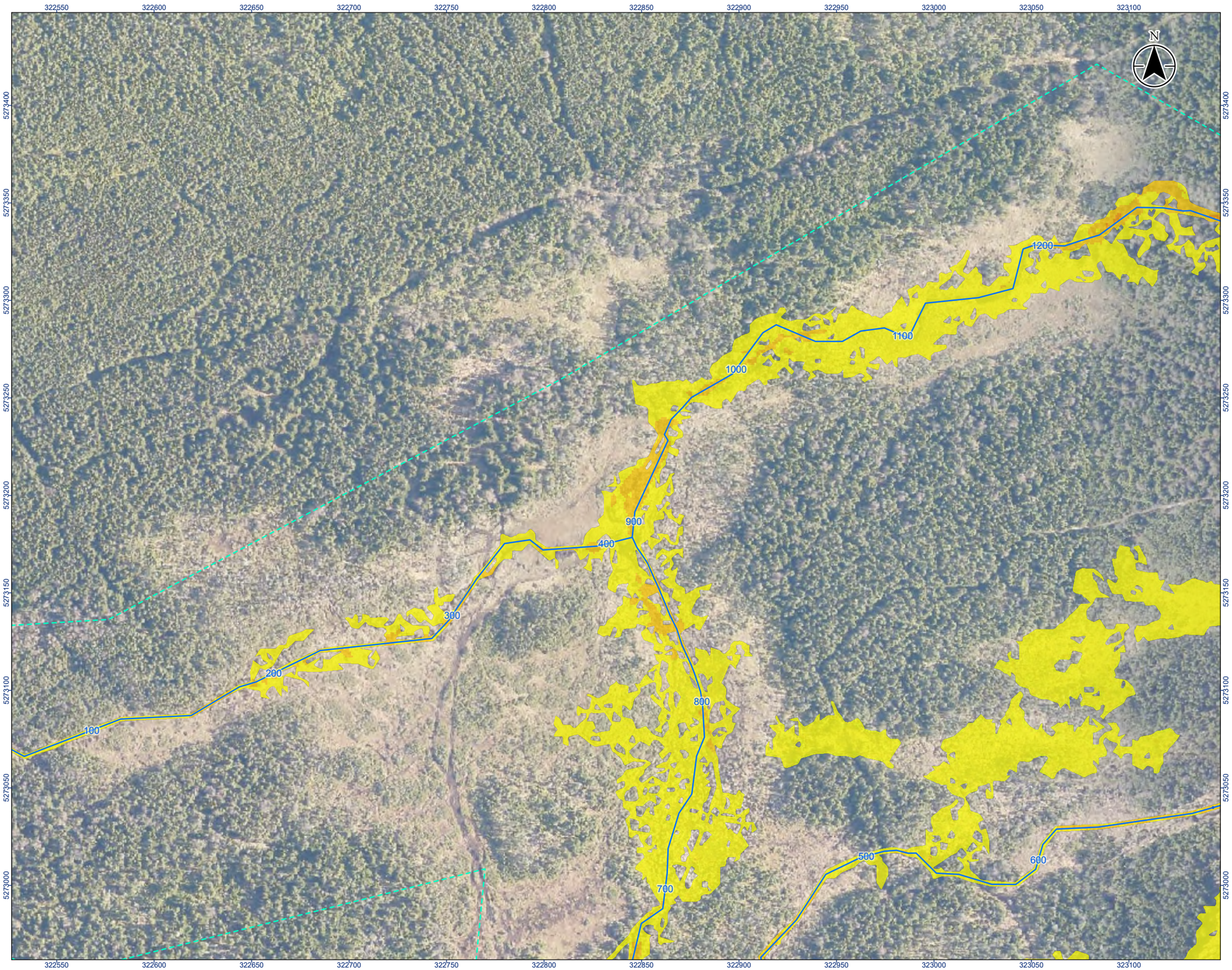

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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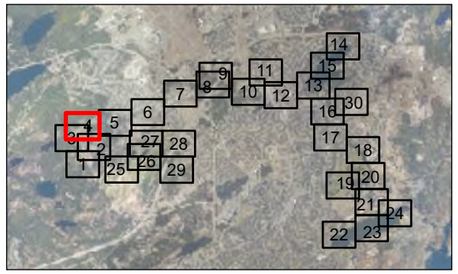

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-4

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 4 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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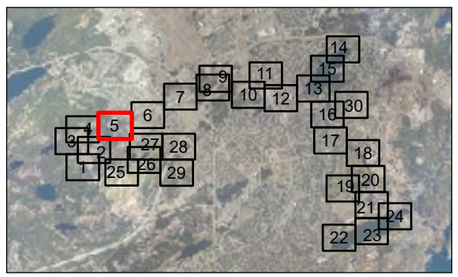

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-5

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 5 of 30

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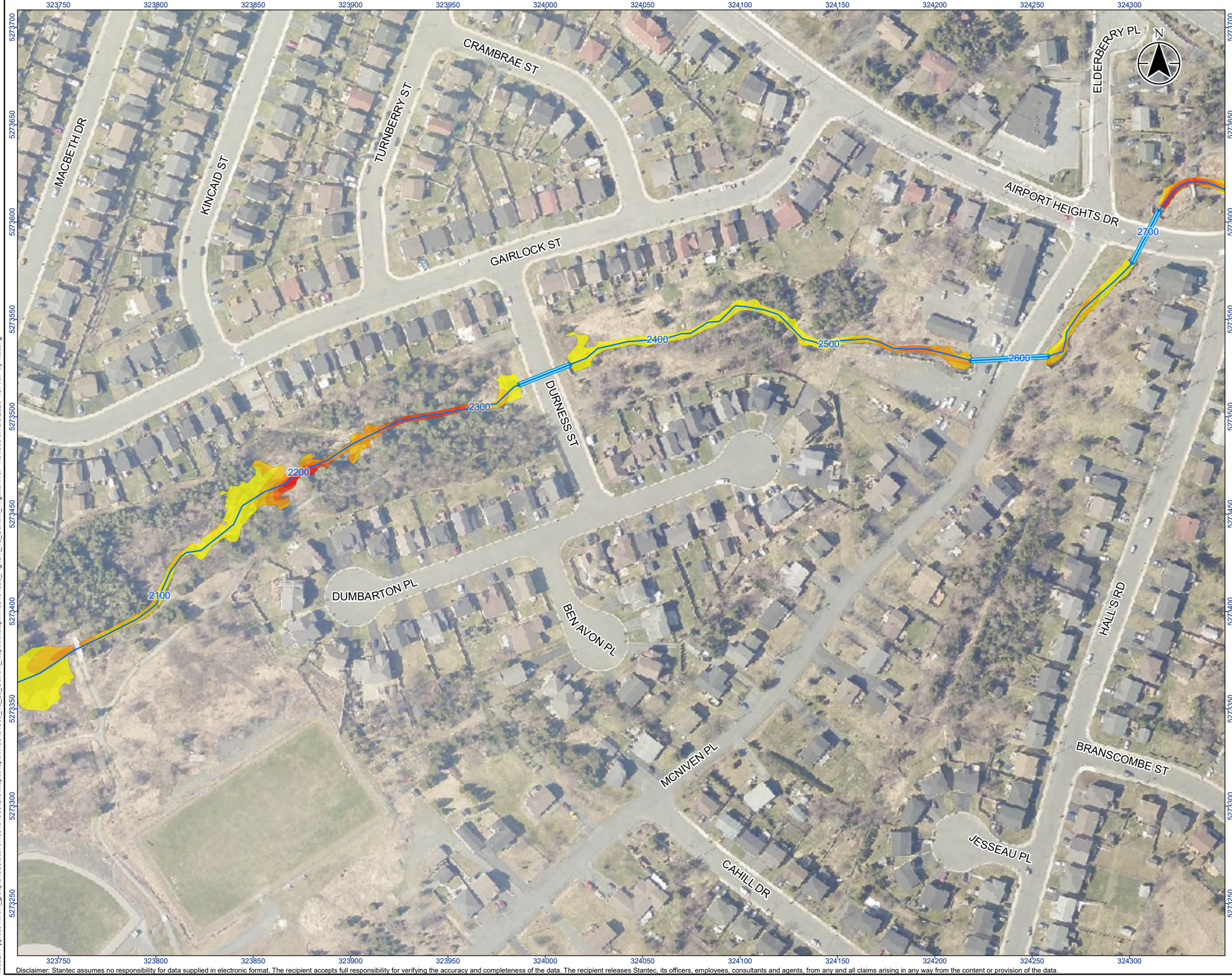

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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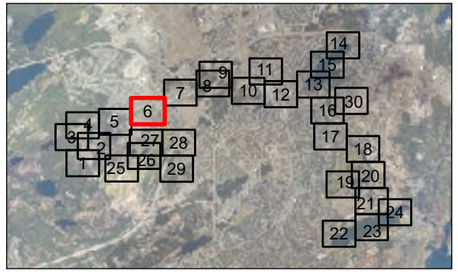

Project Location
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Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-6

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 6 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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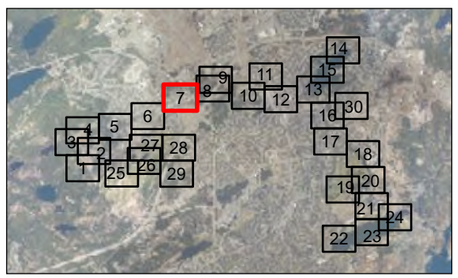

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-7

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 7 of 30

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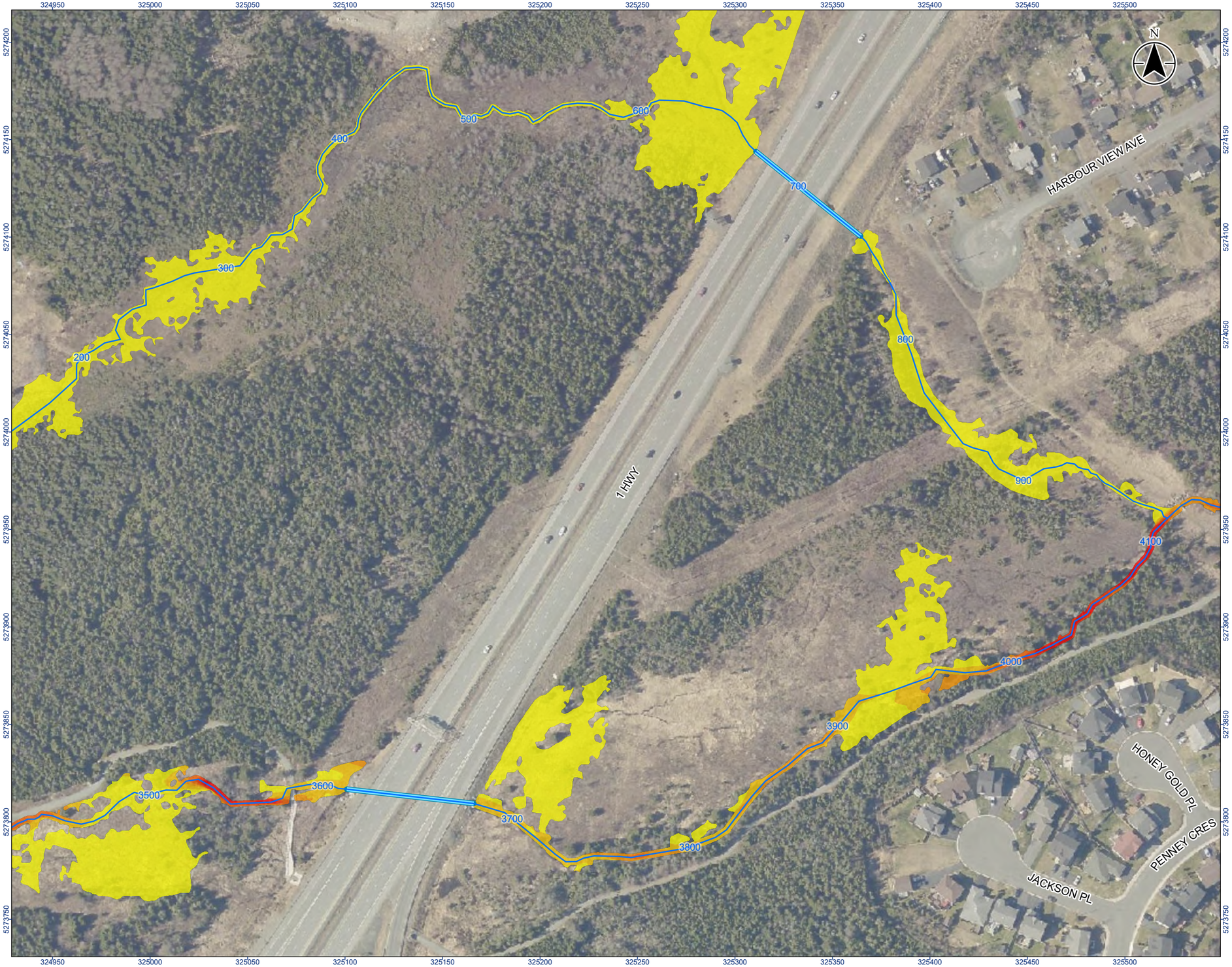

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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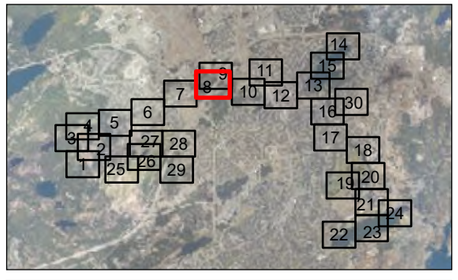

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-8

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 8 of 30

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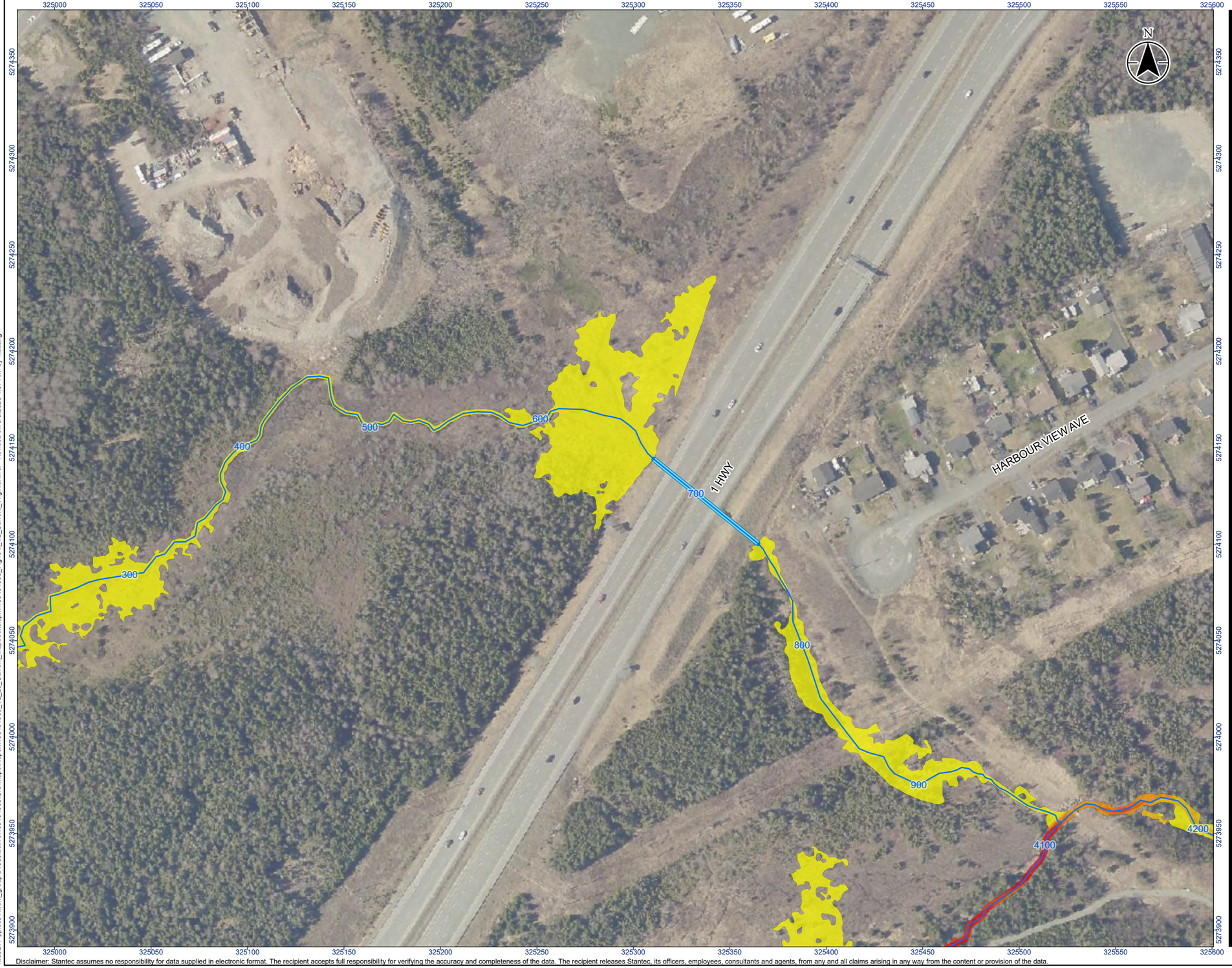

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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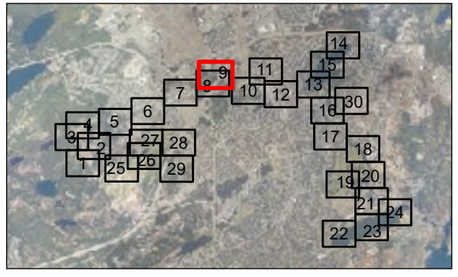

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-9

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 9 of 30

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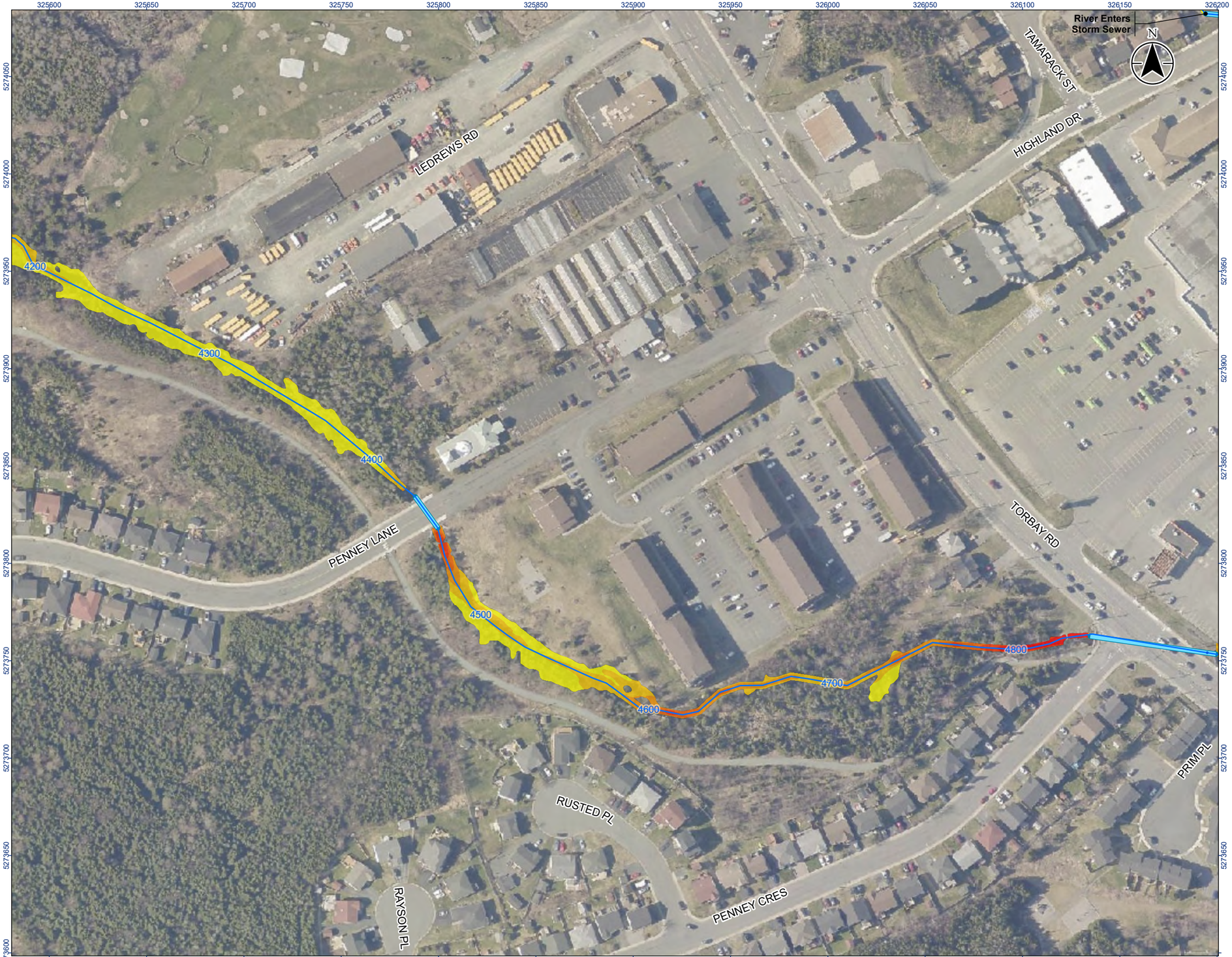

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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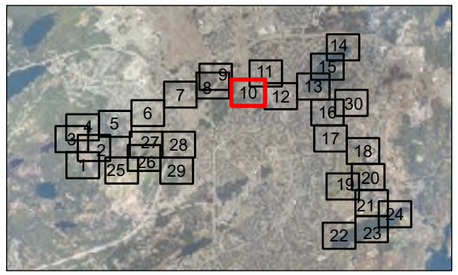

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-10

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 10 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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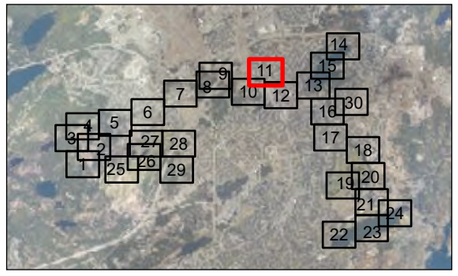

Project Location
City of St. John's

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Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-11

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 11 of 30

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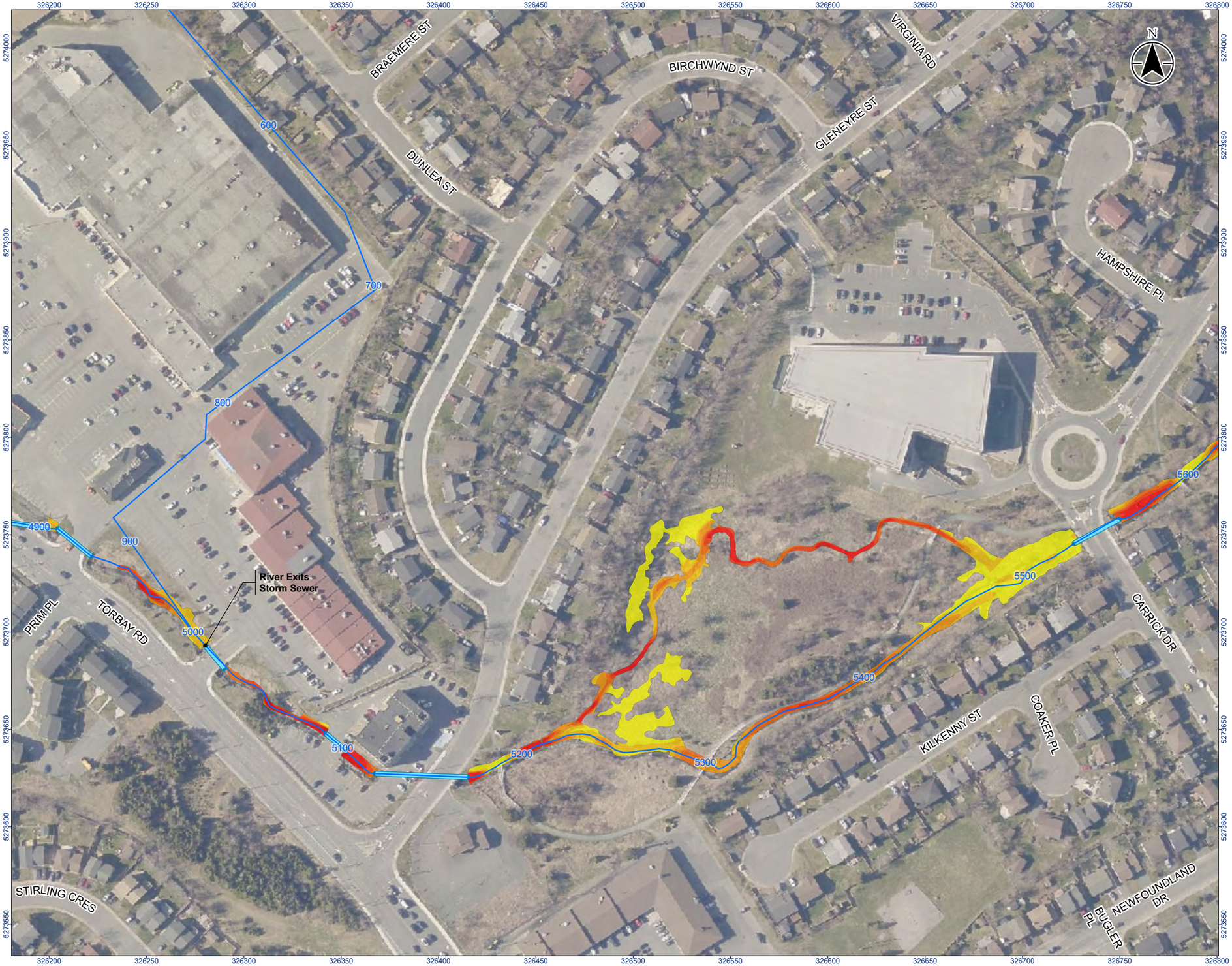

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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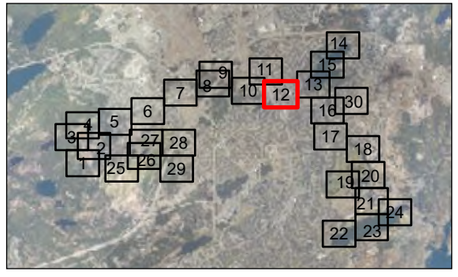

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-12

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 12 of 30

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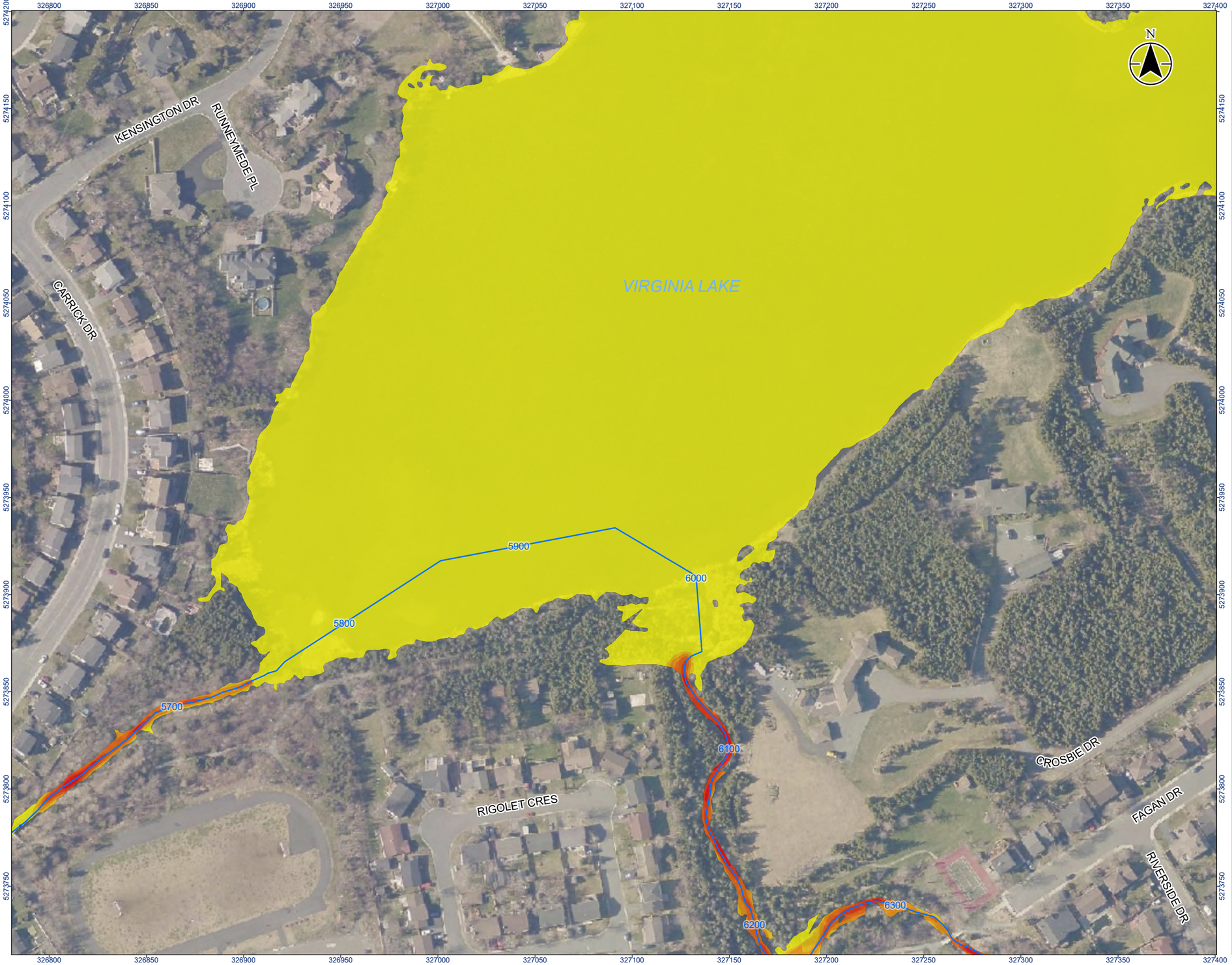

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
1:2,000 (At original document size of 11x17)

Notes

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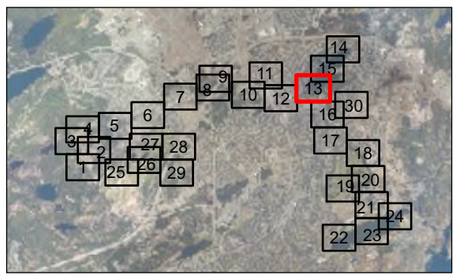

Project Location
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-13

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 13 of 30

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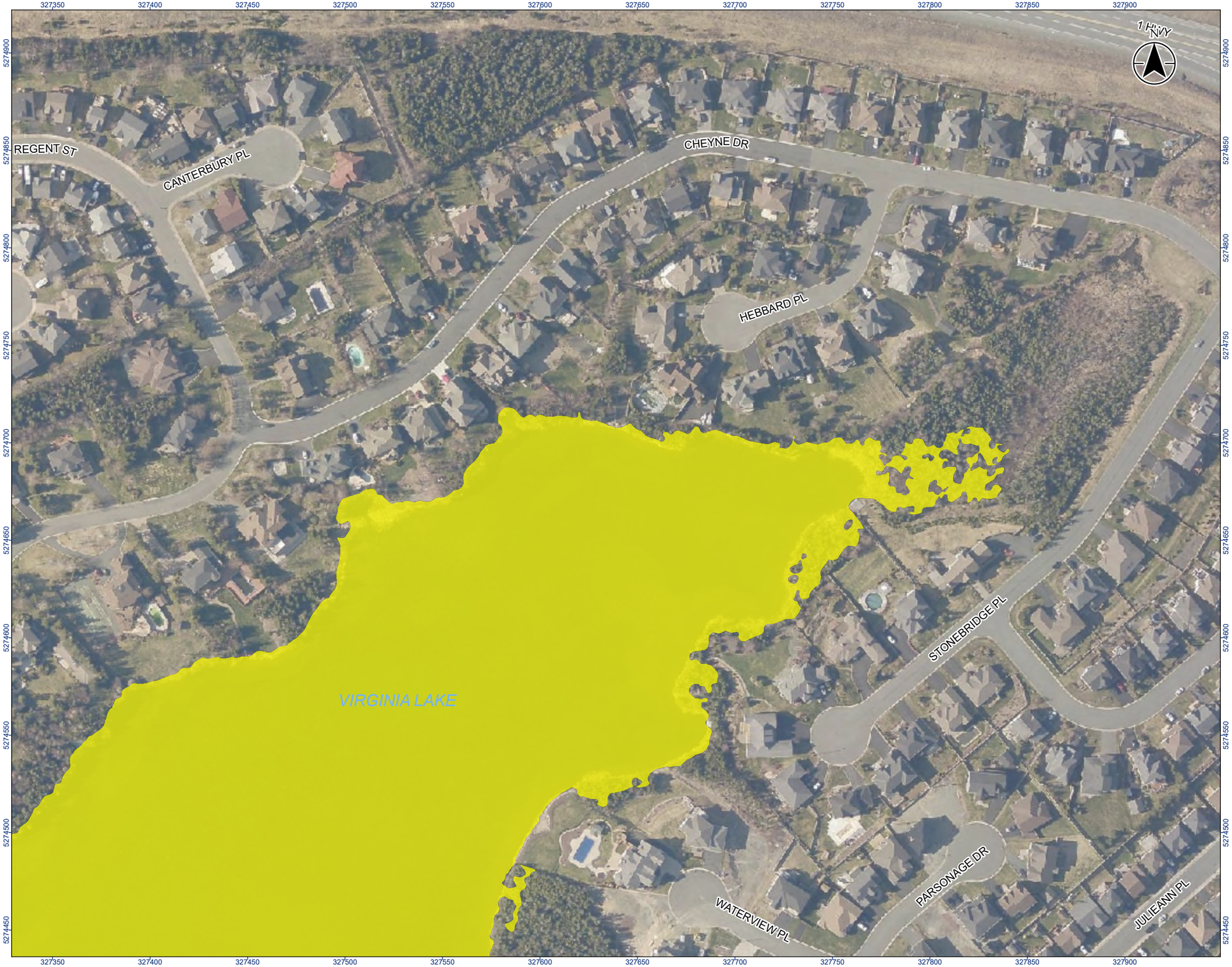

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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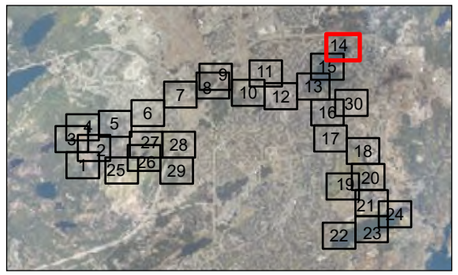

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-14

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 14 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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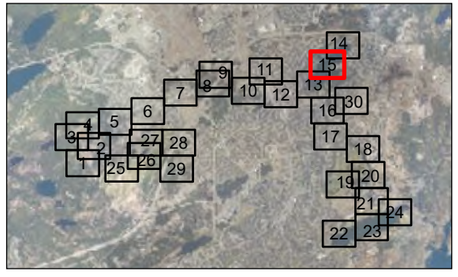

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-15

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 15 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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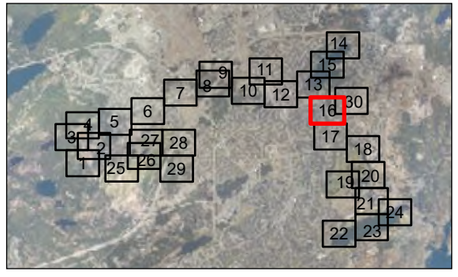

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-16

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 16 of 30

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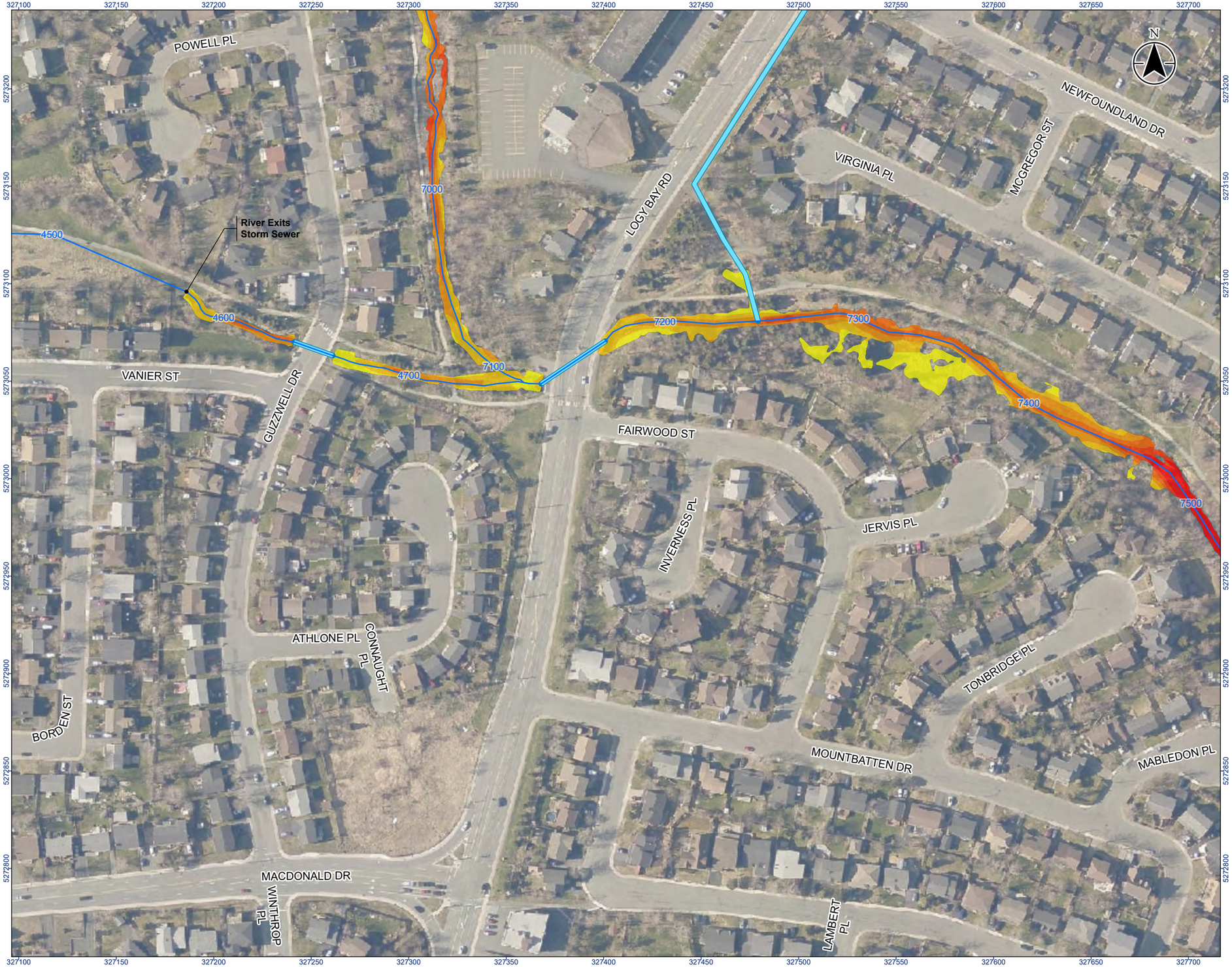

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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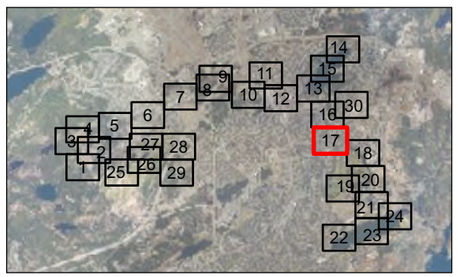

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-17

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 17 of 30

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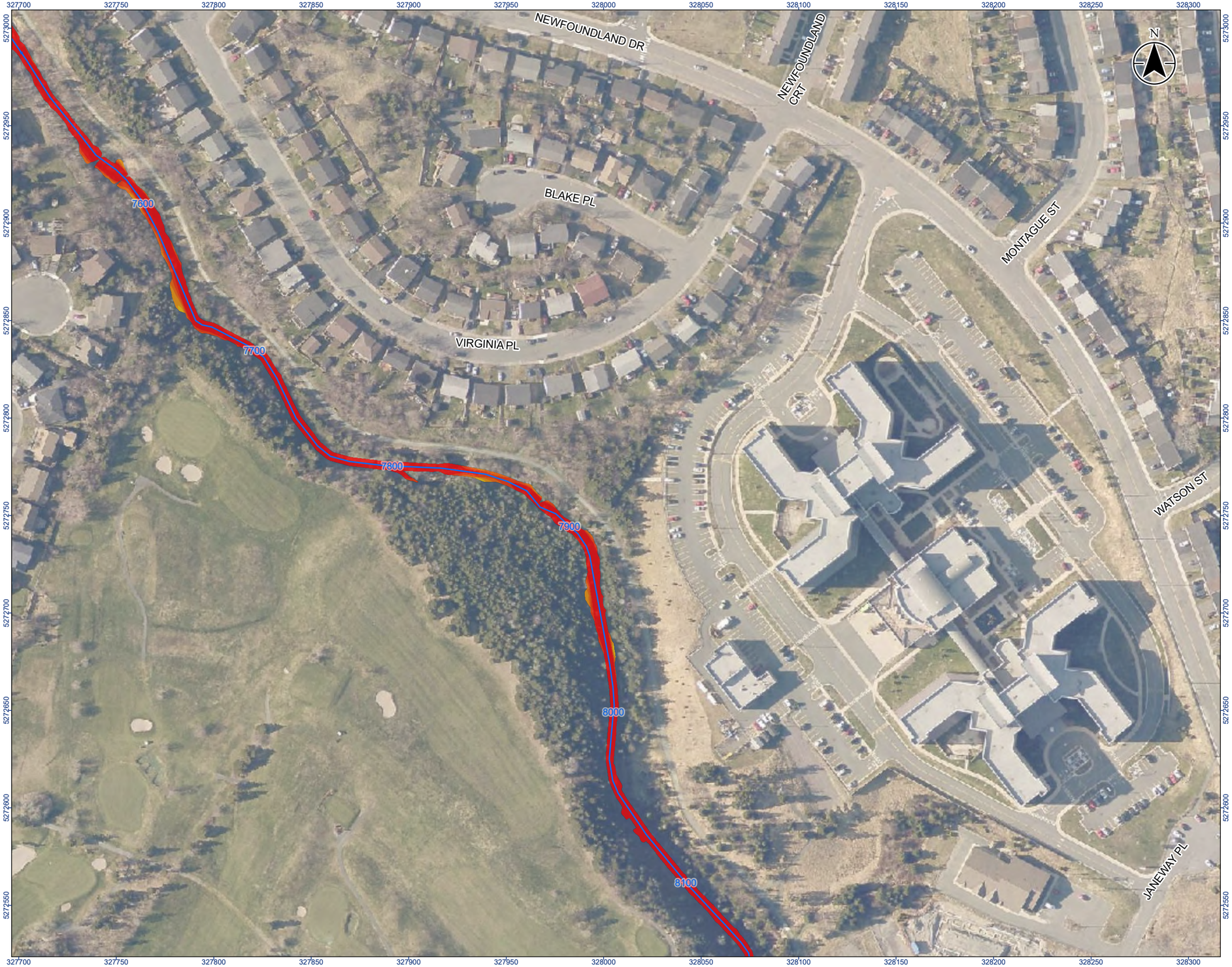

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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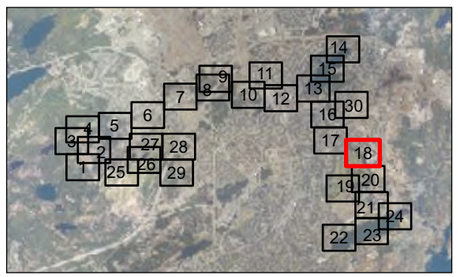

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-18

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 18 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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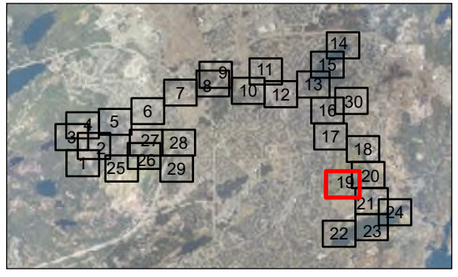

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-19

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 19 of 30

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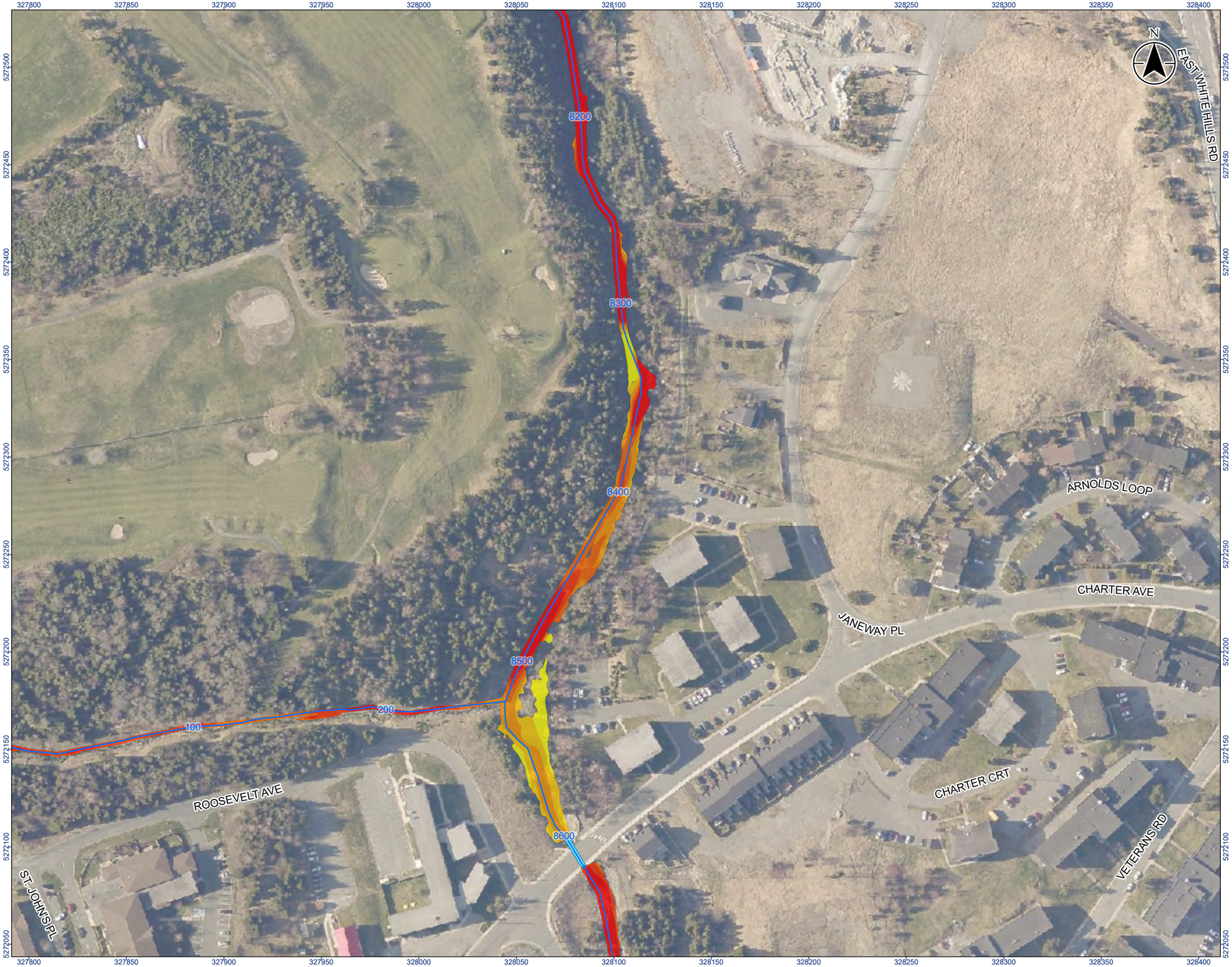

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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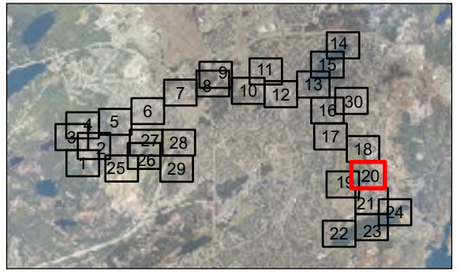

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-20

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 20 of 30

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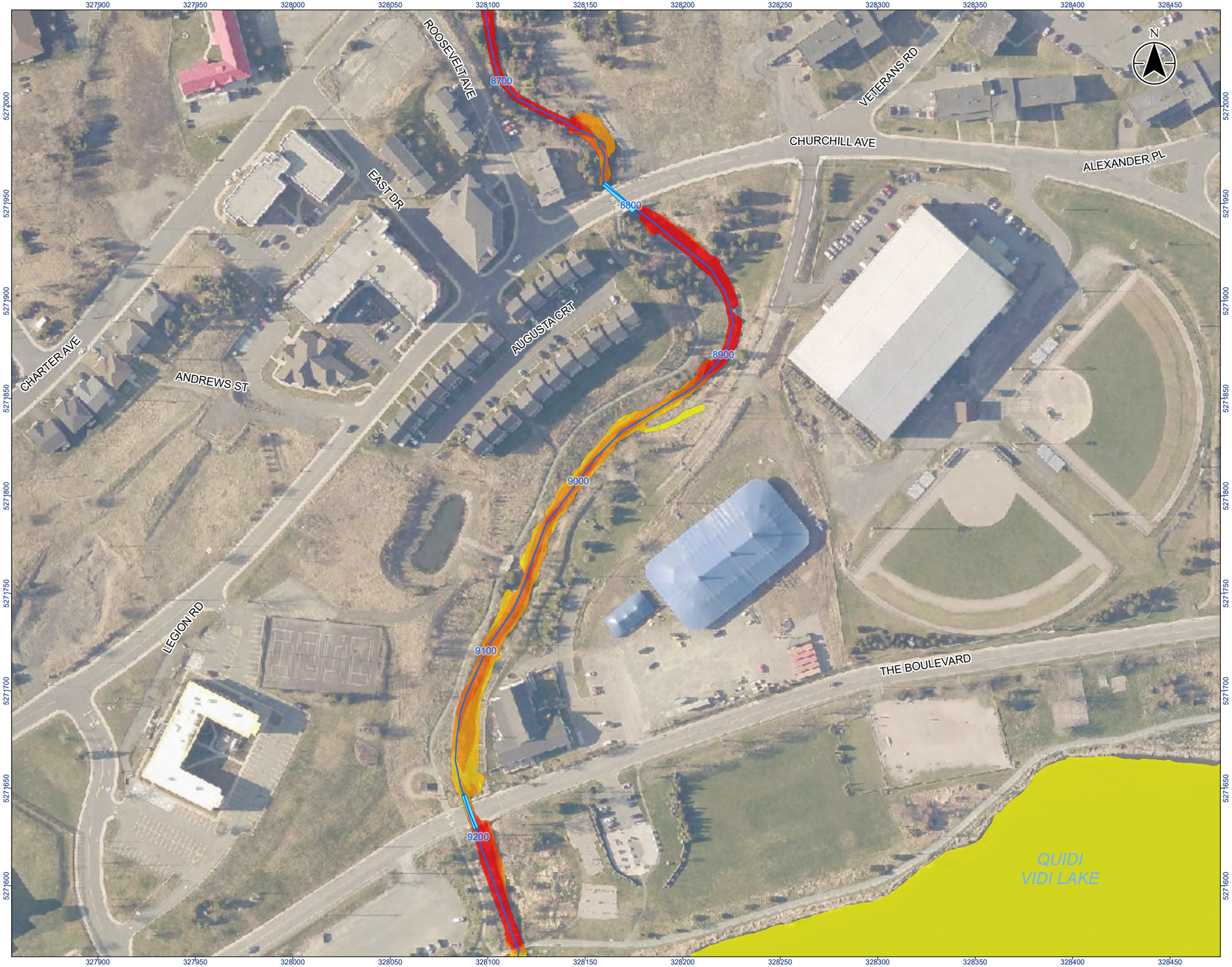

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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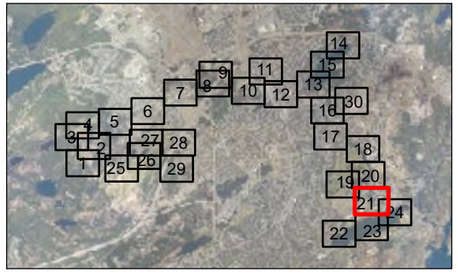

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-21

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 21 of 30

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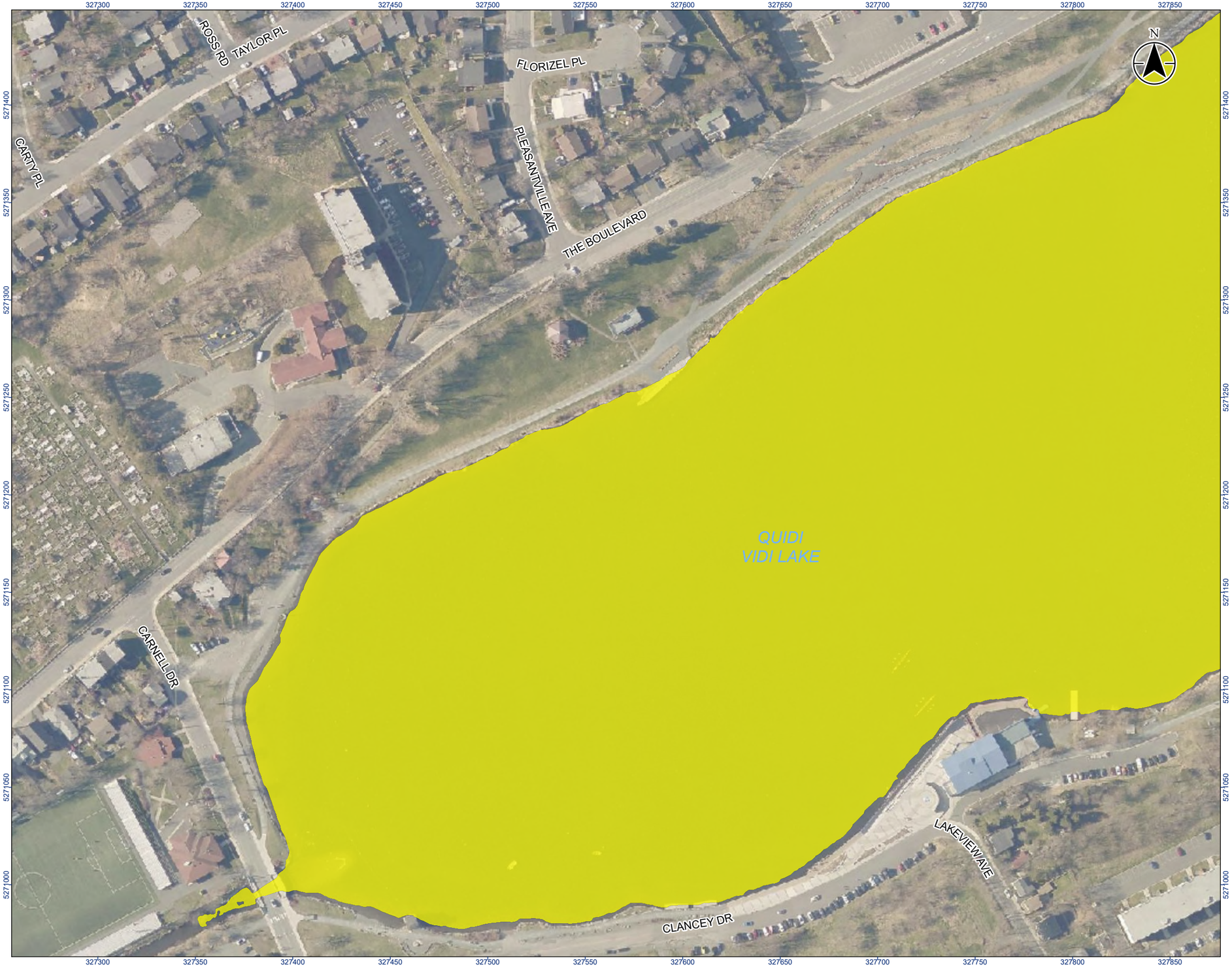

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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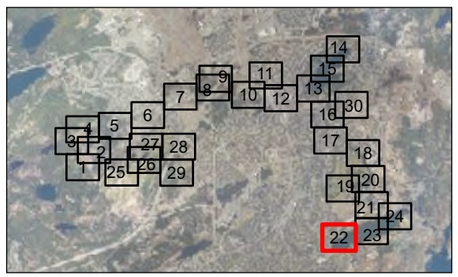

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-22

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 22 of 30

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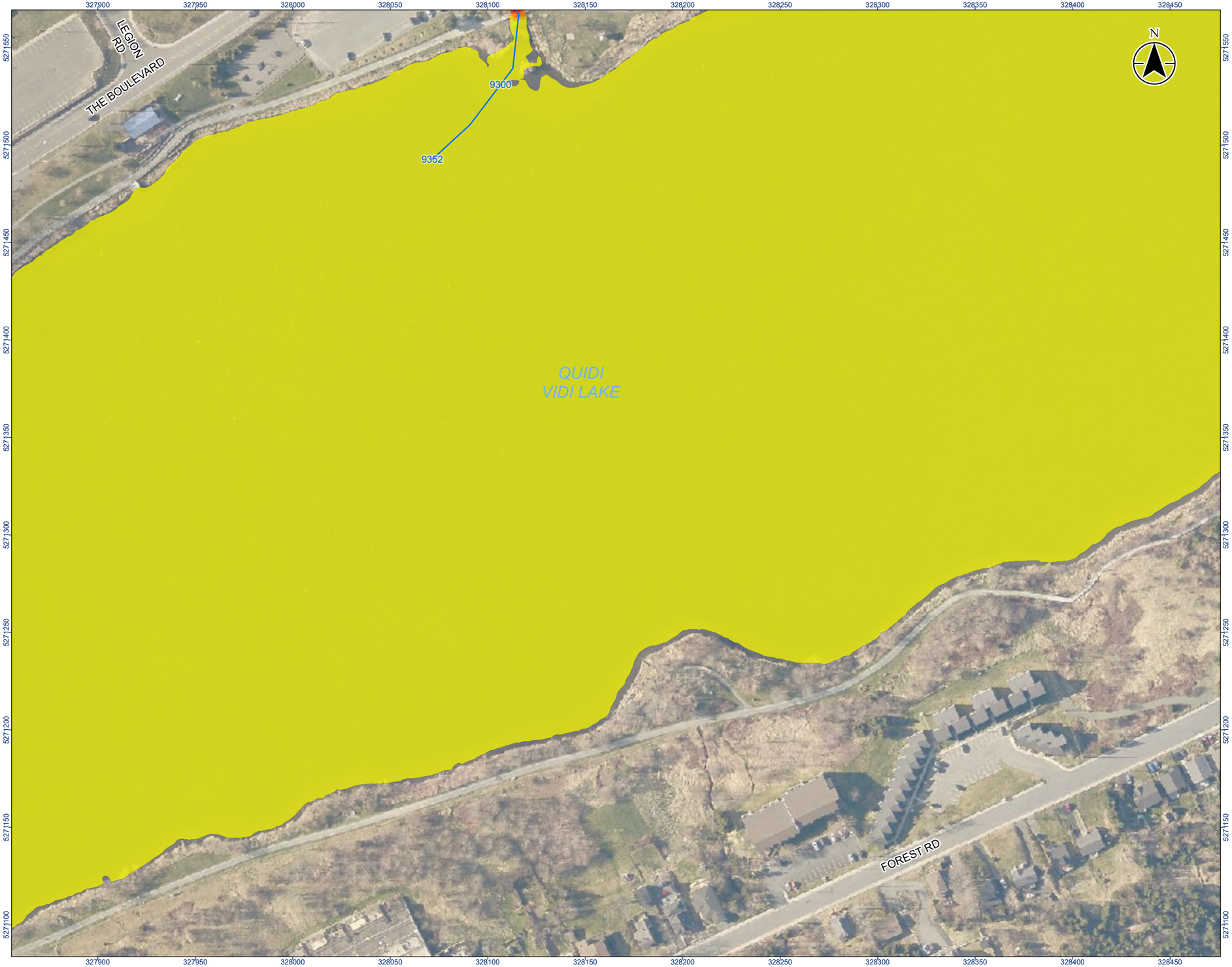

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
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Notes

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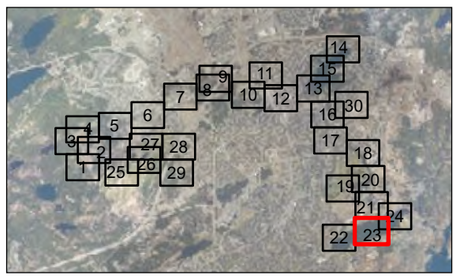

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-23

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 23 of 30

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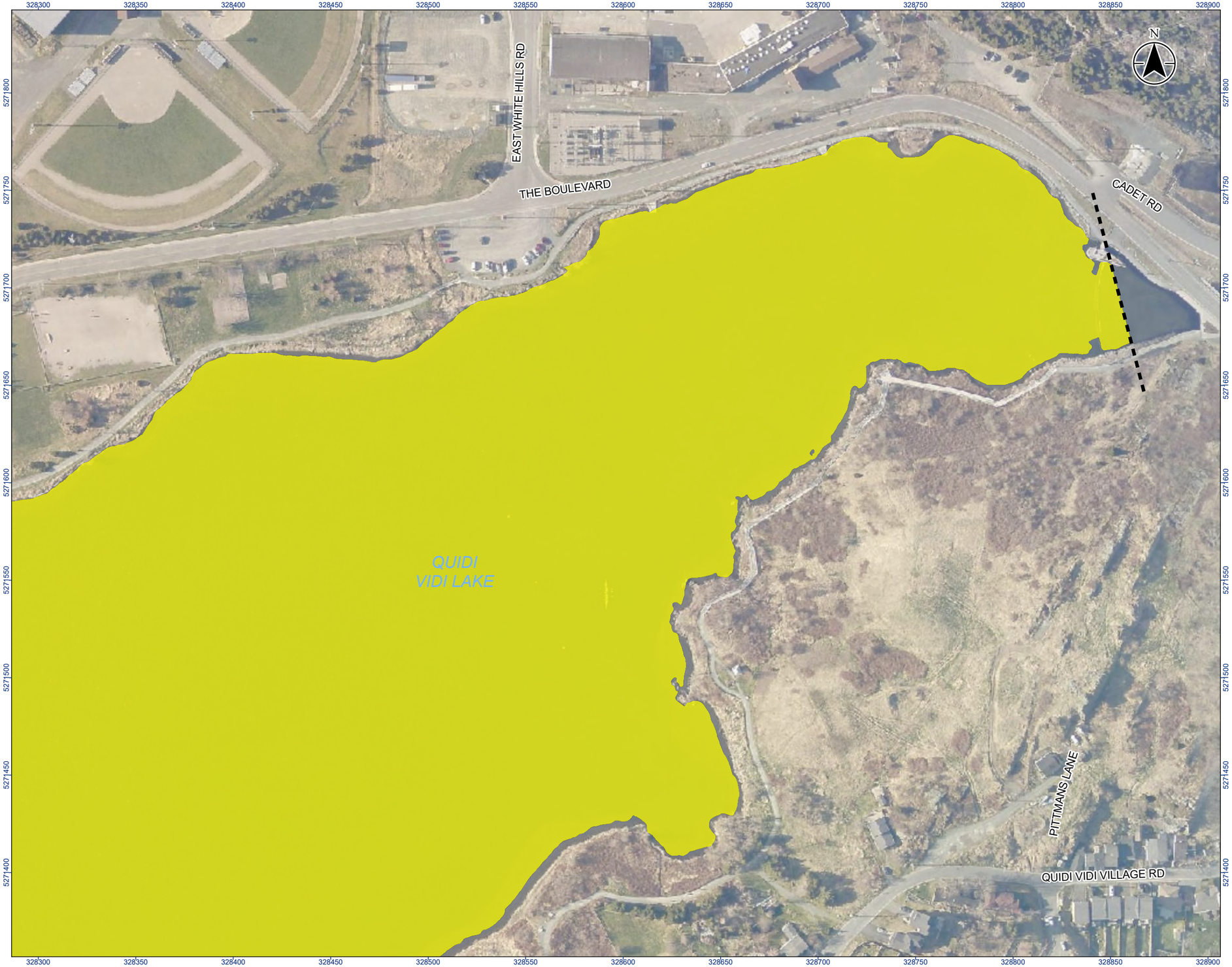

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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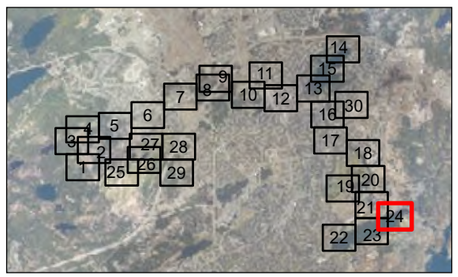

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-24

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 24 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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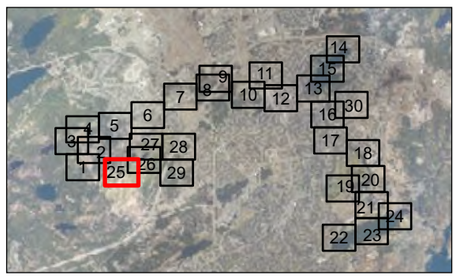

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-25

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 25 of 30

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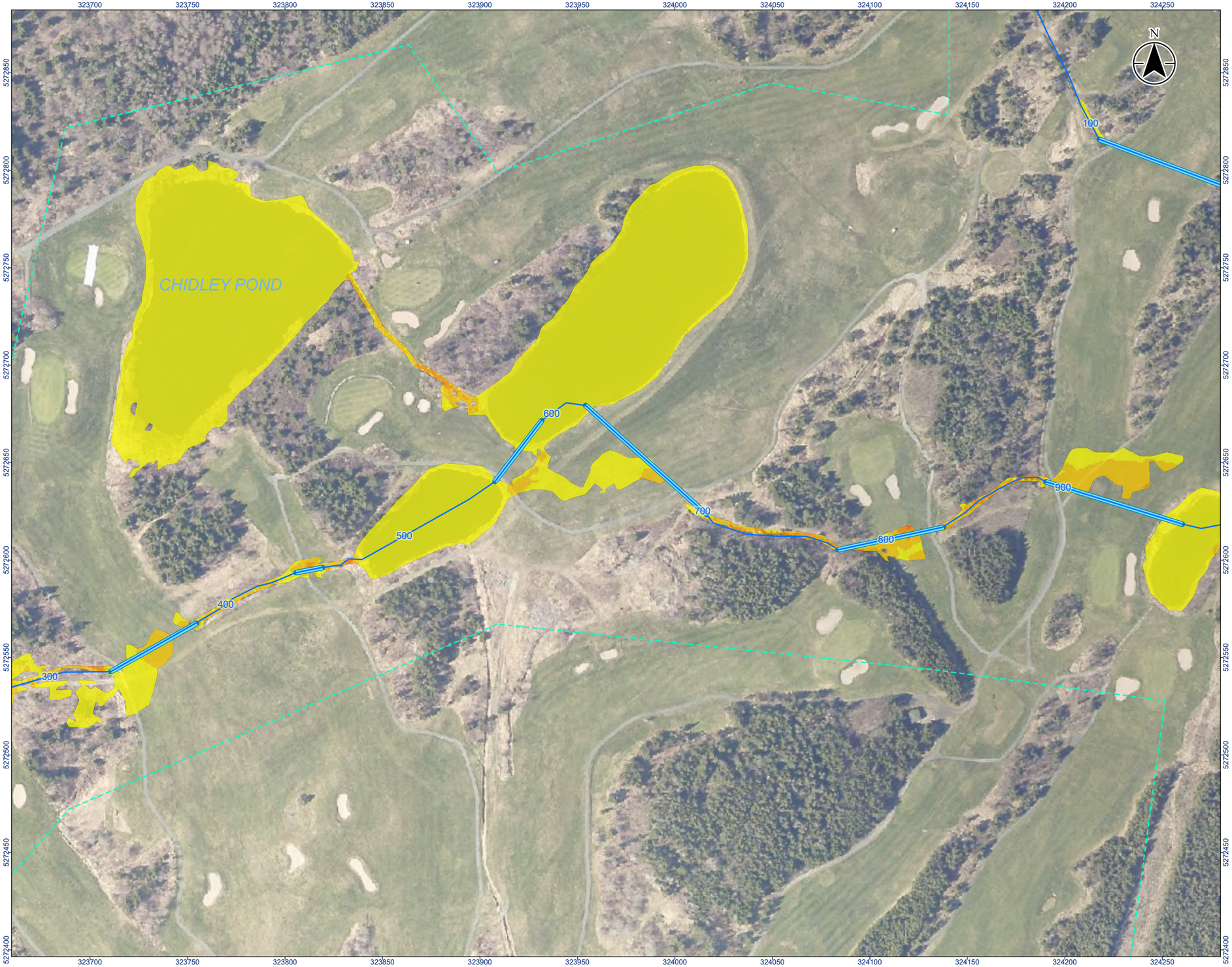

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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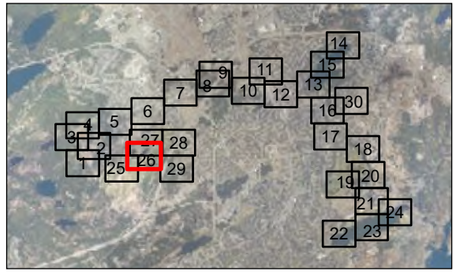

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-26

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 26 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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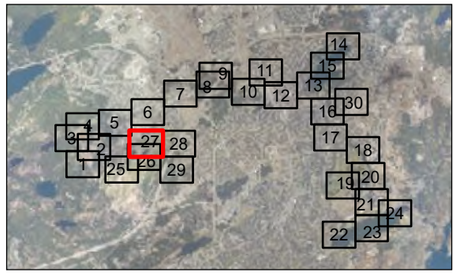

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-27

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 27 of 30

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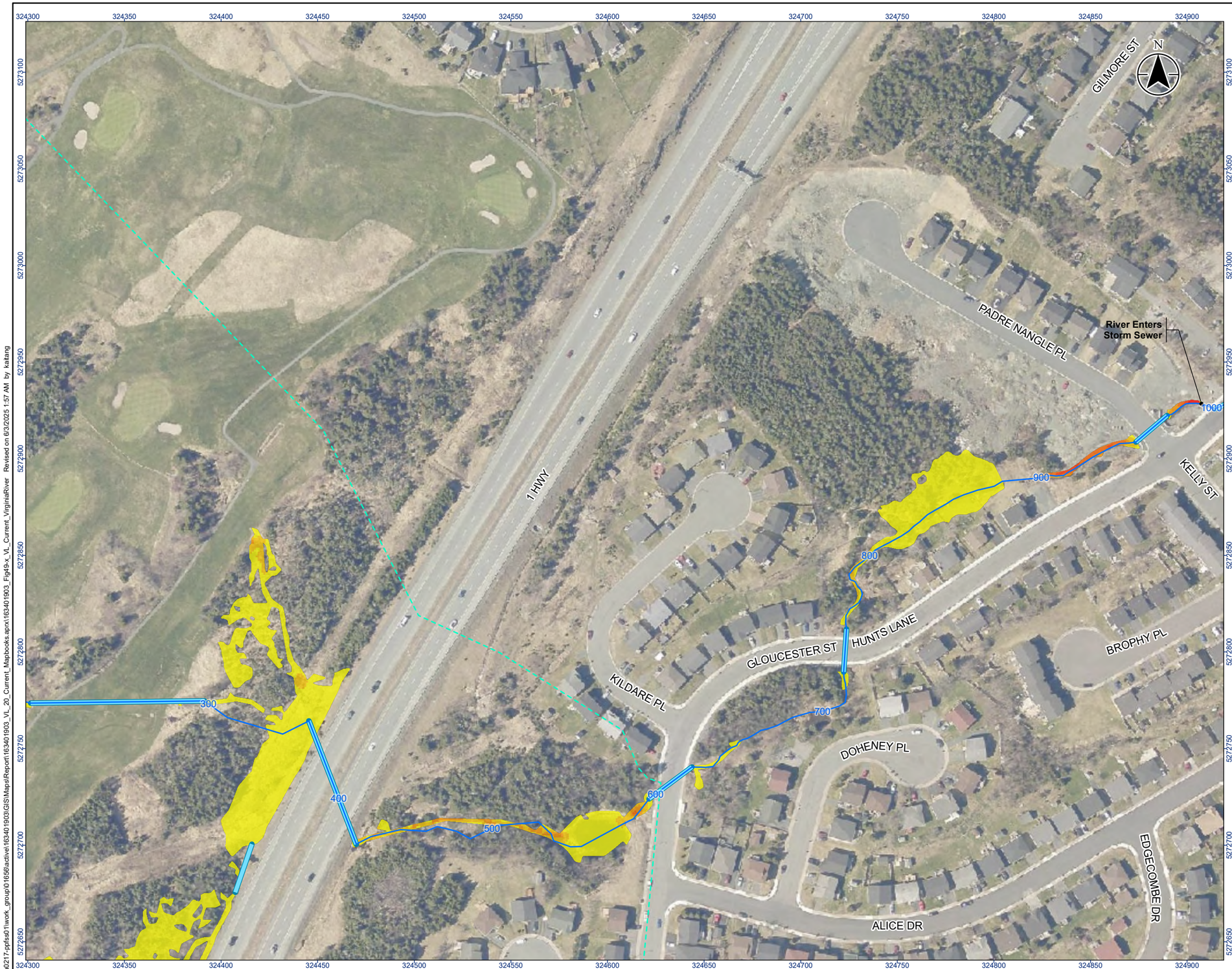

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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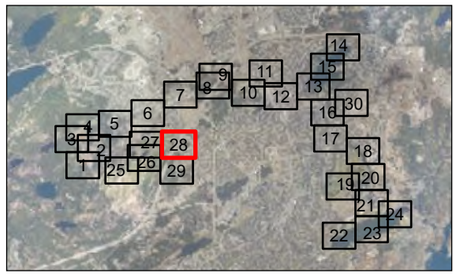

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-28

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 28 of 30

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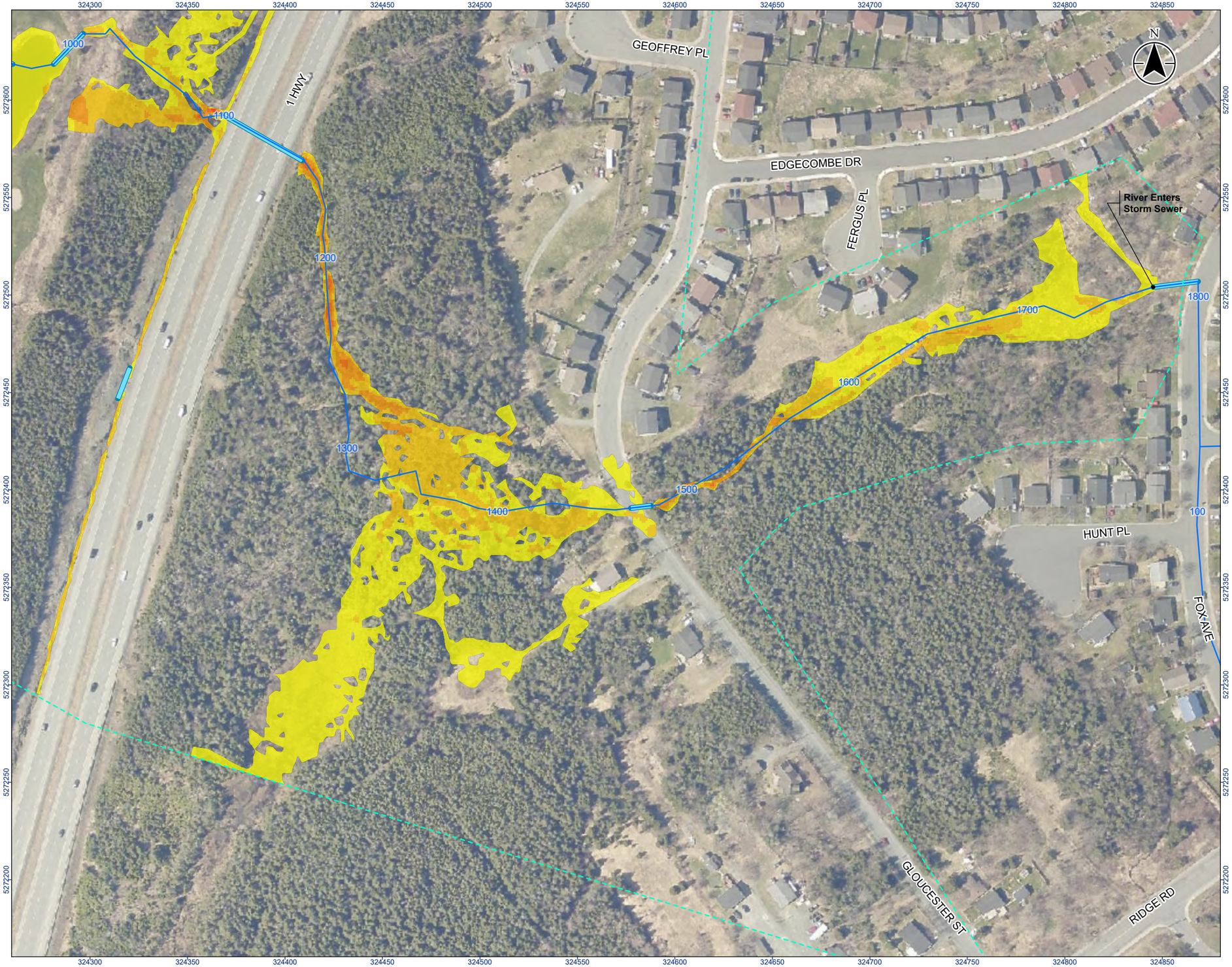

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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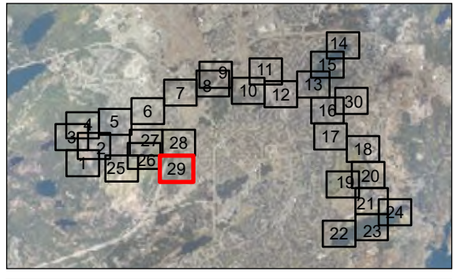

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY
FOR THE CITY OF ST. JOHN'S

Figure No.
49-29

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 29 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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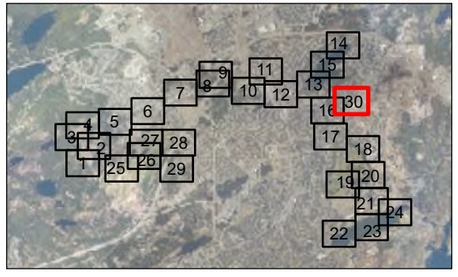

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
49-30

Title
Current Climate Condition
20-Year Velocity - Virginia River
Sheet 30 of 30

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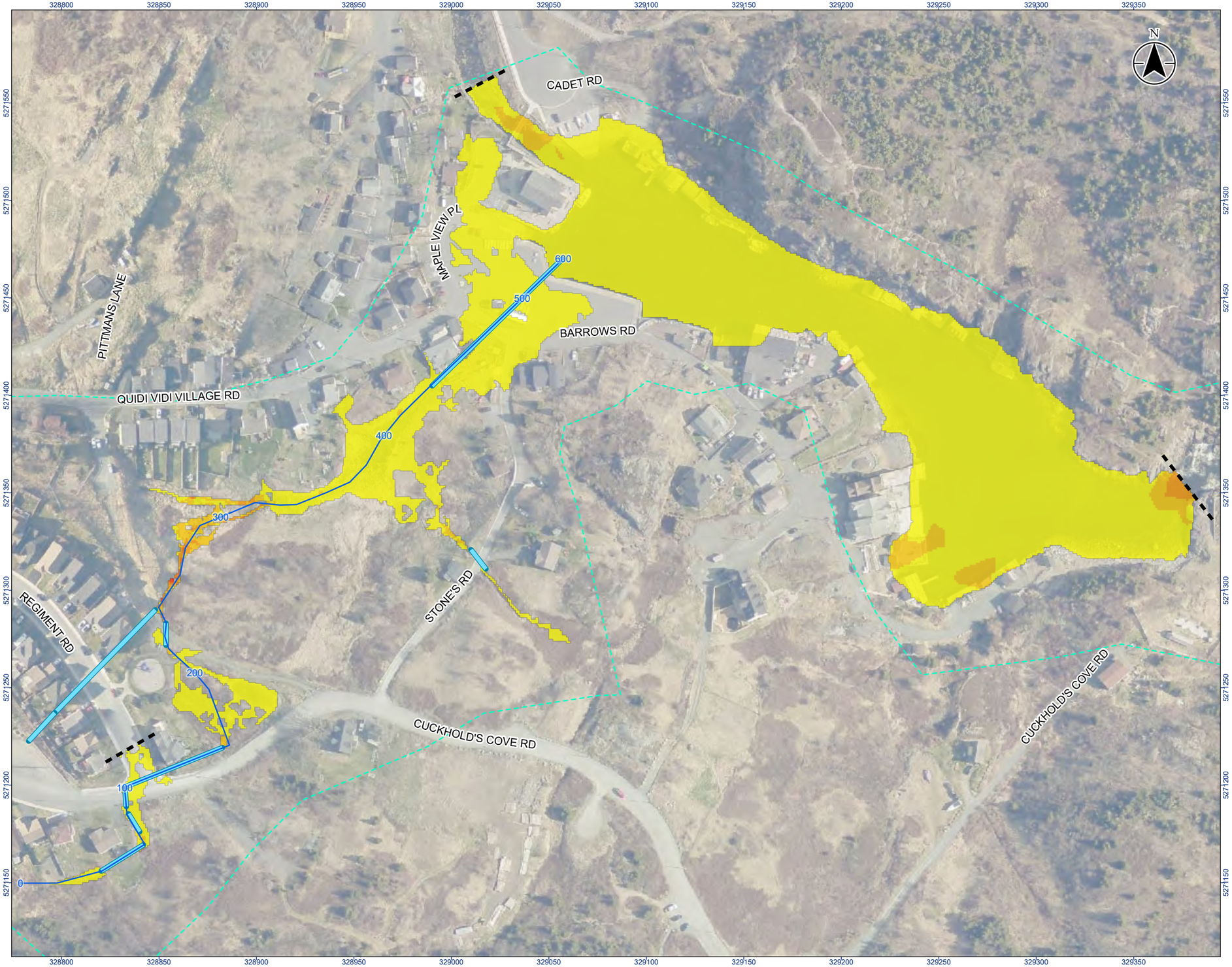

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
50-0

Title
Current Climate Condition
100-Year Velocity - Barrow Road Stream

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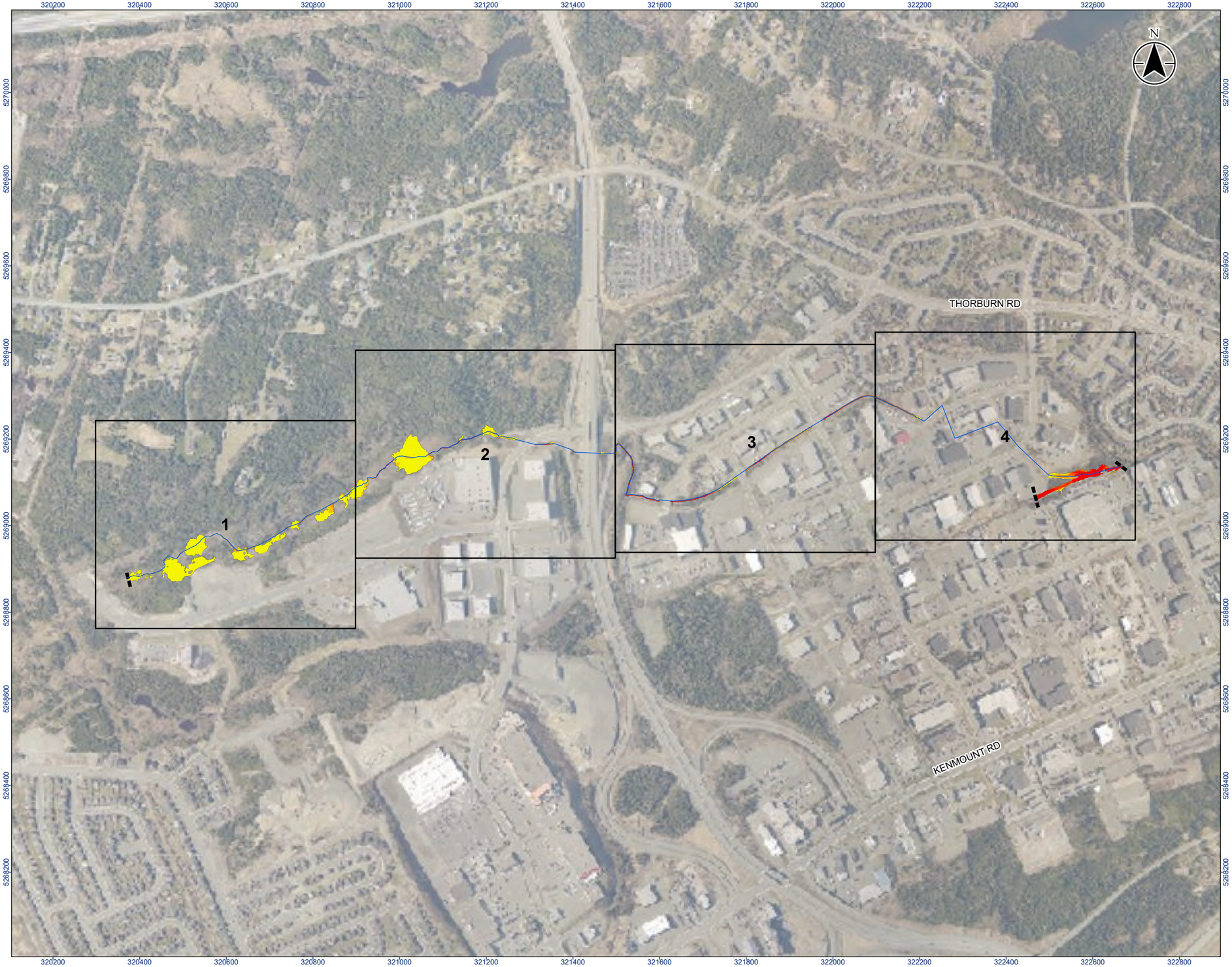

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 175 350 m

1:9,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
51-0

Title
Current Climate Condition
100-Year Velocity - Holes In Marsh Brook
Overview Map

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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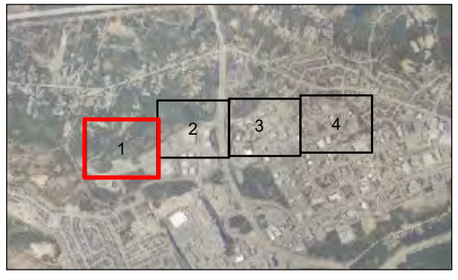

