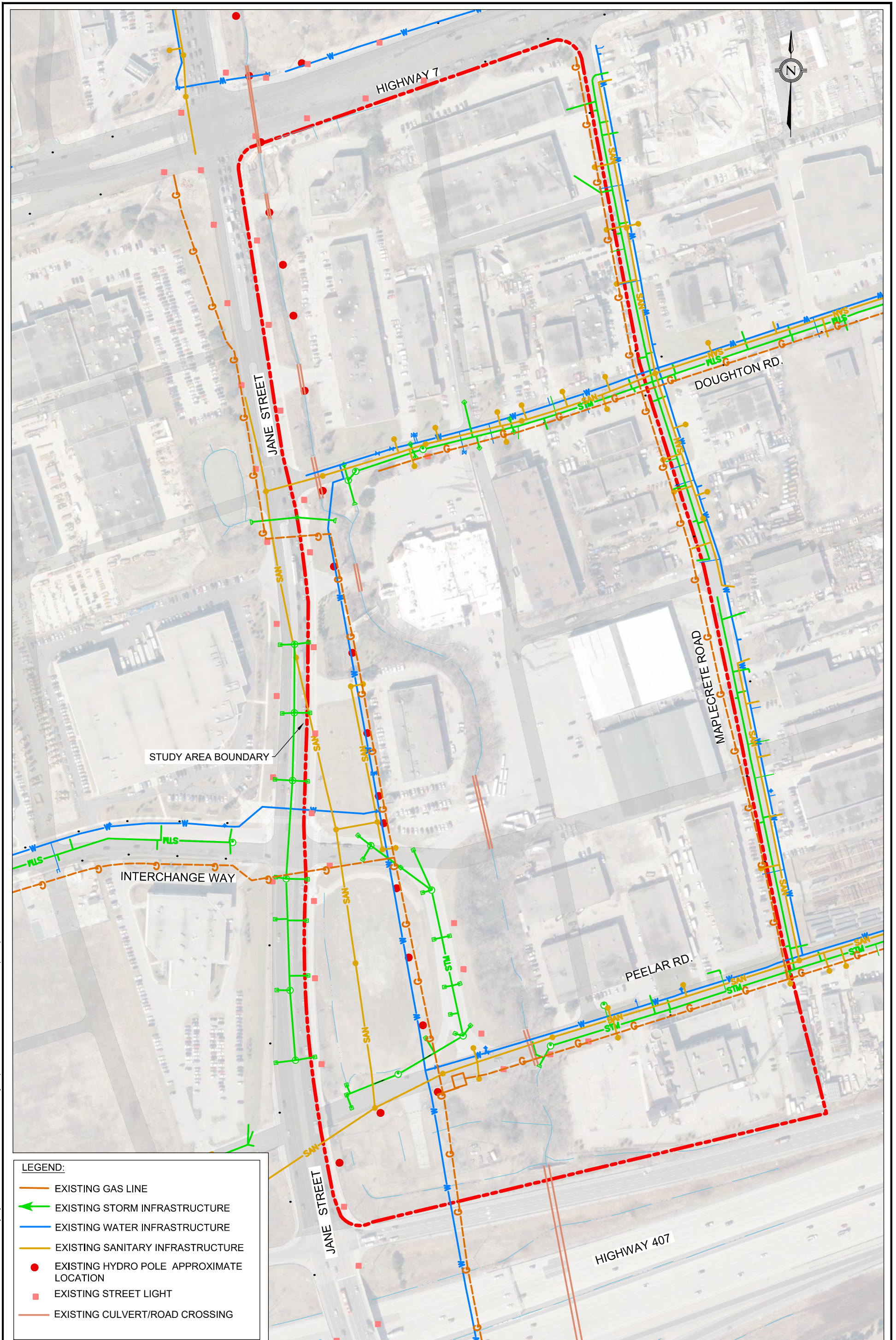


FIGURES



STUDY AREA BOUNDARY

LEGEND:

- EXISTING GAS LINE
- ← EXISTING STORM INFRASTRUCTURE
- EXISTING WATER INFRASTRUCTURE
- EXISTING SANITARY INFRASTRUCTURE
- EXISTING HYDRO POLE APPROXIMATE LOCATION
- EXISTING STREET LIGHT
- EXISTING CULVERT/ROAD CROSSING

