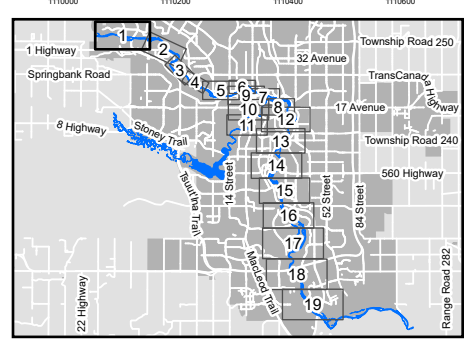
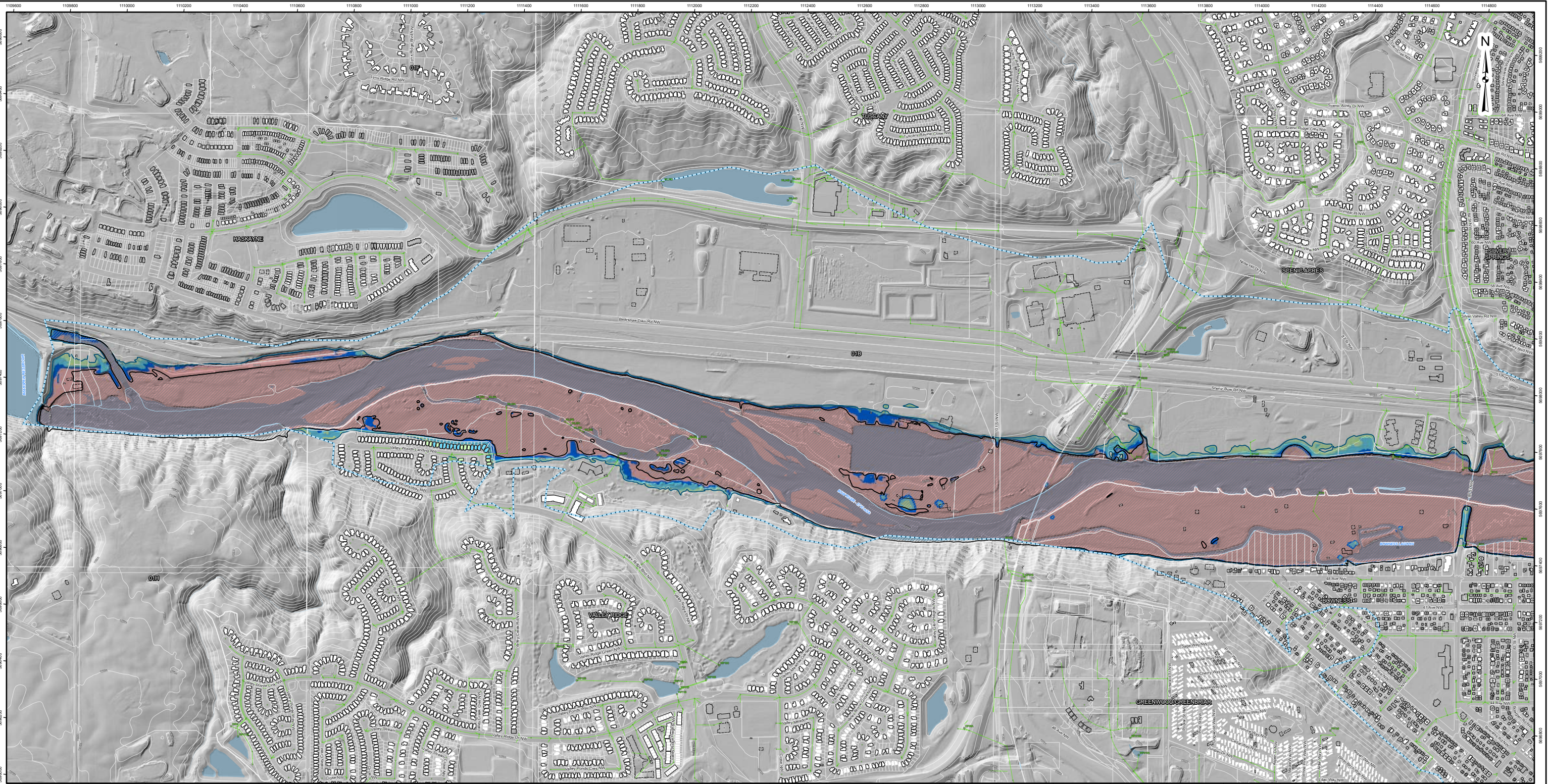


Groundwater Depth and Building Risk Factors (Calibrated Model)

1 in 200 Year Flood

- | | | | |
|-----|----------------------------|-----|------------------------|
| 1. | Valley Ridge | 11. | Lower Elbow |
| 2. | Bowness | 12. | Inglewood – Bonnybrook |
| 3. | Montgomery | 13. | Bonnybrook |
| 4. | Point McKay | 14. | Deerfoot Meadows |
| 5. | Hillhurst / West Hillhurst | 15. | Riverbend/Quarry Park |
| 6. | Sunnyside | 16. | Douglasdale |
| 7. | East Village / Bridgeland | 17. | Fish Creek |
| 8. | Inglewood | 18. | South Stoney Trail |
| 9. | Downtown | 19. | Pine Creek/Cranston |
| 10. | Beltline | | |



LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody
- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 1.2m to 0m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded

NOTES

1. Pre-1990 buildings are more susceptible to groundwater due to lack of reinforcement requirements before 1990. Implementation of reinforcement basement structures may vary since inception of code requirements.
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5. Groundwater depth is compared between the modelled water elevations and the LiDAR data elevation.

DATA SOURCES

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FIGURE 3.7 GROUNDWATER DEPTH & BUILDING RISK FACTORS (CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD 1 - VALLEY RIDGE

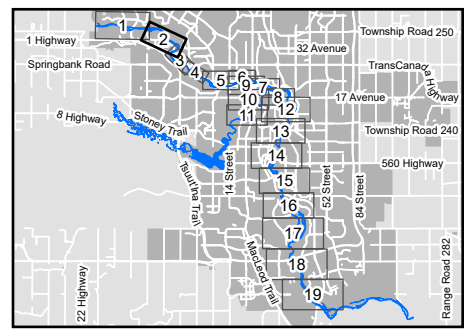
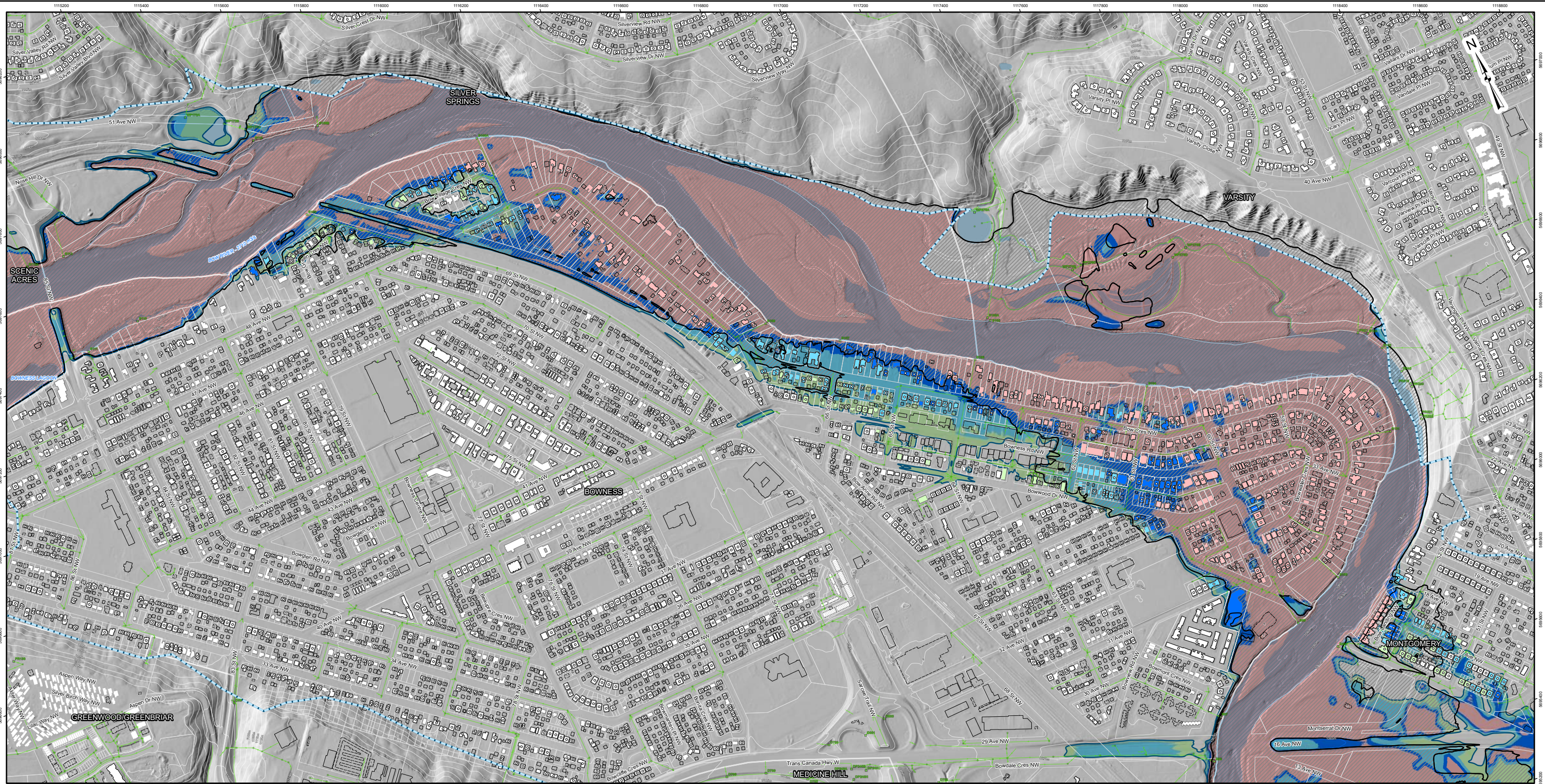
PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114

SCALE 1:13,500 DATE 8/18/2026 AUTHOR TDA Silva

0 80 160 Meters





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody
- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded

NOTES

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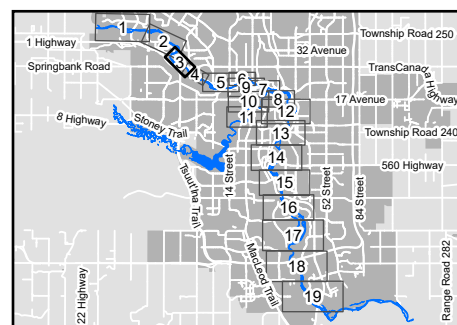
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
2 - BOWNESS

