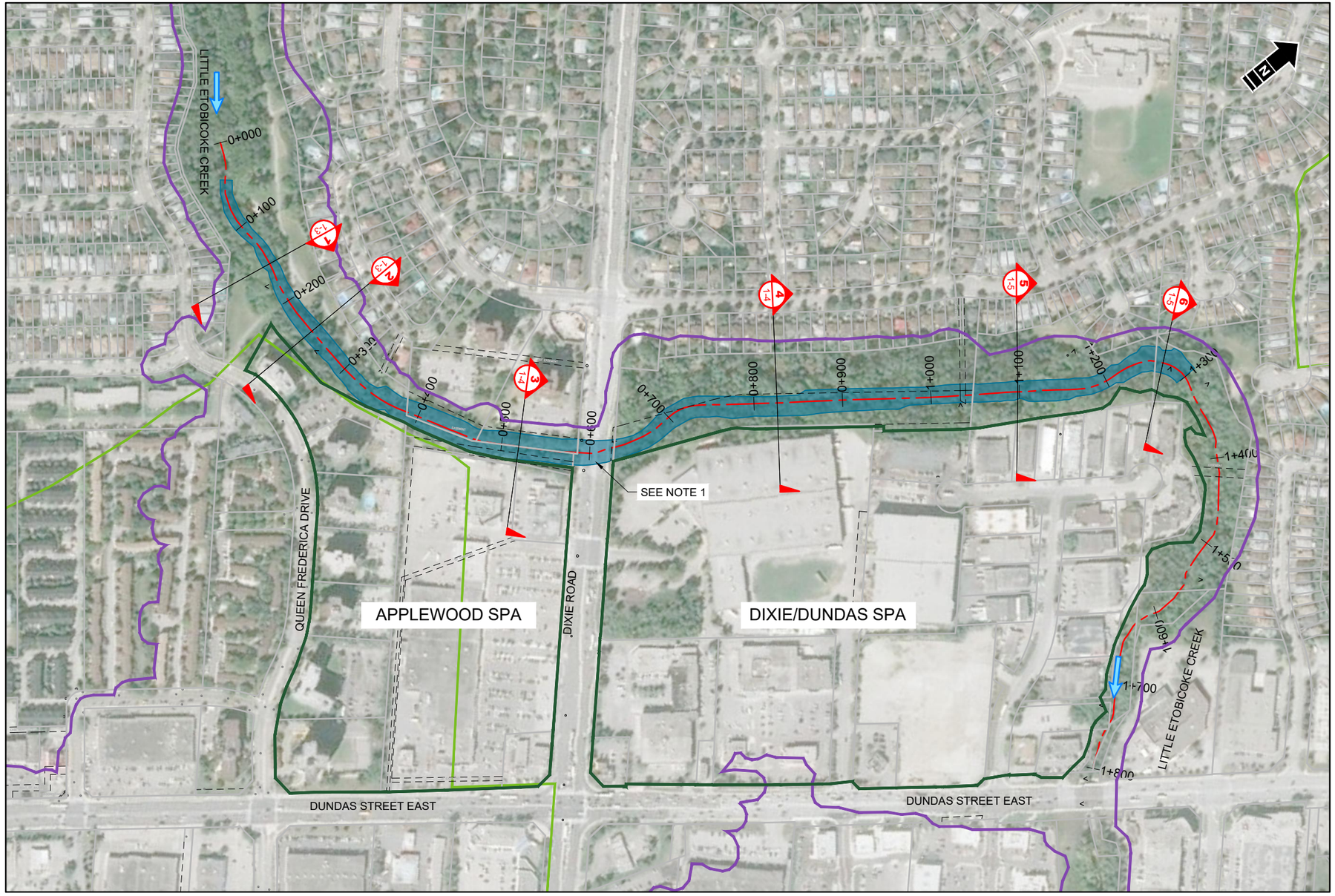
APPENDIX H
Dixie Area Alternative Solutions Drawings



LEGEND

- FLOOD PROTECTION LANDFORM
- CREEK CENTRELINE
- CHANNEL CONVEYANCE IMPROVEMENTS
- FLOODPLAIN CONVEYANCE IMPROVEMENTS
- SPECIAL POLICY AREA (SPA)
- LITTLE ETOBICOKE CREEK WATERSHED BOUNDARY
- TRCA REGULATION LIMIT
- EASEMENT
- FLOW DIRECTION
- CROSS-SECTION

1 : 5,000 metres
50 0 50 100
DATUM

NOTES:

1. CONCEPTUAL DIXIE ROAD BRIDGE REPLACEMENT BY R.V. ANDERSON ASSOCIATES LIMITED (APPENDIX E).
2. BASE DIGITAL INFORMATION OBTAINED FROM THE CITY OF MISSISSAUGA (SHP AND DGN FORMAT).
3. REGULATORY BOUNDARIES PROVIDED BY THE TRCA.
4. KEY MITIGATION CONSTRAINTS ARE MAPPED ON FIGURES 3 TO 5.

PLAN

NOT FOR CONSTRUCTION

REVISION					
B	2020-08-14	CONCEPTUAL 10% DESIGN	AD	SB	KW
A	2020-05-15	ISSUED FOR REVIEW	AD	SB	KW
No.	**DATE**	**DESCRIPTION**	**BY**	**CHK.**	**DRN.**

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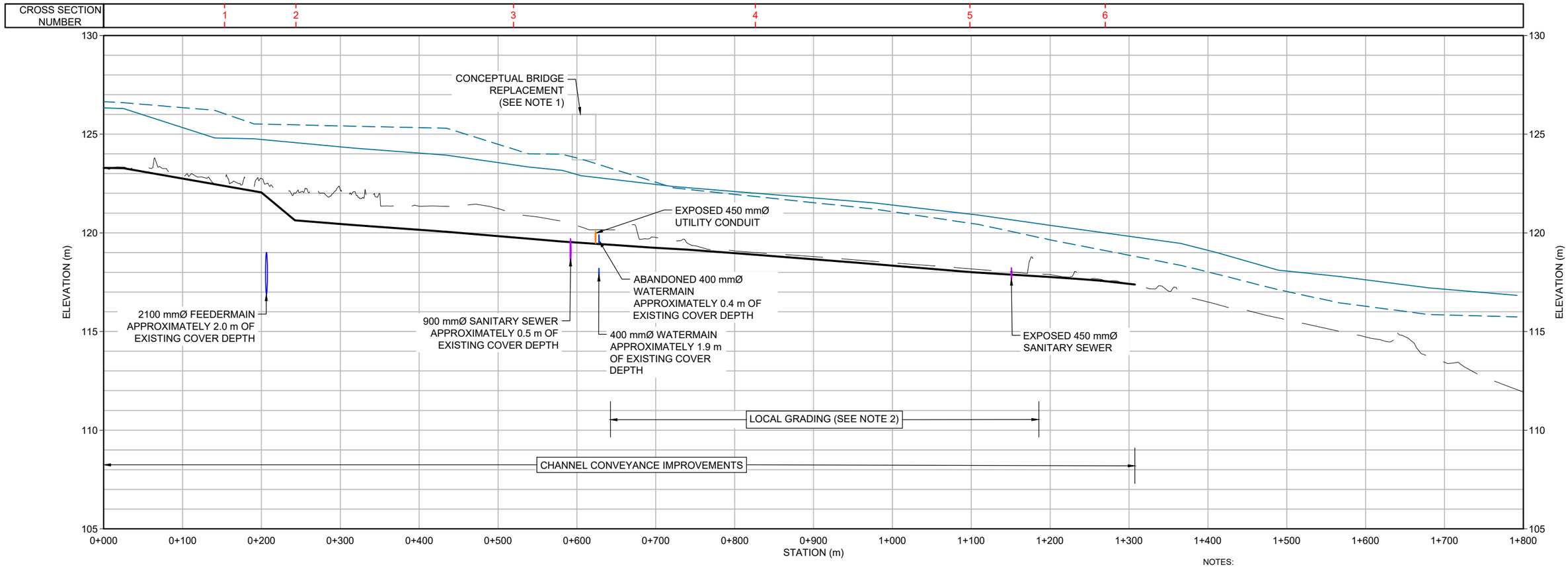
CITY OF MISSISSAUGA
DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 1
MINIMIZED FOOTPRINT
CONCEPTUAL PLAN

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	1-1



OPTION 1 - PROFILE

SCALE HORZ. 1:5000
VERT 1:200

LEGEND

- EXISTING CHANNEL THALWEG
- CONCEPTUAL CHANNEL THALWEG
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL

NOTES:

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7. KEY MITIGATION CONSTRAINTS ARE MAPPED ON FIGURES 3 TO 5.

NOT FOR CONSTRUCTION

REVISION					
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A	2020-05-15	ISSUED FOR REVIEW	AD	SB	KW
No.	DATE	DESCRIPTION	BY	CHK.	DRN.