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
51-1

Title
Current Climate Condition
100-Year Velocity - Holes In Marsh Brook
Sheet 1 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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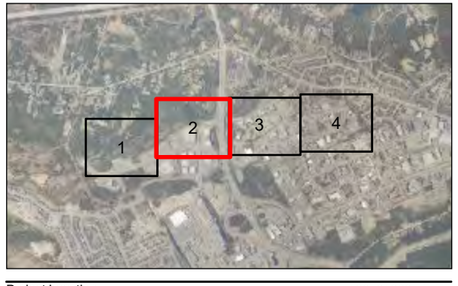

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
51-2

Title
Current Climate Condition
100-Year Velocity - Holes In Marsh Brook
Sheet 2 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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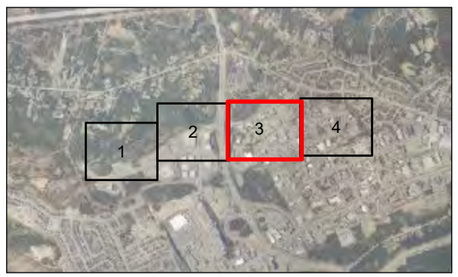

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
51-3

Title
Current Climate Condition
100-Year Velocity - Holes In Marsh Brook
Sheet 3 of 4

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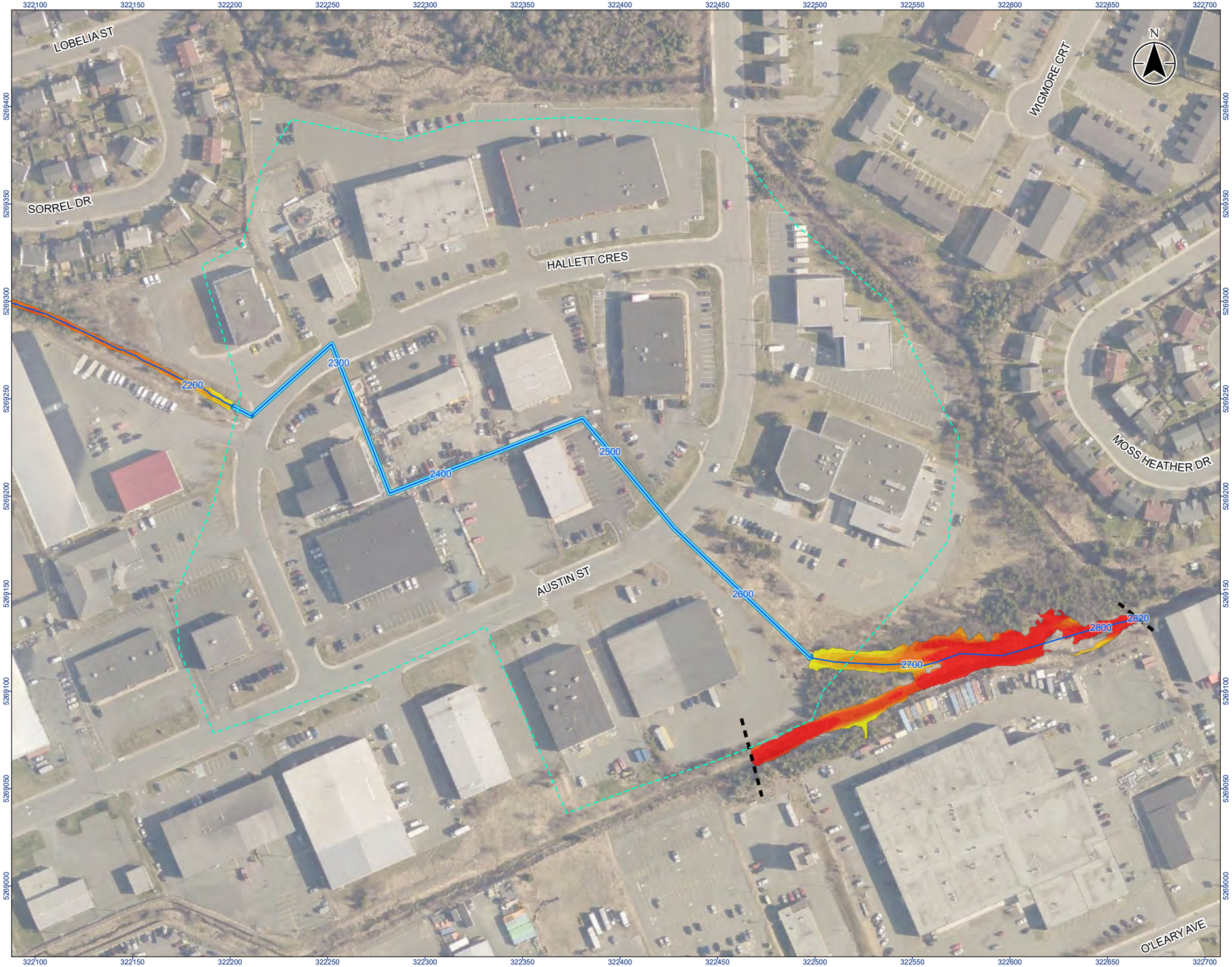

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
51-4

Title
Current Climate Condition
100-Year Velocity - Holes In Marsh Brook
Sheet 4 of 4

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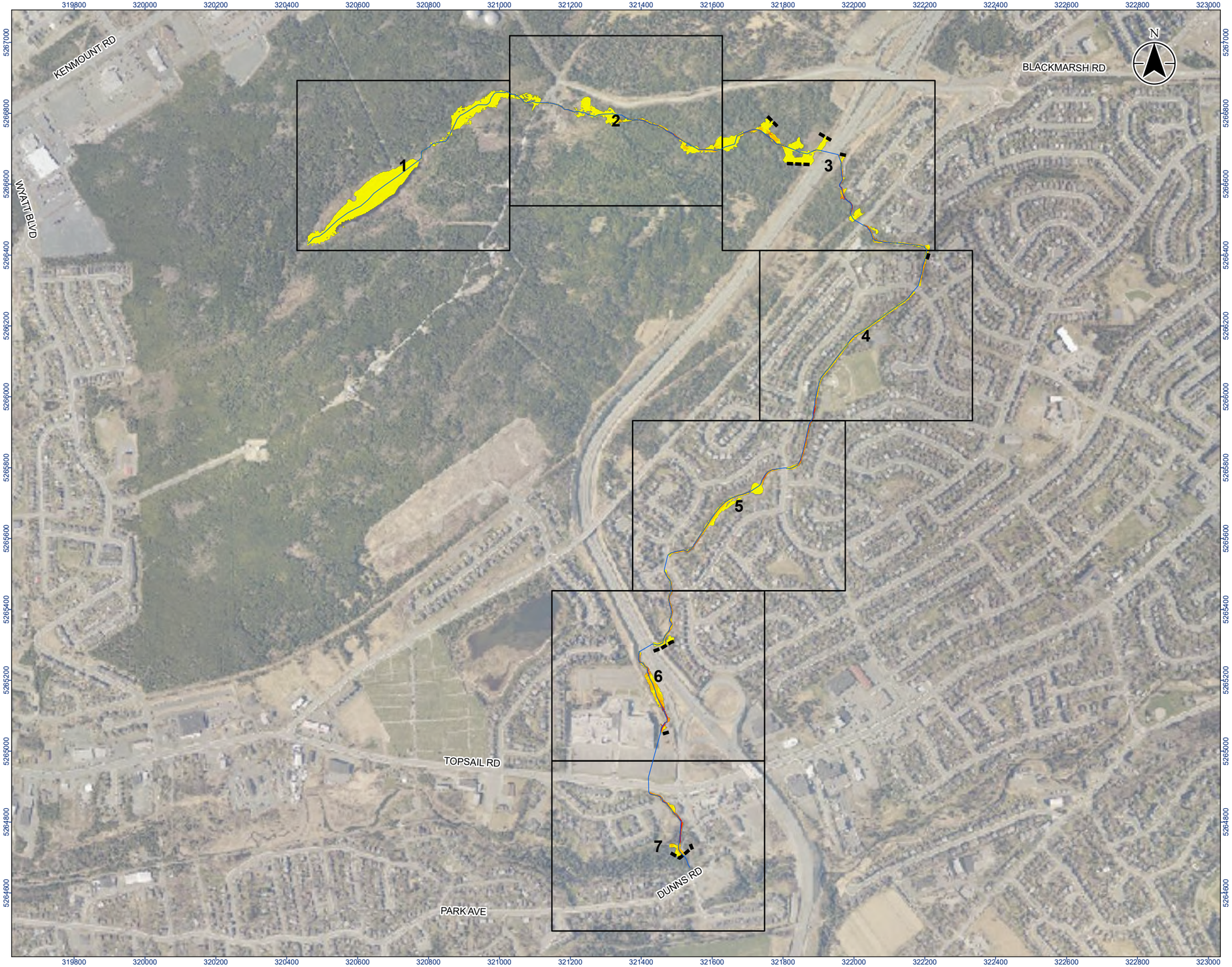

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 210 420 m

1:11,000 (At original document size of 11x17)

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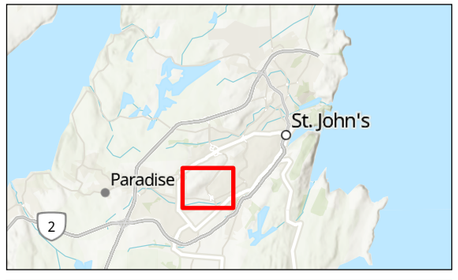

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-0

Title
Current Climate Condition 100-Year Velocity - Kitty Gaul Brook Overview Map

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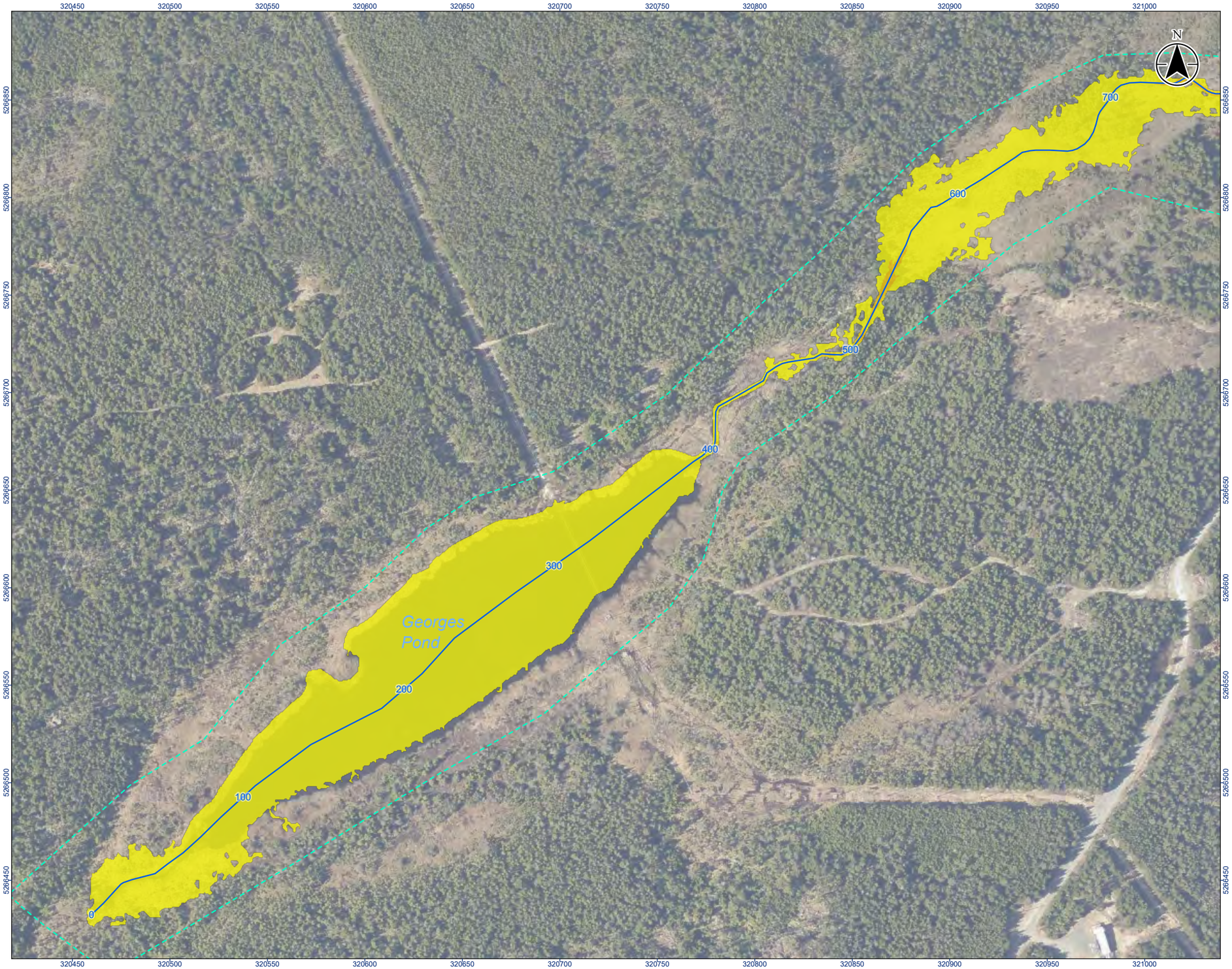

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-1

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 1 of 7

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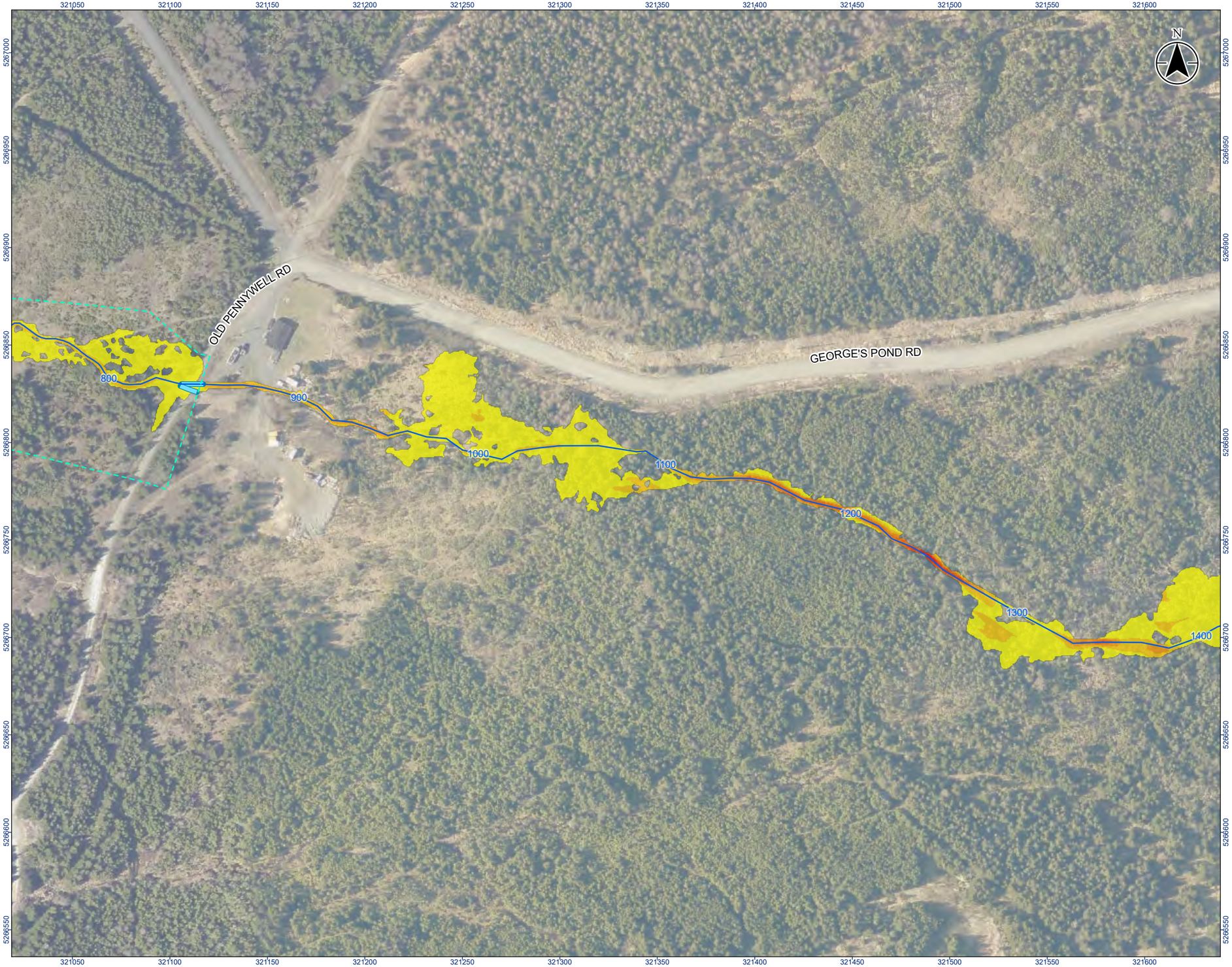

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-2

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 2 of 7

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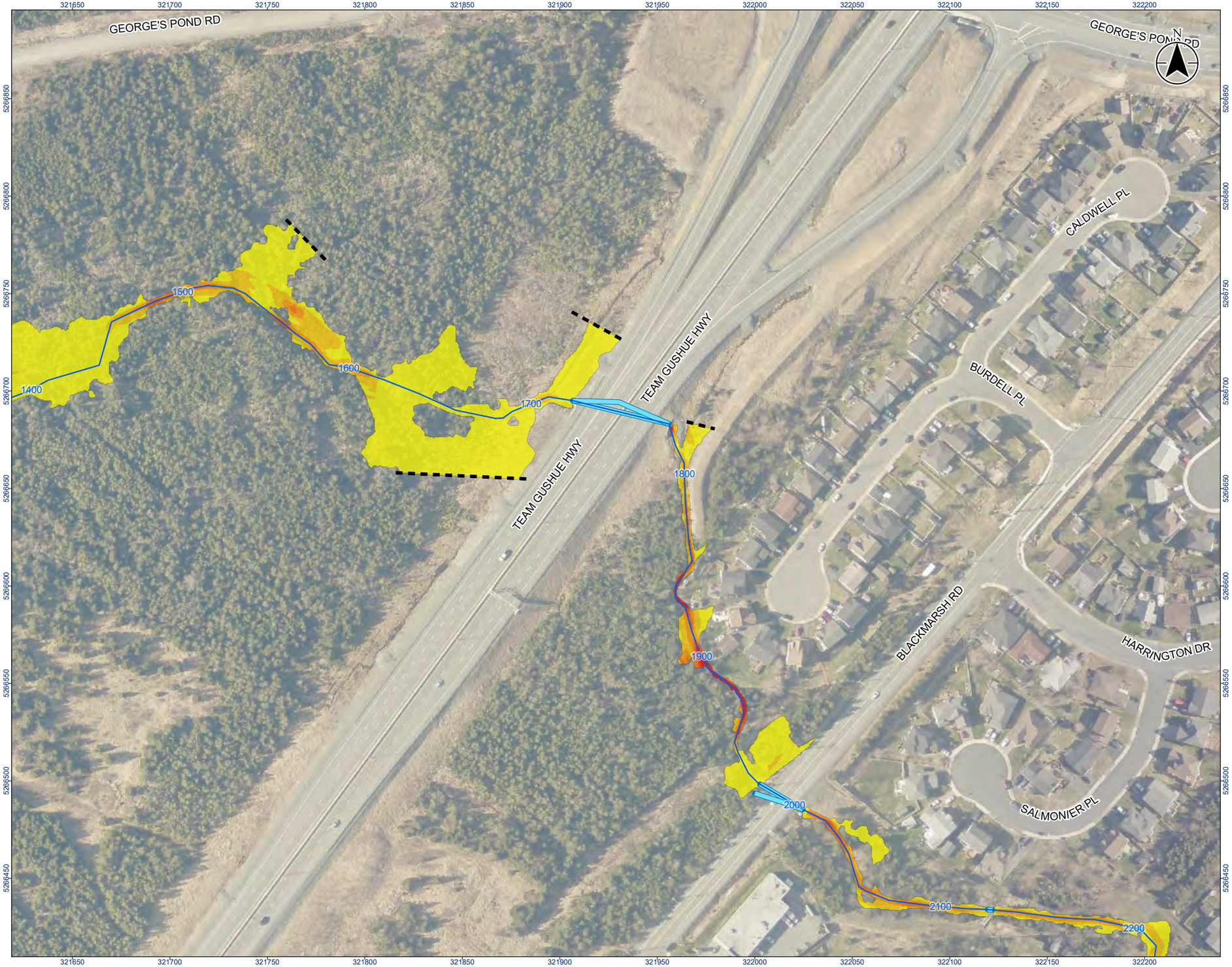

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-3

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 3 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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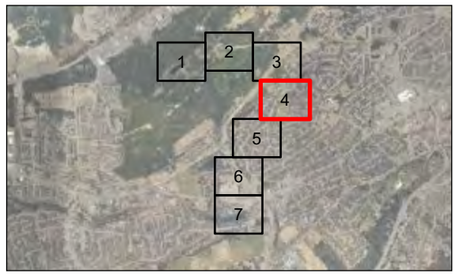

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-4

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 4 of 7

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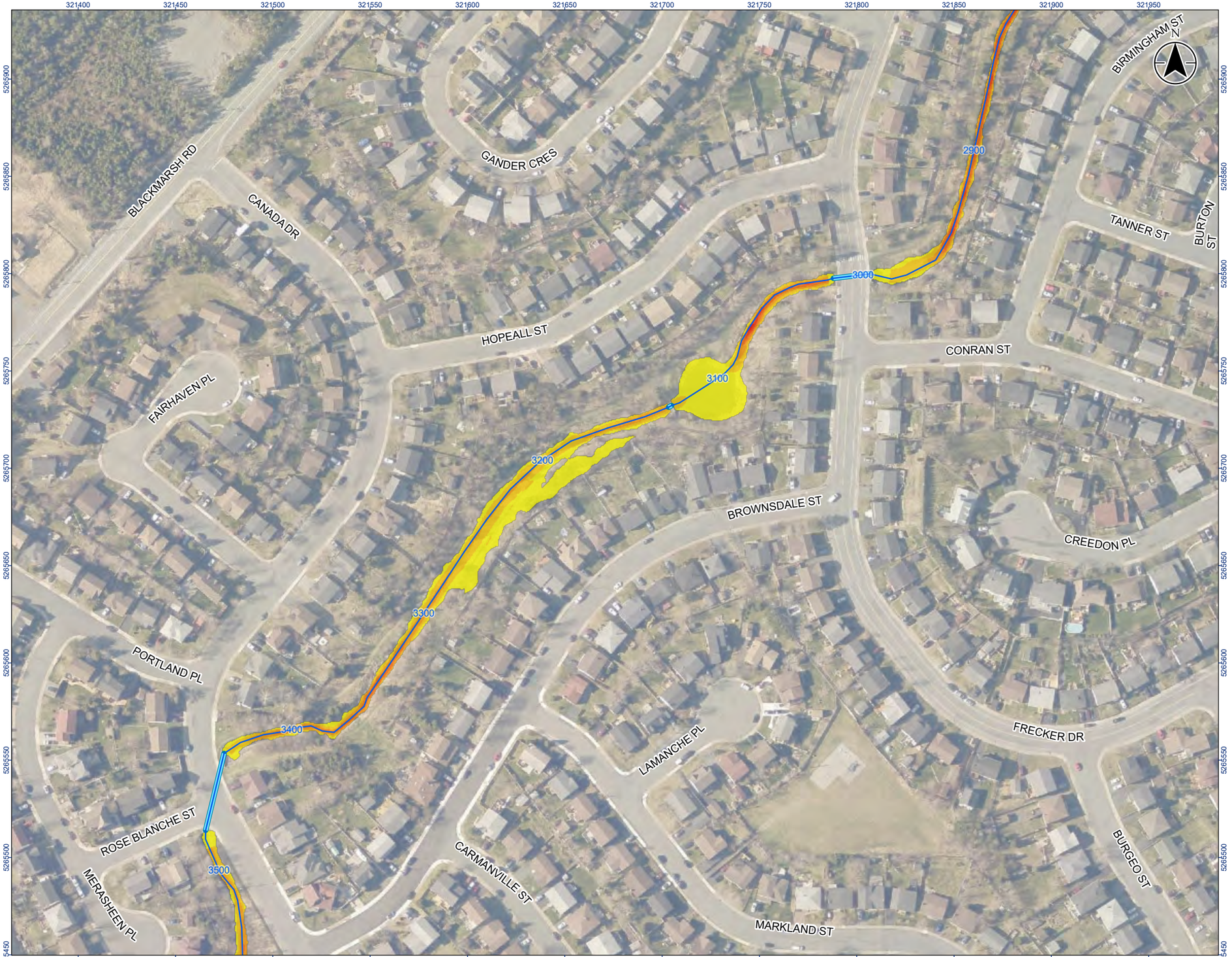

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-5

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 5 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-6

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 6 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
52-7

Title
Current Climate Condition
100-Year Velocity - Kitty Gaul Brook
Sheet 7 of 7

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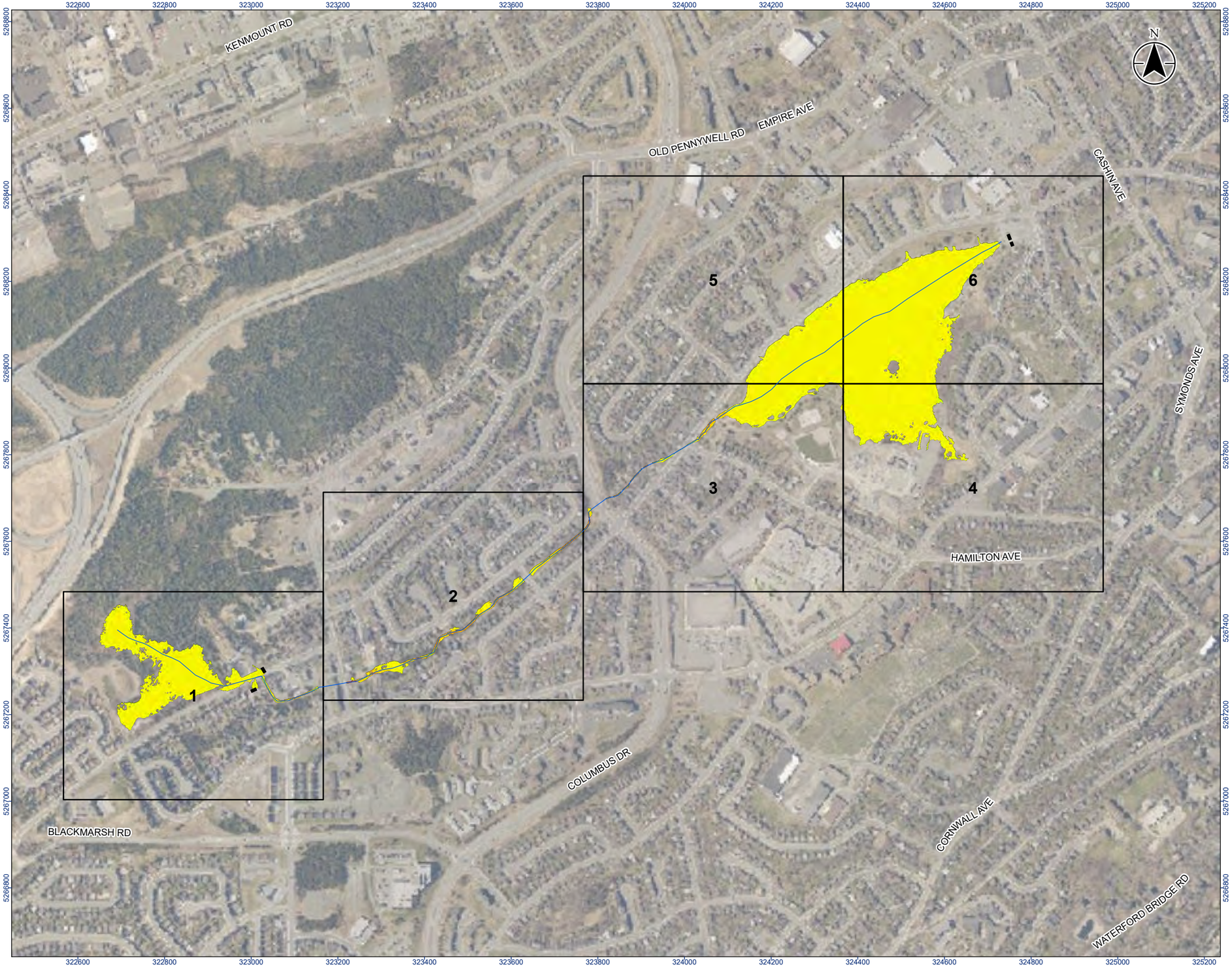

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 175 350 m

1:9,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-05-26

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-0

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook Overview Map

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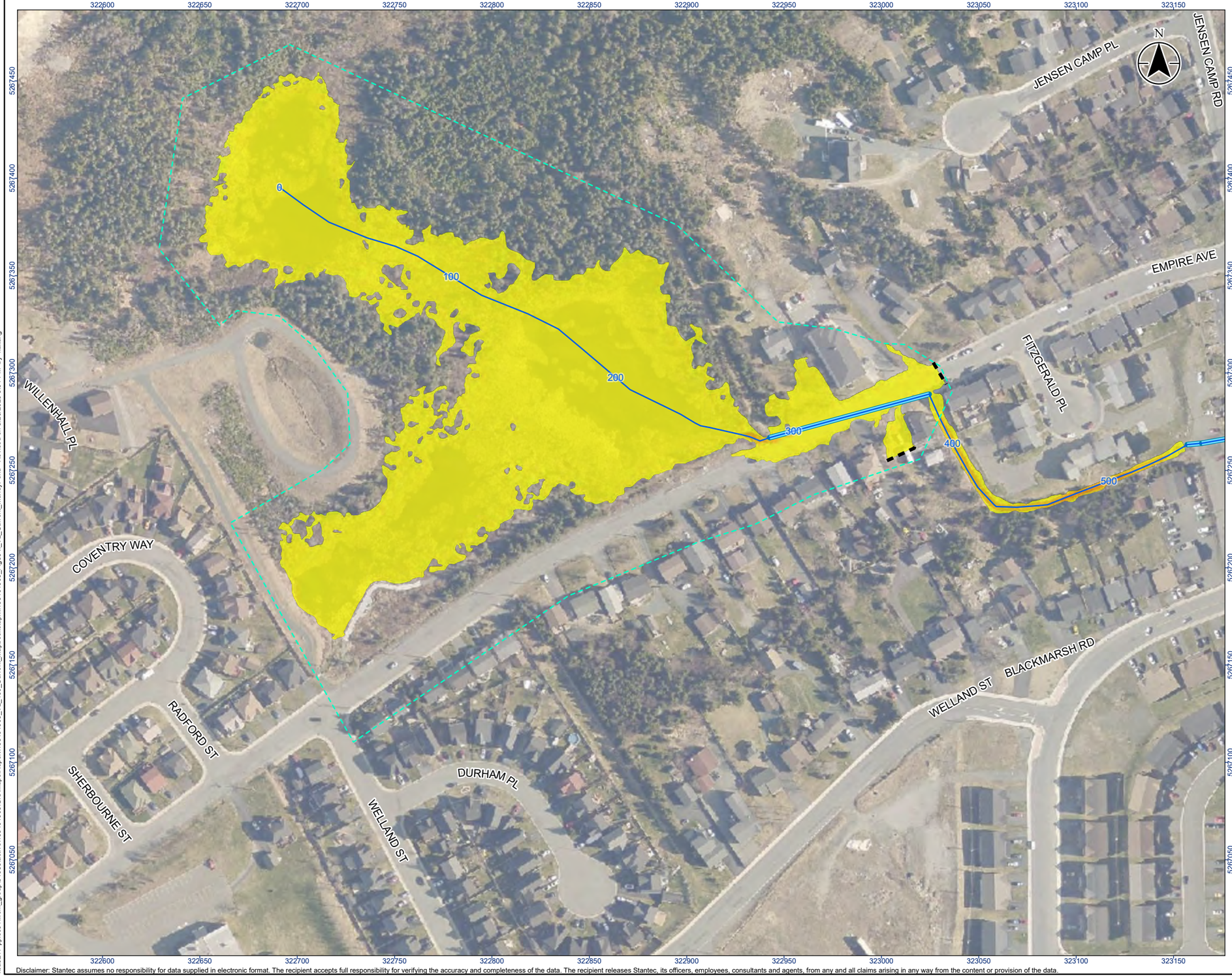

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

1. Coordinate System: NAD 1983 MTM zone 1
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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-1

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook
Sheet 1 of 6

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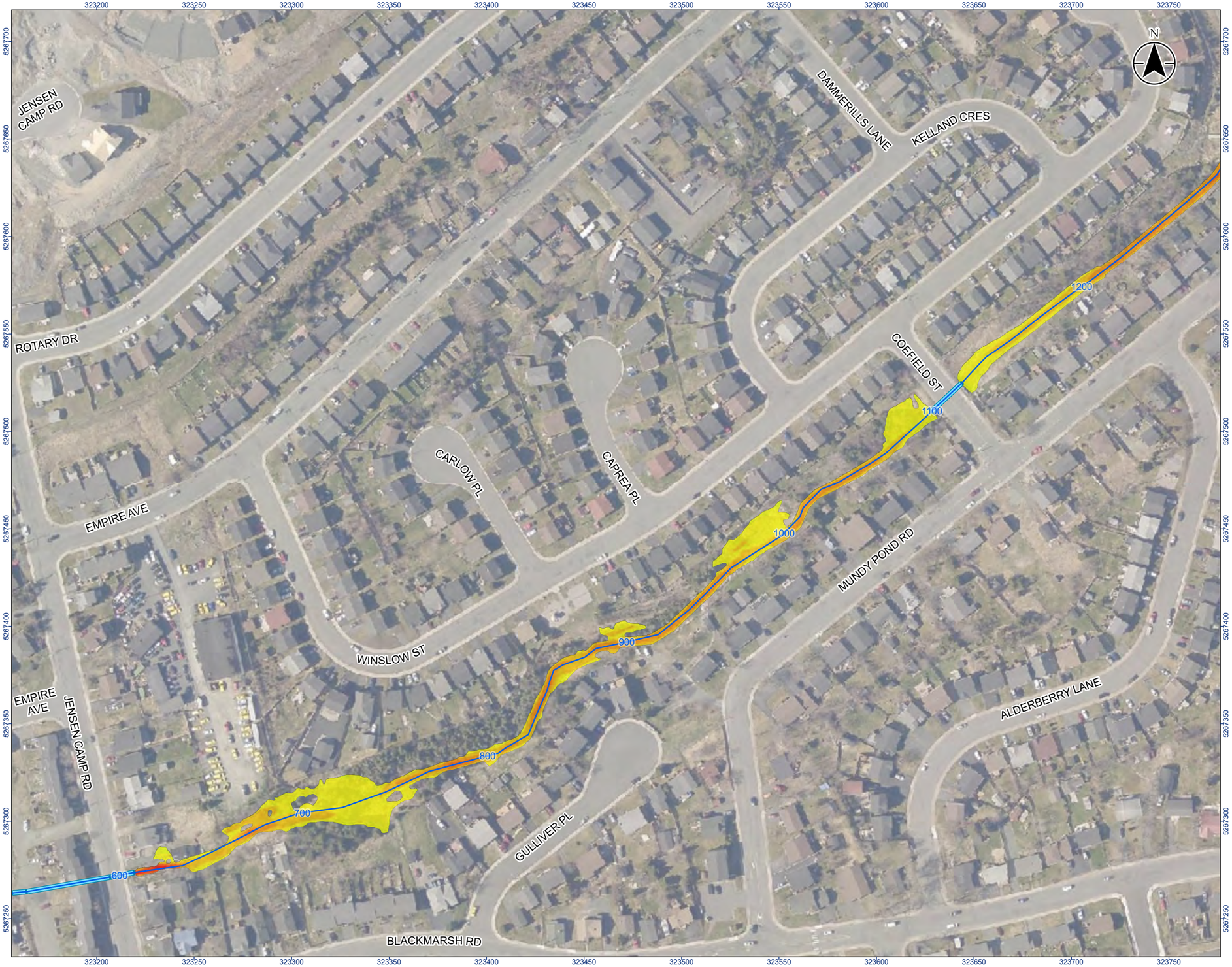

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-2

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook
Sheet 2 of 6

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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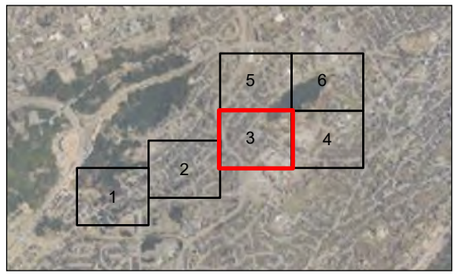

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-3

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook
Sheet 3 of 6

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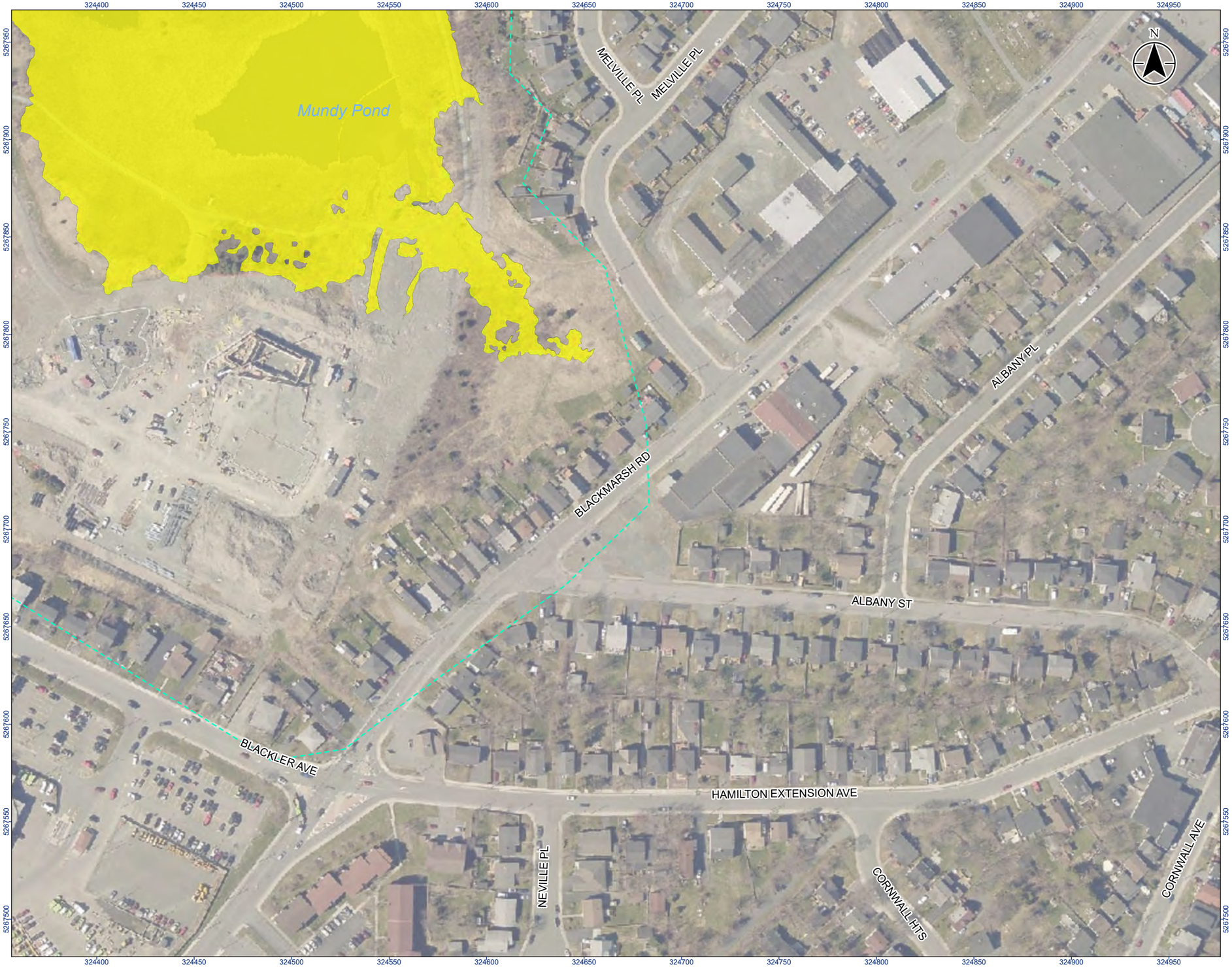

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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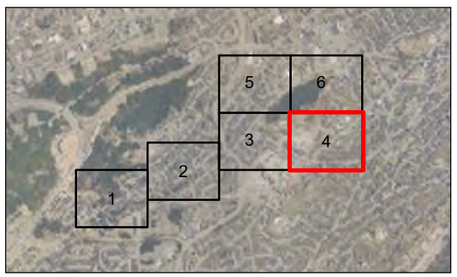

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-4

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook
Sheet 4 of 6

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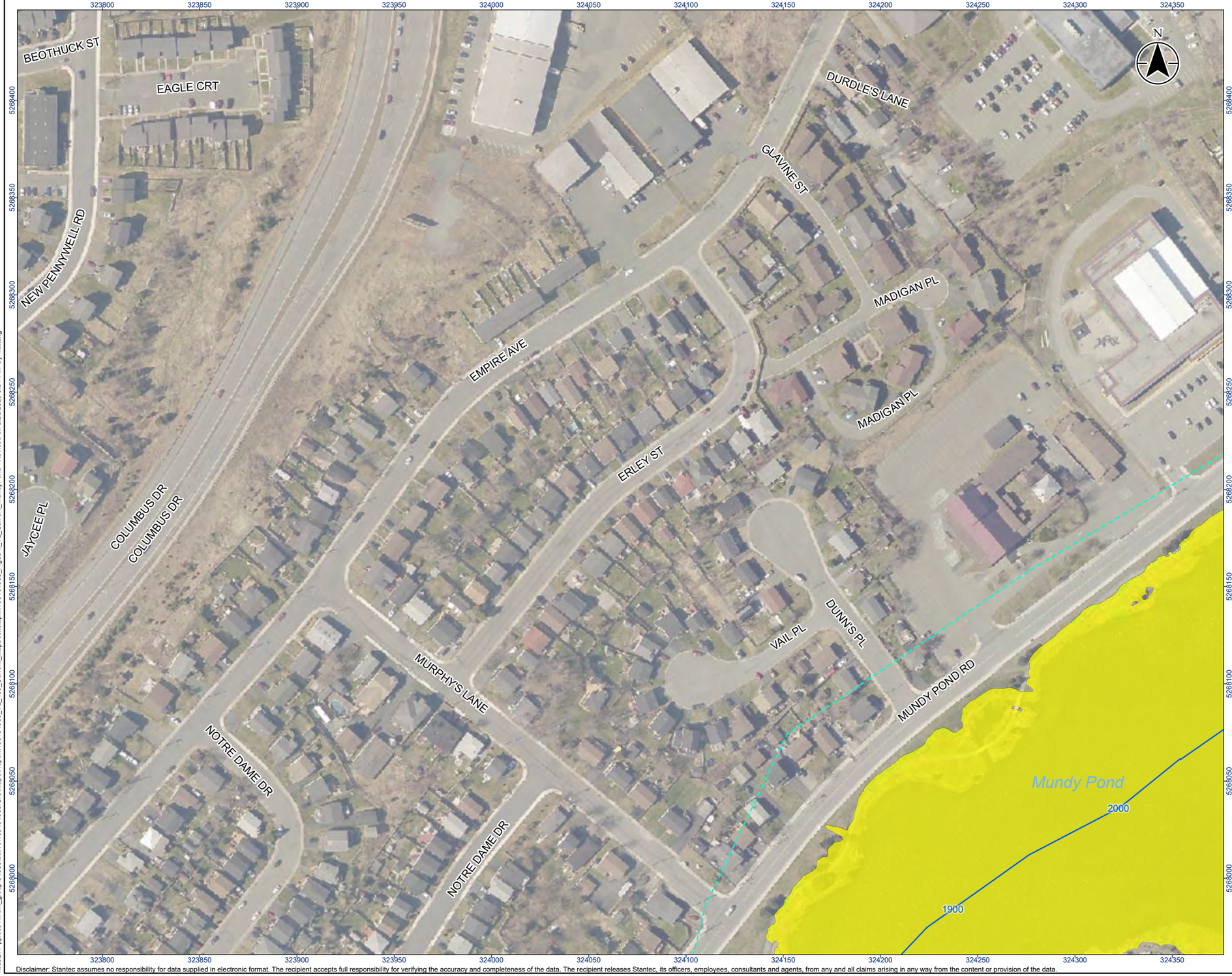

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-5

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook
Sheet 5 of 6

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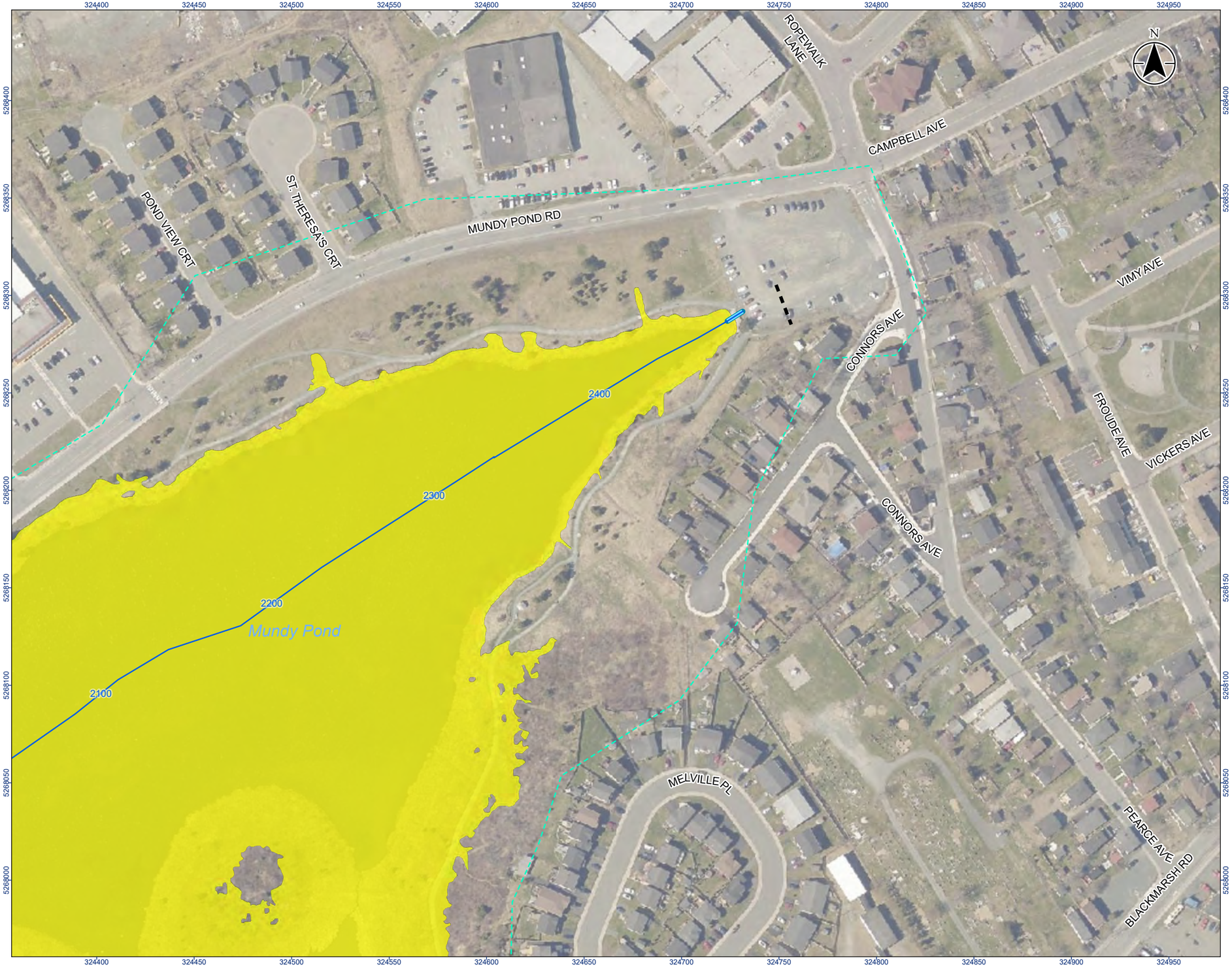

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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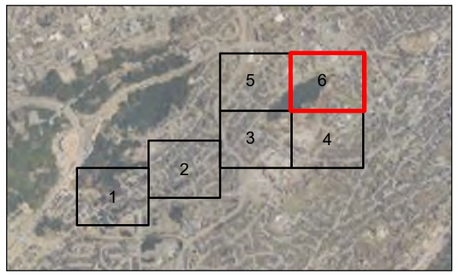

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
53-6

Title
Current Climate Condition
100-Year Velocity - Mundy Pond Brook
Sheet 6 of 6

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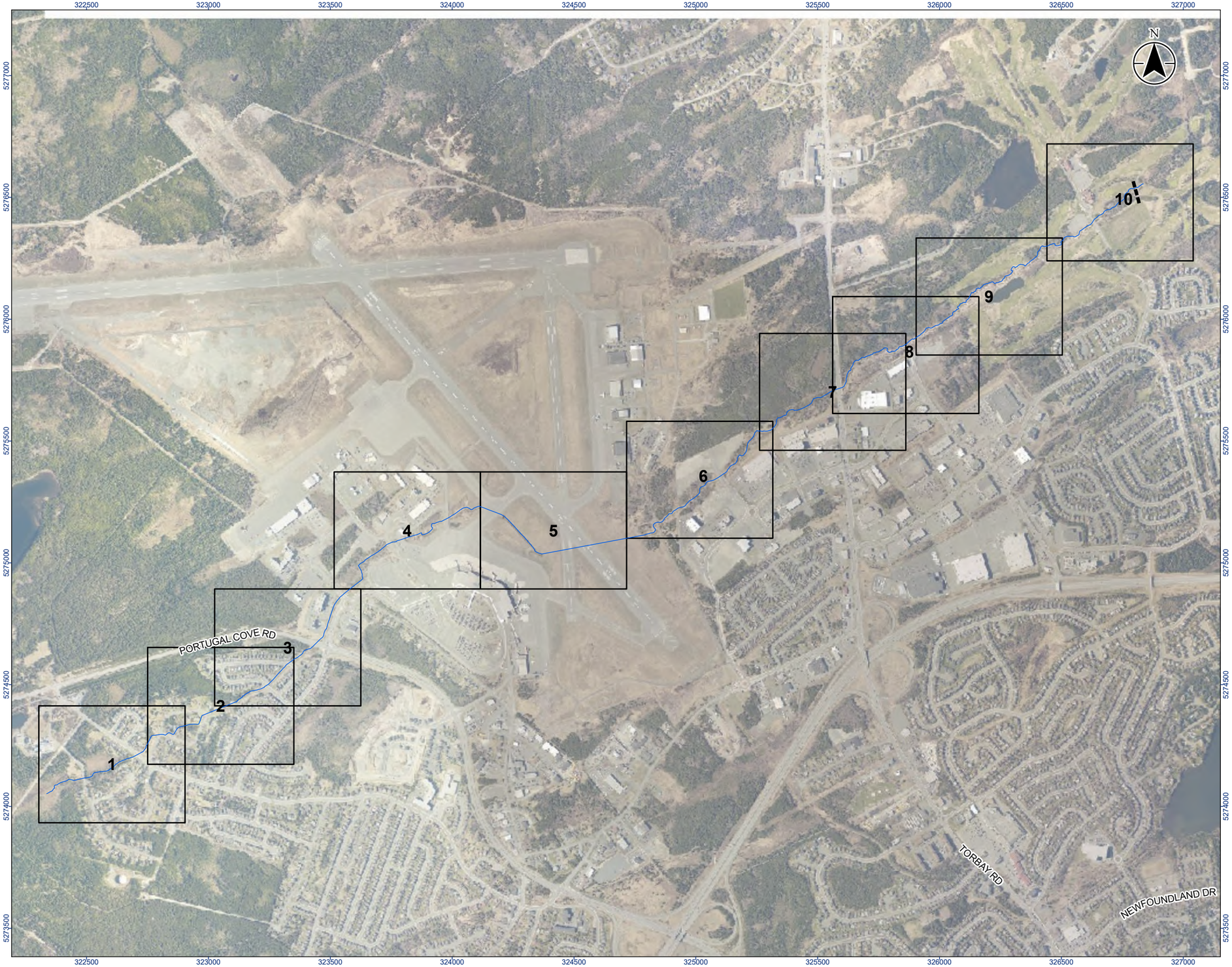

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 310 620 m

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Notes

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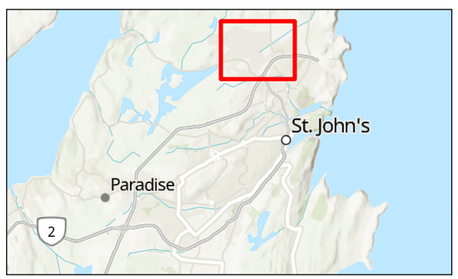

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-0

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Overview Map

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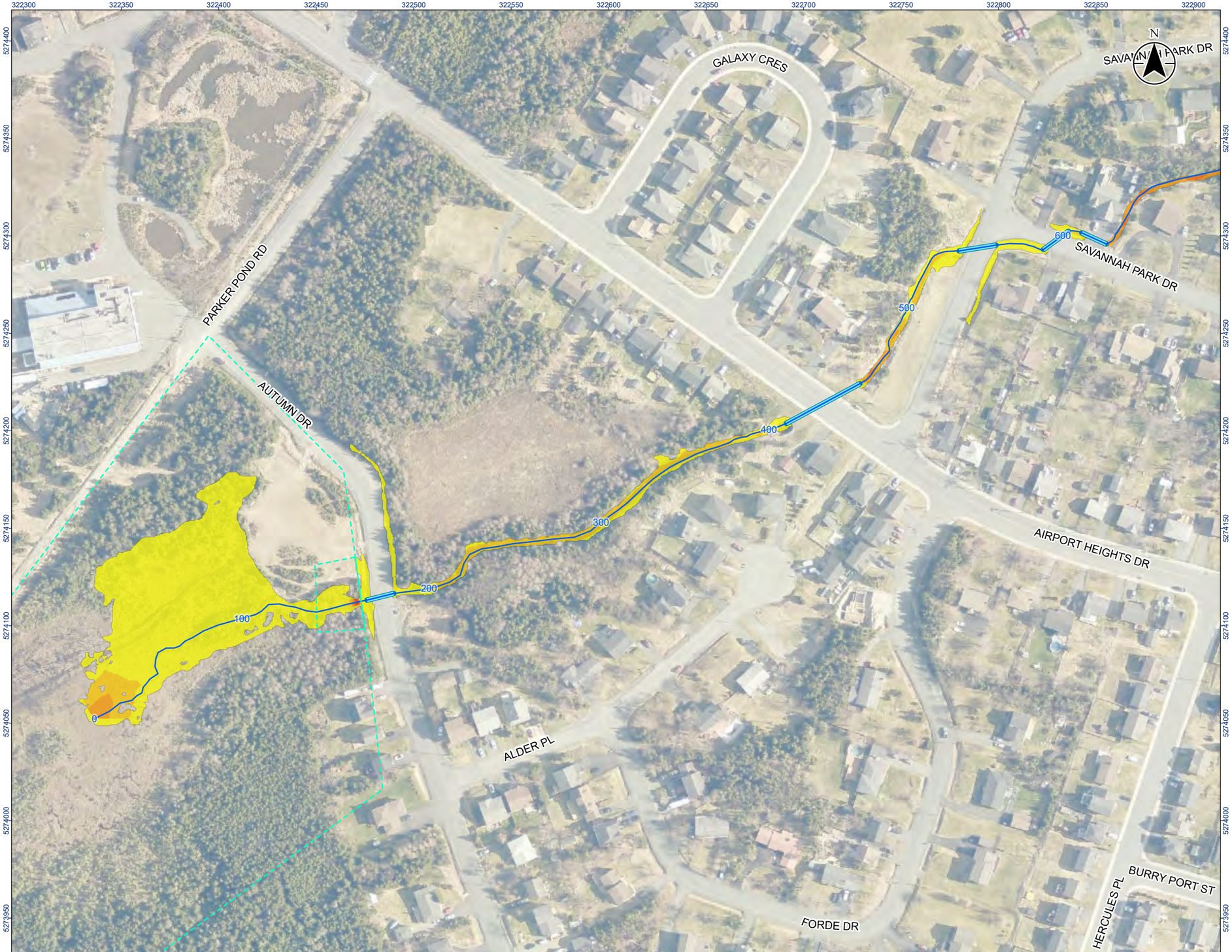

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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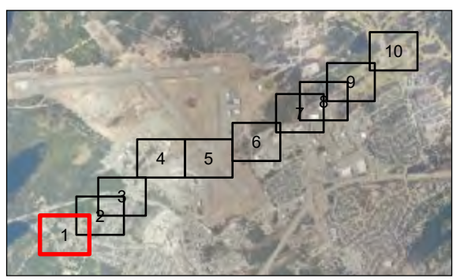

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-1

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 1 of 10

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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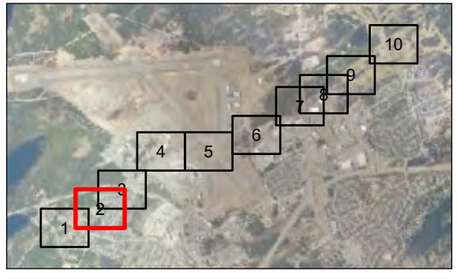

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-2

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 2 of 10

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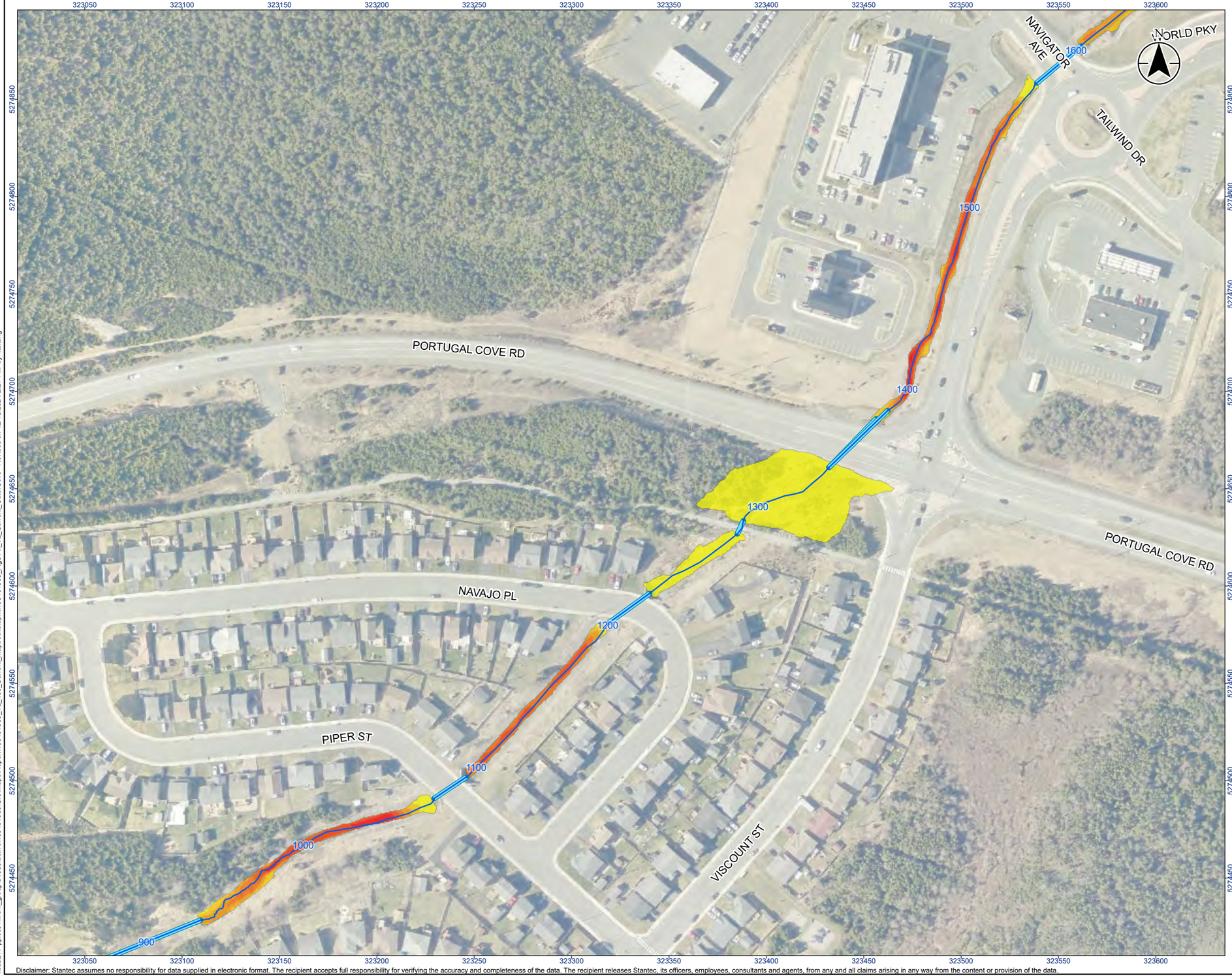

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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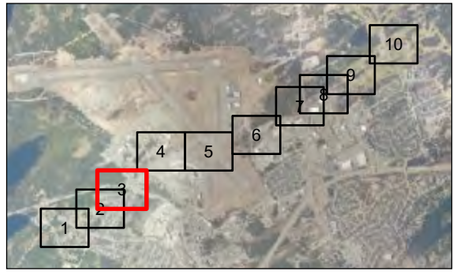

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-3

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 3 of 10

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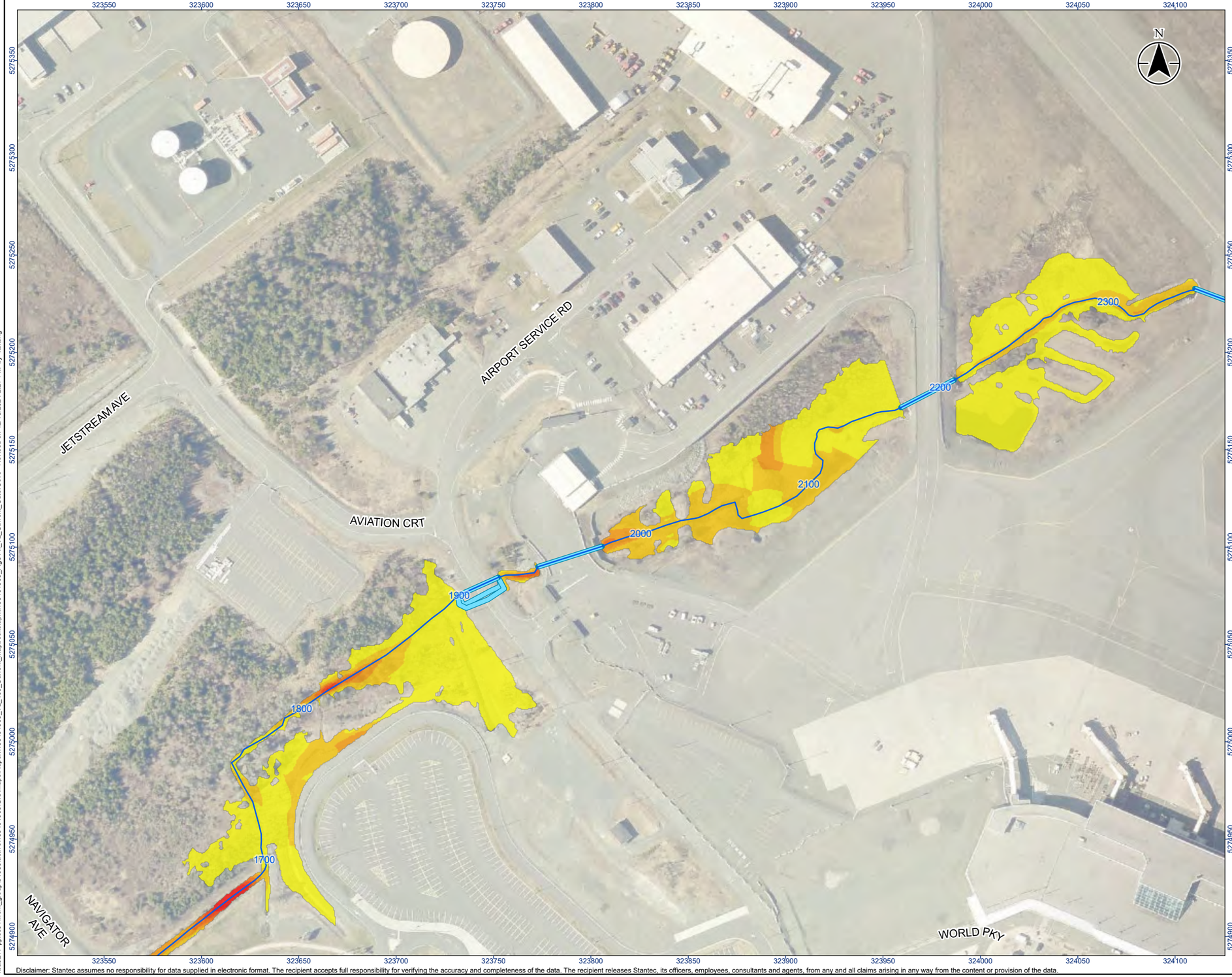

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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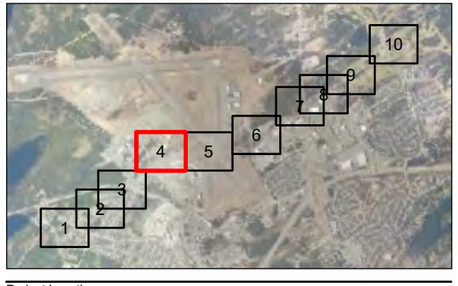

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-4

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 4 of 10

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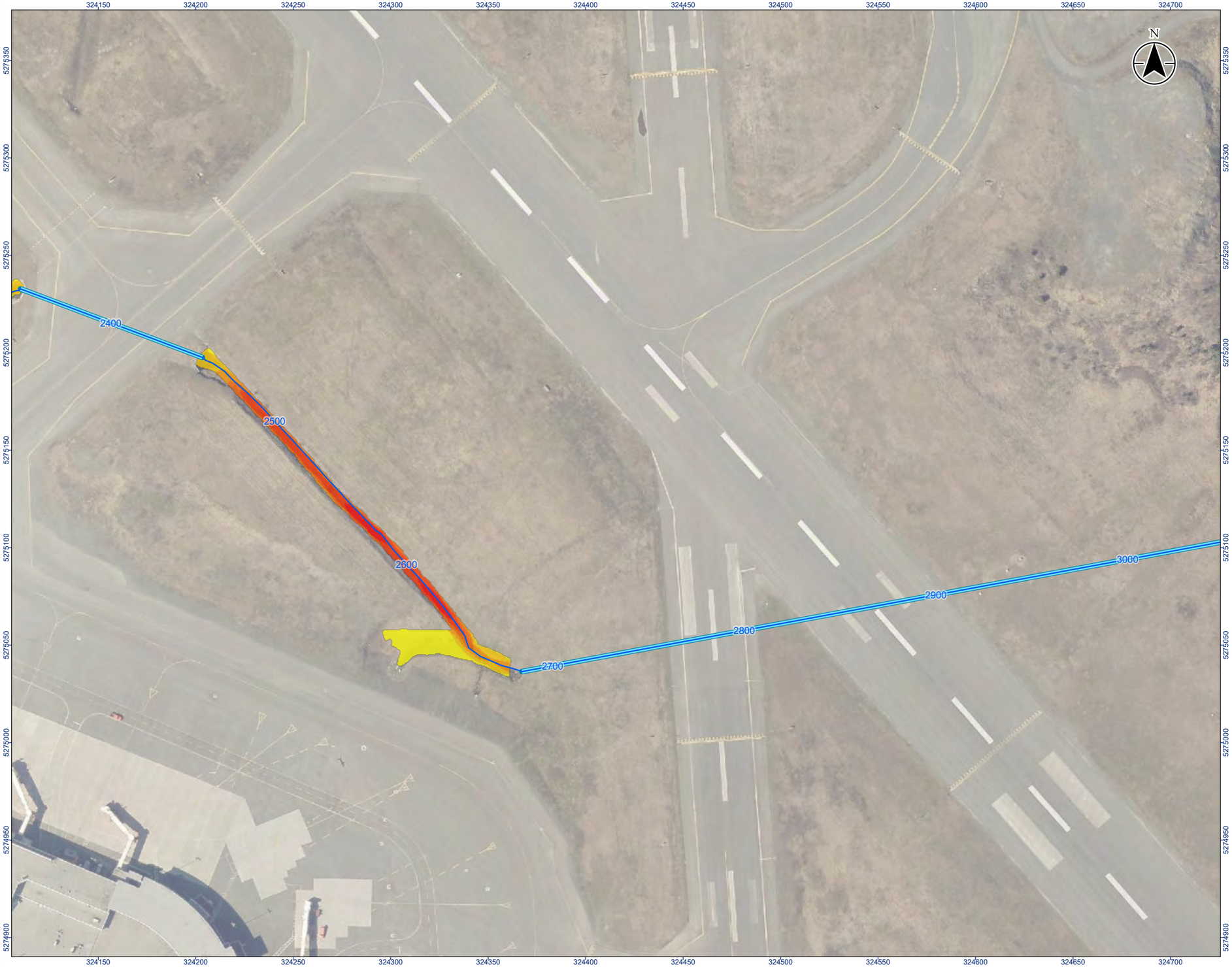

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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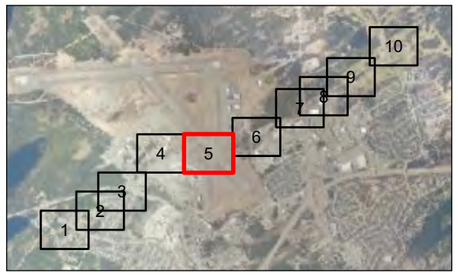

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-5

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 5 of 10

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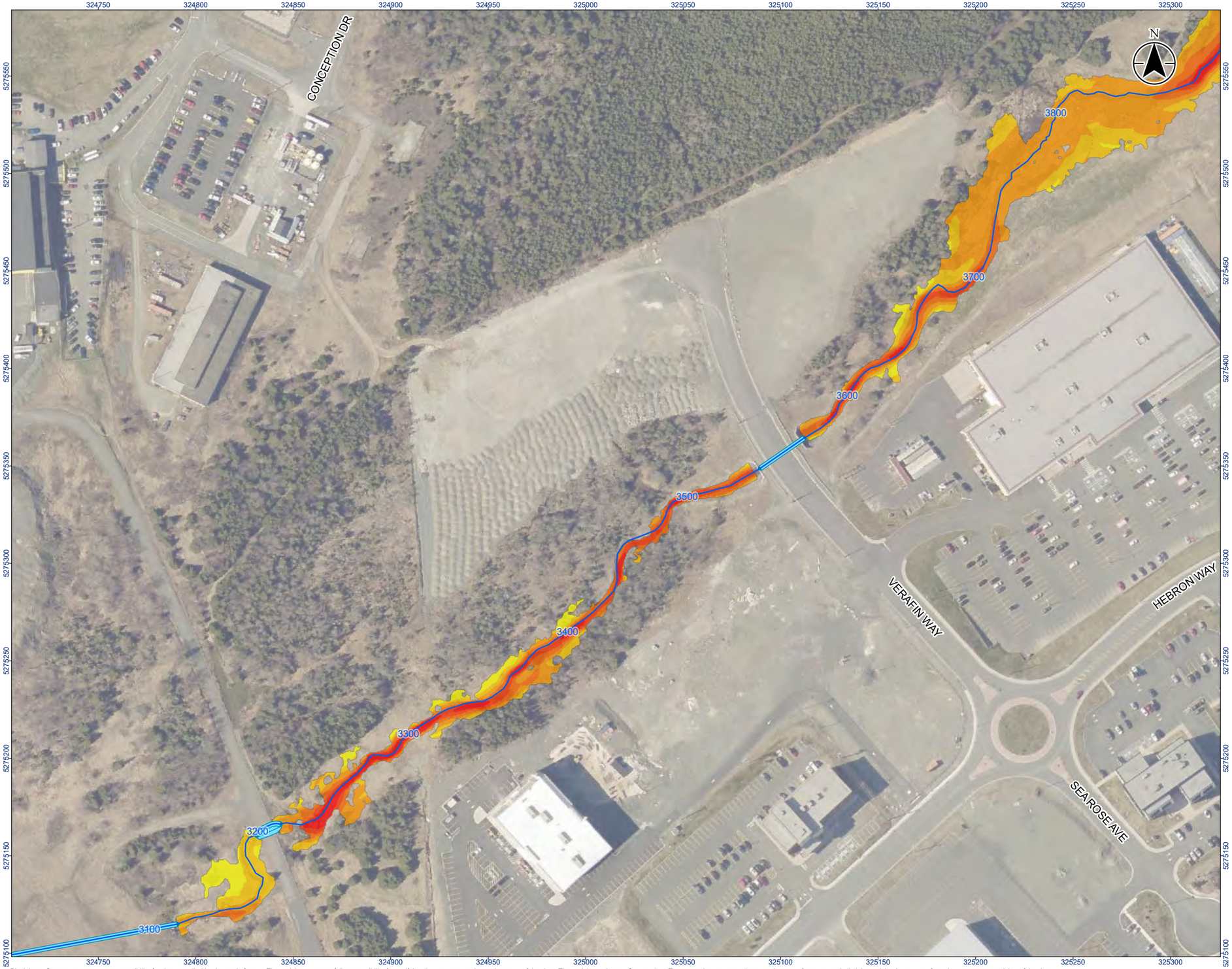

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-6

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 6 of 10

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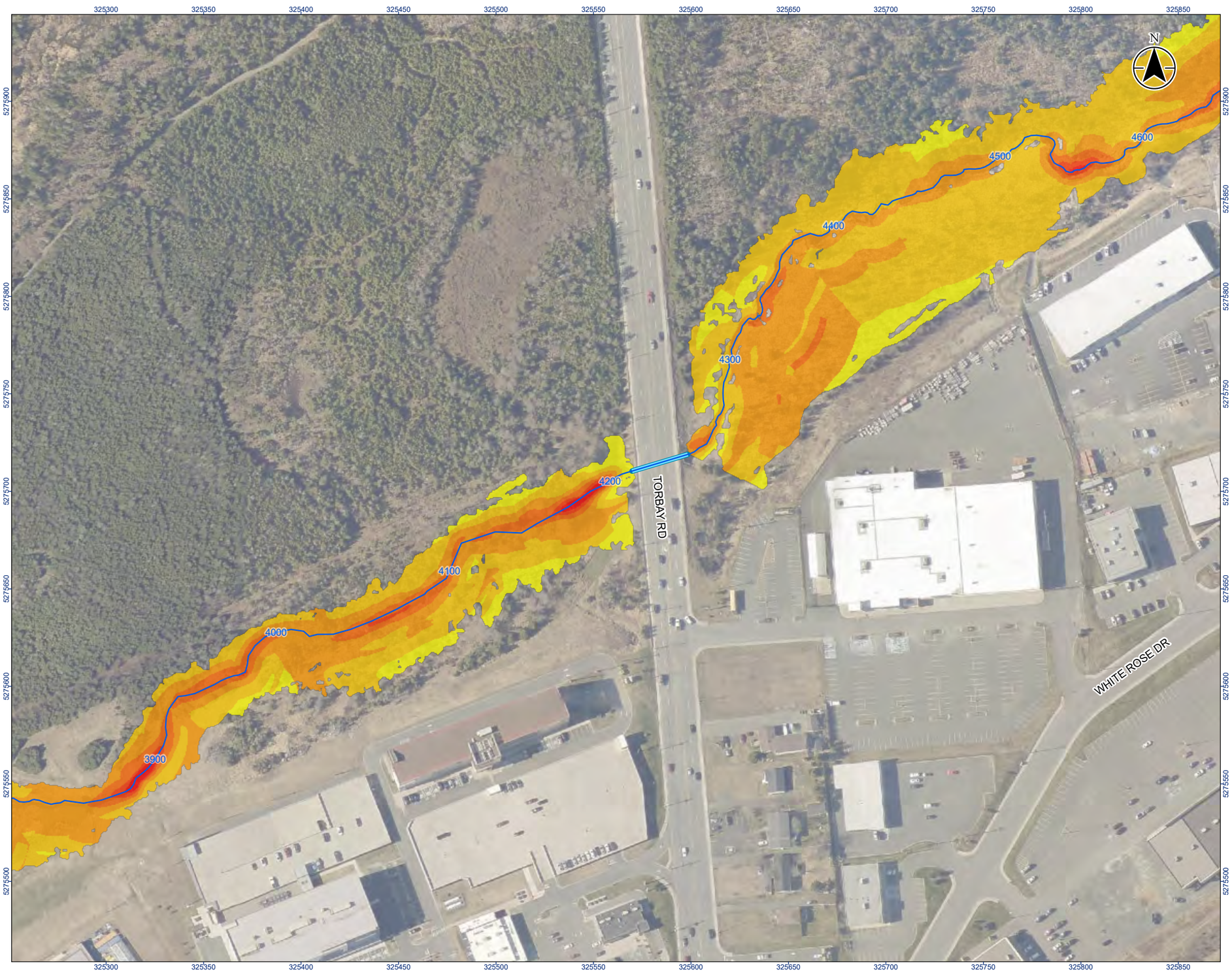

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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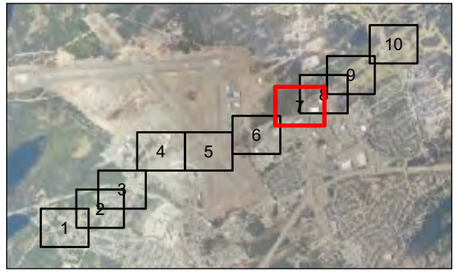

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-7

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 7 of 10

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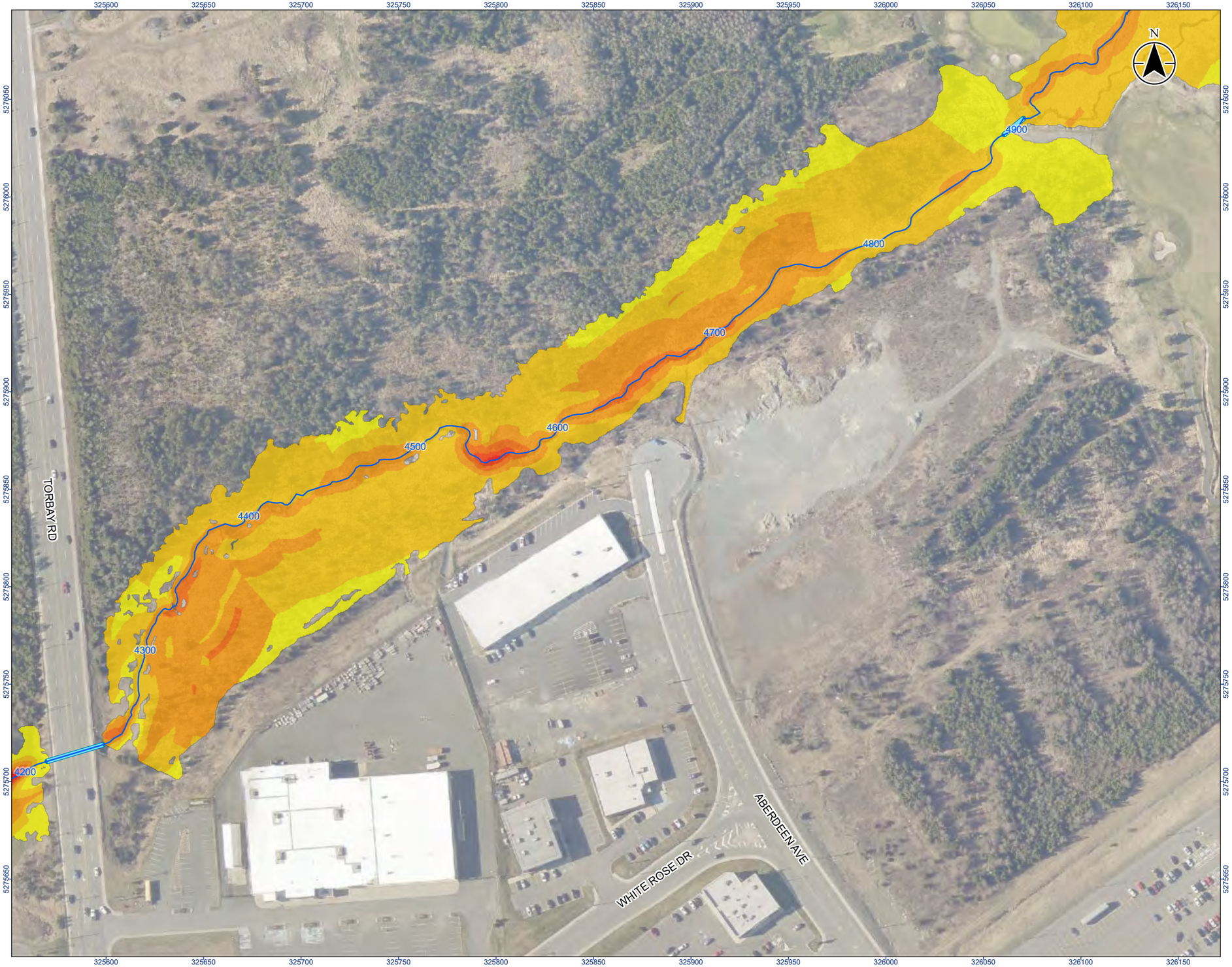

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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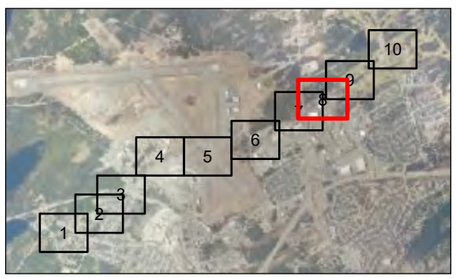

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-8

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 8 of 10

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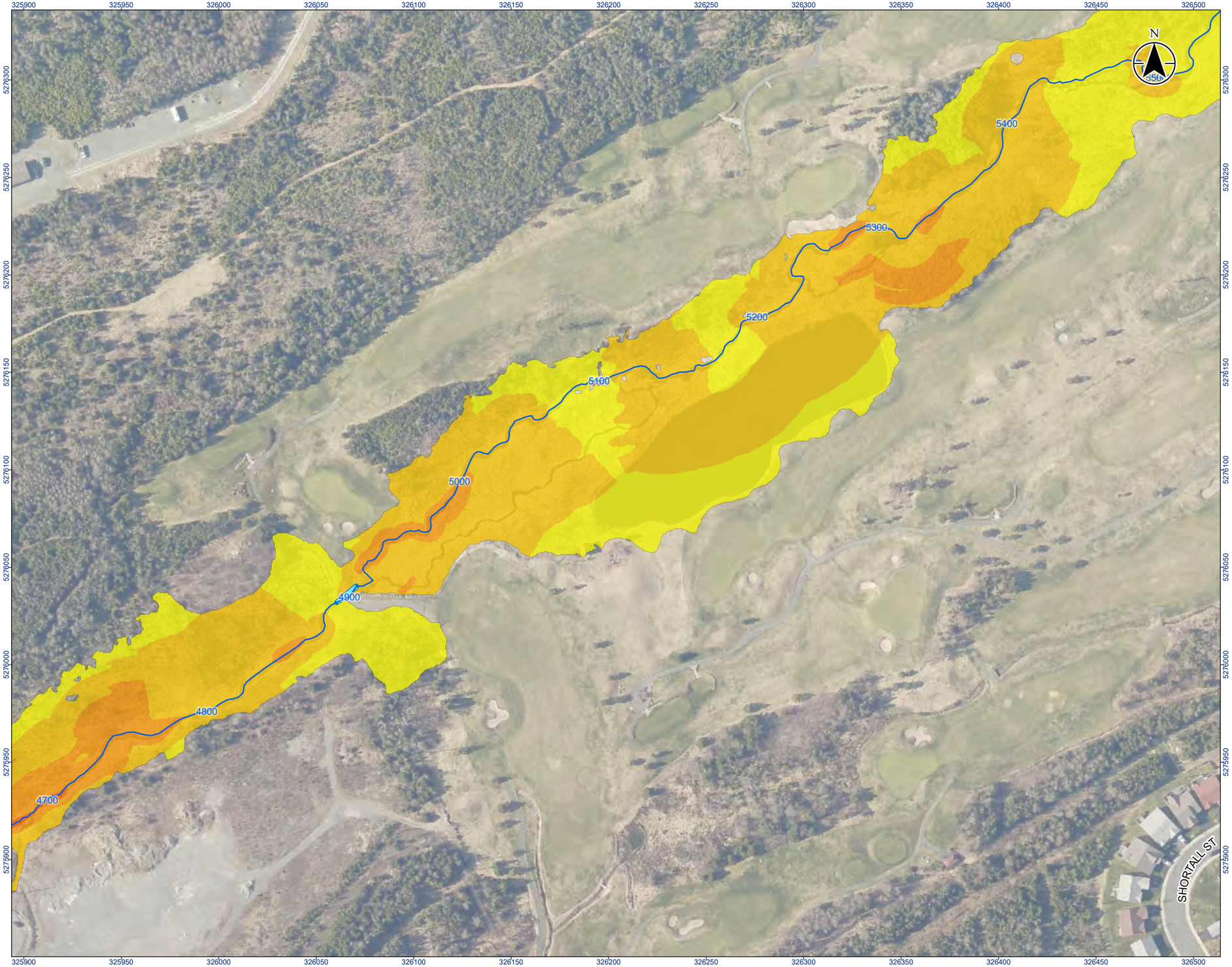

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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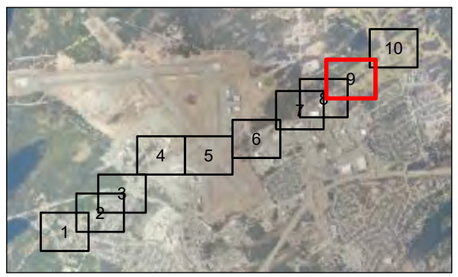