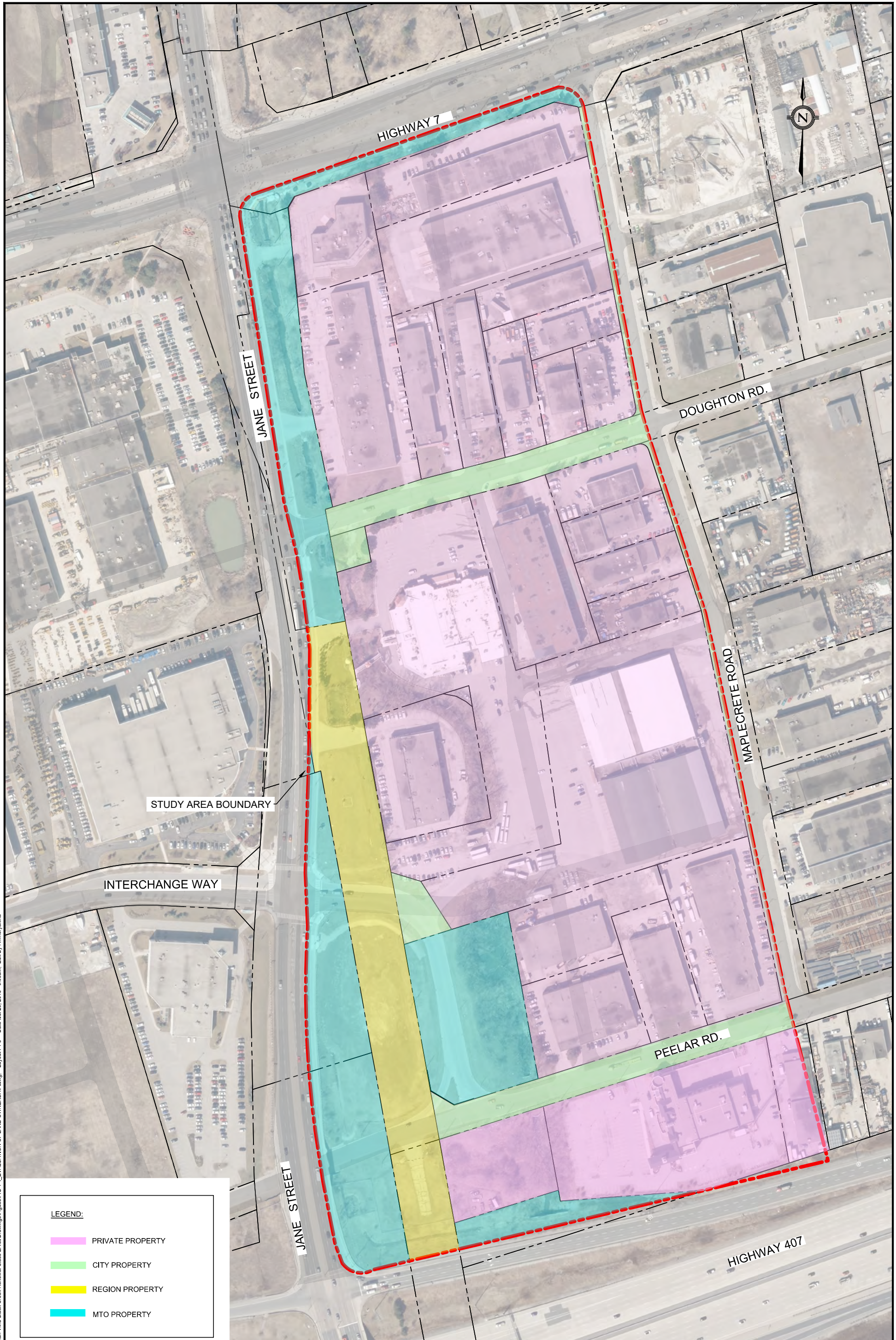
File: G:\Projects\2017\12122 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\FIG 4-3_EVALUATION OF EX-UTILITIES.dwg; Layout: 4-4 Date: Jul 20, 2018 - 8:26am; Edit By: mmoryakina

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f: 905.738.0065

**VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
EXISTING UTILITIES**

SCALE:	1:2500
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
DRAWN BY:	M.M.
CHECKED BY:	S.H.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	4-4



STUDY AREA BOUNDARY

INTERCHANGE WAY

JANE STREET

HIGHWAY 7

DOUGHTON RD.

MAPLECRETE ROAD

PEELAR RD.