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CITY OF MISSISSAUGA

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OPTION 1
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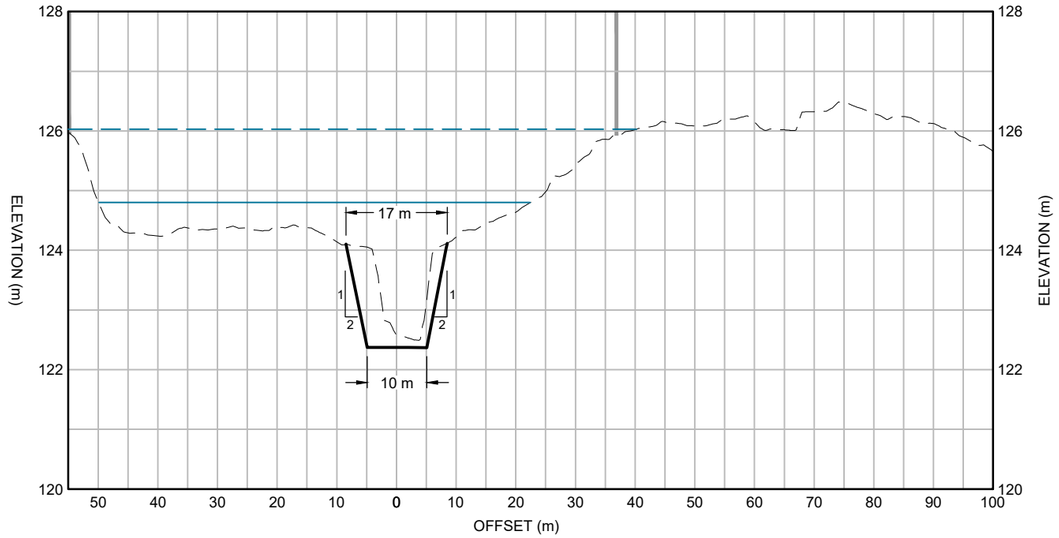
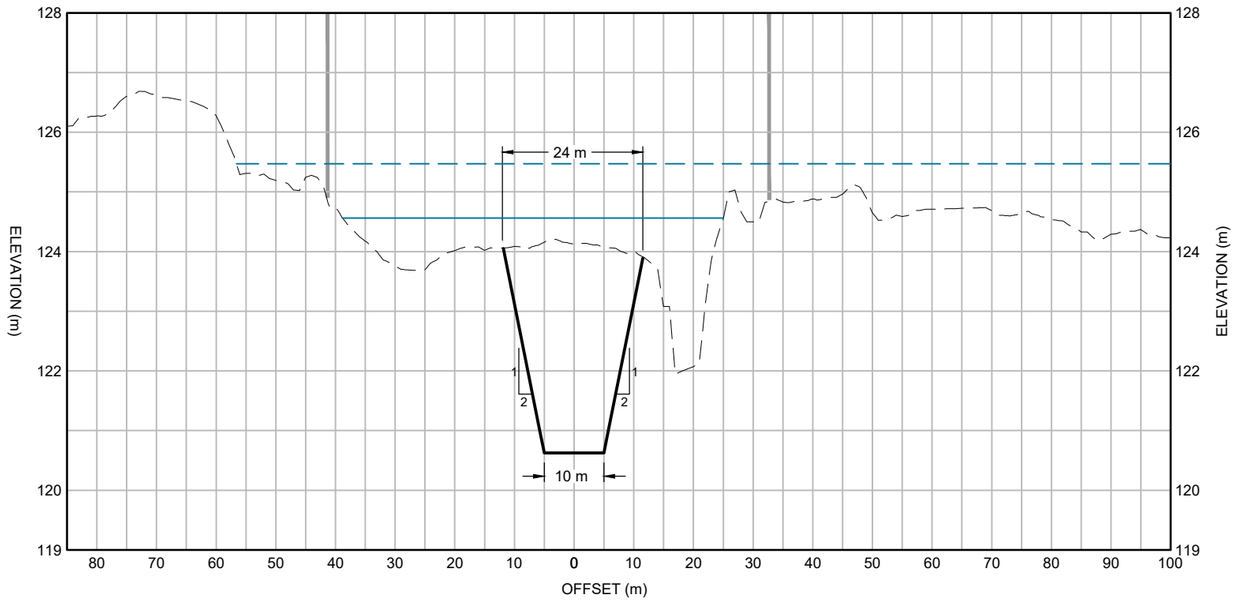
CONCEPTUAL PROFILE

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	1-2



1 Section
1-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100



2 Section
1-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING GROUND
- CHANNEL CONVEYANCE IMPROVEMENTS
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL
- PROPERTY BOUNDARY

NOTES:

1. REGIONAL FLOOD WATER LEVELS ARE MODELLED USING THE 1D-2D MIKE FLOOD MODEL DEVELOPED BY MMM (2015) AND EXPANDED BY MATRIX (2018). THE REGIONAL EVENT IS 200 m^3/s AT DIXIE-DUNDAS. UNDER EXISTING CONDITIONS APPROXIMATELY 130 m^3/s OF THE ENTIRE 200 m^3/s REGIONAL EVENT SPILLS FROM THE LEC VALLEY CORRIDOR. THE CONCEPTUAL ALTERNATIVE SOLUTION KEEPS FLOW WITHIN THE VALLEY CORRIDOR.
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OPTION 1
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CONCEPTUAL CROSS-SECTIONS

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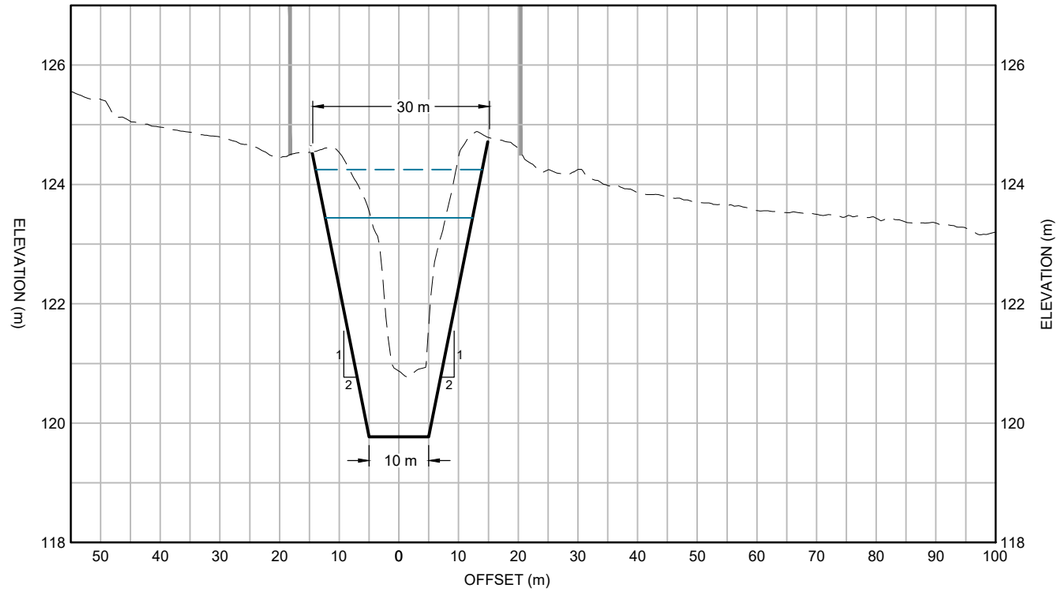
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

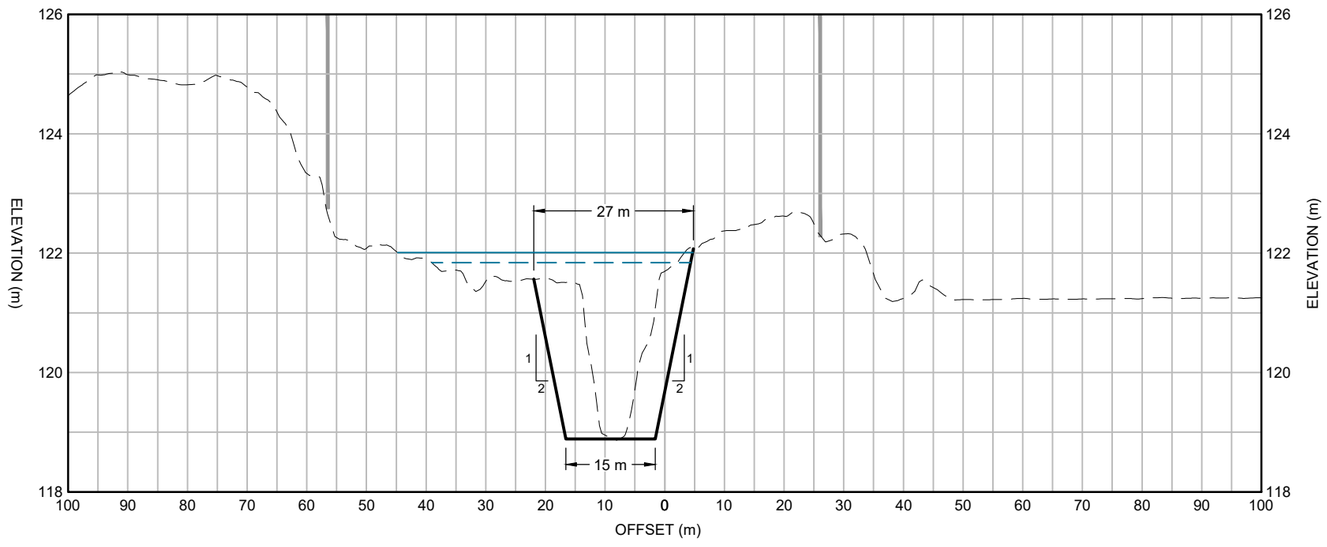
PROJECT:	REVISION:	DRAWING:
24603-531	B	1-3