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY
PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:10,000
DATE 8/18/2026
AUTHOR TDaSilva





- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody

- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Below 3m
3m to 2.4m
2.4m to 1.2m
0m to 1.2m
Above Ground Surface

 Directly Flooded

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PROJECT

COUNTRY	PERCENT
Australia	18
Canada	16
France	15
Germany	15
Italy	15
Japan	15
Korea	15
Spain	15
Sweden	15
Switzerland	15
Taiwan	15
United Kingdom	15
United States	15

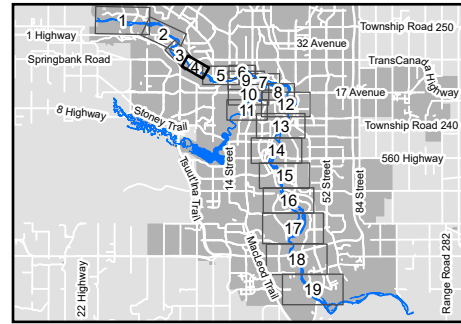
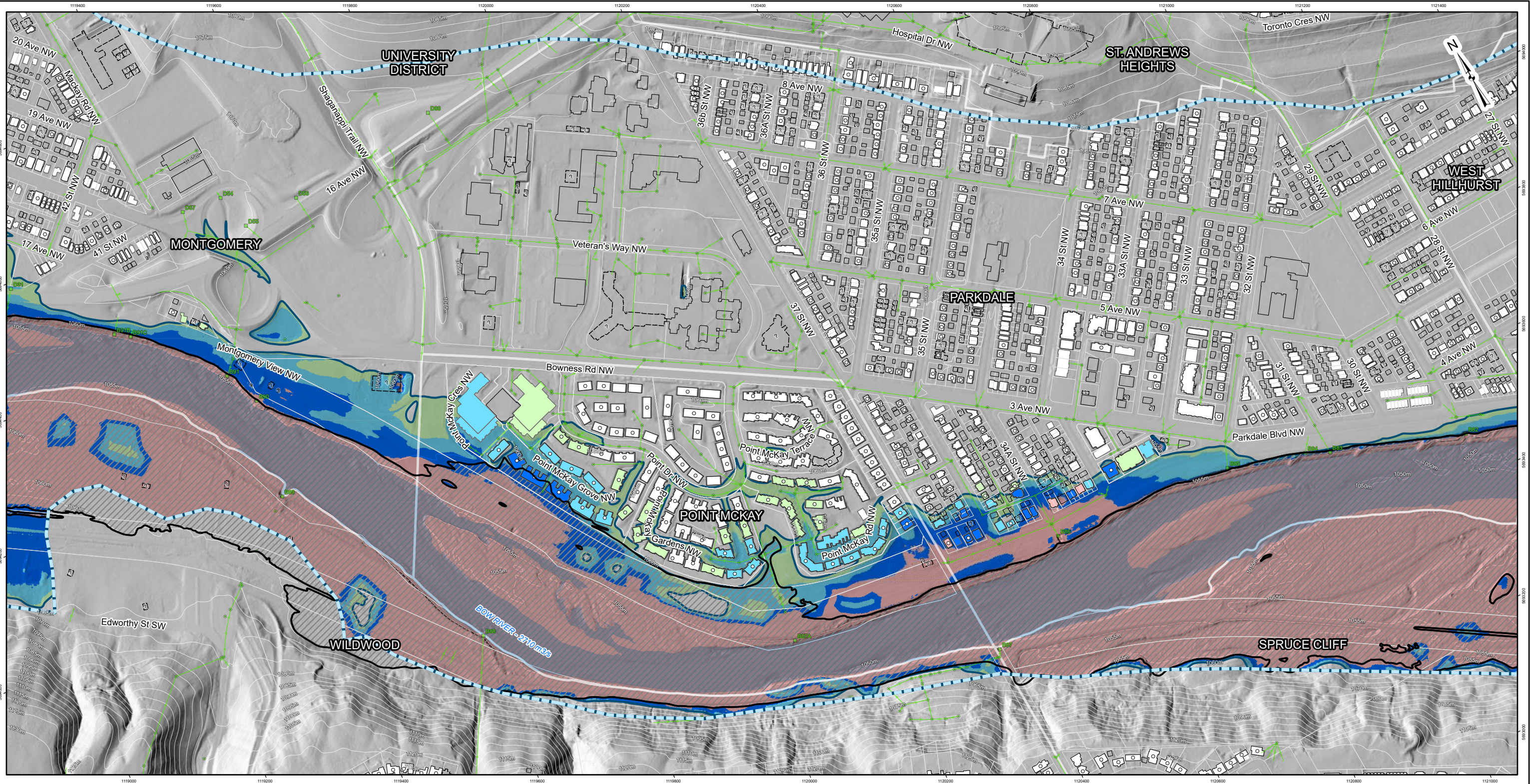
COUNTRY	PERCENT
Australia	18
Canada	16
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Germany	15
Italy	15
Japan	15
Korea	15
Spain	15
Sweden	15
Switzerland	15
Taiwan	15
United Kingdom	15
United States	15

NAD 1983 CSRS 3TM 114

SCALE 1:7.000 DATE 8/18/2026 AUTHOR TDaSilva



Fluid Domains



LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody
- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded

NOTES

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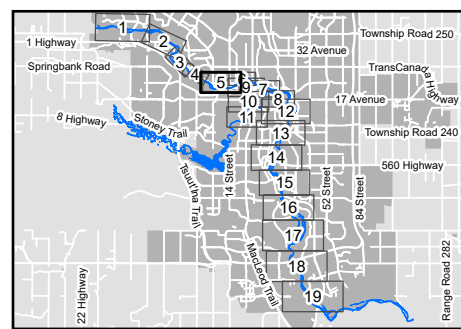
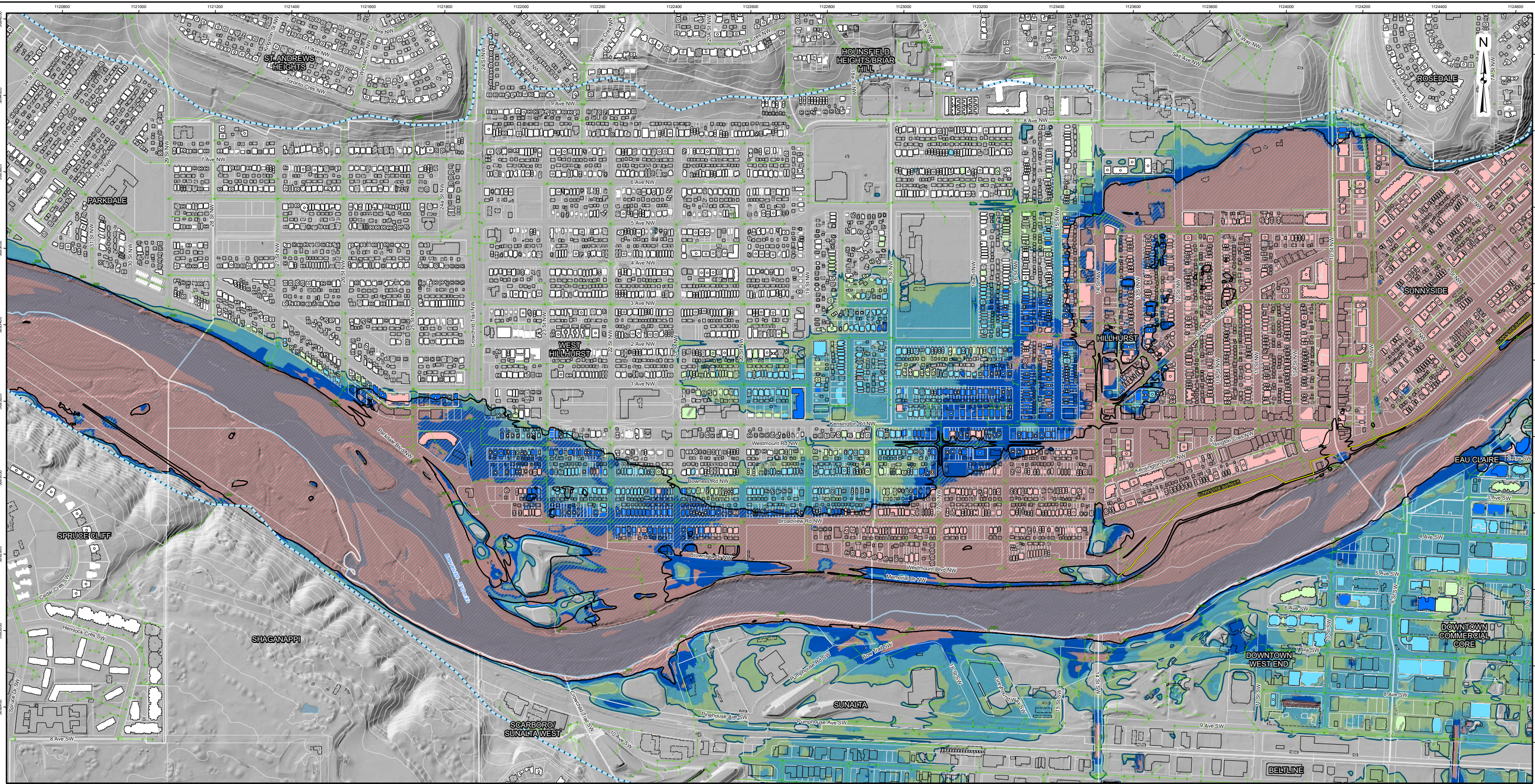
FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
4 - POINT MCKAY

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114

SCALE 1:6,000 DATE 8/18/2026 AUTHOR TDaSilva





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody

- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded
- Protected by Flood Berm