HIGHWAY 407

LEGEND:

- PRIVATE PROPERTY
- CITY PROPERTY
- REGION PROPERTY
- MTO PROPERTY

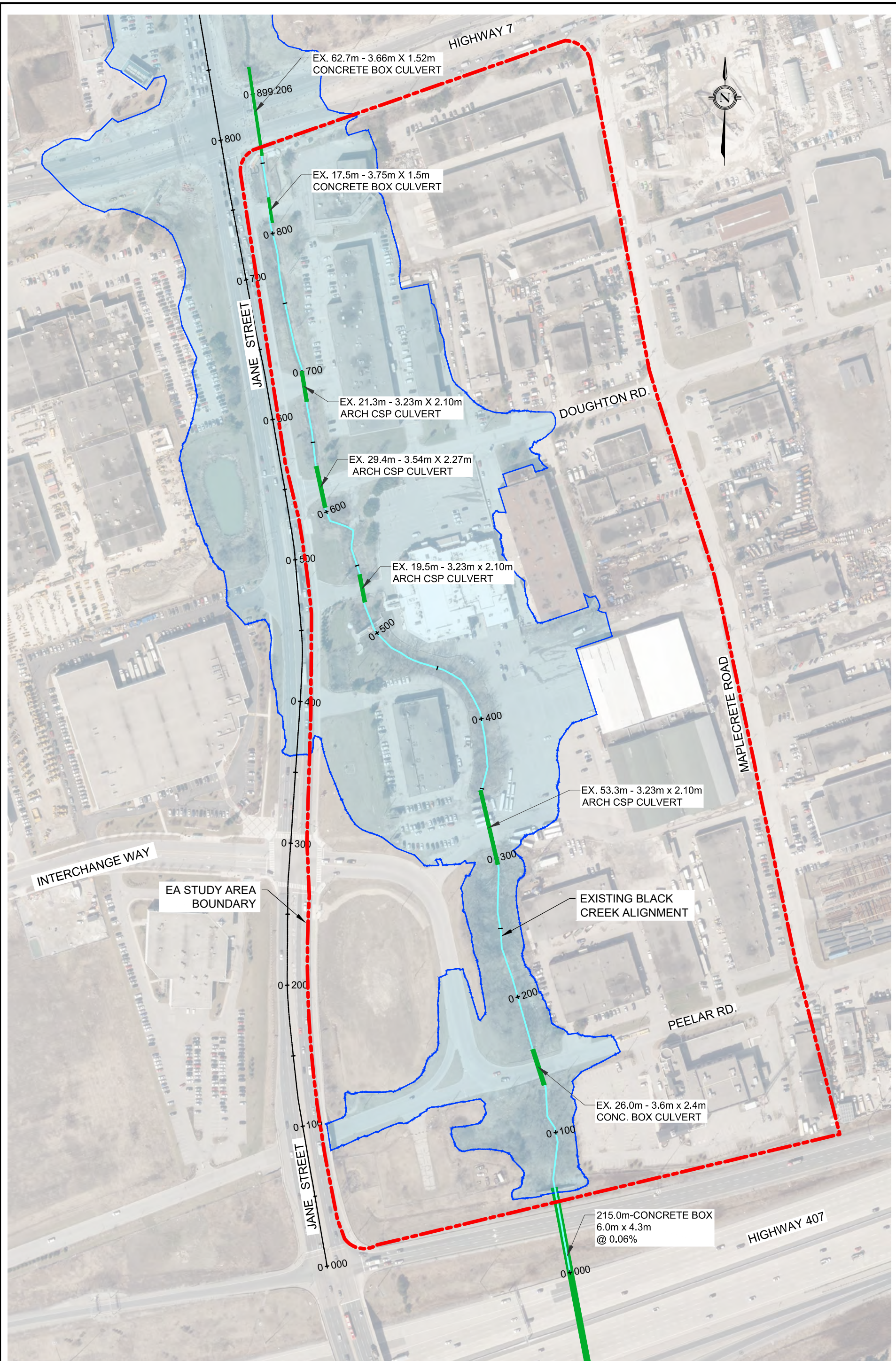


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**VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
EXISTING LAND OWNERSHIP**

SCALE:	1:2500
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
CHECKED BY:	S.H.
DRAWN BY:	M.M.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	4-5



File: G:\Projects\2017\12122 - Vaughan VMC Black Creek Renewal Class EA.s. Drawings\Figures\FIG 4-6_4-7_EXISTING FLOODLINE P&P.dwg. Layout: 4-6 Date: Jul 20, 2018 - 9:06am. Edit By: mmoryakina