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-9

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 9 of 10

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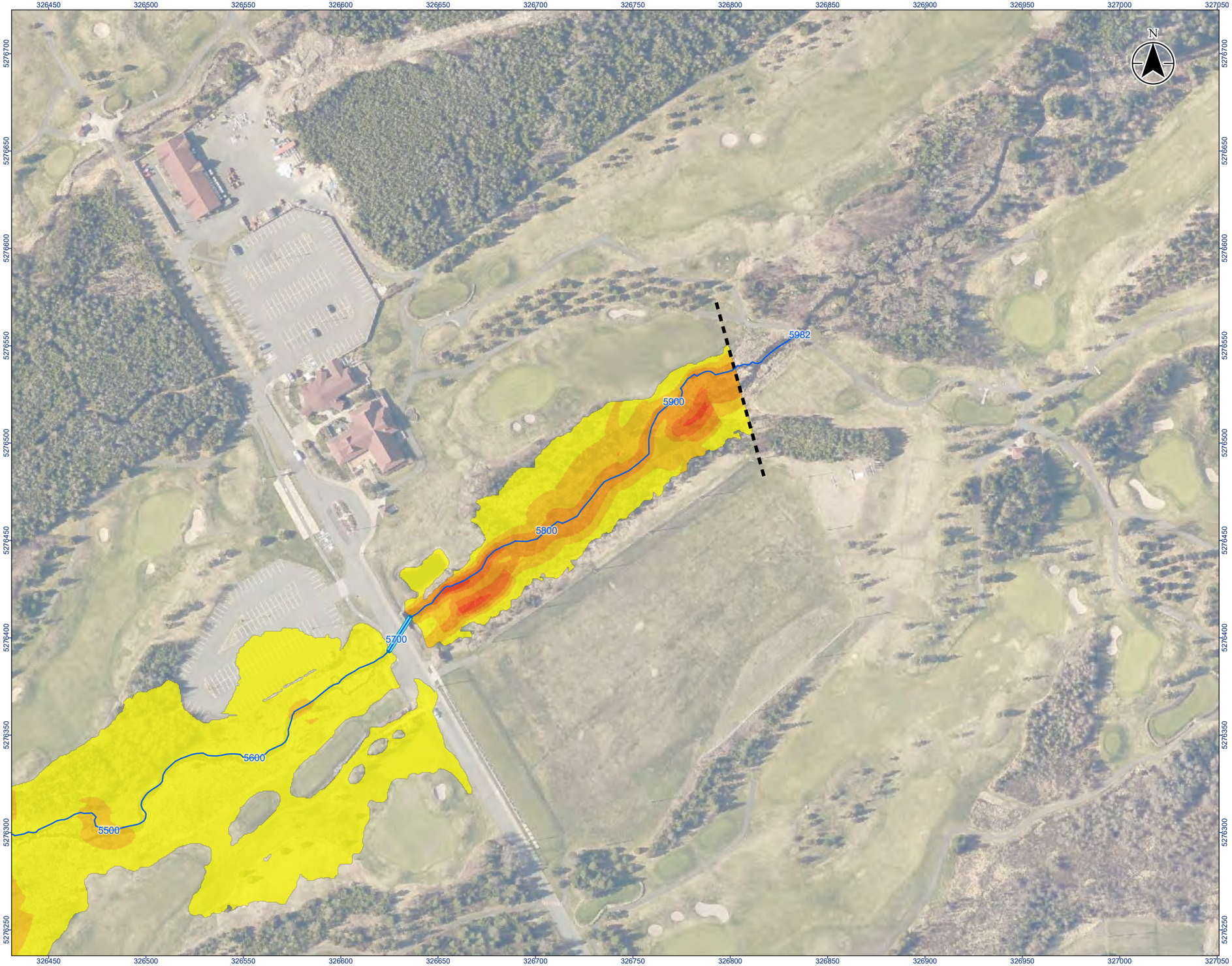

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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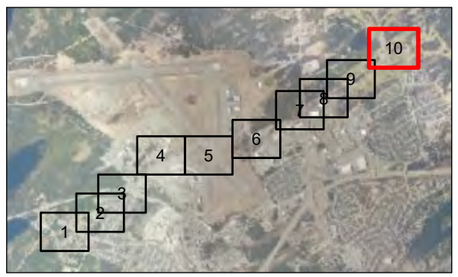

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
54-10

Title
Current Climate Condition
100-Year Velocity - Outer Cove Brook
Sheet 10 of 10

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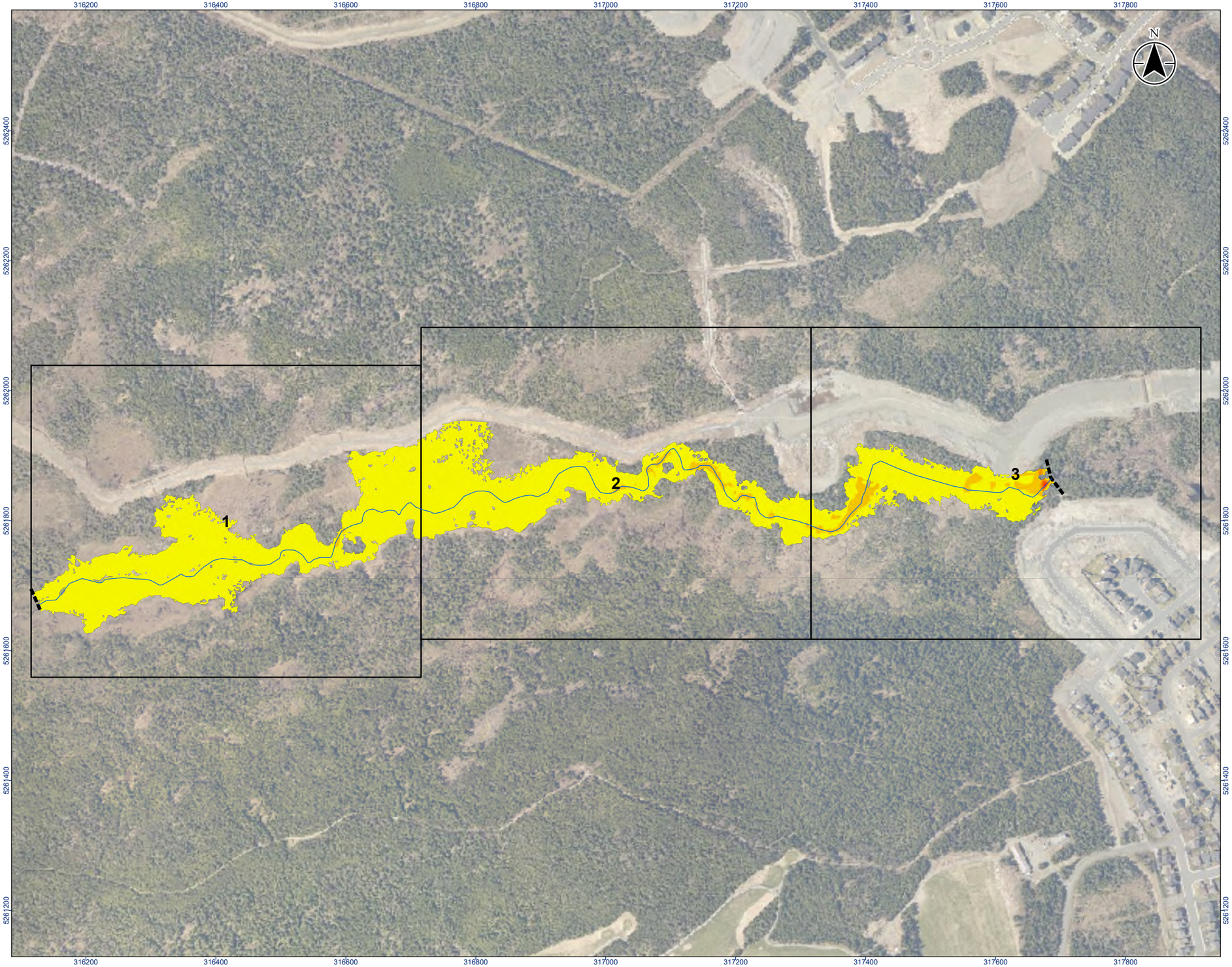

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 110 220 m

1:6,000 (At original document size of 11x17)

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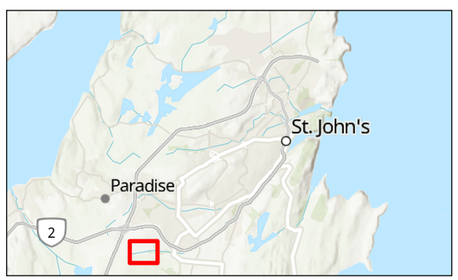

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
55-0

Title
Current Climate Condition 100-Year Velocity - South Brook Overview Map

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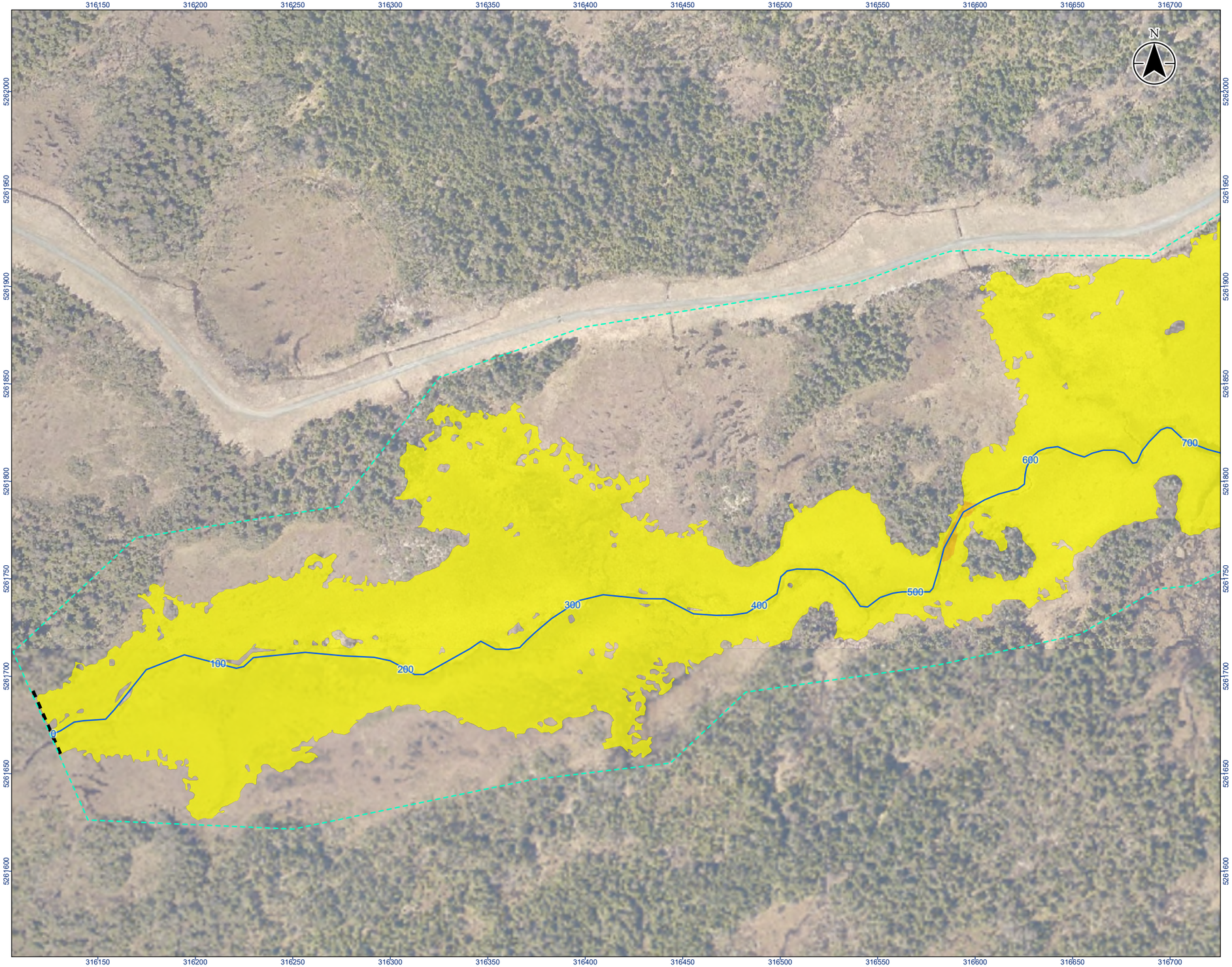

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
55-1

Title
Current Climate Condition
100-Year Velocity - South Brook
Sheet 1 of 3

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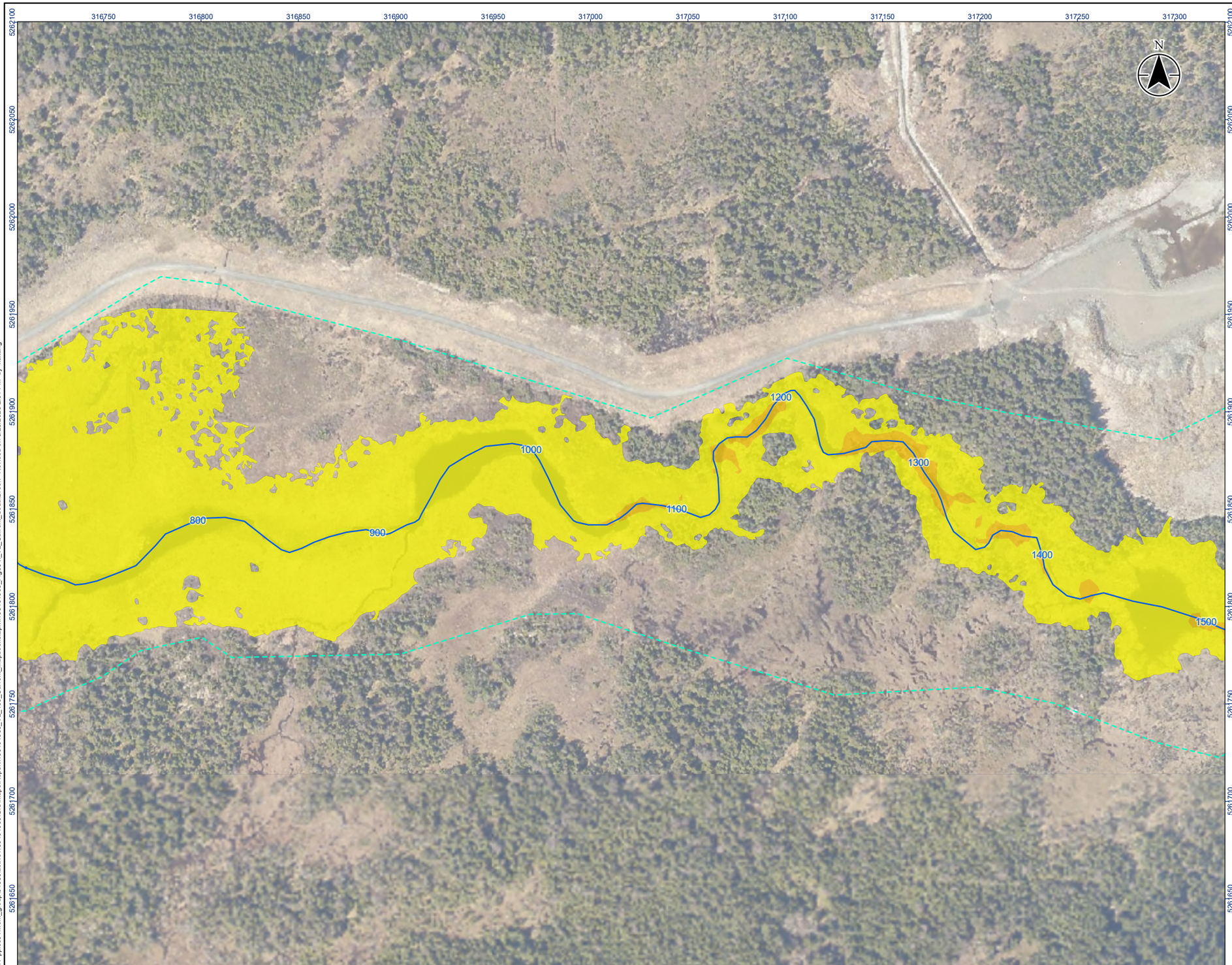

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
55-2

Title
Current Climate Condition
100-Year Velocity - South Brook
Sheet 2 of 3

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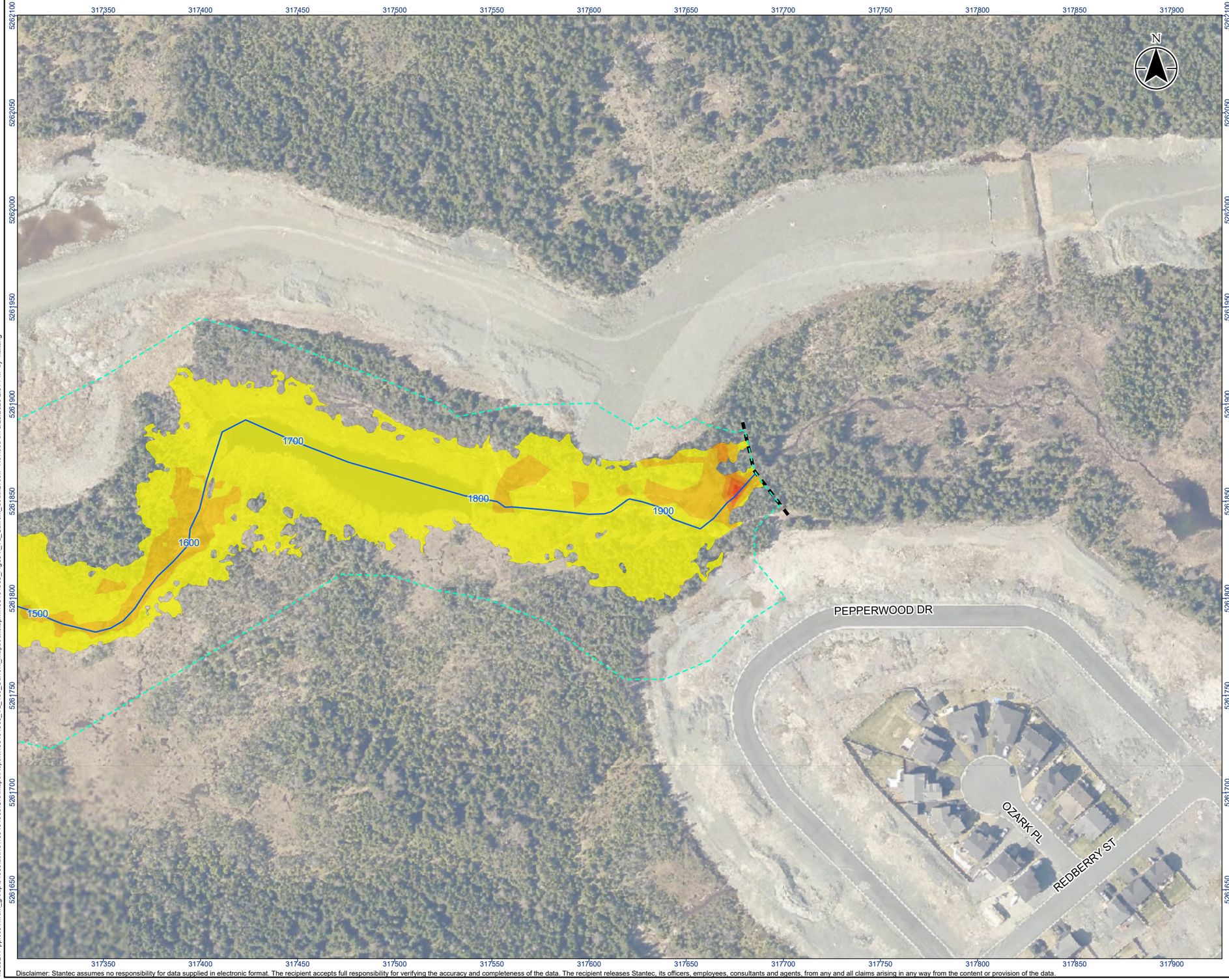

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
55-3

Title
Current Climate Condition
100-Year Velocity - South Brook
Sheet 3 of 3

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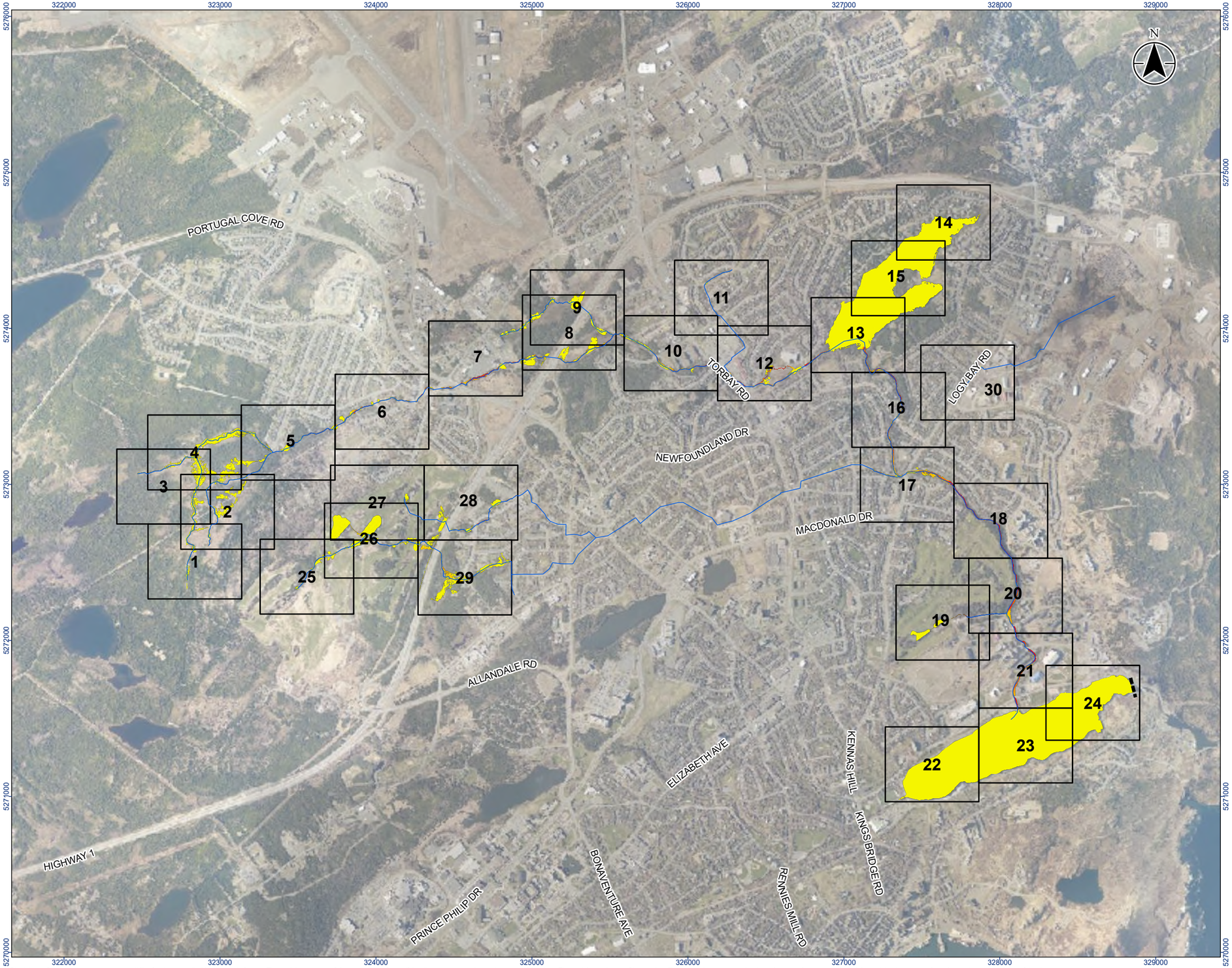

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 490 980 m

1:25,000 (At original document size of 11x17)

Notes

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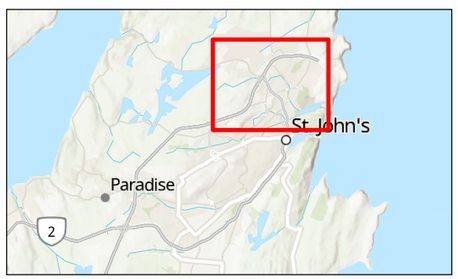

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-0

Title
Current Climate Condition
100-Year Velocity - Virginia River
Overview Map

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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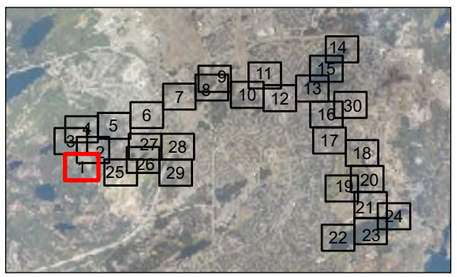

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-1

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 1 of 30

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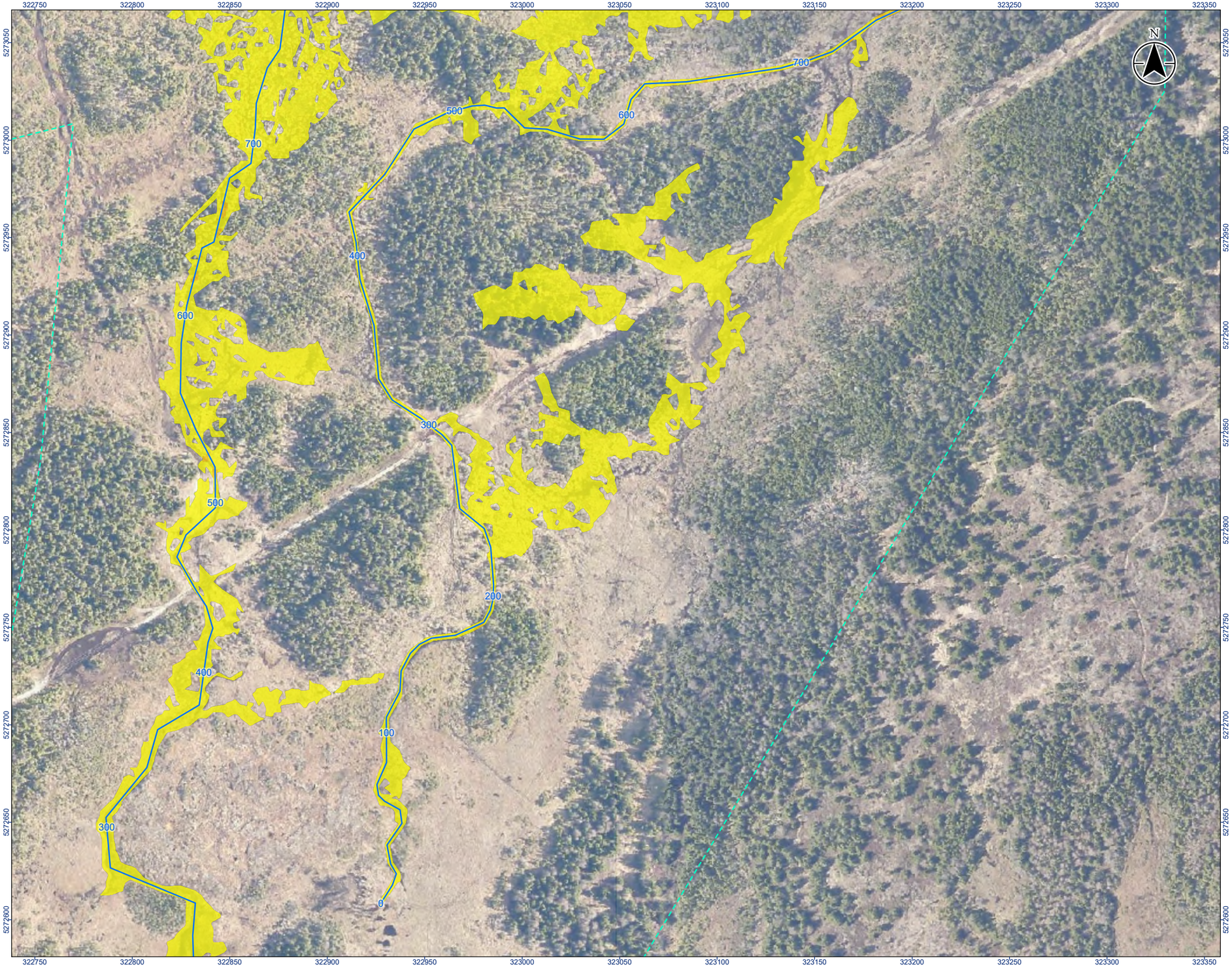

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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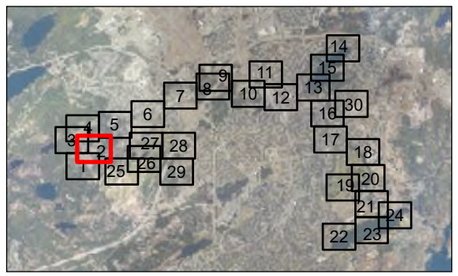

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-2

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 2 of 30

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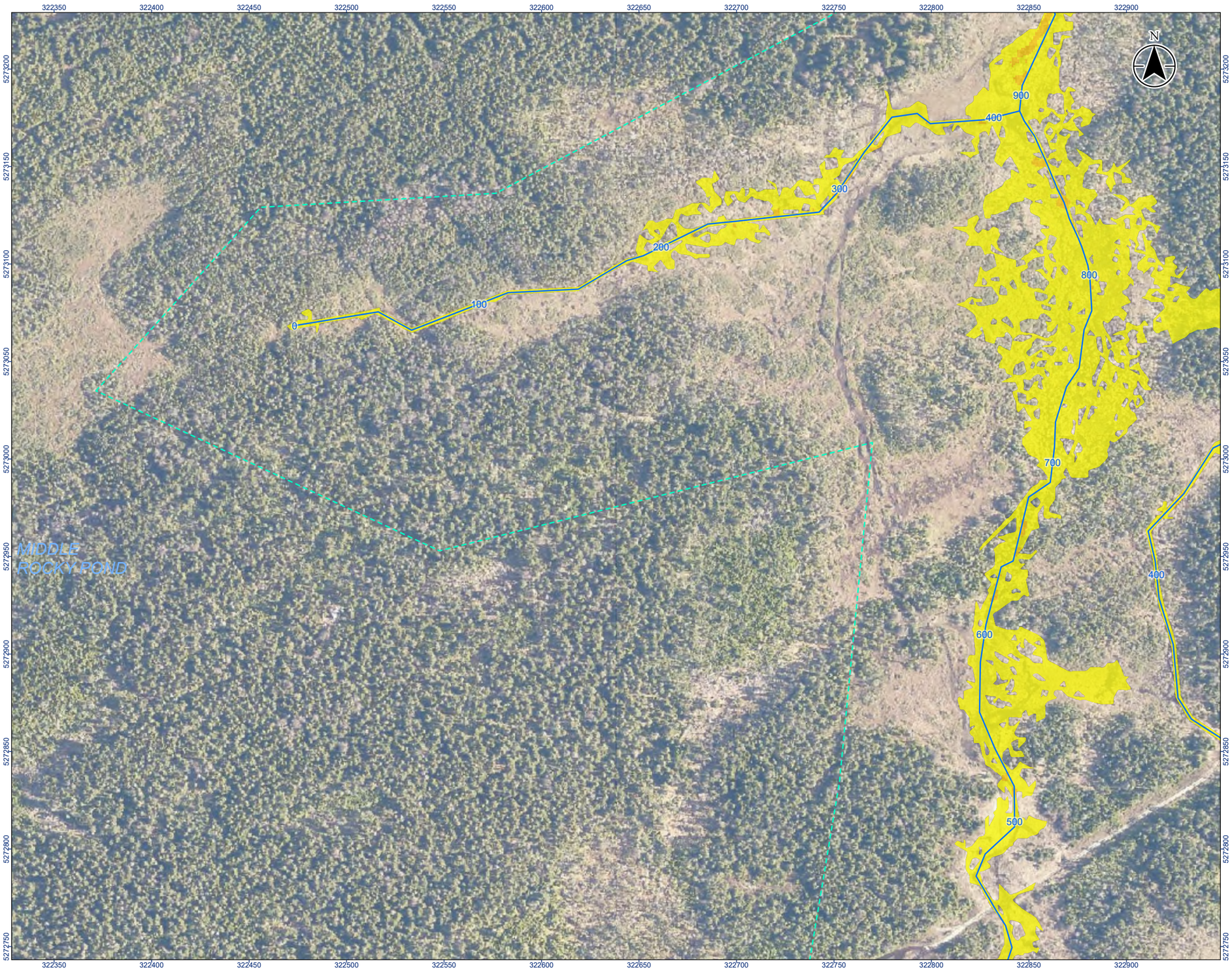

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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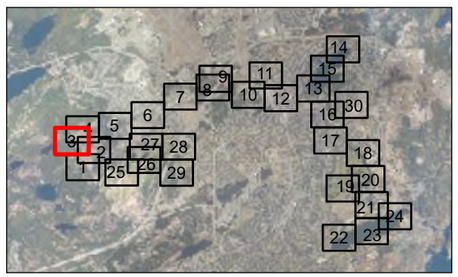

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-3

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 3 of 30

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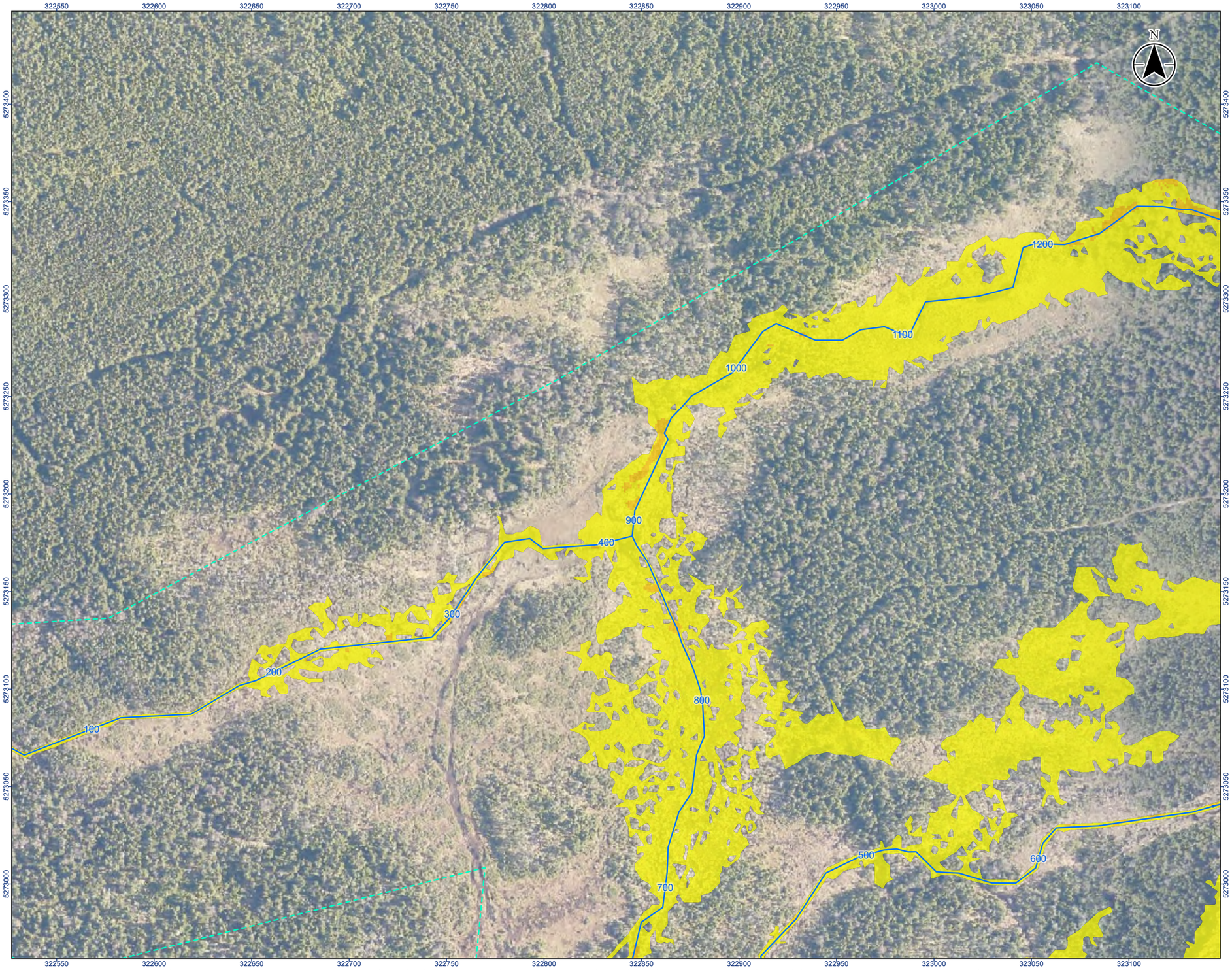

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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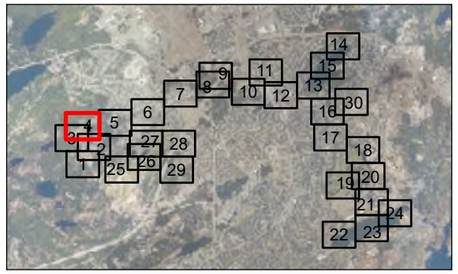

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-4

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 4 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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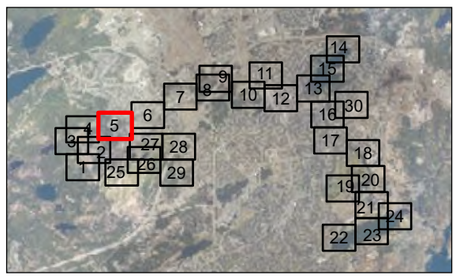

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-5

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 5 of 30

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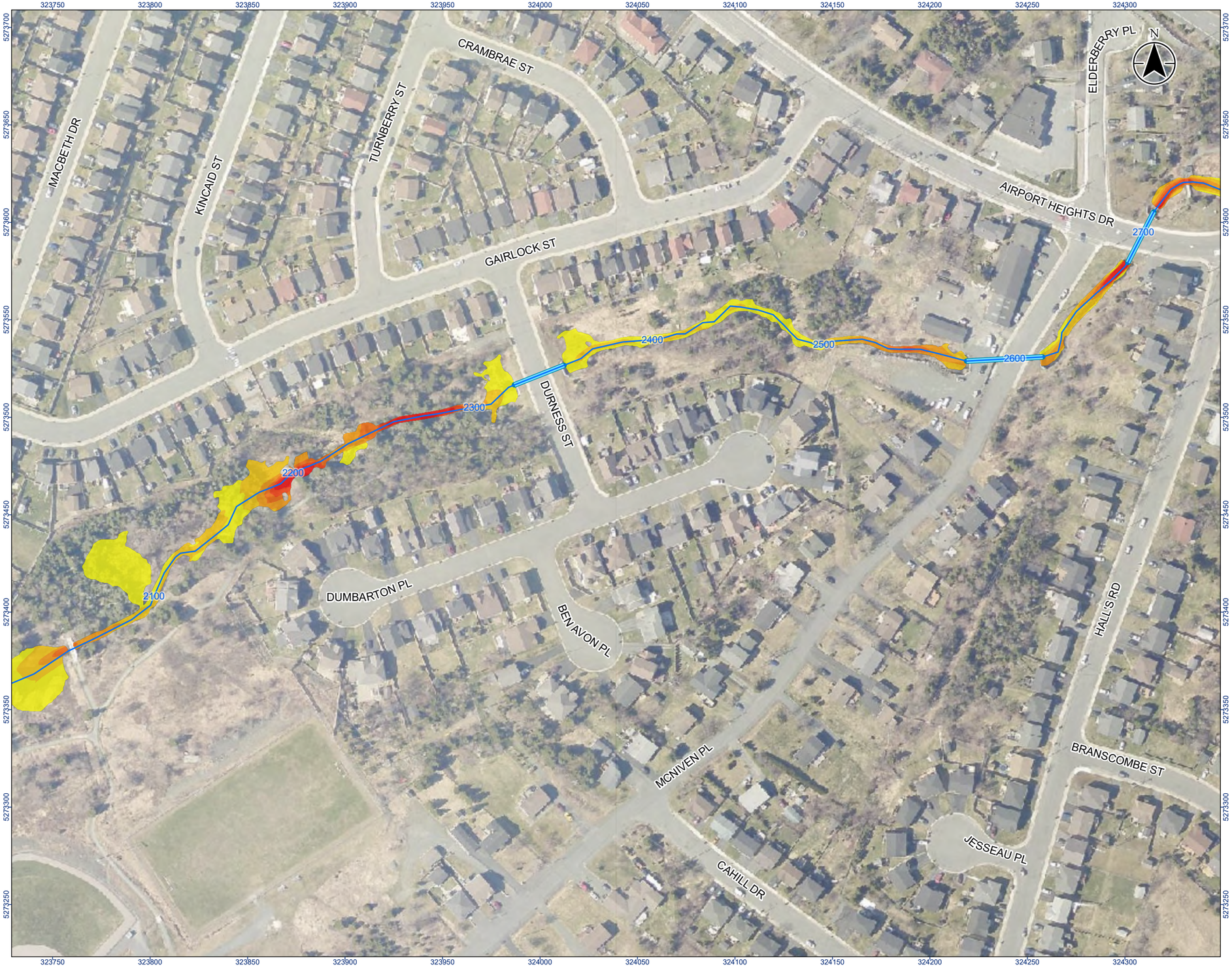

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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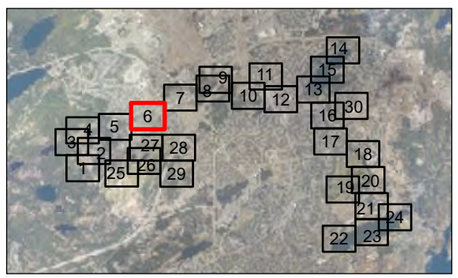

Project Location
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-6

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 6 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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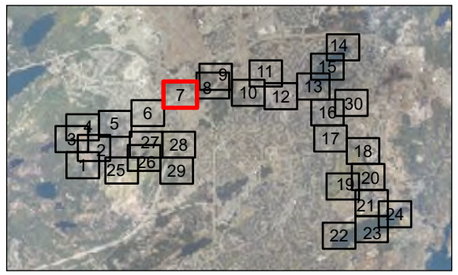

Project Location
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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-7

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 7 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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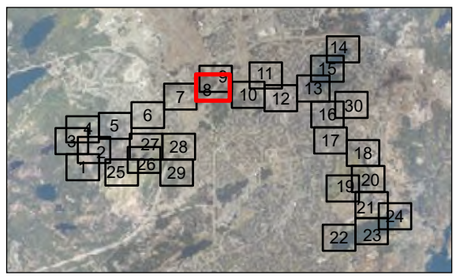

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-8

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 8 of 30

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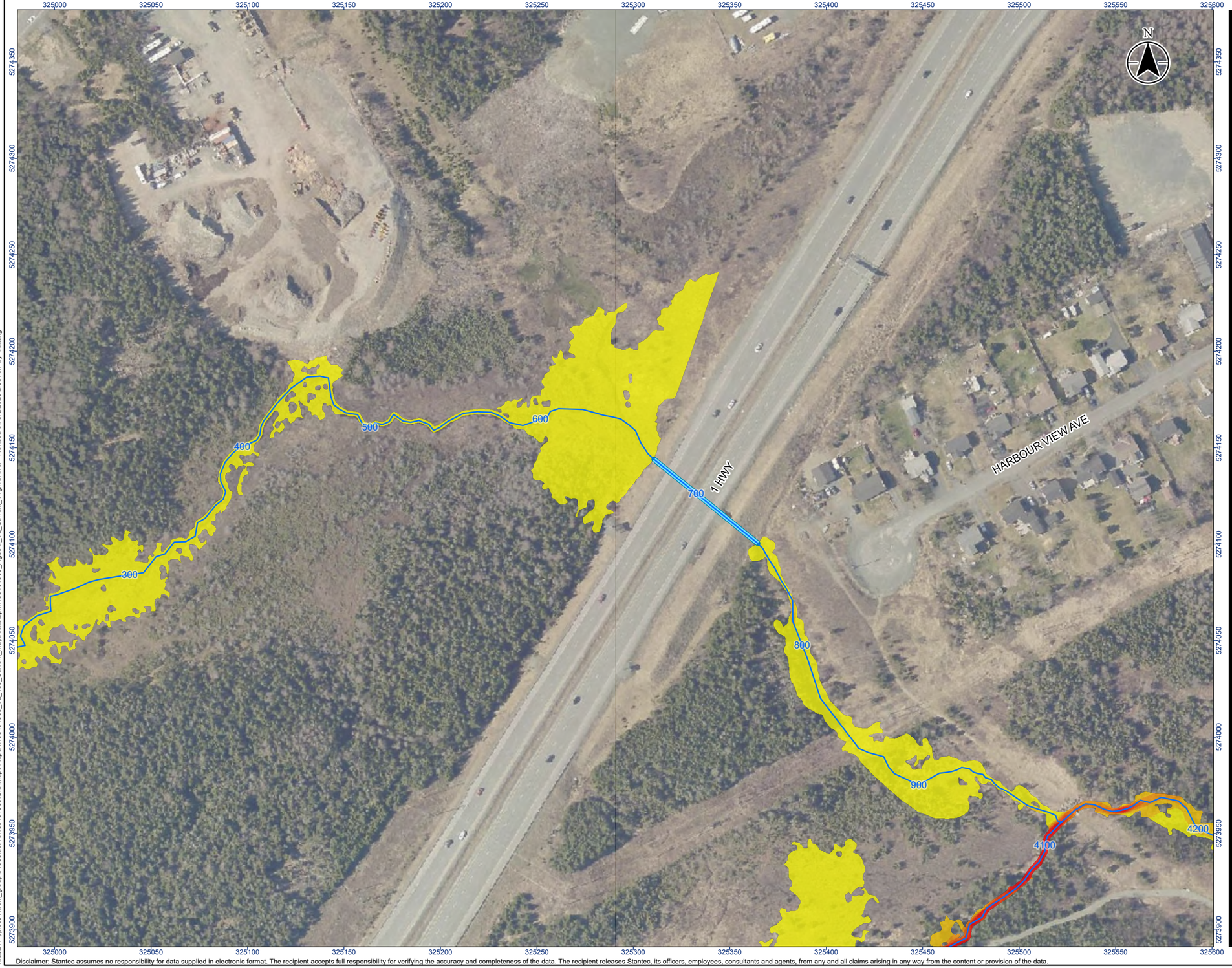

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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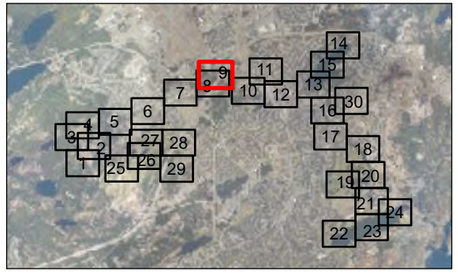

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-9

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 9 of 30

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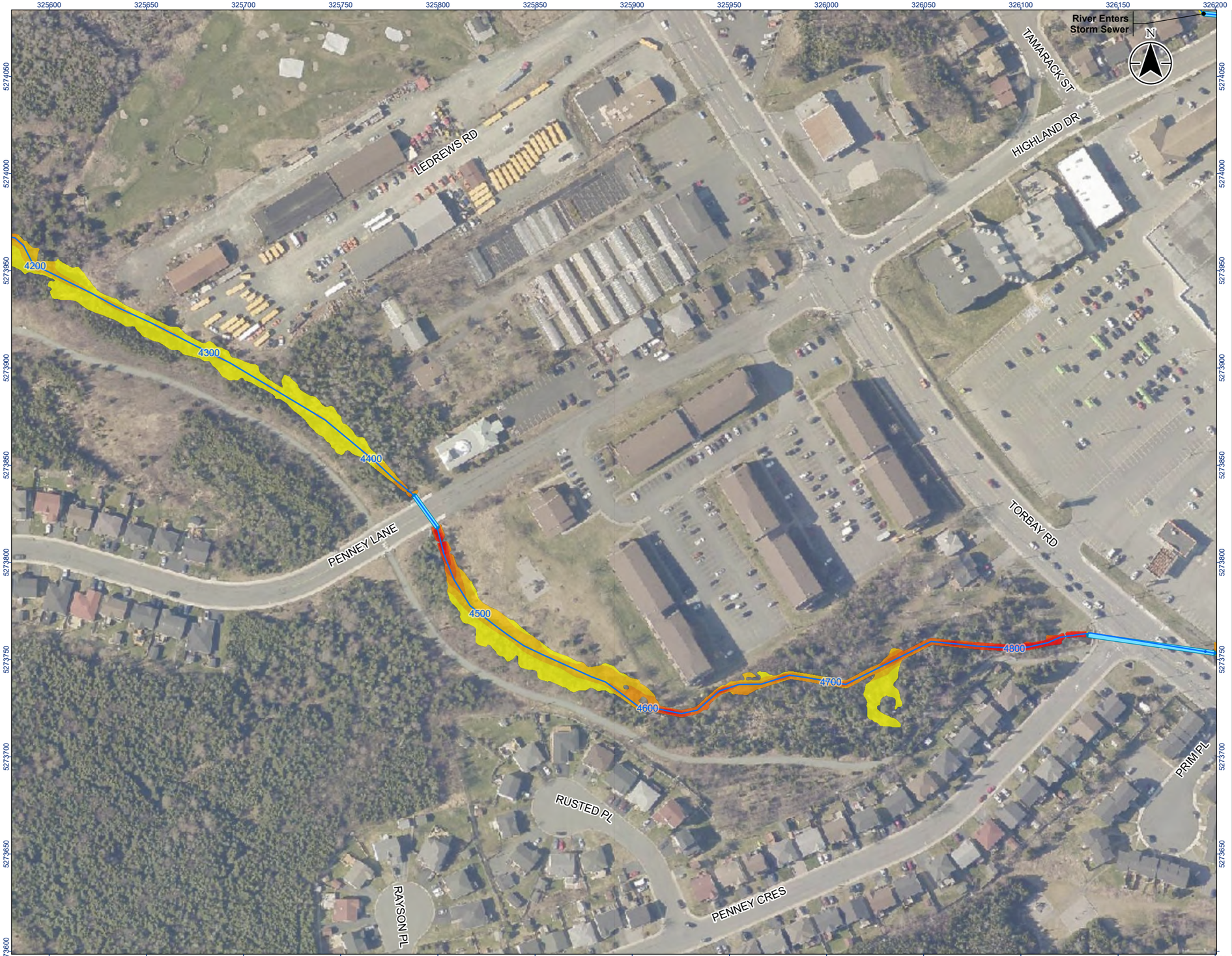

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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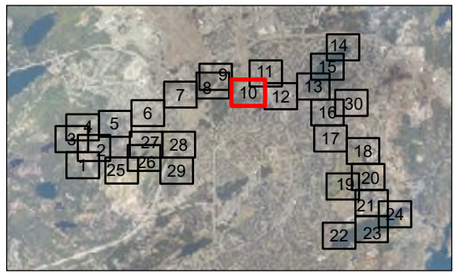

Project Location
City of St. John's

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Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-10

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 10 of 30

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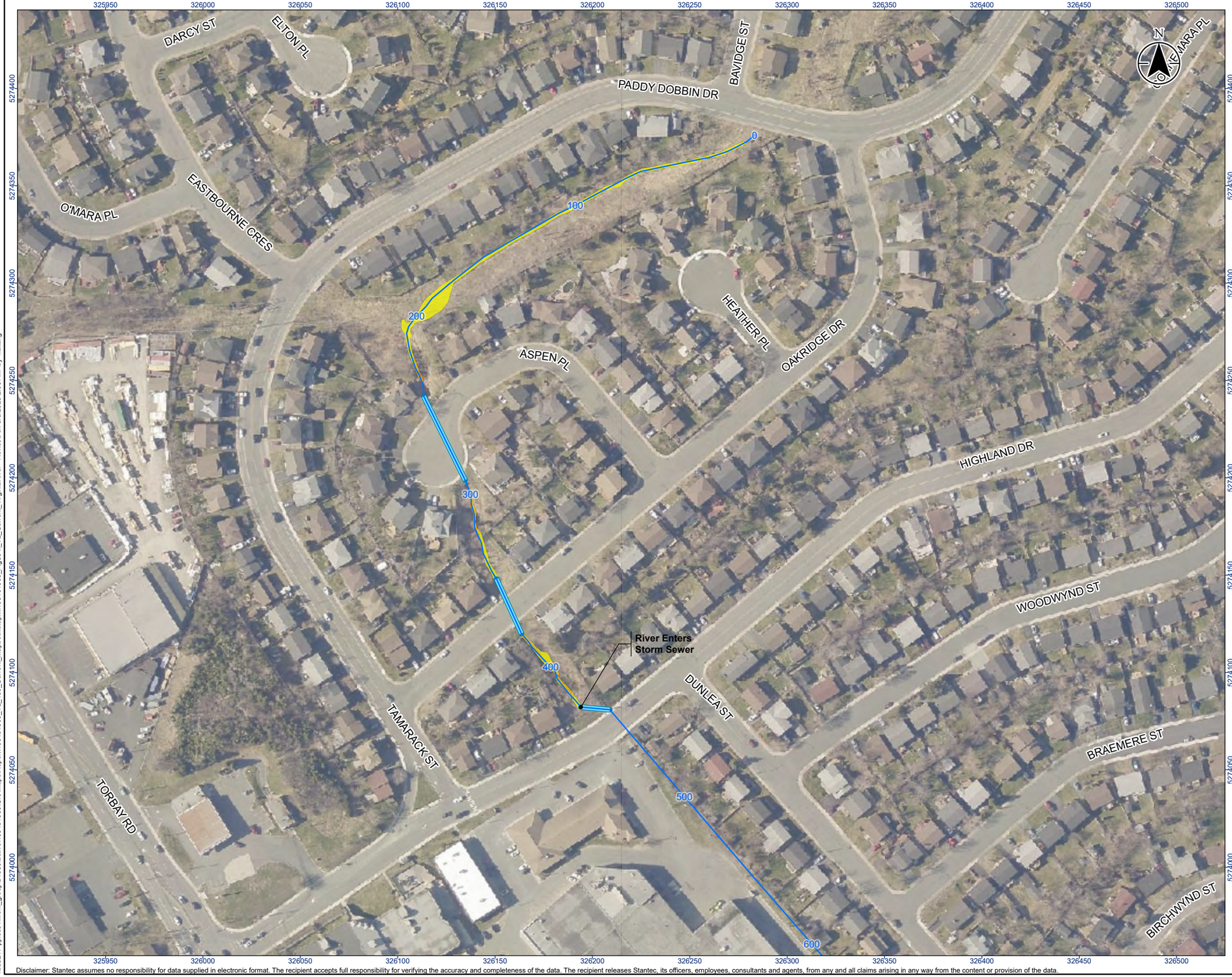

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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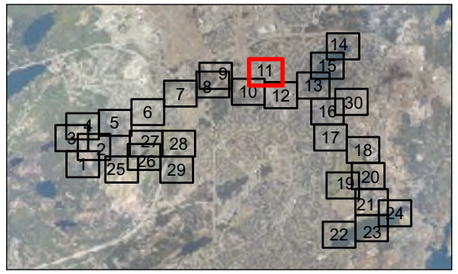

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-11

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 11 of 30

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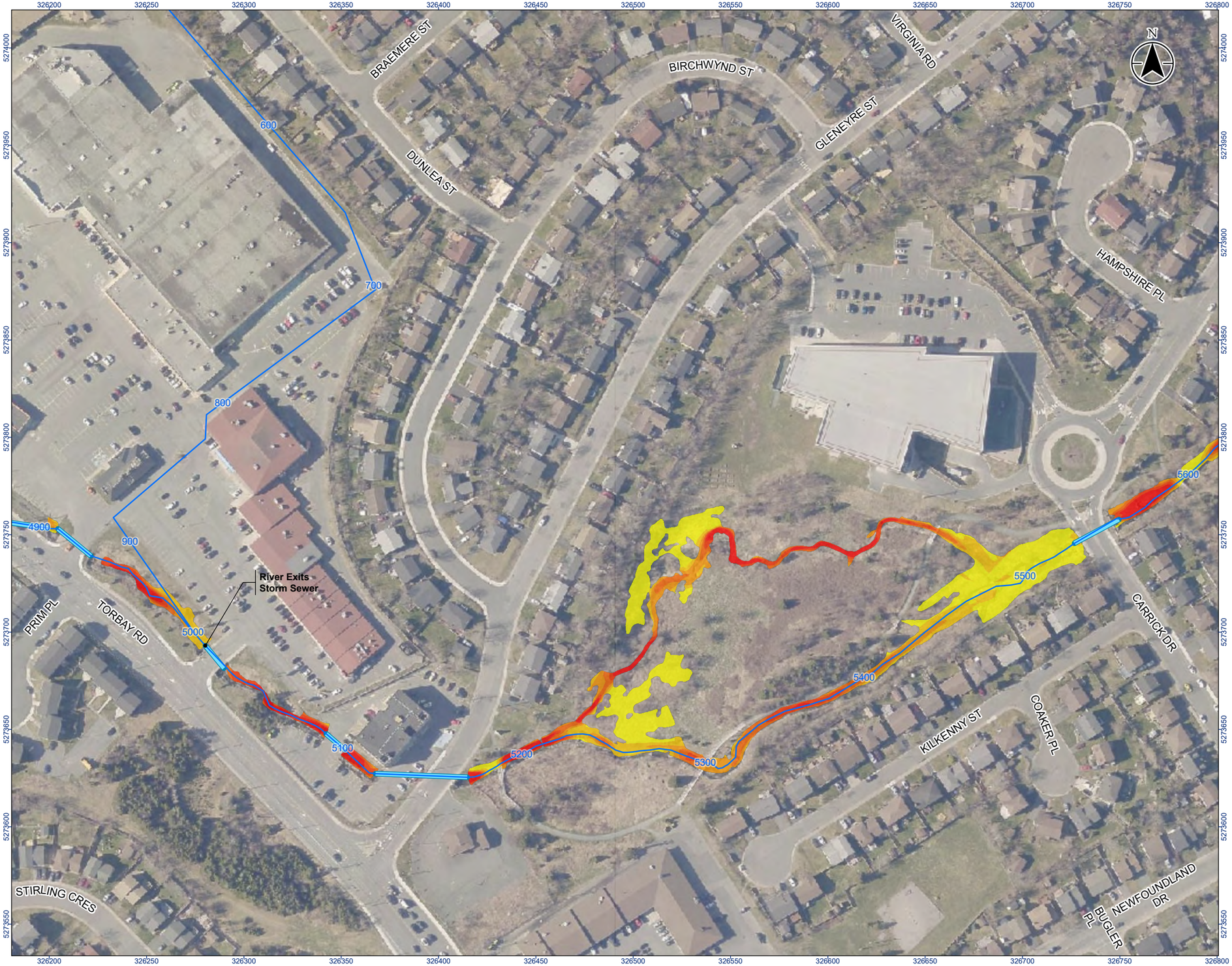

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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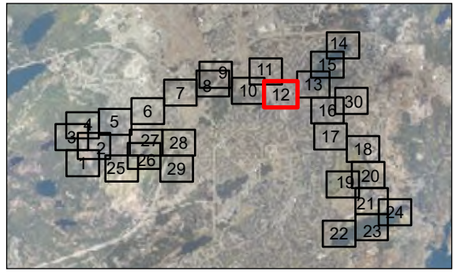

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-12

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 12 of 30

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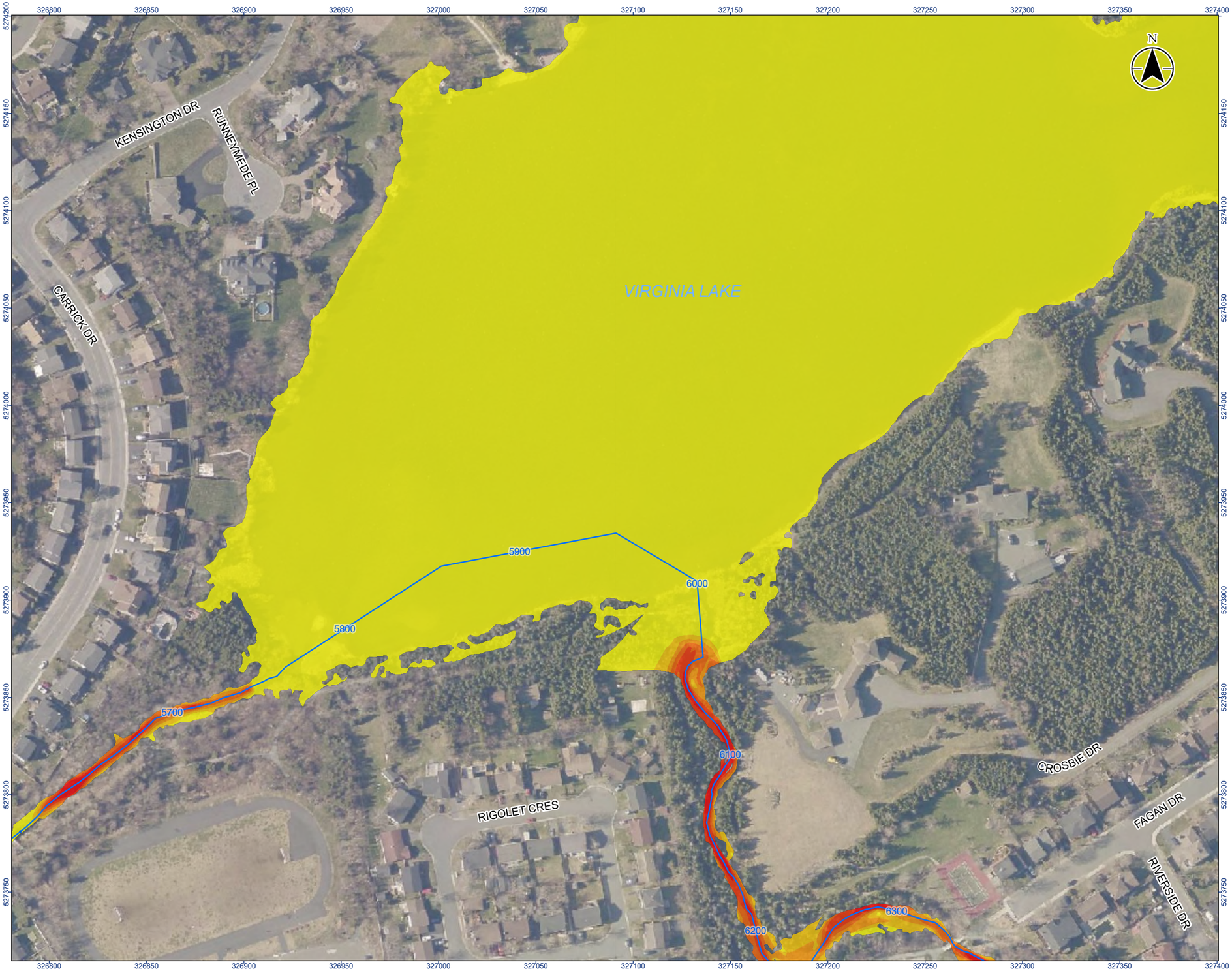

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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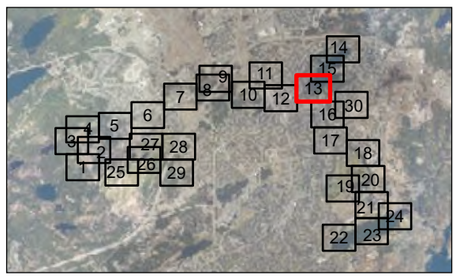

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-13

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 13 of 30

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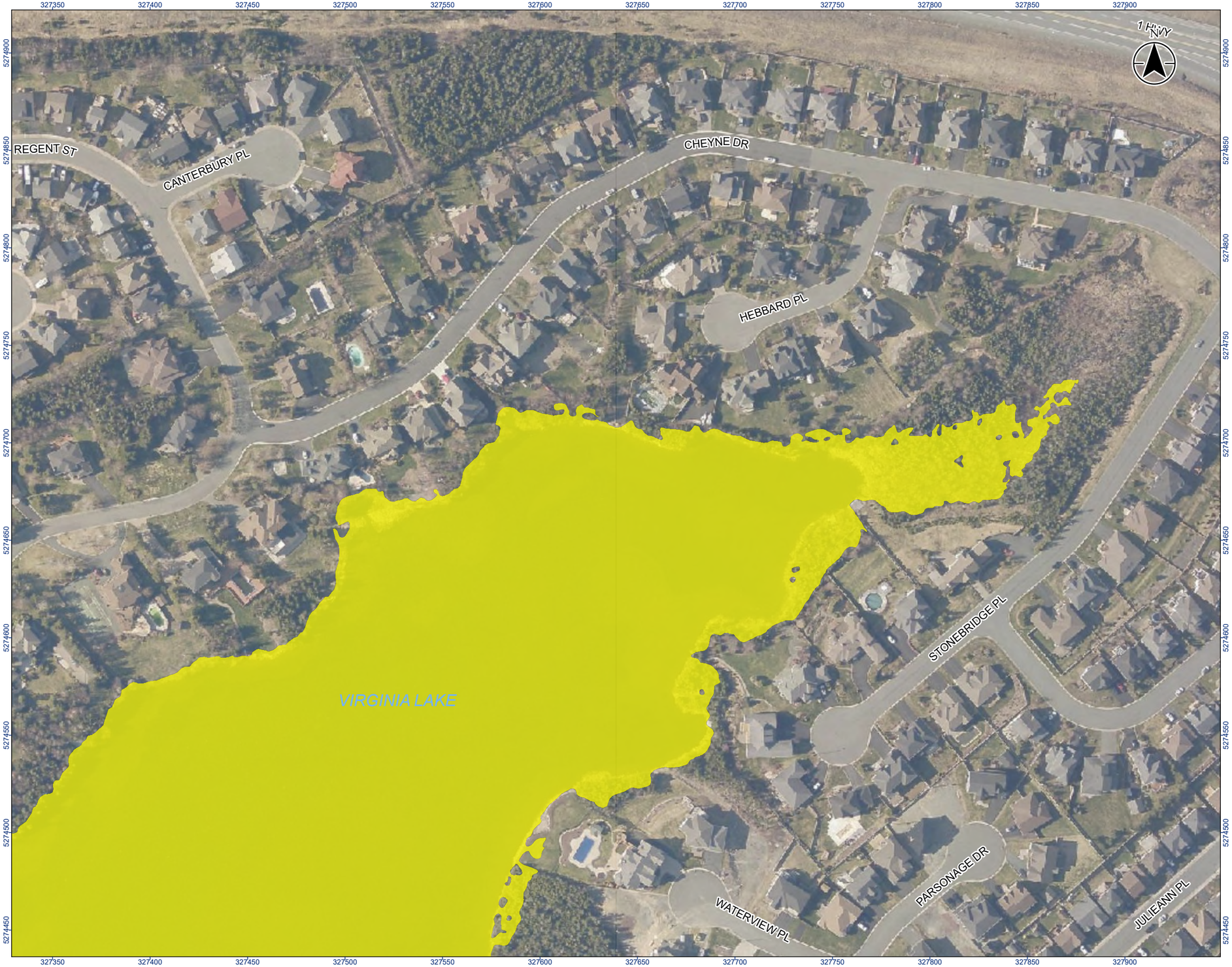

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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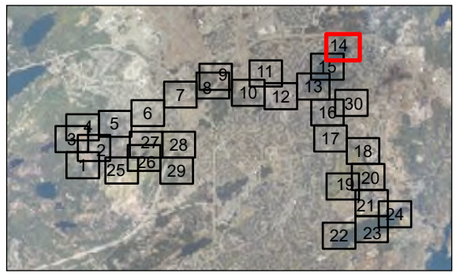

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-14

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 14 of 30

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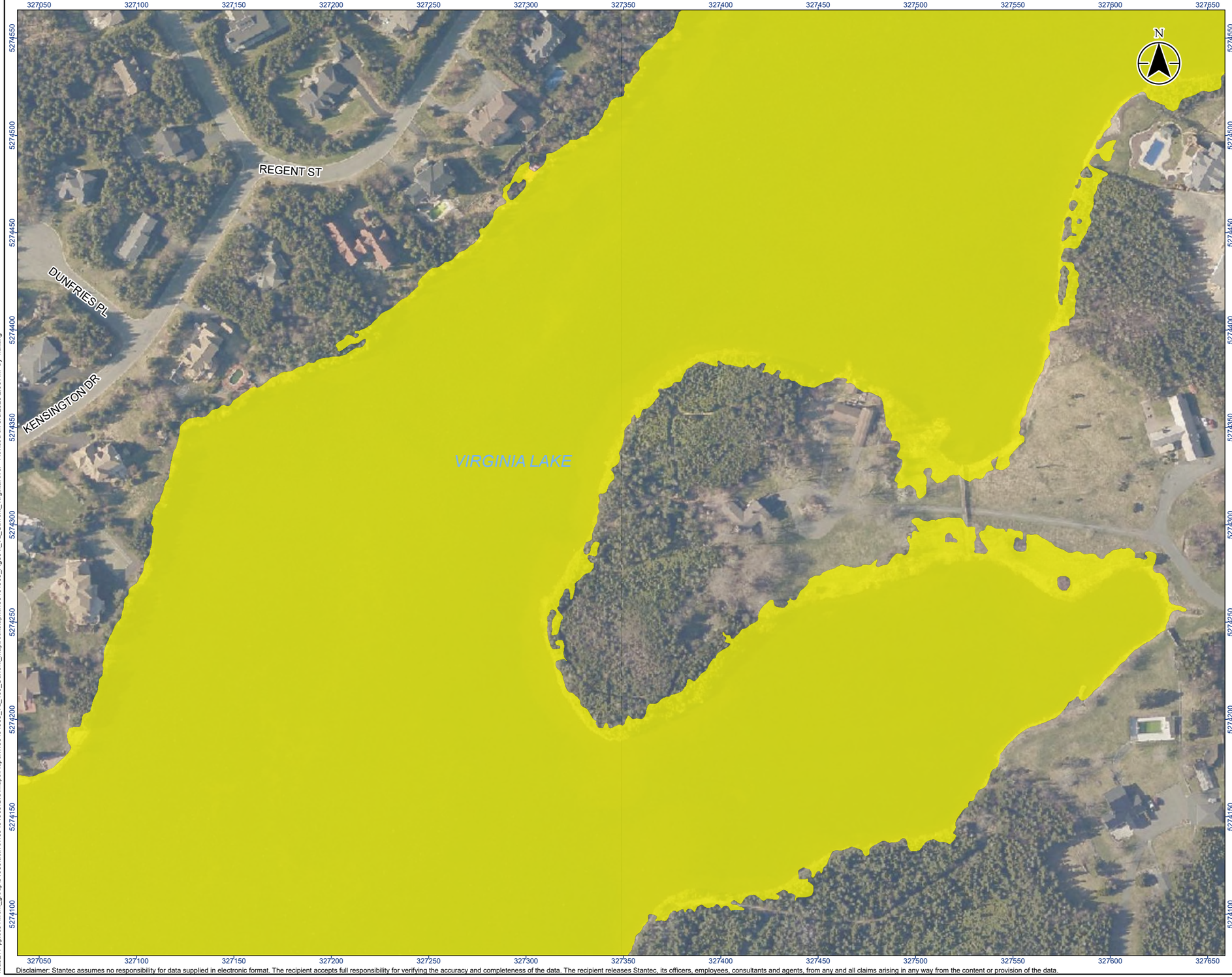

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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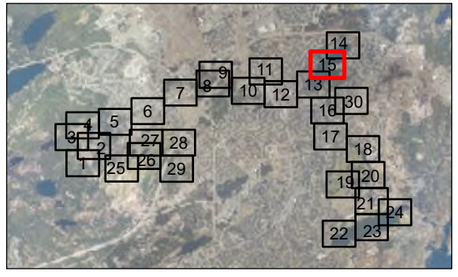

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-15

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 15 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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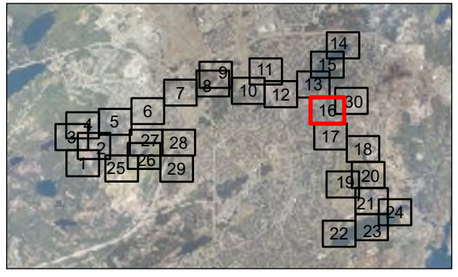

Project Location
City of St. John's

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Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-16

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 16 of 30

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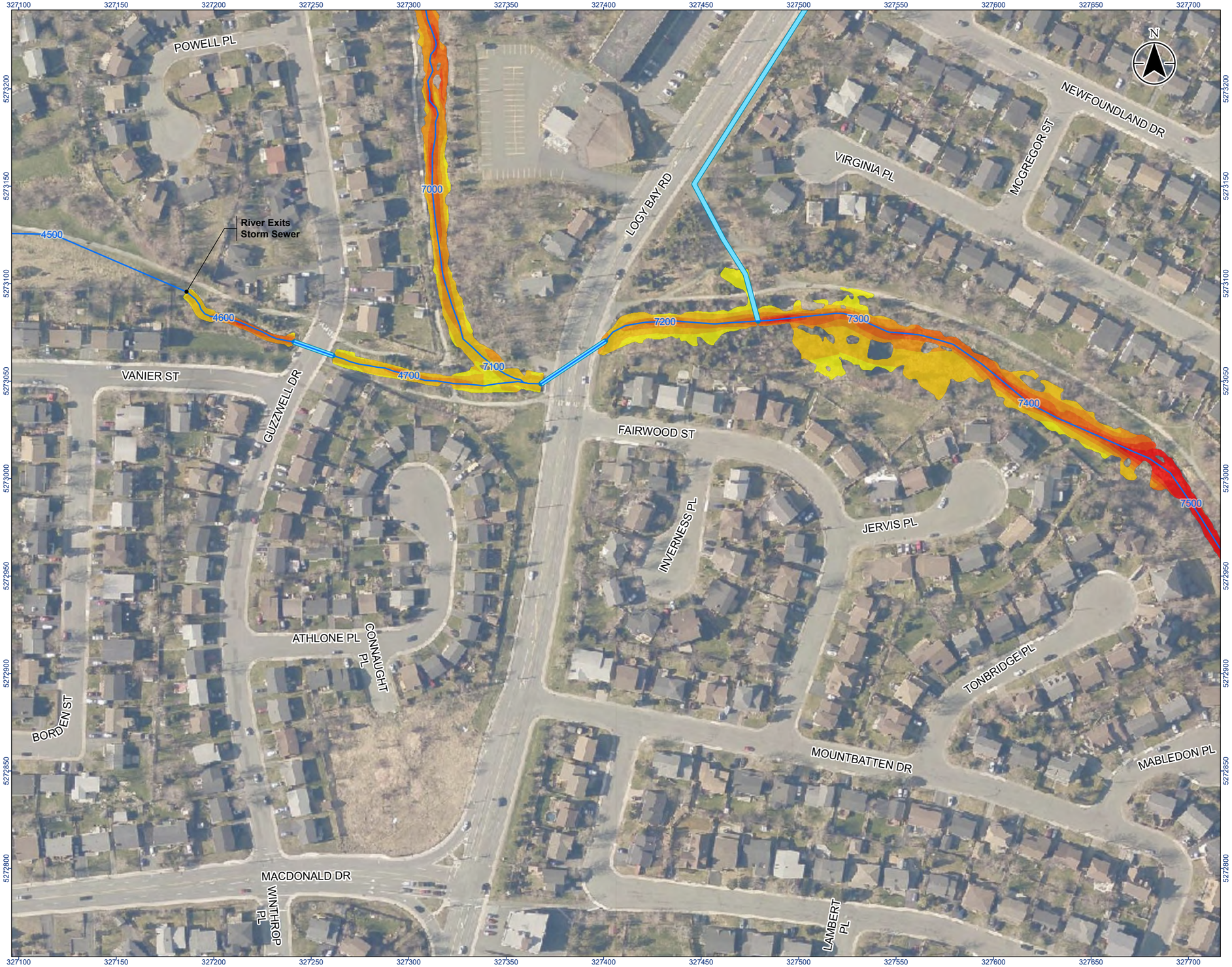

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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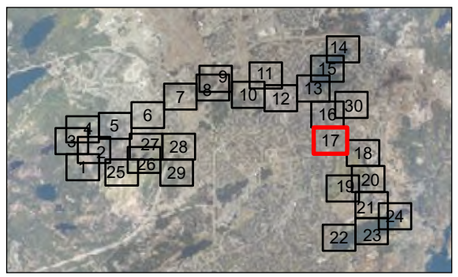

Project Location
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-17

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 17 of 30

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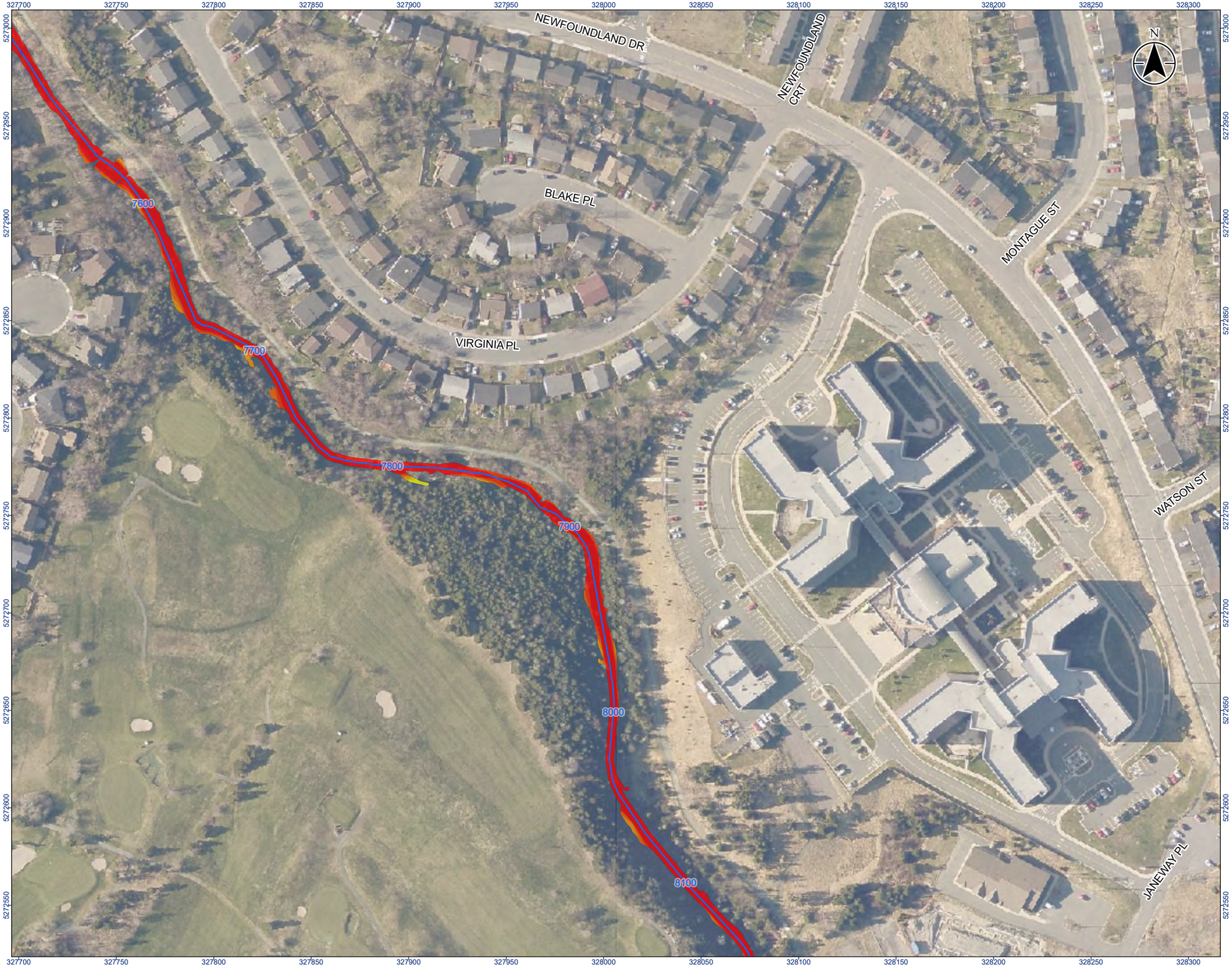

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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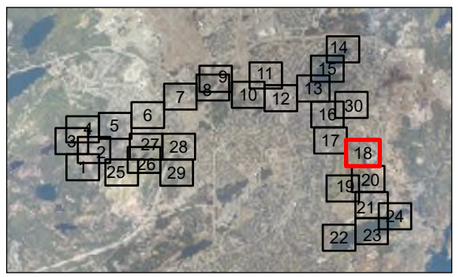

Project Location
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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-18

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 18 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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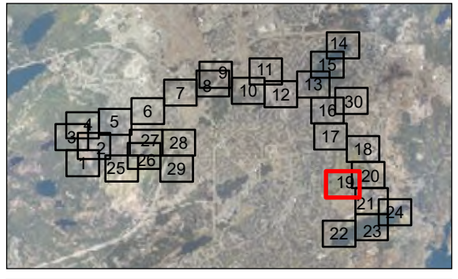

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-19

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 19 of 30

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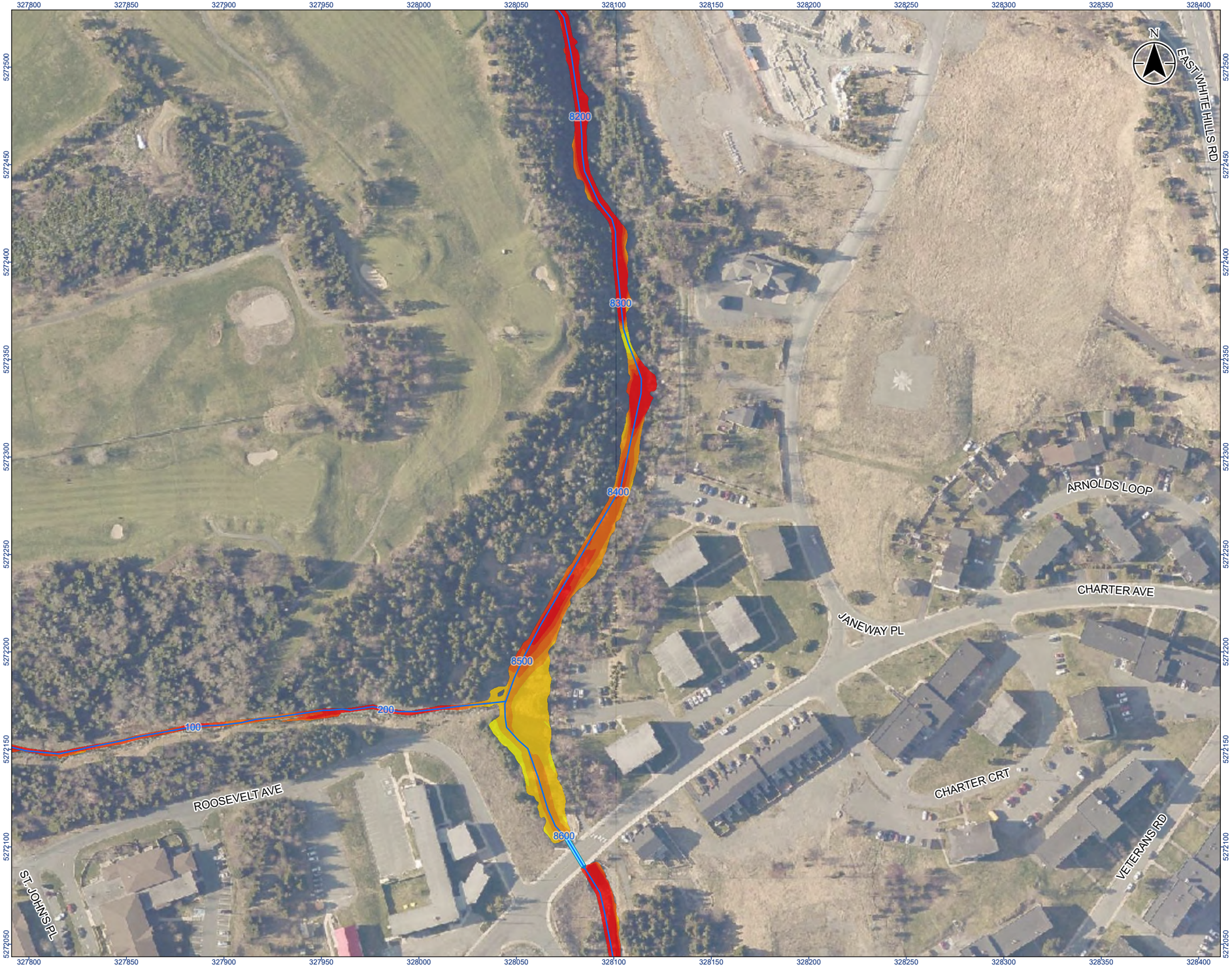

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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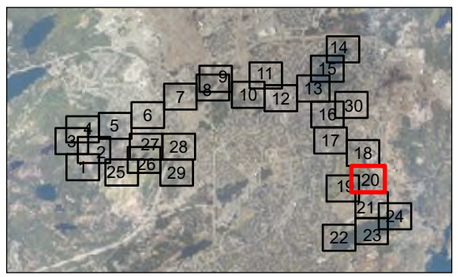

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-20

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 20 of 30

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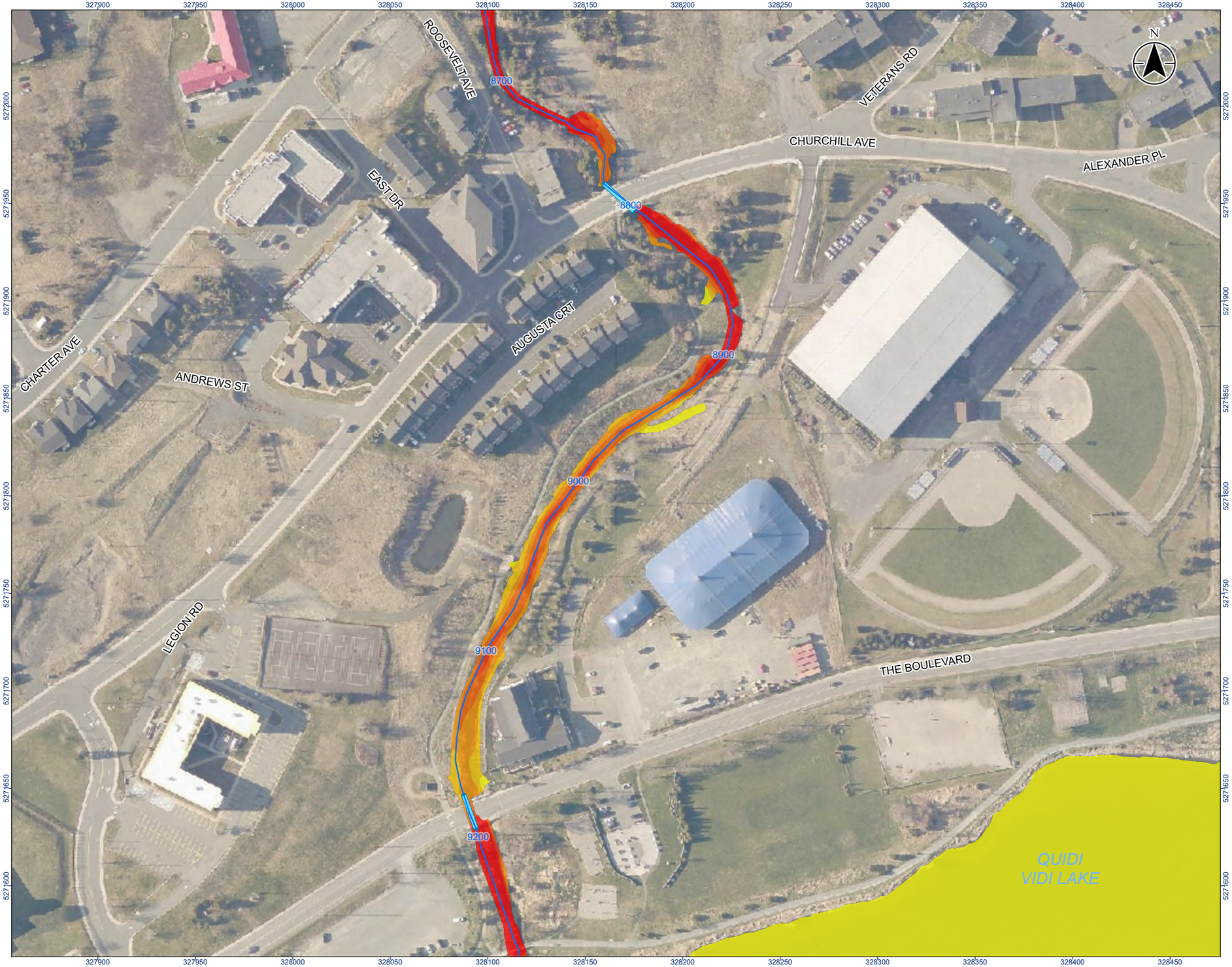