3 1-1 **Section**
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING THALWEG
- DESIGN THALWEG
- EXISTING REGIONAL FLOOD WATER LEVEL
- DESIGN REGIONAL FLOOD WATER LEVEL
- PROPERTY BOUNDARY



4 1-1 **Section**
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

NOTES:
1. REGIONAL FLOOD WATER LEVELS ARE MODELLED USING THE 1D-2D MIKE FLOOD MODEL DEVELOPED BY MMM (2015) AND EXPANDED BY MATRIX (2018). THE REGIONAL EVENT IS 200 m^3/s AT DIXIE-DUNDAS. UNDER EXISTING CONDITIONS APPROXIMATELY 130 m^3/s OF THE ENTIRE 200 m^3/s REGIONAL EVENT SPILLS FROM THE LEC VALLEY CORRIDOR. THE CONCEPTUAL ALTERNATIVE SOLUTION KEEPS FLOW WITHIN THE VALLEY CORRIDOR.
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CITY OF MISSISSAUGA
DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 1
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CONCEPTUAL CROSS-SECTIONS

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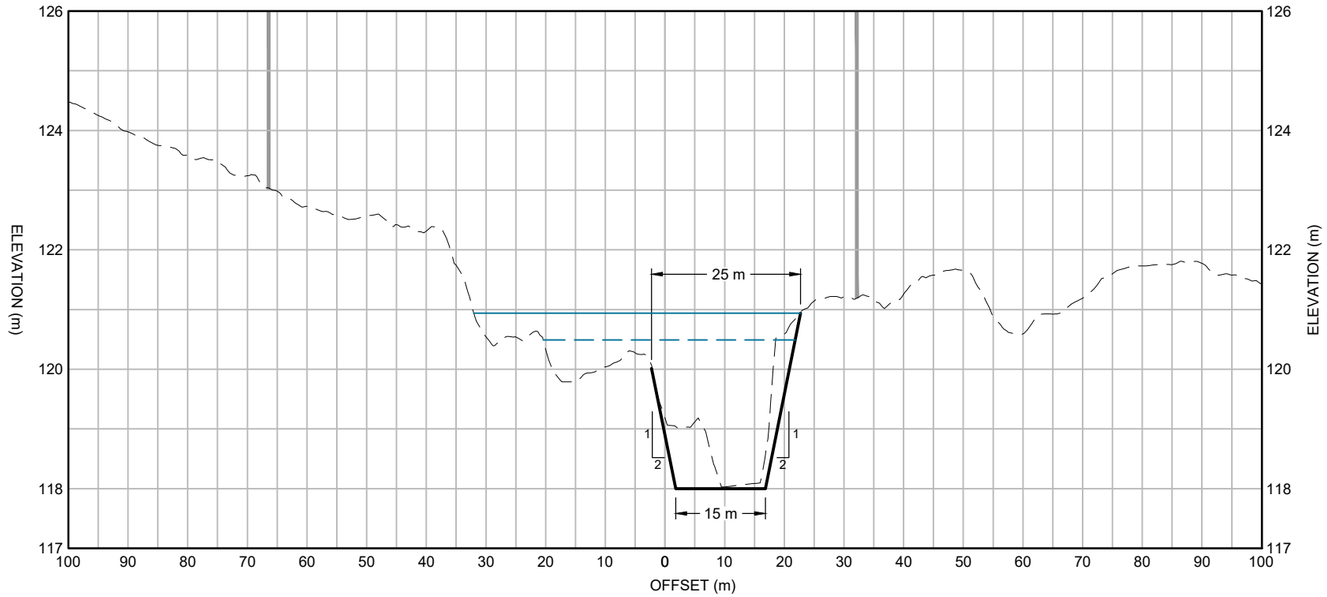
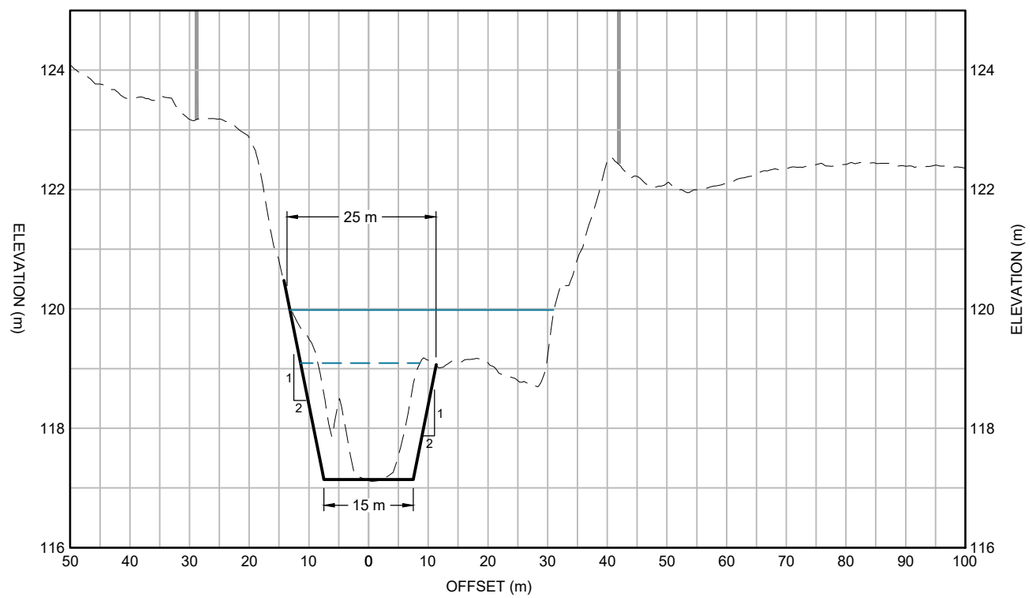
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	1-4



5 Section
1-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100



6 Section
1-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING THALWEG
- DESIGN THALWEG
- EXISTING REGIONAL FLOOD WATER LEVEL
- DESIGN REGIONAL FLOOD WATER LEVEL
- PROPERTY BOUNDARY

NOTES:

1. REGIONAL FLOOD WATER LEVELS ARE MODELLED USING THE 1D-2D MIKE FLOOD MODEL DEVELOPED BY MMM (2015) AND EXPANDED BY MATRIX (2018). THE REGIONAL EVENT IS 200 m^3/s AT DIXIE-DUNDAS. UNDER EXISTING CONDITIONS APPROXIMATELY 130 m^3/s OF THE ENTIRE 200 m^3/s REGIONAL EVENT SPILLS FROM THE LEC VALLEY CORRIDOR. THE CONCEPTUAL ALTERNATIVE SOLUTION KEEPS FLOW WITHIN THE VALLEY CORRIDOR.
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ENVIRONMENT & ENGINEERING