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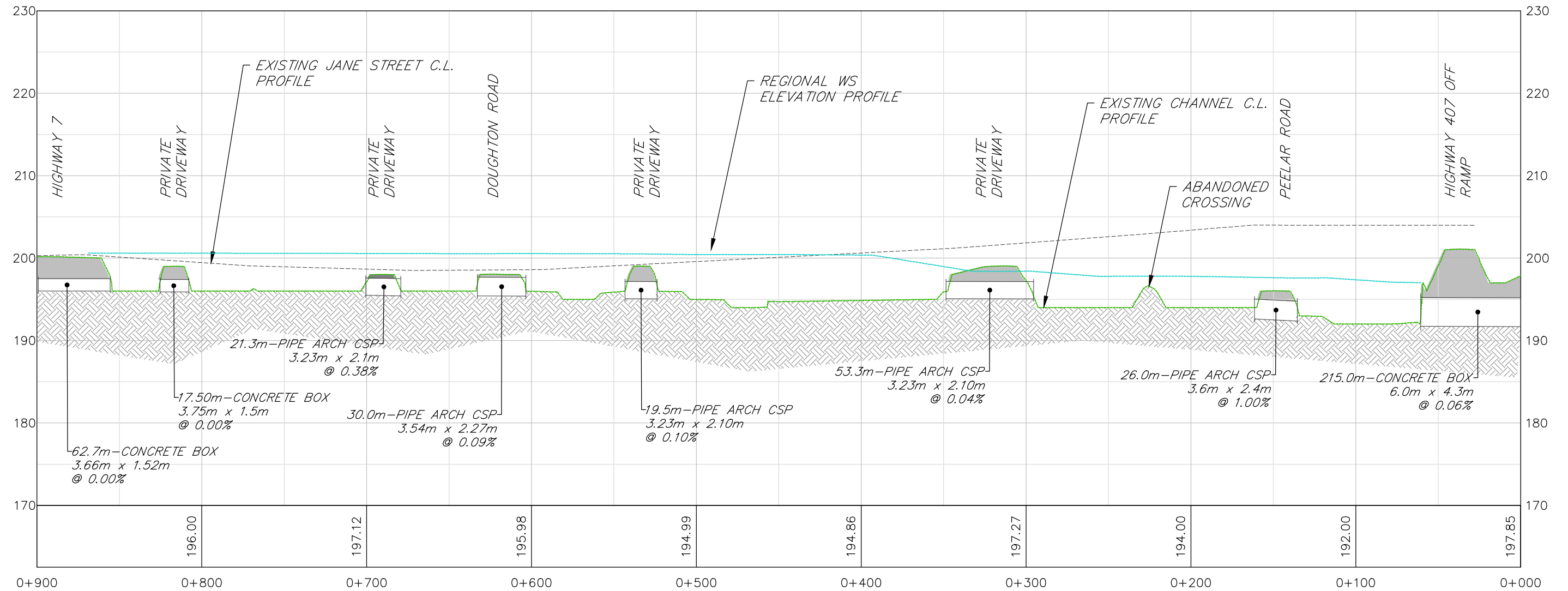
VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA

EXISTING FLOODLINE

SCALE:	1:2500
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
DRAWN BY:	M.M.
CHECKED BY:	S.H.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	4-6

File: G:\Projects\2012\12122 - Vaughan VMC Black Creek Renewal Class EA\5. Drawings\Figures\Fig 4-6, 4-7_EXISTING FLOOD LINE P&P.dwg. Date: Jul 20, 2018 - 9:08am. Edit By: mmoyakina