NOTES

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DATA SOURCES

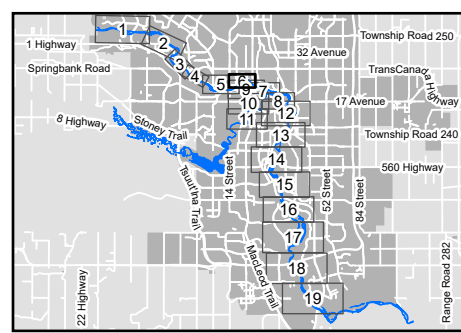
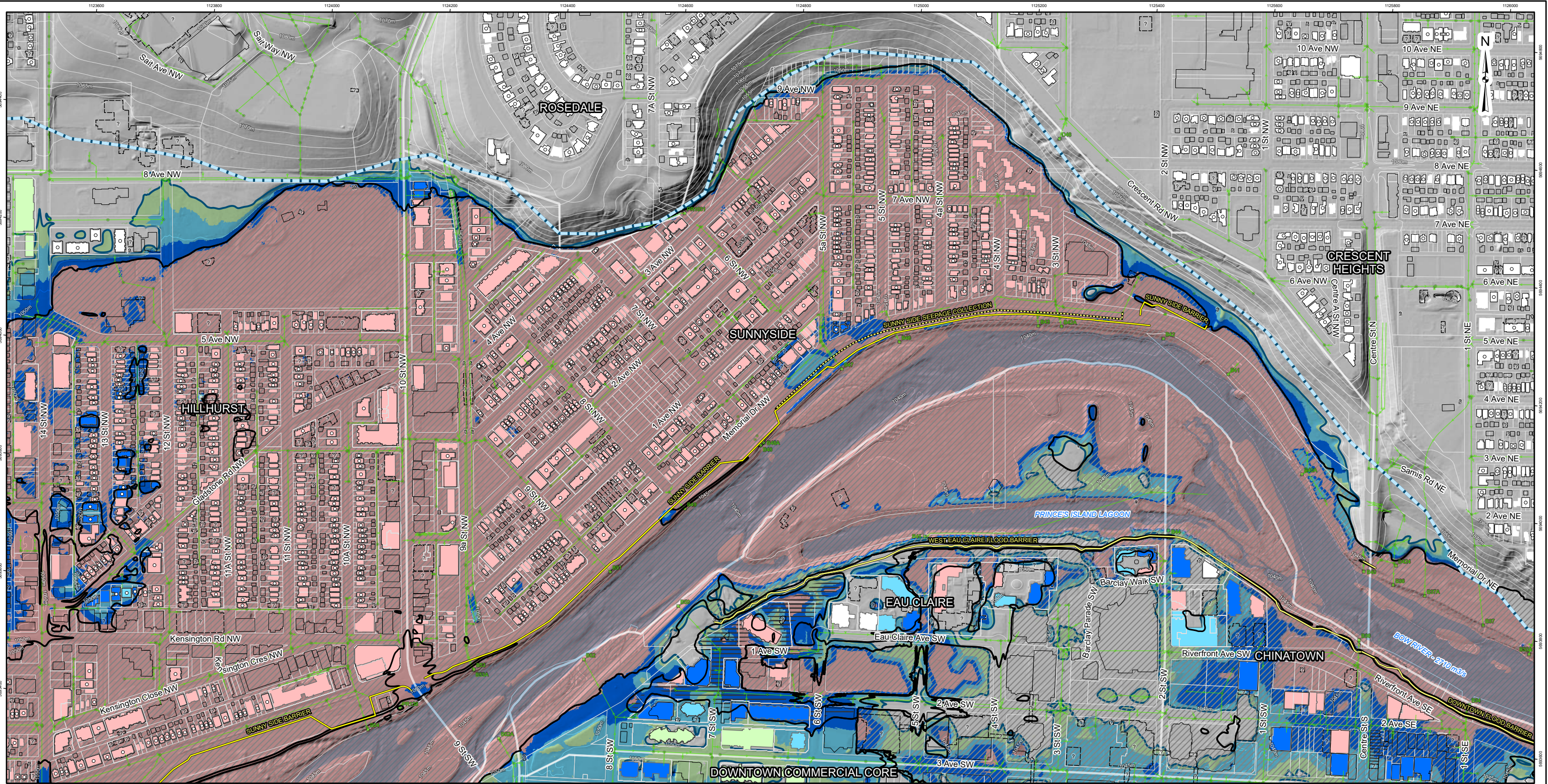
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
5 - HILLHURST / WEST HILLHURST

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:10,000
DATE 8/18/2026
AUTHOR TDaSilva





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody
- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded
- Protected by Flood Berm

NOTES

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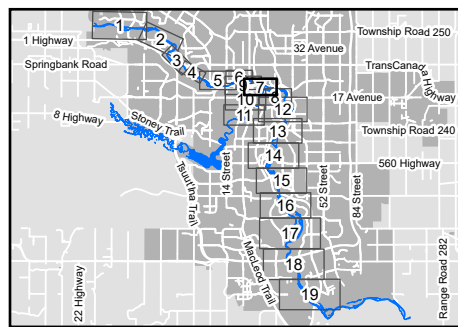
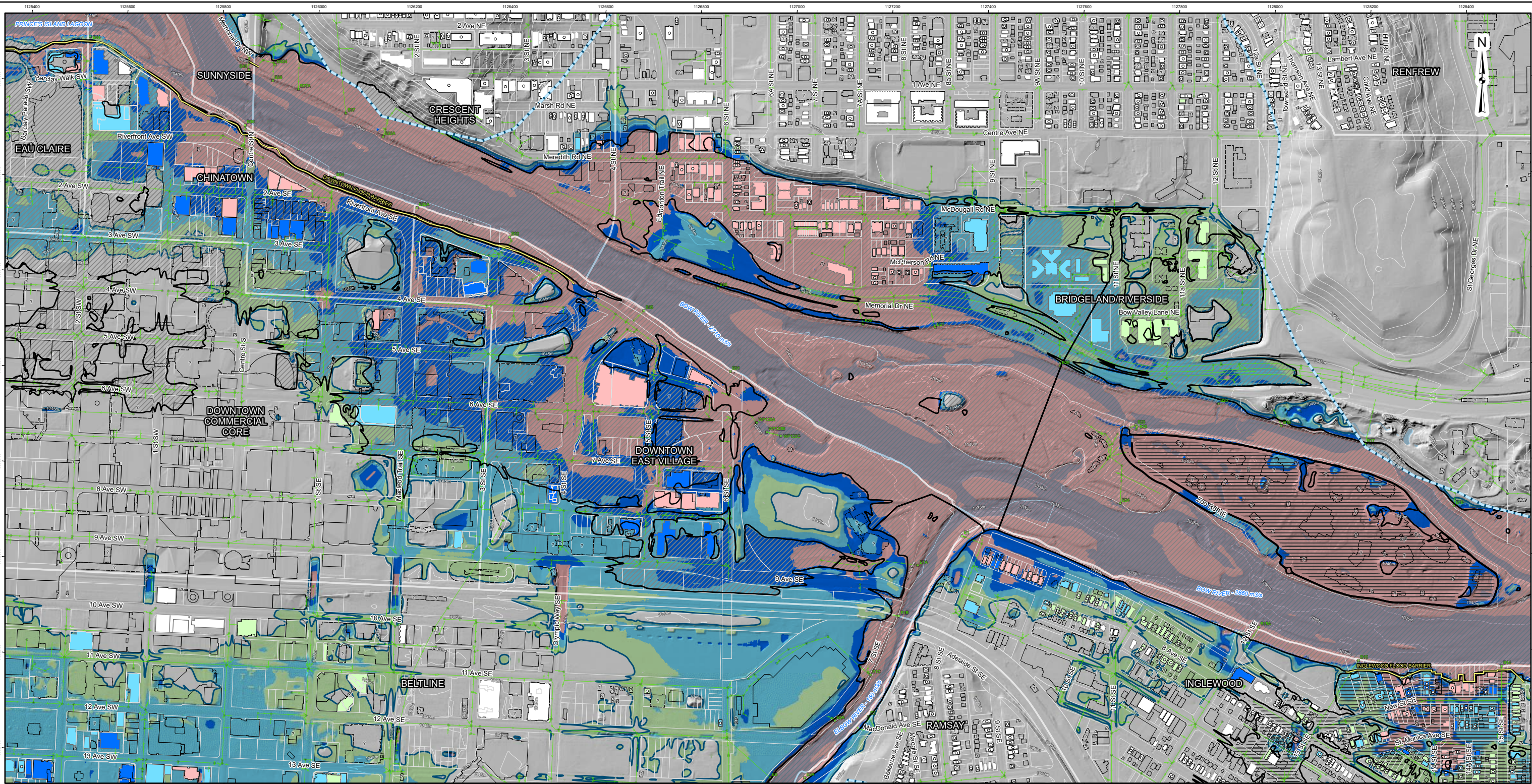
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
6 - SUNNYSIDE

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY
PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:6,500 DATE 8/18/2026 AUTHOR TDA Silva





LEGEND

- | | |
|---|------------------------------|
| Building Footprint | Manhole |
| Pre-1990 Building Construction | Outfall |
| Below Grade Space | Storm Network |
| Building Information Missing | 3m Depth Threshold |
| Non-Residential Building / Building Outside Scope | Flood Control Structure |
| Parcel | Sunnyside Seepage Collection |
| Community District | Contours - 5m |
| Alluvial Aquifer / Model Domain | |
| Waterbody | |
- | | |
|---|-------------------------|
| Estimated Depth to Groundwater | |
| | Below 3m |
| | 3m to 2.4m |
| | 2.4m to 1.2m |
| | 0m to 1.2m |
| | Above Ground Surface |
| Flood Inundation Area (200-Year) | |
| | Directly Flooded |
| | Protected by Flood Berm |