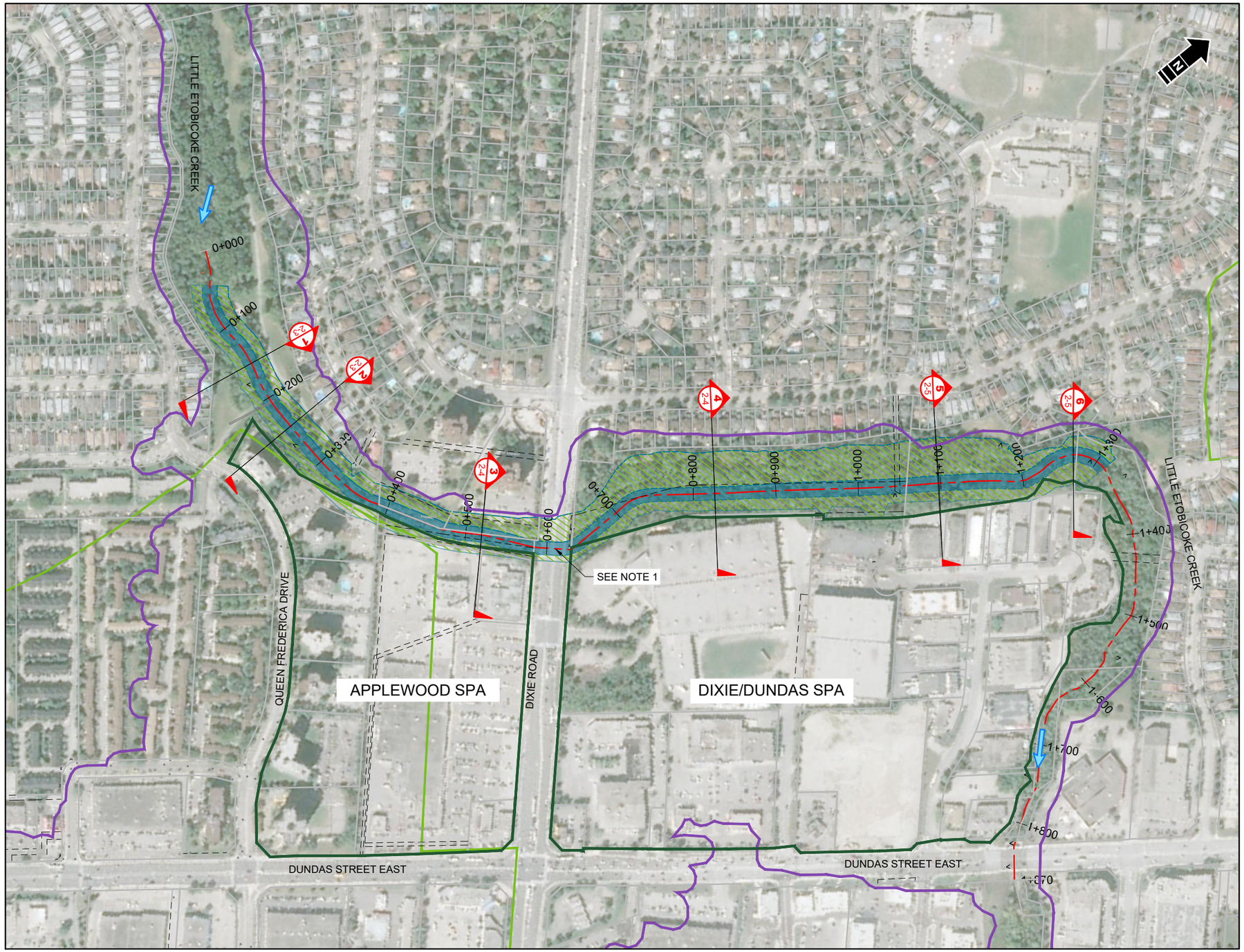
CITY OF MISSISSAUGA

DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 1
MINIMIZED FOOTPRINT
CONCEPTUAL CROSS-SECTIONS

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	1-5



LEGEND

- FLOOD PROTECTION LANDFORM
- CREEK CENTRELINE
- CHANNEL CONVEYANCE IMPROVEMENTS
- FLOODPLAIN CONVEYANCE IMPROVEMENTS
- SPECIAL POLICY AREA (SPA)
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- TRCA REGULATION LIMIT
- EASEMENT
- FLOW DIRECTION
- CROSS-SECTION

1 : 5,000 metres
50 0 50 100
DATUM

NOTES:

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Matrix Solutions Inc.
ENVIRONMENT & ENGINEERING

CITY OF MISSISSAUGA

DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 2
MAKING ROOM FOR THE CREEK
CONCEPTUAL PLAN

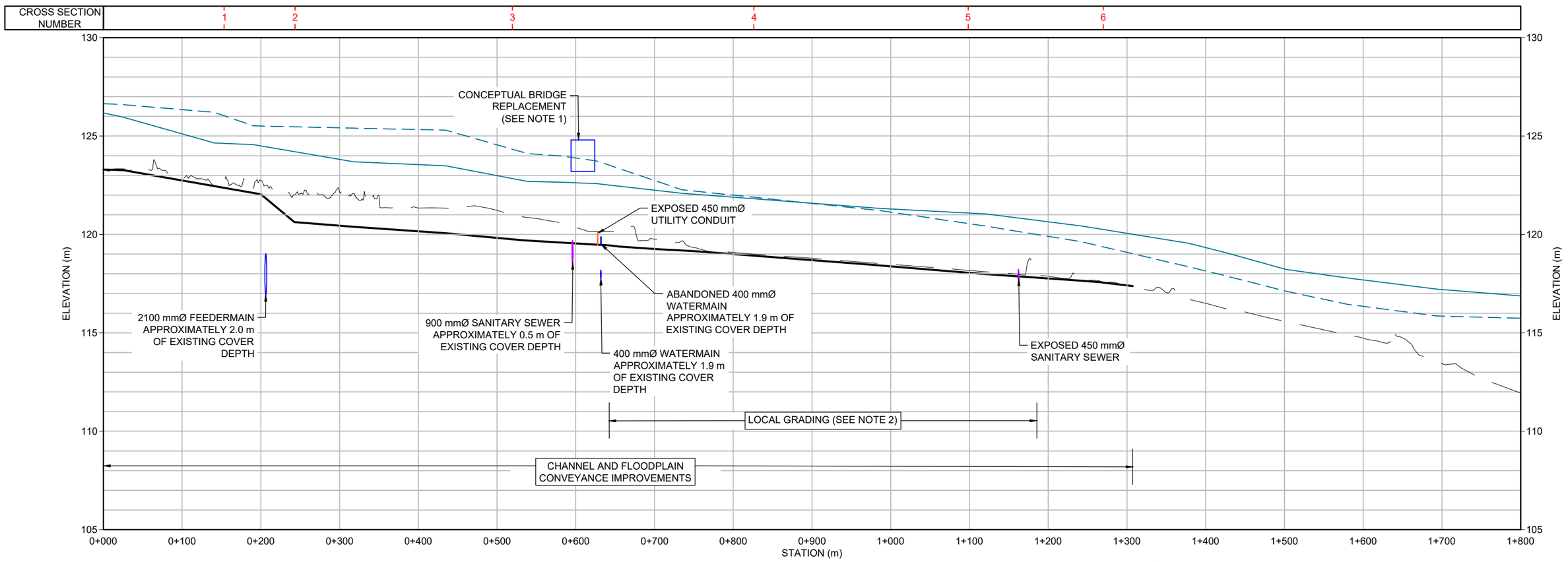
PLAN

NOT FOR CONSTRUCTION

REVISION					
B	2020-08-14	CONCEPTUAL 10% DESIGN	AD	SB	KW
A	2020-05-15	ISSUED FOR REVIEW	AD	SB	KW
No.	**DATE**	**DESCRIPTION**	**BY**	**CHK.**	**DRN.**

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT: 24603-531 | REVISION: B | DRAWING: 2-1



OPTION 2 - PROFILE

SCALE HORZ. 1:5000
VERT 1:200

LEGEND

- EXISTING CHANNEL THALWEG
- CONCEPTUAL CHANNEL THALWEG
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL

NOTES:

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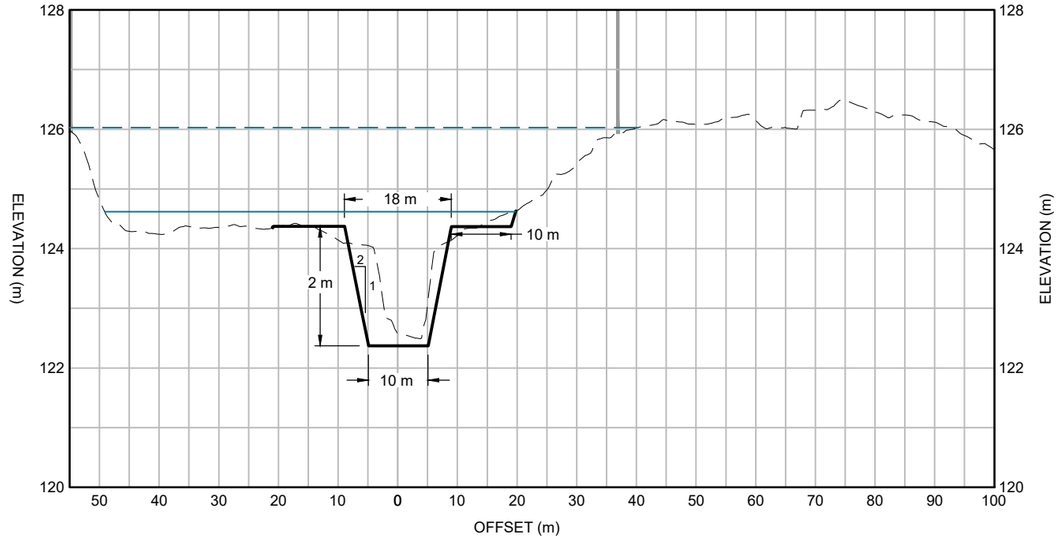
CITY OF MISSISSAUGA
DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 2
MAKING ROOM FOR THE CREEK
CONCEPTUAL PROFILE

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	2-2



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2-1
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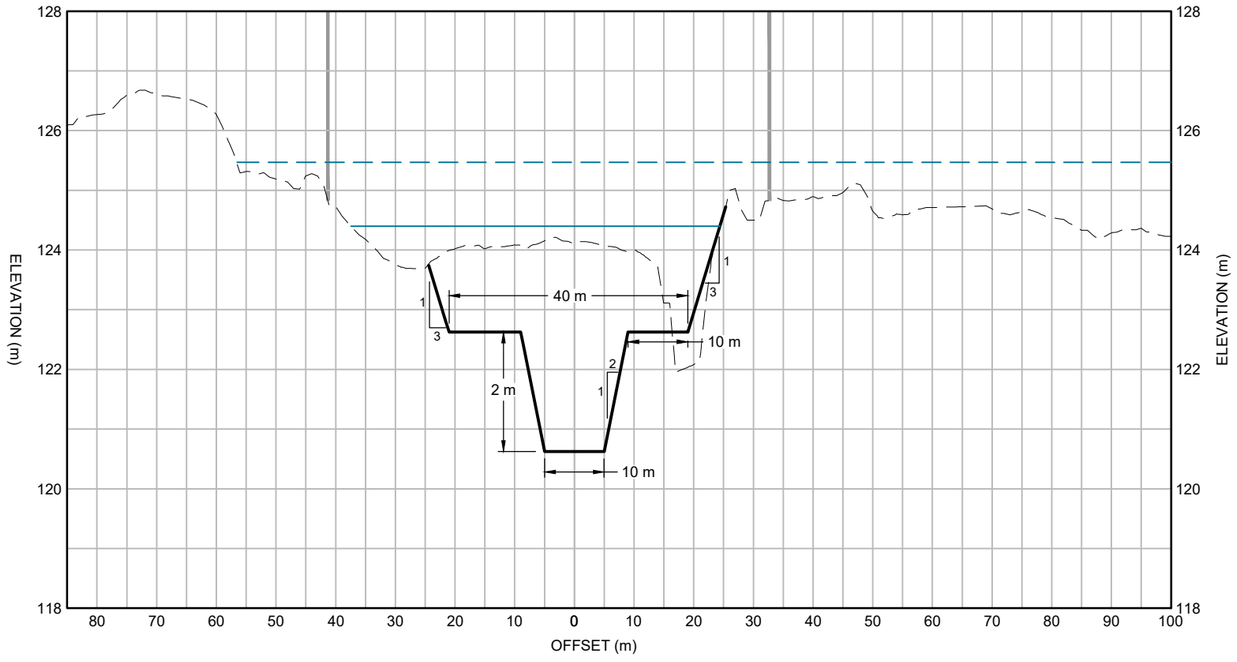
VERTICAL SCALE 1:100