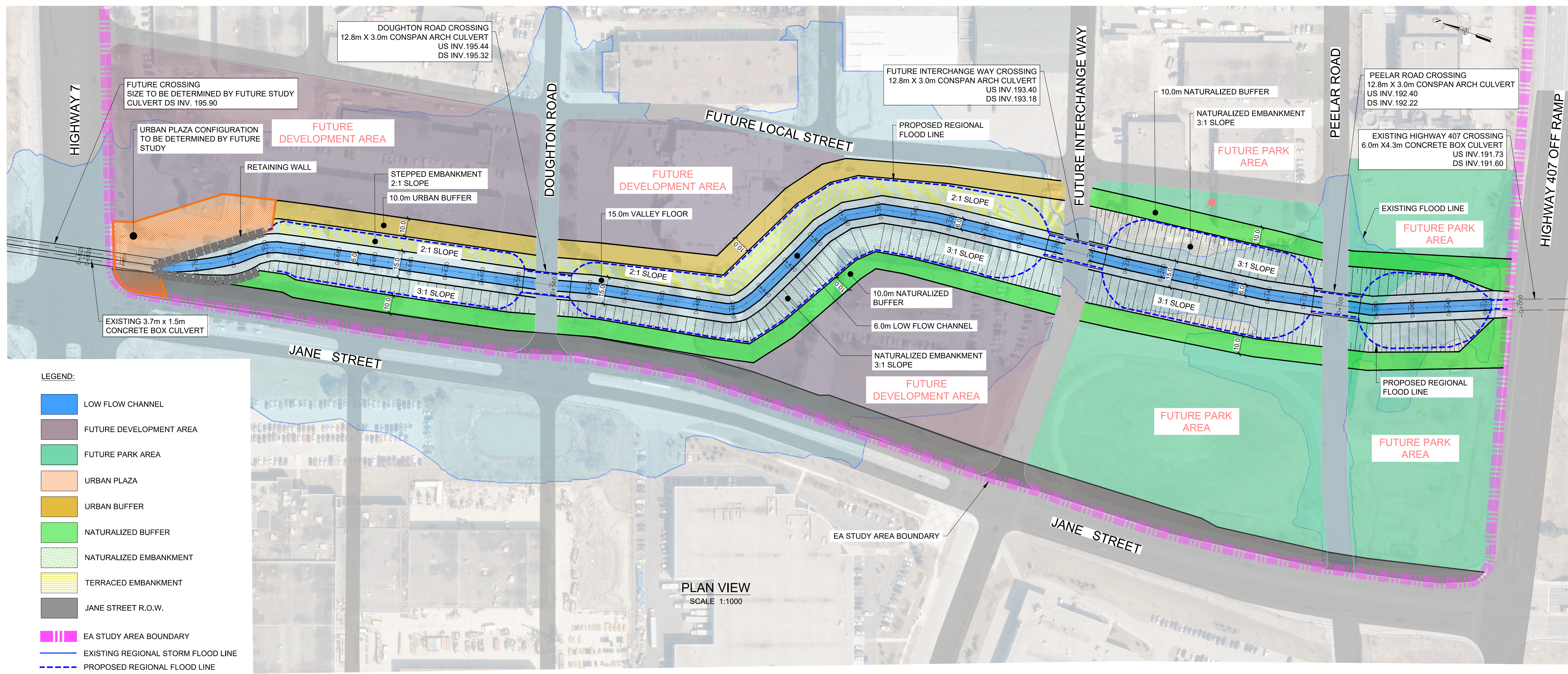


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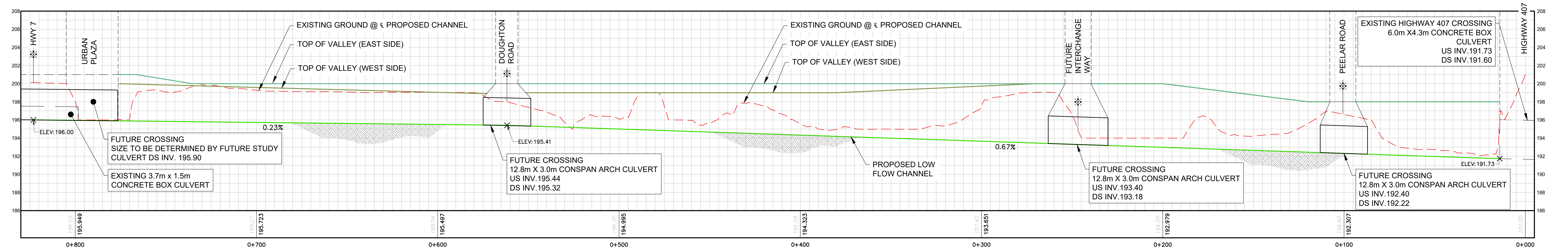
**VAUGHAN VMC BLACK CREEK
RENEWAL CLASS EA**