NOTES

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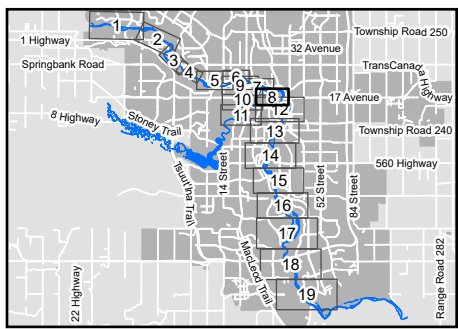
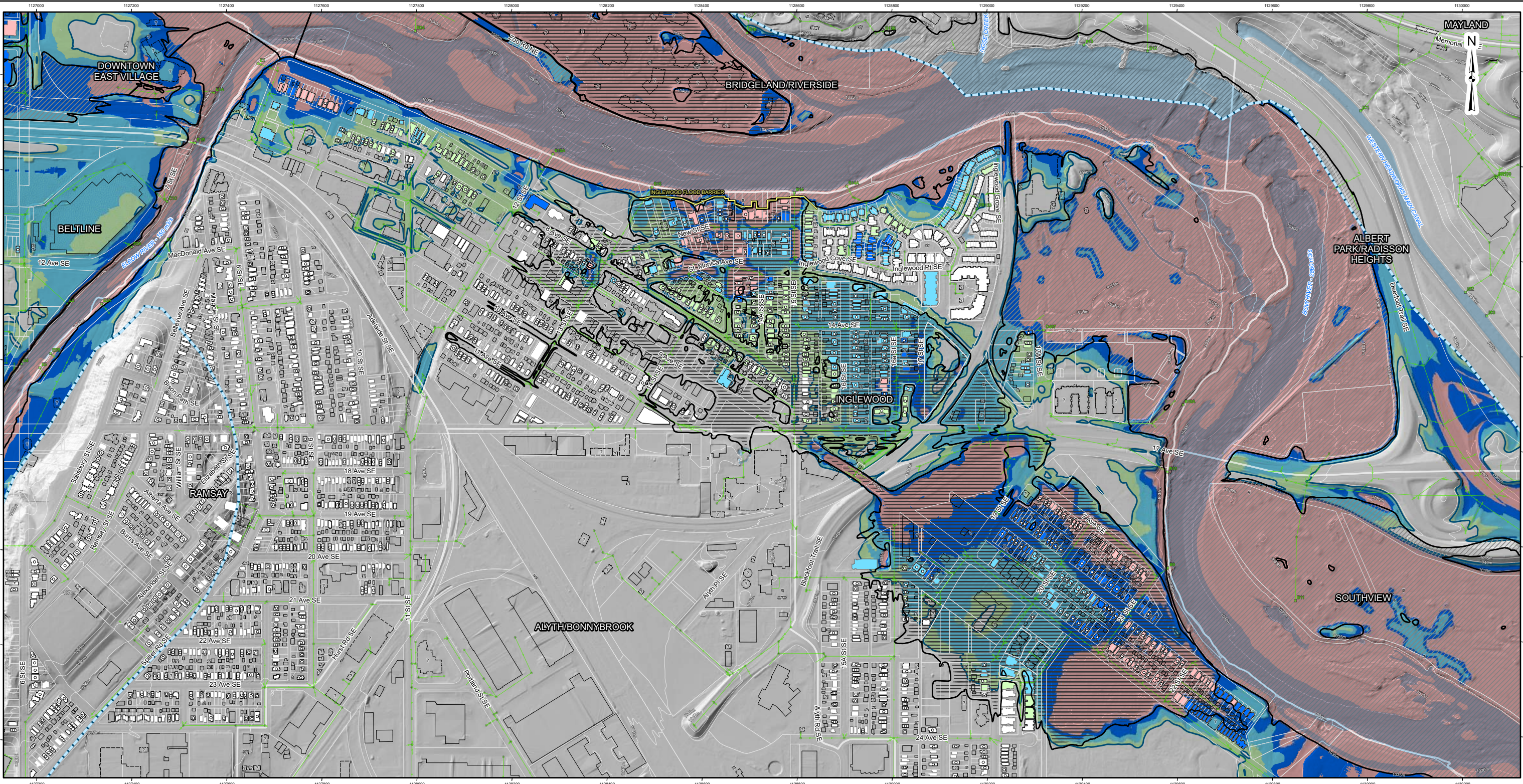
FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
7 - EAST VILLAGE / BRIDGELAND

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114

SCALE 1:8,000 DATE 8/18/2026 AUTHOR TDaSilva





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody
- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded
- Protected by Flood Berm

NOTES

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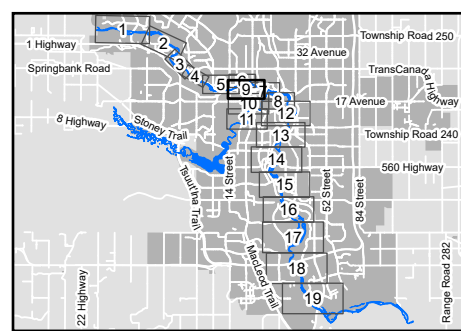
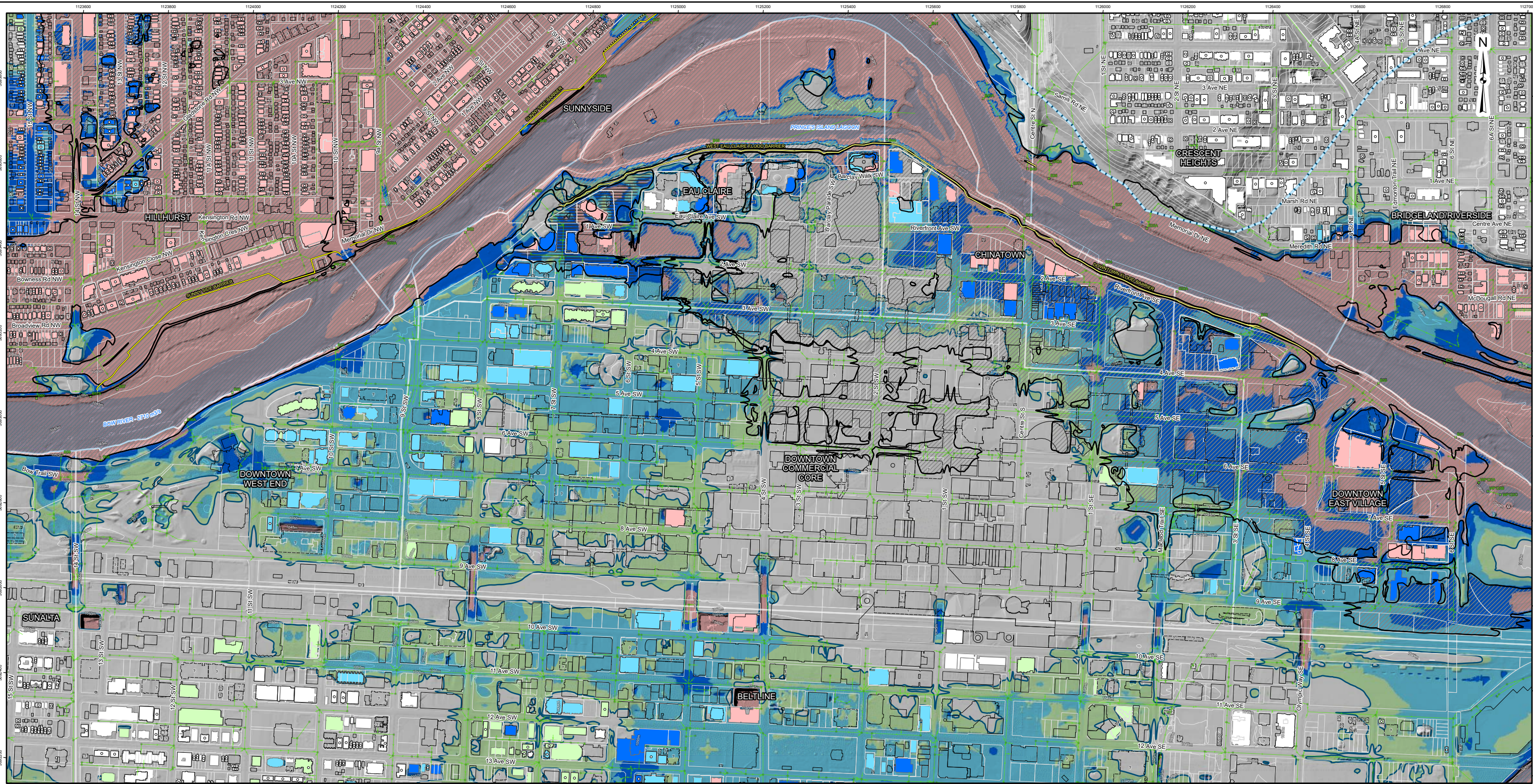
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
8 - INGLEWOOD

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY
PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:8,000 DATE 8/18/2026 AUTHOR TDaSilva





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody

- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded
- Protected by Flood Berm

NOTES

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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
9 - DOWNTOWN

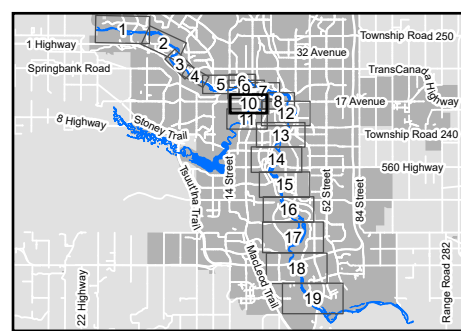
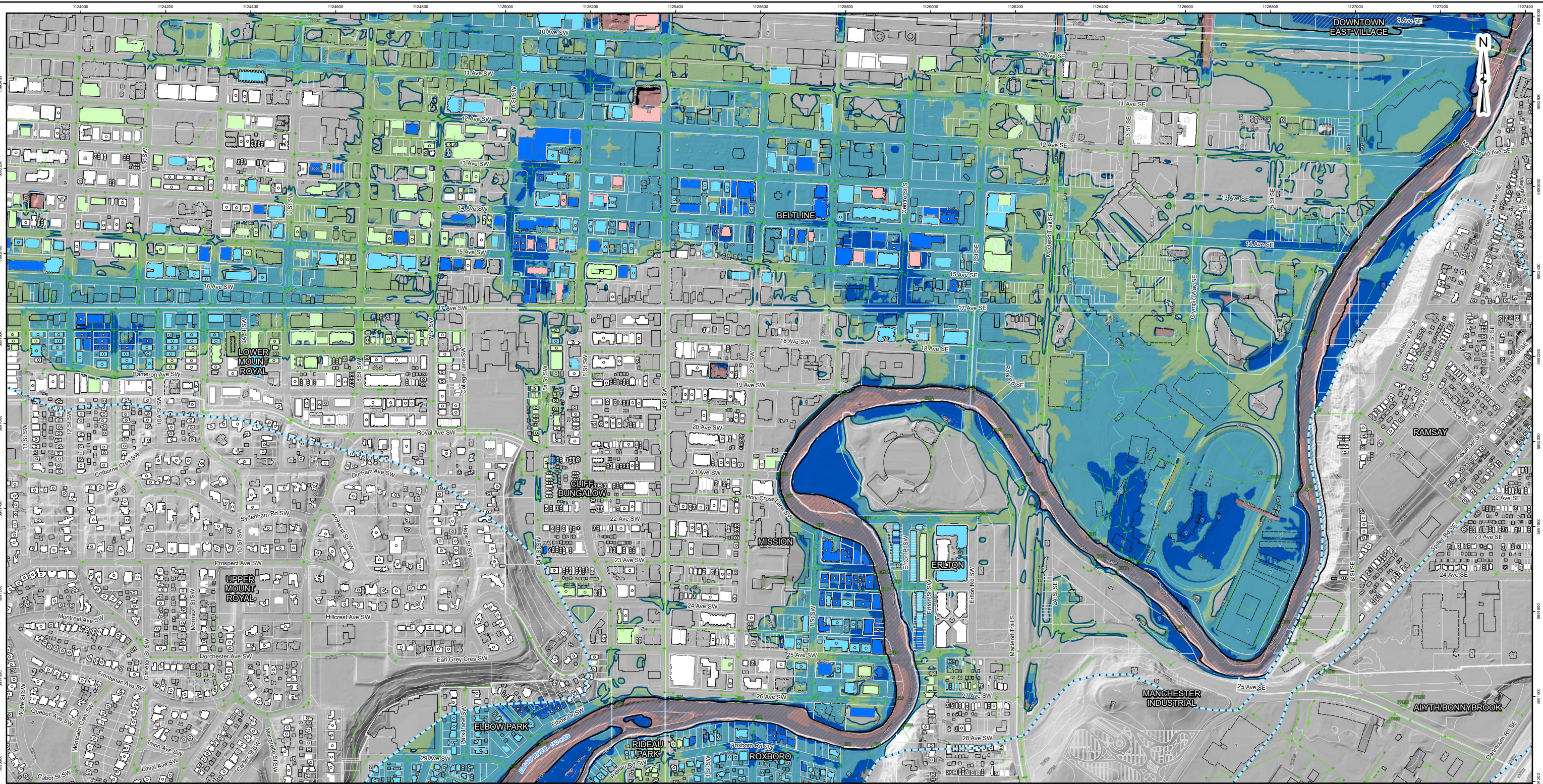
PROJECT

CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114

SCALE 1:9,000 DATE 8/18/2026 AUTHOR TDaSilva





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
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- Contours - 5m

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- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded

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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
10 - BELTLINE

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

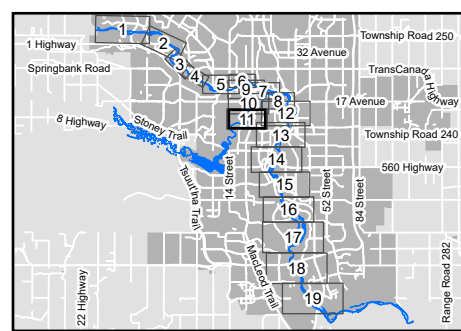
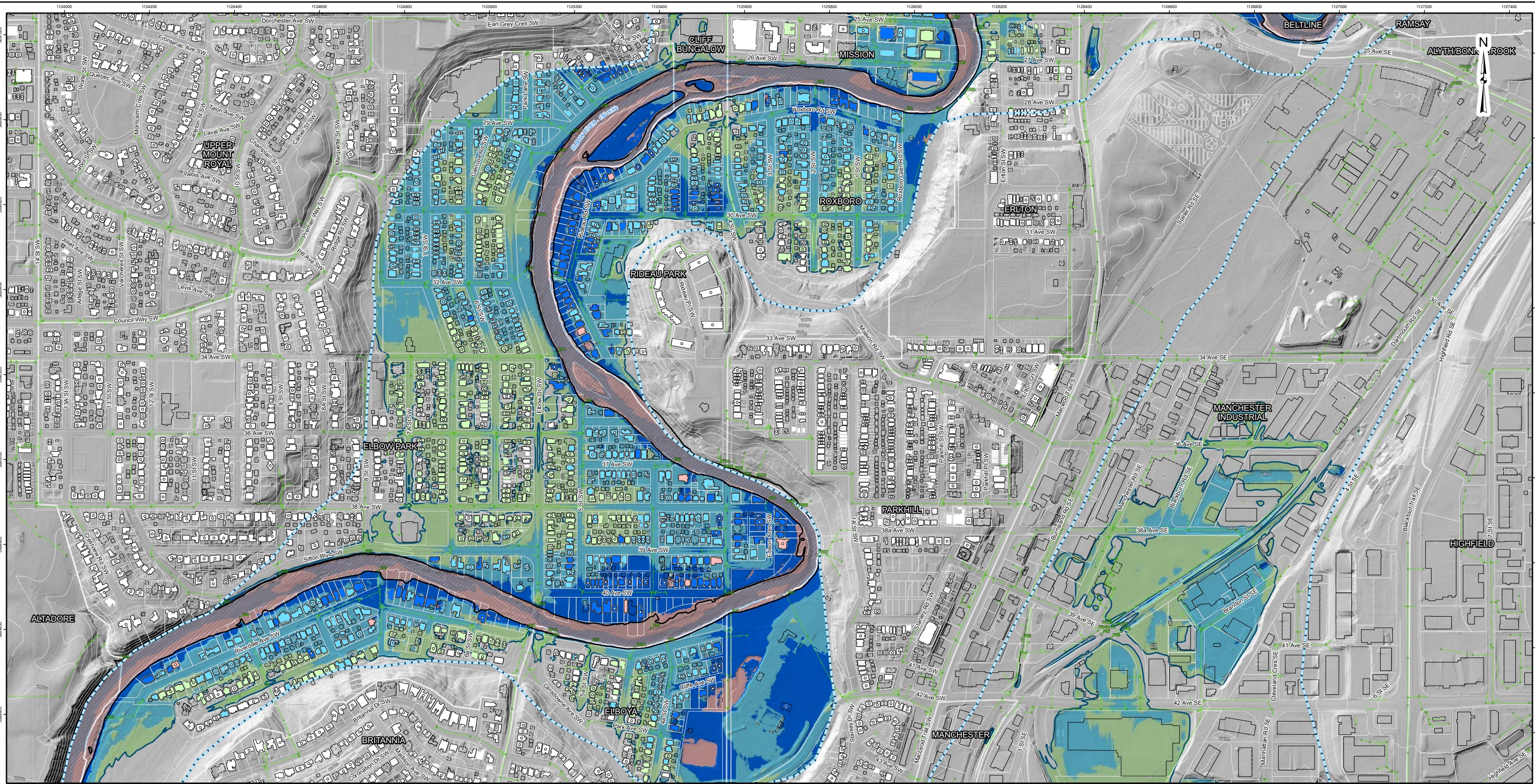
PROJECTION
NAD 1983 CSRS 3TM 114

SCALE 1:9,000

DATE 8/18/2026

AUTHOR TDaSilva





LEGEND

- Building Footprint
- Pre-1990 Building Construction
- Below Grade Space
- Building Information Missing
- Non-Residential Building / Building Outside Scope
- Parcel
- Community District
- Alluvial Aquifer / Model Domain
- Waterbody
- Manhole
- Outfall
- Storm Network
- 3m Depth Threshold
- Flood Control Structure
- Sunnyside Seepage Collection
- Contours - 5m

Estimated Depth to Groundwater

- Below 3m
- 3m to 2.4m
- 2.4m to 1.2m
- 0m to 1.2m
- Above Ground Surface

Flood Inundation Area (200-Year)

- Directly Flooded

NOTES

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DATA SOURCES

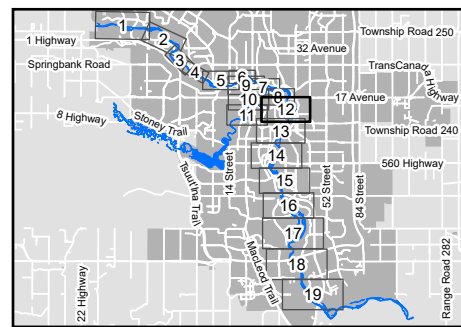
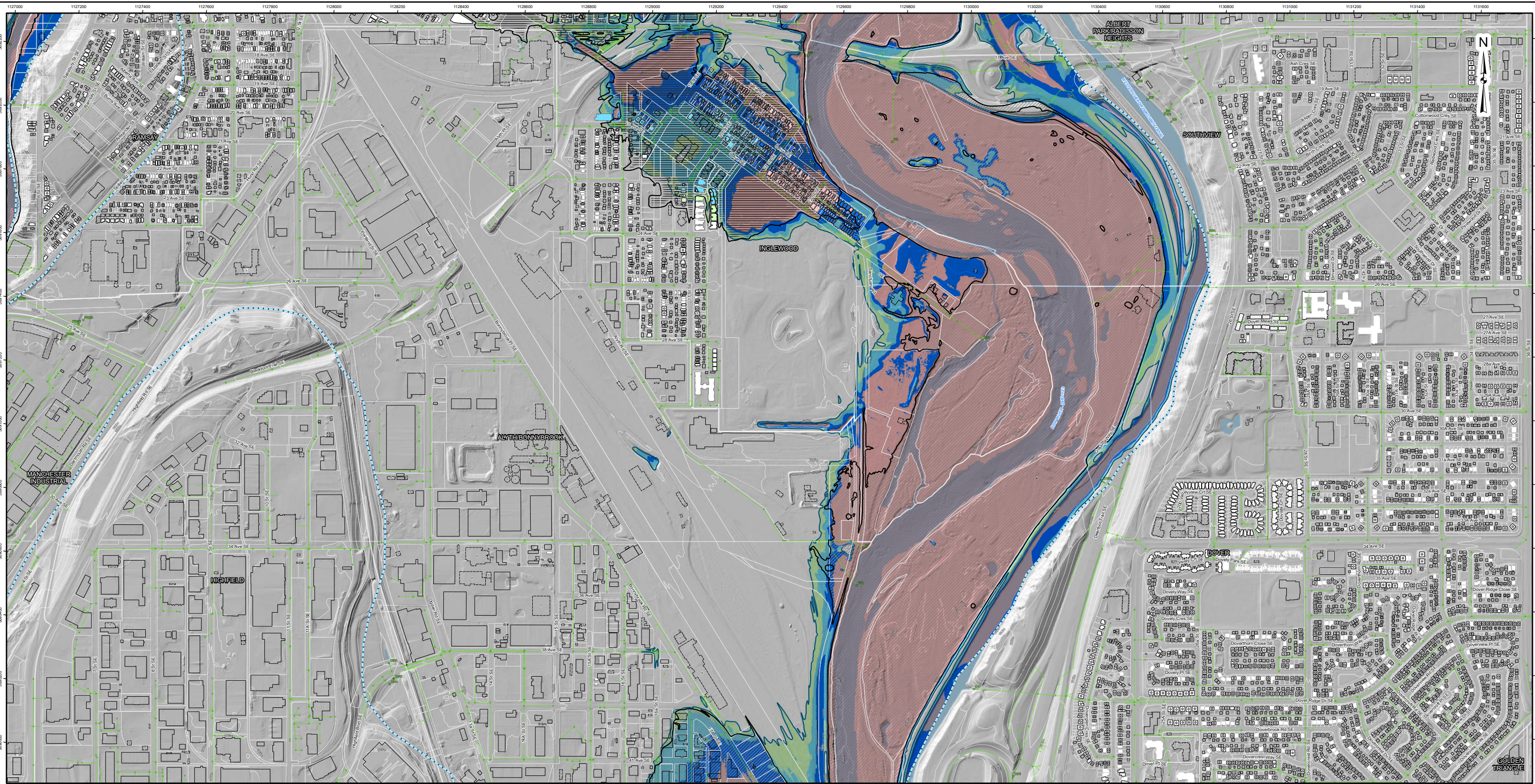
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
11 - LOWER ELBOW

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:9,000
DATE 8/18/2026
AUTHOR TDaSilva