2 Section
2-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING GROUND
- CHANNEL AND FLOODPLAIN CONVEYANCE IMPROVEMENTS
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL
- PROPERTY BOUNDARY

NOTES:

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OPTION 2
MAKING ROOM FOR THE CREEK
CONCEPTUAL CROSS-SECTIONS

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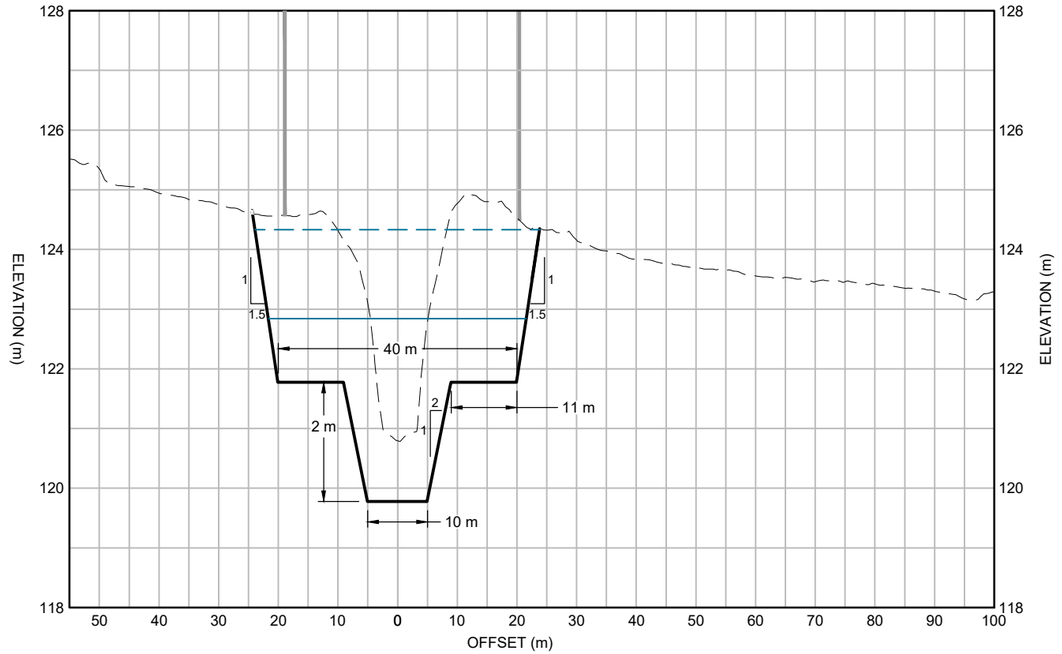
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

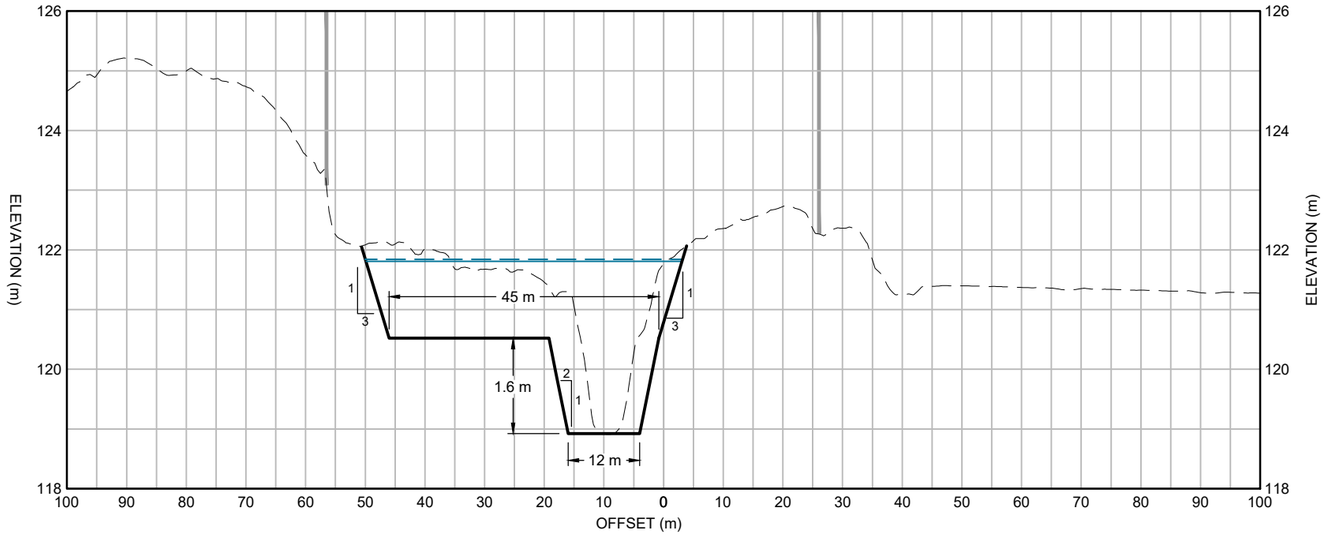
PROJECT:	REVISION:	DRAWING:
24603-531	B	2-3



3 / 2-1 **Section**
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING GROUND
- CHANNEL AND FLOODPLAIN CONVEYANCE IMPROVEMENTS
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL
- PROPERTY BOUNDARY



4 / 2-1 **Section**
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

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OPTION 2
MAKING ROOM FOR THE CREEK
CONCEPTUAL CROSS-SECTIONS

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PROJECT:	REVISION:	DRAWING:
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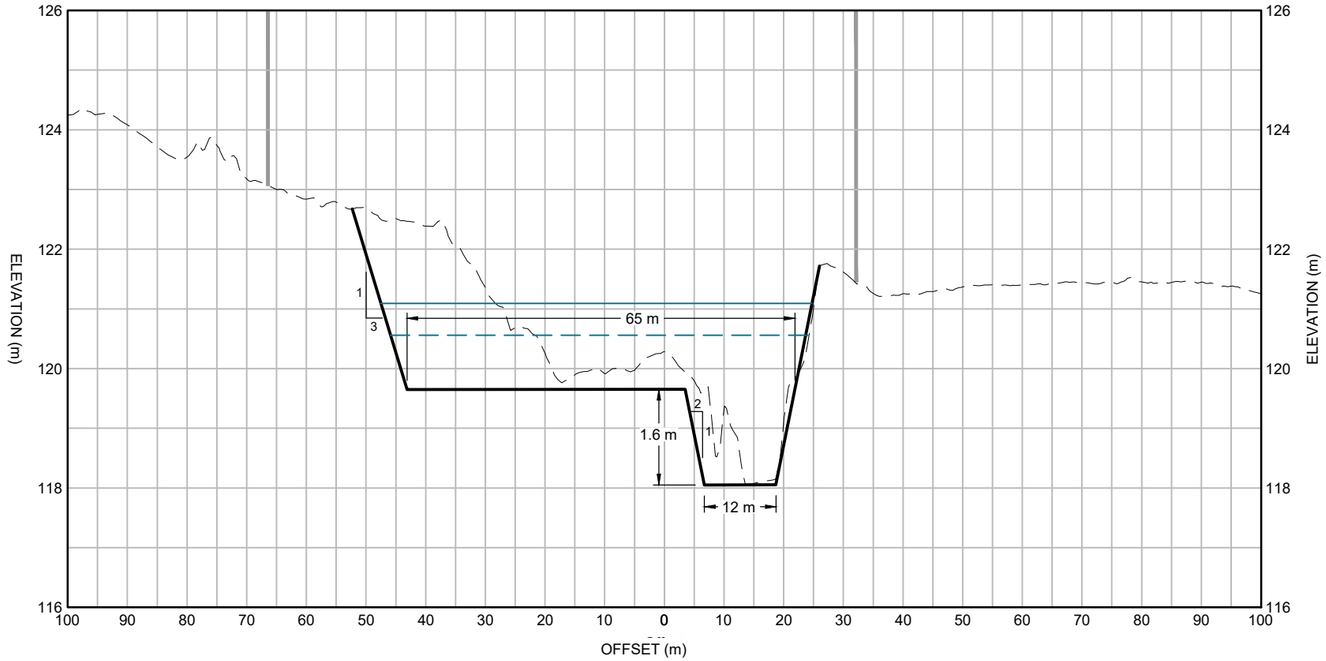
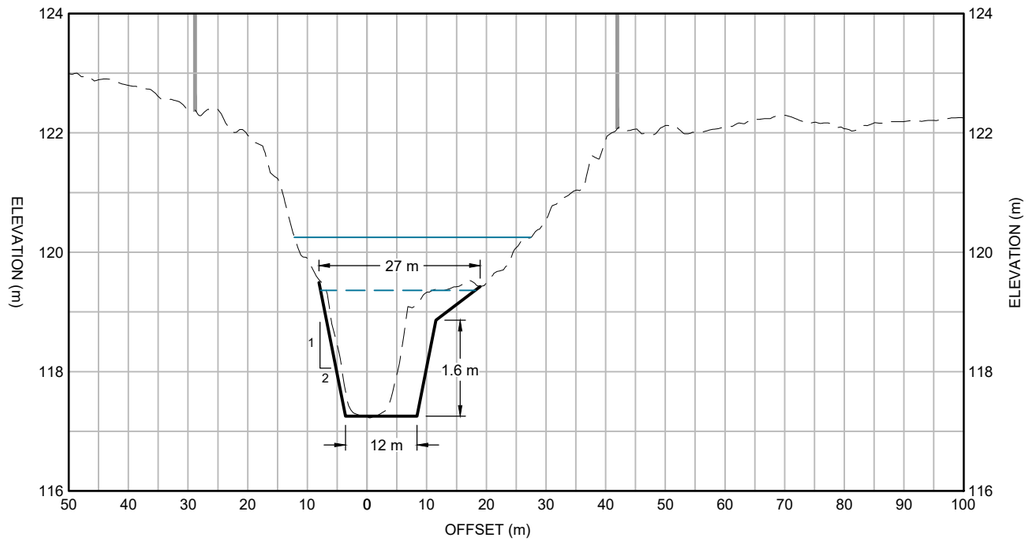