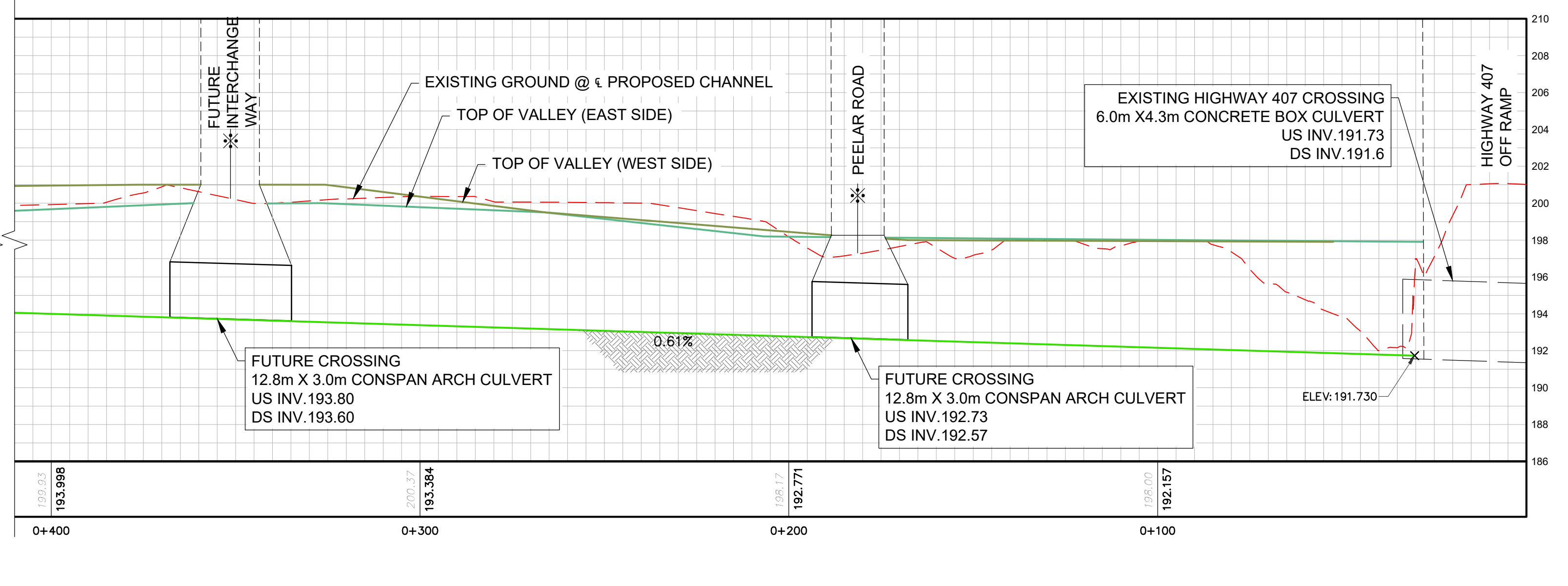
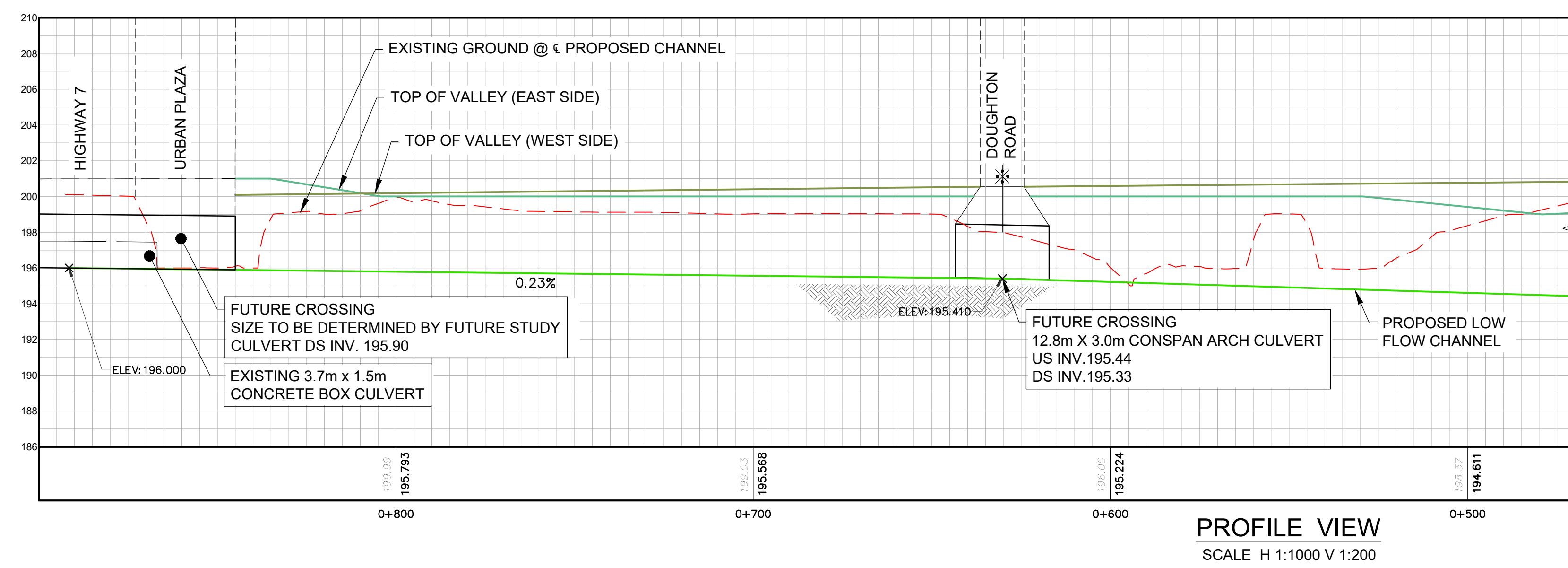