LEGEND

- Building Footprint
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- Parcel
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
12 - INGLEWOOD - BONNYBROOK

PROJECT

CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION

NAD 1983 CSRS 3TM 114

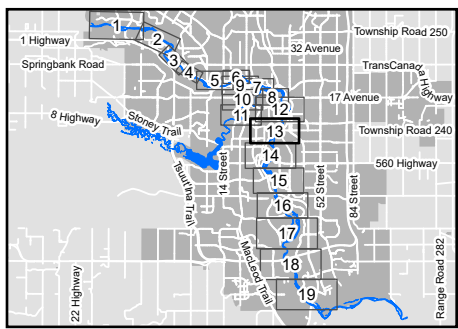
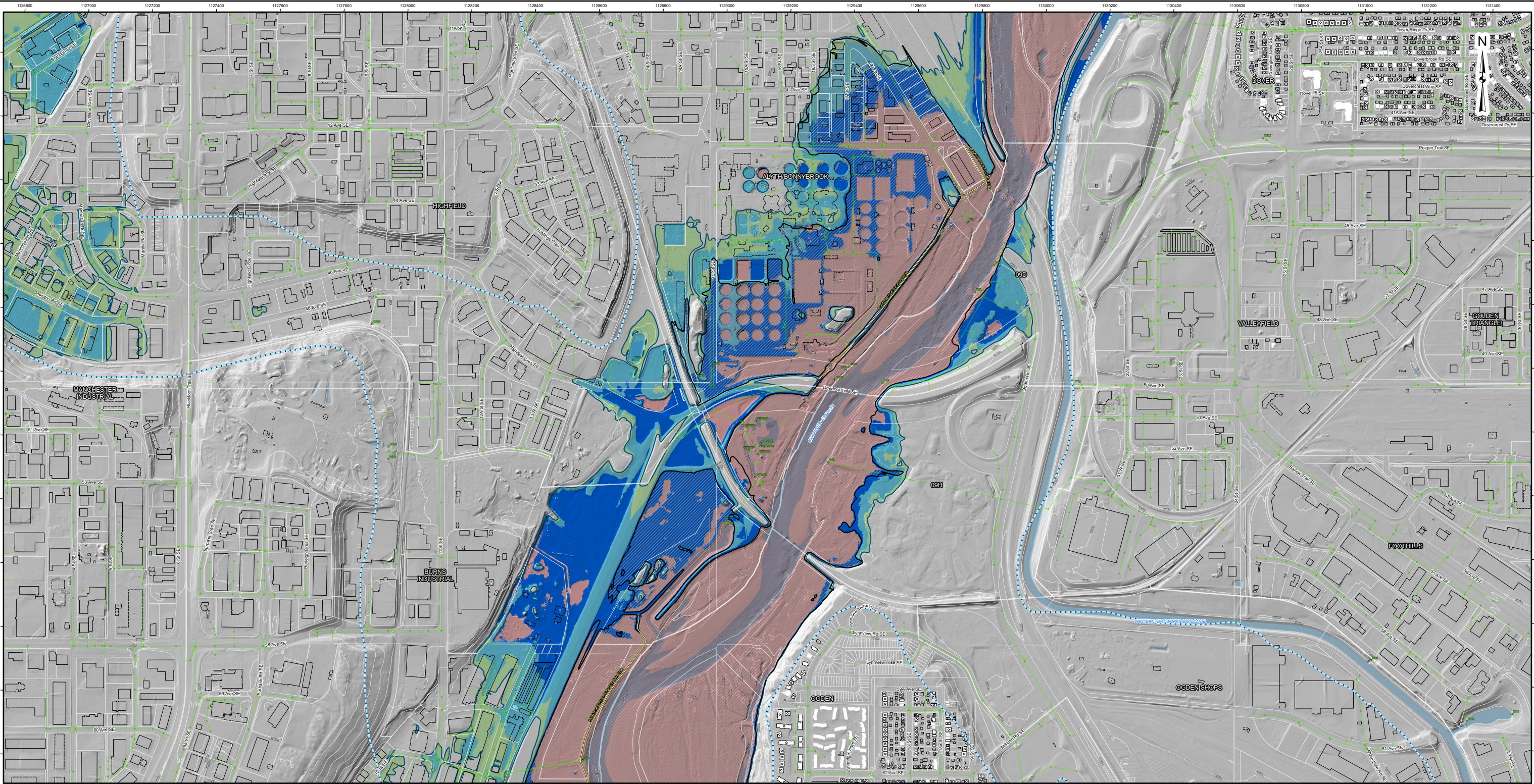
0 70 140
Meters

SCALE 1:12,000

DATE 8/18/2026

AUTHOR TDaSilva





LEGEND

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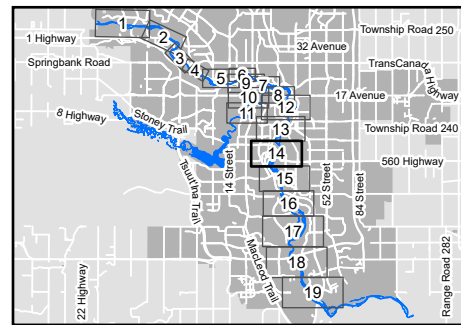
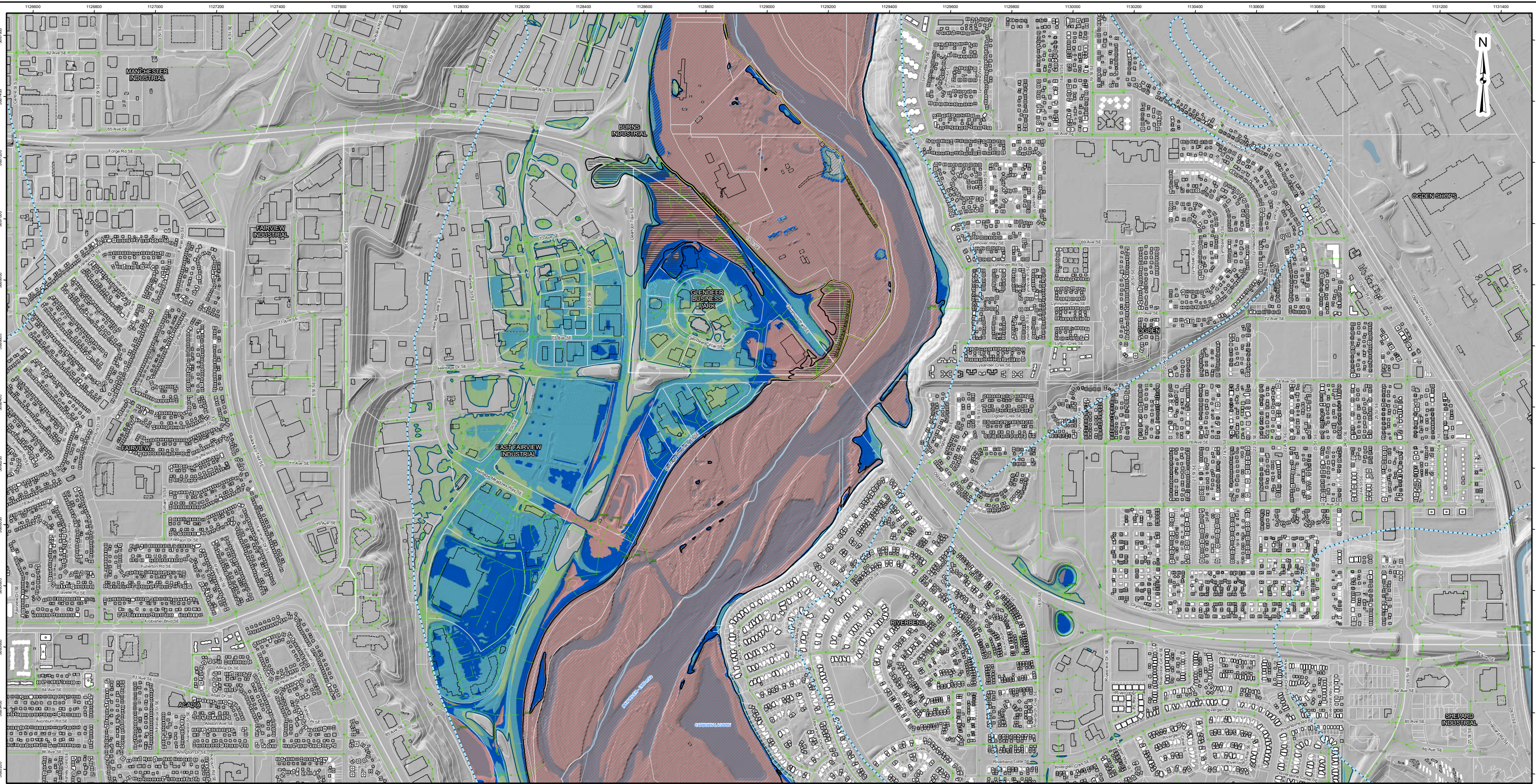
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
13 - BONNYBROOK

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY
PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:12,000
DATE 8/18/2026
AUTHOR TDaSilva





LEGEND

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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
14 - DEERFOOT MEADOWS