5 2-1 **Section**
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING GROUND
- CHANNEL AND FLOODPLAIN CONVEYANCE IMPROVEMENTS
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL
- PROPERTY BOUNDARY



6 2-1 **Section**
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

NOTES:
1. REGIONAL FLOOD WATER LEVELS ARE MODELLED USING THE 1D-2D MIKE FLOOD MODEL DEVELOPED BY MMM (2015) AND EXPANDED BY MATRIX (2018). THE REGIONAL EVENT IS 200 m³/s AT DIXIE-DUNDAS. UNDER EXISTING CONDITIONS APPROXIMATELY 130 m³/s OF THE ENTIRE 200 m³/s REGIONAL EVENT SPILLS FROM THE LEC VALLEY CORRIDOR. THE CONCEPTUAL ALTERNATIVE SOLUTION KEEPS FLOW WITHIN THE VALLEY CORRIDOR.
2. EXISTING CHANNEL ELEVATIONS BASED ON SURVEY BY MMM (2013). EXISTING FLOODPLAIN ELEVATIONS BASED ON TRCA LIDAR SURVEY (2017).
3. KEY MITIGATION CONSTRAINTS ARE MAPPED ON FIGURES 3 TO 5. THE COVER DEPTH FOR KEY LINEAR INFRASTRUCTURE CROSSING BELOW LEC ARE SHOWN ON THE CONCEPTUAL PROFILE DRAWINGS 1-2, 2-2, 3-2 IS BASED ON REGIONAL OF PEEL GIS DATA AND DRAWING RECORDS.
4. PROPERTY BOUNDARIES BASED ON GIS DATA OBTAINED FROM THE CITY OF MISSISSAUGA.

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REVISION					
B	2020-08-14	CONCEPTUAL 10% DESIGN	AD	SB	KW
A	2020-05-15	ISSUED FOR REVIEW	AD	SB	KW
No.	DATE	DESCRIPTION	BY	CHK.	DRN.

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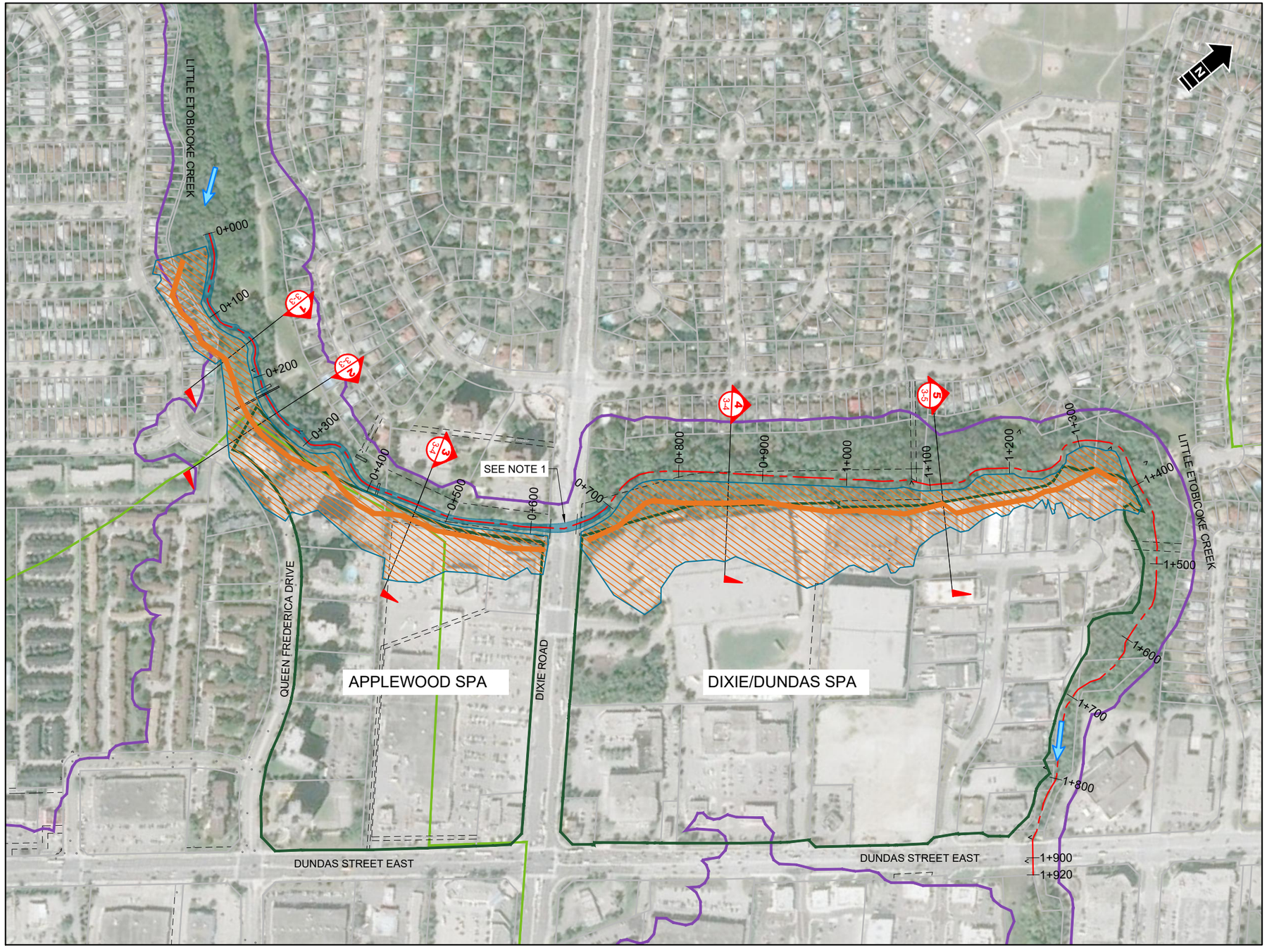
CITY OF MISSISSAUGA

DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 2
MAKING ROOM FOR THE CREEK
CONCEPTUAL CROSS-SECTIONS

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	2-5



LEGEND

- FLOOD PROTECTION LANDFORM
- CREEK CENTRELINE
- CHANNEL CONVEYANCE IMPROVEMENTS
- FLOODPLAIN CONVEYANCE IMPROVEMENTS
- SPECIAL POLICY AREA (SPA)
- LITTLE ETOBICOKE CREEK WATERSHED BOUNDARY
- TRCA REGULATION LIMIT
- EASEMENT
- FLOW DIRECTION
- CROSS-SECTION

1 : 5,000 metres
50 0 50 100
DATUM

NOTES:

1. CONCEPTUAL DIXIE ROAD BRIDGE REPLACEMENT BY R.V. ANDERSON ASSOCIATES LIMITED (APPENDIX E).
2. BASE DIGITAL INFORMATION OBTAINED FROM THE CITY OF MISSISSAUGA (SHP AND DGN FORMAT).
3. REGULATORY BOUNDARIES PROVIDED BY THE TRCA.
4. KEY MITIGATION CONSTRAINTS ARE MAPPED ON FIGURES 3 TO 5.