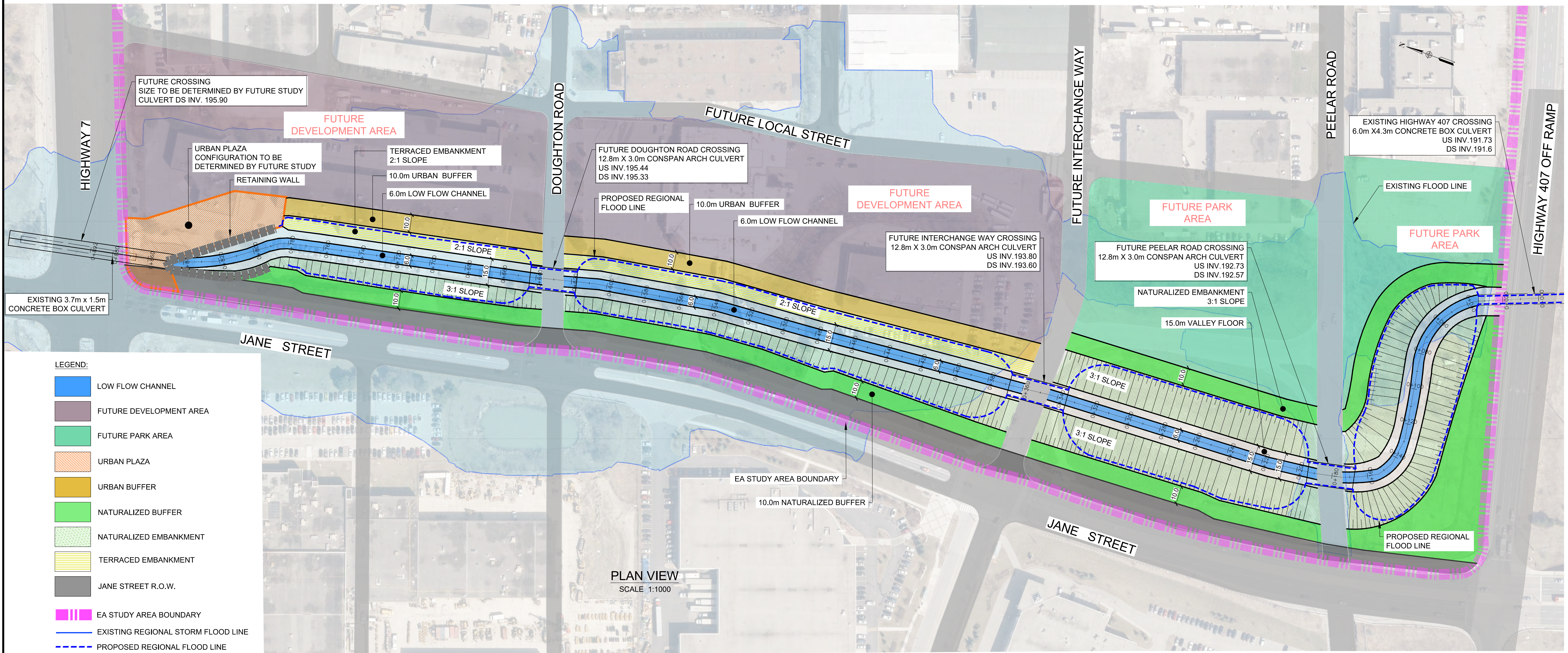
EXISTING CHANNEL PROFILE