PROJECT

CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114

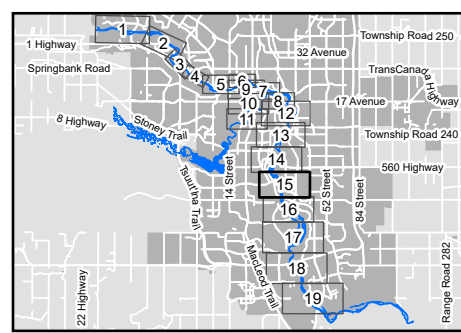
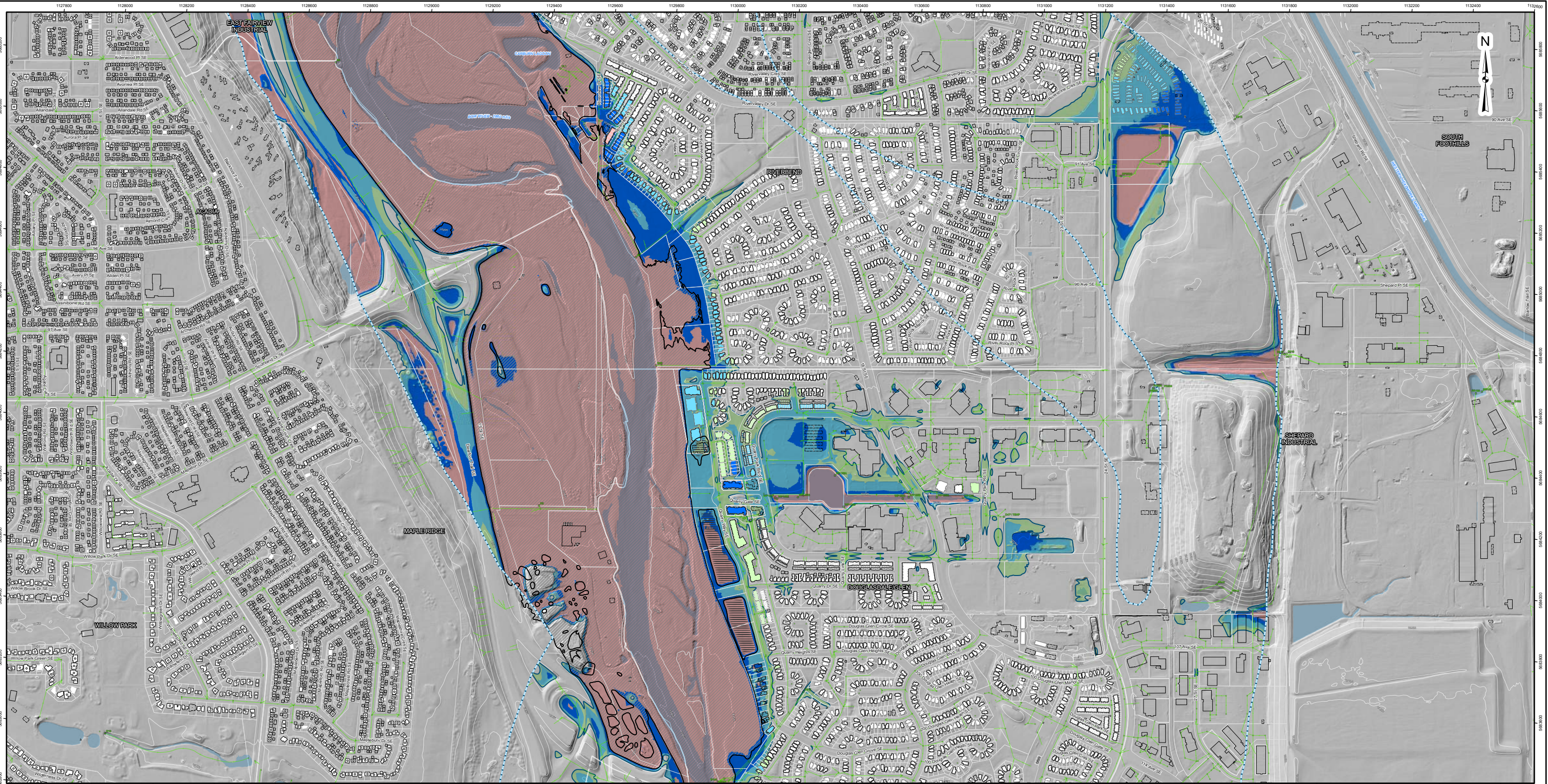
0 75 150
Meters

SCALE 1:12,500

DATE 8/18/2026

AUTHOR TDaSilva





LEGEND

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- Below Grade Space
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DATA SOURCES

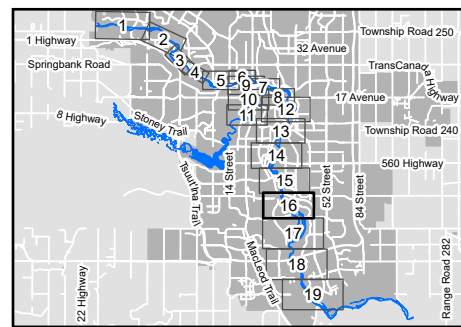
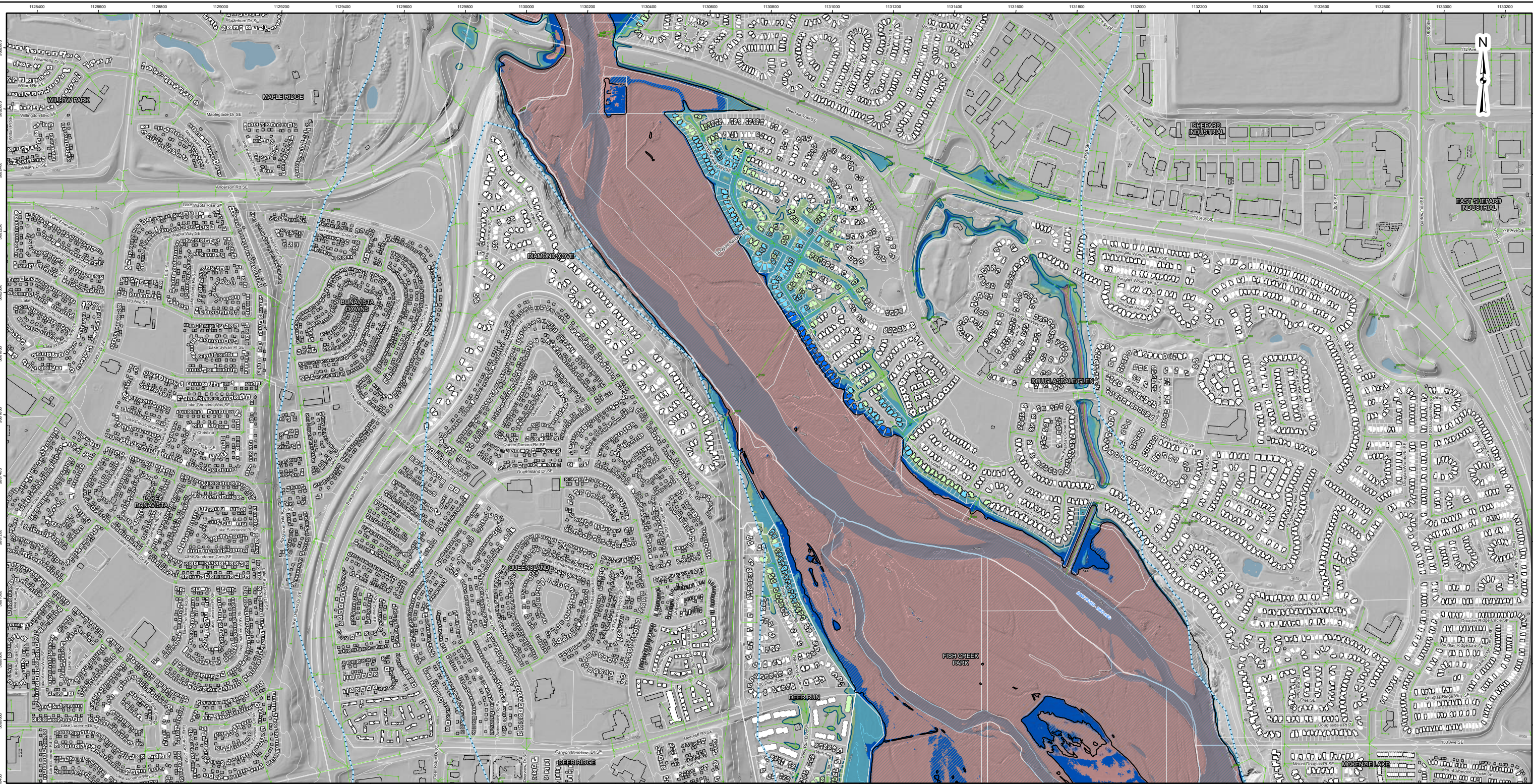
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
15 - RIVERBEND / QUARRY PARK

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:12,500
DATE 8/18/2026
AUTHOR TDaSilva





LEGEND

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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
16 - DOUGLASDALE

PROJECT

CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION

NAD 1983 CSRS 3TM 114

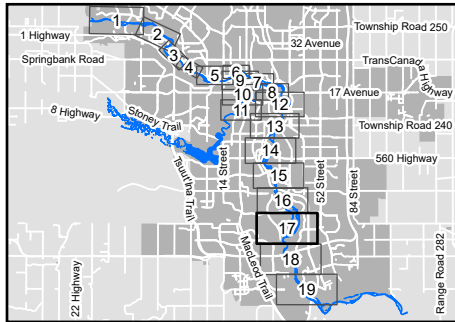
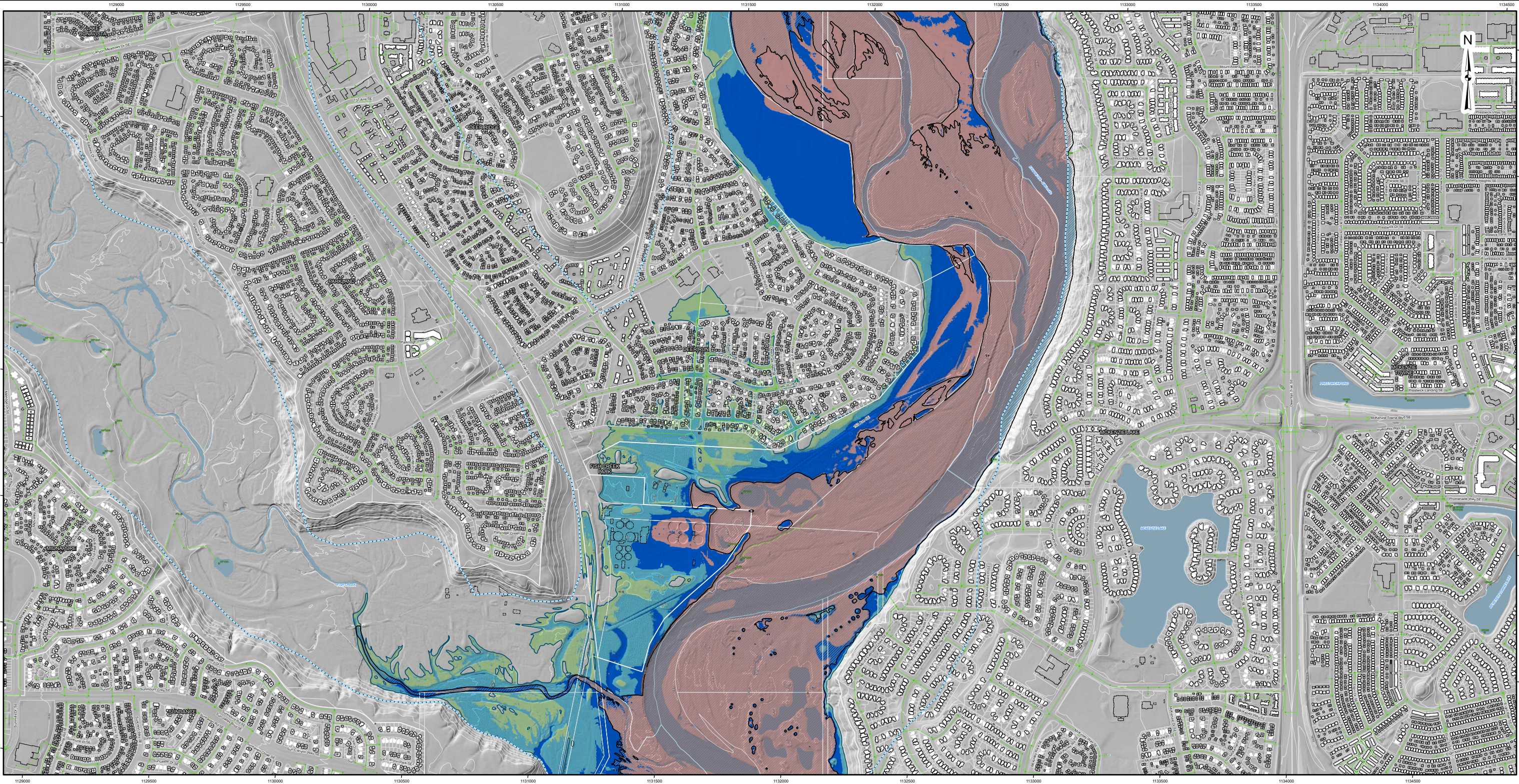
0 75 150
Meters