PLAN

NOT FOR CONSTRUCTION

REVISION					
B	2020-08-14	CONCEPTUAL 10% DESIGN	AD	SB	KW
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CITY OF MISSISSAUGA
DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 3
FLOOD CONTAINMENT
CONCEPTUAL PLAN

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
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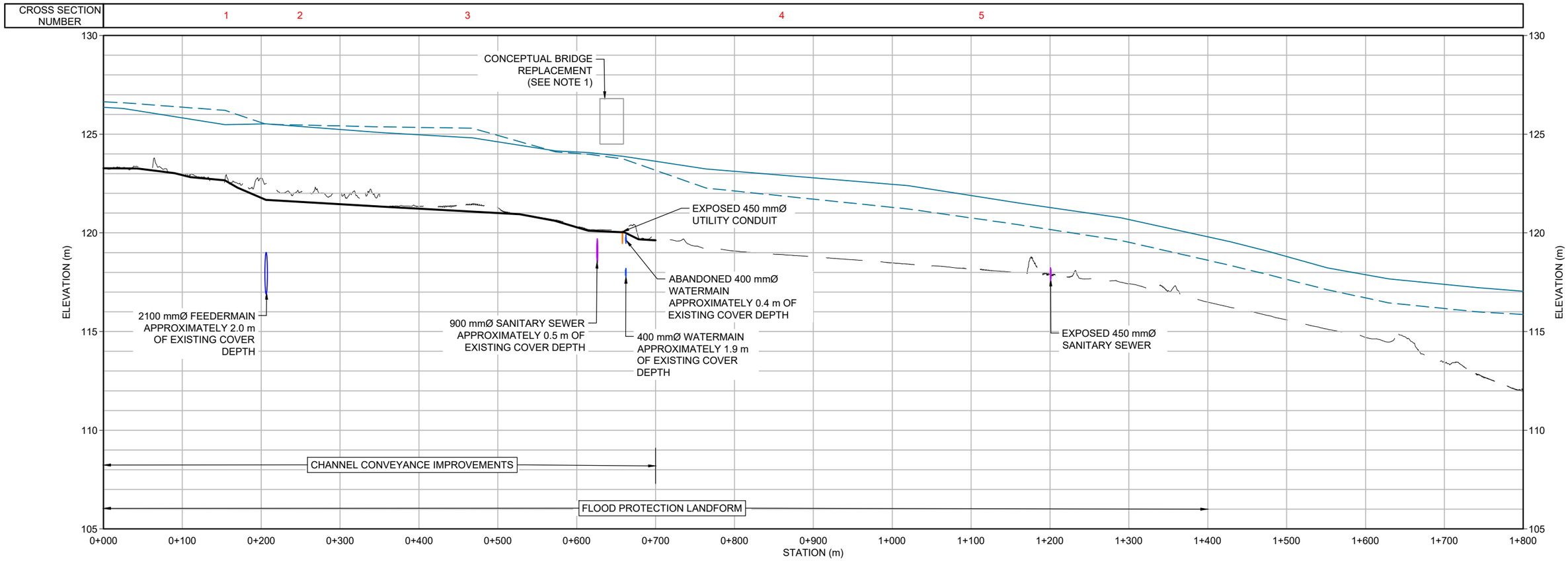
PROJECT: 24603-531 | REVISION: B | DRAWING: 3-1



OPTION 3 - PROFILE

SCALE HORZ. 1:5000
VERT 1:200

LEGEND

- EXISTING THALWEG
- DESIGN THALWEG
- EXISTING REGIONAL FLOOD WATER LEVEL
- DESIGN REGIONAL FLOOD WATER LEVEL

NOTES:

1. CONCEPTUAL DIXIE ROAD BRIDGE REPLACEMENT BY R.V. ANDERSON ASSOCIATES LIMITED (APPENDIX E).
2. REGIONAL FLOOD WATER LEVELS ARE MODELLED USING THE 1D-2D MIKE FLOOD MODEL DEVELOPED BY MMM (2015) AND EXPANDED BY MATRIX (2018). THE REGIONAL EVENT IS 200 m^3/s AT DIXIE-DUNDAS. UNDER EXISTING CONDITIONS APPROXIMATELY 130 m^3/s OF THE ENTIRE 200 m^3/s REGIONAL EVENT SPILLS FROM THE LEC VALLEY CORRIDOR UPSTREAM OF DIXIE ROAD. THE CONCEPTUAL ALTERNATIVE SOLUTION KEEPS FLOW WITHIN THE VALLEY CORRIDOR.
3. BASE DIGITAL INFORMATION OBTAINED FROM THE CITY OF MISSISSAUGA (SHP AND DGN FORMAT).
4. EXISTING CHANNEL THALWEG BASED ON CHANNEL SURVEY BY MMM (2013).
5. THE COVER DEPTH FOR KEY LINEAR INFRASTRUCTURE CROSSING BELOW LEC IS BASED ON REGIONAL OF PEEL GIS DATA AND DRAWING RECORDS.
6. KEY MITIGATION CONSTRAINTS ARE MAPPED ON FIGURES 3 TO 5.

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CITY OF MISSISSAUGA

DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 3
FLOOD CONTAINMENT
CONCEPTUAL PROFILE

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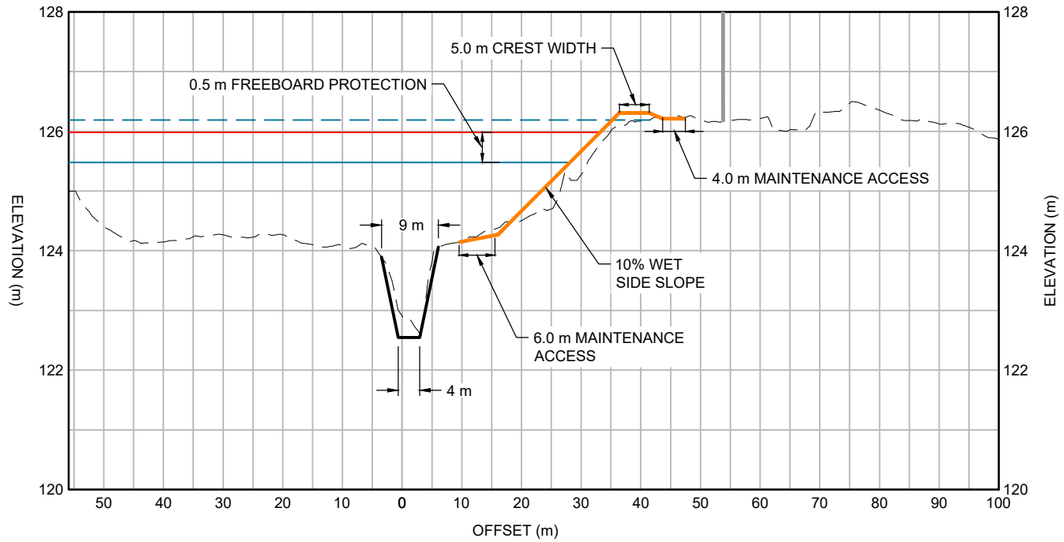
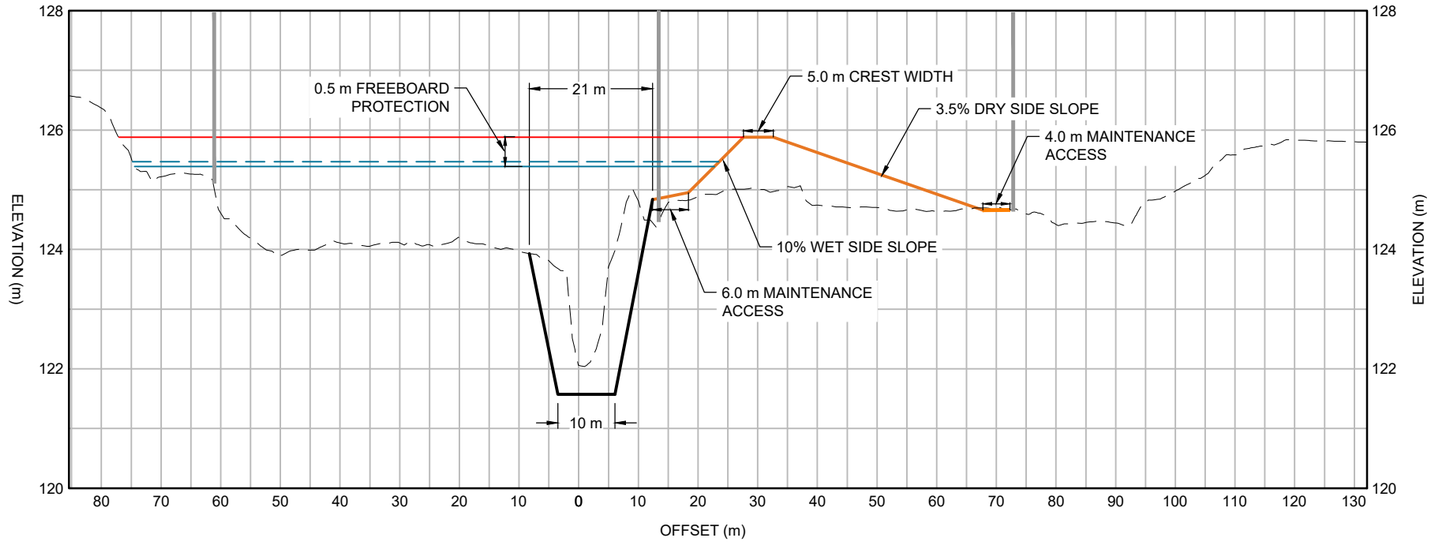
PROJECT:	REVISION:	DRAWING:
24603-531	B	3-2