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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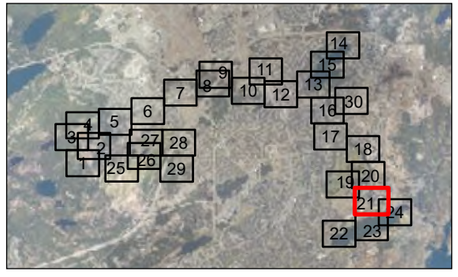

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-21

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 21 of 30

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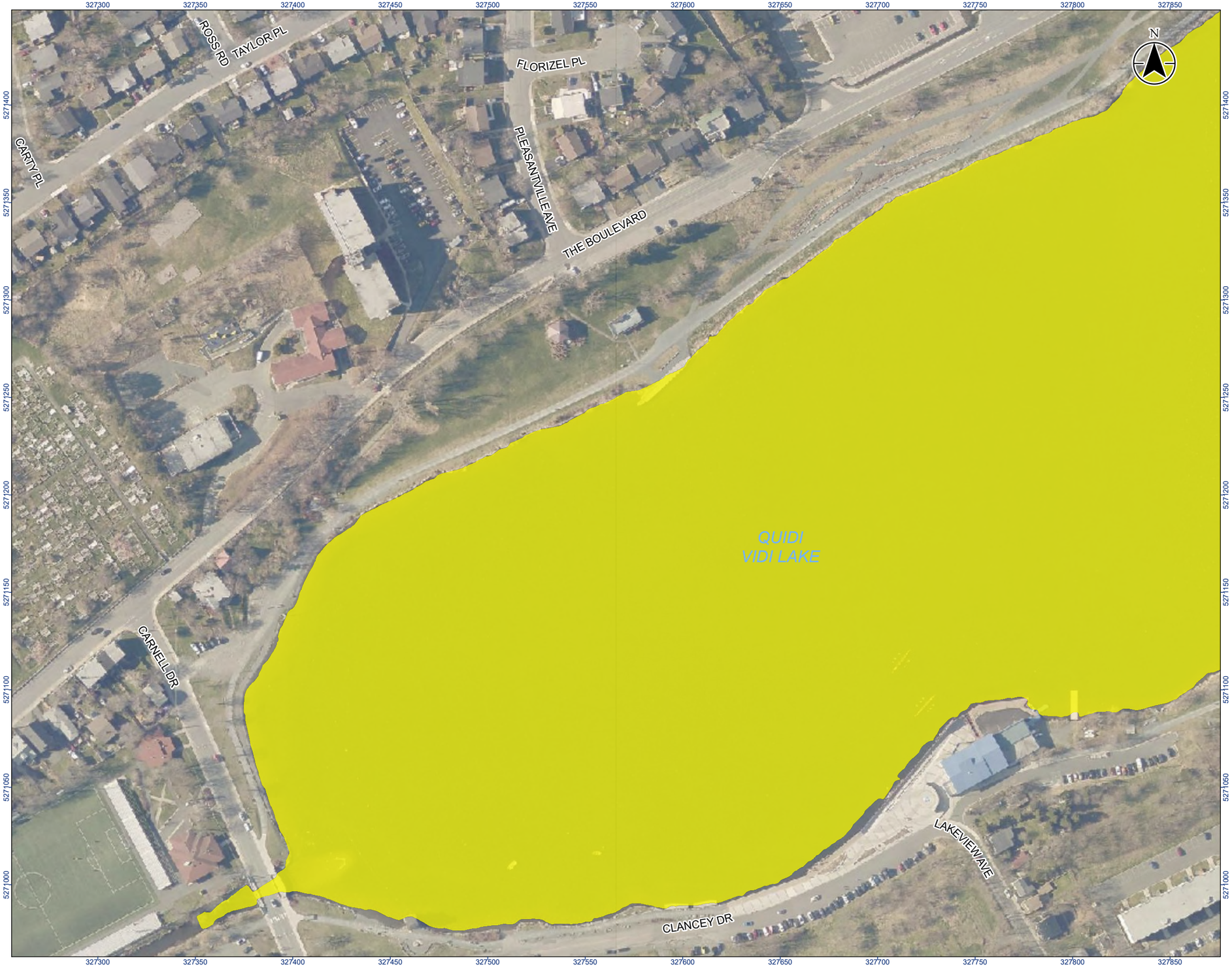

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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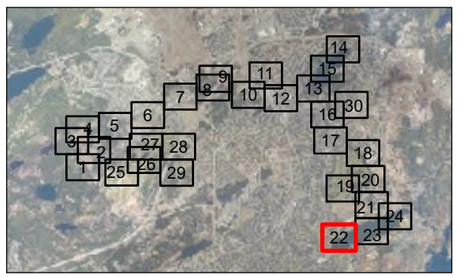

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-22

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 22 of 30

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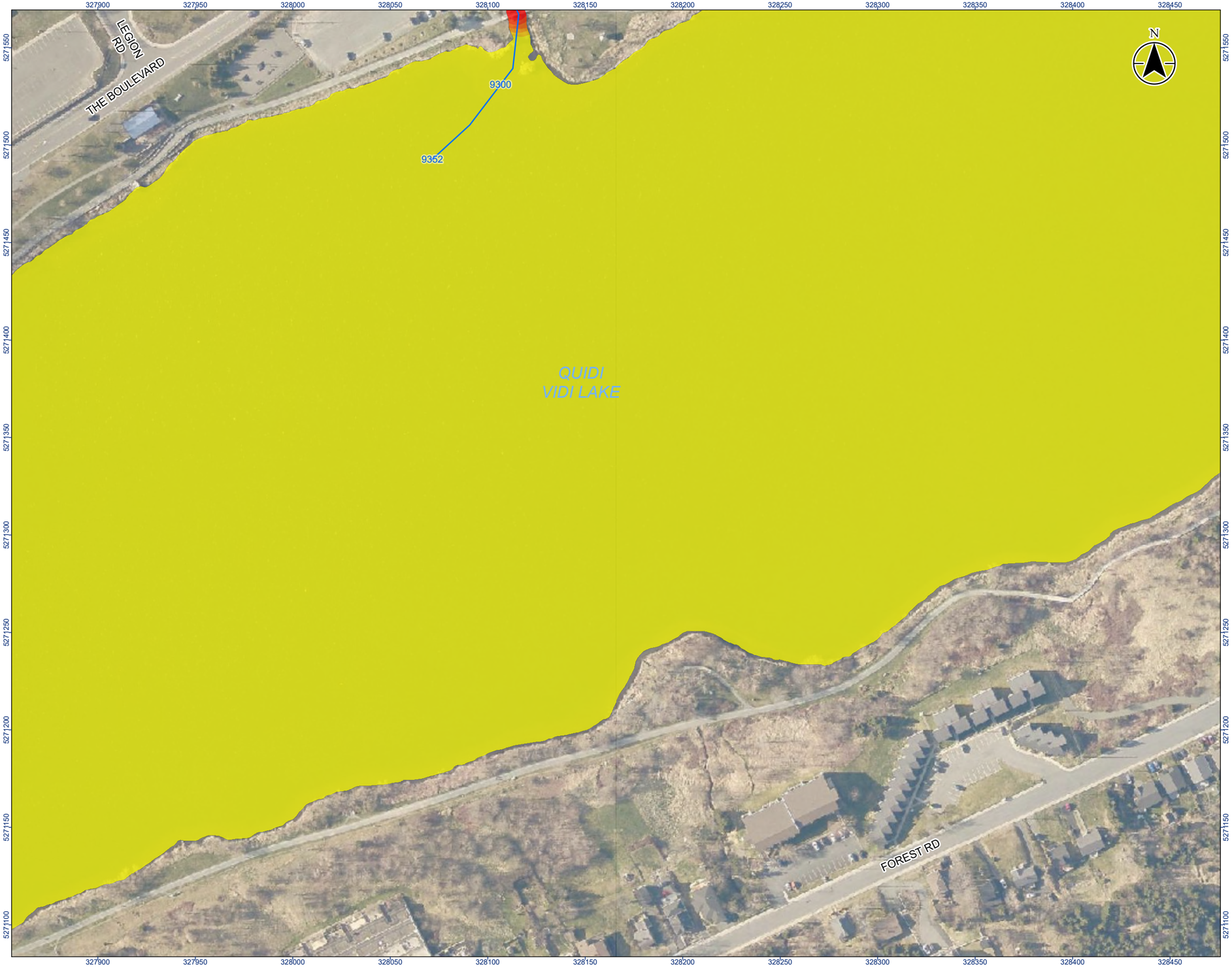

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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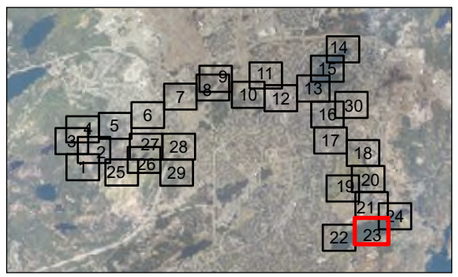

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-23

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 23 of 30

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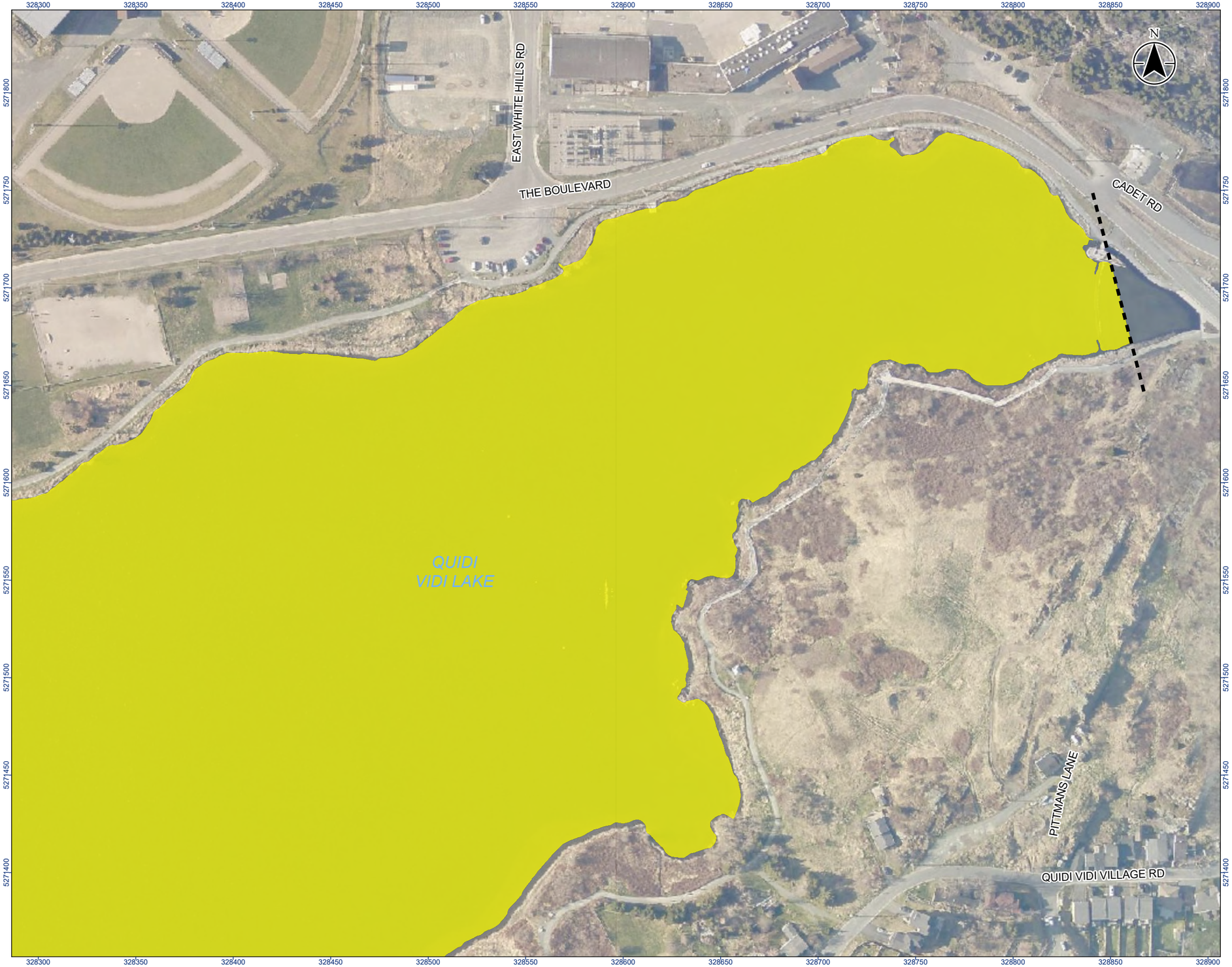

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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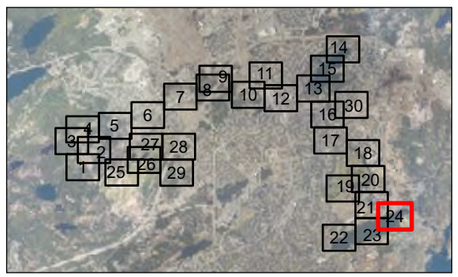

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-24

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 24 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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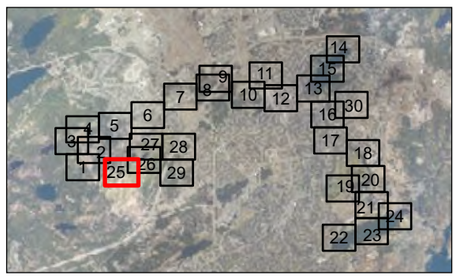

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-25

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 25 of 30

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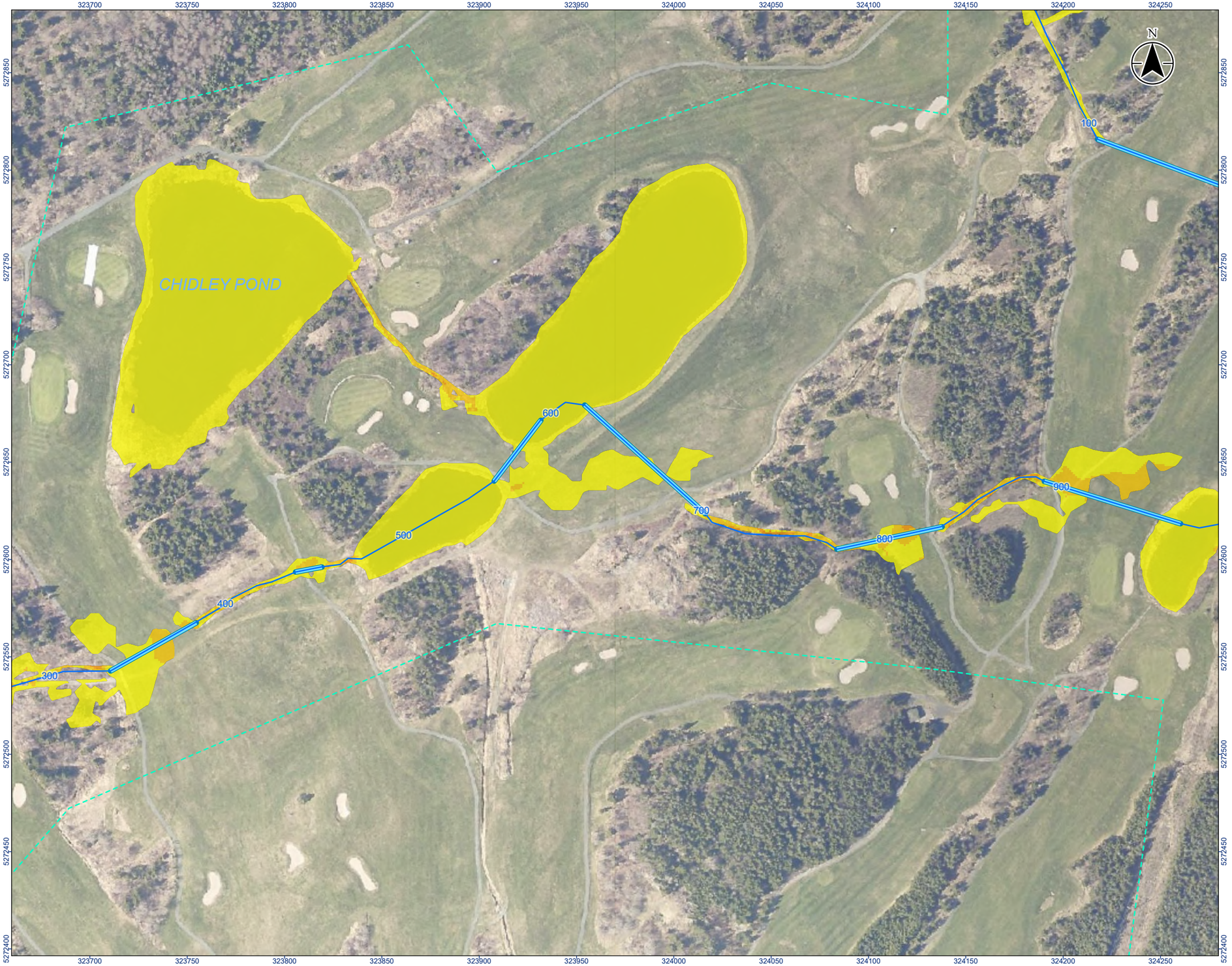

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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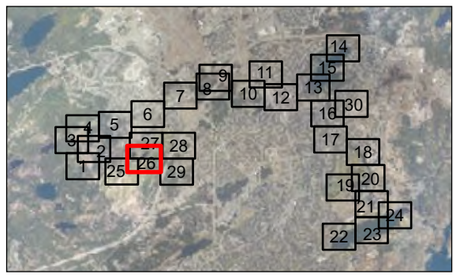

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-26

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 26 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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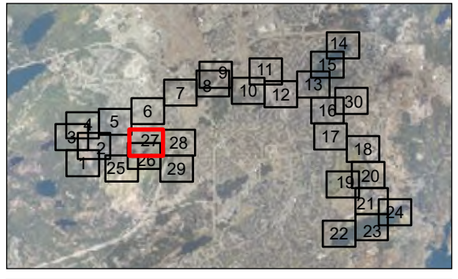

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-27

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 27 of 30

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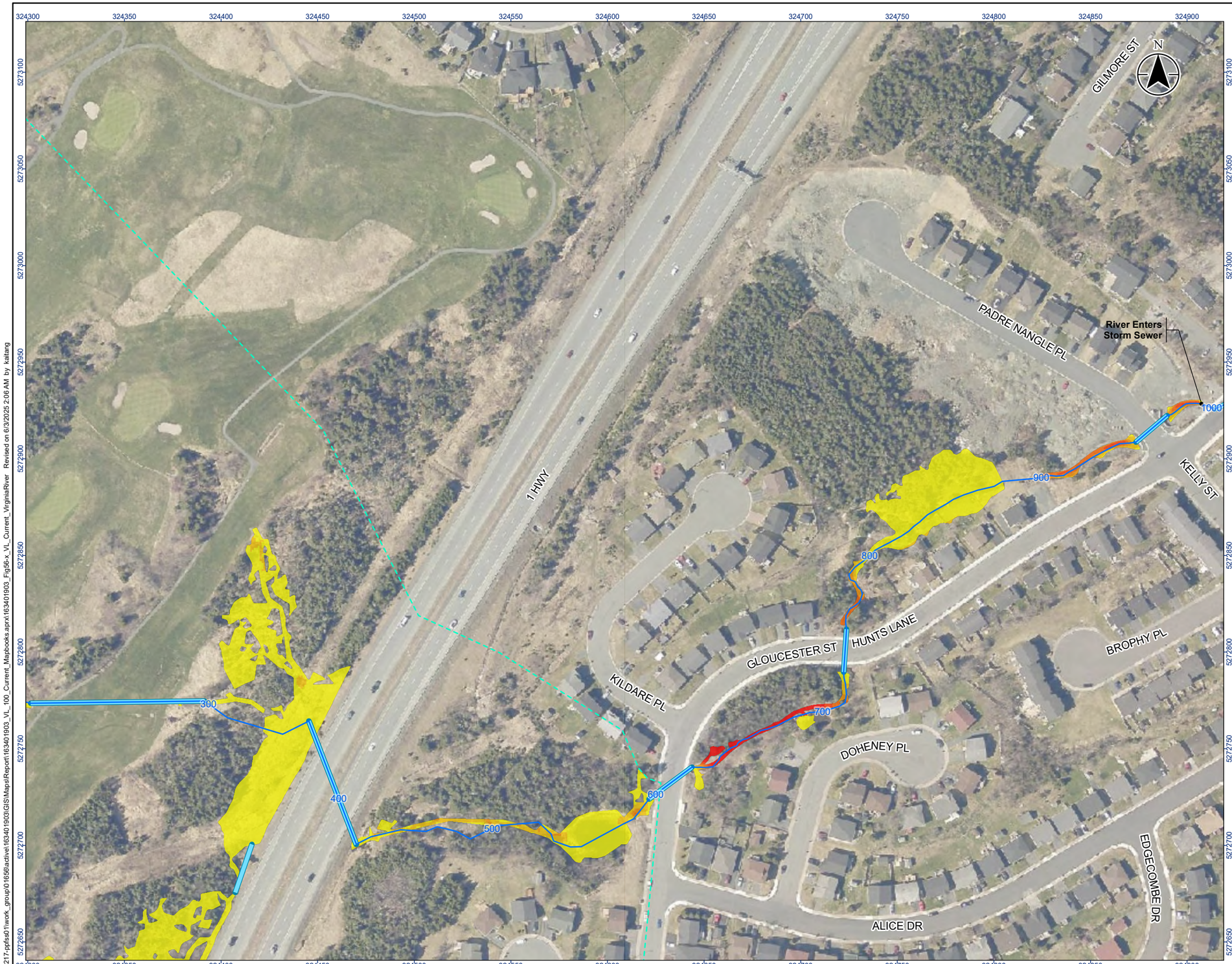

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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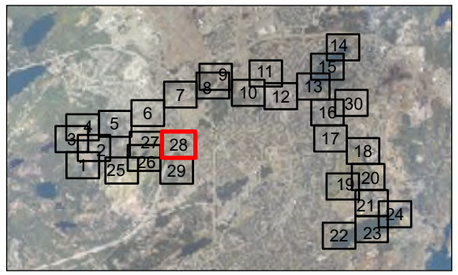

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-28

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 28 of 30

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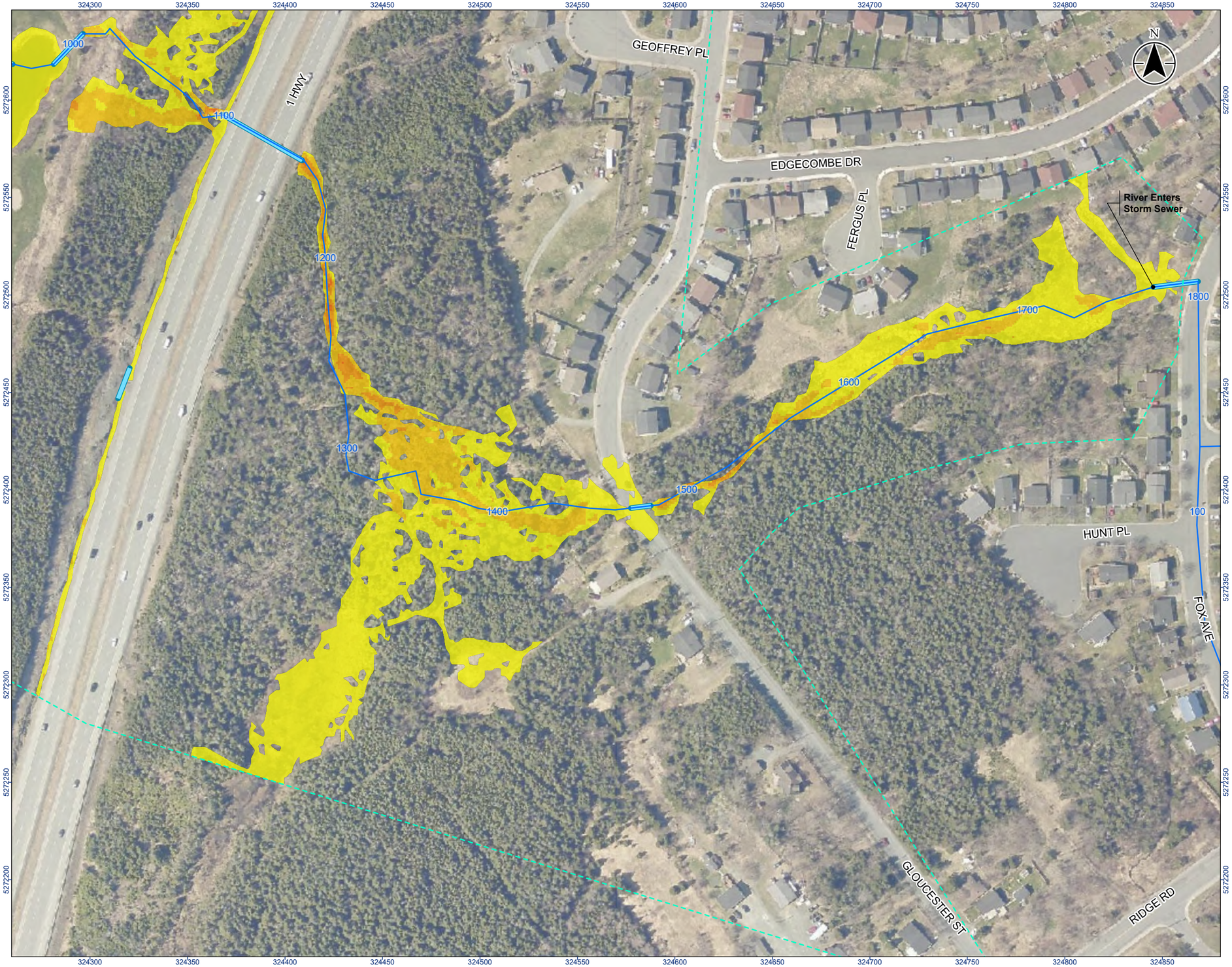

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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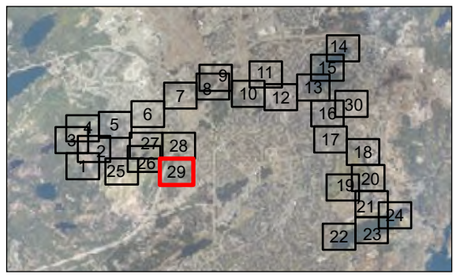

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-29

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 29 of 30

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Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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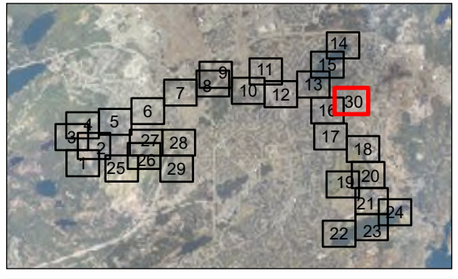

Project Location
City of St. John's

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Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
56-30

Title
Current Climate Condition
100-Year Velocity - Virginia River
Sheet 30 of 30

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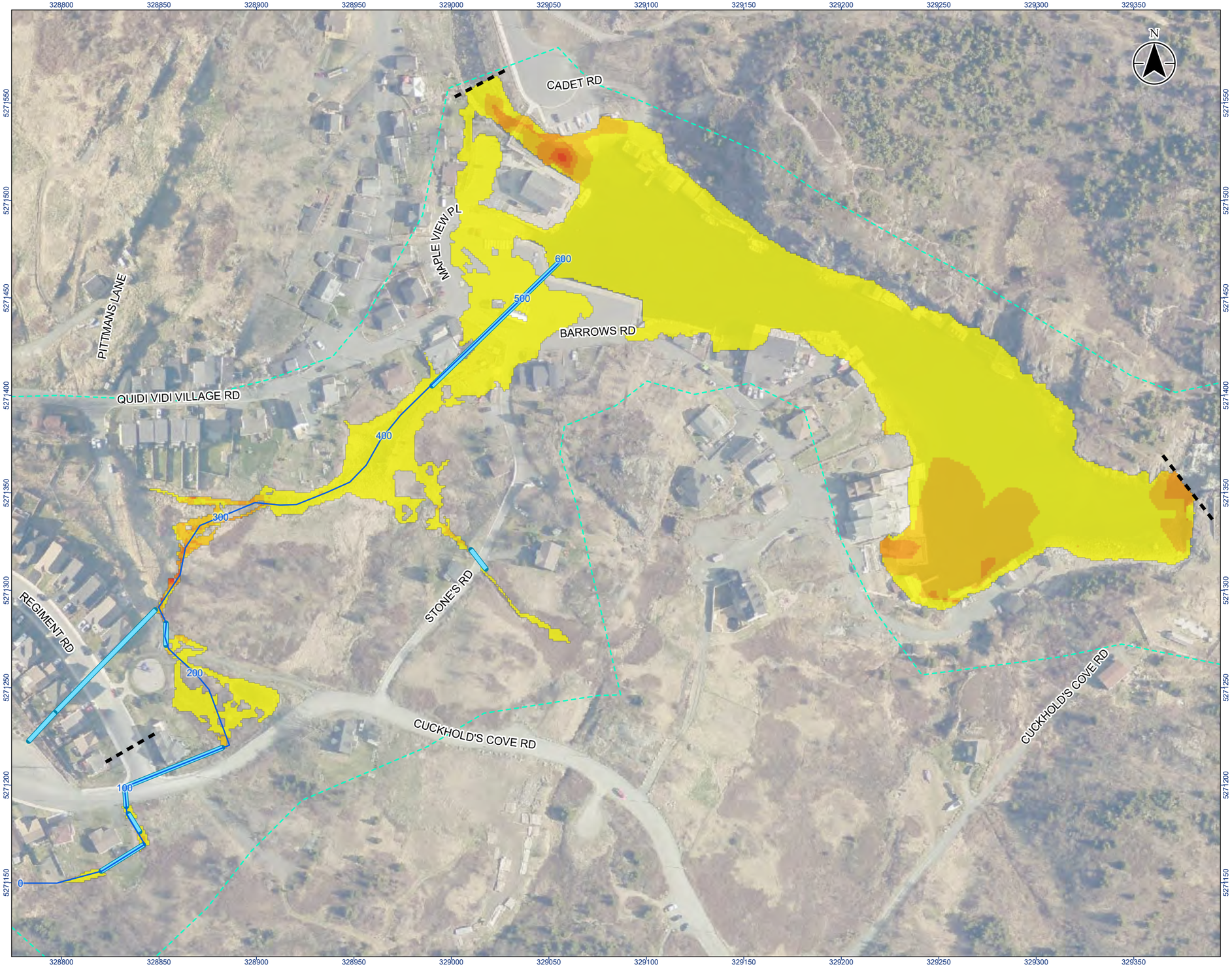

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
57-0

Title
Climate Change Condition
20-Year Velocity- Barrow Road Stream

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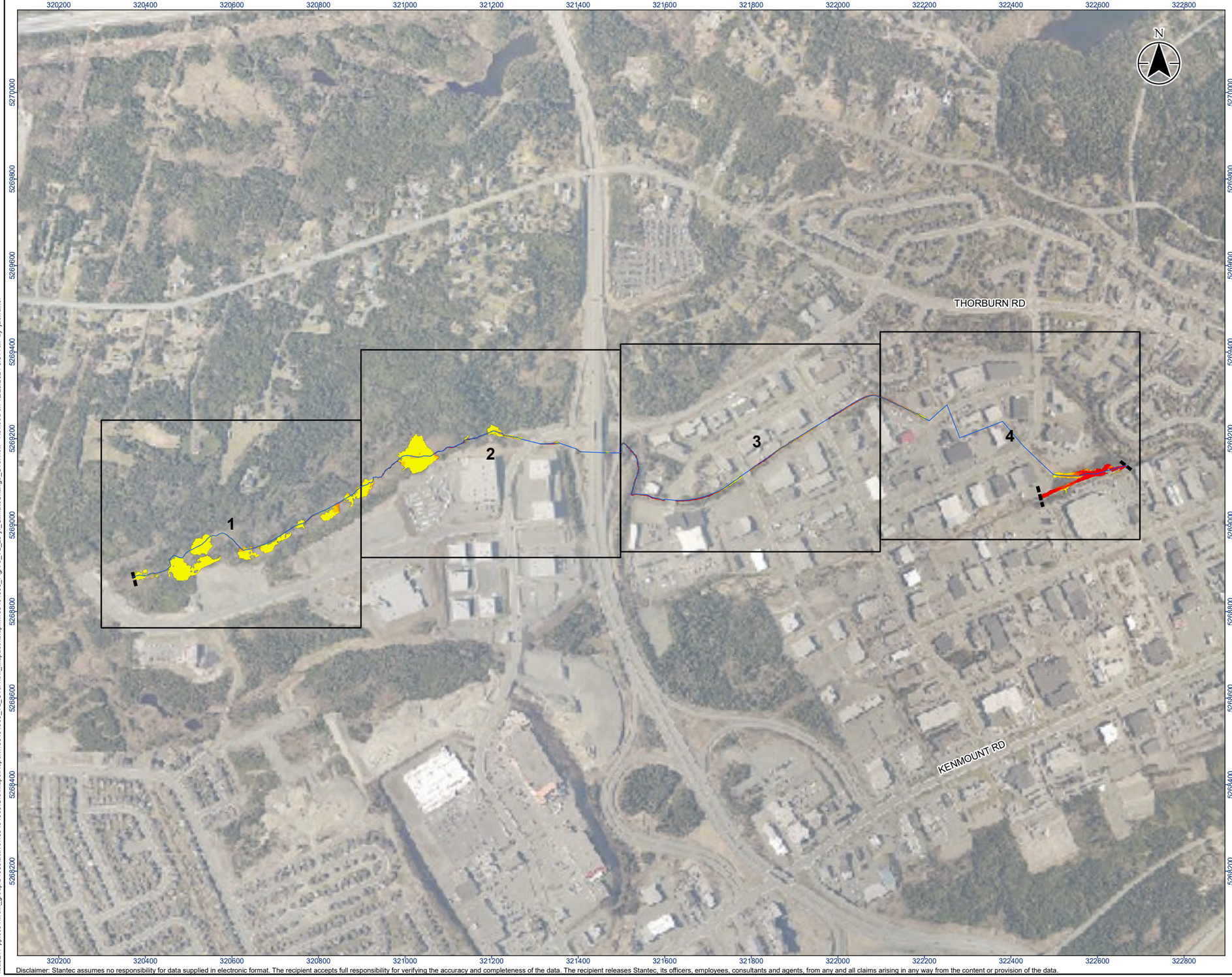

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 175 350 m

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Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
58-0

Title
Climate Change Condition
20-Year Velocity - Holes In Marsh Brook
Overview Map

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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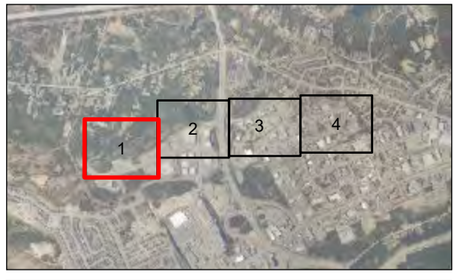

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
58-1

Title
Climate Change Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 1 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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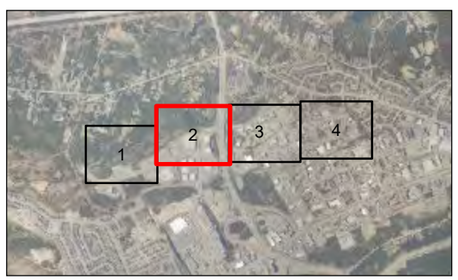

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
58-2

Title
Climate Change Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 2 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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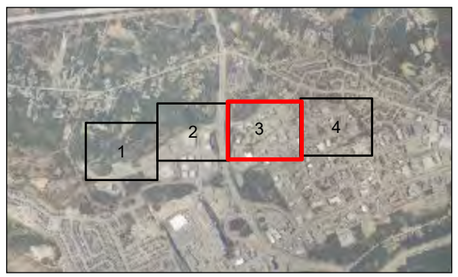

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
58-3

Title
Climate Change Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 3 of 4

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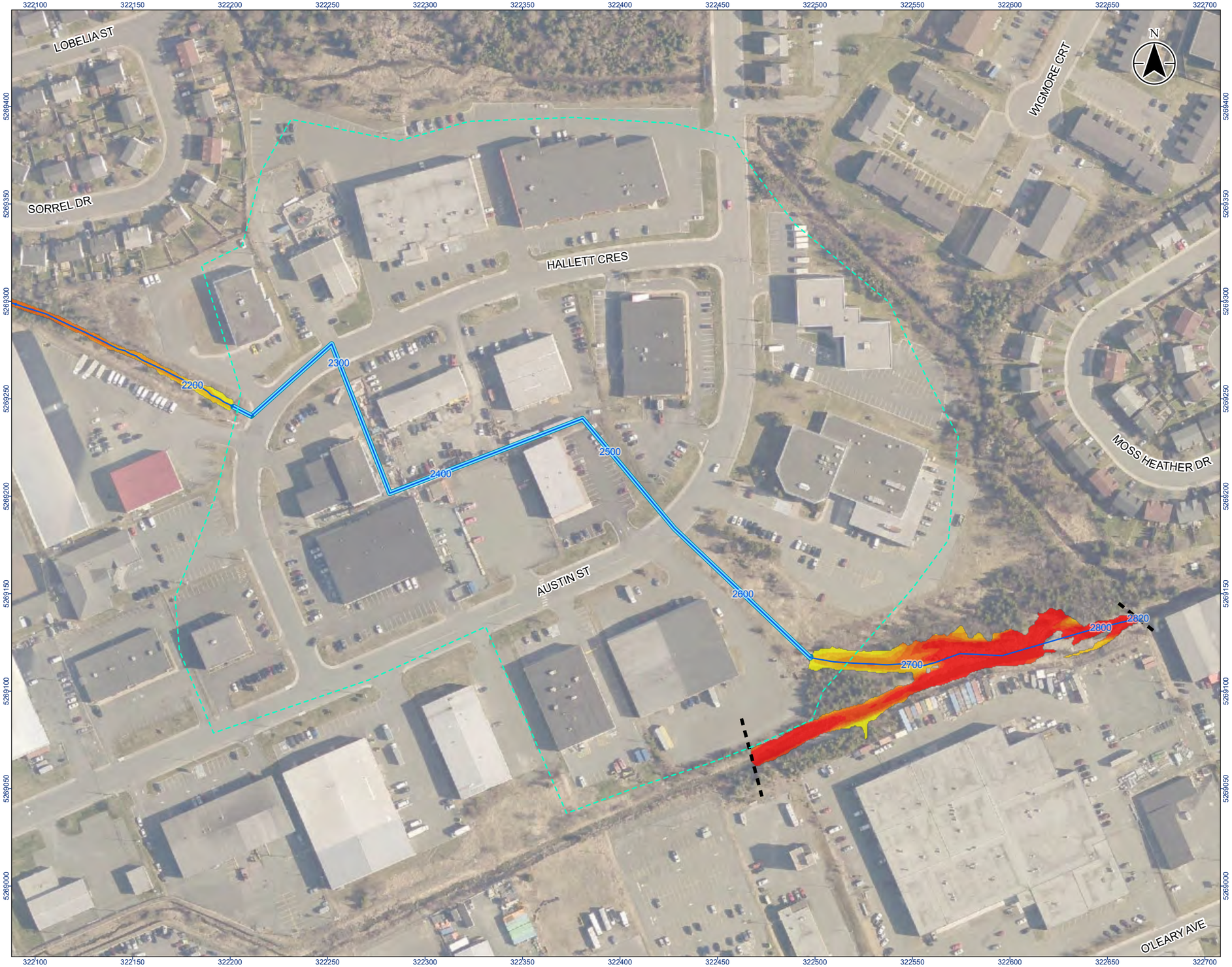

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
58-4

Title
Climate Change Condition
20-Year Velocity - Holes In Marsh Brook
Sheet 4 of 4

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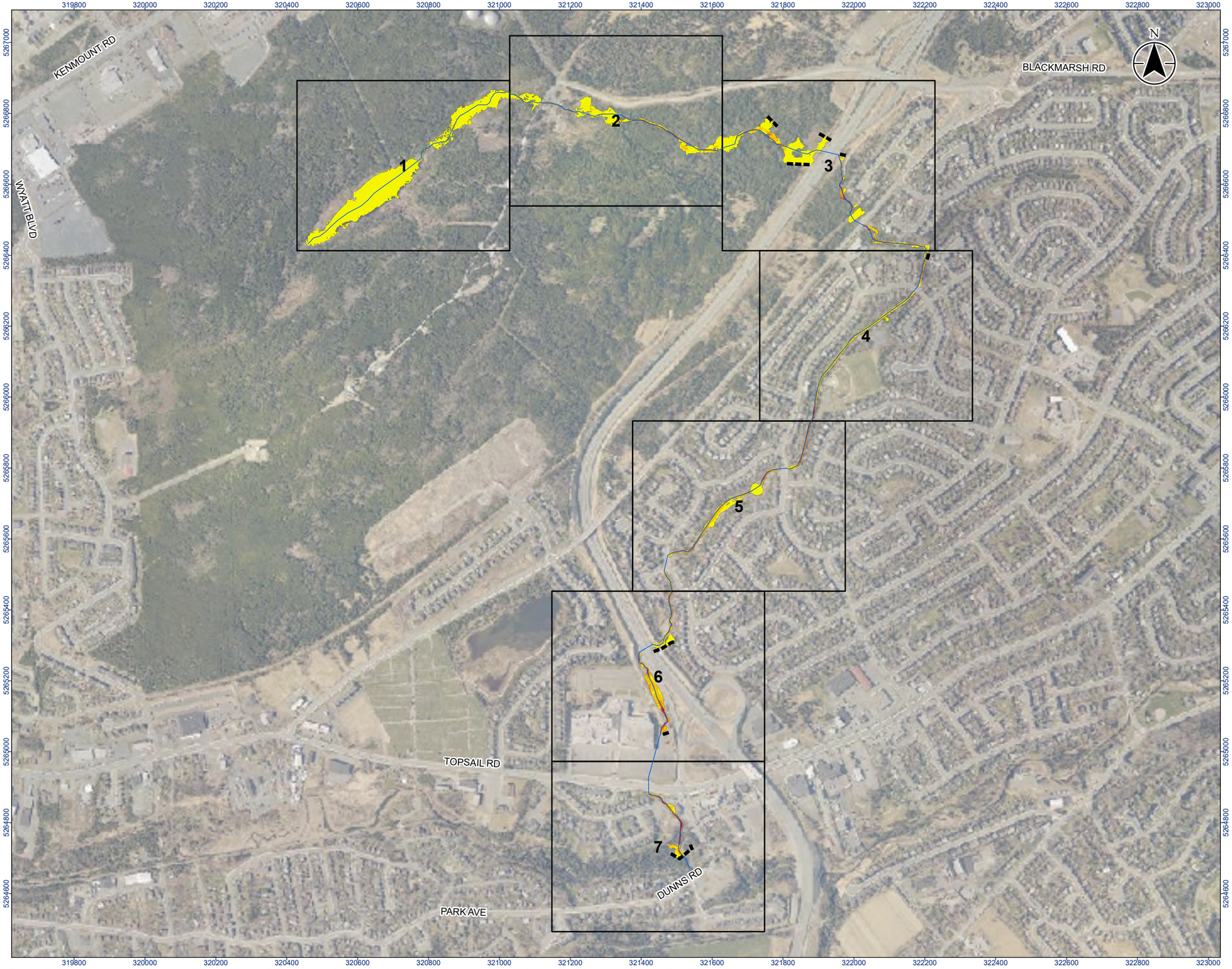

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 210 420 m

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Notes

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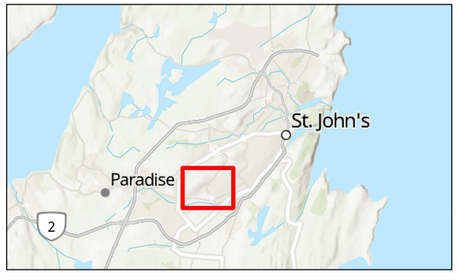

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
59-0

Title
Climate Change Condition 20-Year Velocity - Kitty Gaul Brook Overview Map

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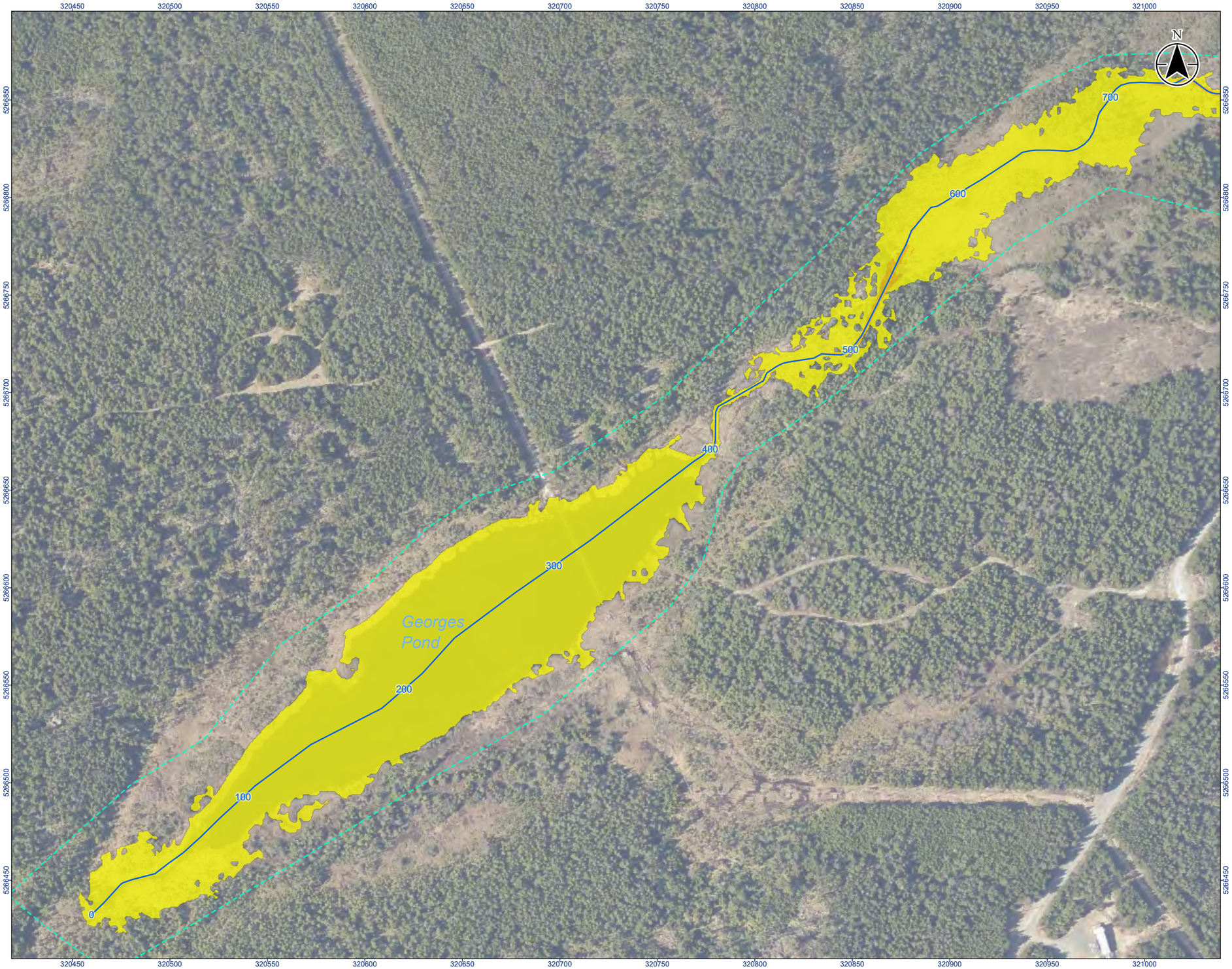

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY
FOR THE CITY OF ST. JOHN'S

Figure No.
59-1

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 1 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY
FOR THE CITY OF ST. JOHN'S

Figure No.
59-2

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 2 of 7

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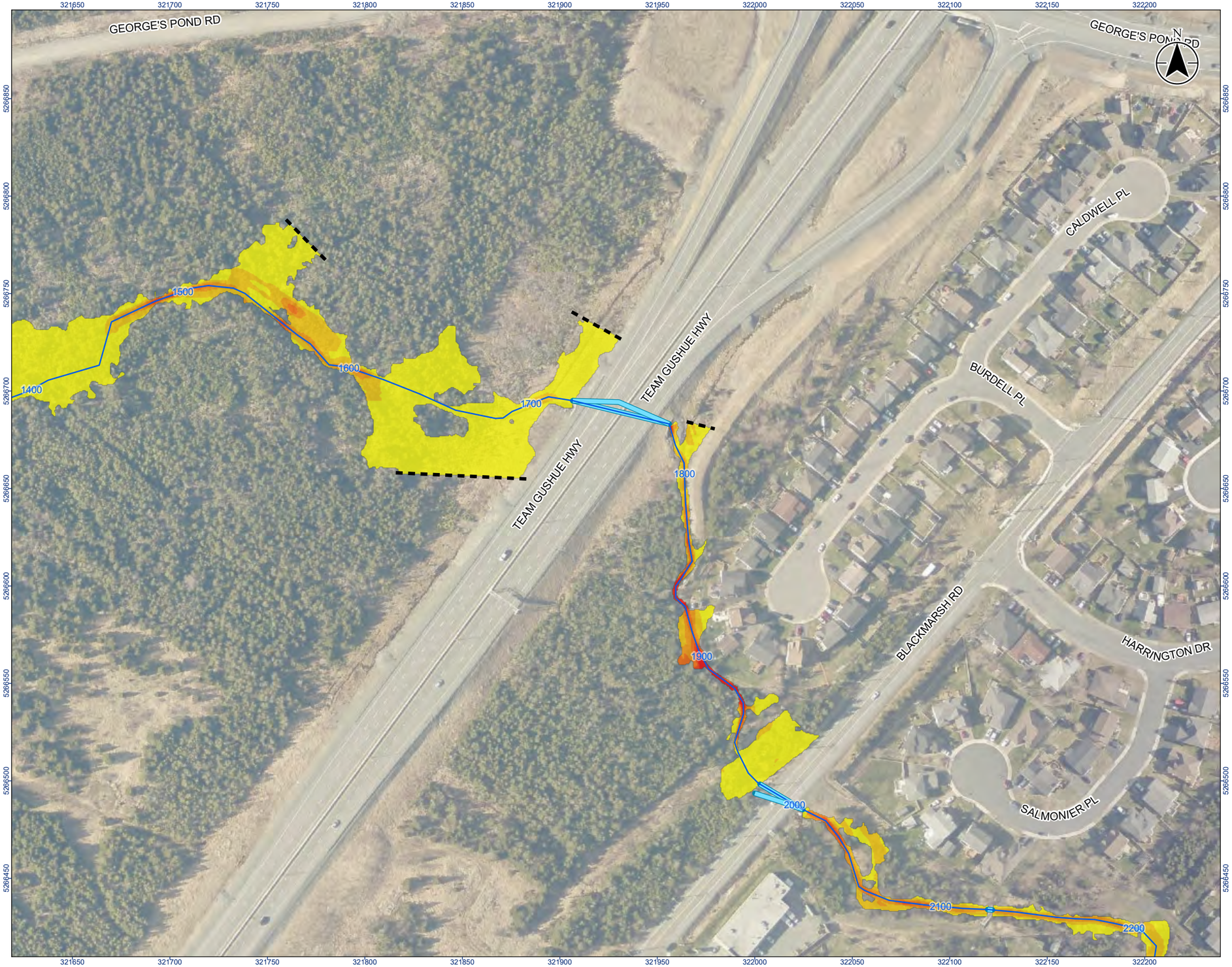

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
59-3

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 3 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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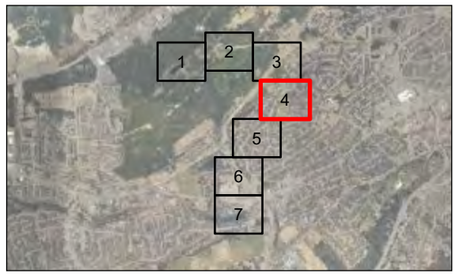

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
59-4

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 4 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
59-5

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 5 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
59-6

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 6 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
59-7

Title
Climate Change Condition
20-Year Velocity - Kitty Gaul Brook
Sheet 7 of 7

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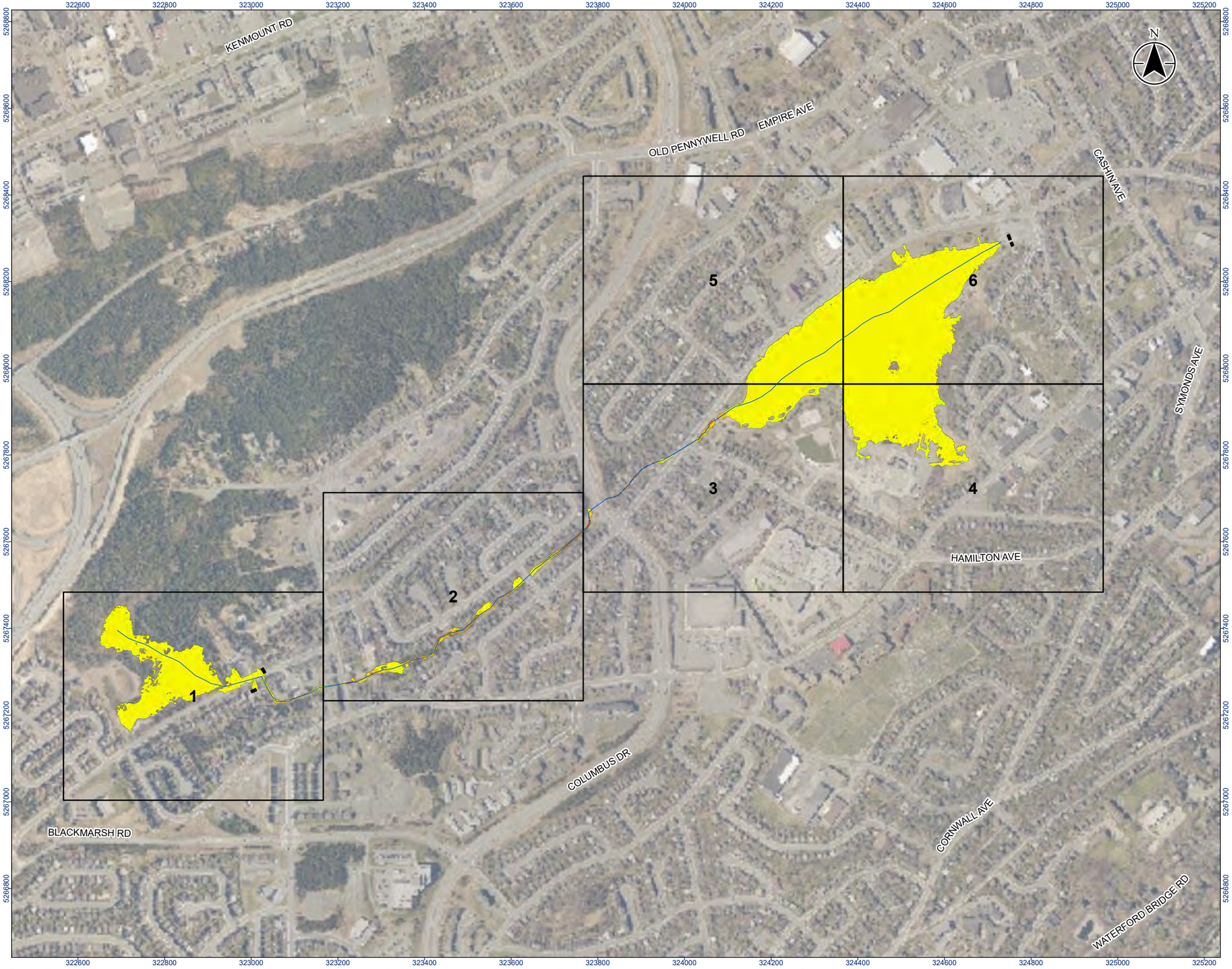

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 175 350 m

1:9,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-05-26

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-0

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook Overview Map

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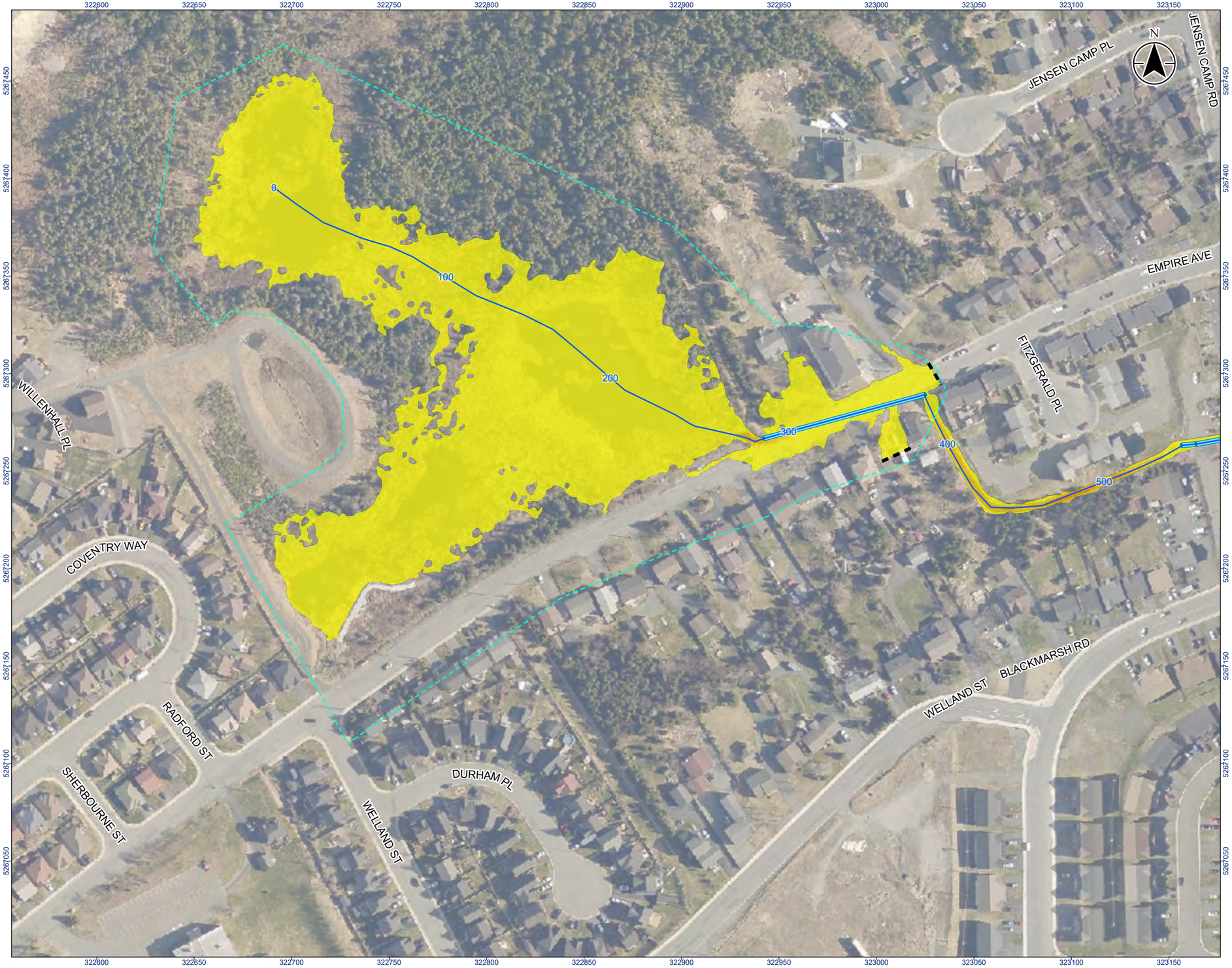

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-02

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-1

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook
Sheet 1 of 6

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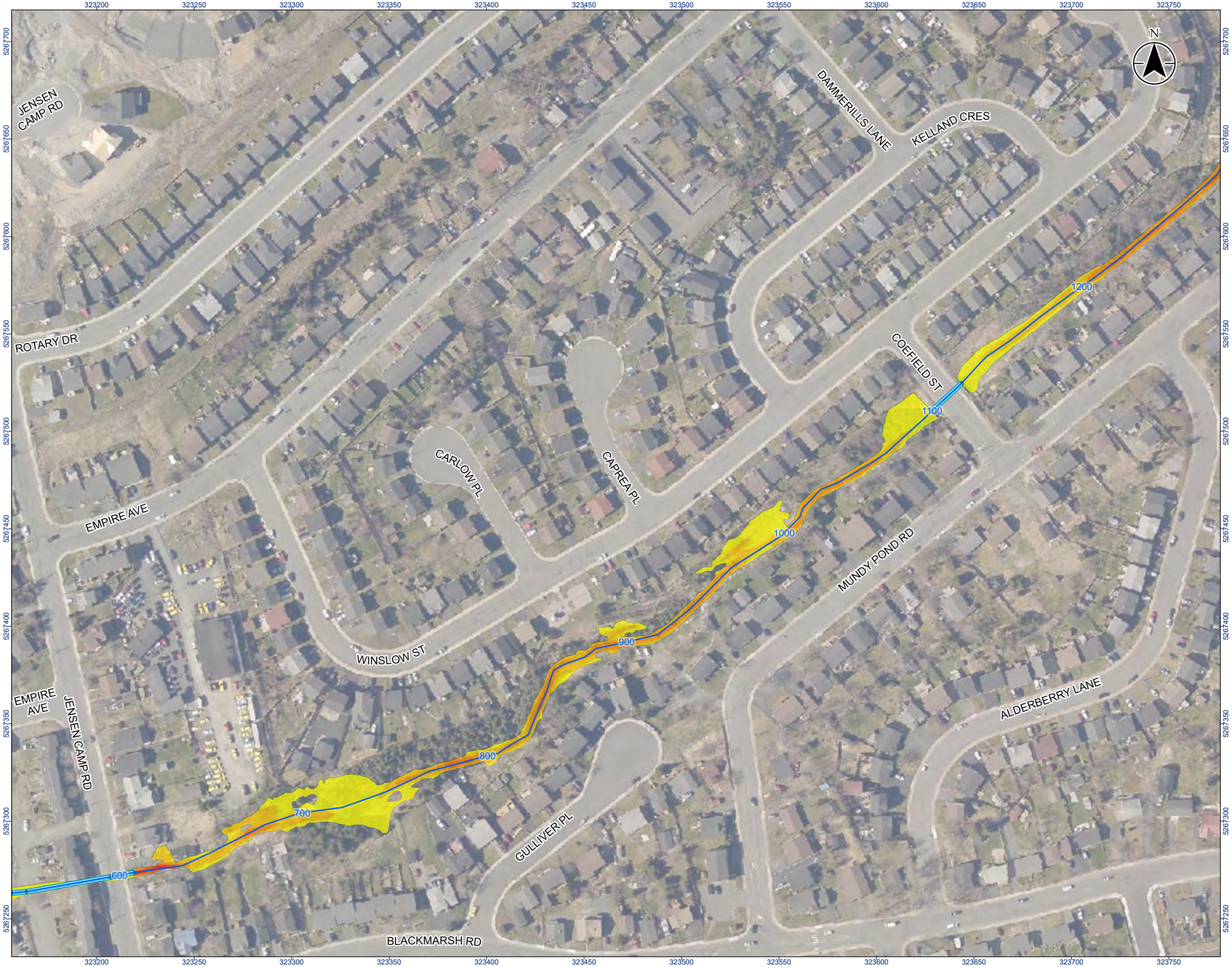

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-02

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-2

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook
Sheet 2 of 6

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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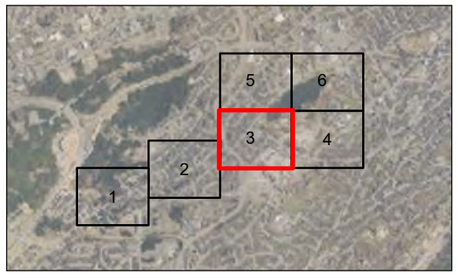

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-02

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-3

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook
Sheet 3 of 6

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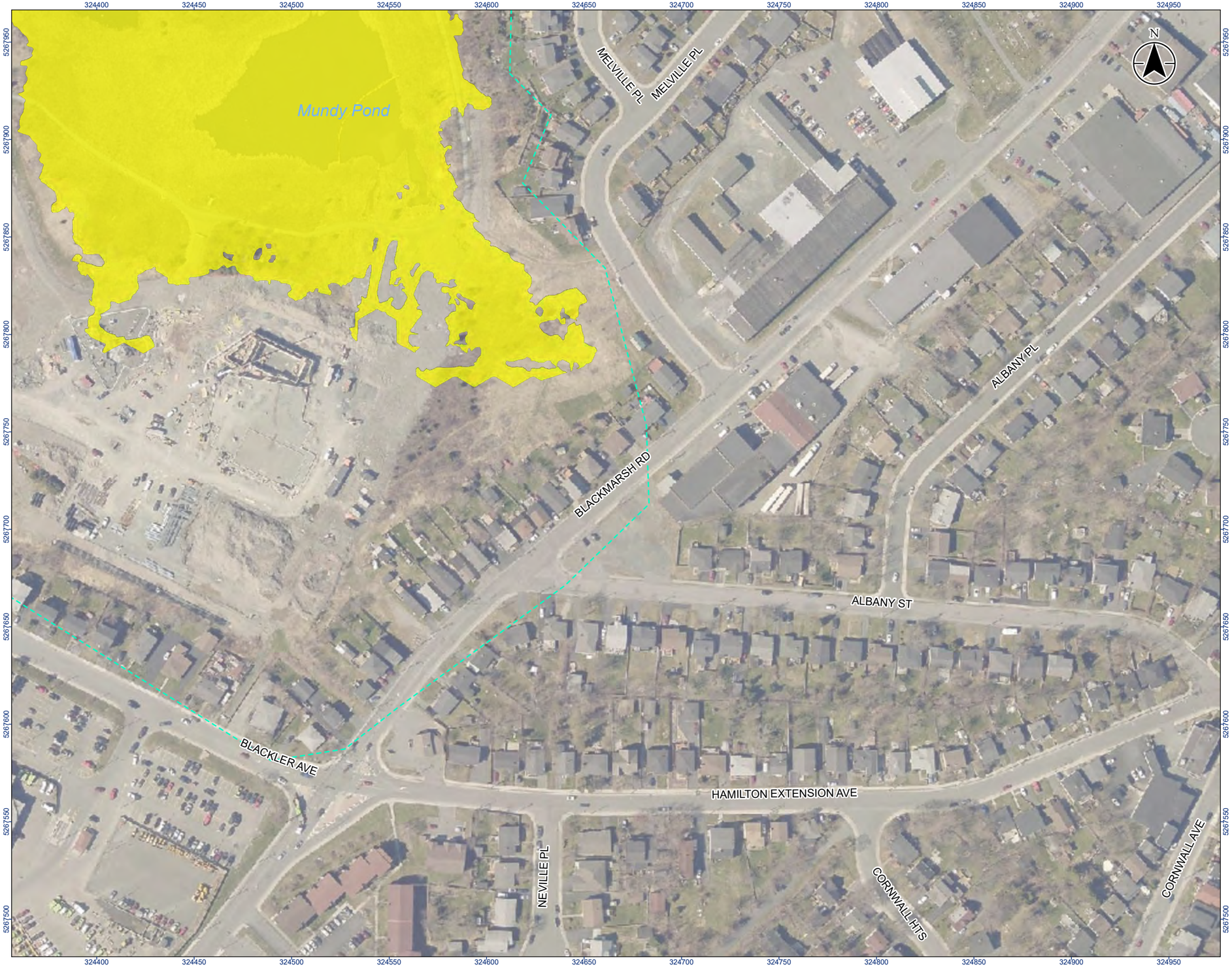

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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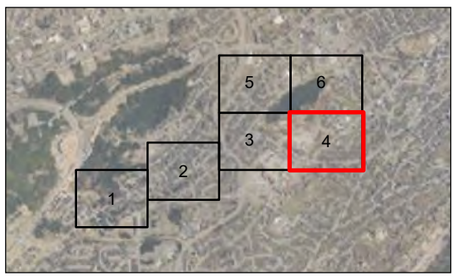

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-4

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook
Sheet 4 of 6

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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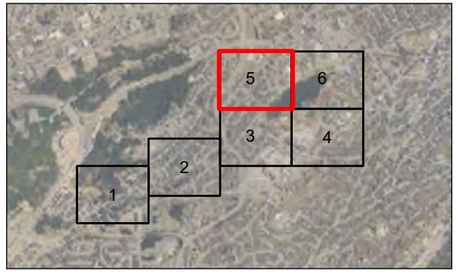

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-5

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook
Sheet 5 of 6

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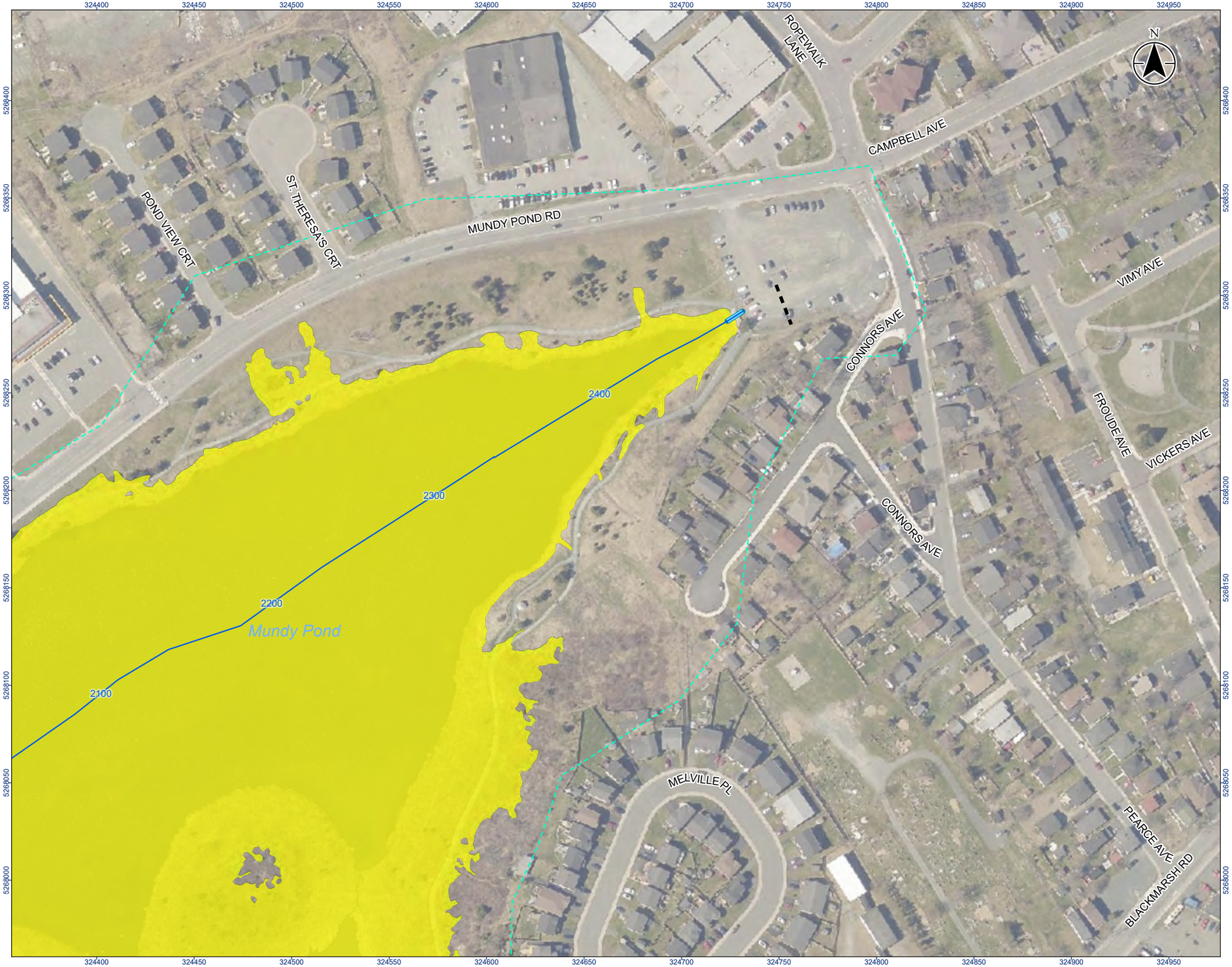

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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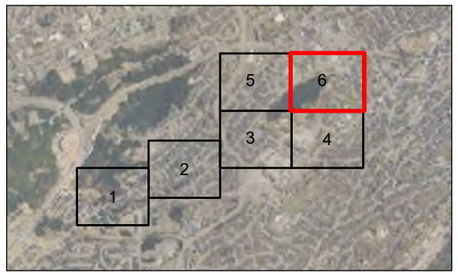

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-02

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
60-6

Title
Climate Change Condition
20-Year Velocity - Mundy Pond Brook
Sheet 6 of 6

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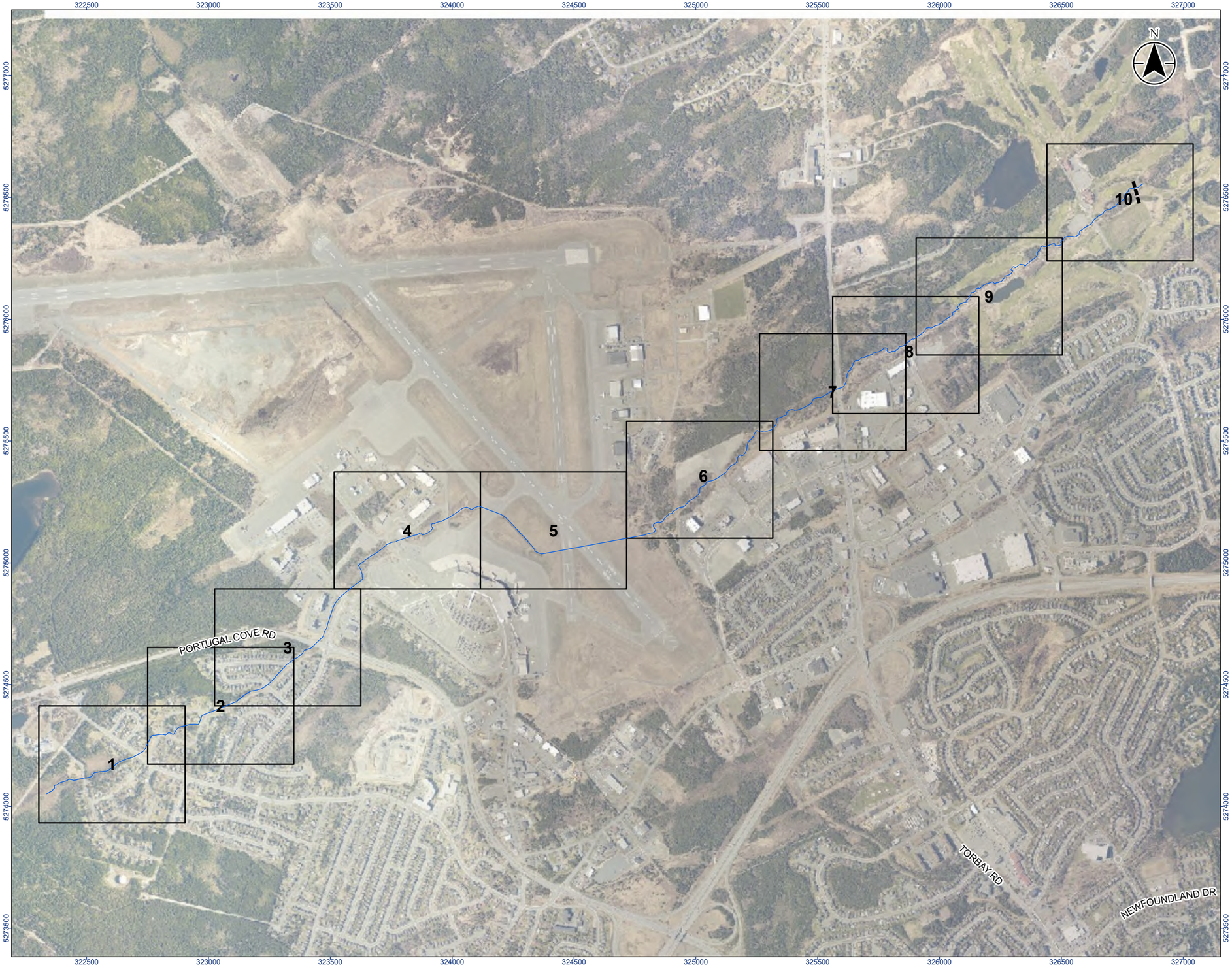

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 310 620 m

1:16,000 (At original document size of 11x17)

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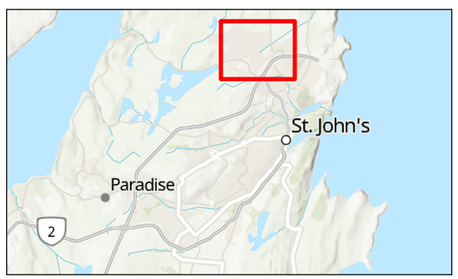

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-0

Title
Climate Change Condition 20-Year Velocity - Outer Cove Brook Overview Map

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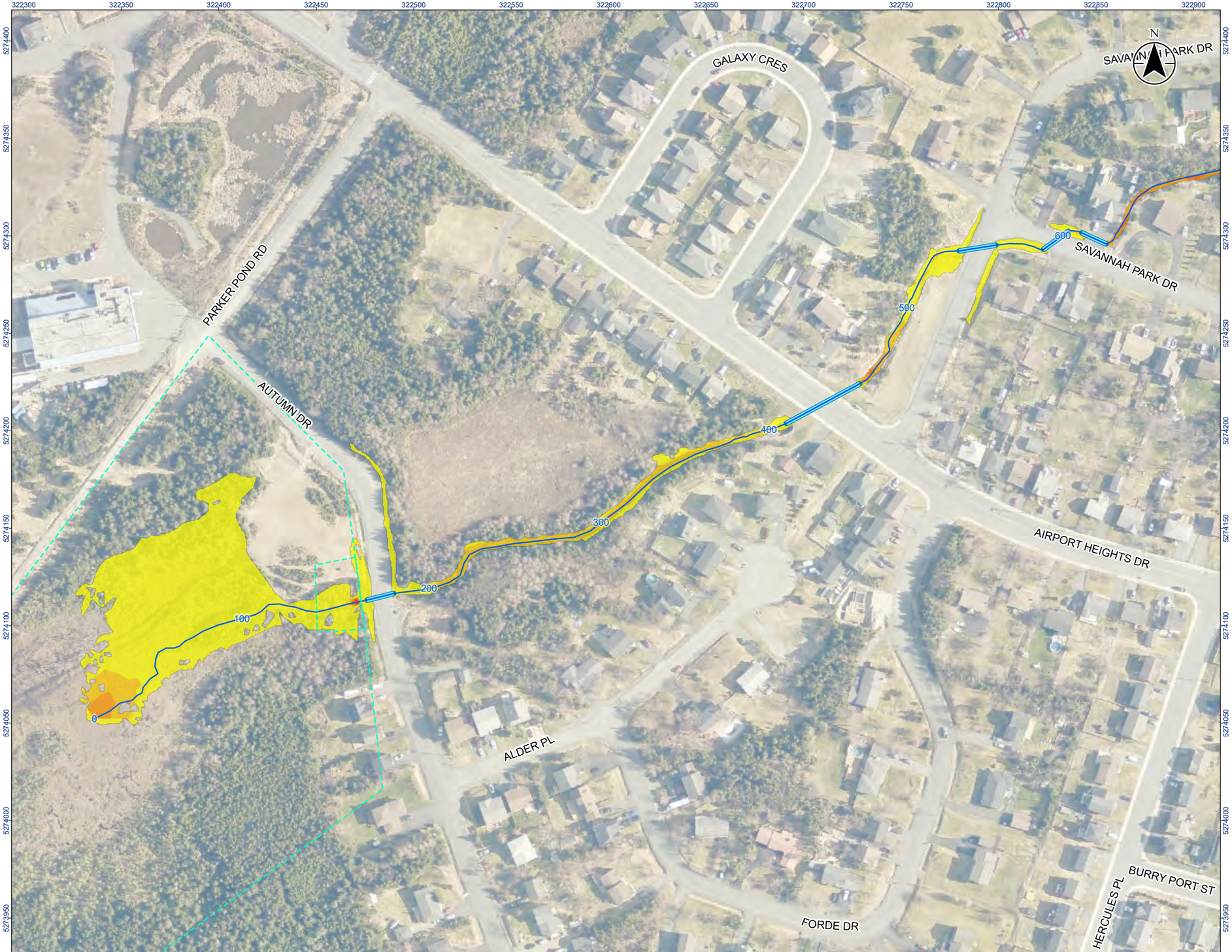

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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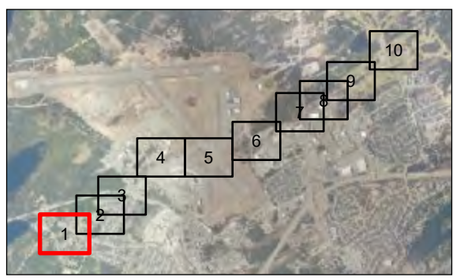

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-1

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 1 of 10

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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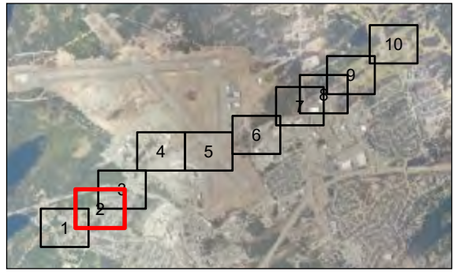

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-2

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 2 of 10

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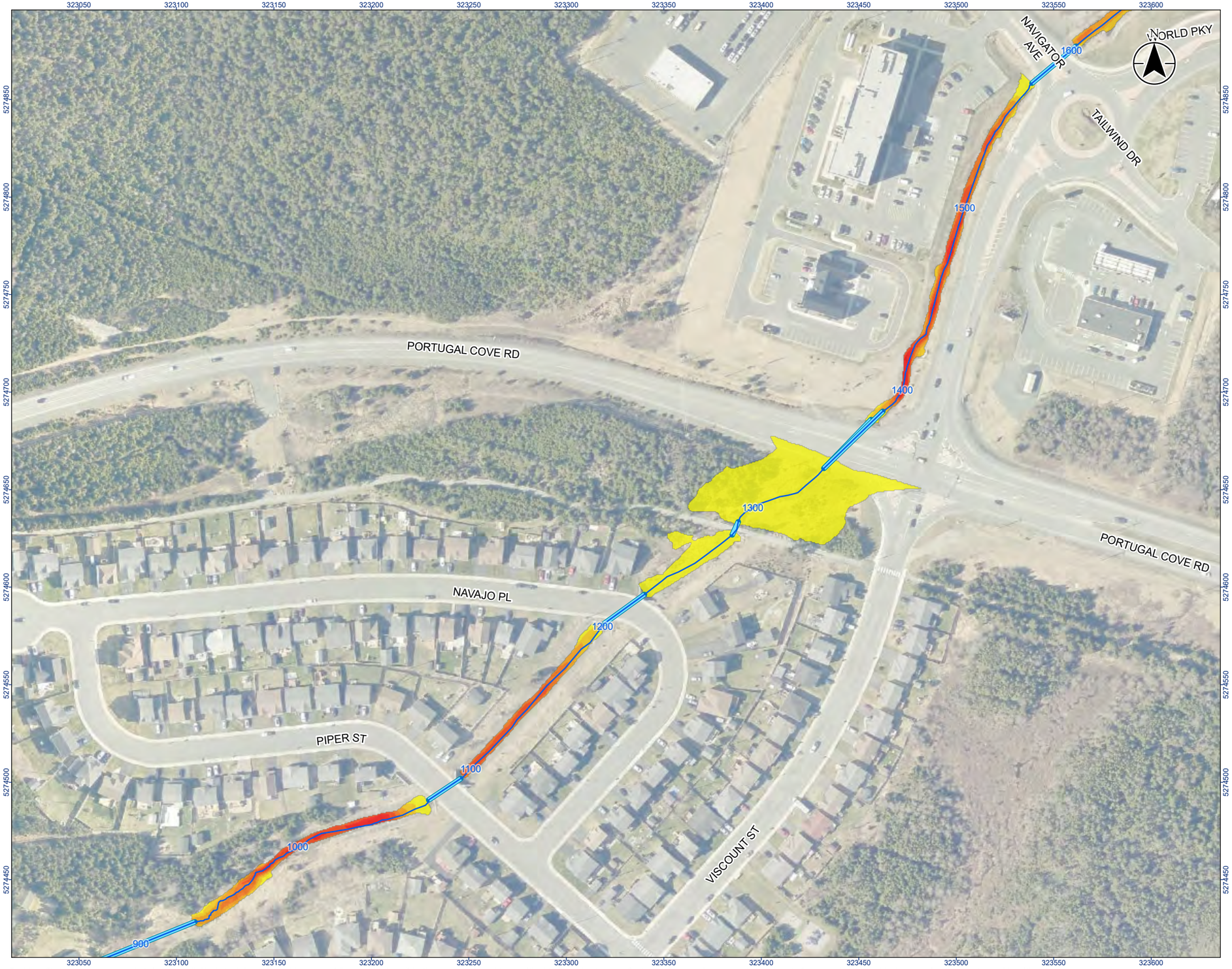

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
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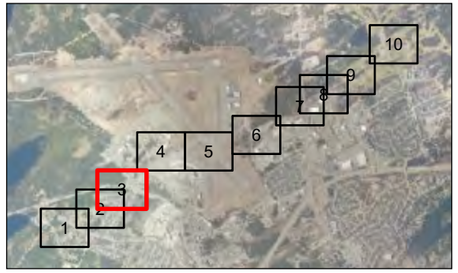

Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-3

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 3 of 10

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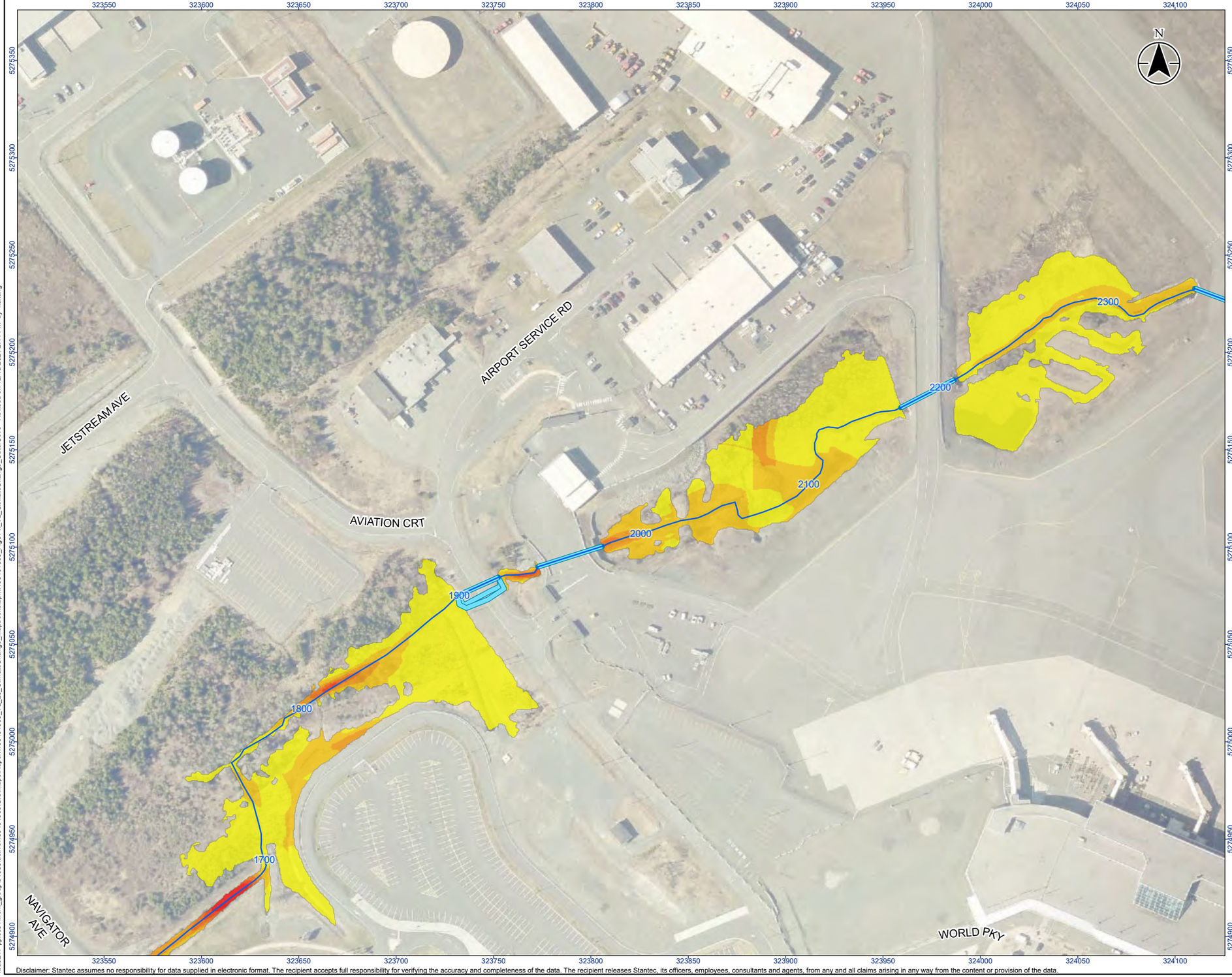

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40
m
1:2,000 (At original document size of 11x17)

Notes

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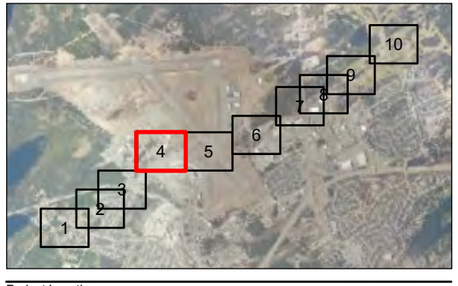

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-4

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 4 of 10

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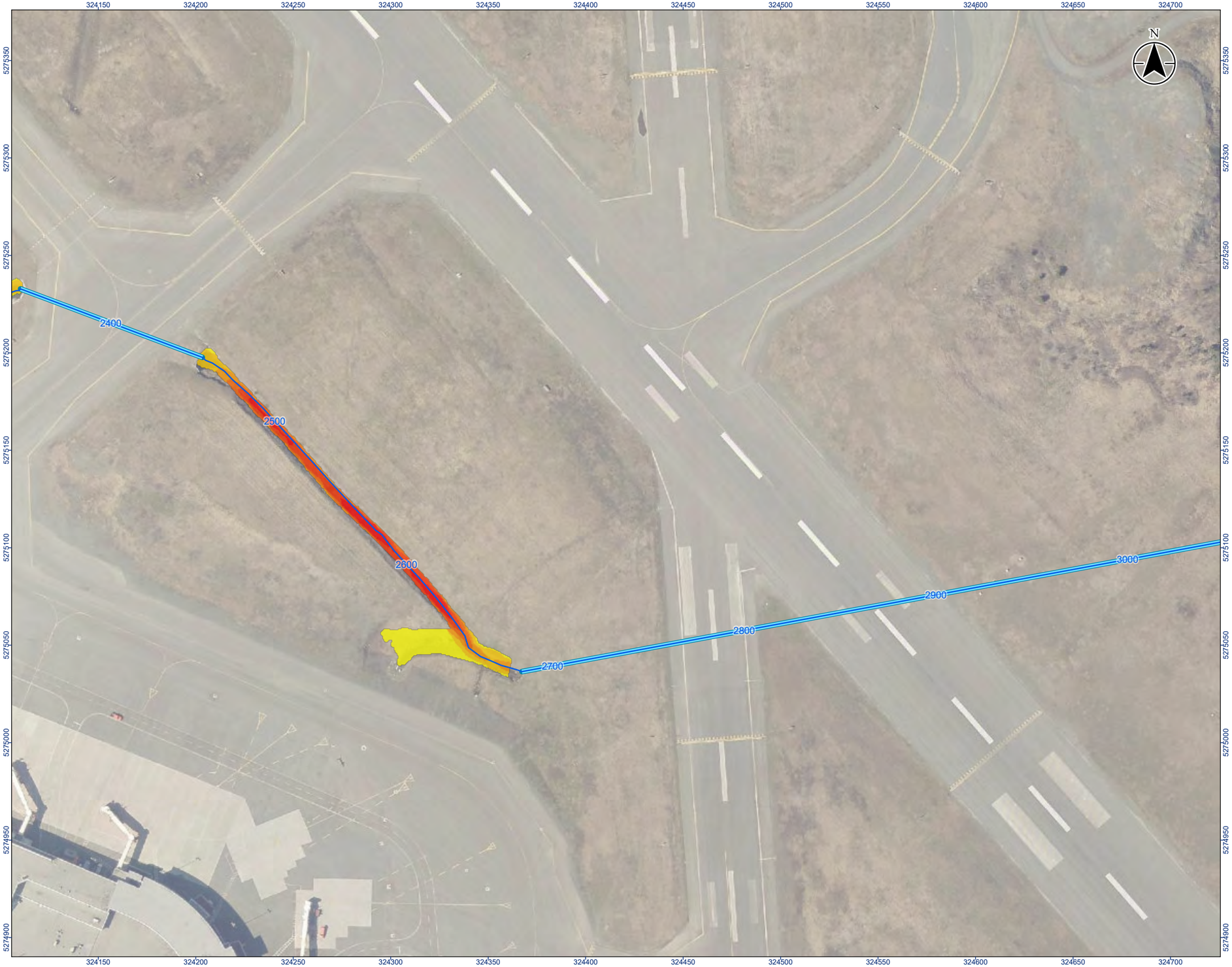

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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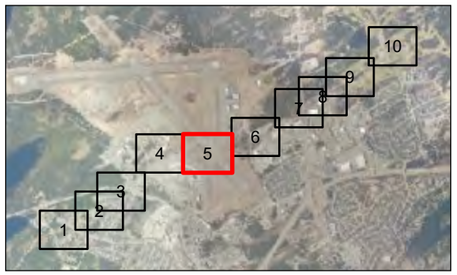

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-5

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 5 of 10

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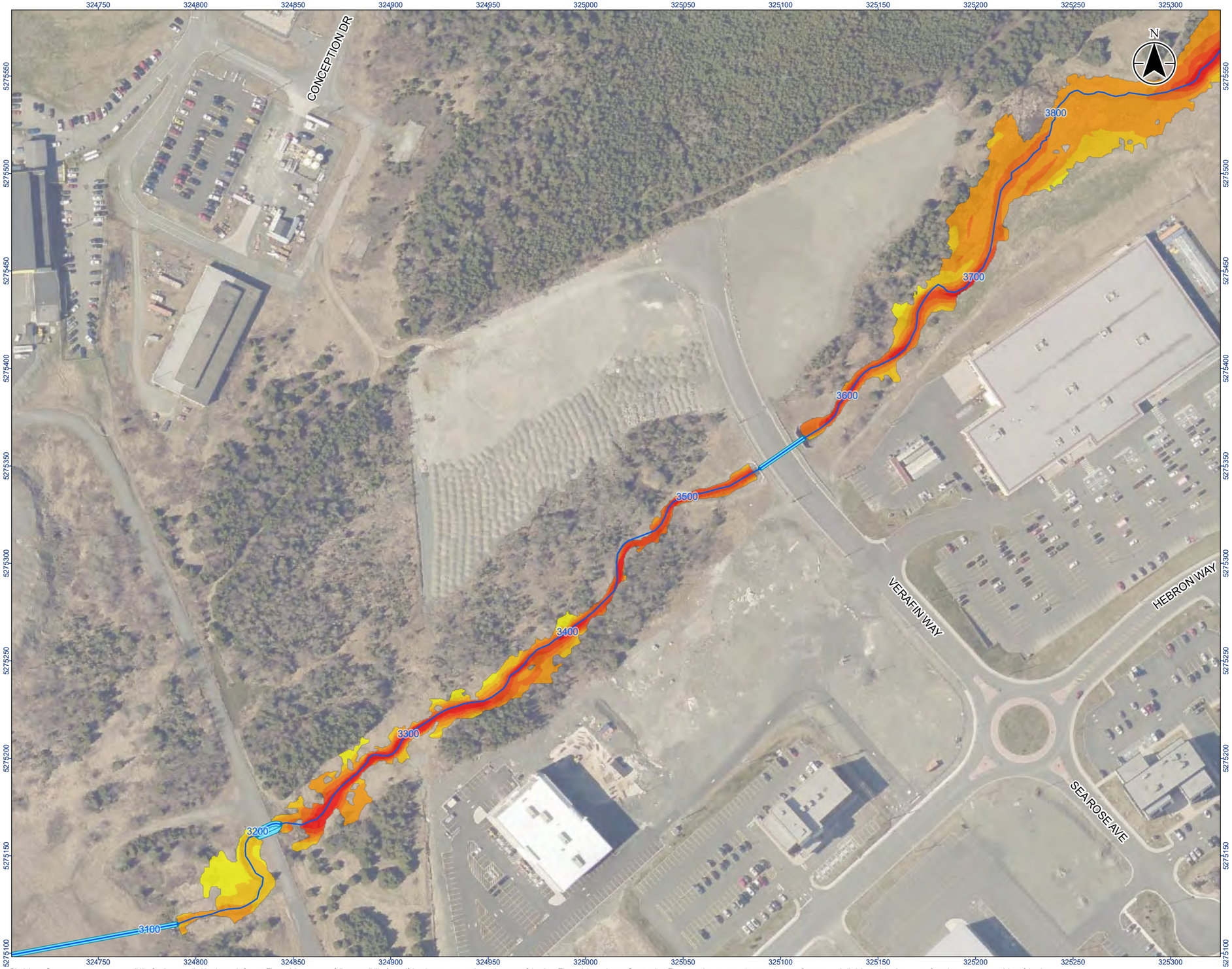

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-6

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 6 of 10

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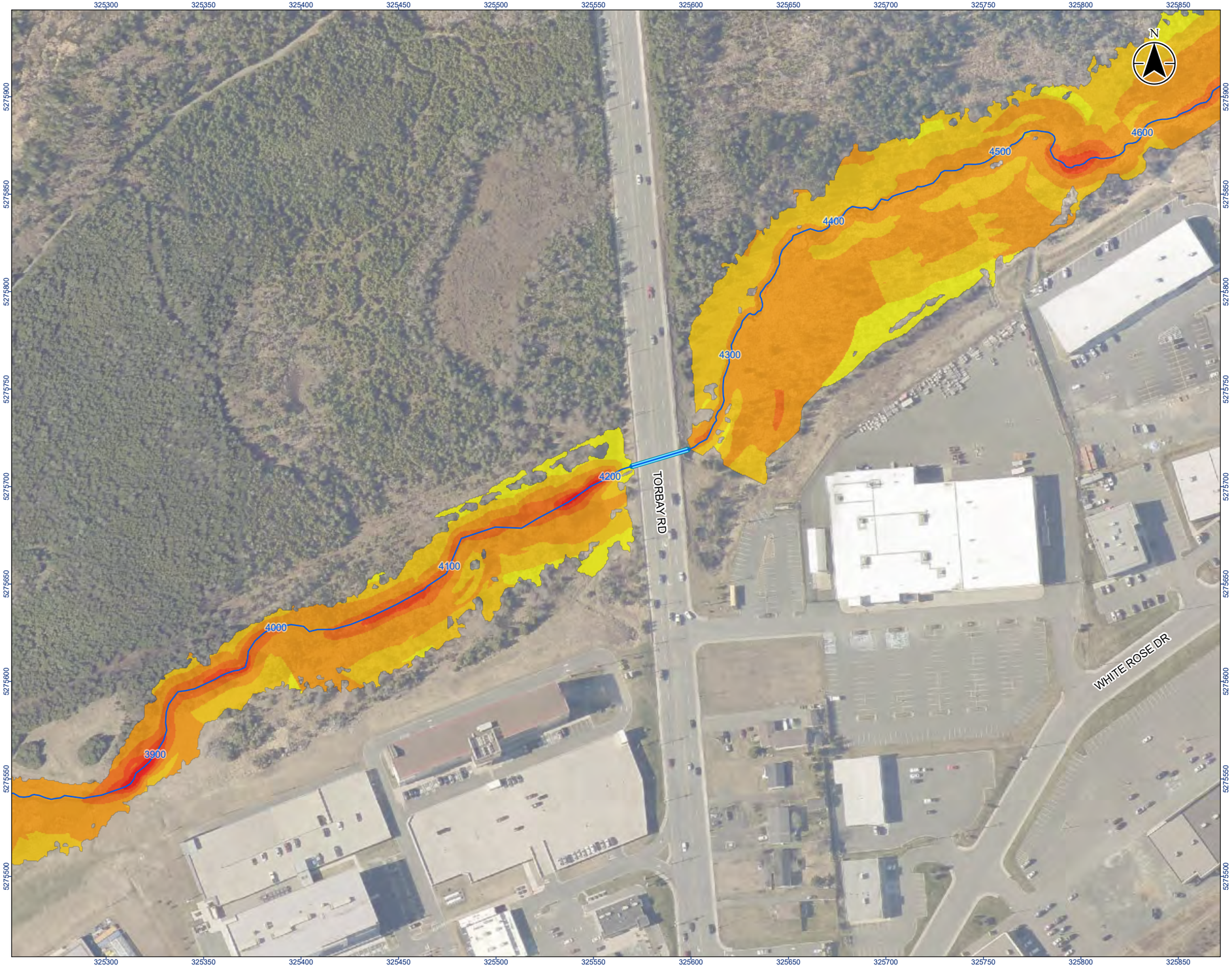

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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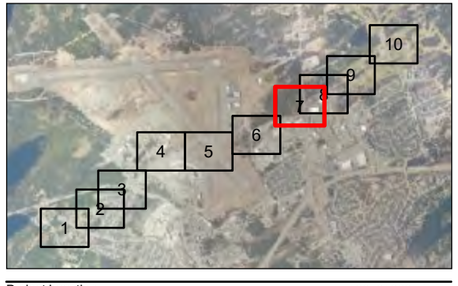

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-7

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 7 of 10

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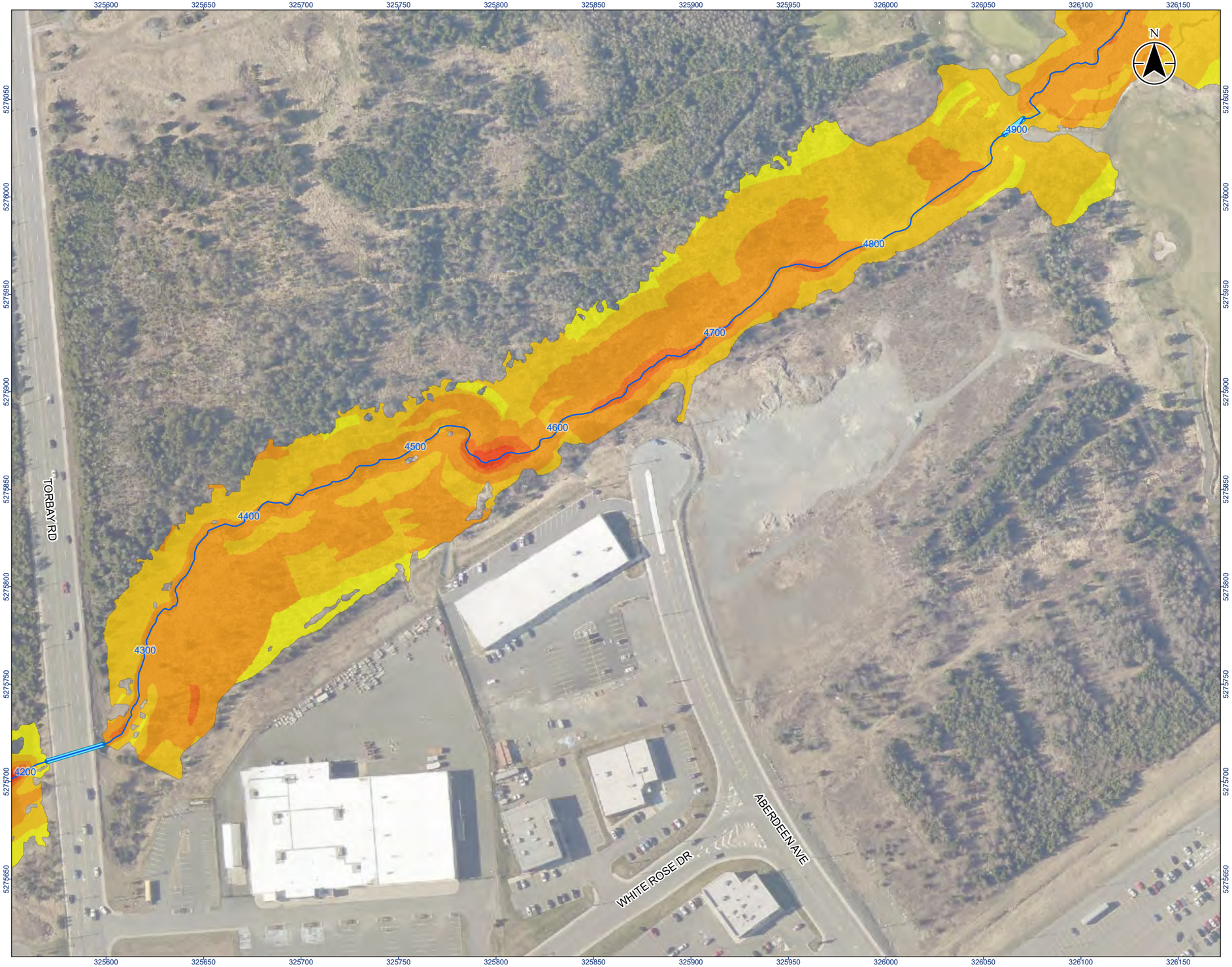

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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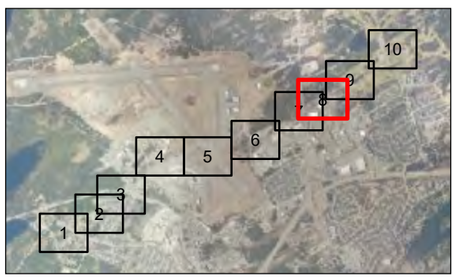

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-8

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 8 of 10

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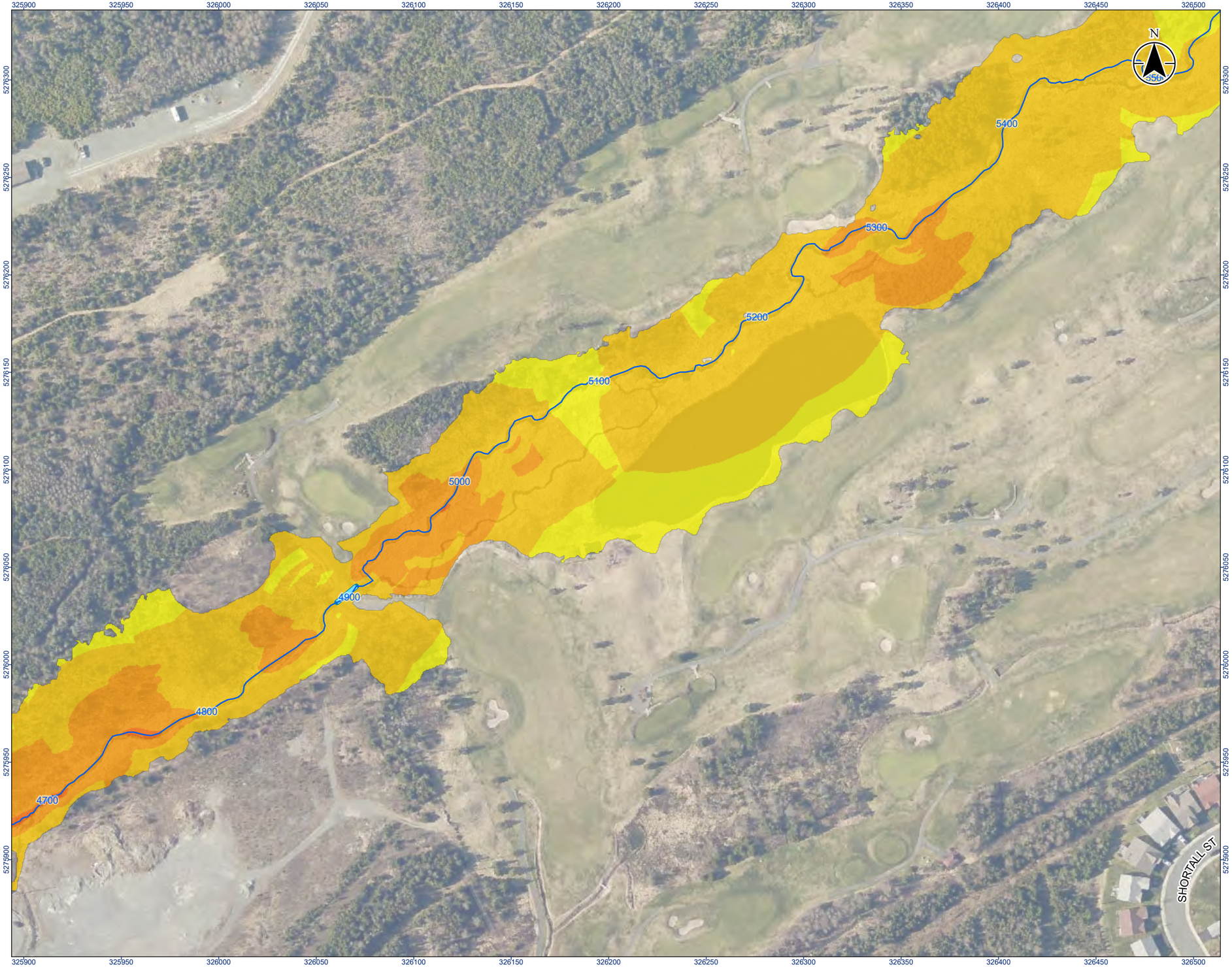

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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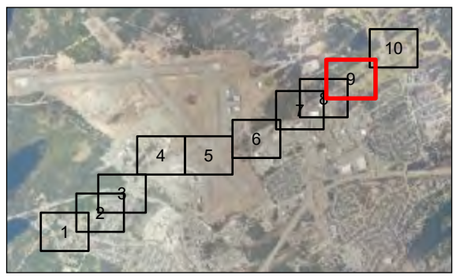

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-9

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 9 of 10

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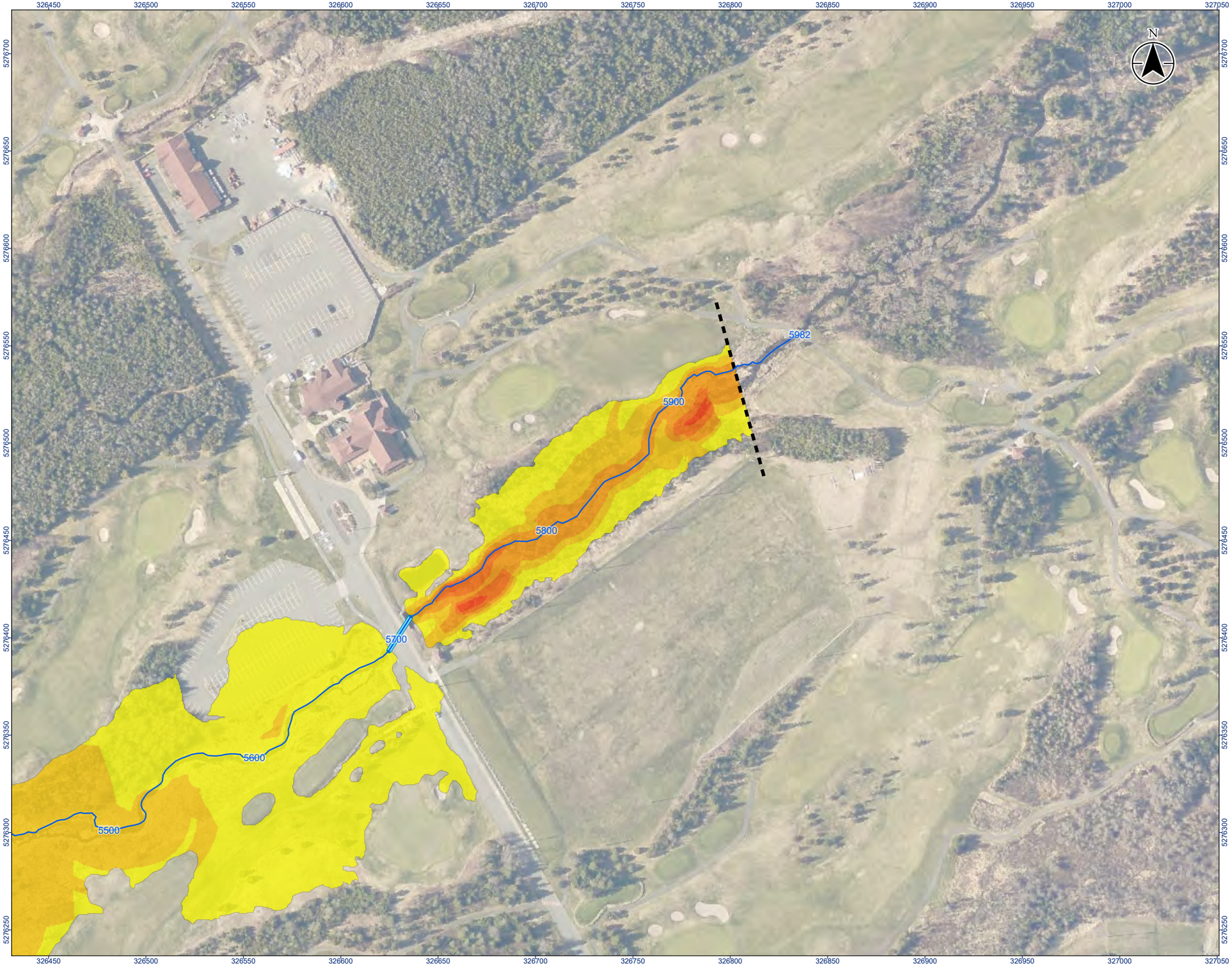

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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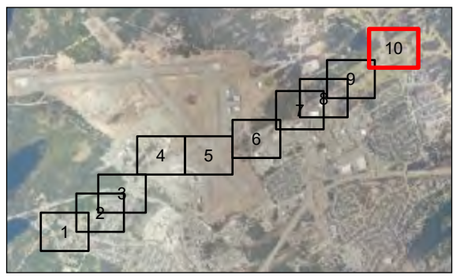

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
61-10

Title
Climate Change Condition
20-Year Velocity - Outer Cove Brook
Sheet 10 of 10

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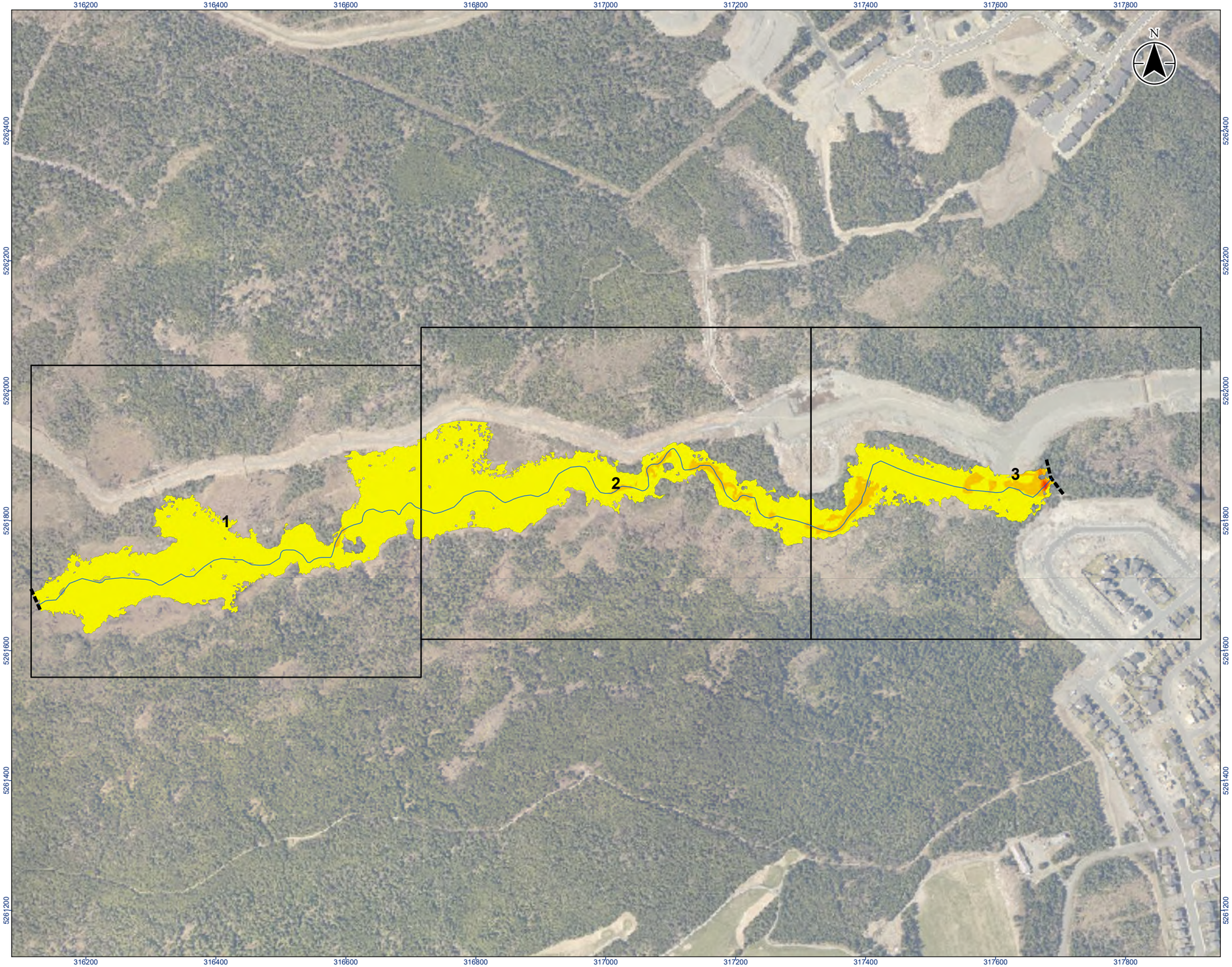

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 110 220 m

1:6,000 (At original document size of 11x17)

Notes

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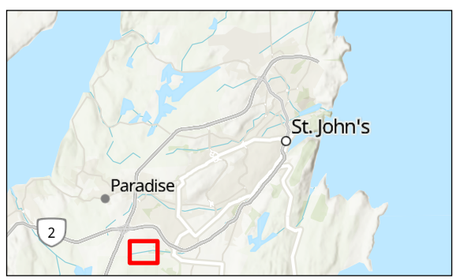

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
62-0

Title
Climate Change Condition 20-Year Velocity - South Brook Overview Map

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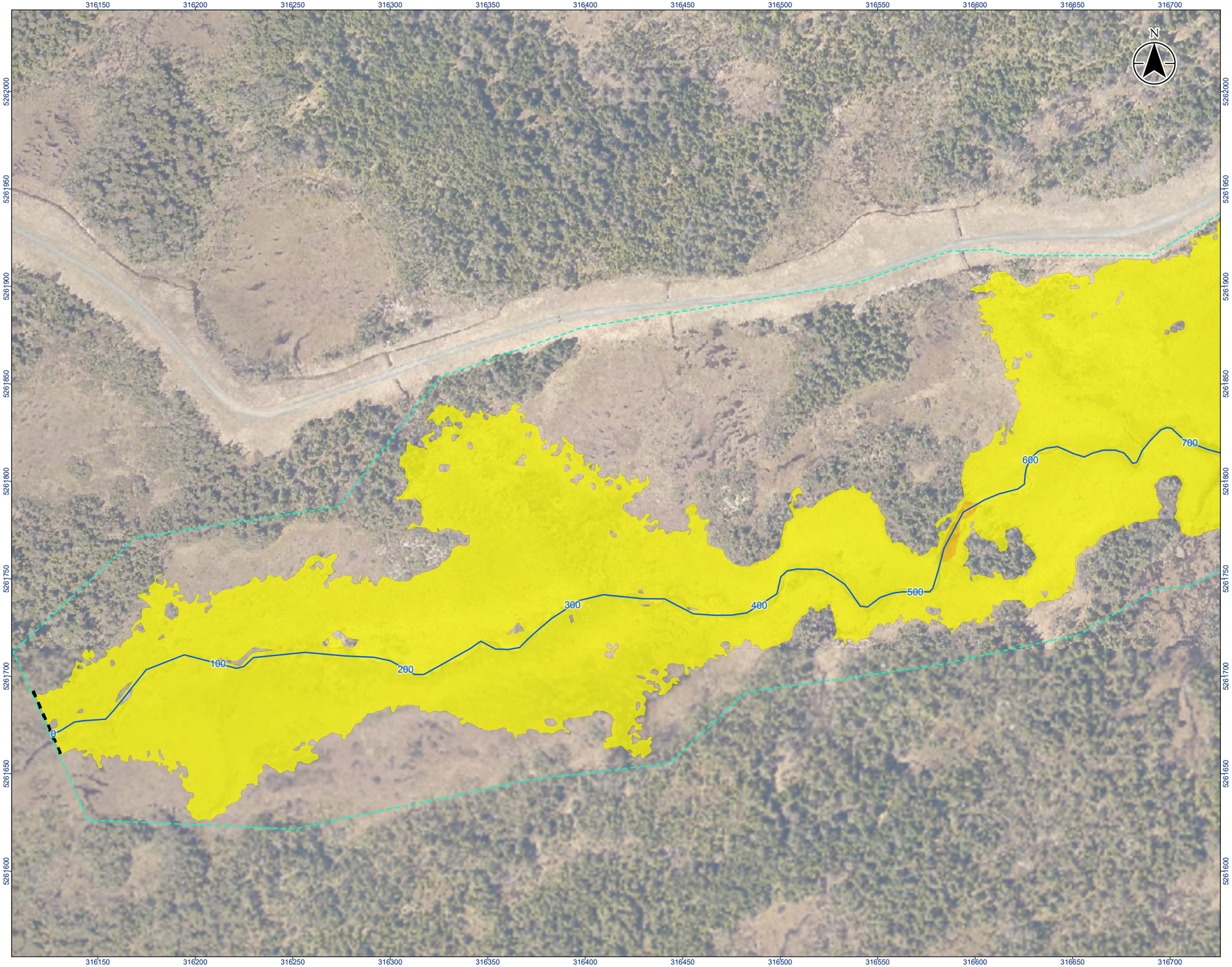

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
62-1

Title
Climate Change Condition
20-Year Velocity - South Brook
Sheet 1 of 3

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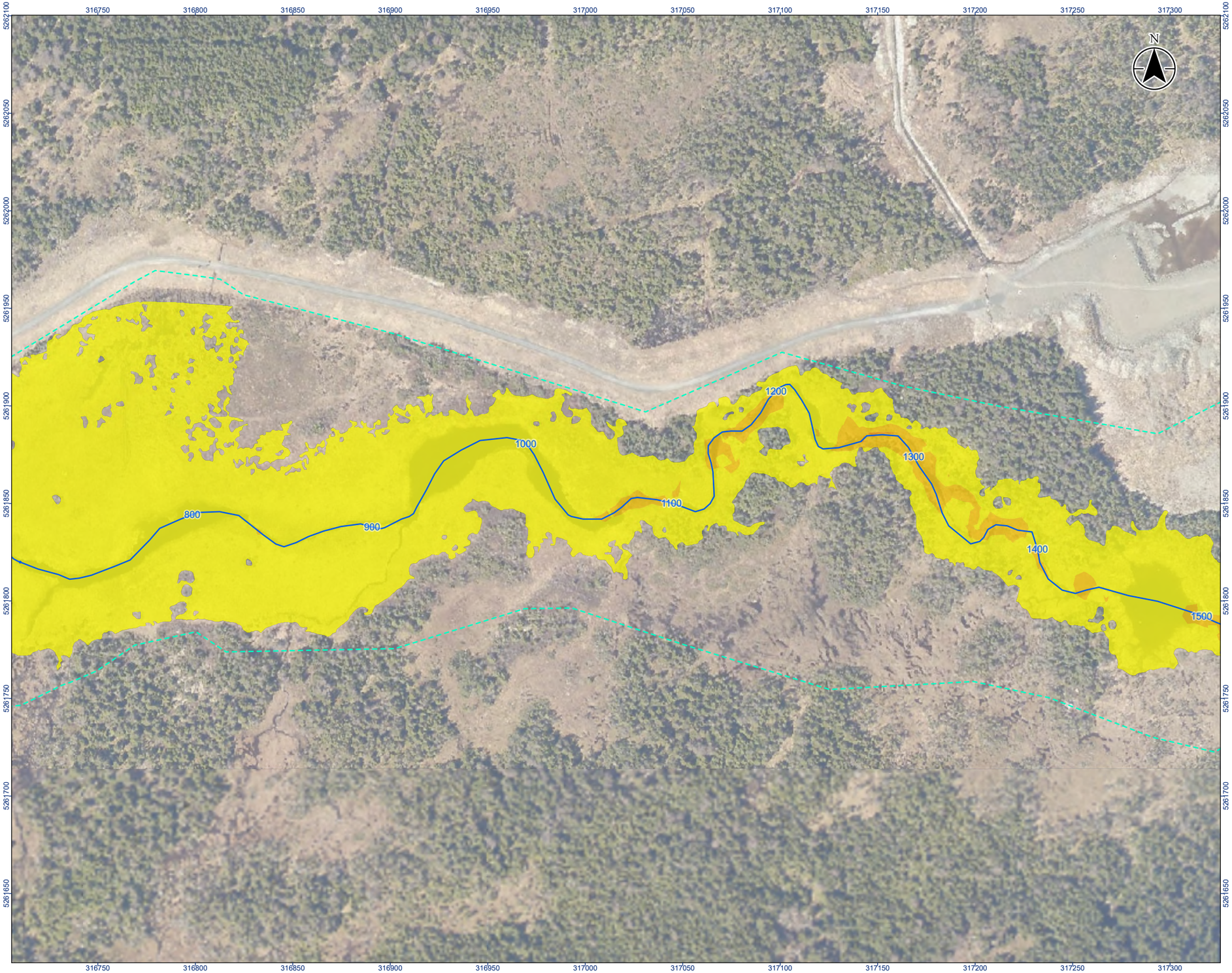

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
62-2

Title
Climate Change Condition
20-Year Velocity - South Brook
Sheet 2 of 3

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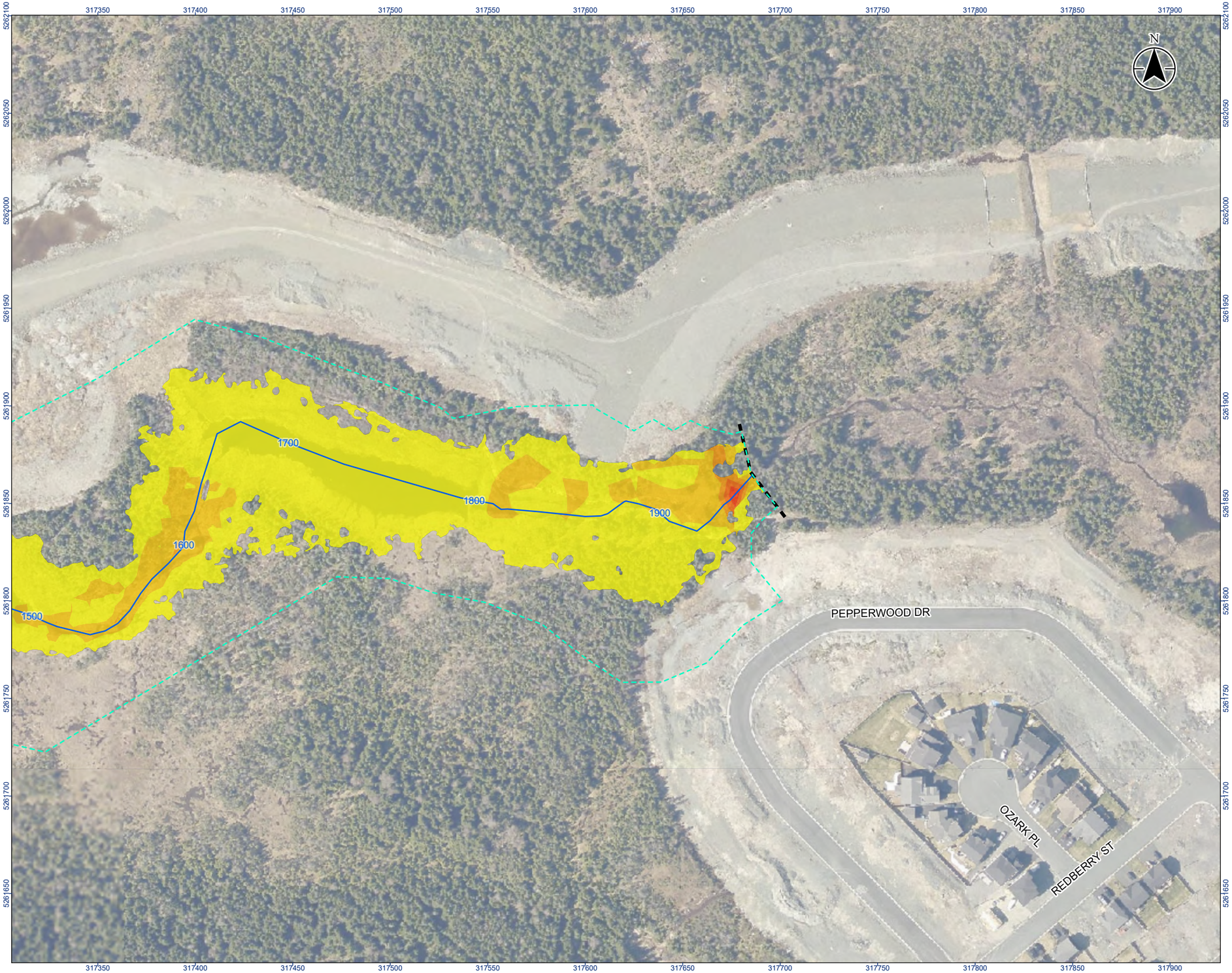

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
62-3

Title
Climate Change Condition
20-Year Velocity - South Brook
Sheet 3 of 3

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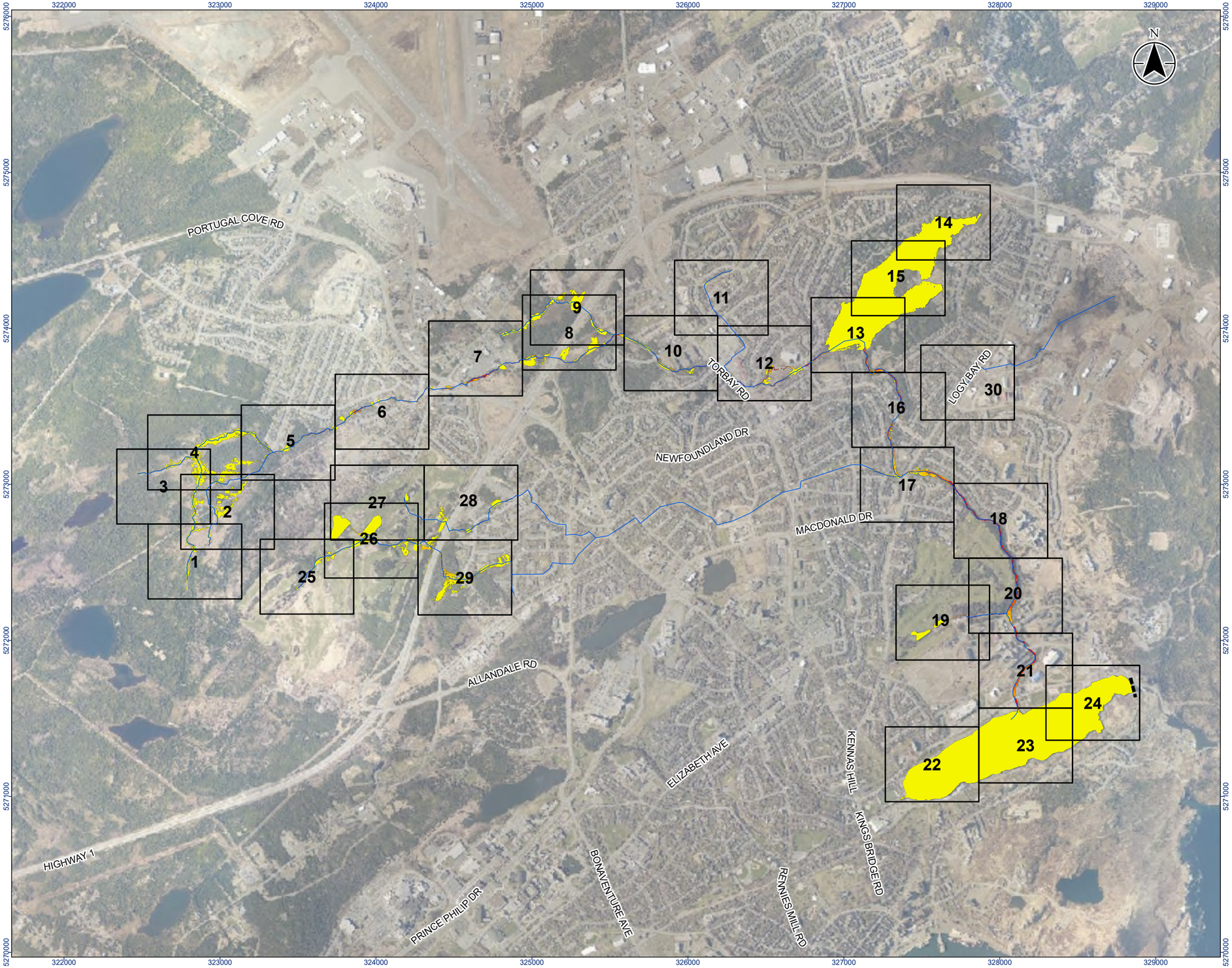

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 490 980 m

1:25,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-0

Title
Climate Change Condition 20-Year Velocity - Virginia River Overview Map

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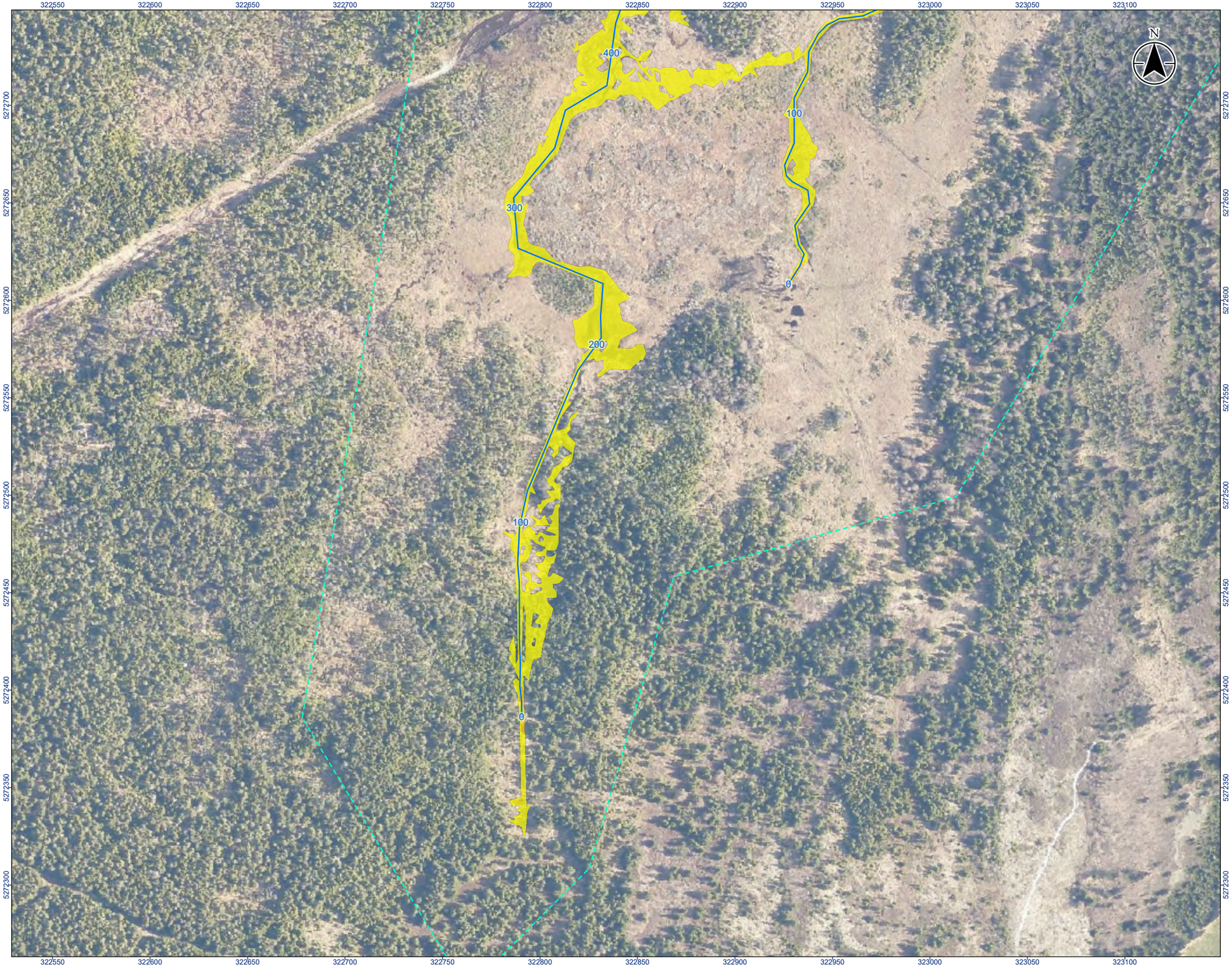

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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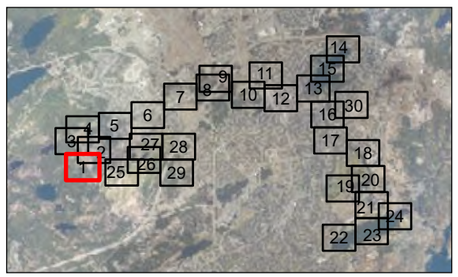

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-1

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 1 of 30

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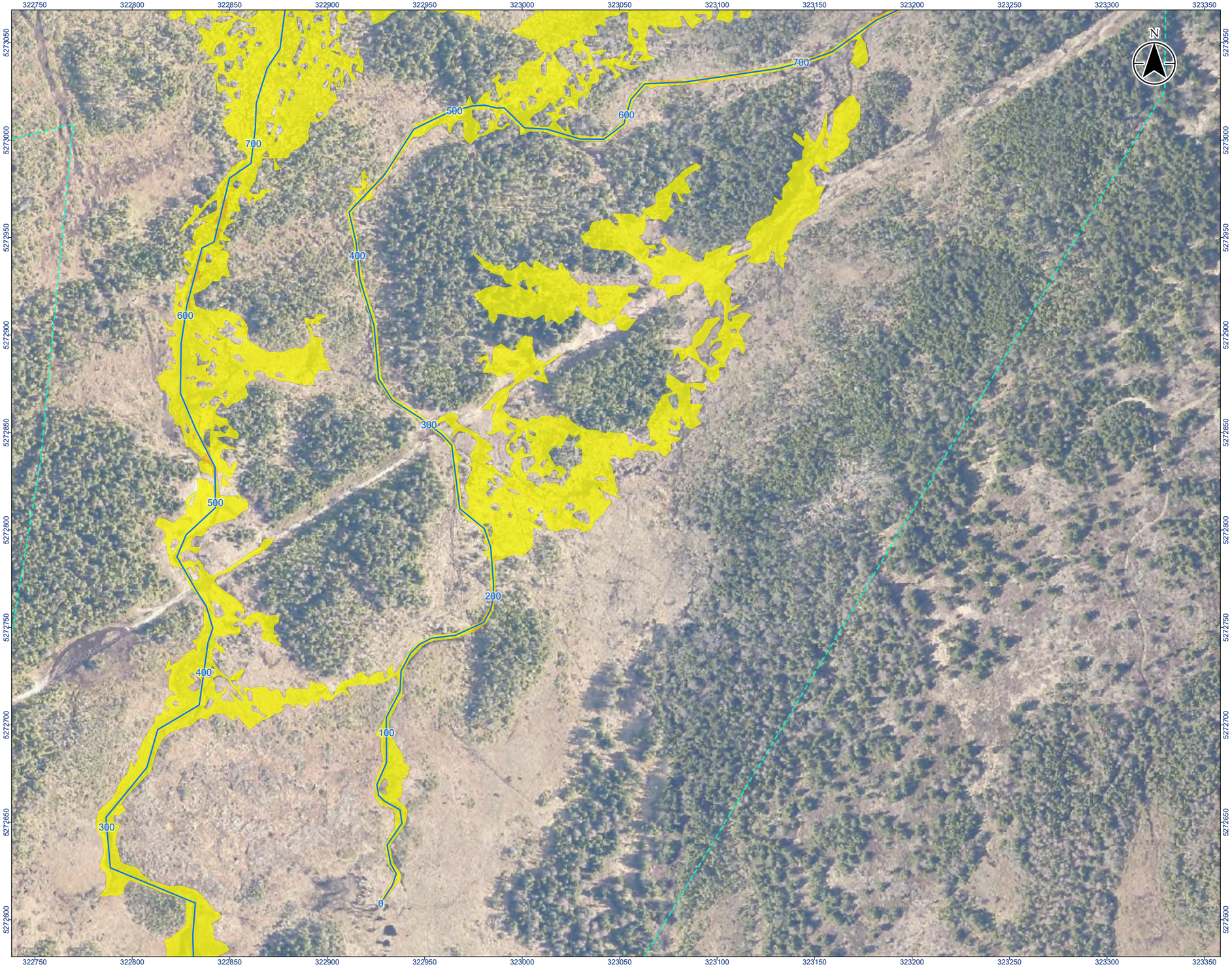

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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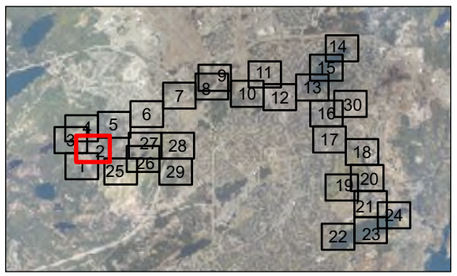

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-2

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 2 of 30

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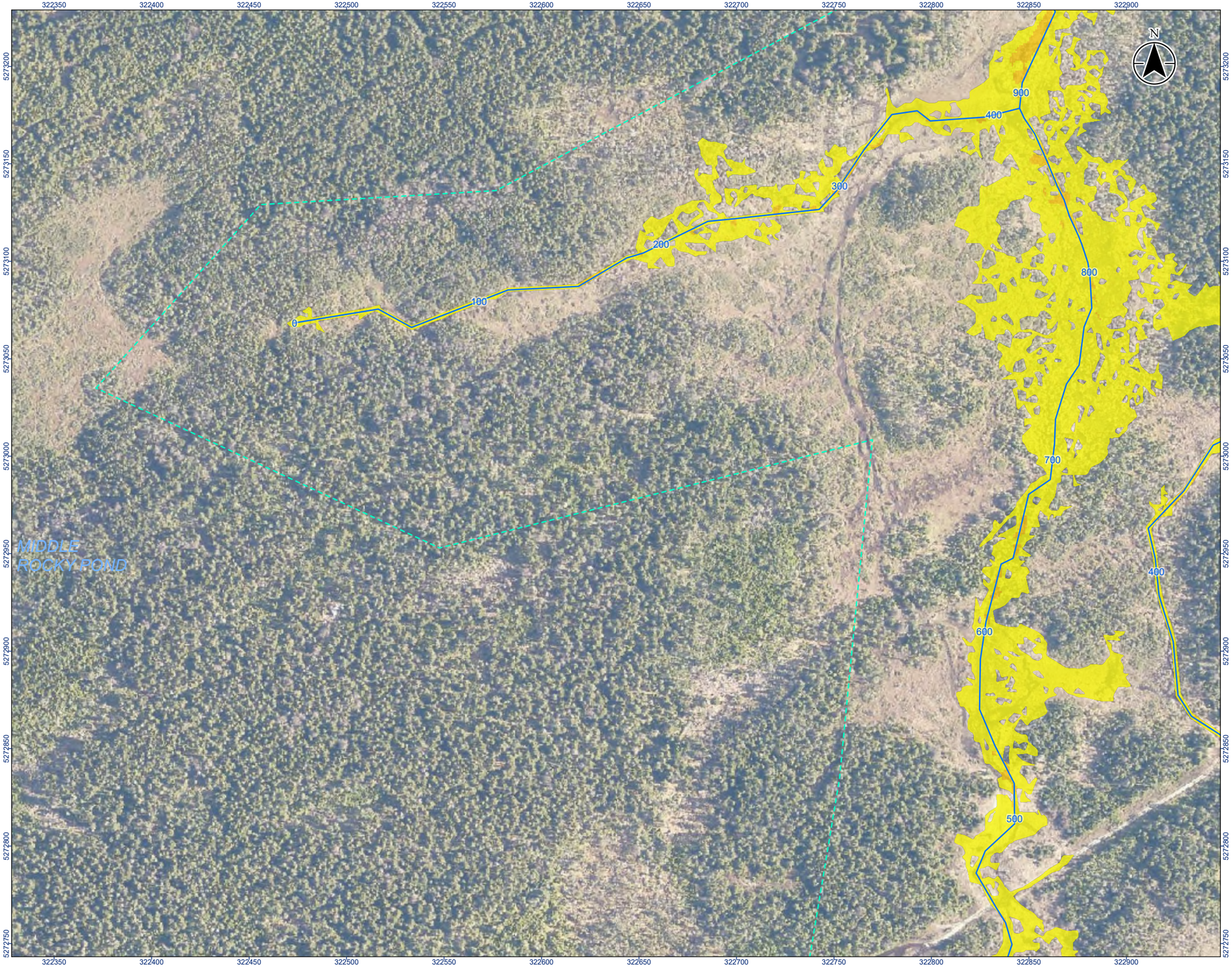

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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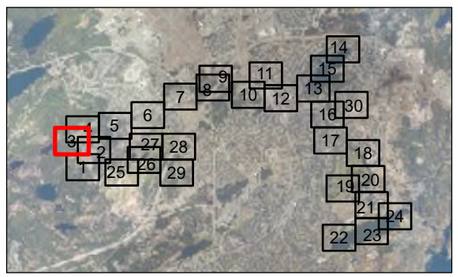

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-3

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 3 of 30

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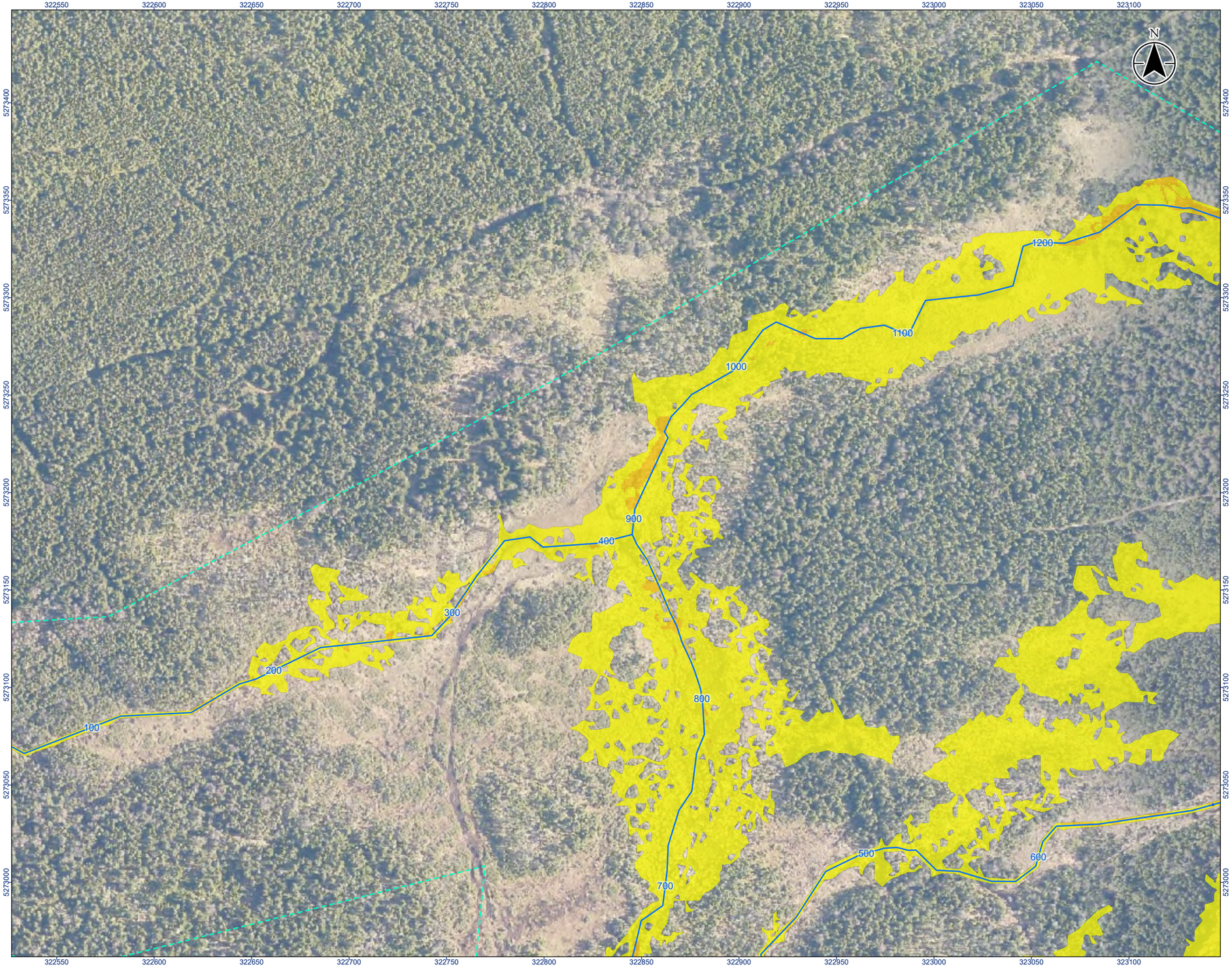

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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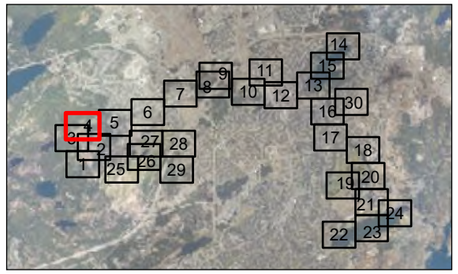

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-4

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 4 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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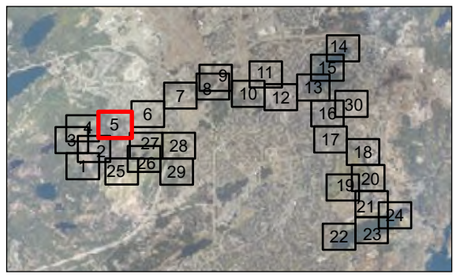

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-5

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 5 of 30

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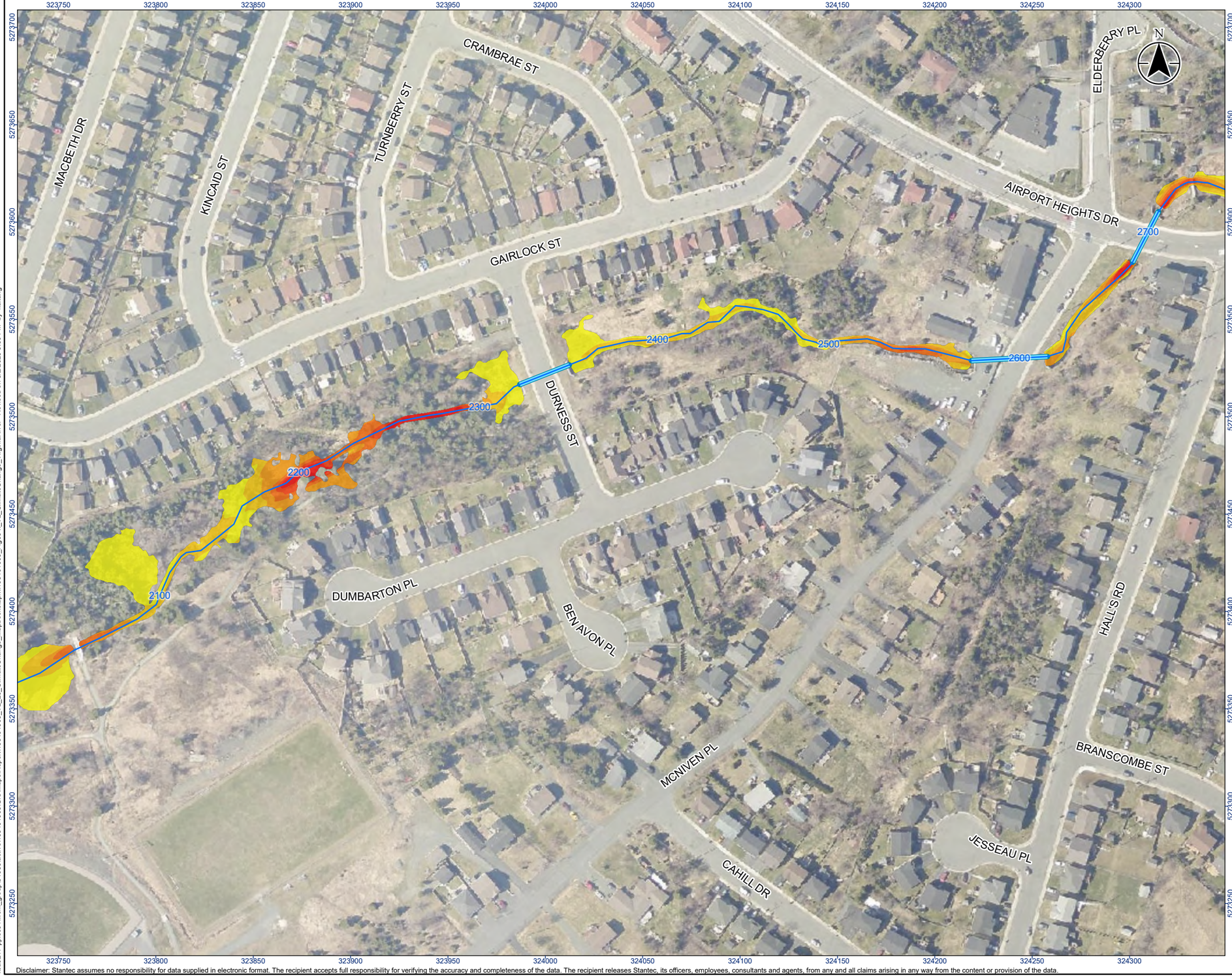

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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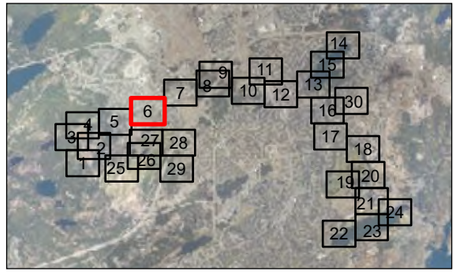

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-6

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 6 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
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Notes

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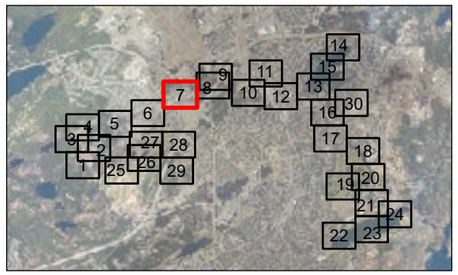

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-7

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 7 of 30

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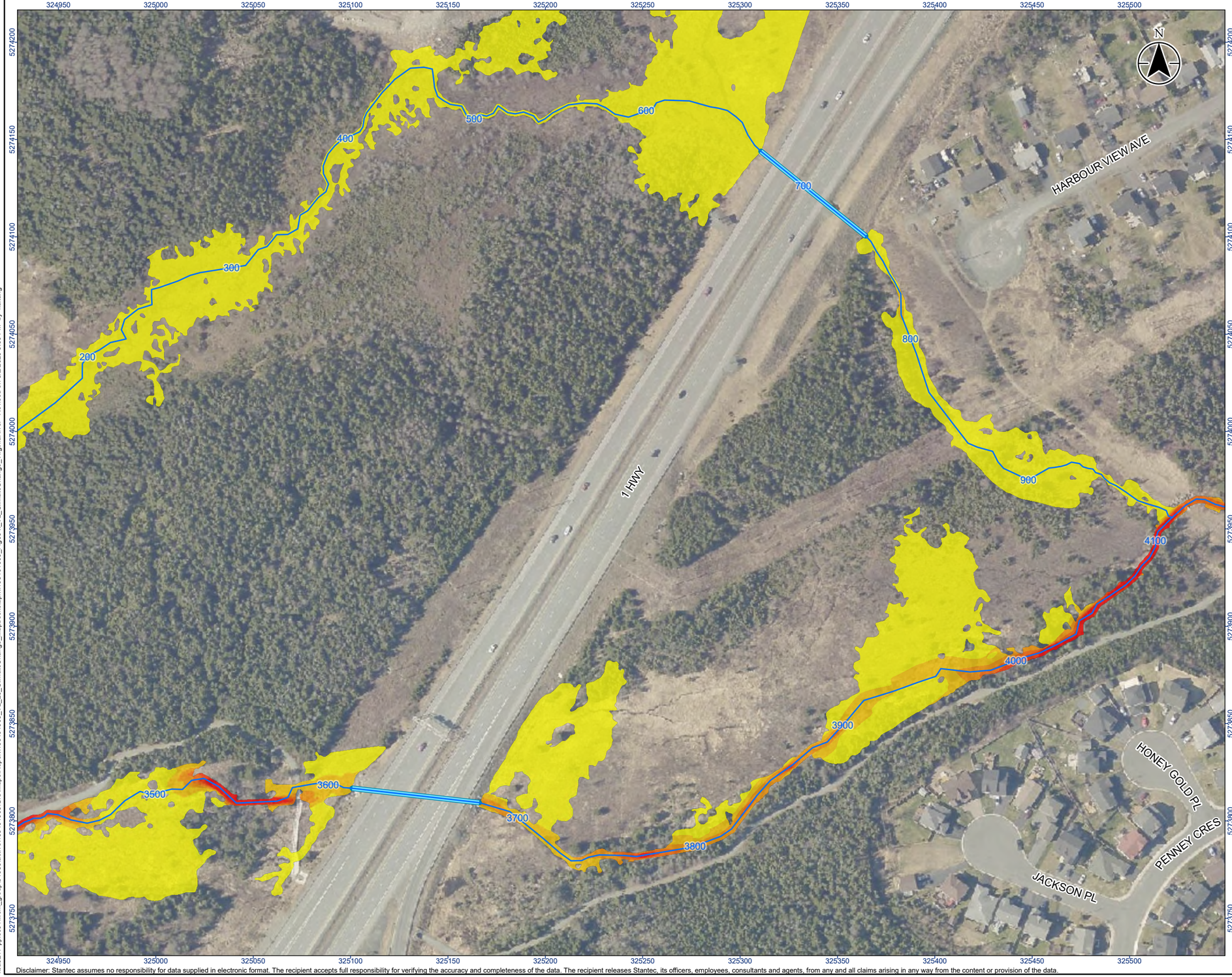

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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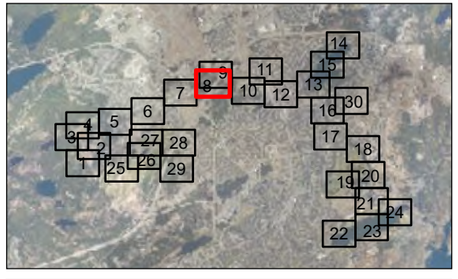

Project Location
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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-8

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 8 of 30

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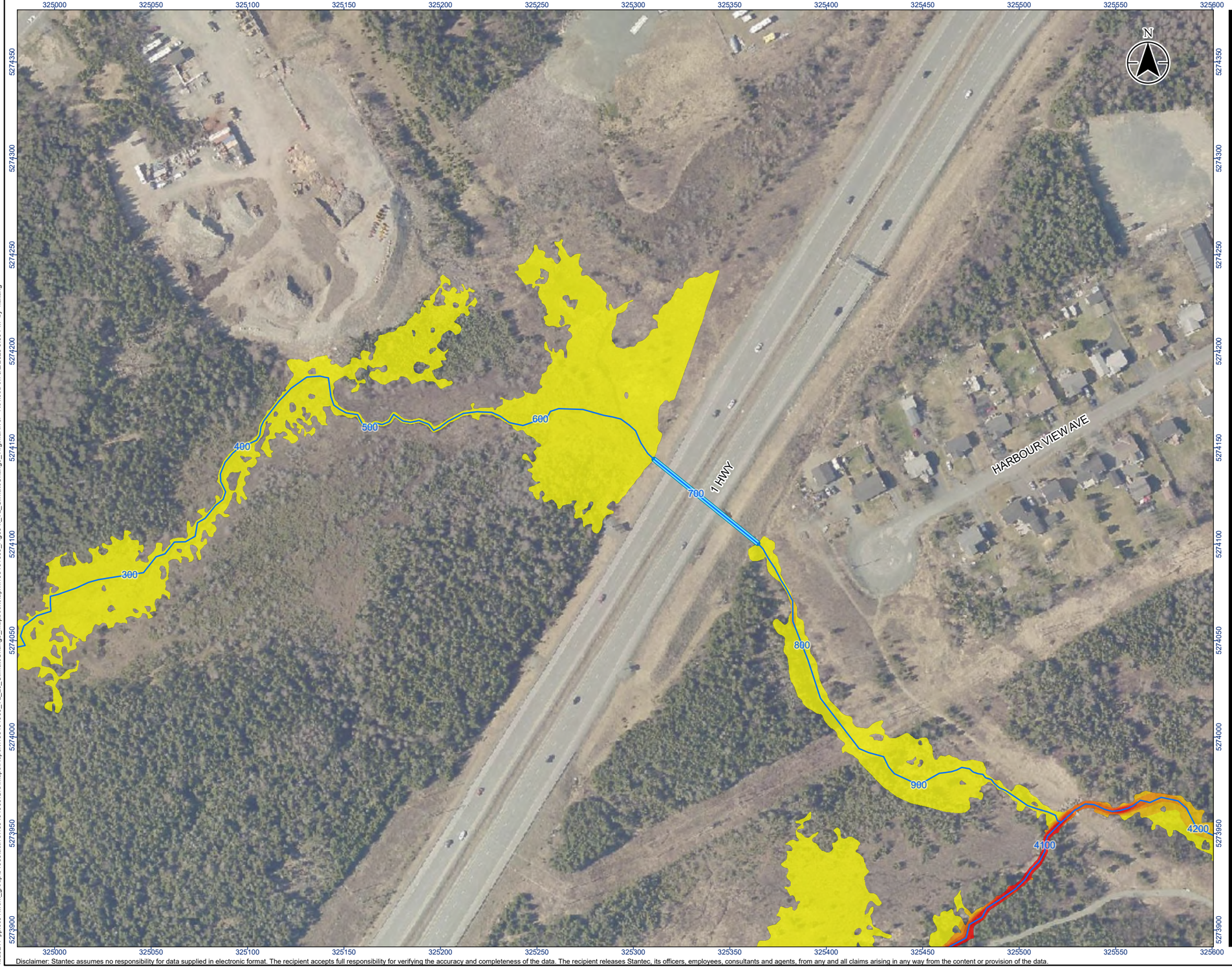

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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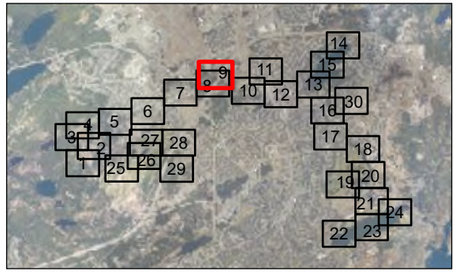

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-9

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 9 of 30

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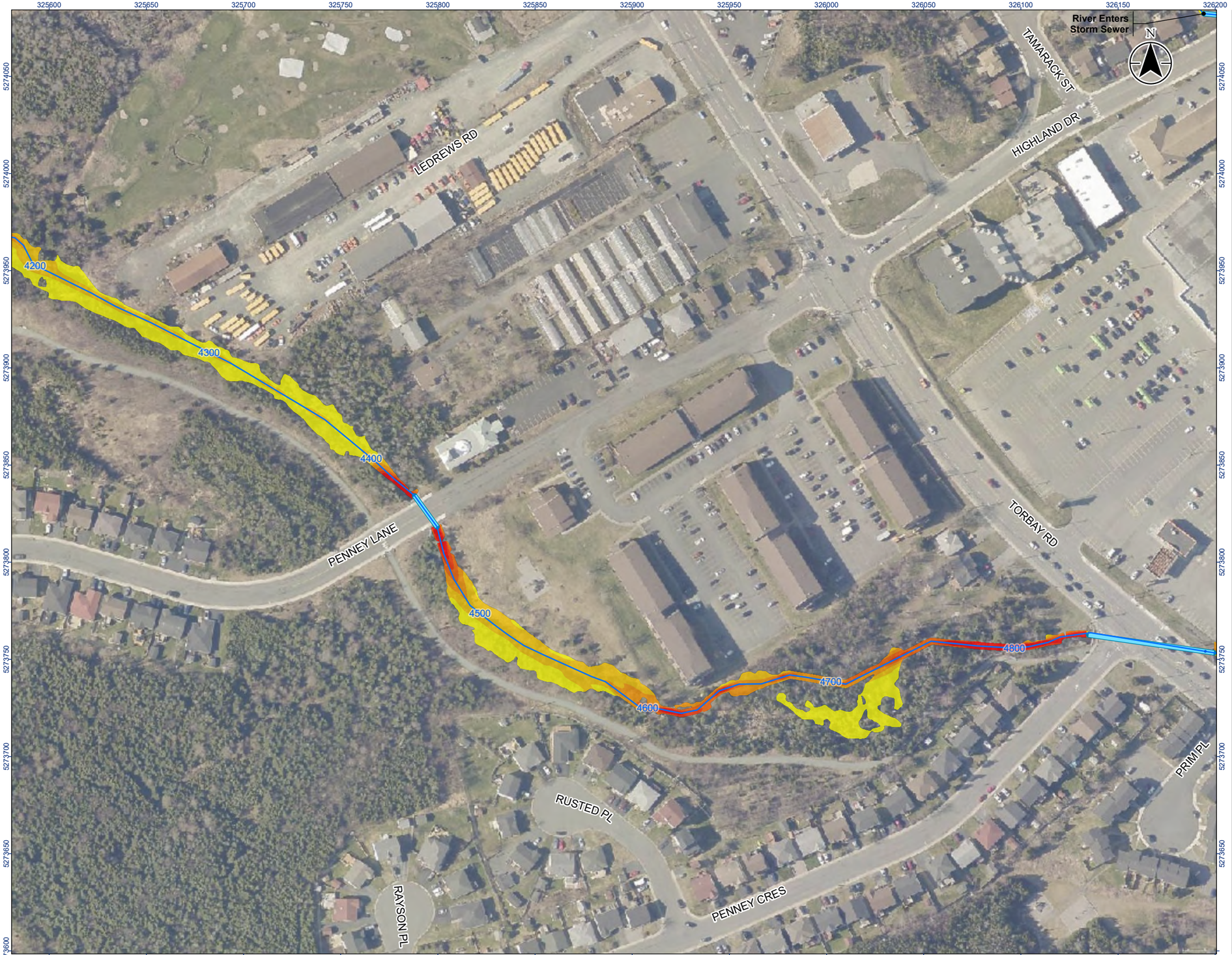

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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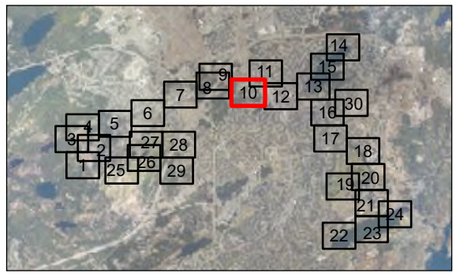

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-10

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 10 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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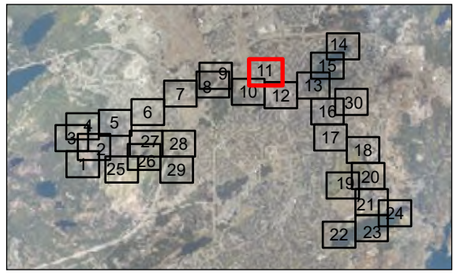

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-11

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 11 of 30

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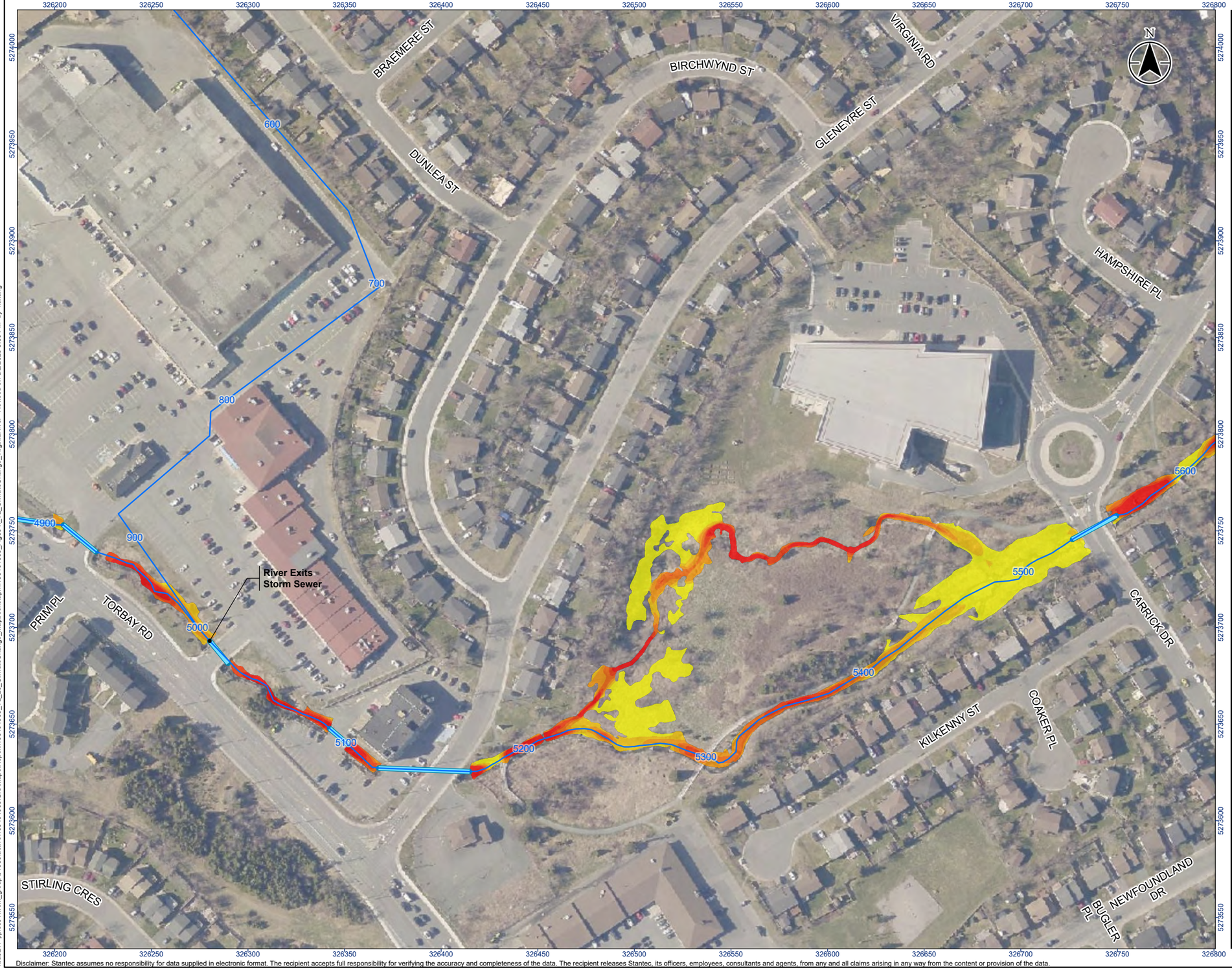