SCALE 1:12,500

DATE 8/18/2026

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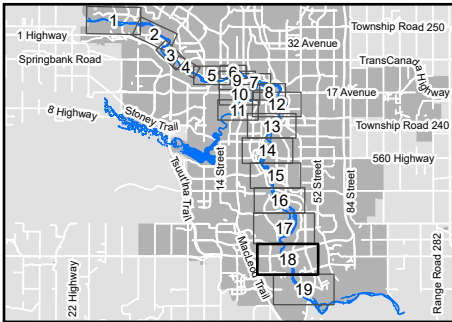
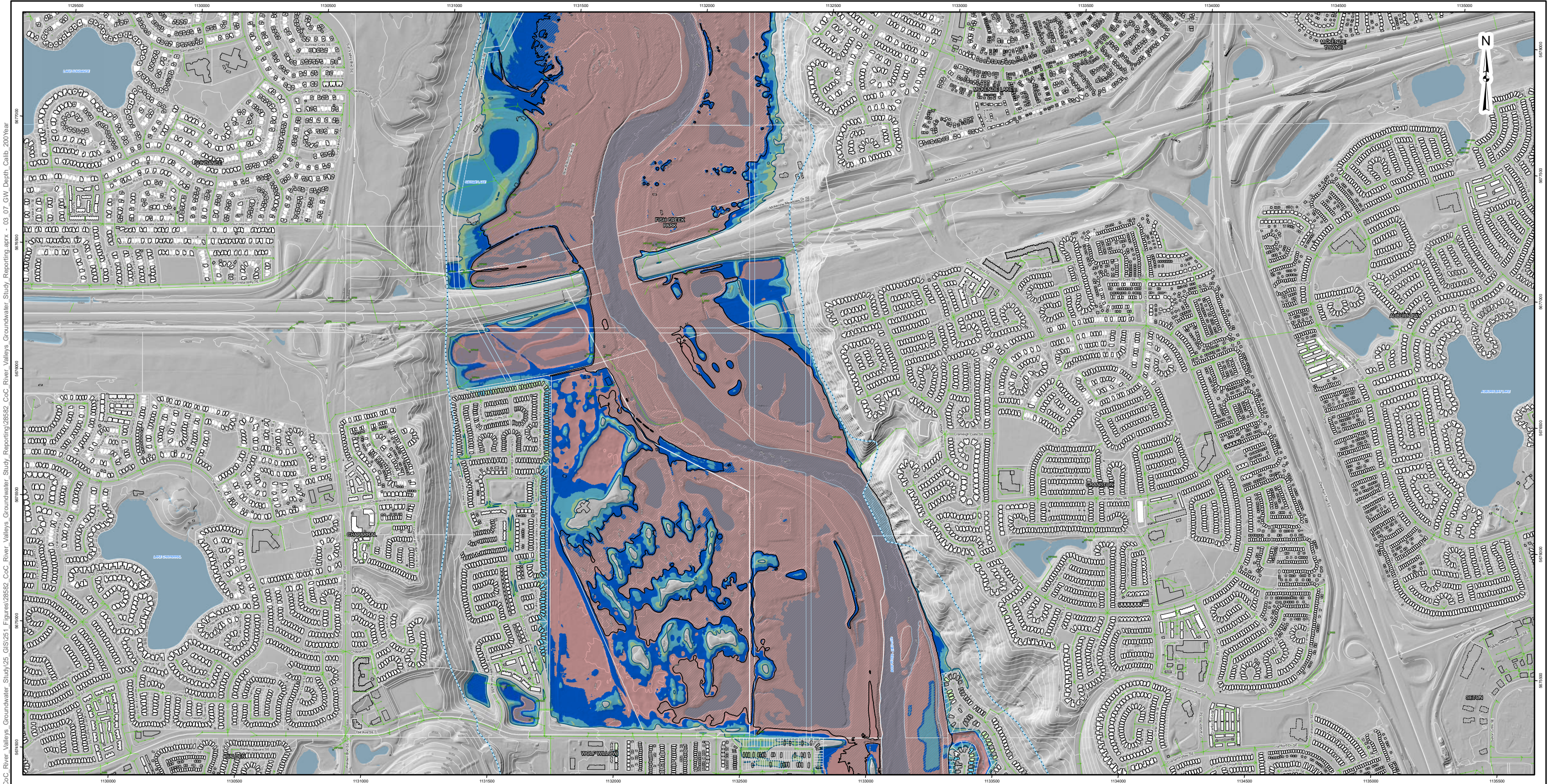
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
17 - FISH CREEK

PROJECT
CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:15,000
DATE 8/18/2026
AUTHOR TDaSilva





LEGEND

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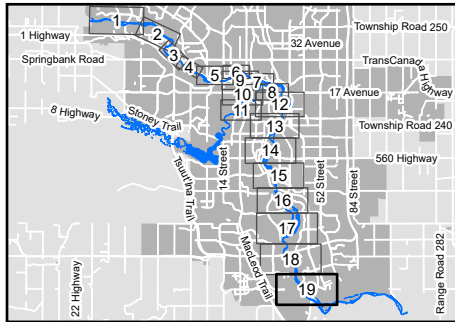
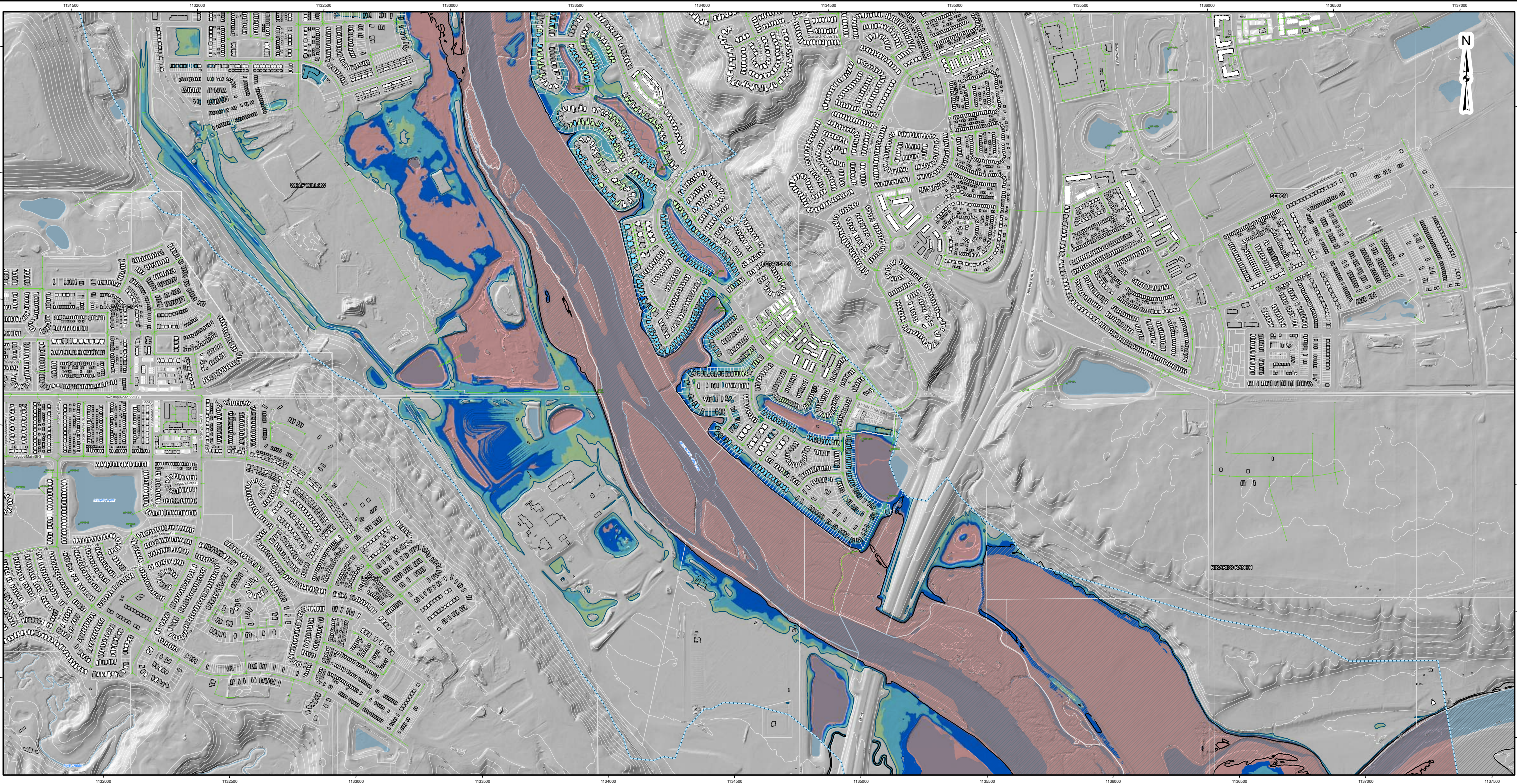
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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
18 - SOUTH STONEY TRAIL

CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION
NAD 1983 CSRS 3TM 114
SCALE 1:15,000
DATE 8/18/2026
AUTHOR TDaSilva





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FIGURE 3.7
GROUNDWATER DEPTH & BUILDING RISK FACTORS
(CALIBRATED MODEL) - 1 IN 200 YEAR FLOOD
19 - PINE CREEK / CRANSTON

PROJECT

CALGARY RIVER VALLEYS GROUNDWATER STUDY

PROJECTION

NAD 1983 CSRS 3TM 114

0 90 180
Meters

SCALE 1:15,000

DATE 8/18/2026

AUTHOR TDaSilva