1 Section 3-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100



2 Section 3-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING GROUND
- CHANNEL CONVEYANCE IMPROVEMENTS
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL
- PROPERTY BOUNDARY

NOTES:

1. REGIONAL FLOOD WATER LEVELS ARE MODELLED USING THE 1D-2D MIKE FLOOD MODEL DEVELOPED BY MMM (2015) AND EXPANDED BY MATRIX (2018). THE REGIONAL EVENT IS 200 m³/s AT DIXIE-DUNDAS. UNDER EXISTING CONDITIONS APPROXIMATELY 130 m³/s OF THE ENTIRE 200 m³/s REGIONAL EVENT SPILLS FROM THE LEC VALLEY CORRIDOR. THE CONCEPTUAL ALTERNATIVE SOLUTION KEEPS FLOW WITHIN THE VALLEY CORRIDOR.
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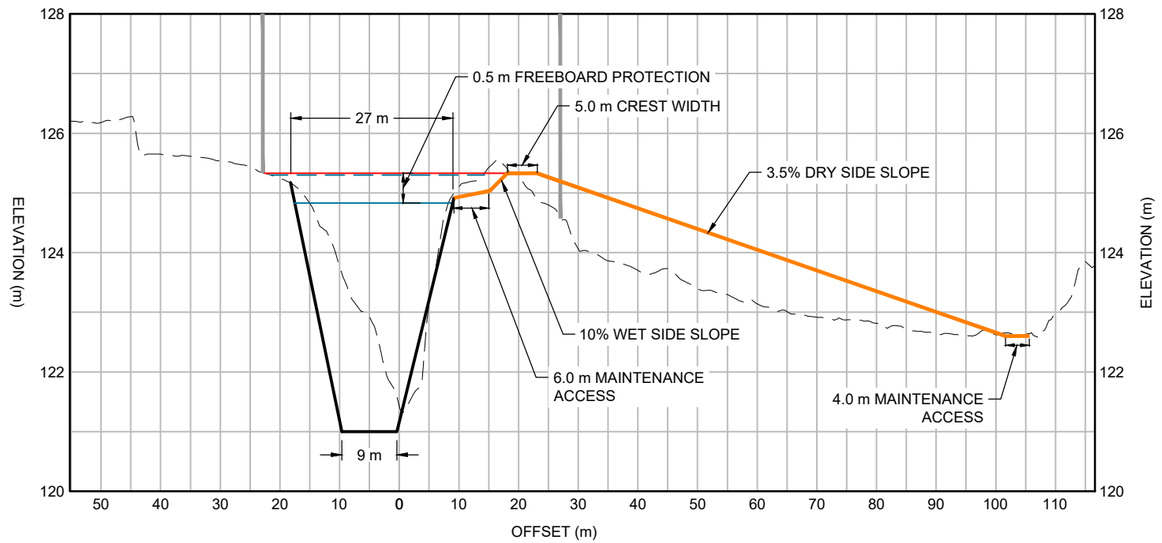
CITY OF MISSISSAUGA

DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

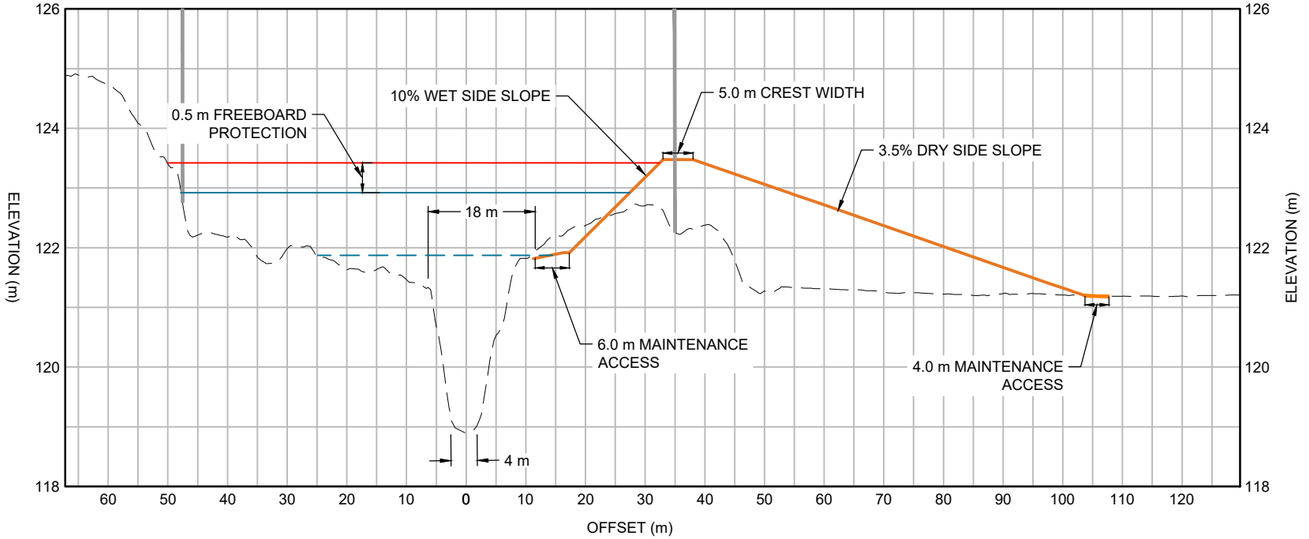
OPTION 3
FLOOD CONTAINMENT
CONCEPTUAL CROSS-SECTIONS

DATE:	TECHNICAL:	REVIEWER:	DRAWN:
AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
24603-531	B	3-3



3 Section
3-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100



4 Section
3-1
HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

LEGEND

- EXISTING THALWEG
- DESIGN THALWEG
- EXISTING REGIONAL FLOOD WATER LEVEL
- DESIGN REGIONAL FLOOD WATER LEVEL
- PROPERTY BOUNDARY

NOTES:
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CITY OF MISSISSAUGA

DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 3
FLOOD CONTAINMENT
CONCEPTUAL CROSS-SECTIONS

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AUGUST 2020	A.DOHERTY	S.BRAUN	K.WEILER

PROJECT:	REVISION:	DRAWING:
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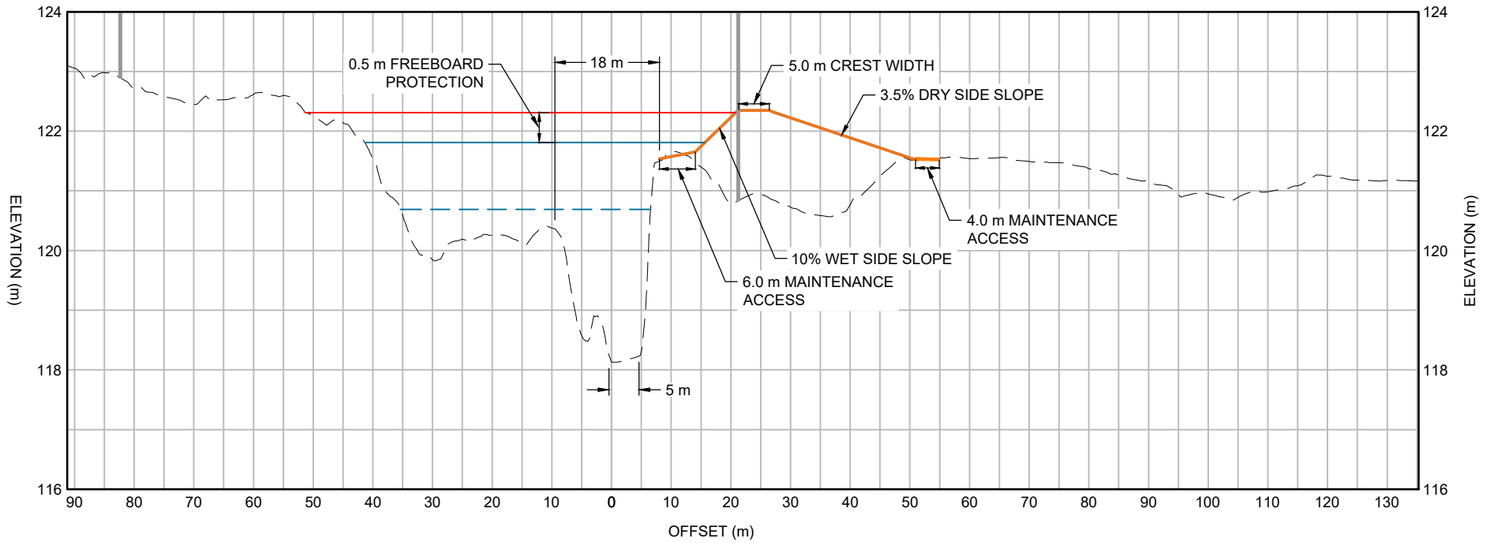

LEGEND

- EXISTING GROUND
- CHANNEL CONVEYANCE IMPROVEMENTS
- EXISTING REGIONAL WATER LEVEL
- DESIGN REGIONAL WATER LEVEL
- PROPERTY BOUNDARY

5 / 3-1 **Section**

HORIZONTAL SCALE 1:1000
VERTICAL SCALE 1:100

NOTES:

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DIXIE-DUNDAS FLOOD MITIGATION PROJECT - PHASE 1 FEASIBILITY STUDY

OPTION 3
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CONCEPTUAL CROSS-SECTIONS

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