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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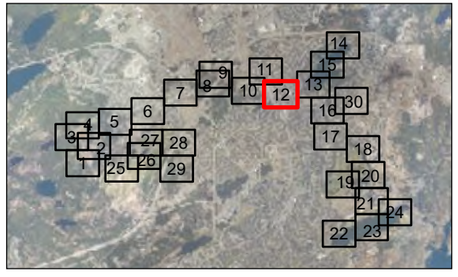

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-12

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 12 of 30

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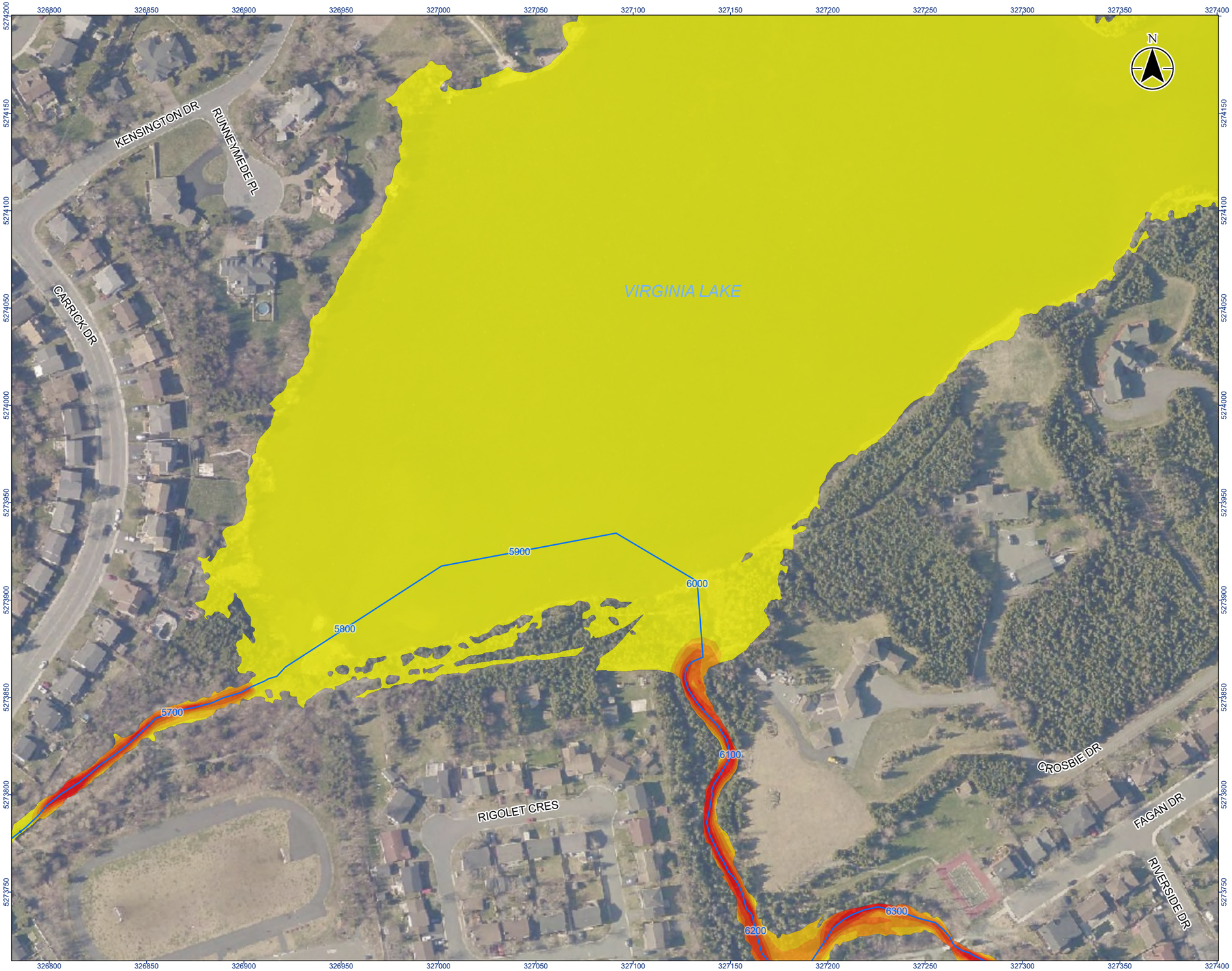

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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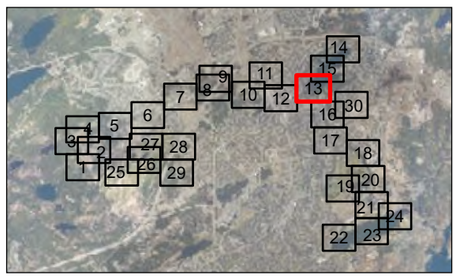

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-13

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 13 of 30

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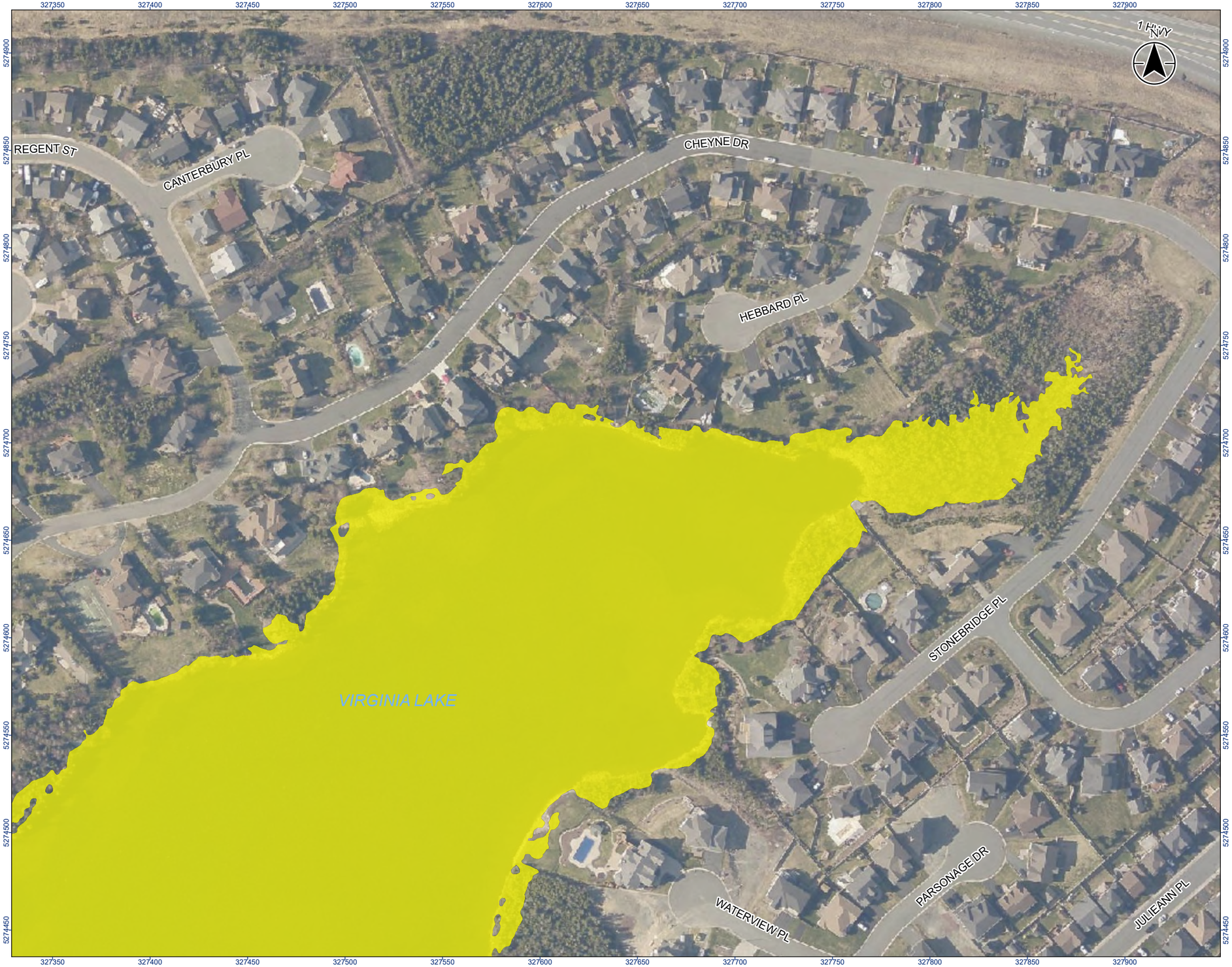

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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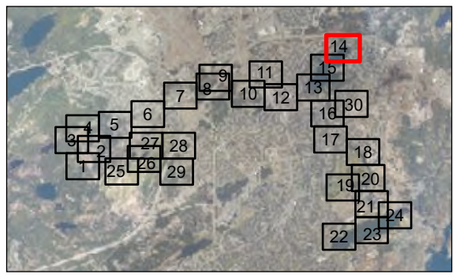

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-14

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 14 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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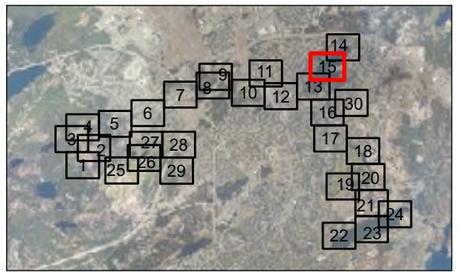

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-15

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 15 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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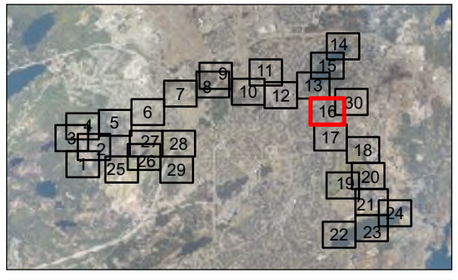

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-16

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 16 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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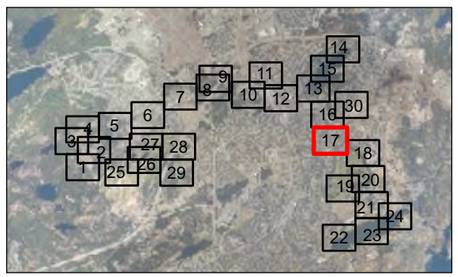

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-17

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 17 of 30

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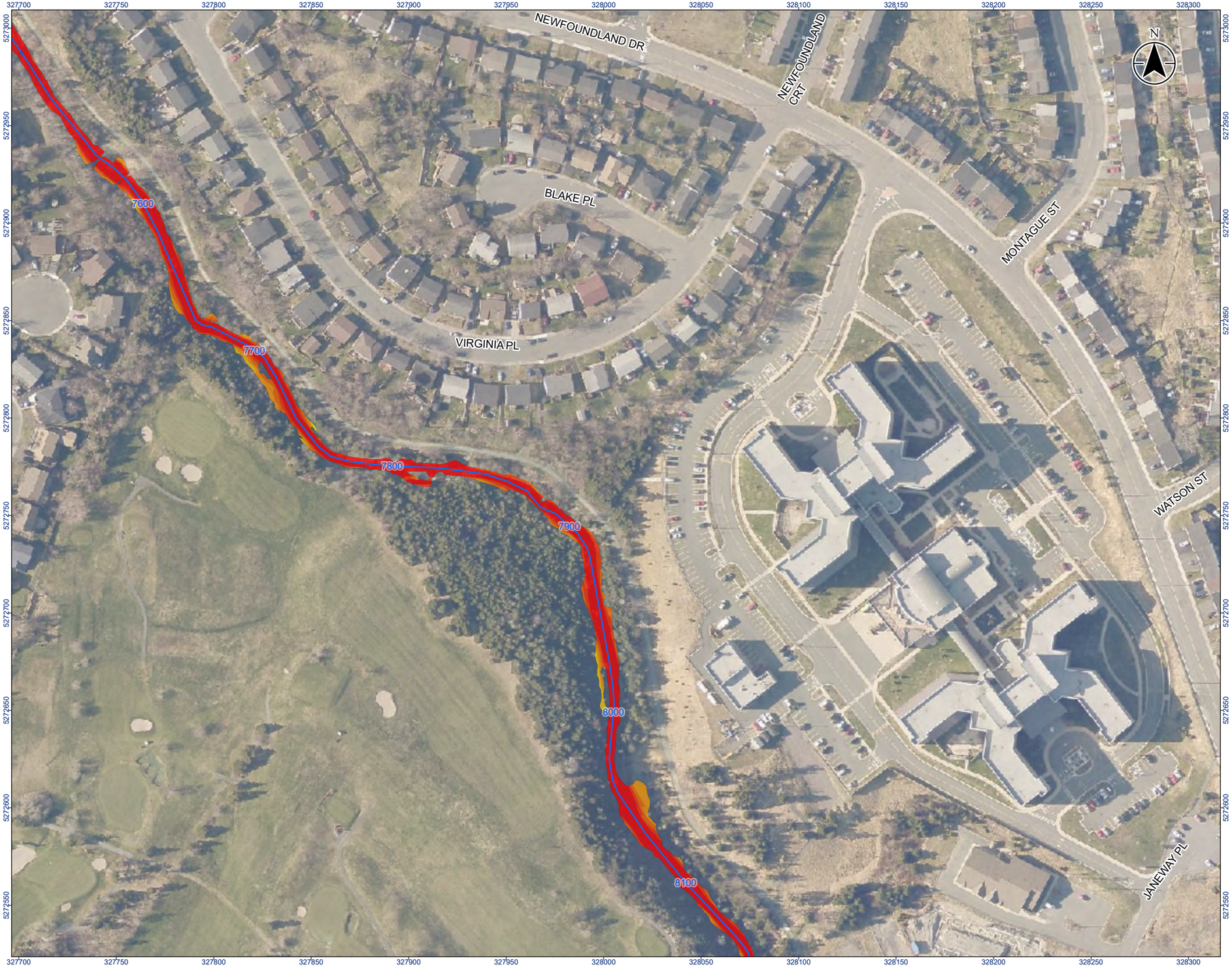

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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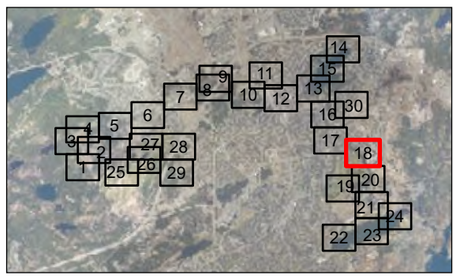

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-18

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 18 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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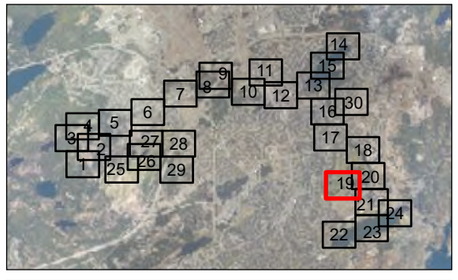

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-19

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 19 of 30

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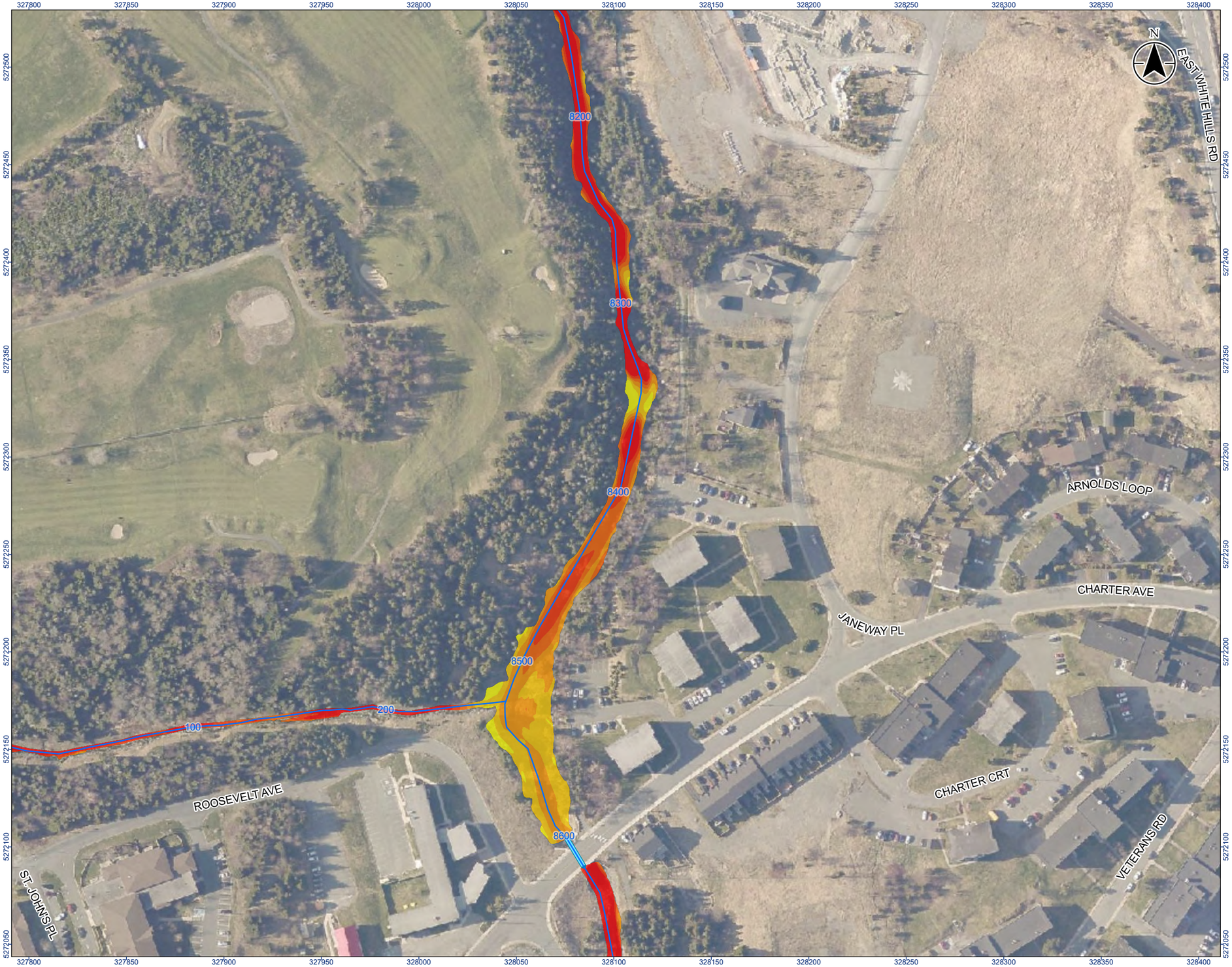

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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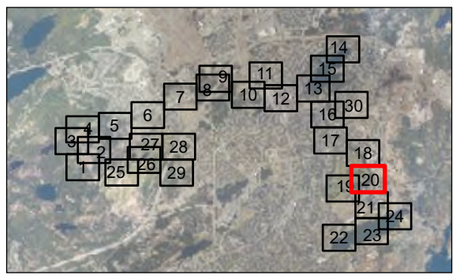

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-20

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 20 of 30

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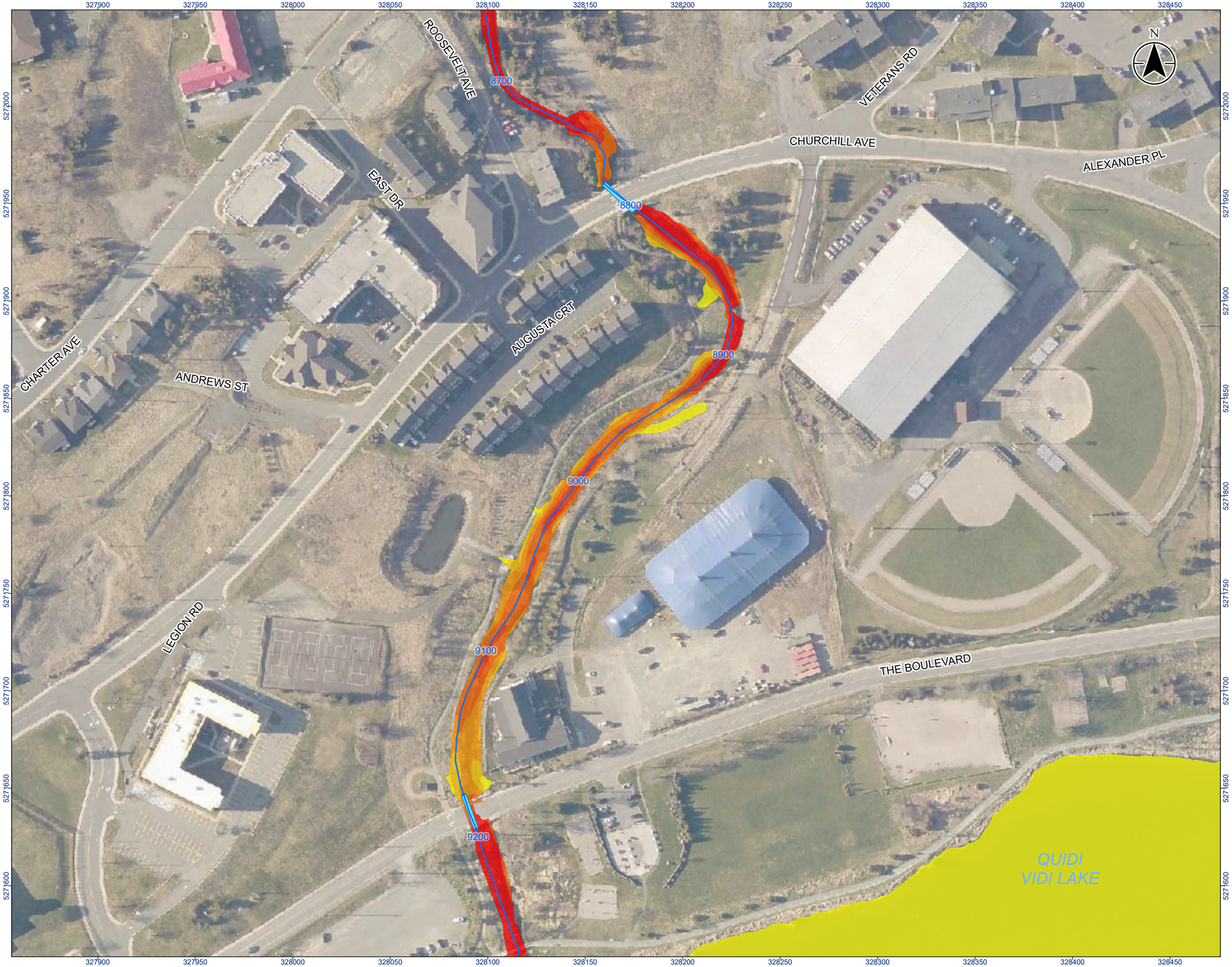

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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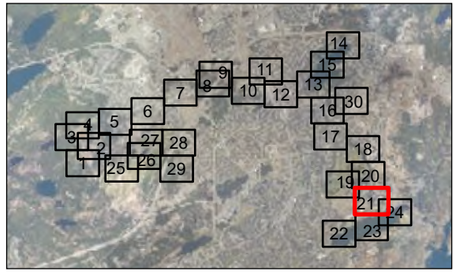

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-21

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 21 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
1:2,000 (At original document size of 11x17)

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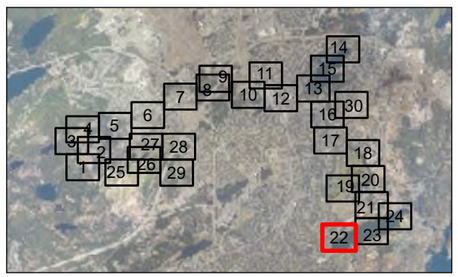

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-22

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 22 of 30

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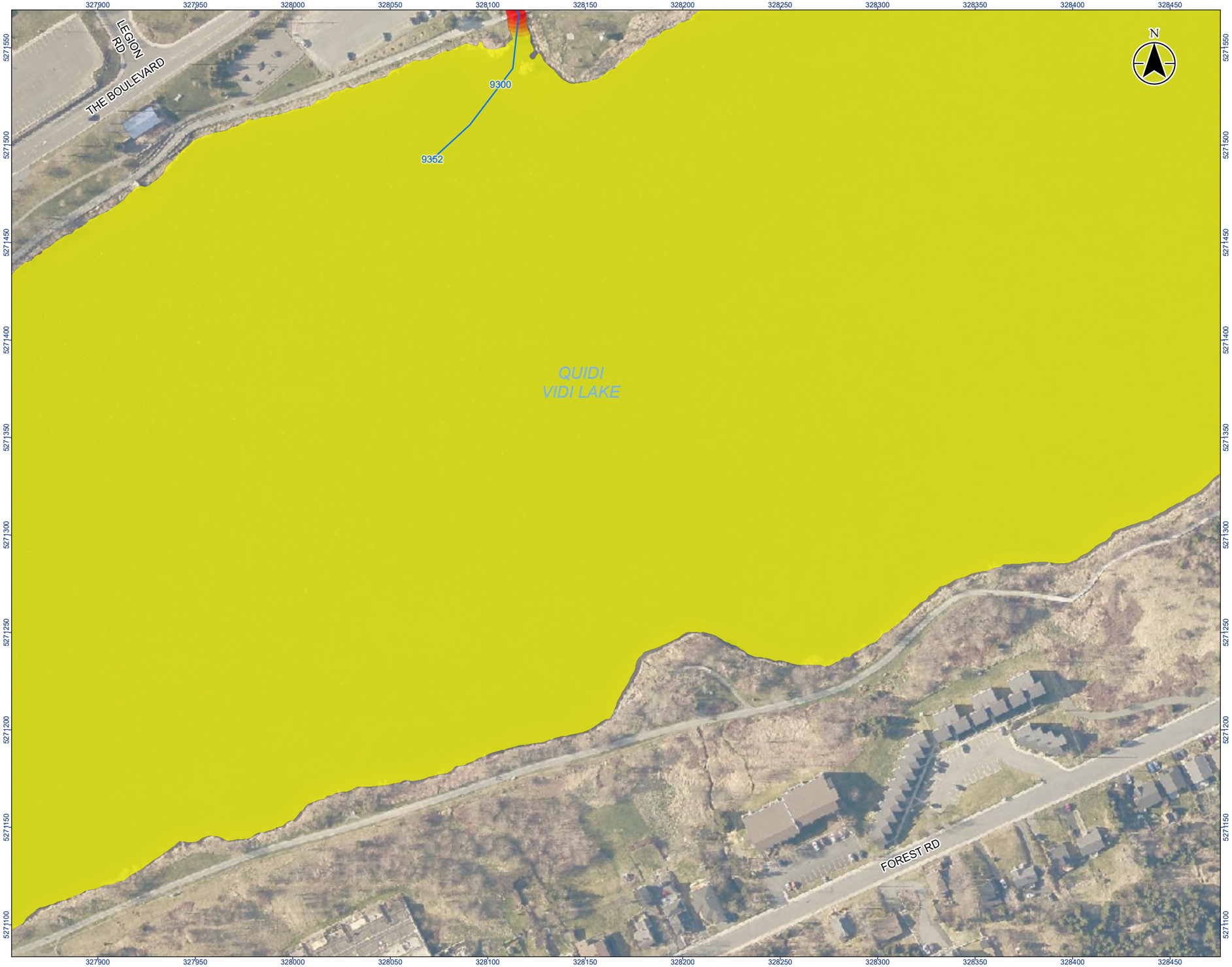

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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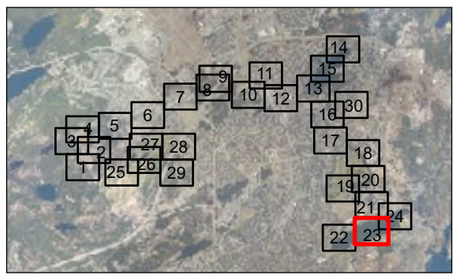

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-23

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 23 of 30

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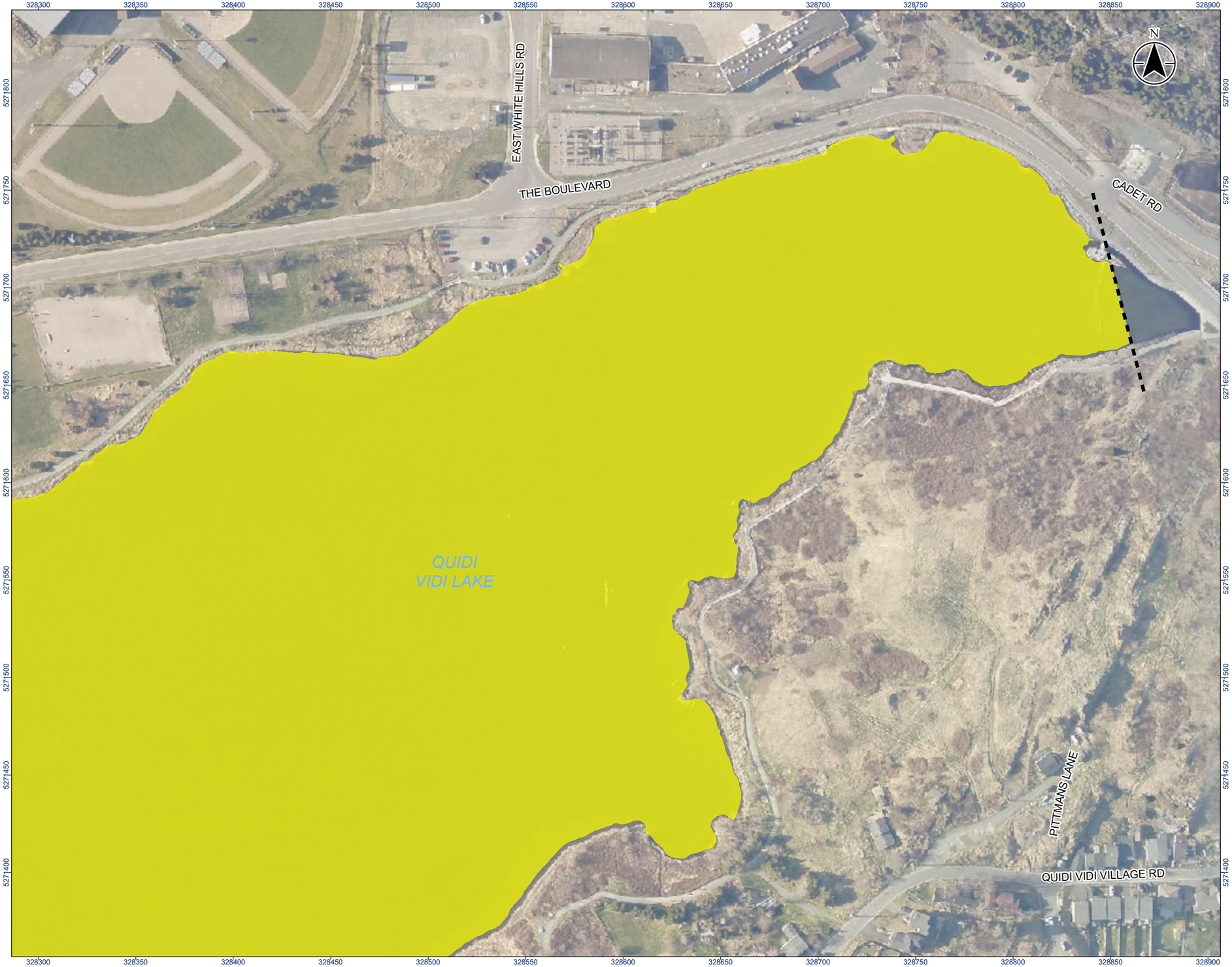

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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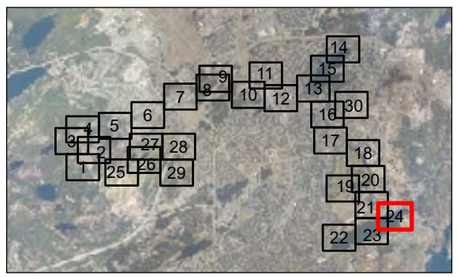

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-24

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 24 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m
1:2,000 (At original document size of 11x17)

Notes

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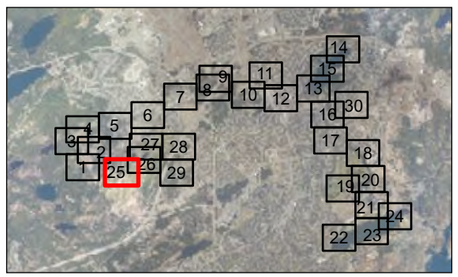

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-25

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 25 of 30

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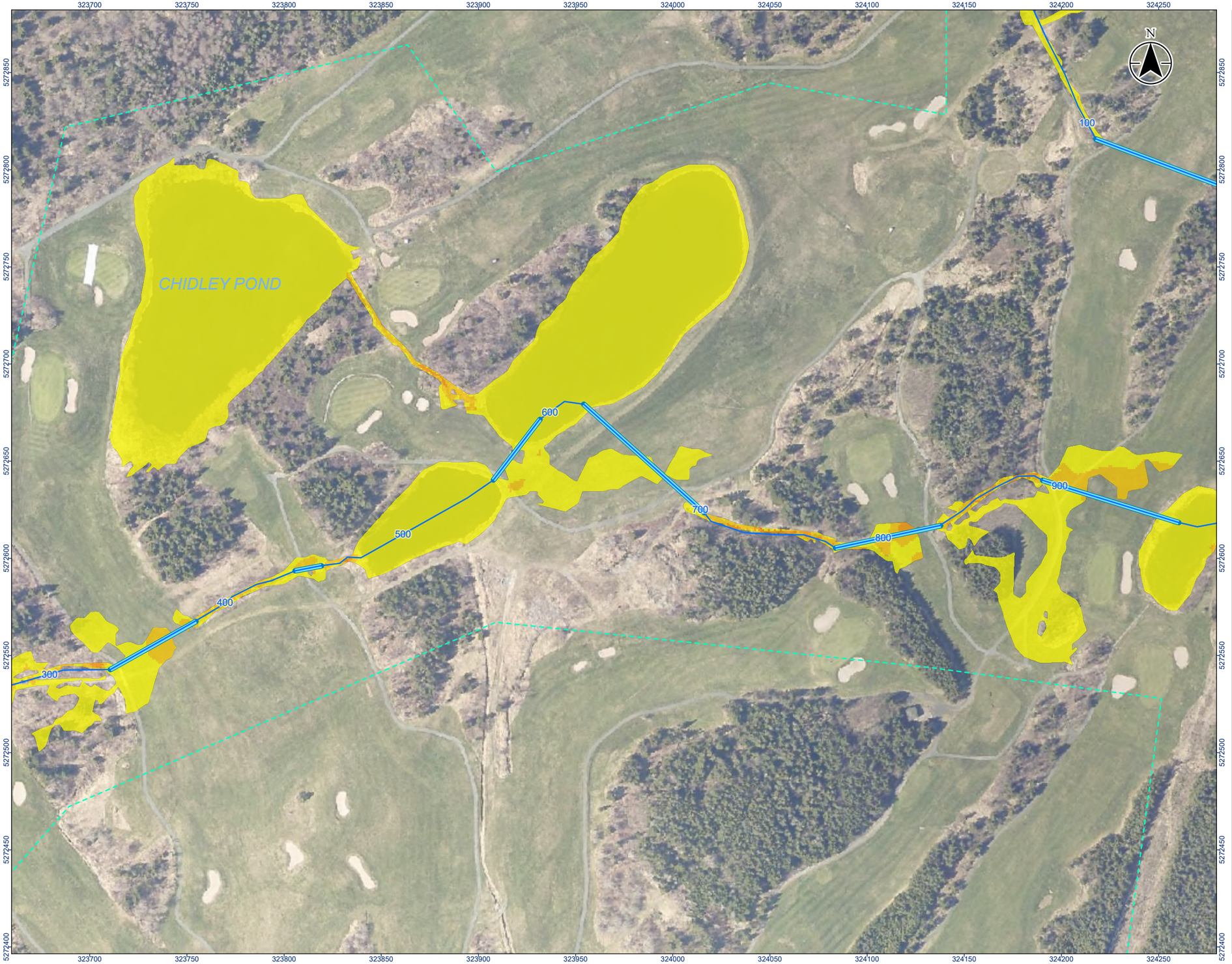

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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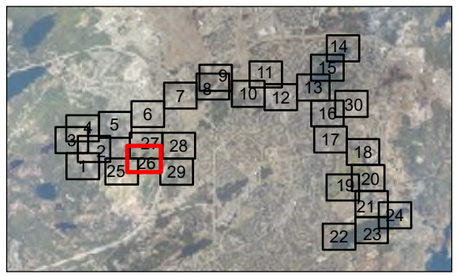

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-26

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 26 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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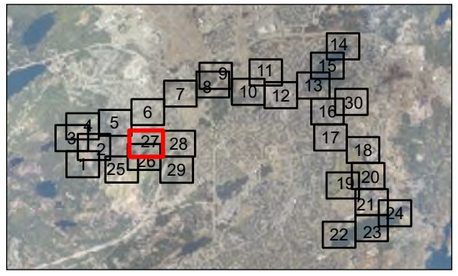

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-27

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 27 of 30

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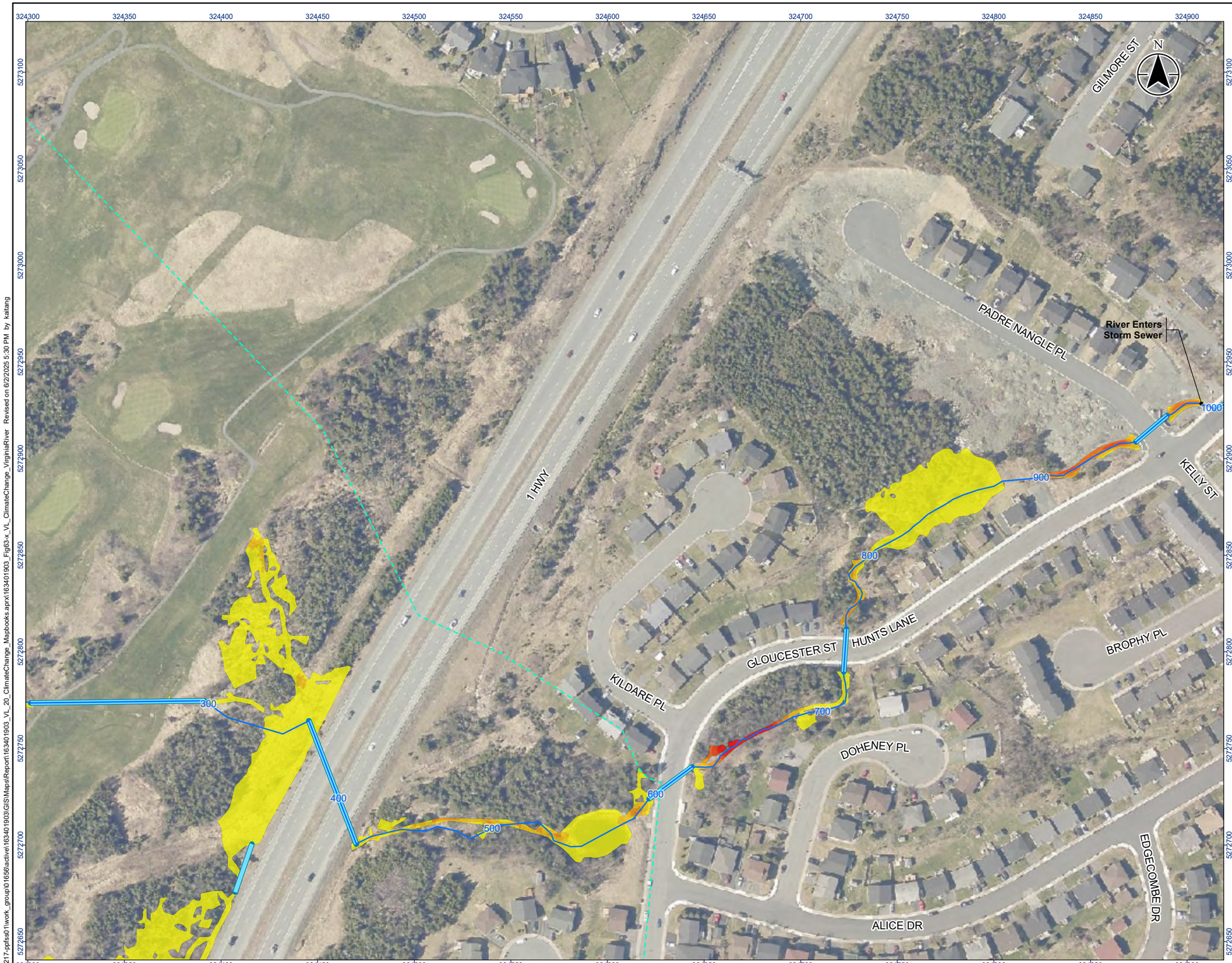

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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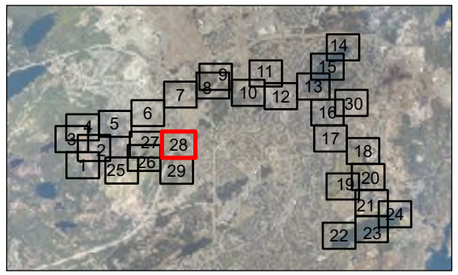

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-28

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 28 of 30

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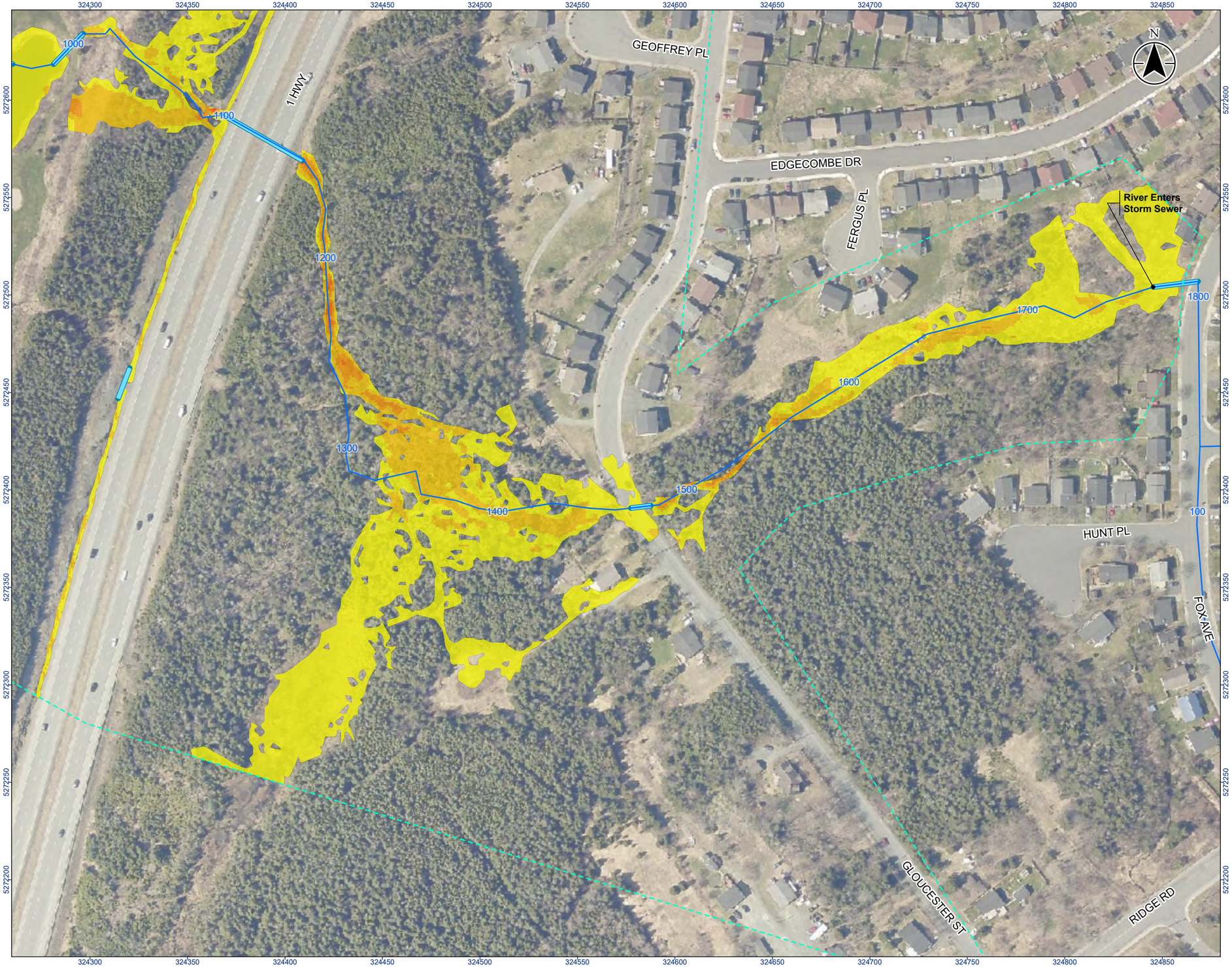

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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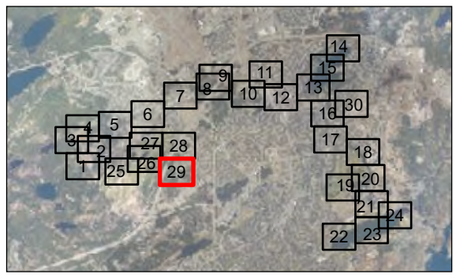

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-29

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 29 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 20 Year Velocity - 0.0 - 1.0 m/s
- 20 Year Velocity - 1.0 - 2.0 m/s
- 20 Year Velocity - 2.0 - 3.0 m/s
- 20 Year Velocity - 3.0 - 4.0 m/s
- 20 Year Velocity - 4.0 - 5.0 m/s
- 20 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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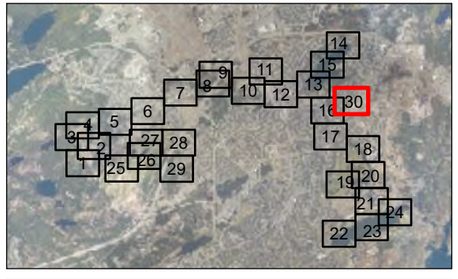

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
63-30

Title
Climate Change Condition
20-Year Velocity - Virginia River
Sheet 30 of 30

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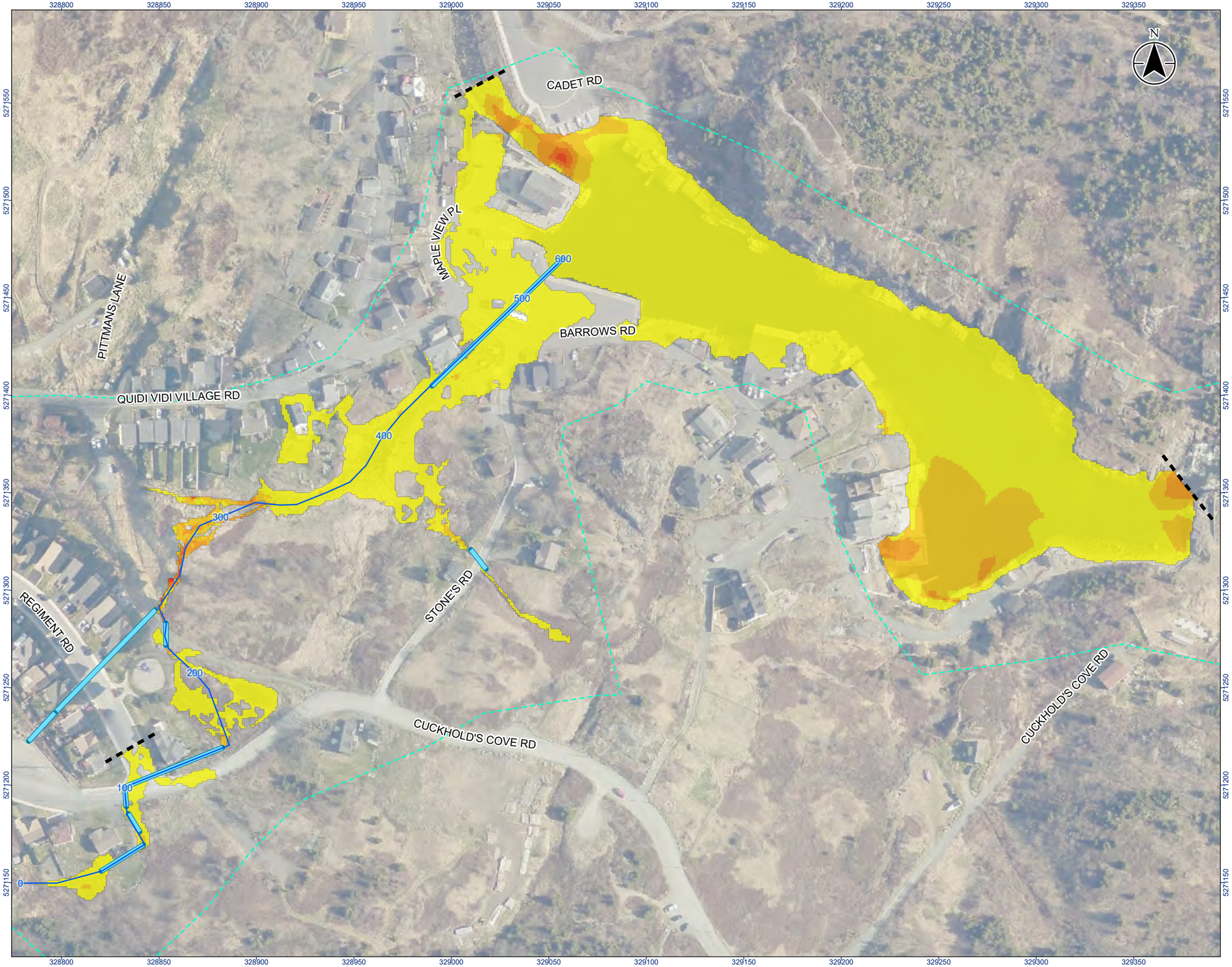

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
64-0

Title
Climate Change Condition
100-Year Velocity - Barrow Road Stream

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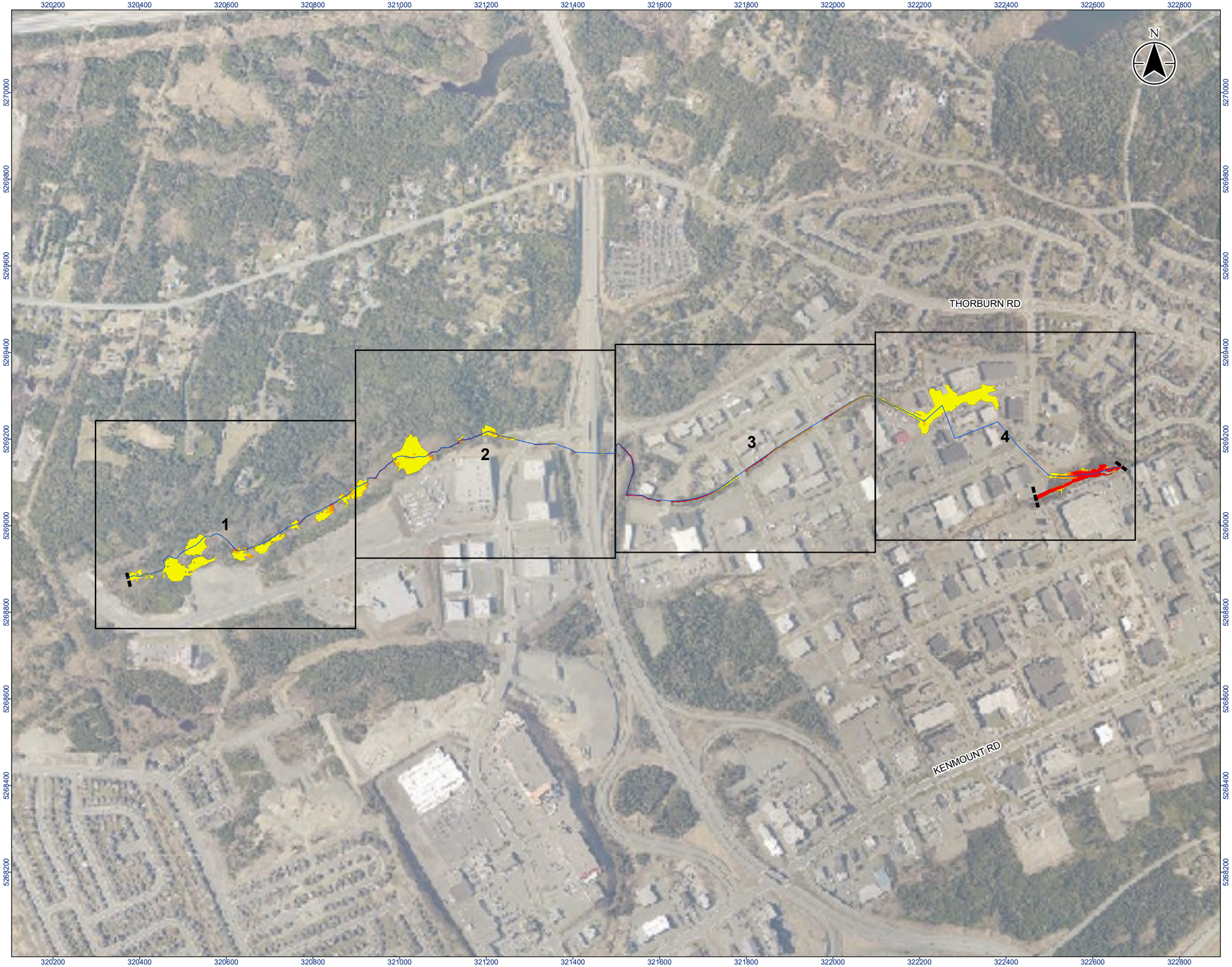

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 175 350 m

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Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
65-0

Title
Climate Change Condition
100-Year Velocity - Holes In Marsh Brook
Overview Map

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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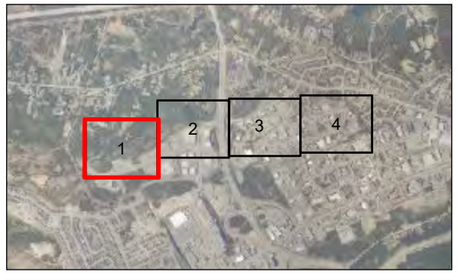

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
65-1

Title
Climate Change Condition
100-Year Velocity- Holes In Marsh Brook
Sheet 1 of 4

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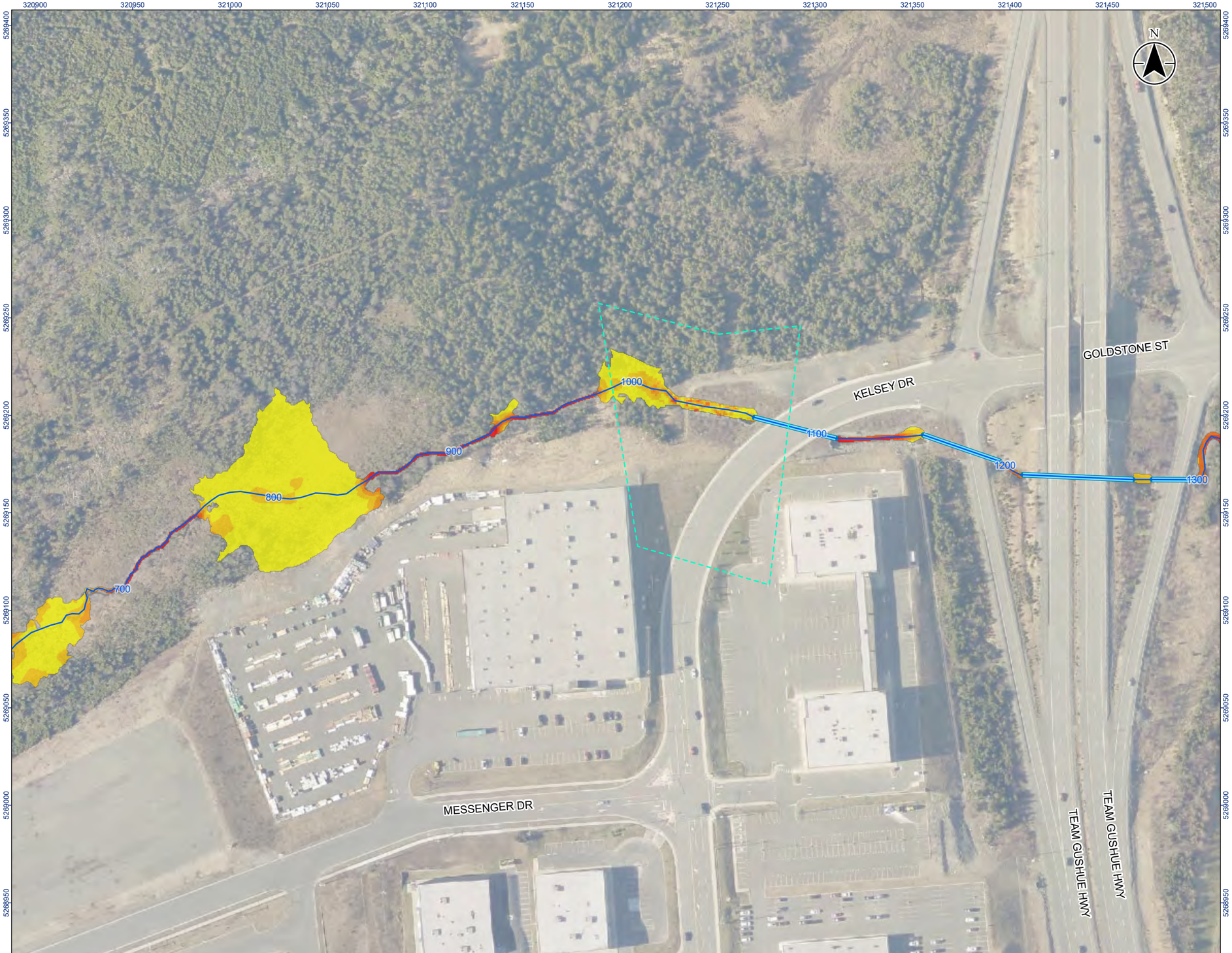

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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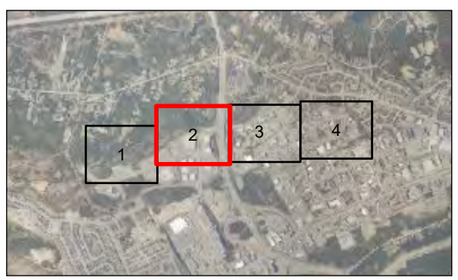

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
65-2

Title
Climate Change Condition
100-Year Velocity- Holes In Marsh Brook
Sheet 2 of 4

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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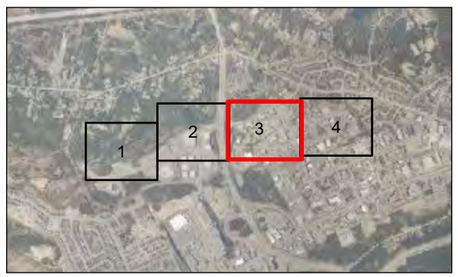

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
65-3

Title
Climate Change Condition
100-Year Velocity- Holes In Marsh Brook
Sheet 3 of 4

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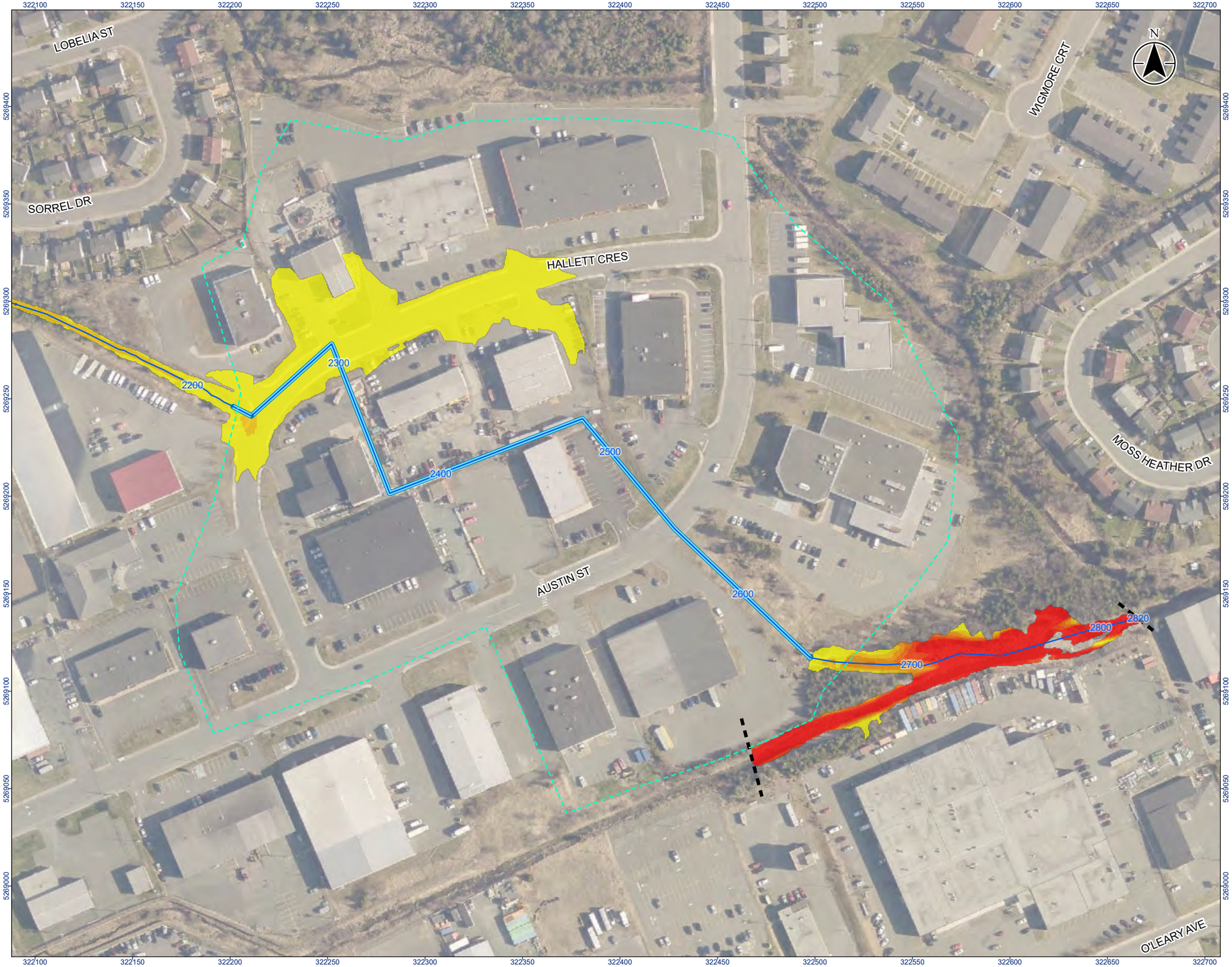

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
65-4

Title
Climate Change Condition
100-Year Velocity- Holes In Marsh Brook
Sheet 4 of 4

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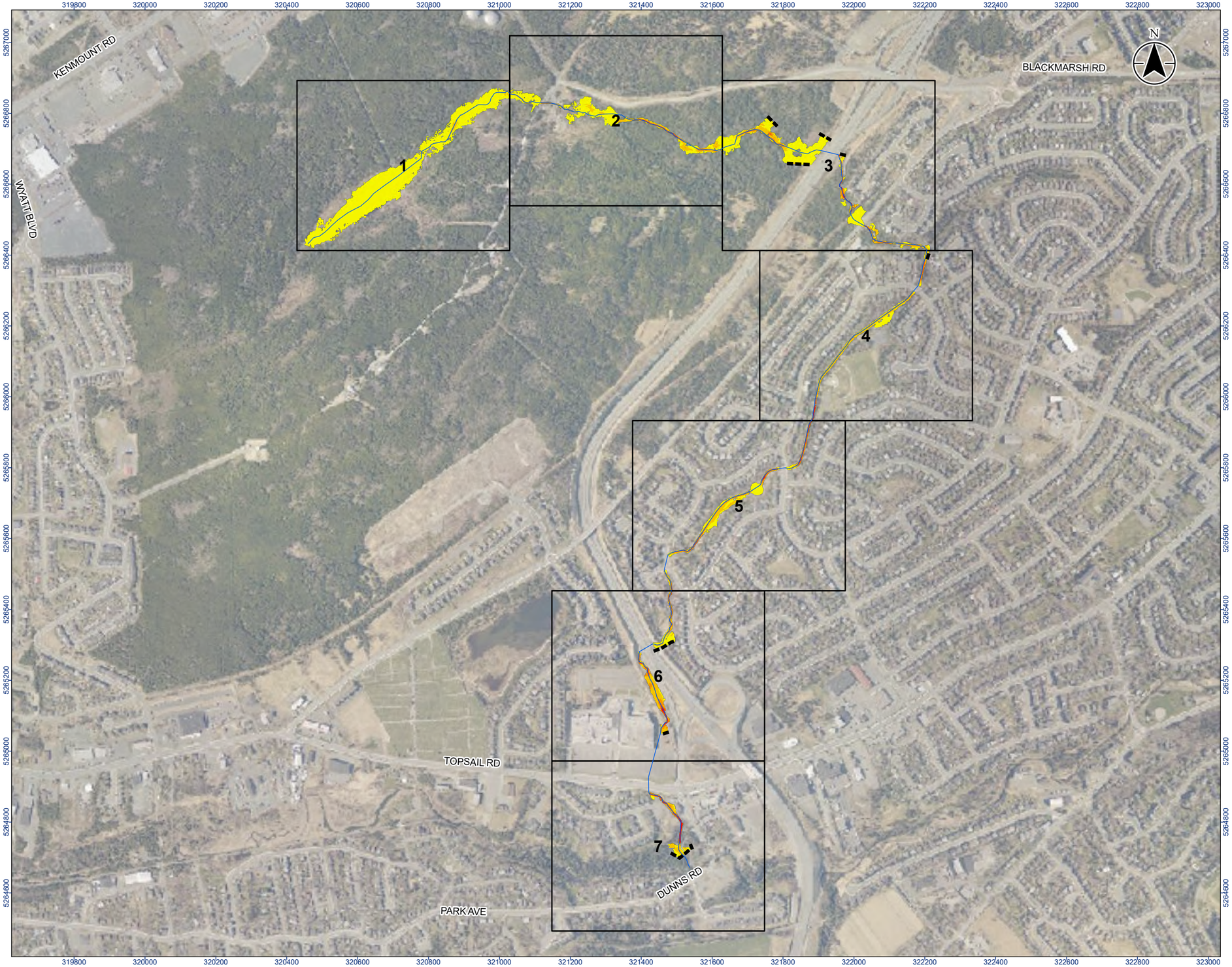

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 210 420 m

1:11,000 (At original document size of 11x17)

Notes

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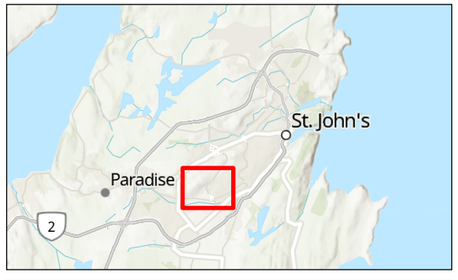

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-0

Title
Climate Change Condition 100-Year Velocity - Kitty Gaul Brook Overview Map

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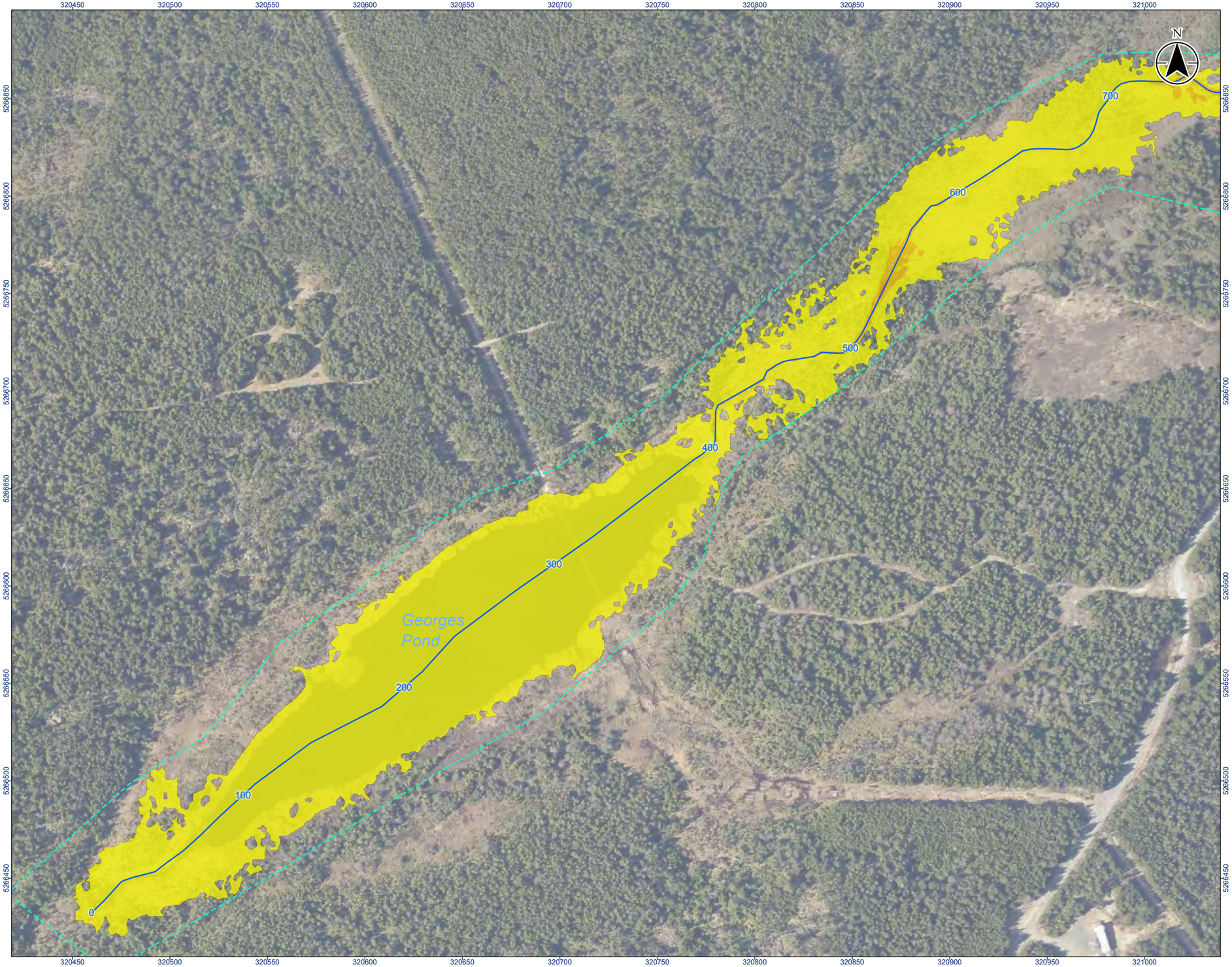

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY
FOR THE CITY OF ST. JOHN'S

Figure No.
66-1

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 1 of 7

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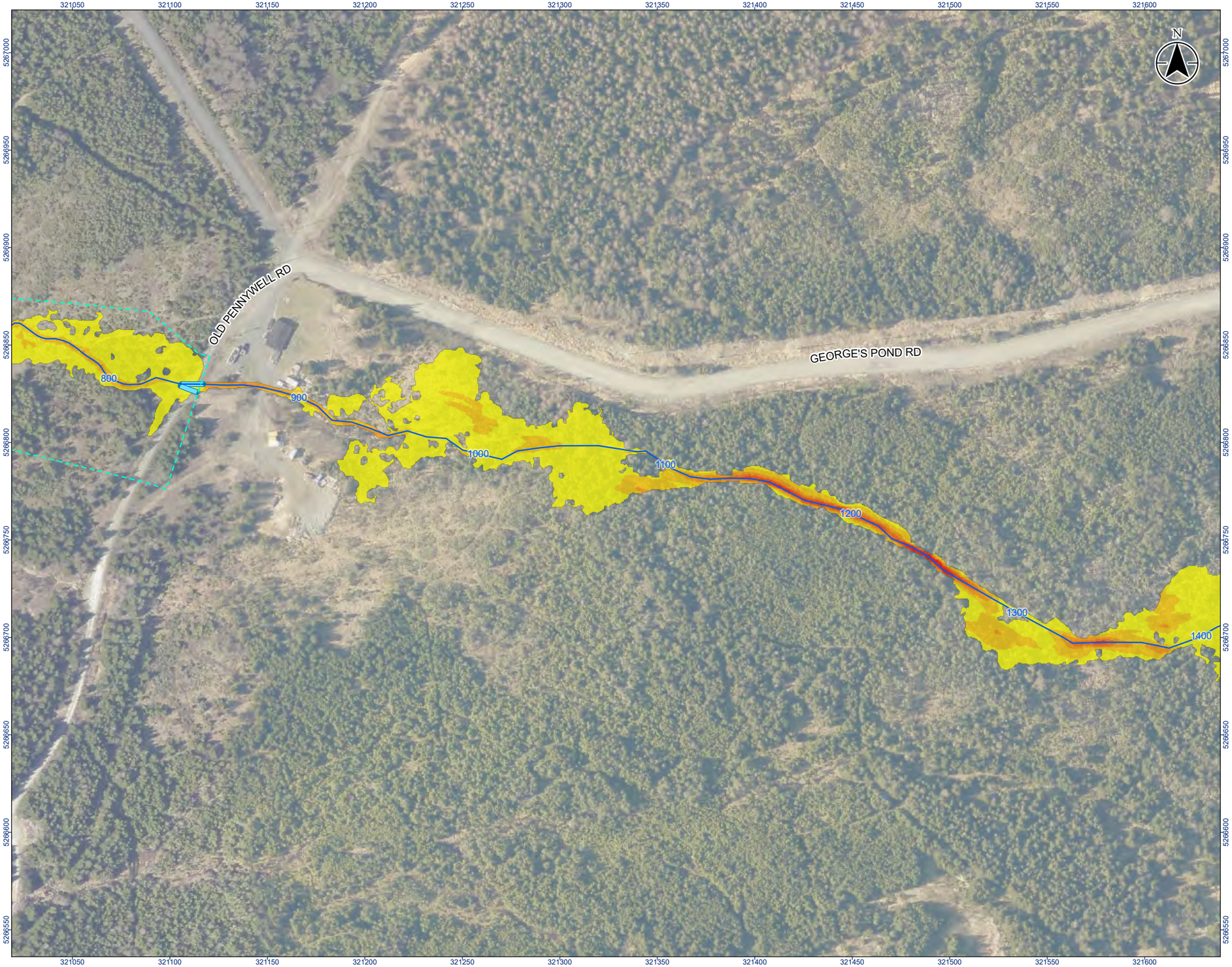

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-2

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 2 of 7

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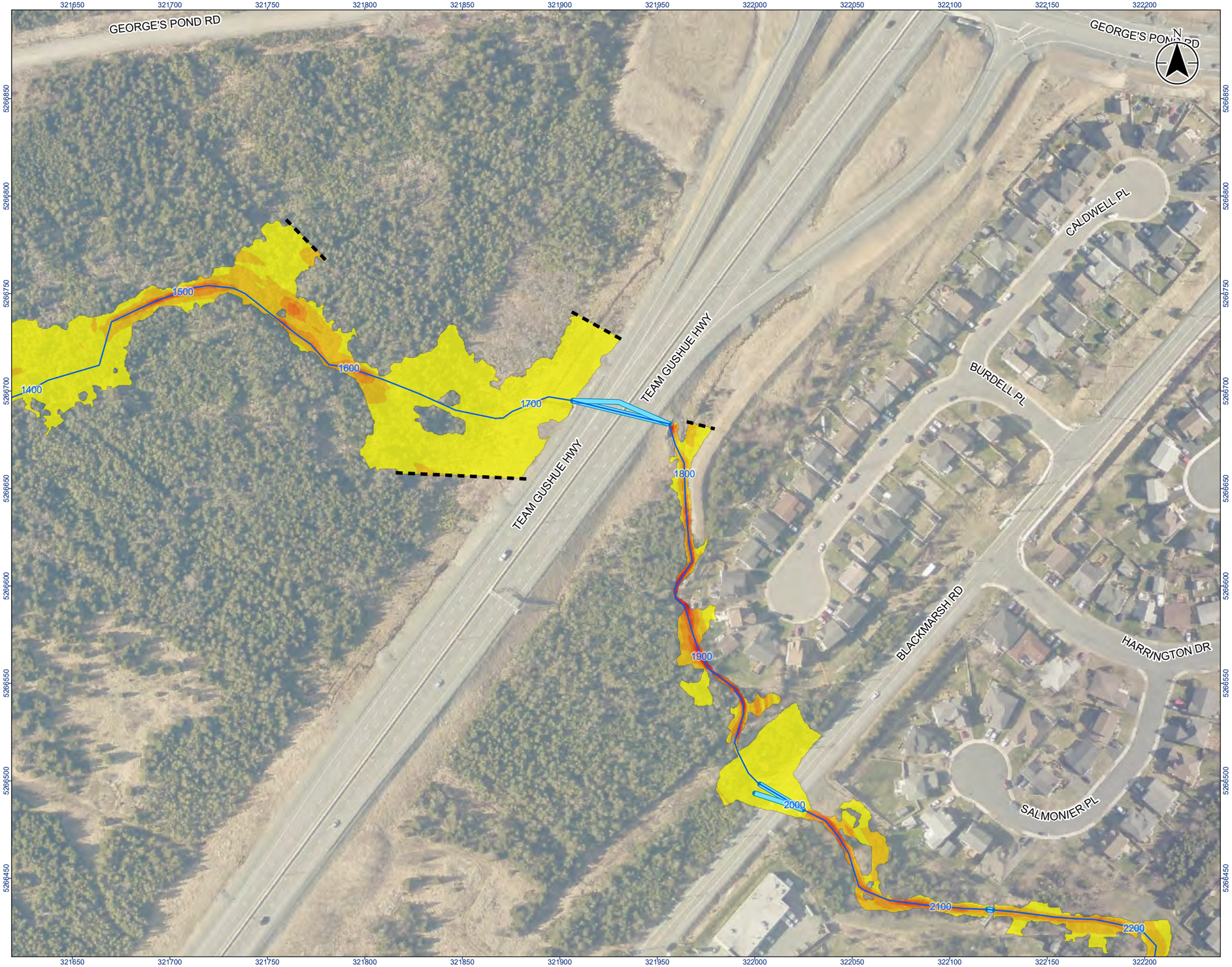

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-3

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 3 of 7

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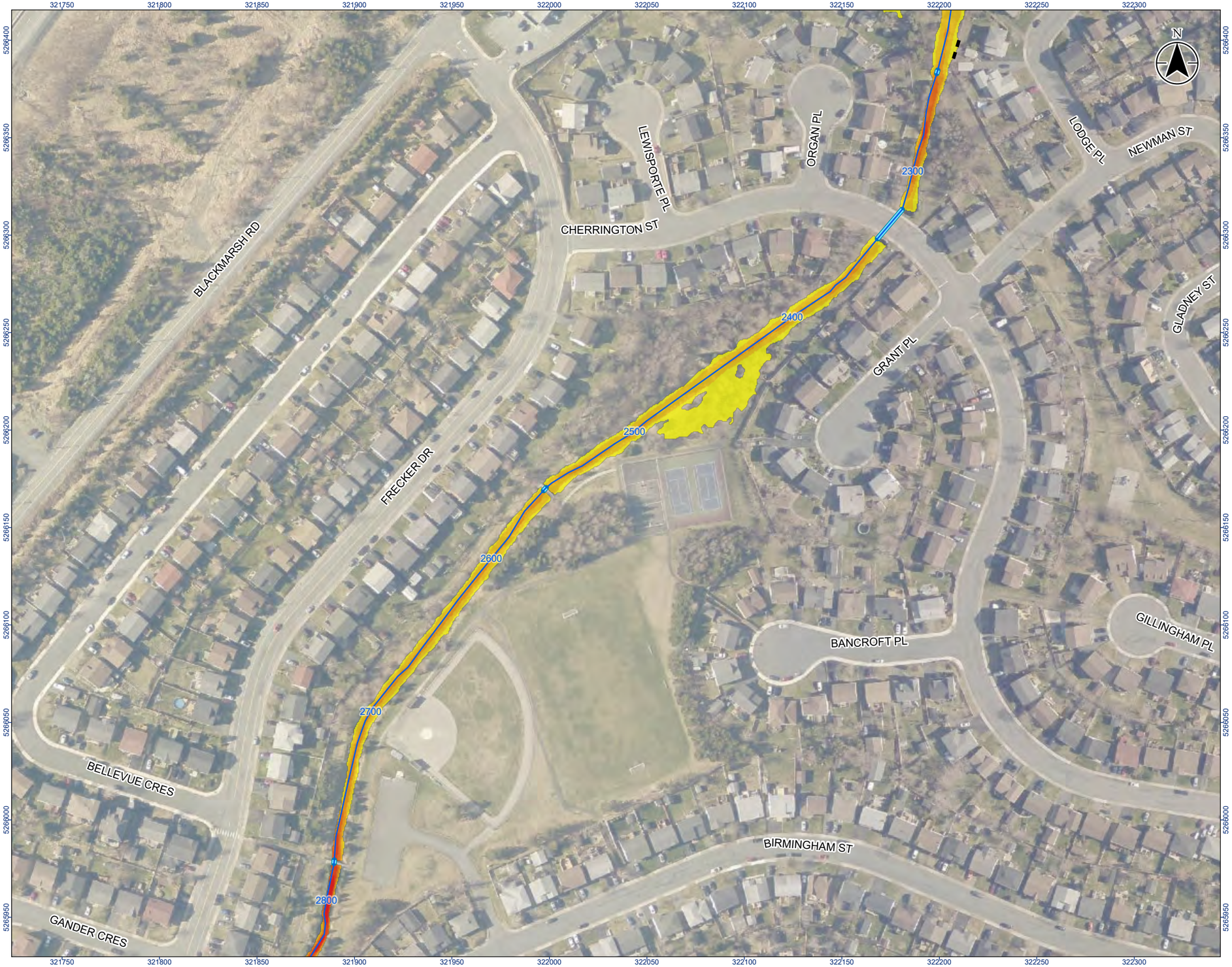

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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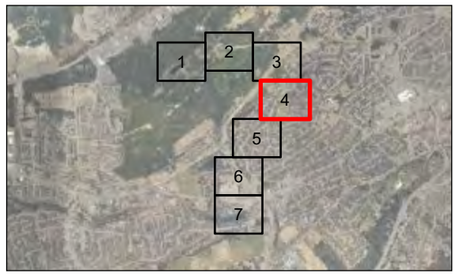

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-4

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 4 of 7

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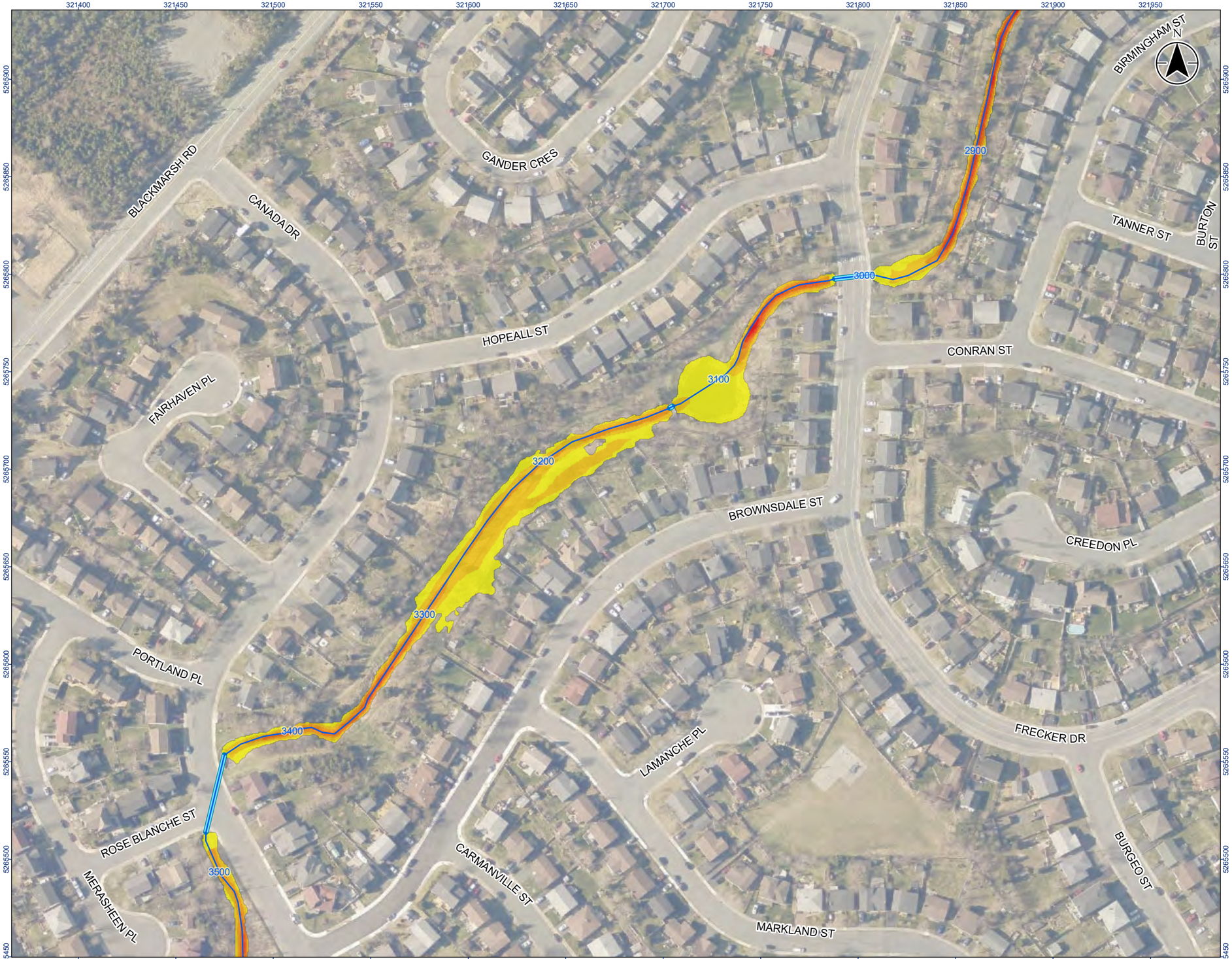

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-5

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 5 of 7

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-6

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 6 of 7

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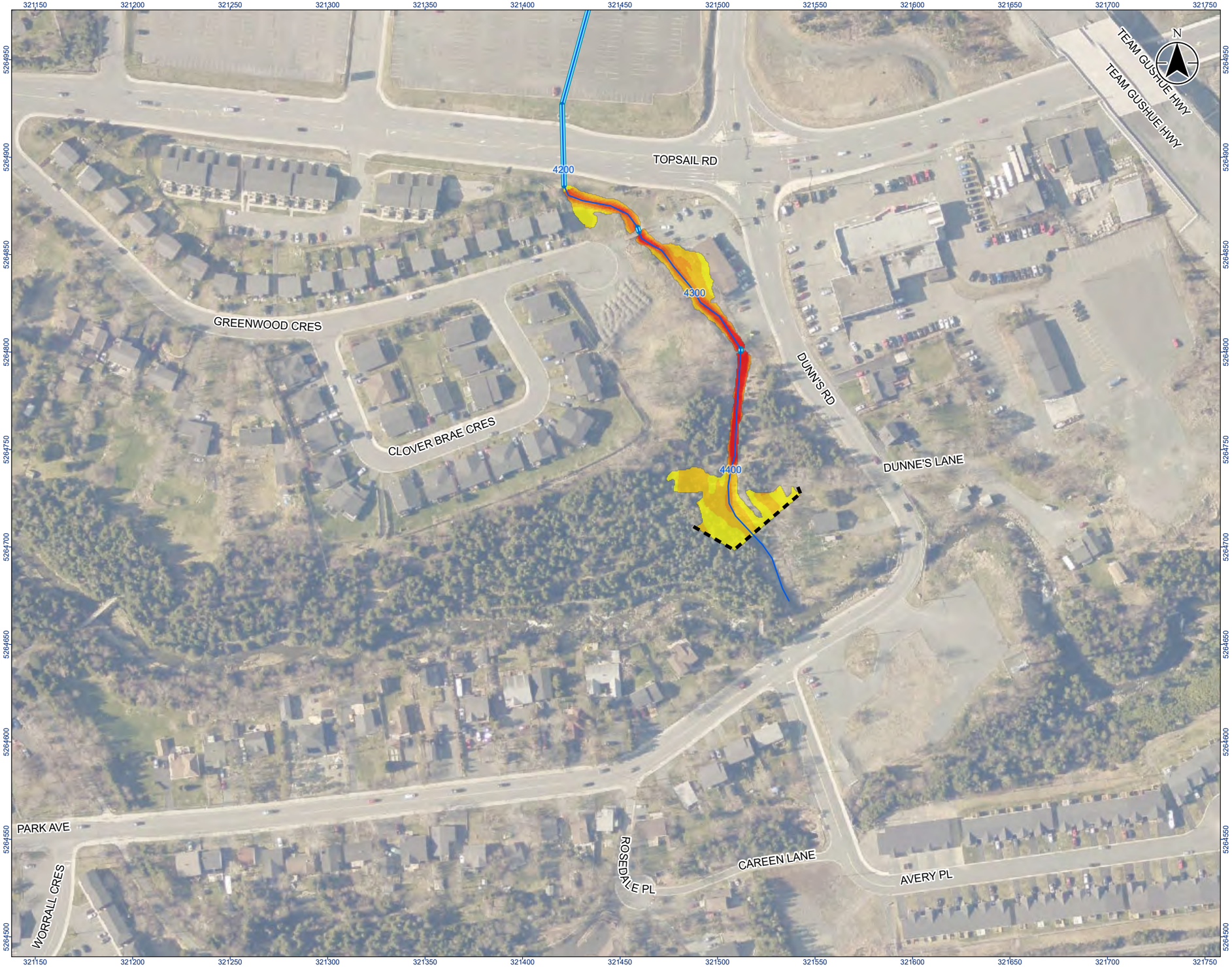

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
66-7

Title
Climate Change Condition
100-Year Velocity- Kitty Gaul Brook
Sheet 7 of 7

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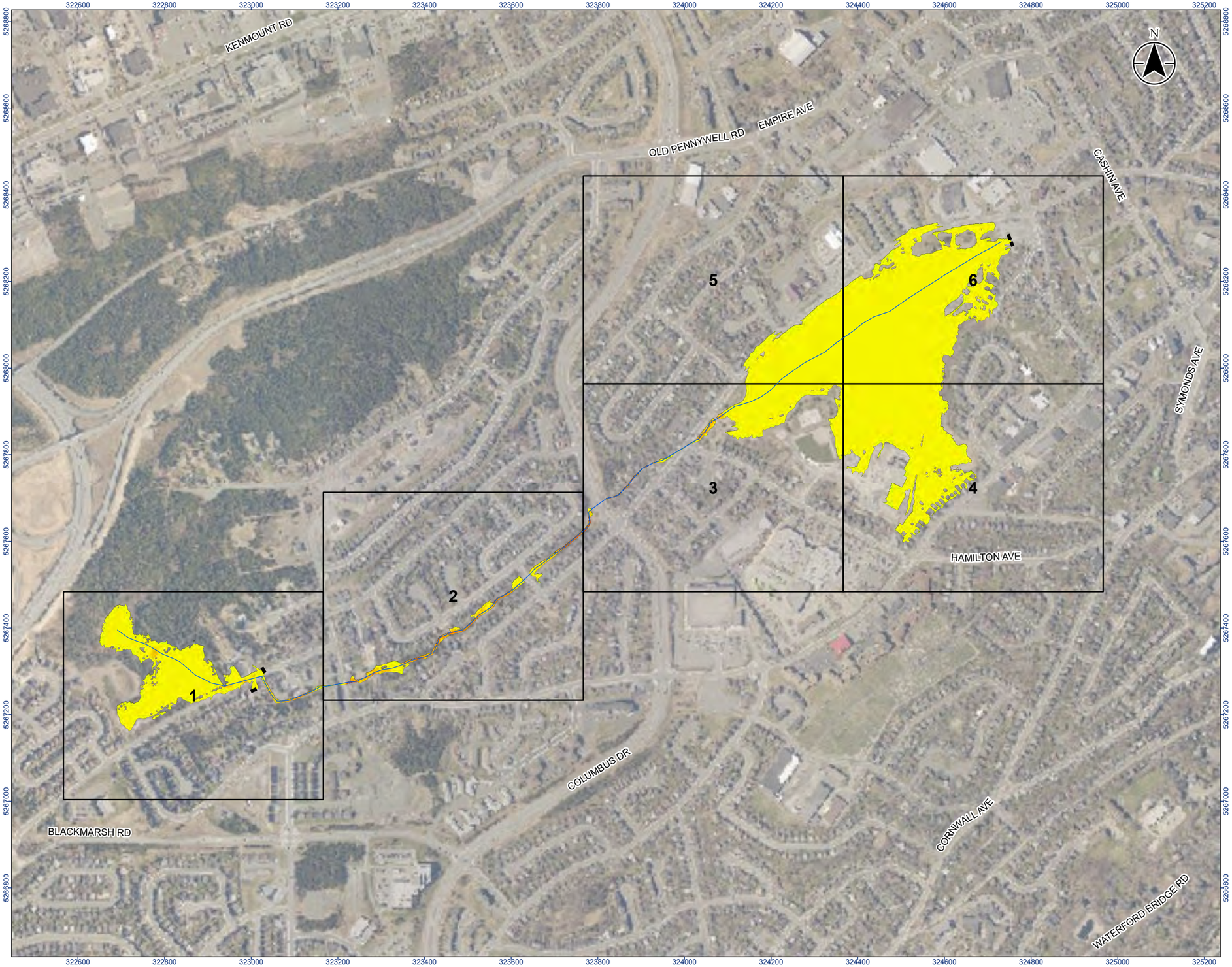

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 175 350 m

1:9,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-05-26

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-0

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook Overview Map

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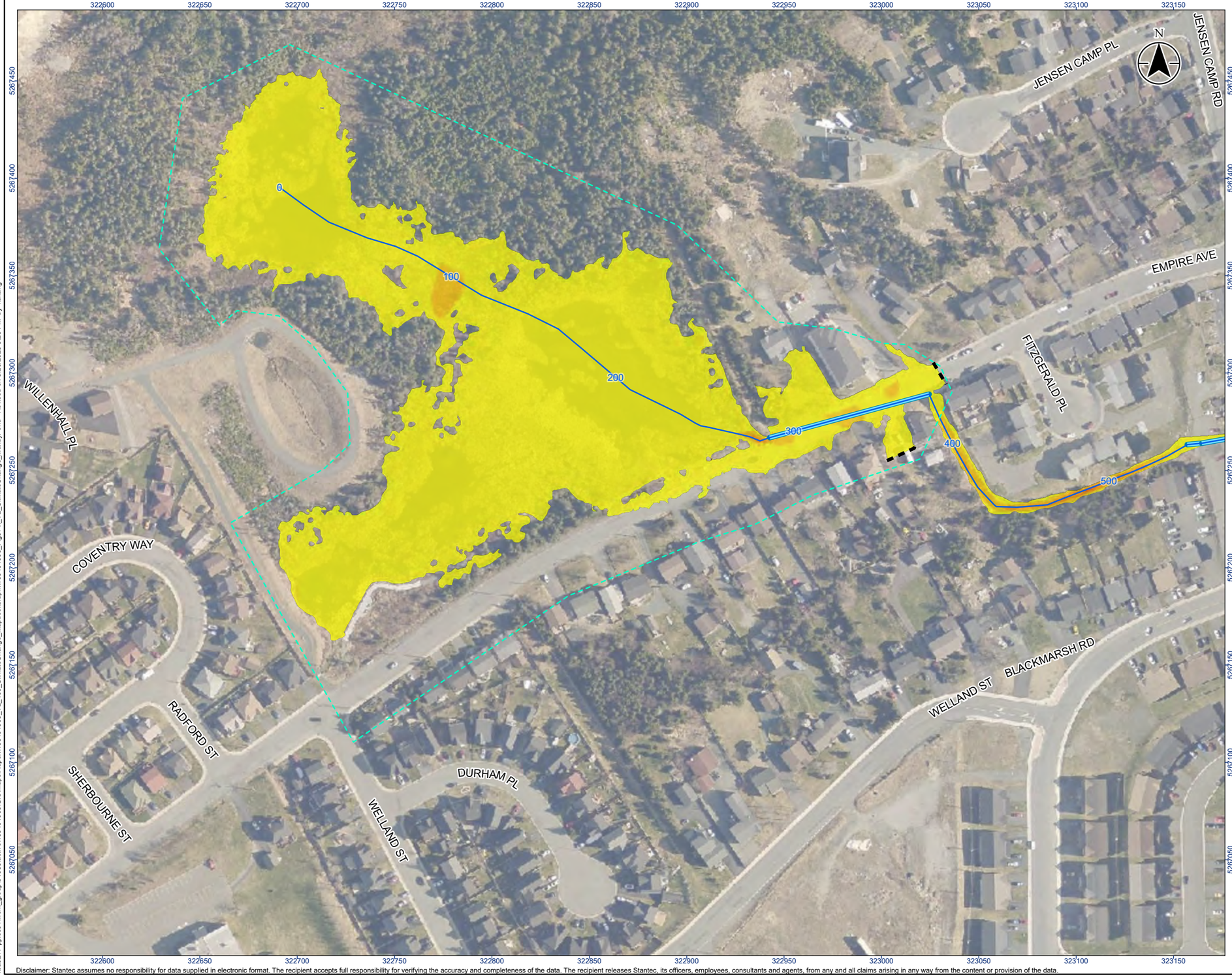

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-1

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook
Sheet 1 of 6

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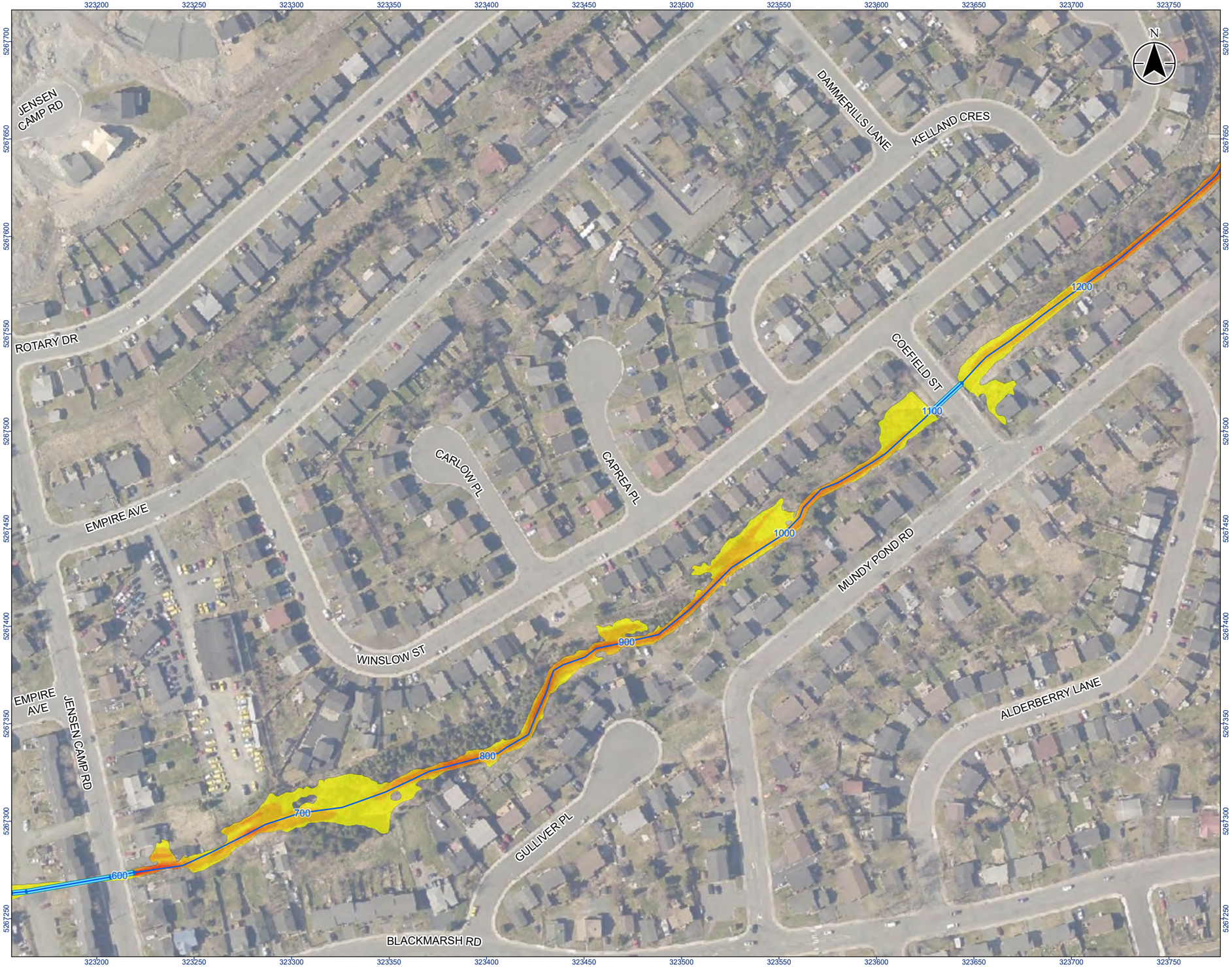

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-2

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook
Sheet 2 of 6

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Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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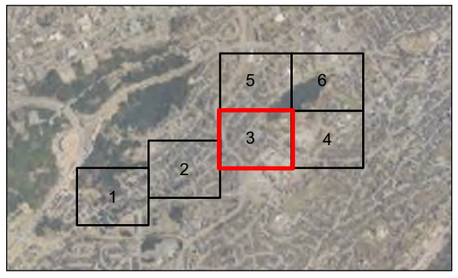

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-3

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook
Sheet 3 of 6

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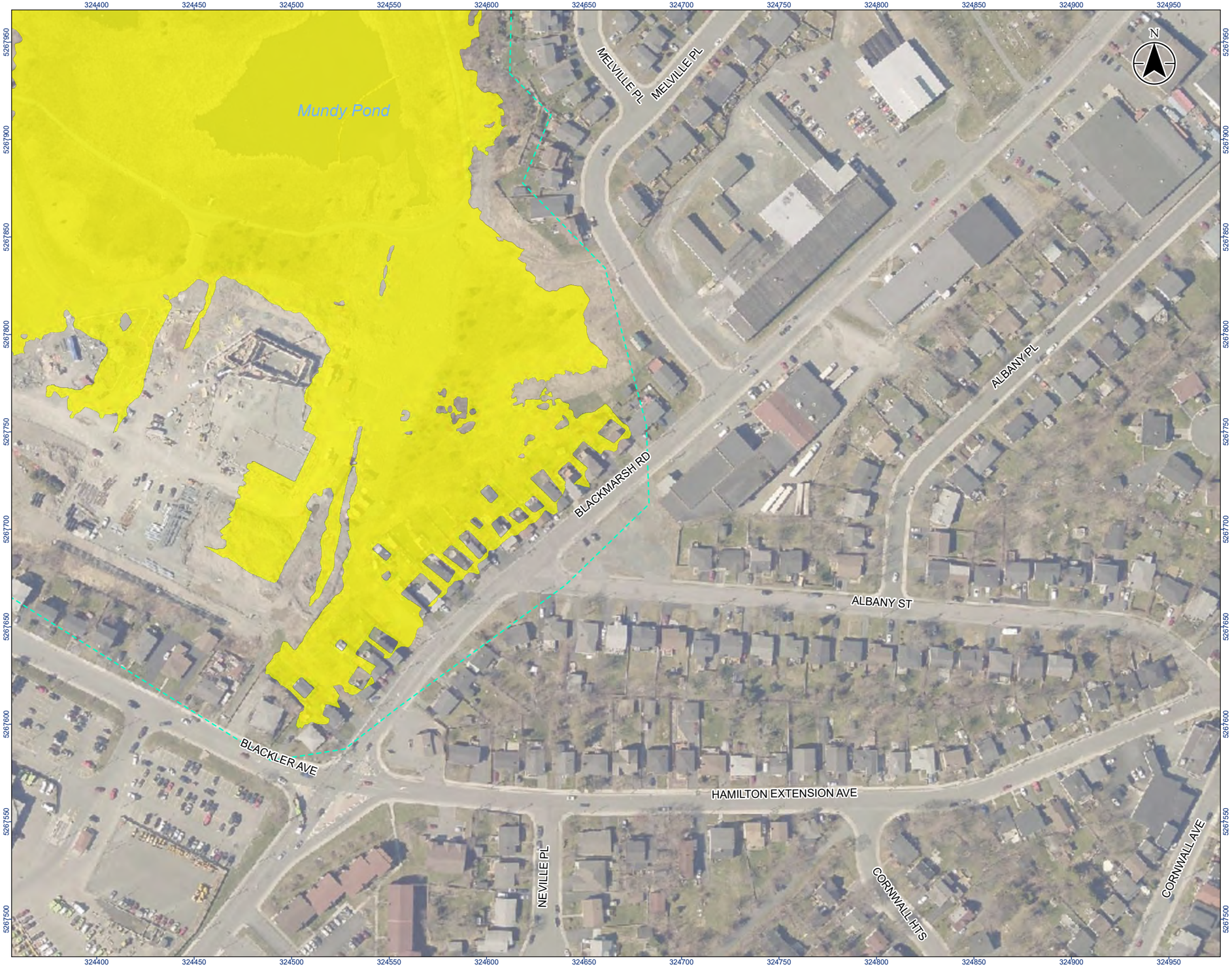

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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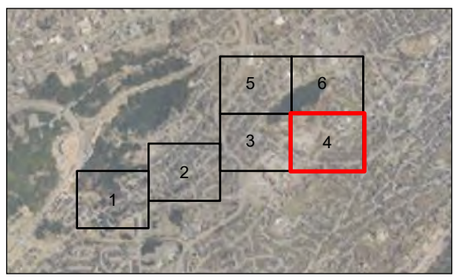

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-4

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook
Sheet 4 of 6

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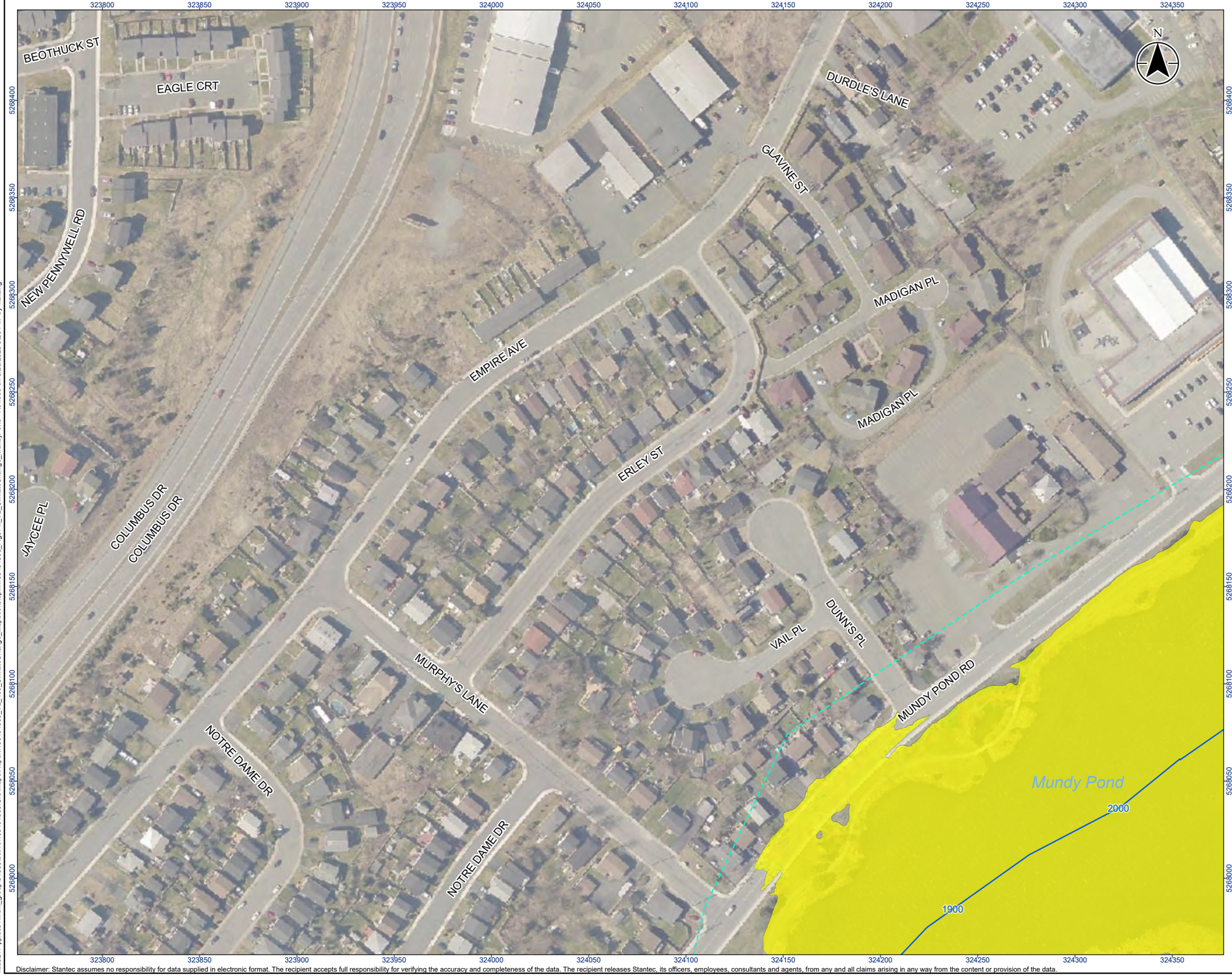

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-5

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook
Sheet 5 of 6

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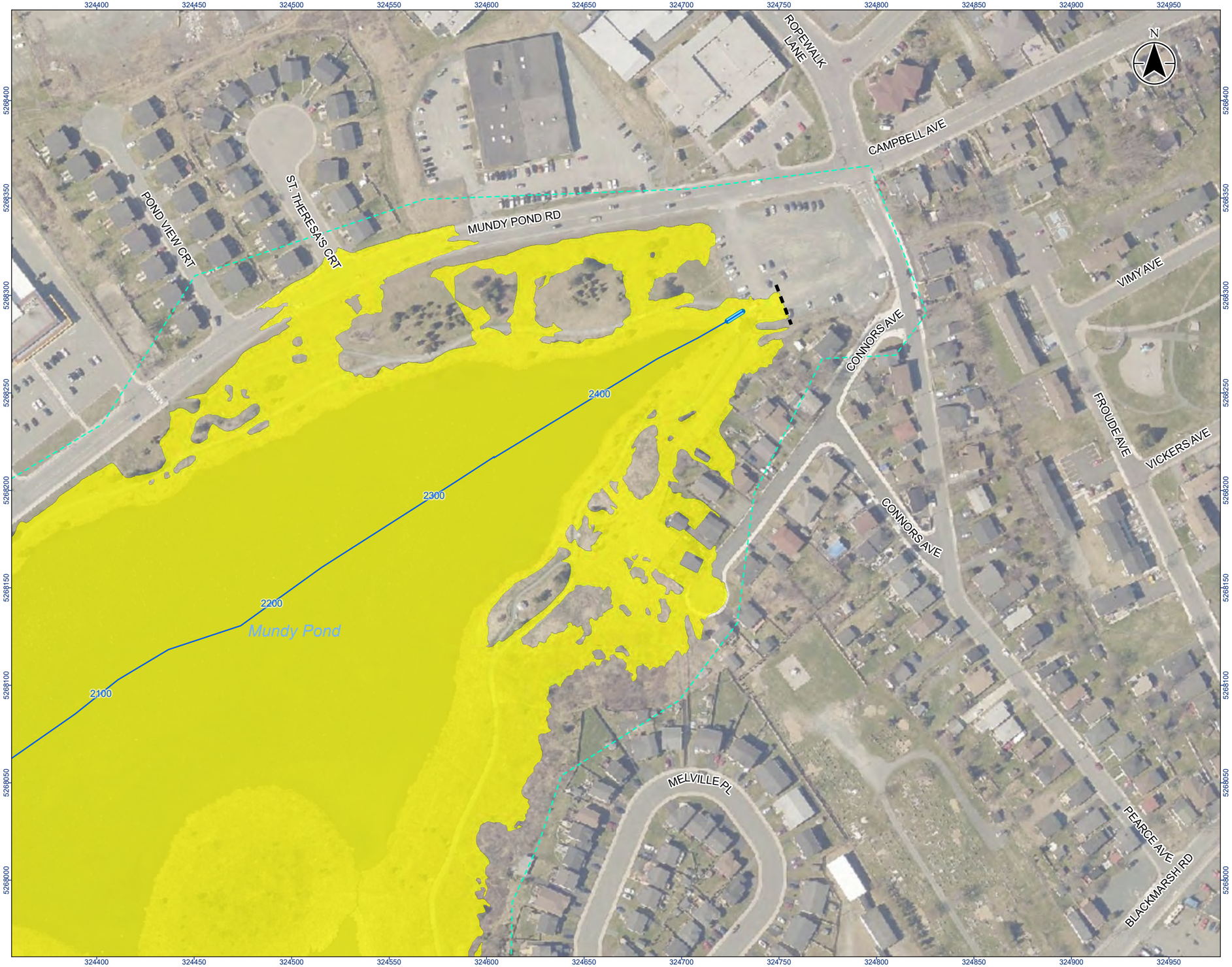

Stantec

Legend

- River/Creek Centreline
- Modelled Hydraulic Structure
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
67-6

Title
Climate Change Condition
100-Year Velocity - Mundy Pond Brook
Sheet 6 of 6

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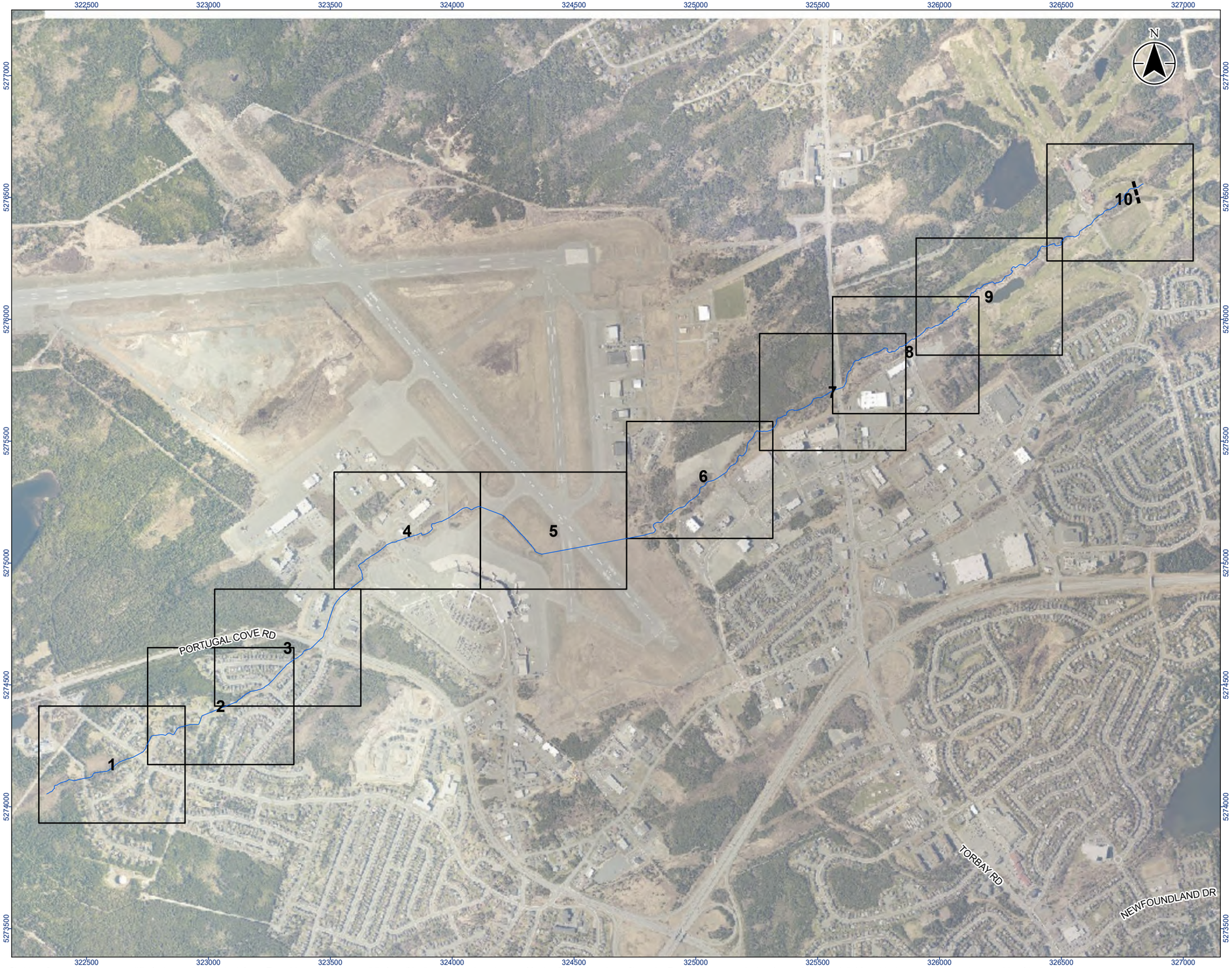

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 310 620 m

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Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-0

Title
Climate Change Condition 100-Year Velocity - Outer Cove Brook Overview Map

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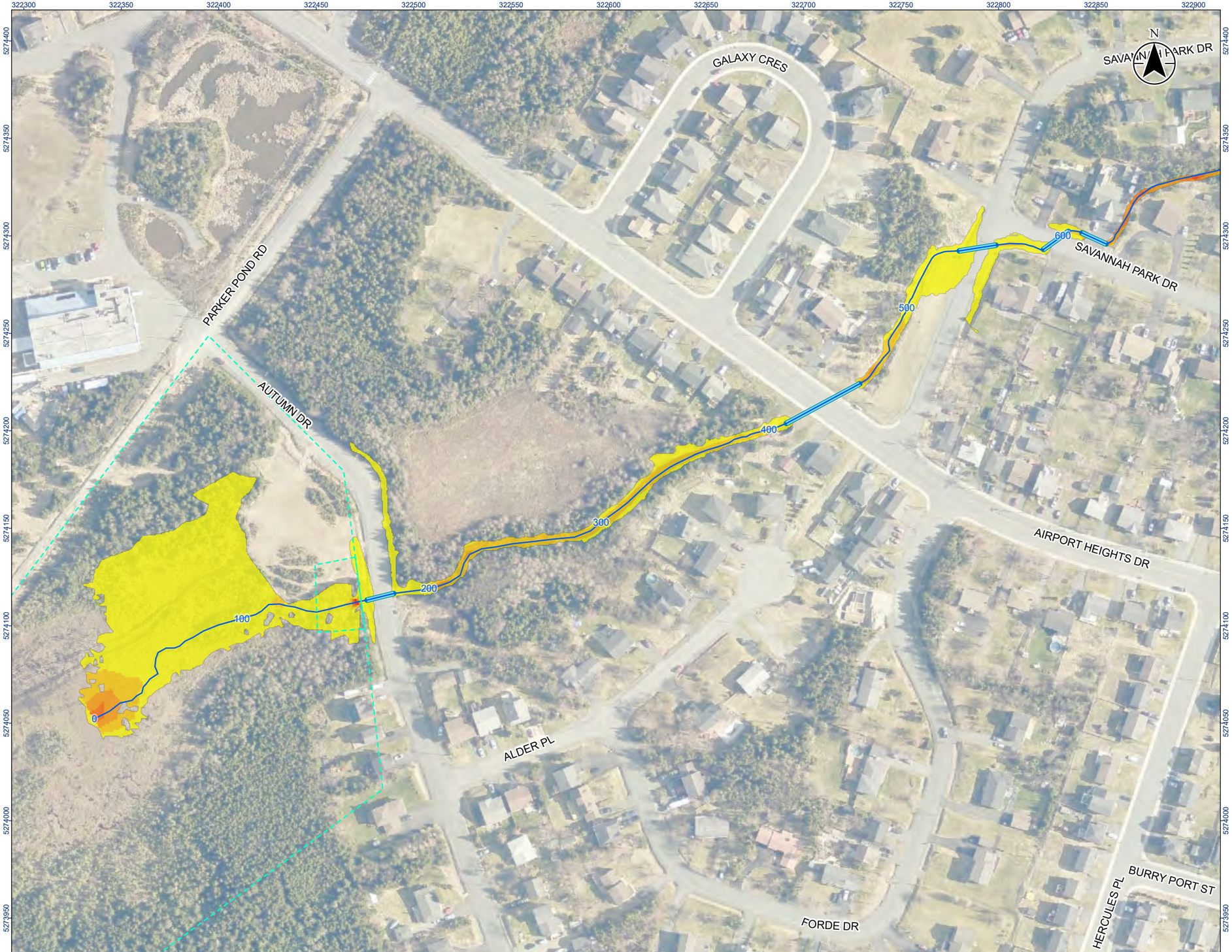

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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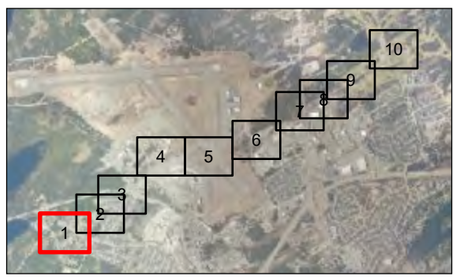

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-1

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 1 of 10

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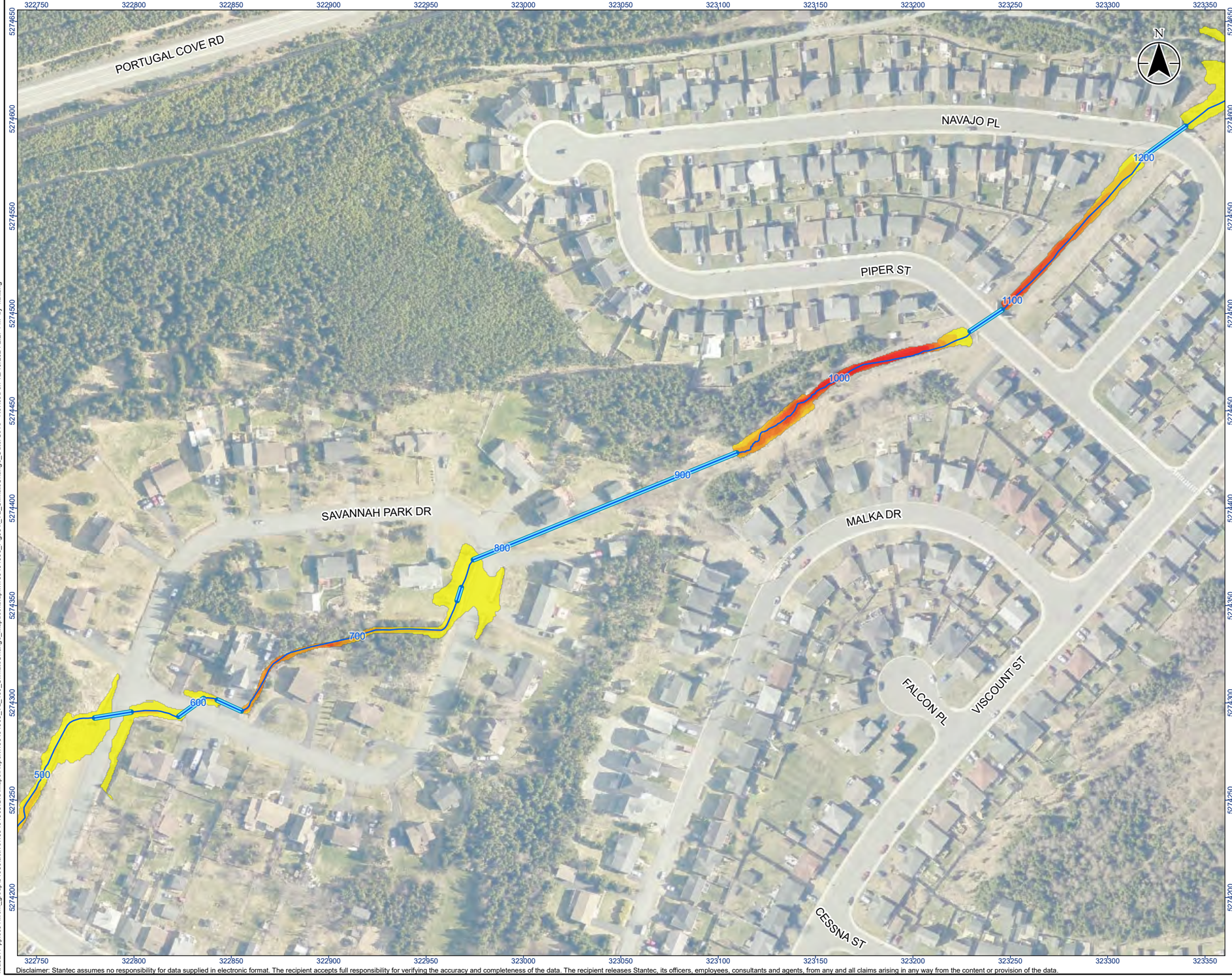

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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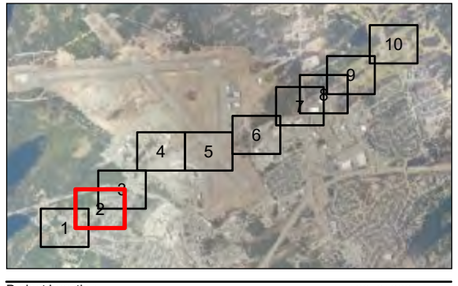

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-2

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 2 of 10

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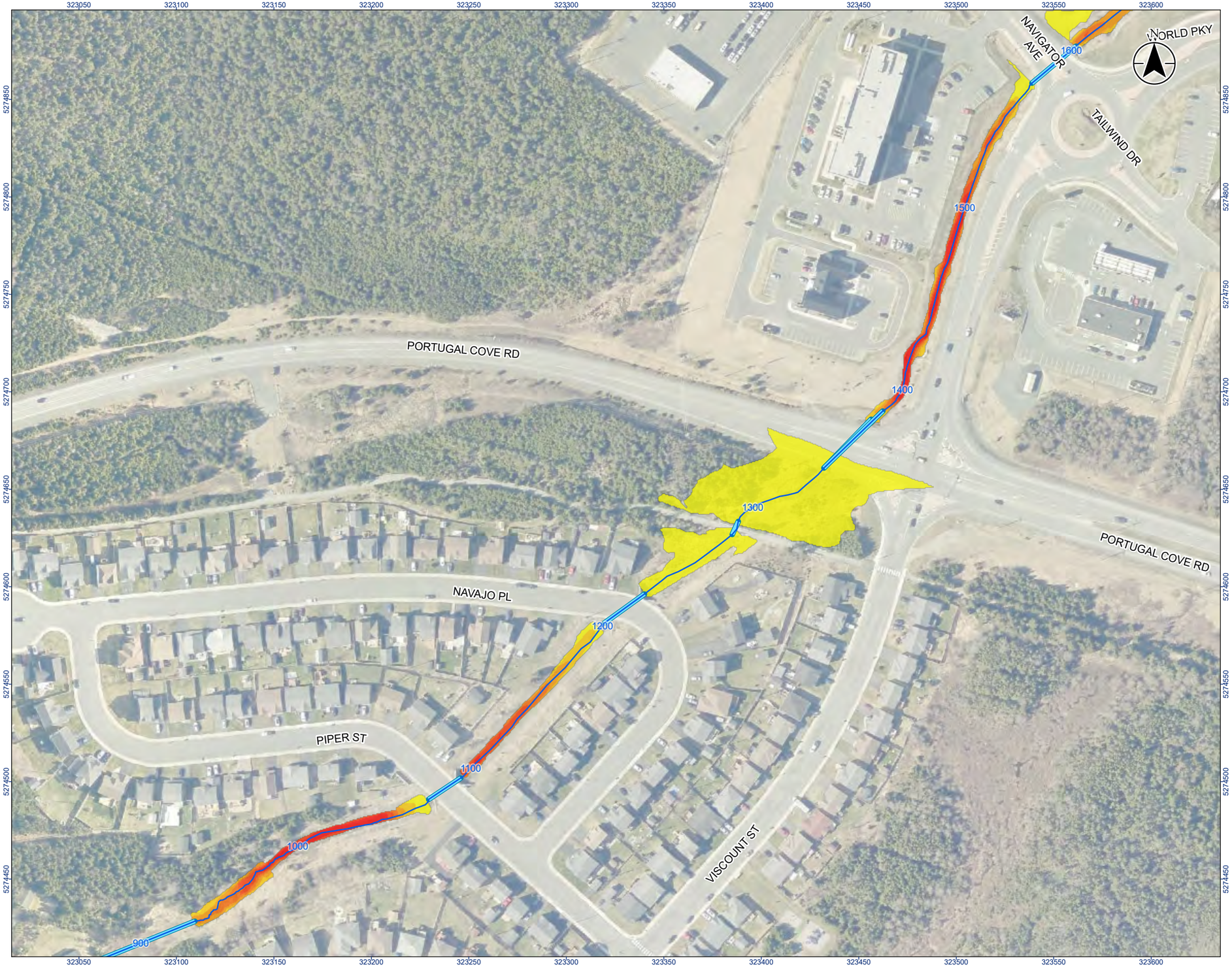

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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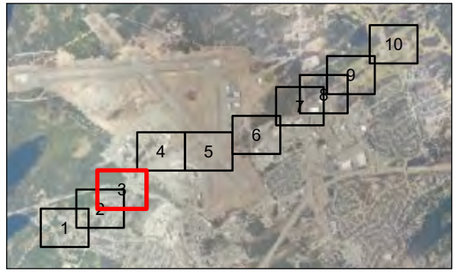

Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-3

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 3 of 10

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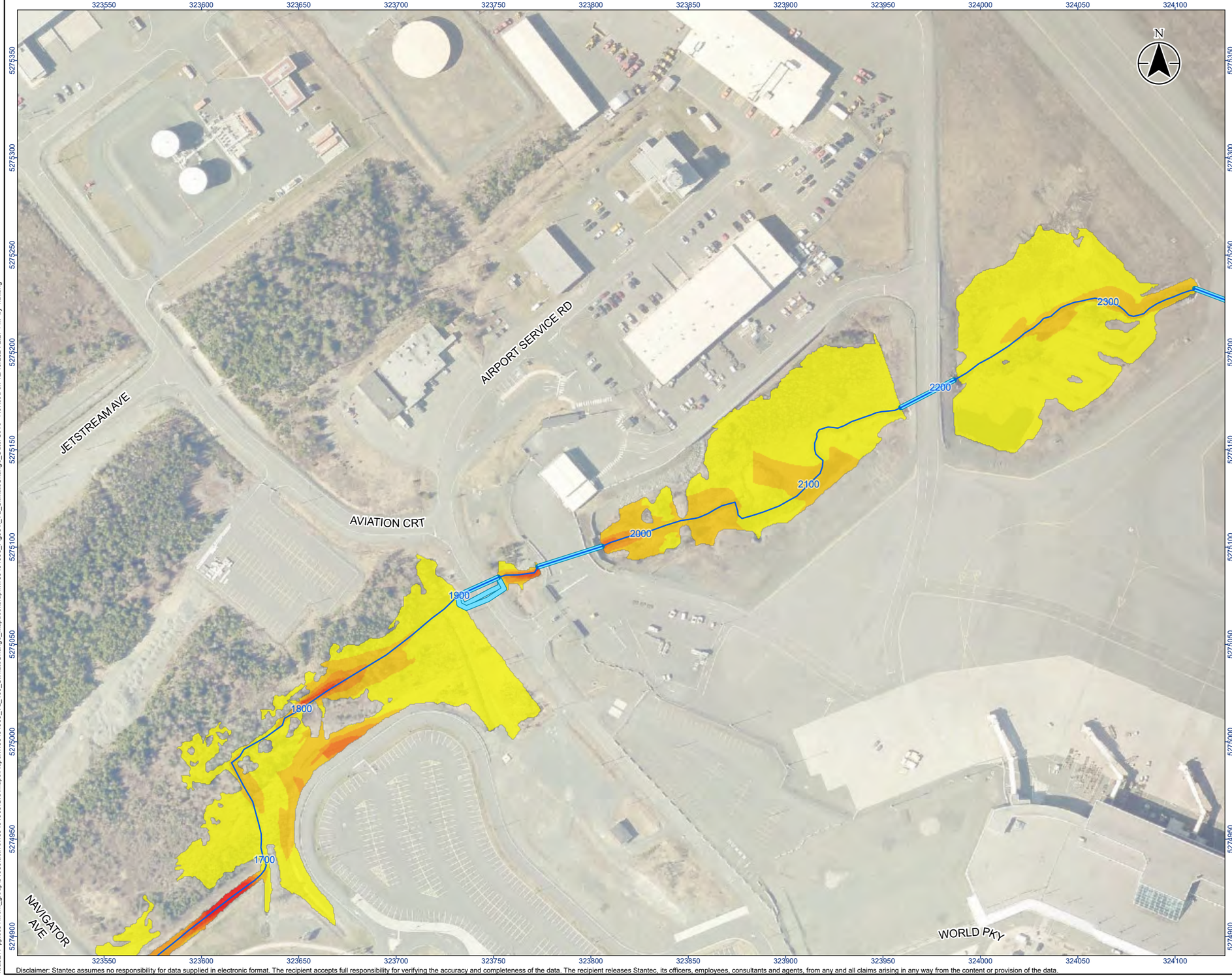

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40
m
1:2,000 (At original document size of 11x17)

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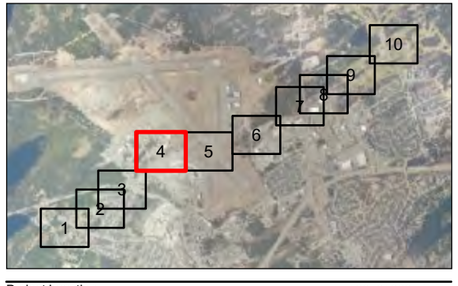

Project Location
City of St. John's

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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-4

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 4 of 10

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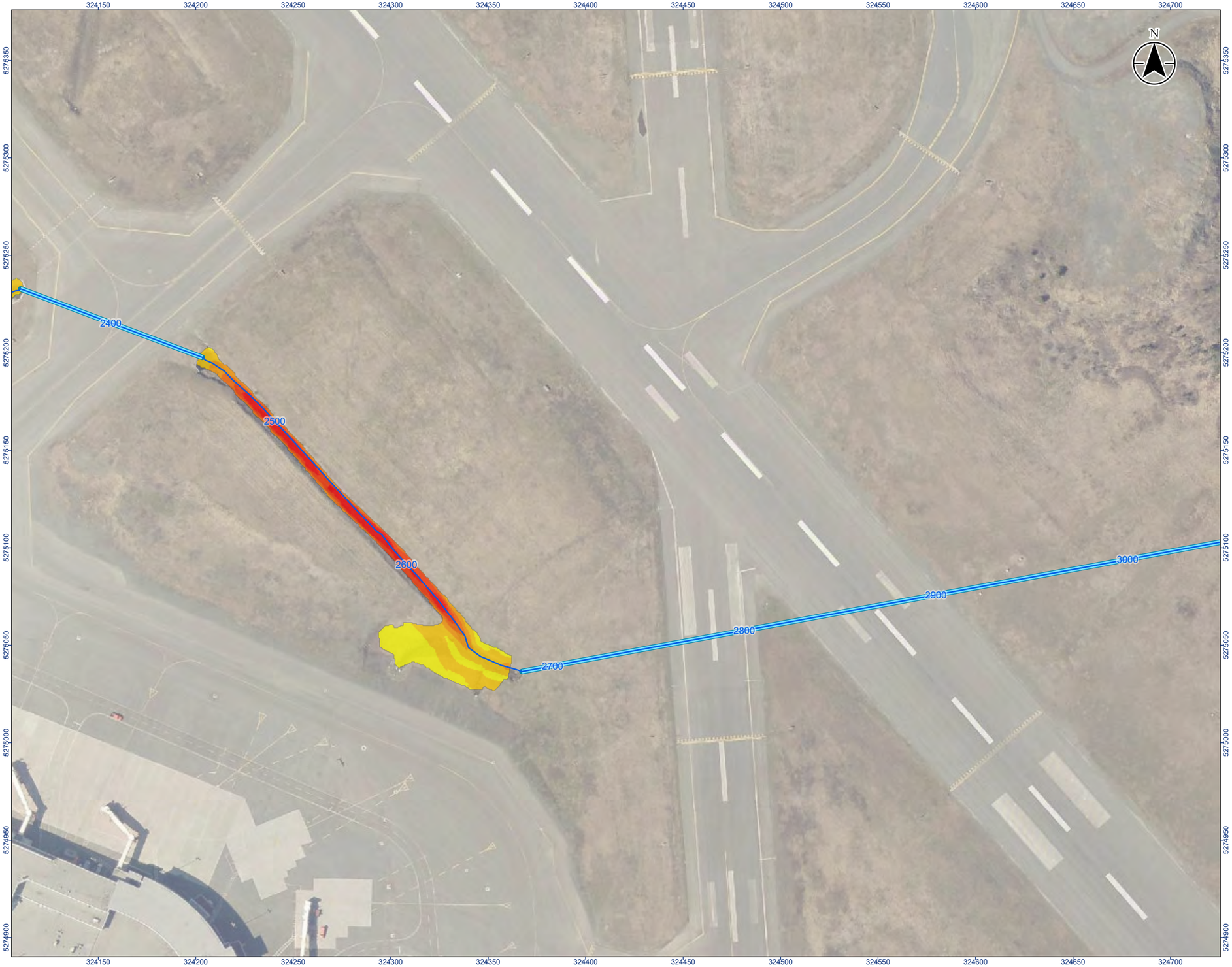

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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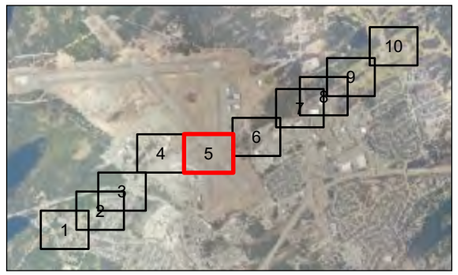

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-5

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 5 of 10

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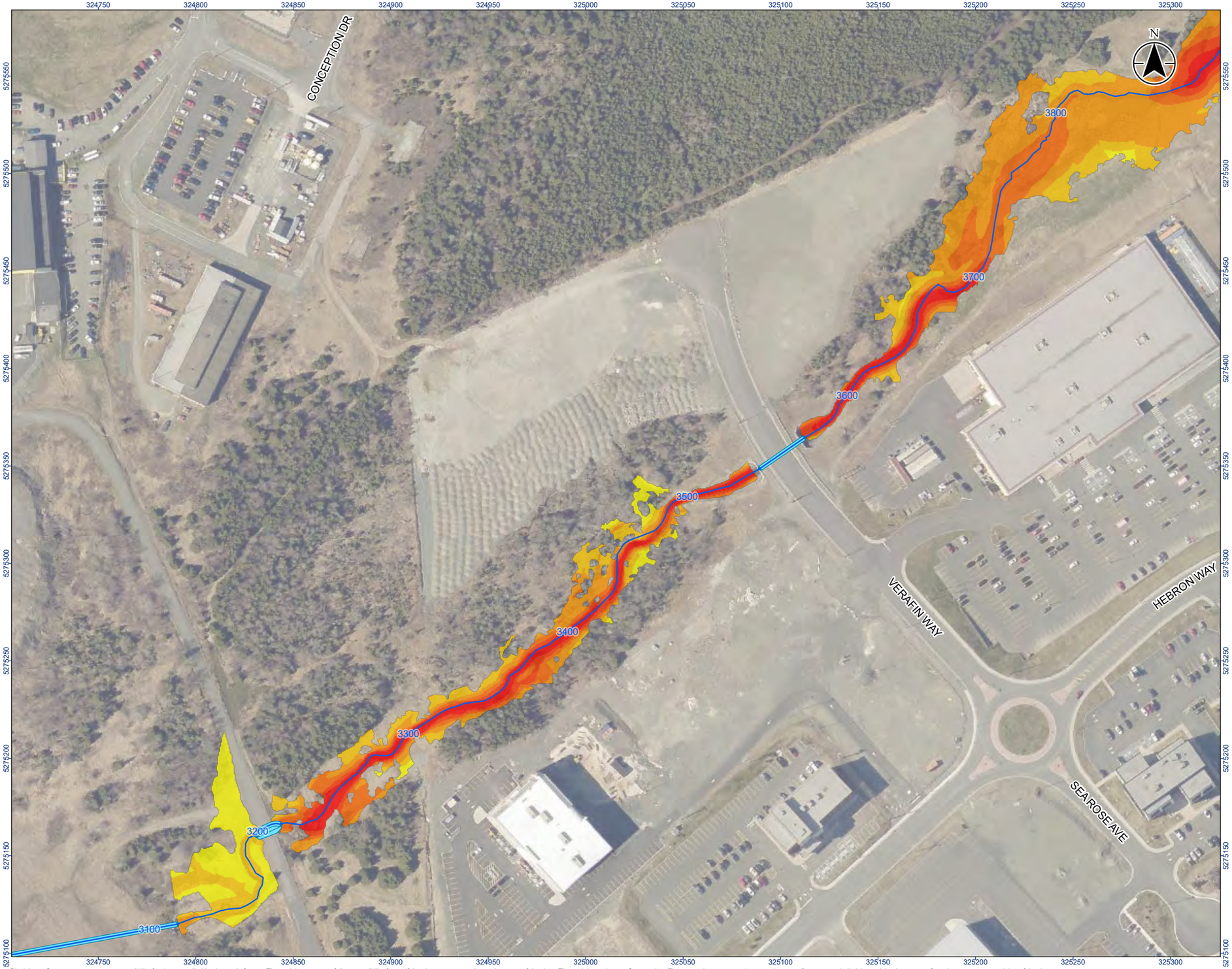

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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Project Location
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Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-6

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 6 of 10

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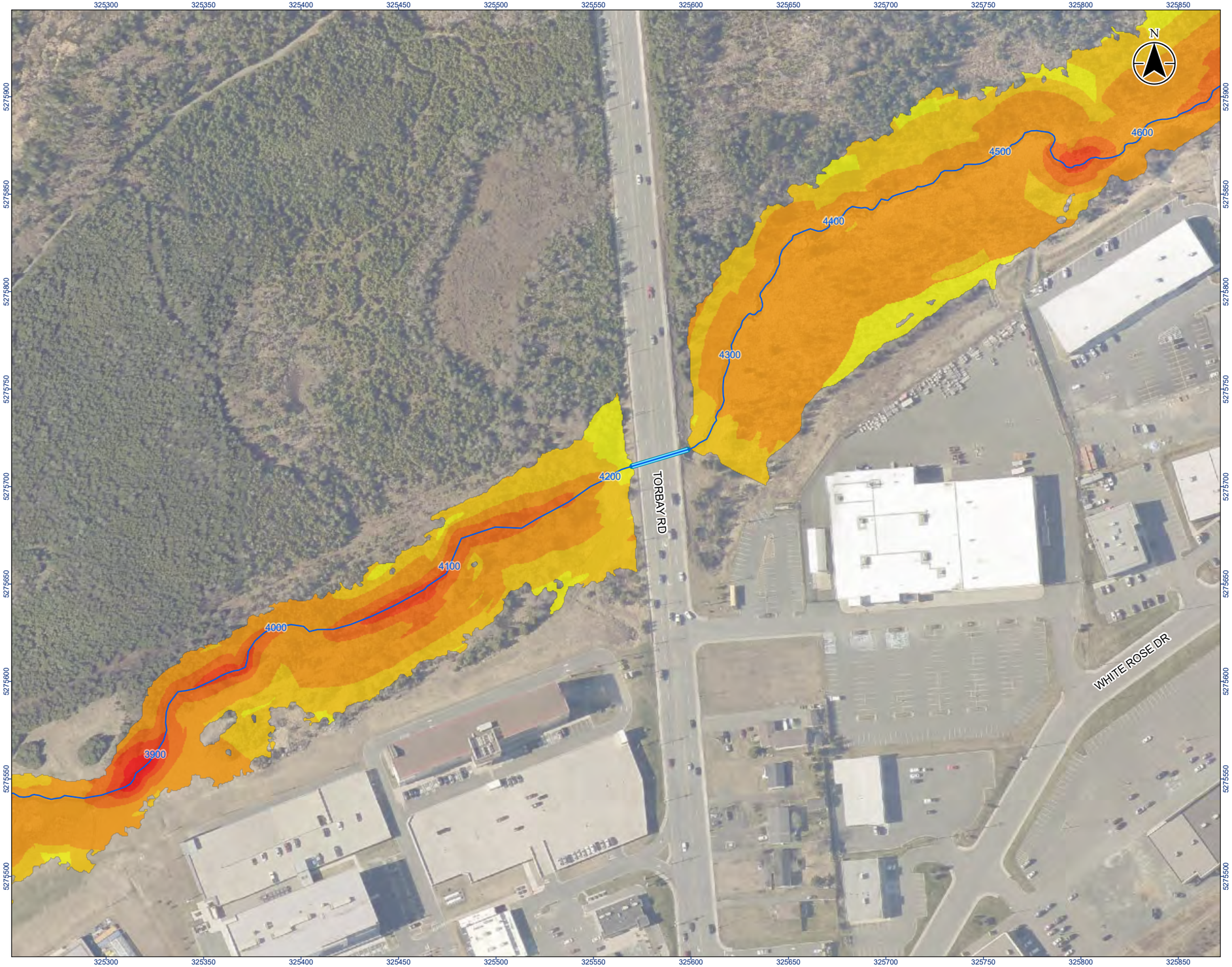

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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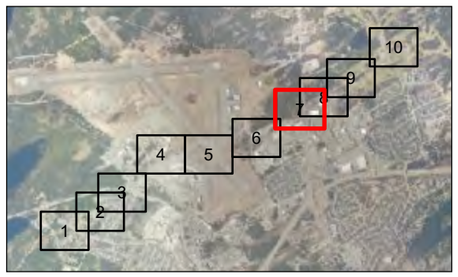

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-7

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 7 of 10

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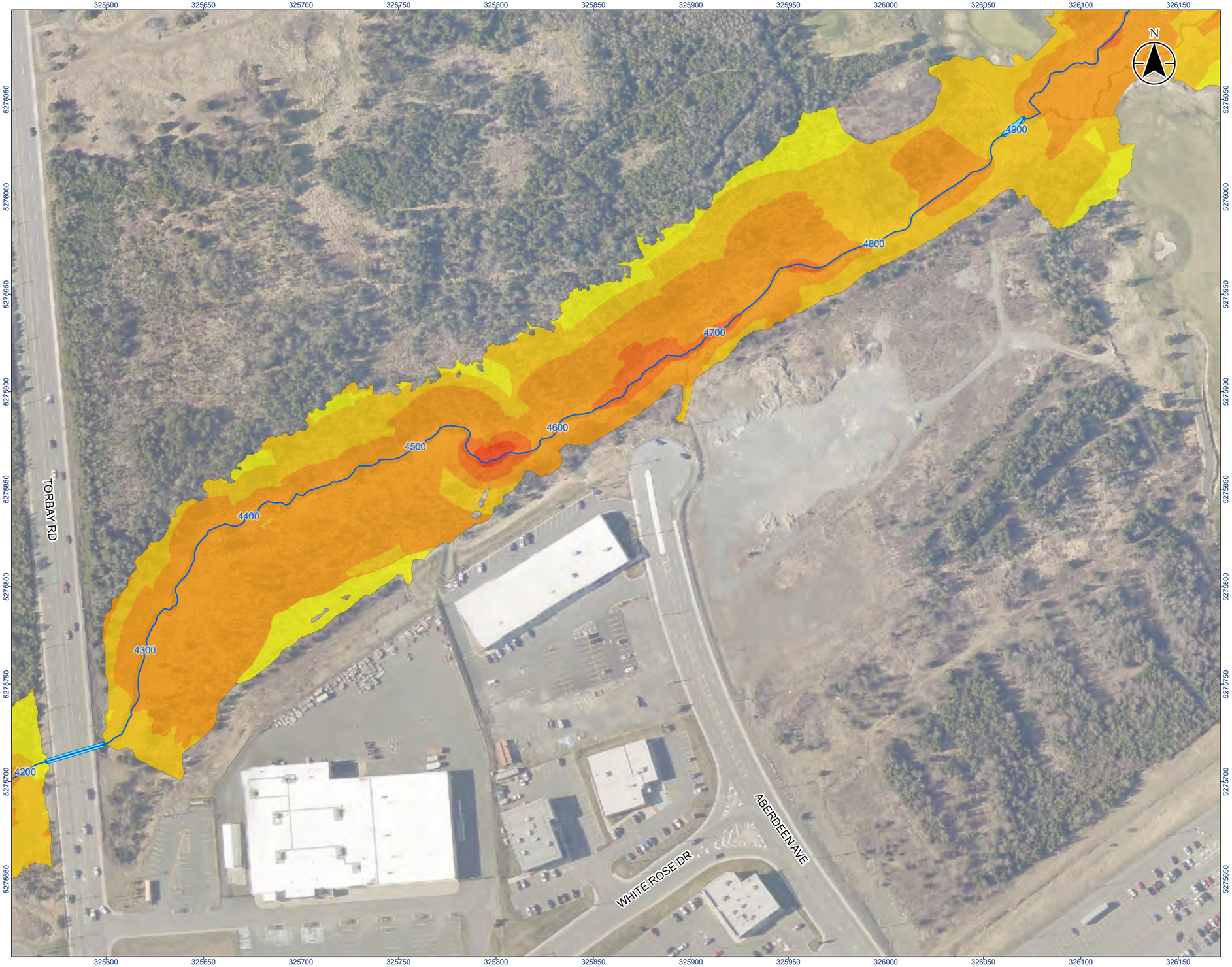

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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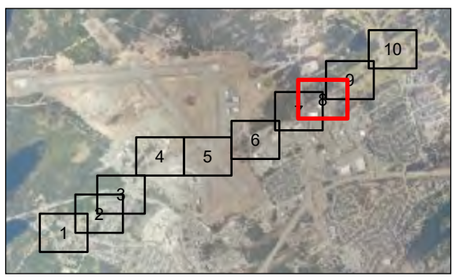

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-8

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 8 of 10

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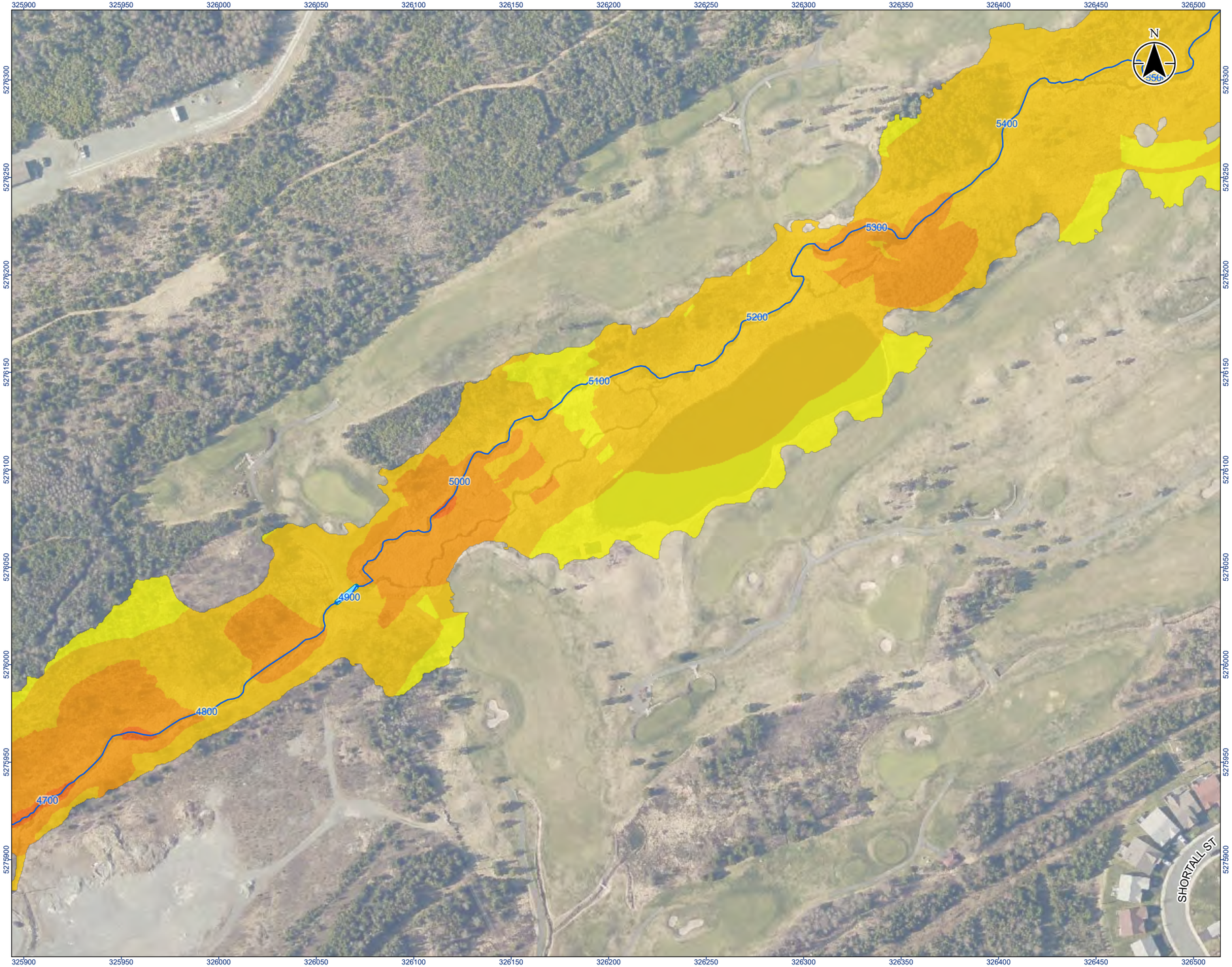

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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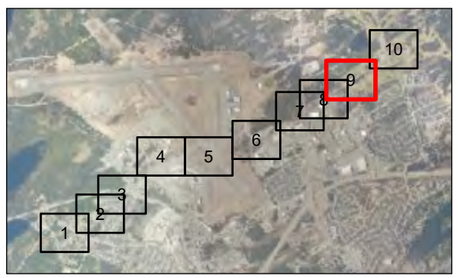

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-9

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 9 of 10

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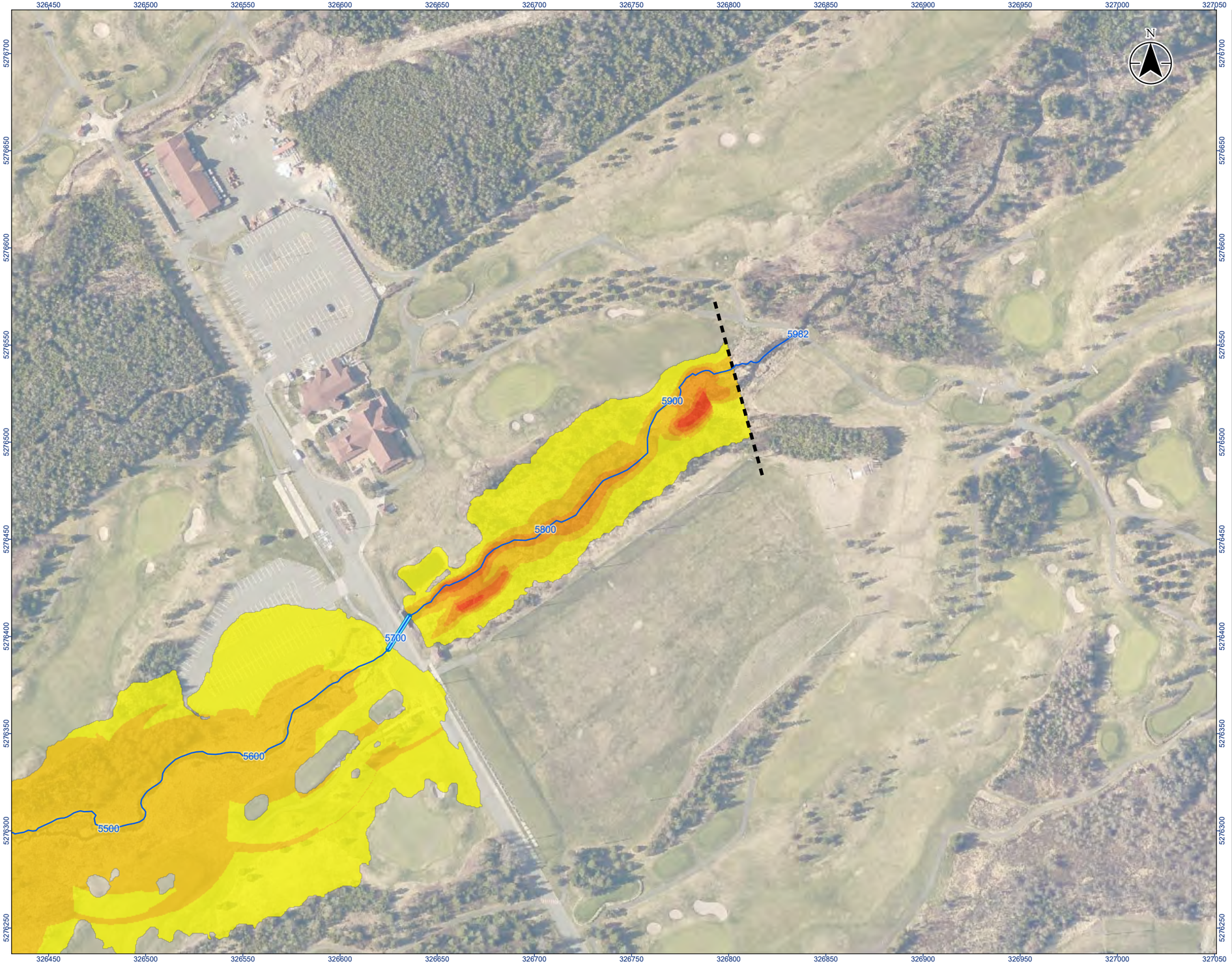

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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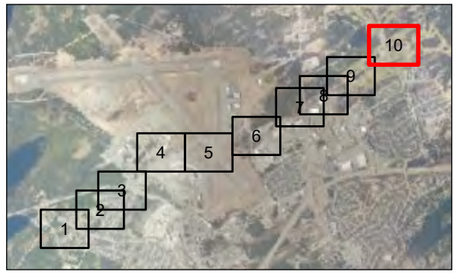

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2024-12-19

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
68-10

Title
Climate Change Condition
100-Year Velocity - Outer Cove Brook
Sheet 10 of 10

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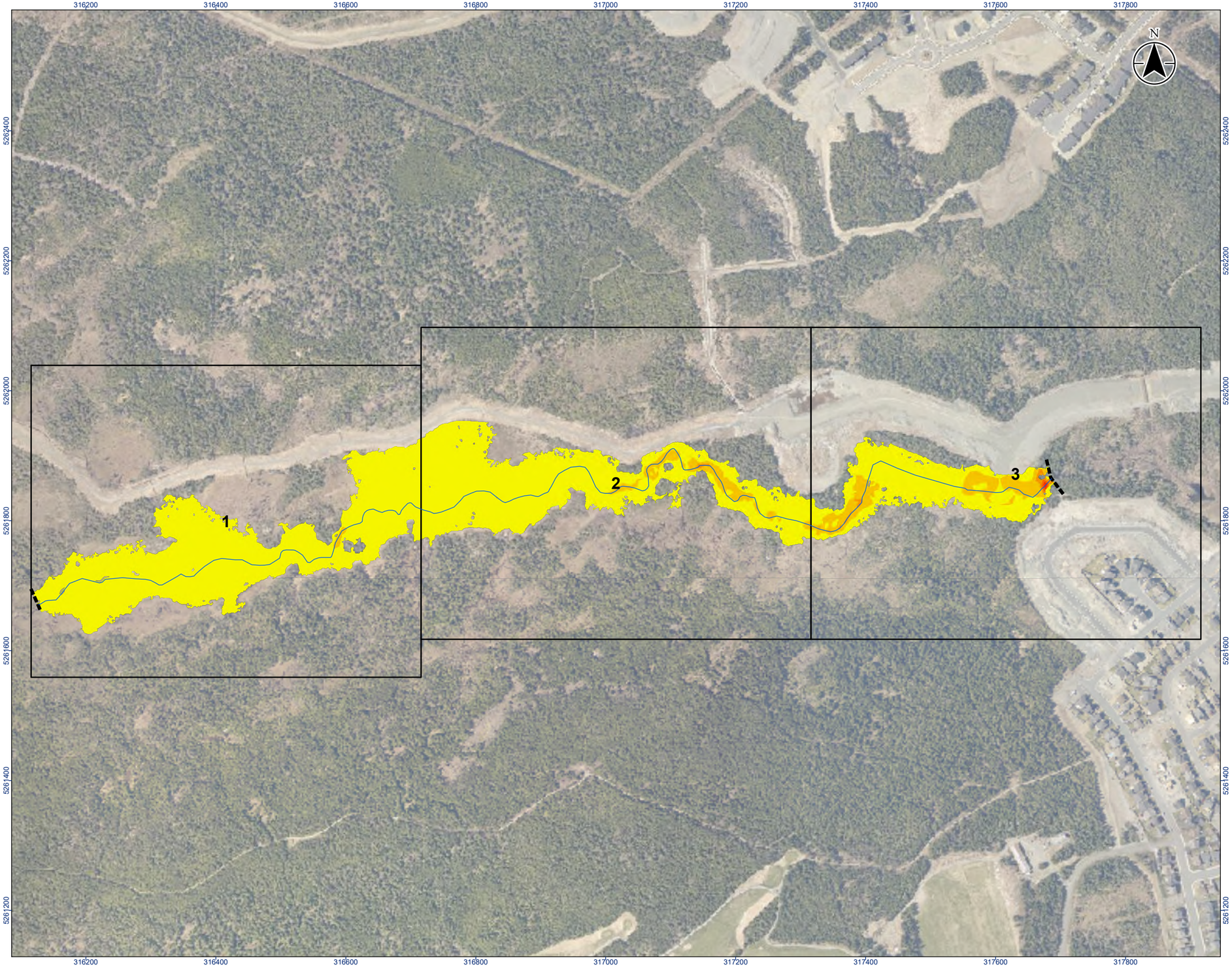

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 110 220 m

1:6,000 (At original document size of 11x17)

Notes

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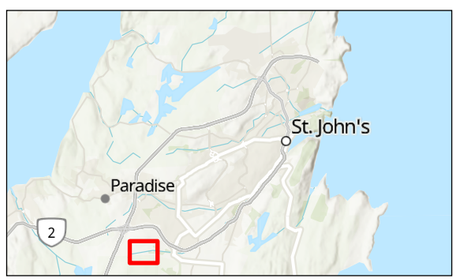

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
69-0

Title
Climate Change Condition 100-Year Velocity - South Brook Overview Map

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316150 316200 316250 316300 316350 316400 316450 316500 316550 316600 316650 316700

5262000 5261950 5261900 5261850 5261800 5261750 5261700 5261650 5261600

N

0 100 200 300 400 500 600 700

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
69-1

Title
Climate Change Condition
100-Year Velocity - South Brook
Sheet 1 of 3

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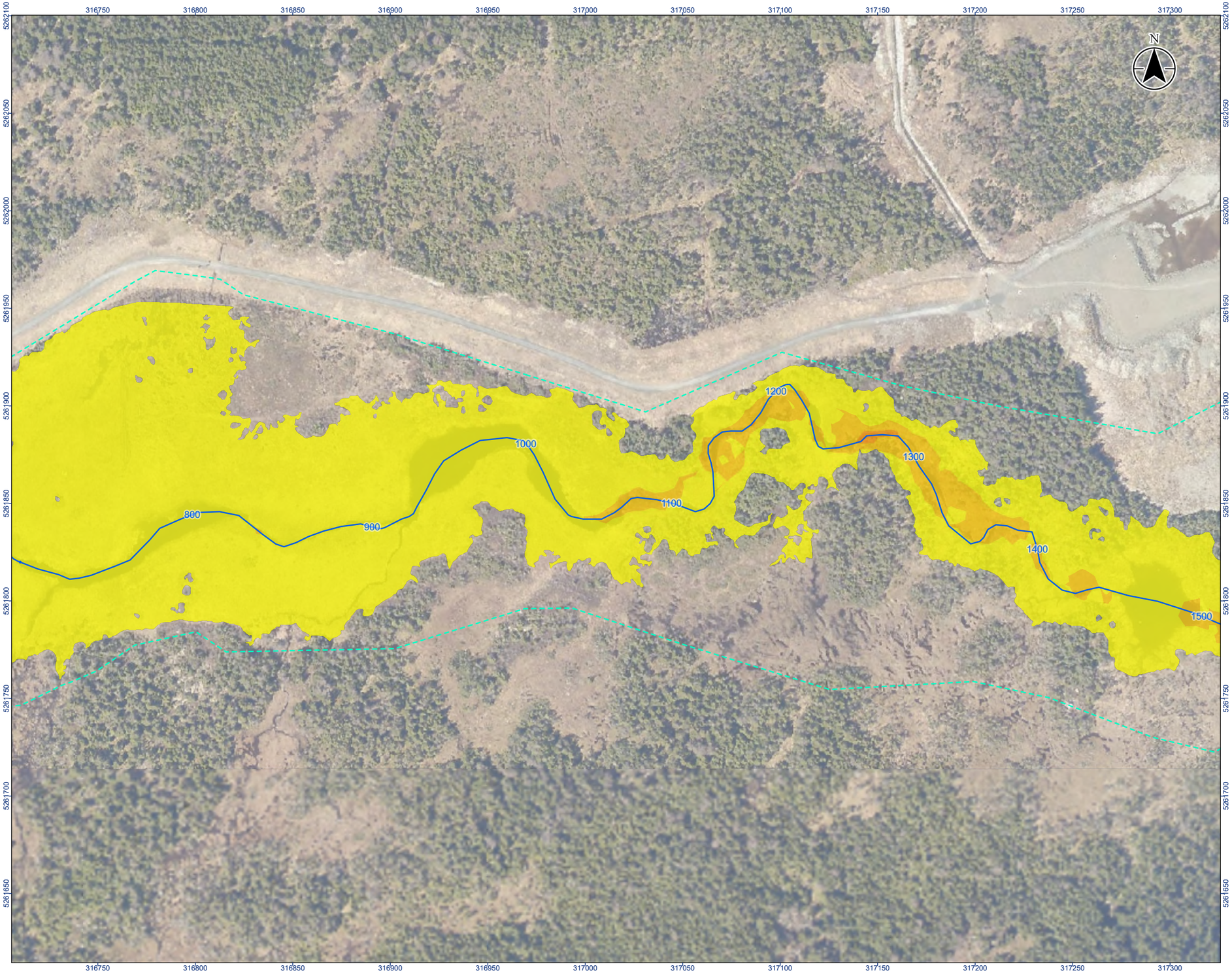

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
69-2

Title
Climate Change Condition
100-Year Velocity - South Brook
Sheet 2 of 3

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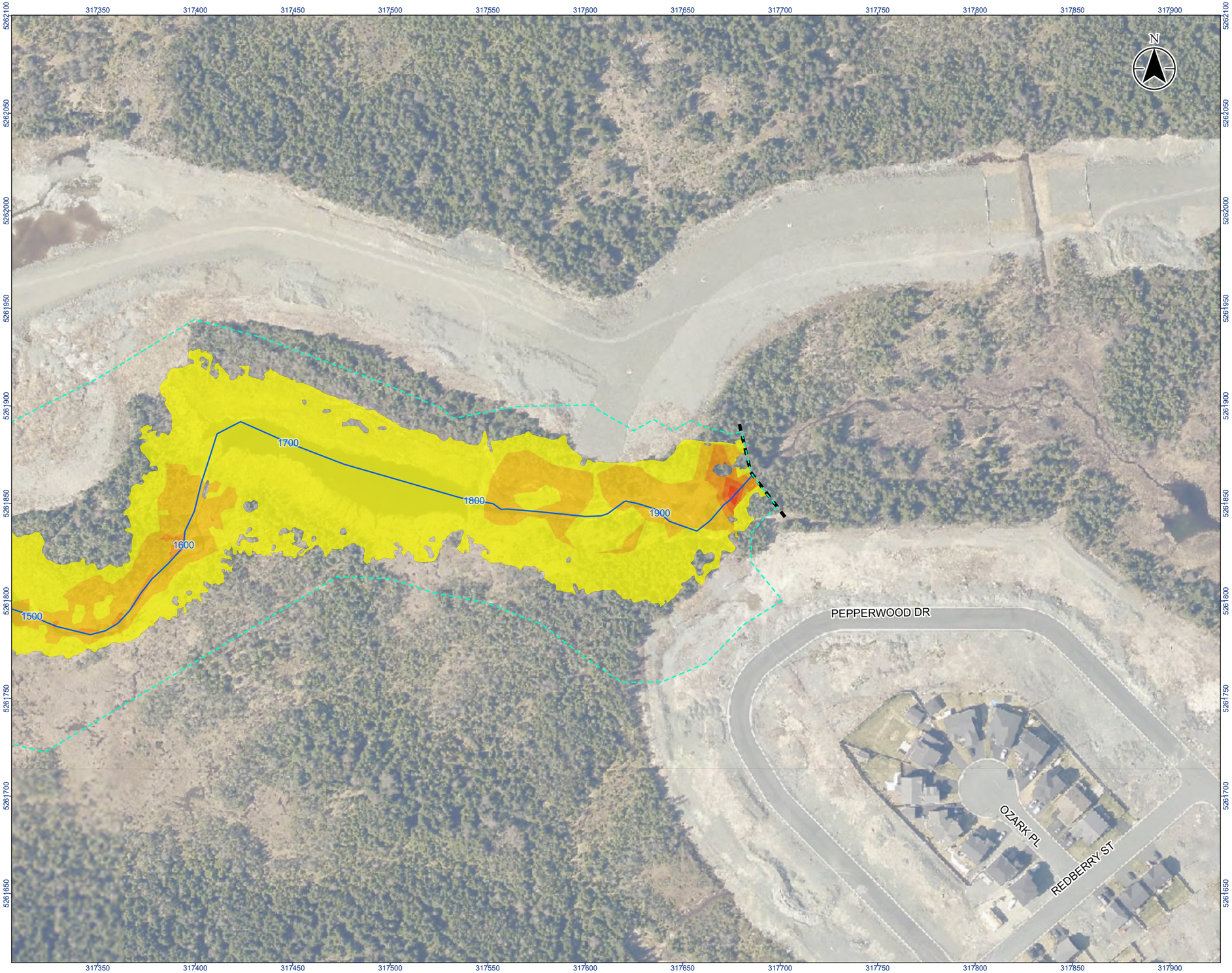

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-04-01

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
69-3

Title
Climate Change Condition
100-Year Velocity - South Brook
Sheet 3 of 3

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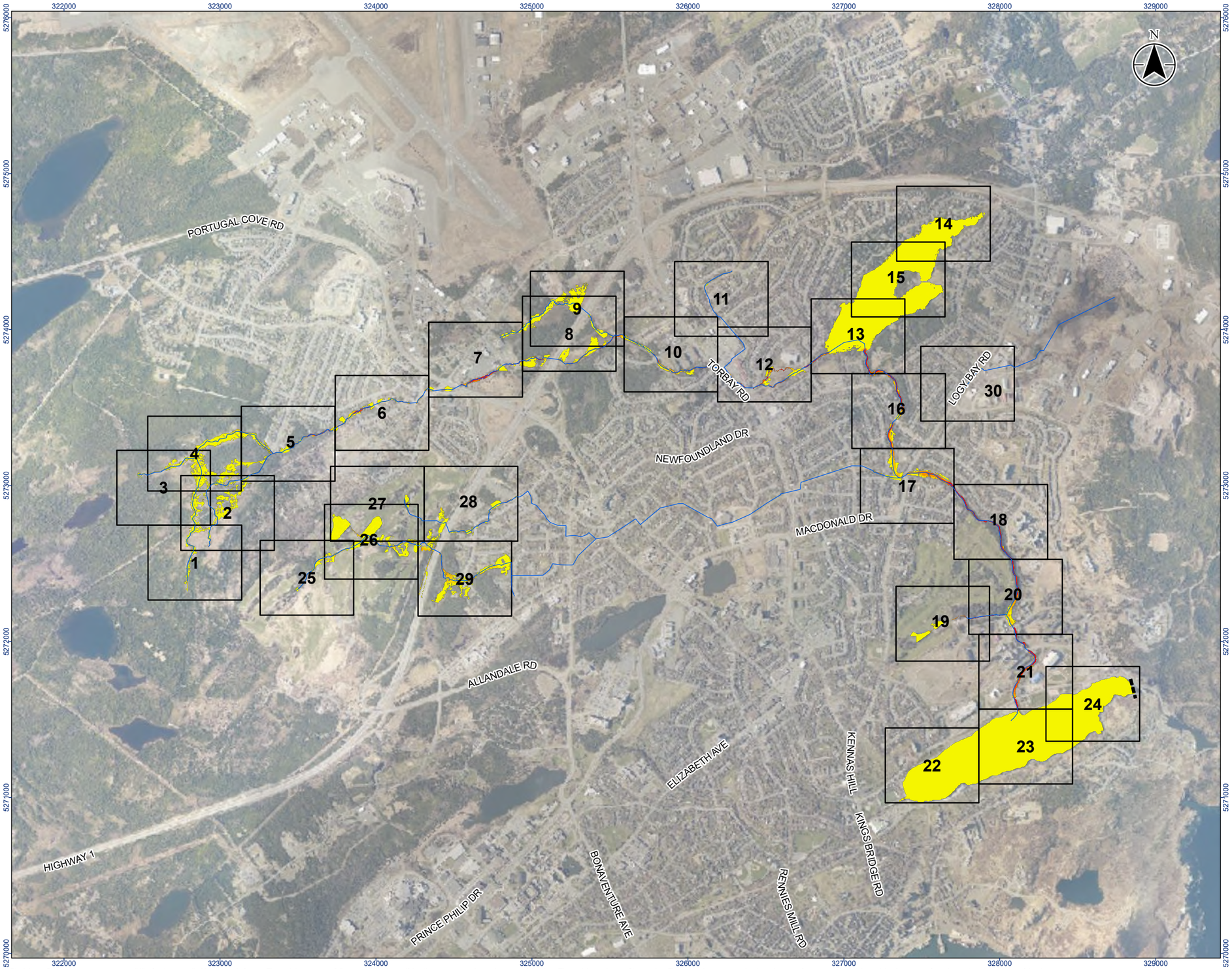

Stantec

Legend

- River/Creek Centreline
- Limit of Mapping
- Map Extents
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 490 980 m

1:25,000 (At original document size of 11x17)

Notes

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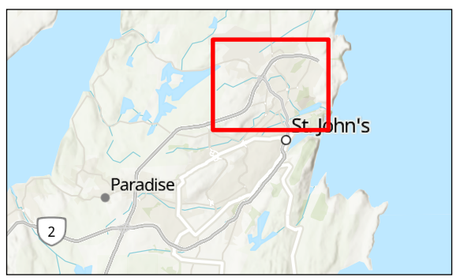

Project Location
City of St. John's

163401903 REVA
Prepared by jacwalker on 2024-12-20

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-0

Title
Climate Change Condition 100-Year Velocity - Virginia River Overview Map

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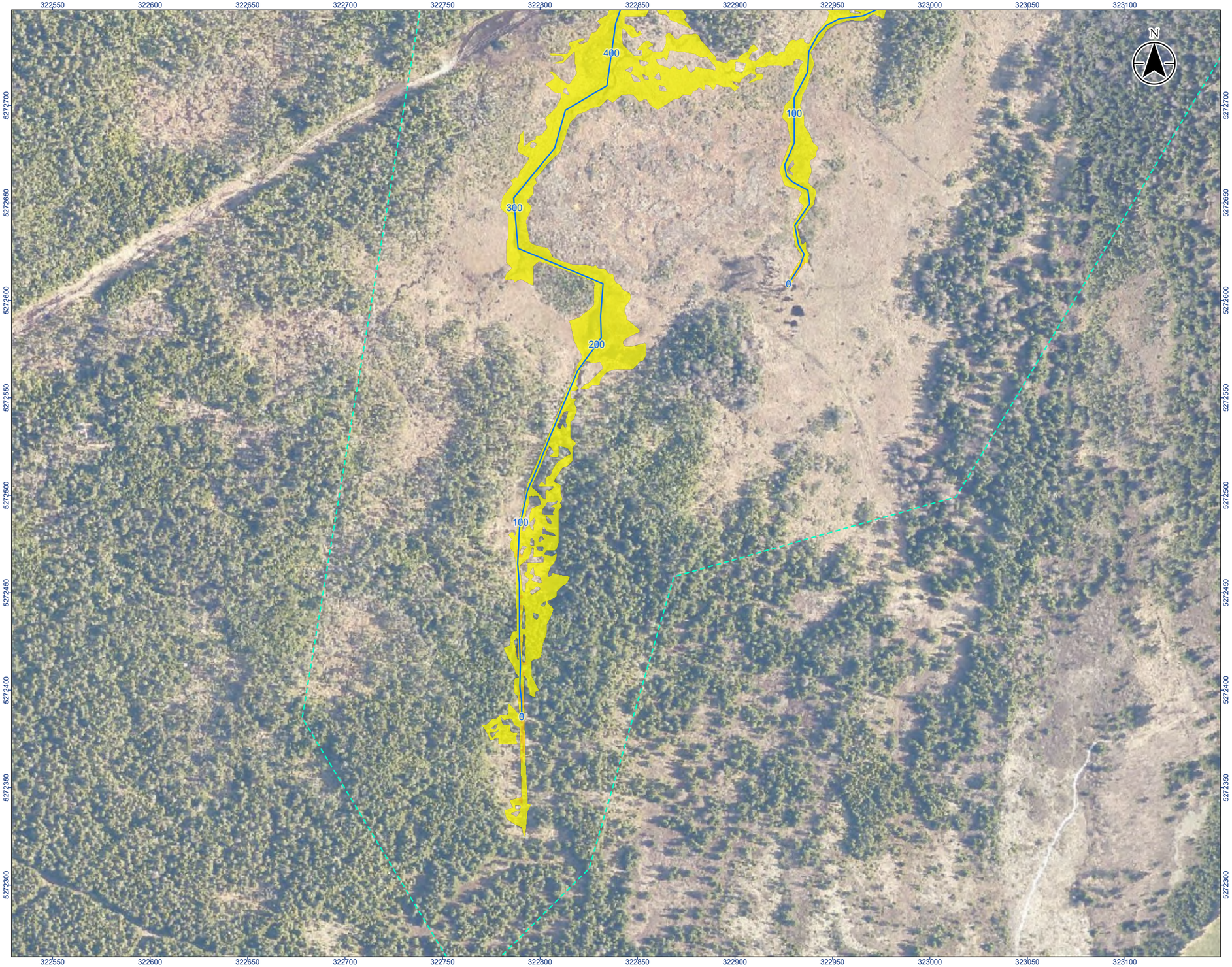

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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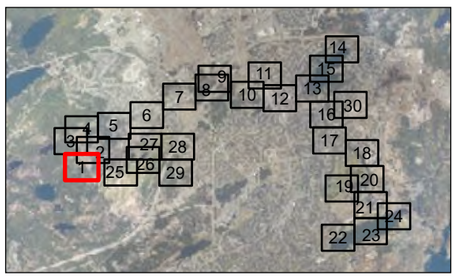

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-1

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 1 of 30

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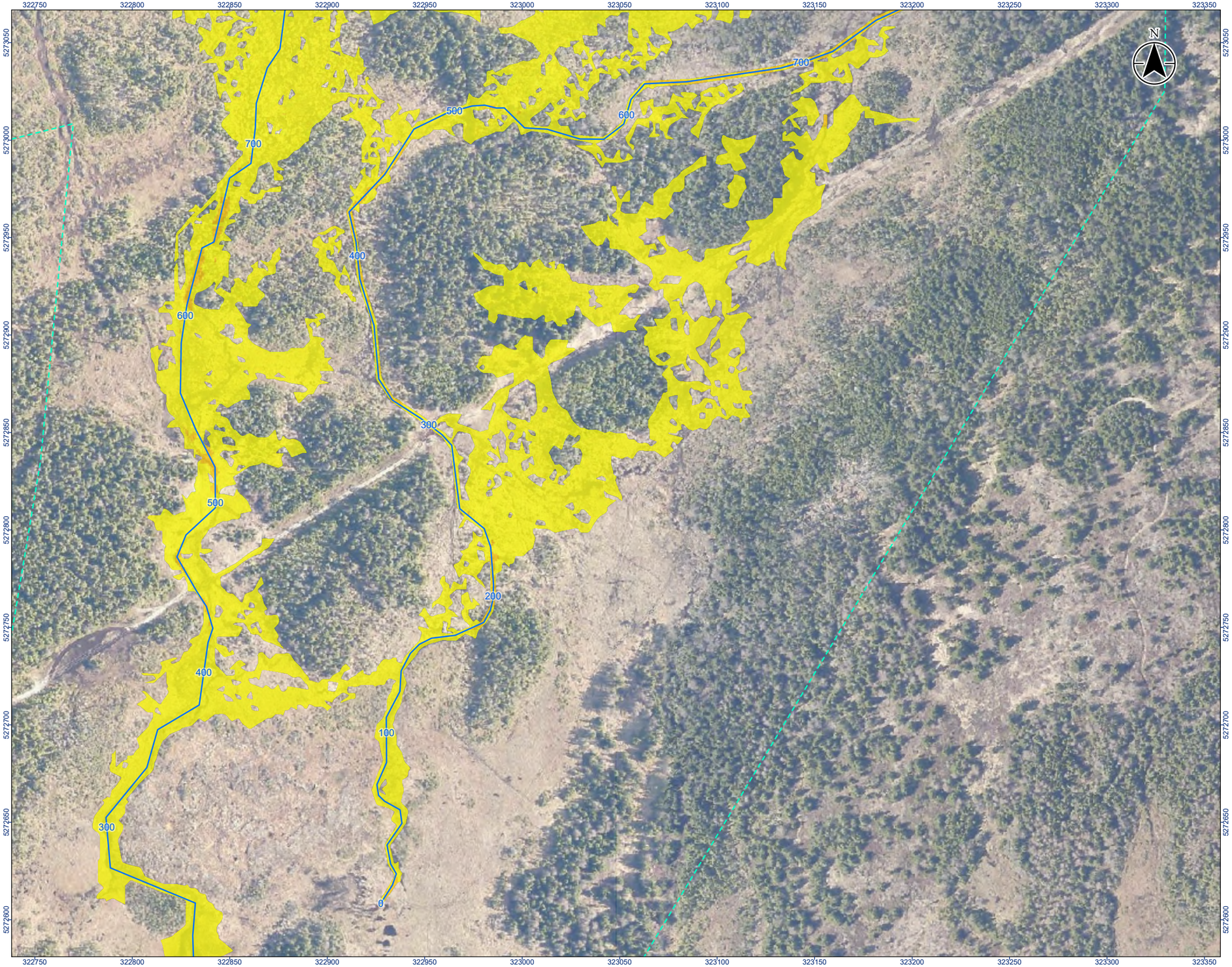

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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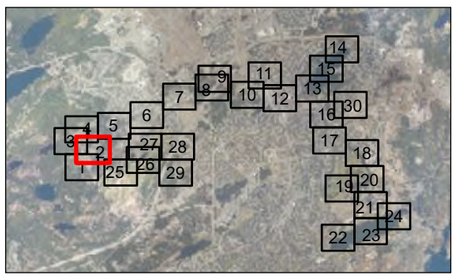

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-2

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 2 of 30

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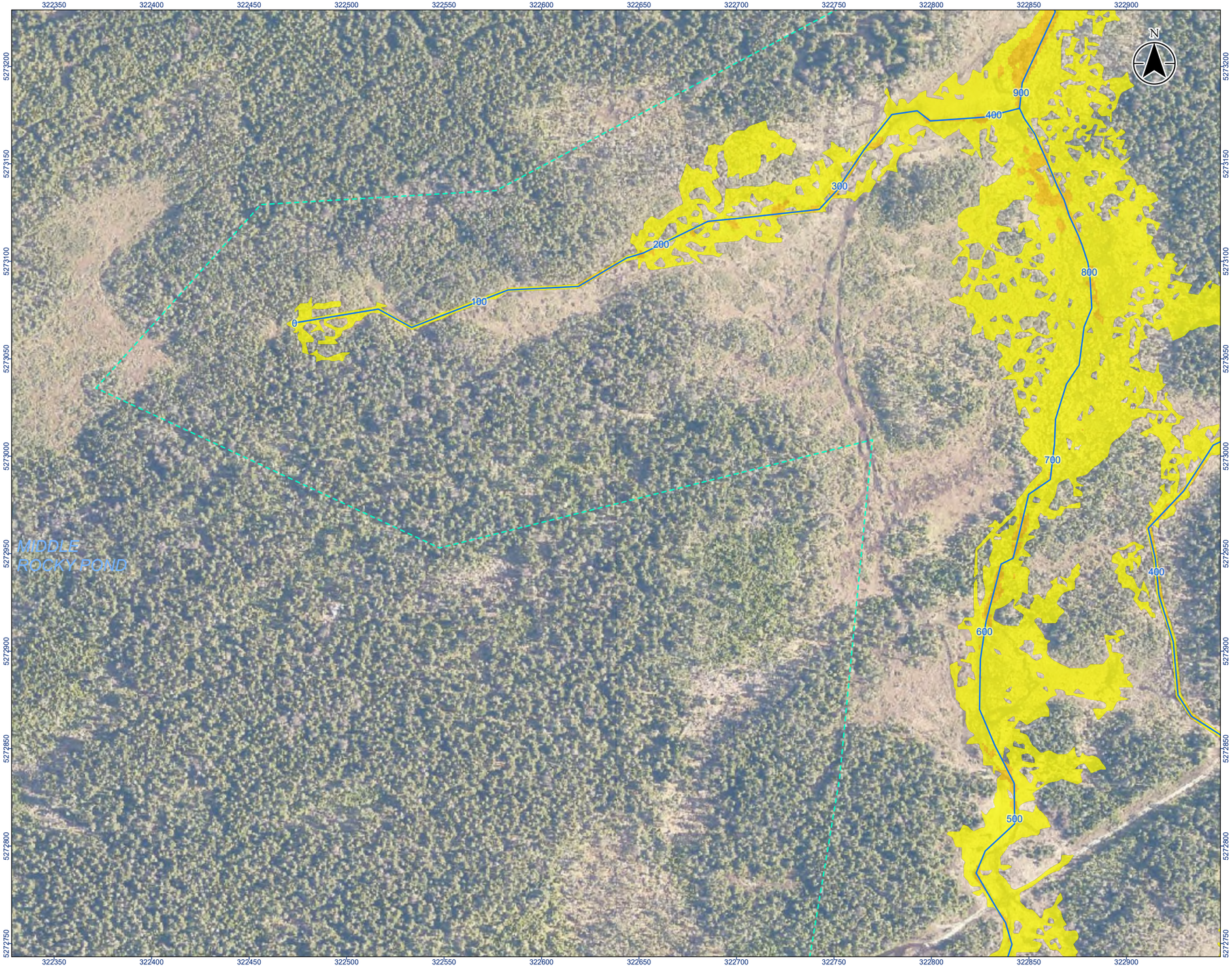

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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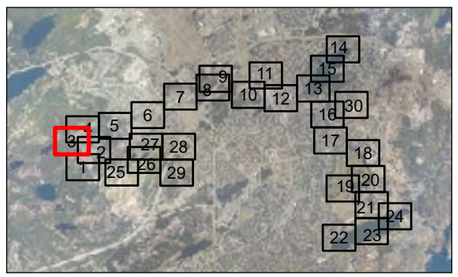

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-3

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 3 of 30

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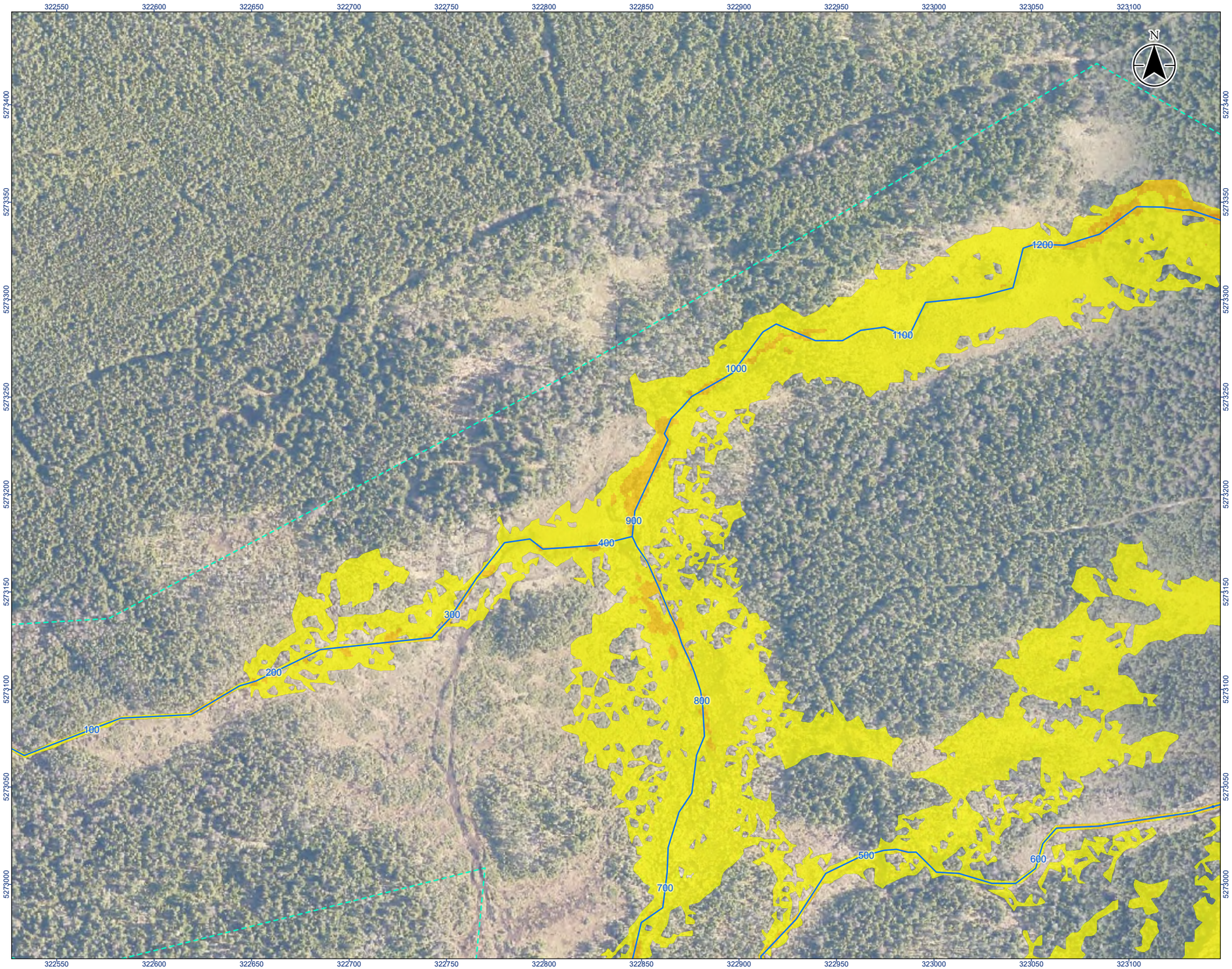

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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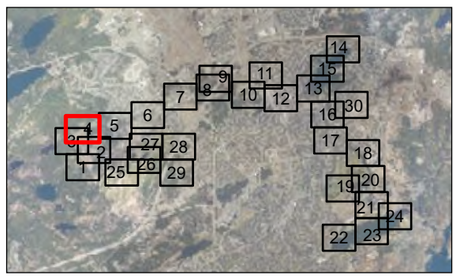

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-4

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 4 of 30

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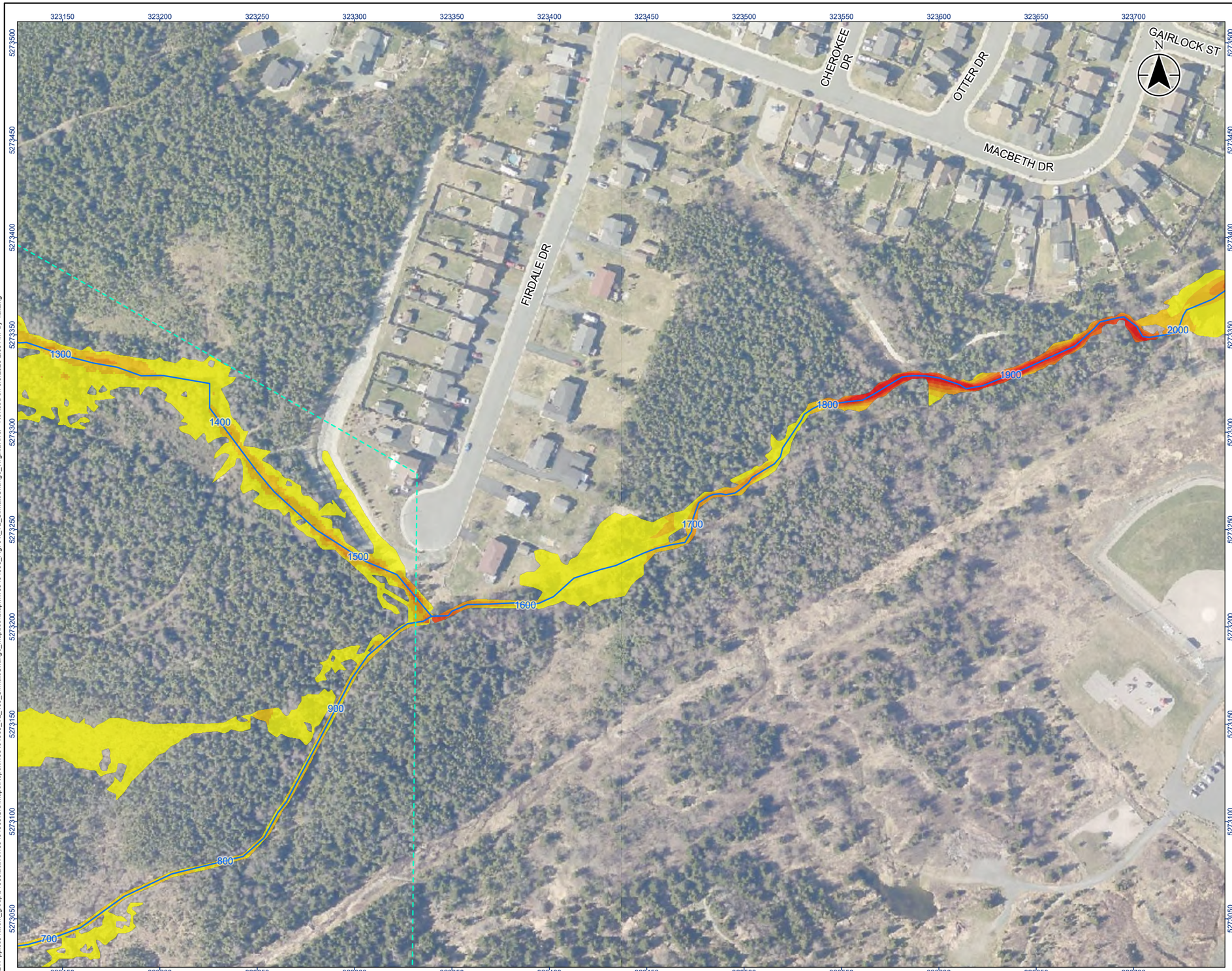

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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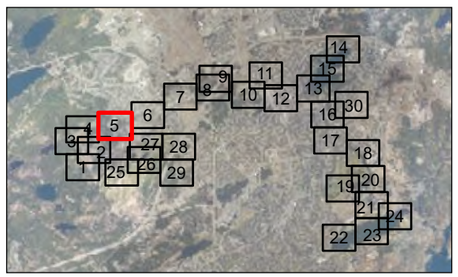

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-5

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 5 of 30

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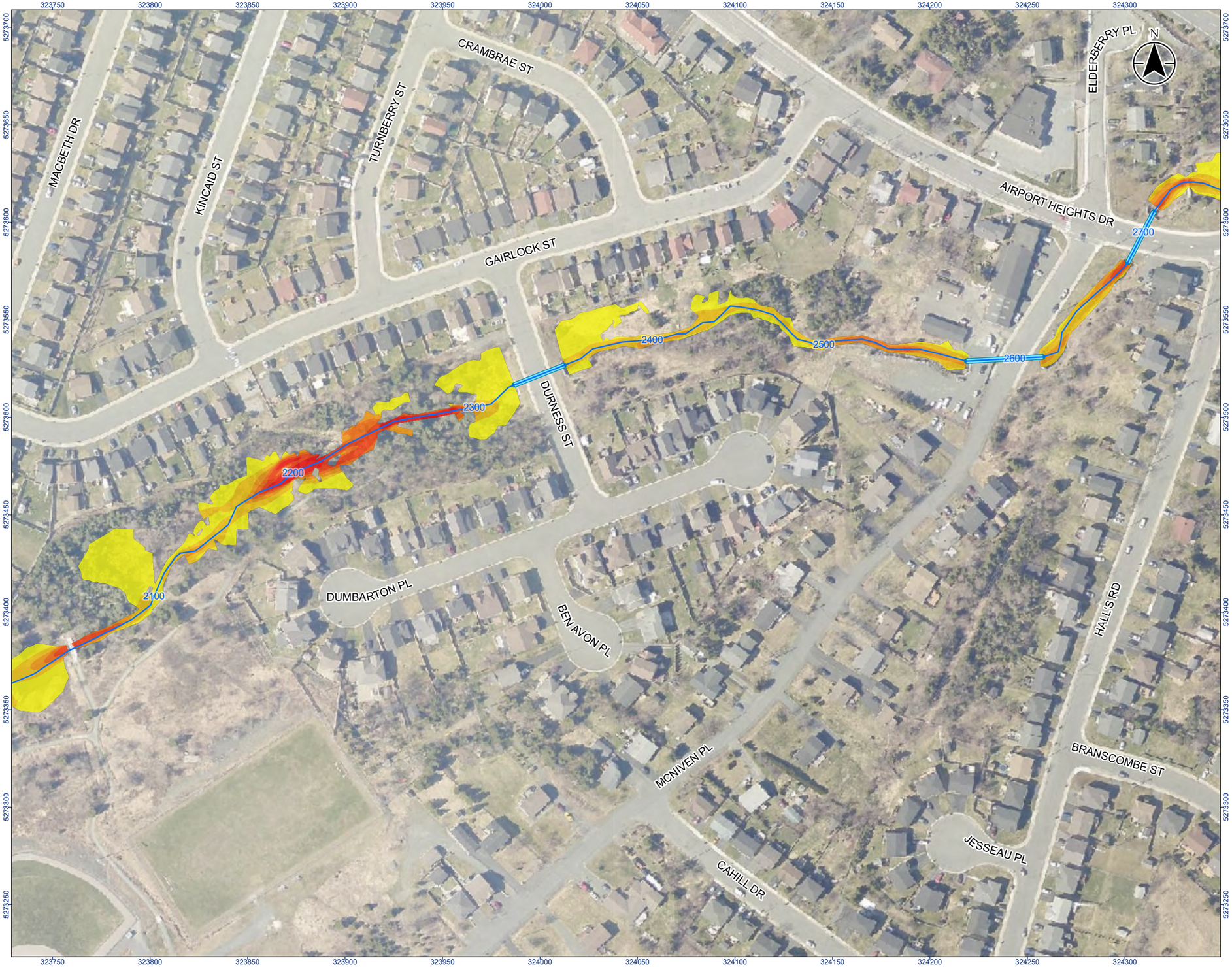

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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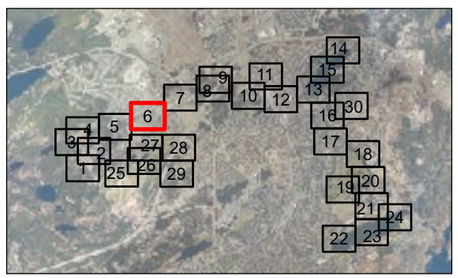

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-6

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 6 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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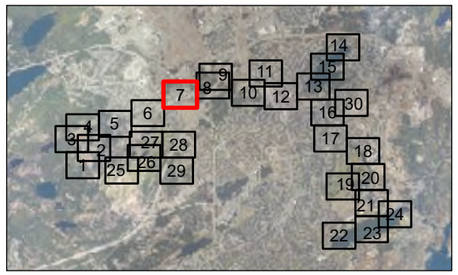

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-7

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 7 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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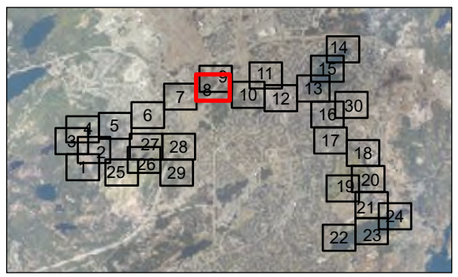

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-8

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 8 of 30

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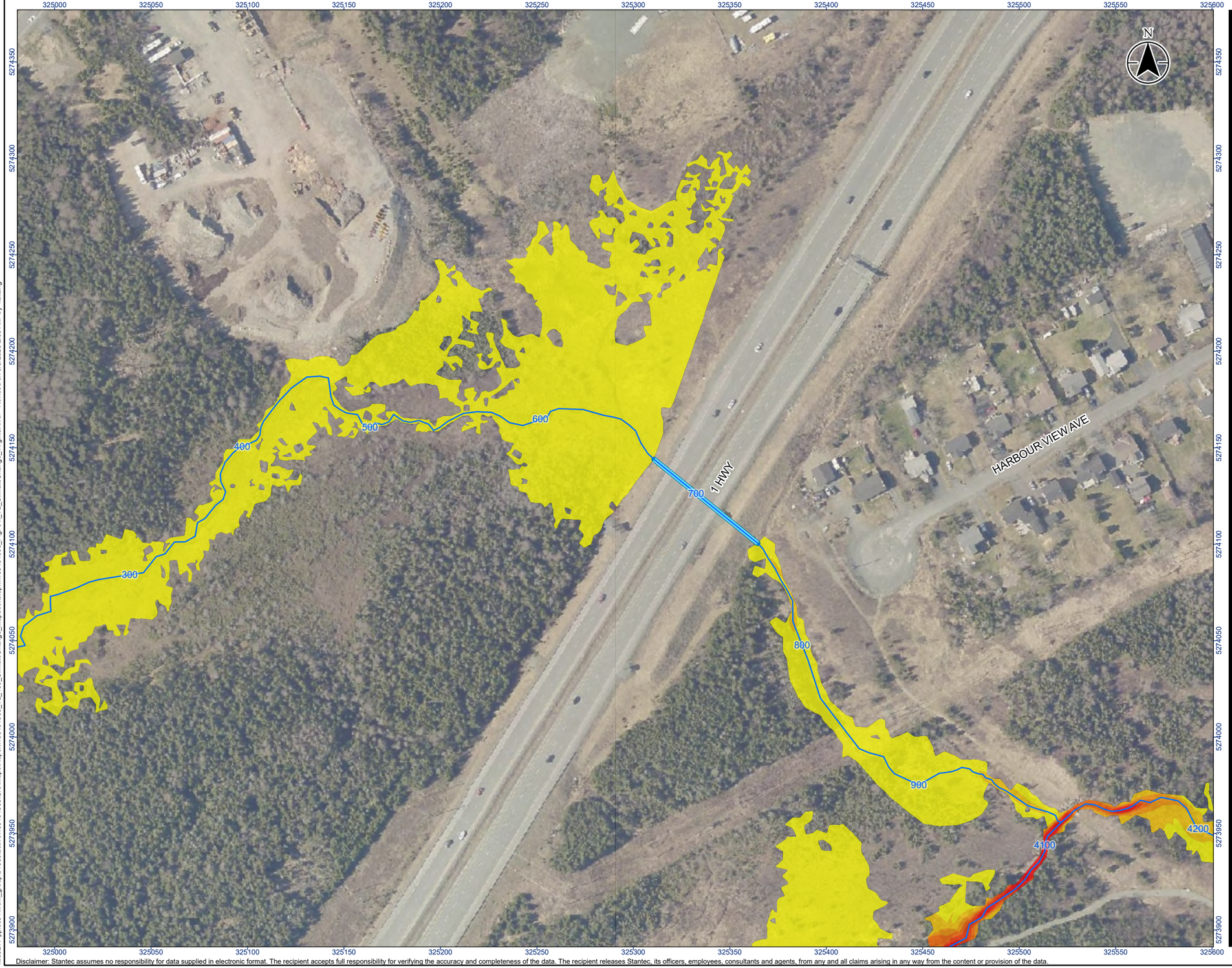

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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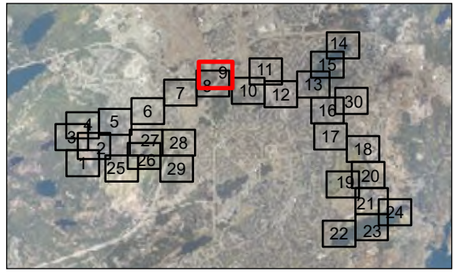

Project Location
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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-9

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 9 of 30

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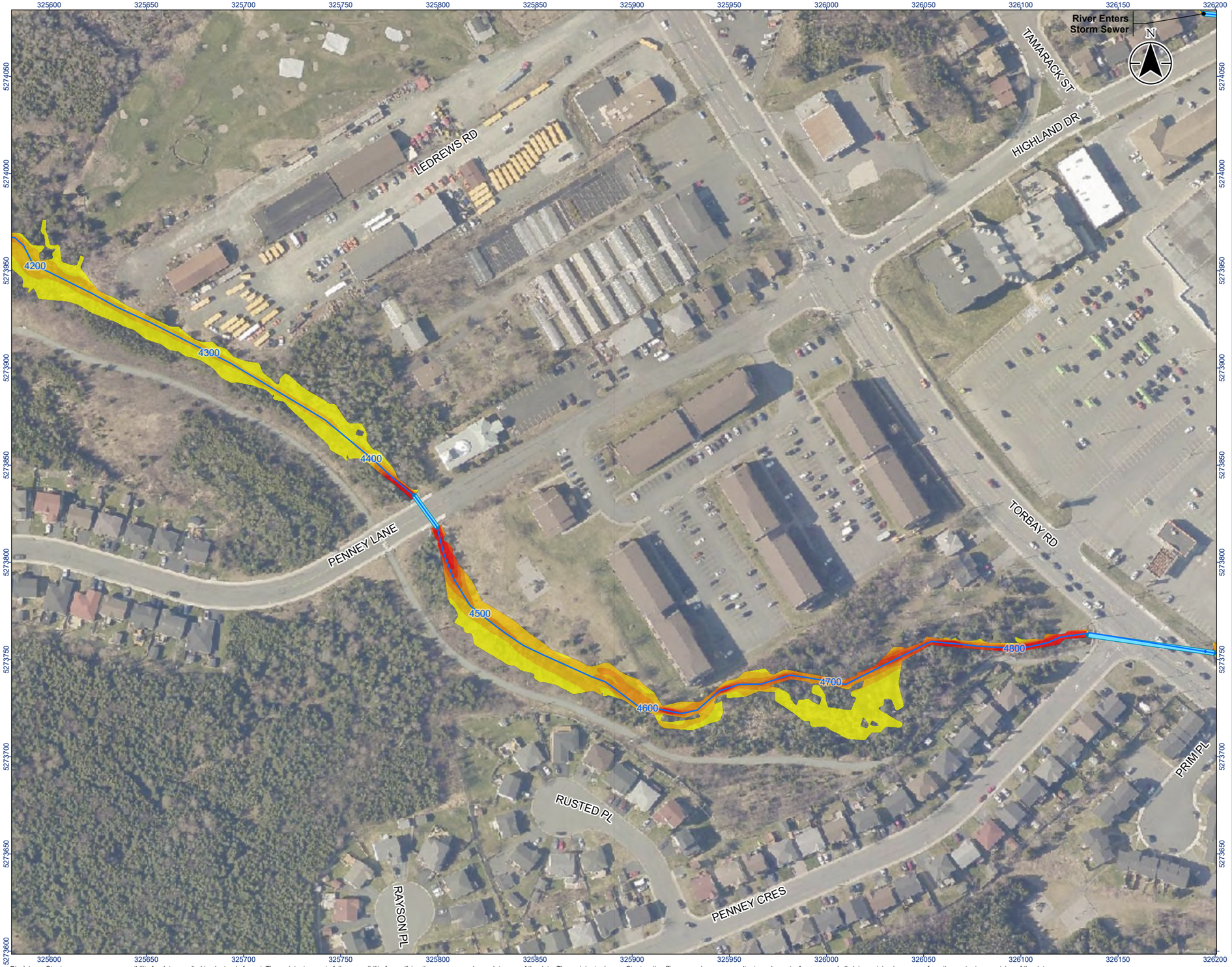

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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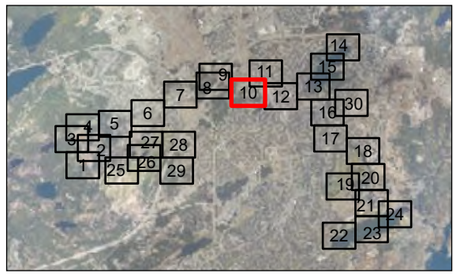

Project Location
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-10

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 10 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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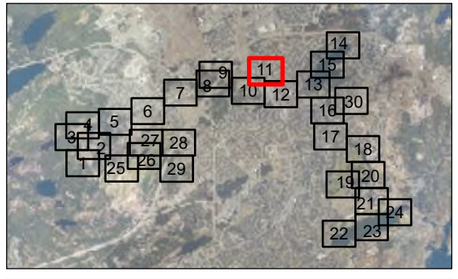

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-11

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 11 of 30

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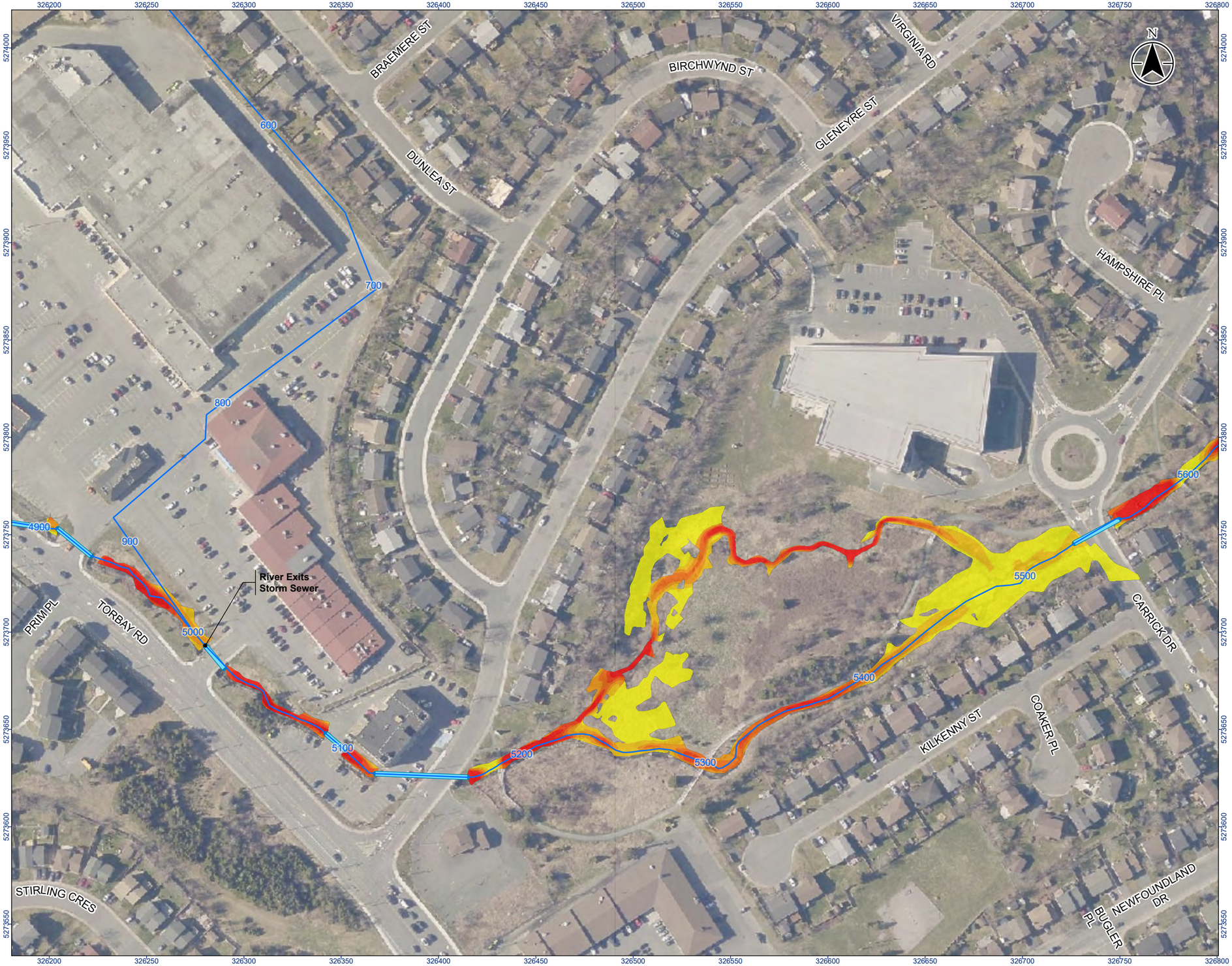

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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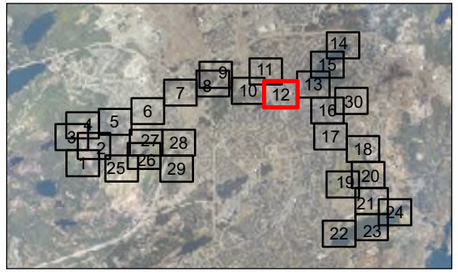

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-12

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 12 of 30

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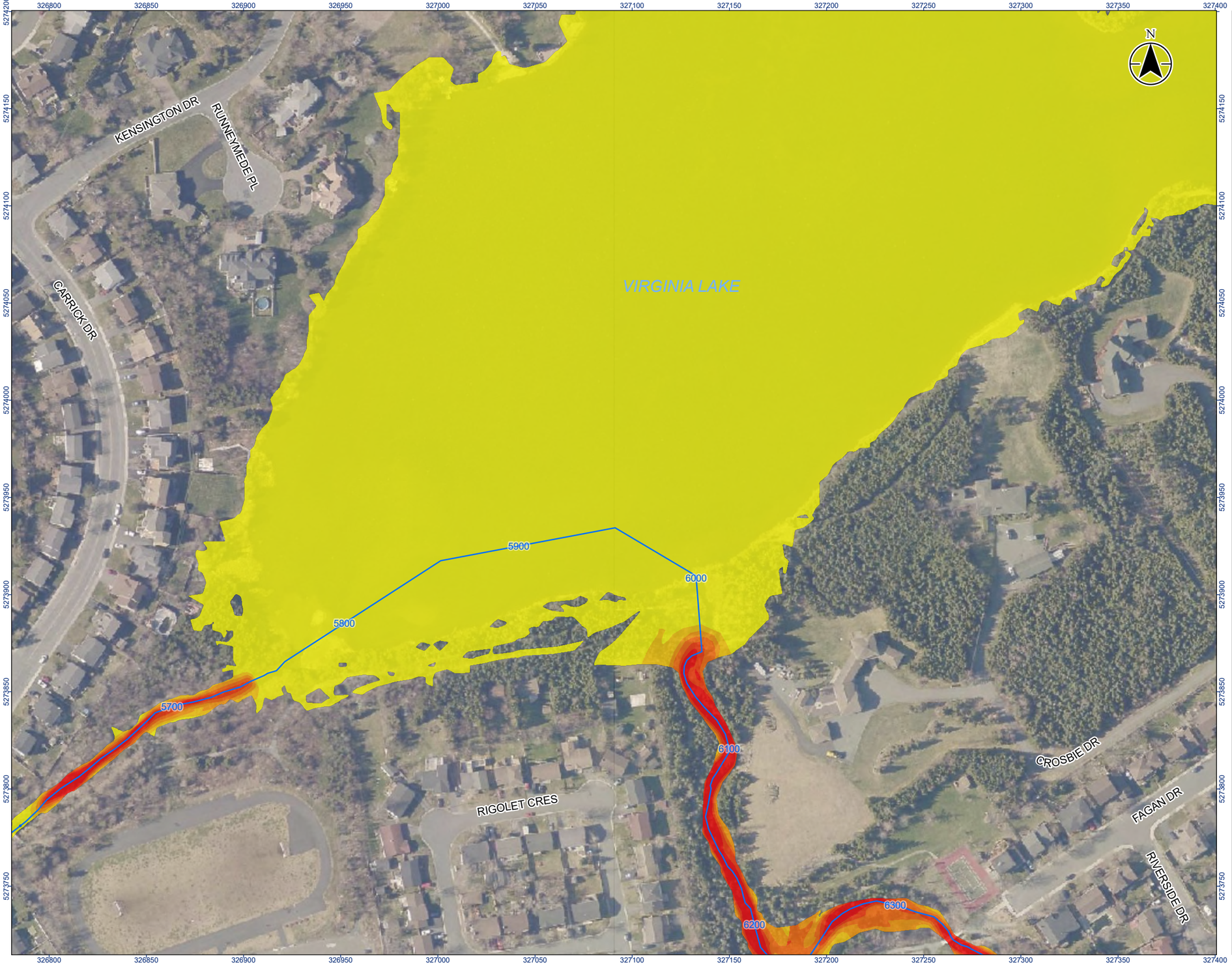

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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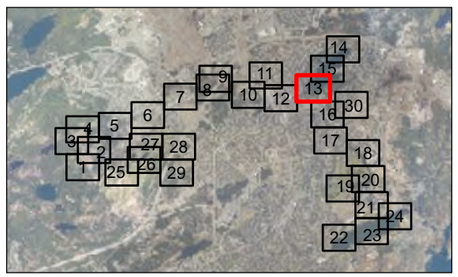

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-13

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 13 of 30

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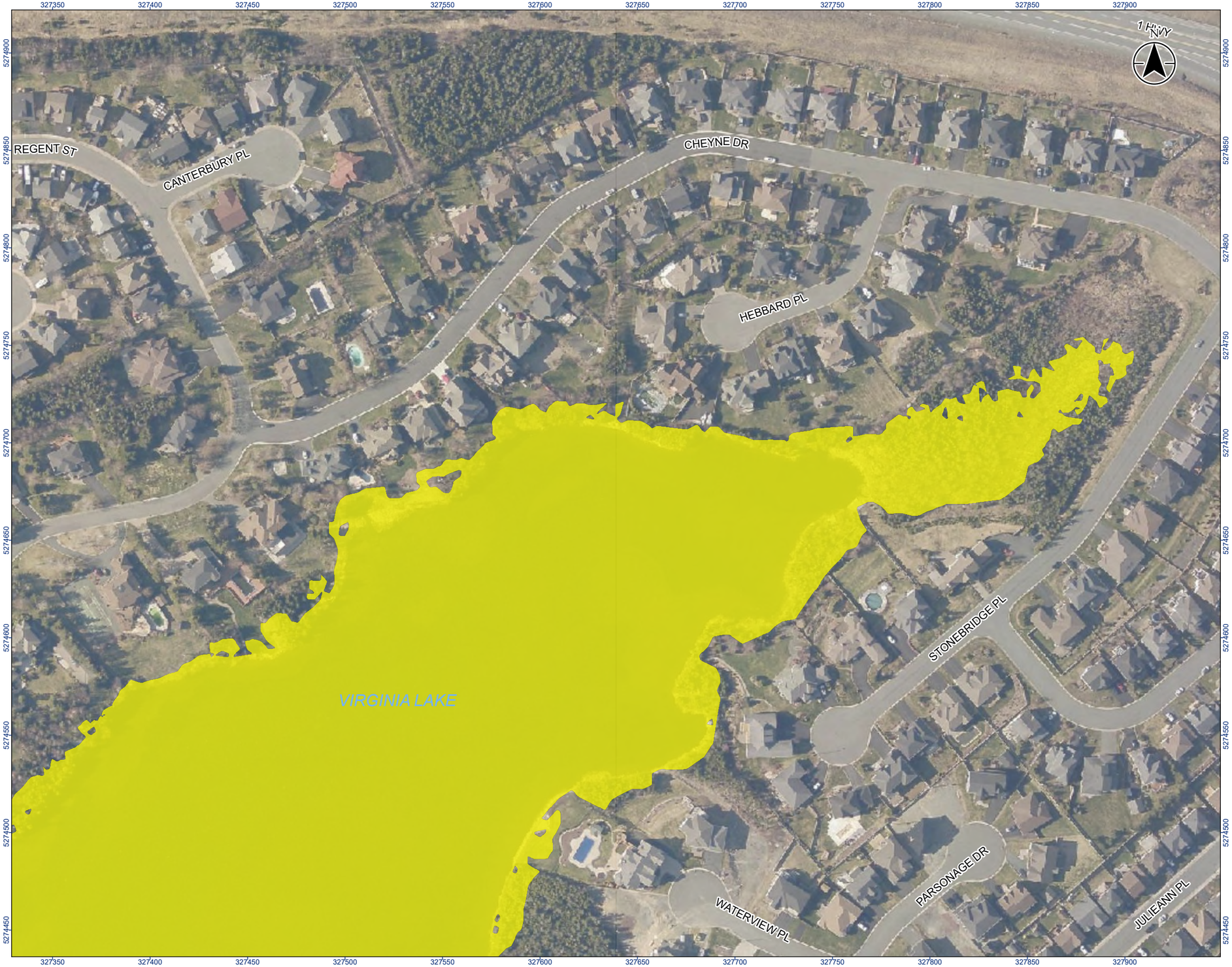

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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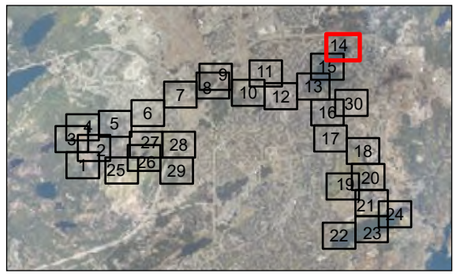

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-14

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 14 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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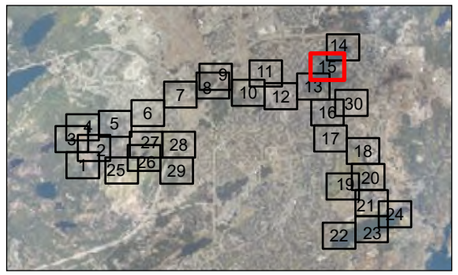

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-15

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 15 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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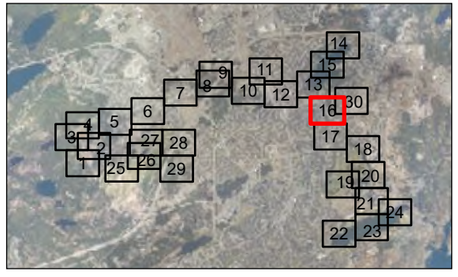

Project Location
City of St. John's

163401903_REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY
FOR THE CITY OF ST. JOHN'S

Figure No.
70-16

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 16 of 30

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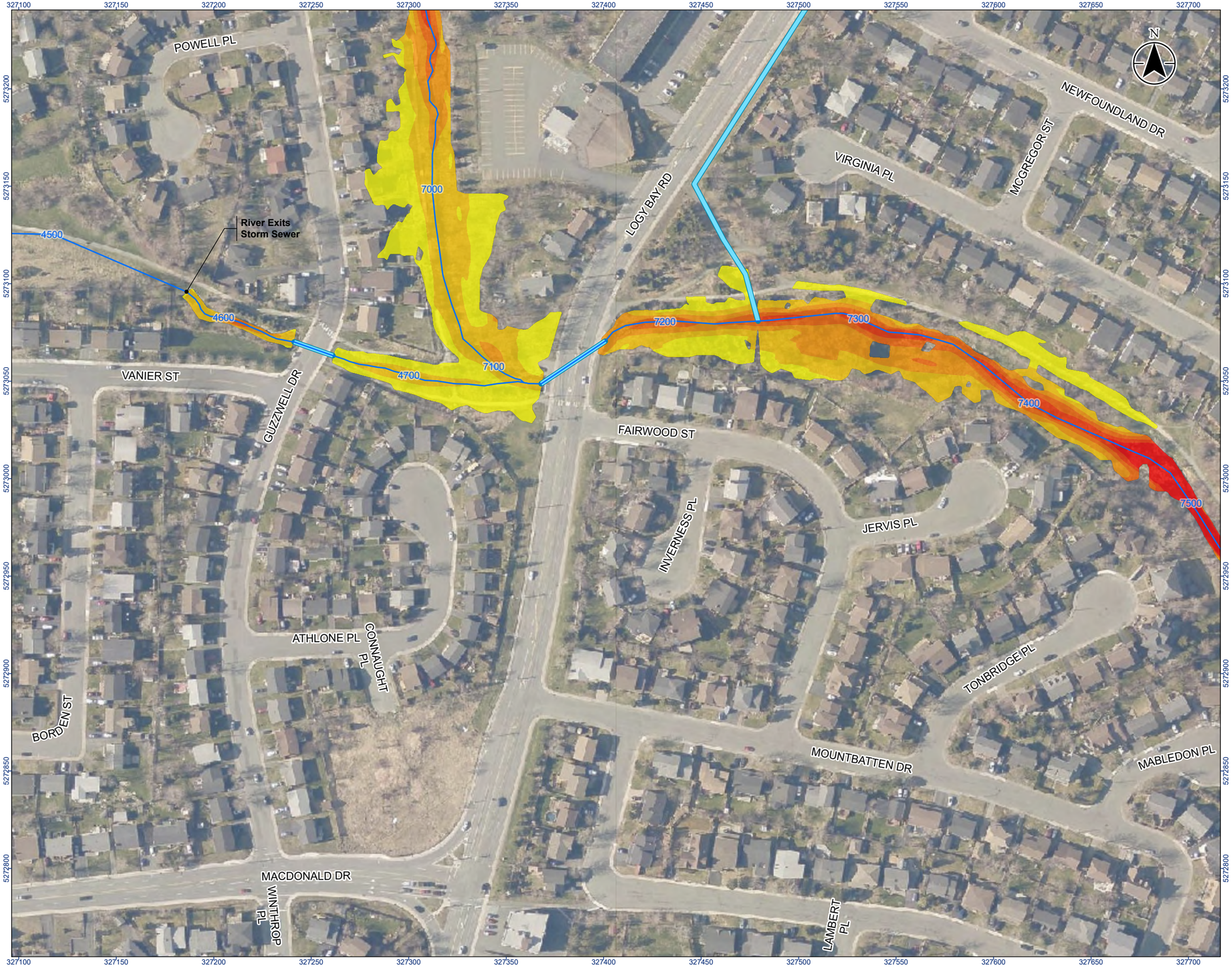

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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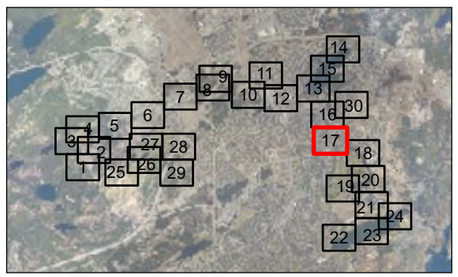

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-17

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 17 of 30

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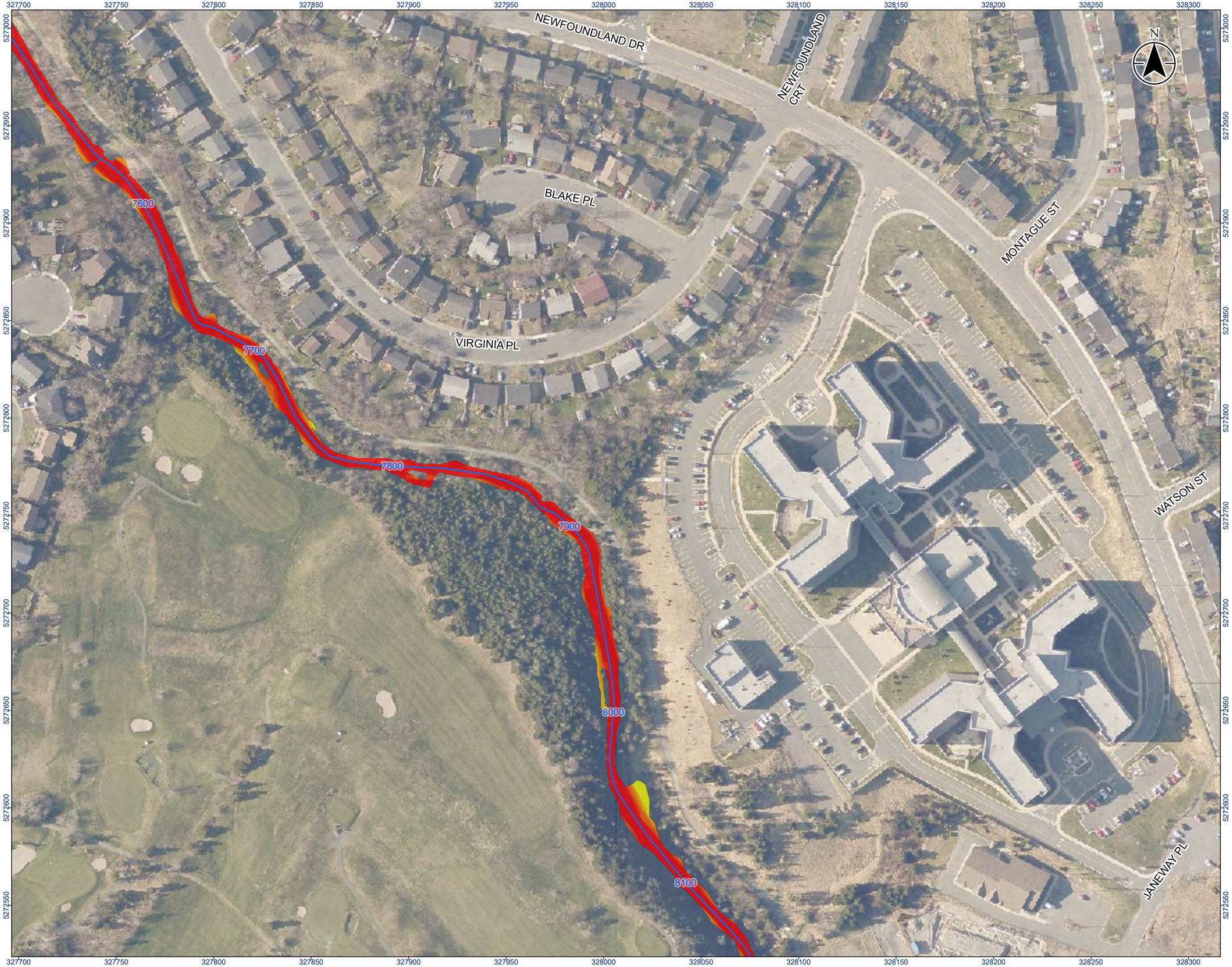

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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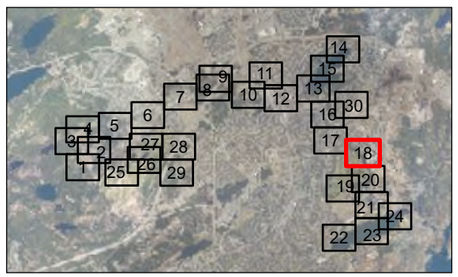

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-18

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 18 of 30

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VL_ClimateChange_VirginiaRiver Revised on 6/3/2025 2:00 AM by kaitang

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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Notes

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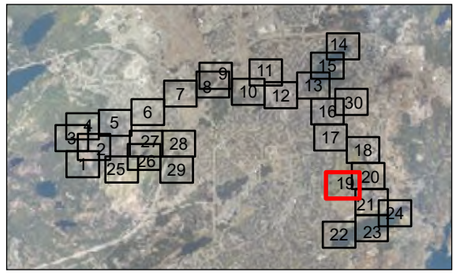

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-19

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 19 of 30

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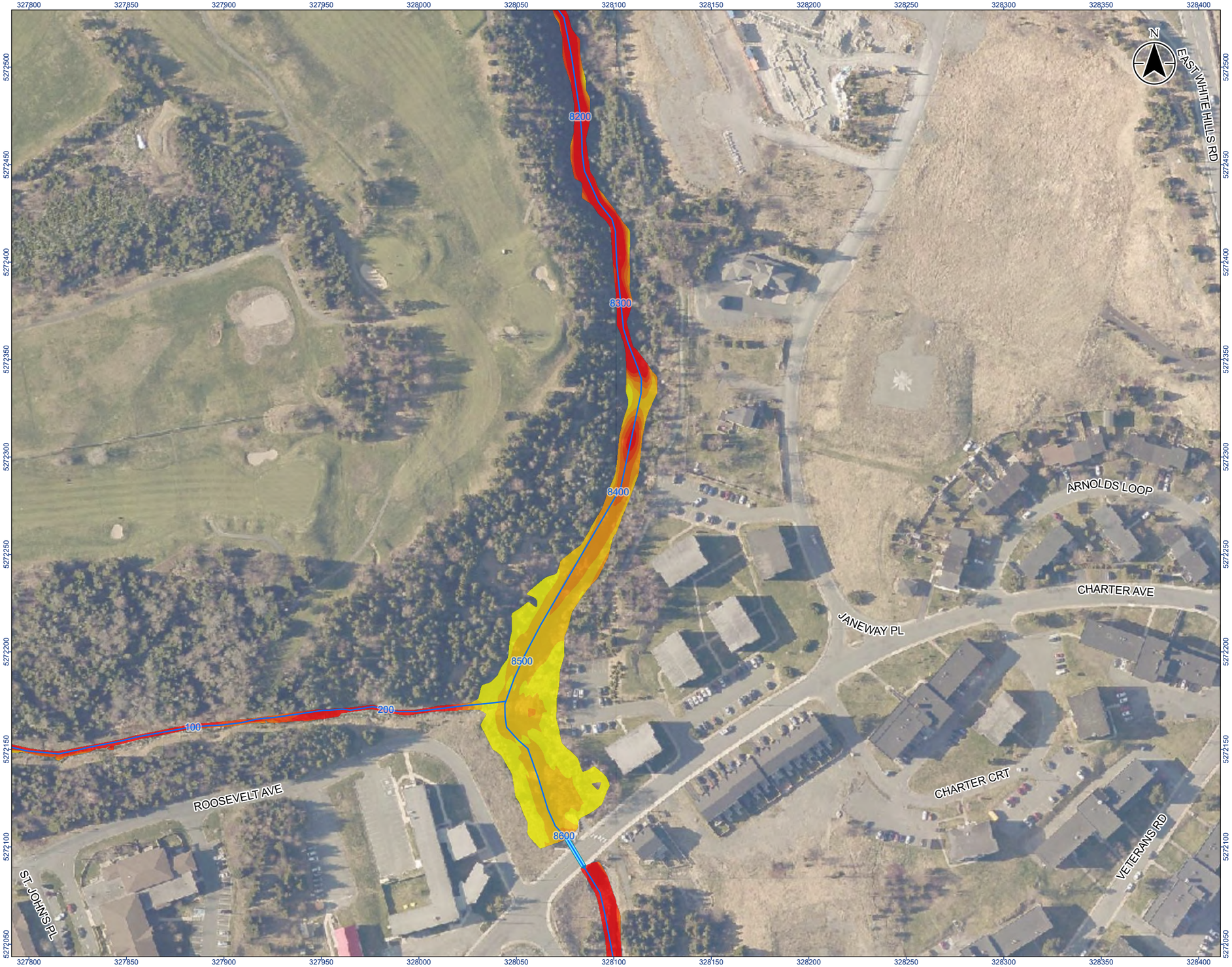

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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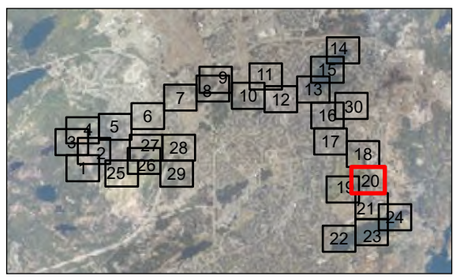

Project Location
City of St. John's

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CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-20

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 20 of 30

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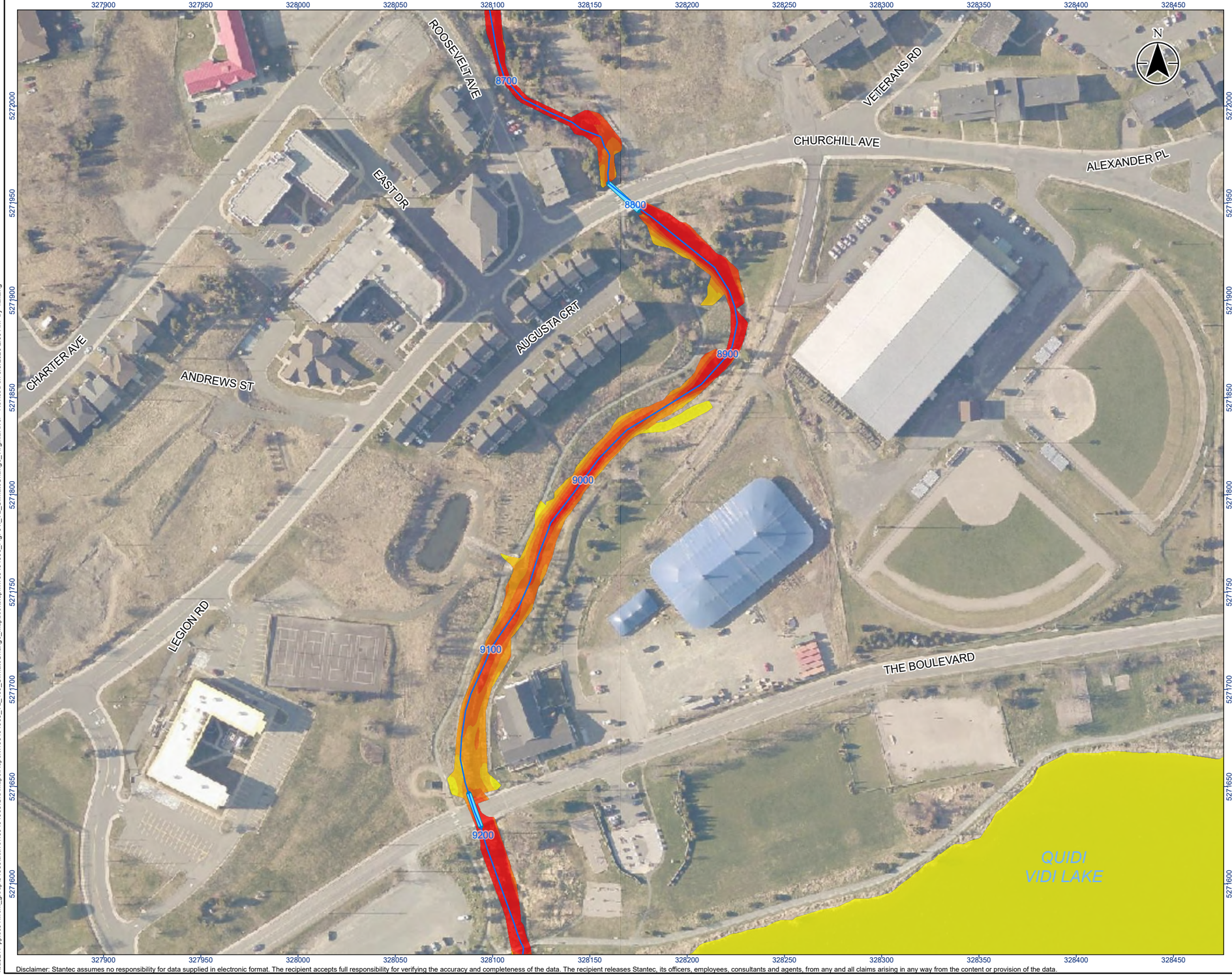

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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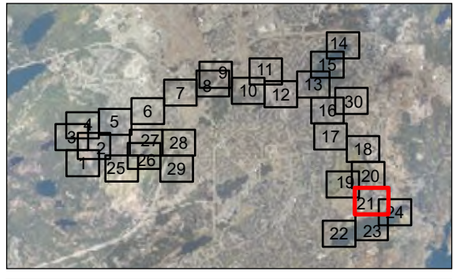

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-21

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 21 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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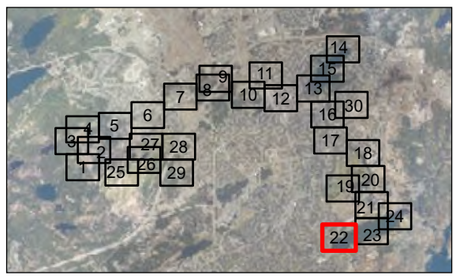

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-22

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 22 of 30

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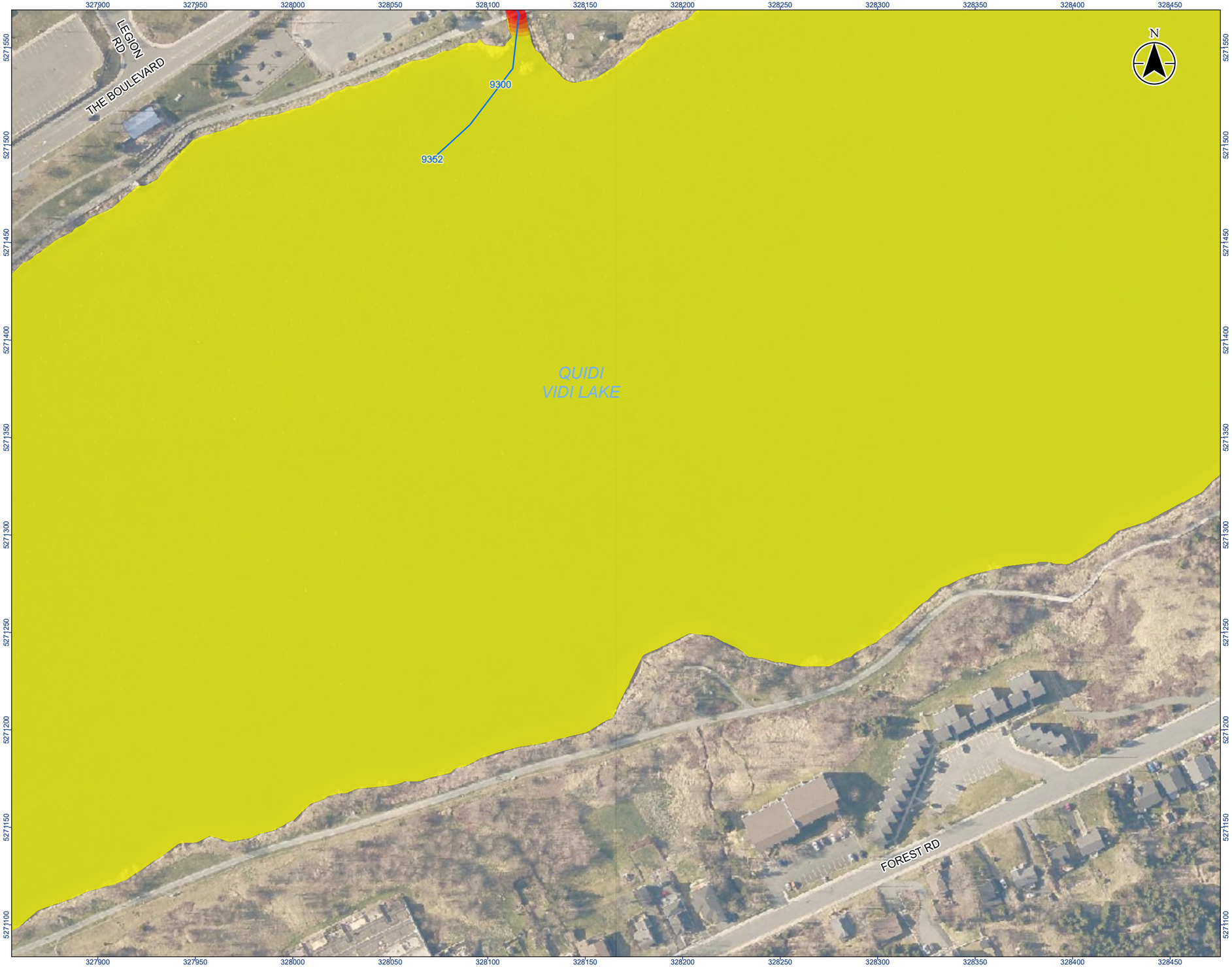

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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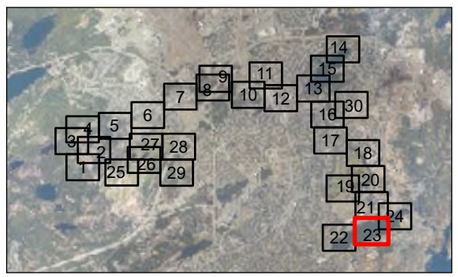

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-23

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 23 of 30

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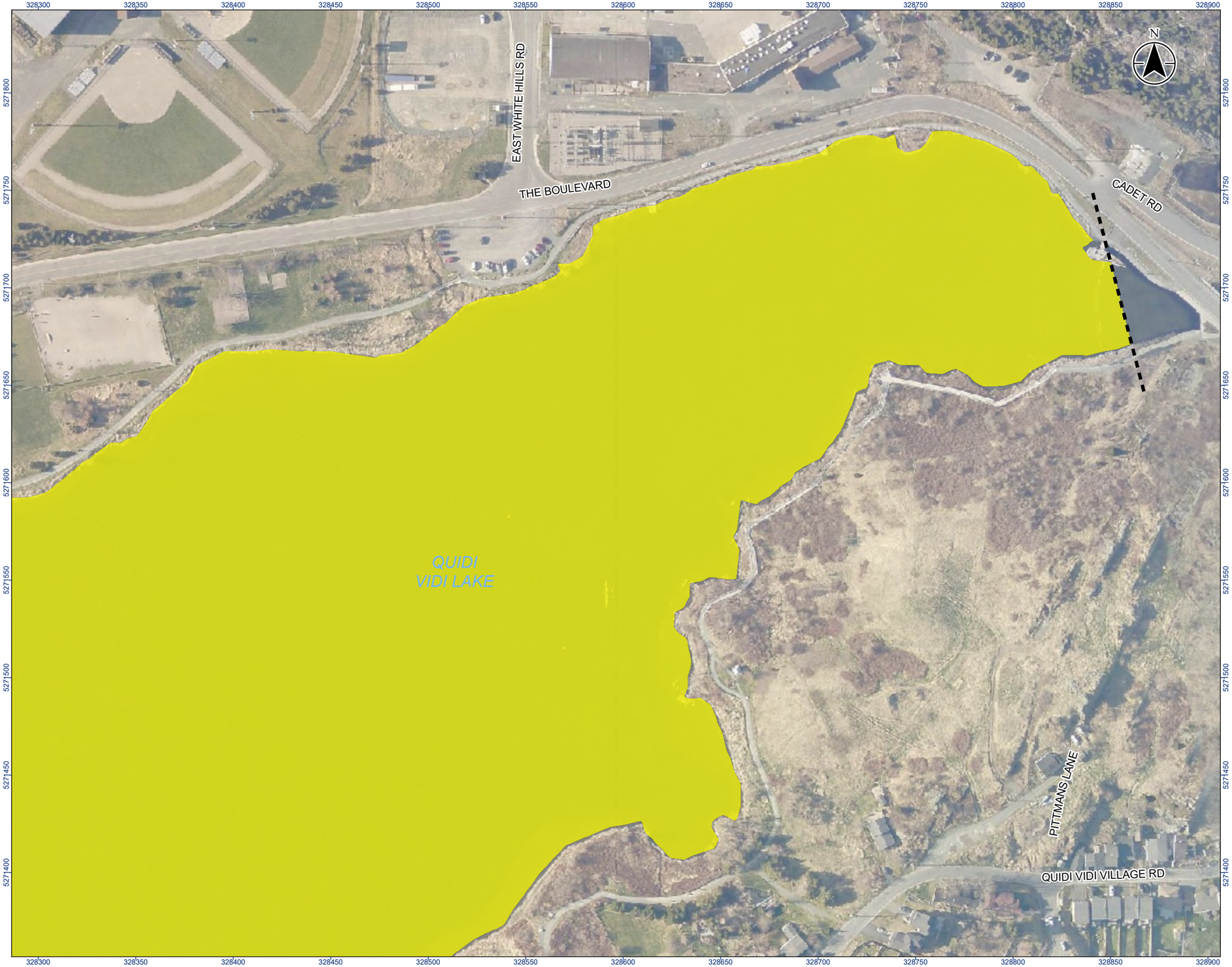

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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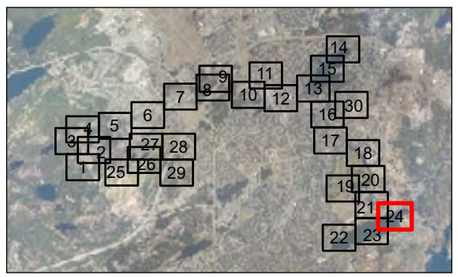

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-24

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 24 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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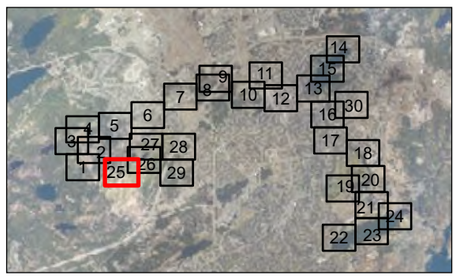

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-25

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 25 of 30

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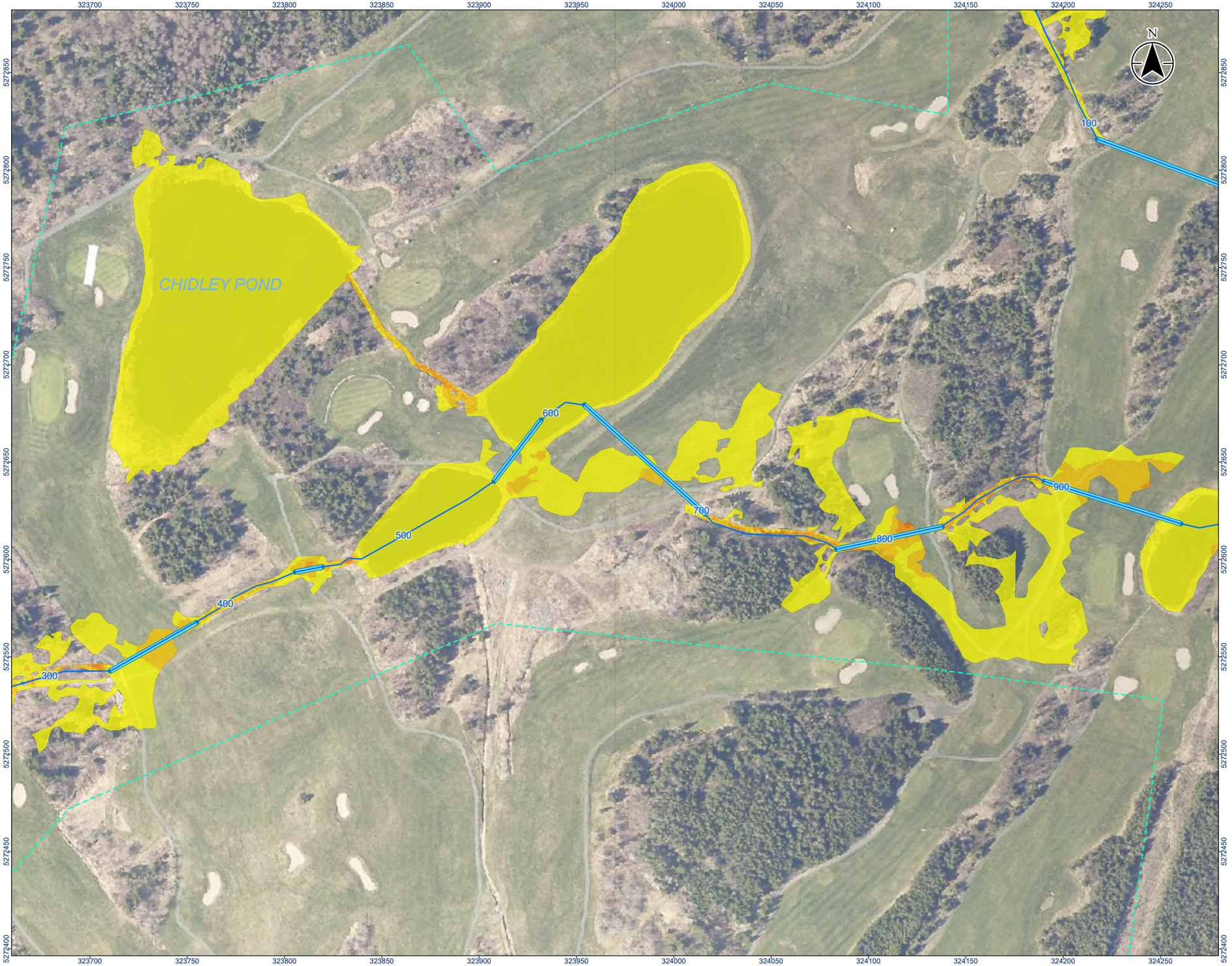

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

Notes

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2. Topography shown was developed by Stantec from the HRDEM from Natural Resources Canada (NRCAN).
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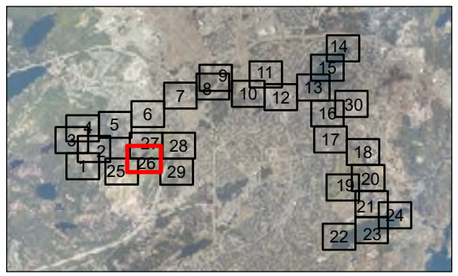

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-26

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 26 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

1:2,000 (At original document size of 11x17)

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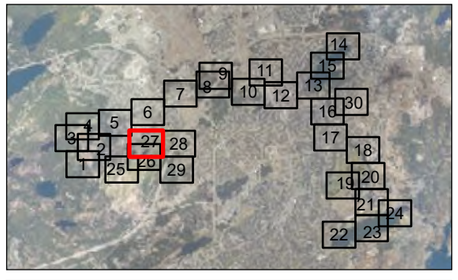

Project Location
City of St. John's

163401903 REVA
Prepared by kaitang on 2025-06-03

Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-27

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 27 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
- 100 Year Velocity - 4.0 - 5.0 m/s
- 100 Year Velocity - Greater than 5.0 m/s

0 20 40 m

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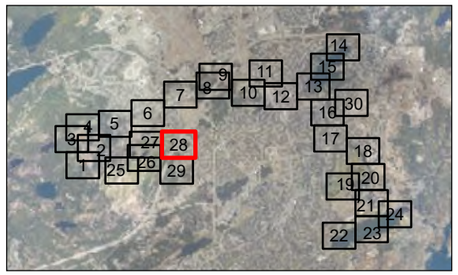

Project Location
City of St. John's

163401903_REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-28

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 28 of 30

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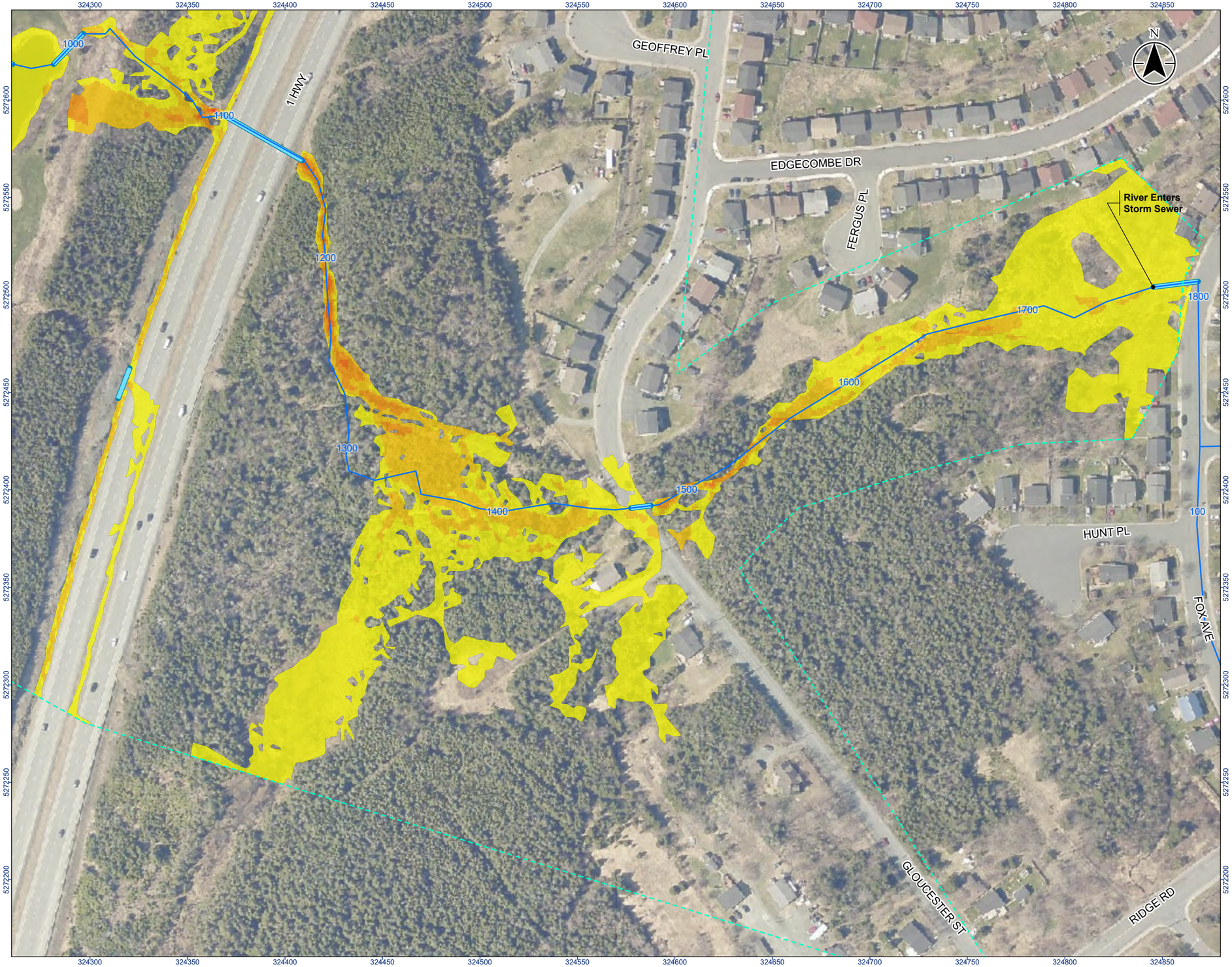

Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
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0 20 40 m
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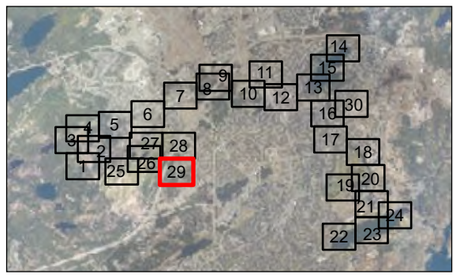

Project Location
City of St. John's

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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-29

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 29 of 30

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Stantec

Legend

- River/Creek Centreline
- Modelled Culvert
- Limit of Mapping
- Limit of 2D Modelling
- 100 Year Velocity - 0.0 - 1.0 m/s
- 100 Year Velocity - 1.0 - 2.0 m/s
- 100 Year Velocity - 2.0 - 3.0 m/s
- 100 Year Velocity - 3.0 - 4.0 m/s
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0 20 40 m

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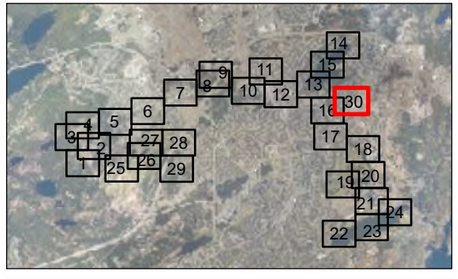

Project Location
City of St. John's

163401903 REVA
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Client/Project
CLIMATE CHANGE FLOOD RISK MAPPING STUDY FOR THE CITY OF ST. JOHN'S

Figure No.
70-30

Title
Climate Change Condition
100-Year Velocity - Virginia River
Sheet 30 of 30

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