SCALE: H 1:250 V 1:50	PROJECT No. 12122
DATE: AUGUST 2018	FIGURE No. 4-7
DESIGNED BY: T.D.	DRAWN BY: M.M.
CHECKED BY: S.H.	CHECKED BY:



PLAN VIEW
SCALE 1:1000





File: C:\projects\201812122 - Vaughan VMC Black Creek Renewal Class EA - Design\Figures\Fig 5-2 - Alternative #3.dwg Layout: 5-2 PRP Date: Jul 20, 2018 10:54am. EDR By: mmopolshan

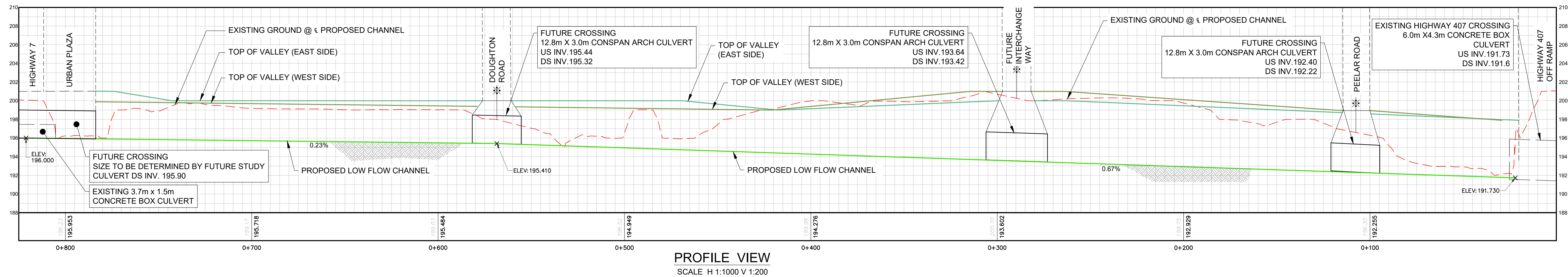
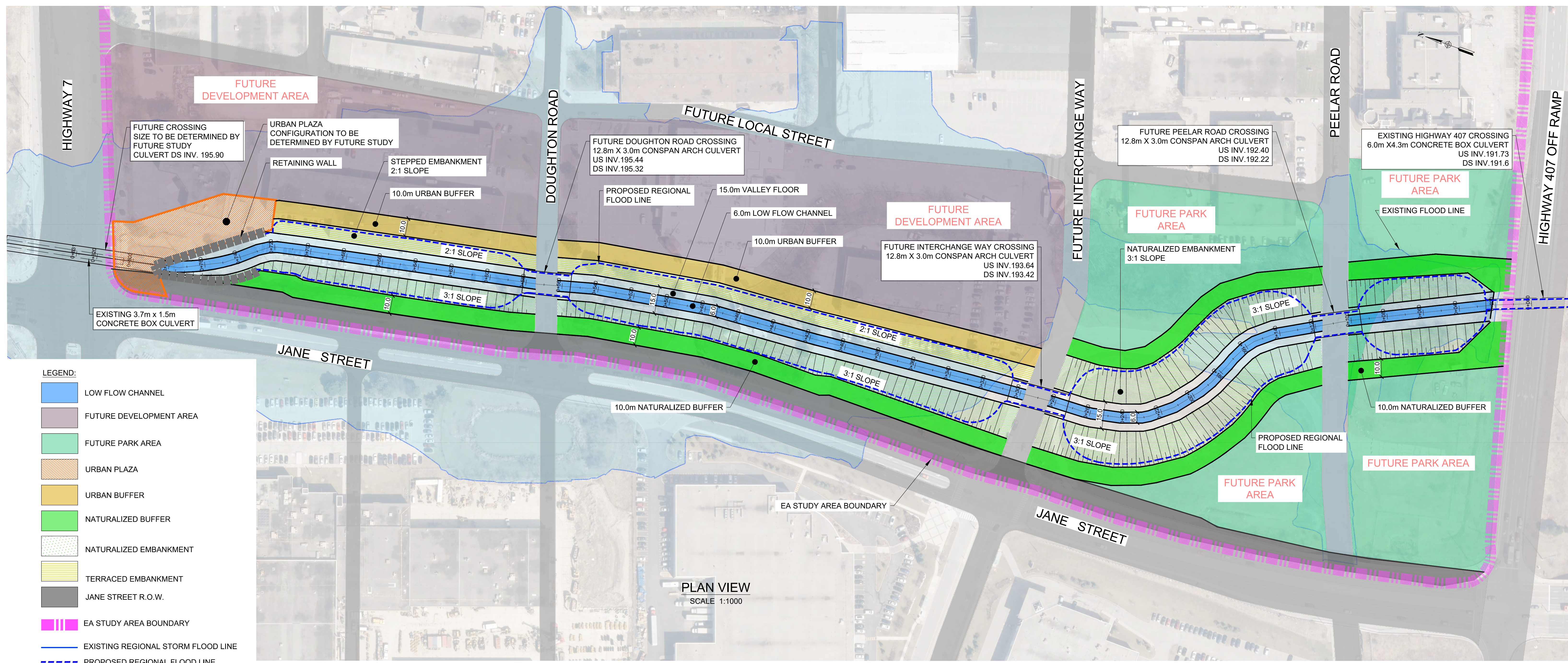
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f: 905.738.0065

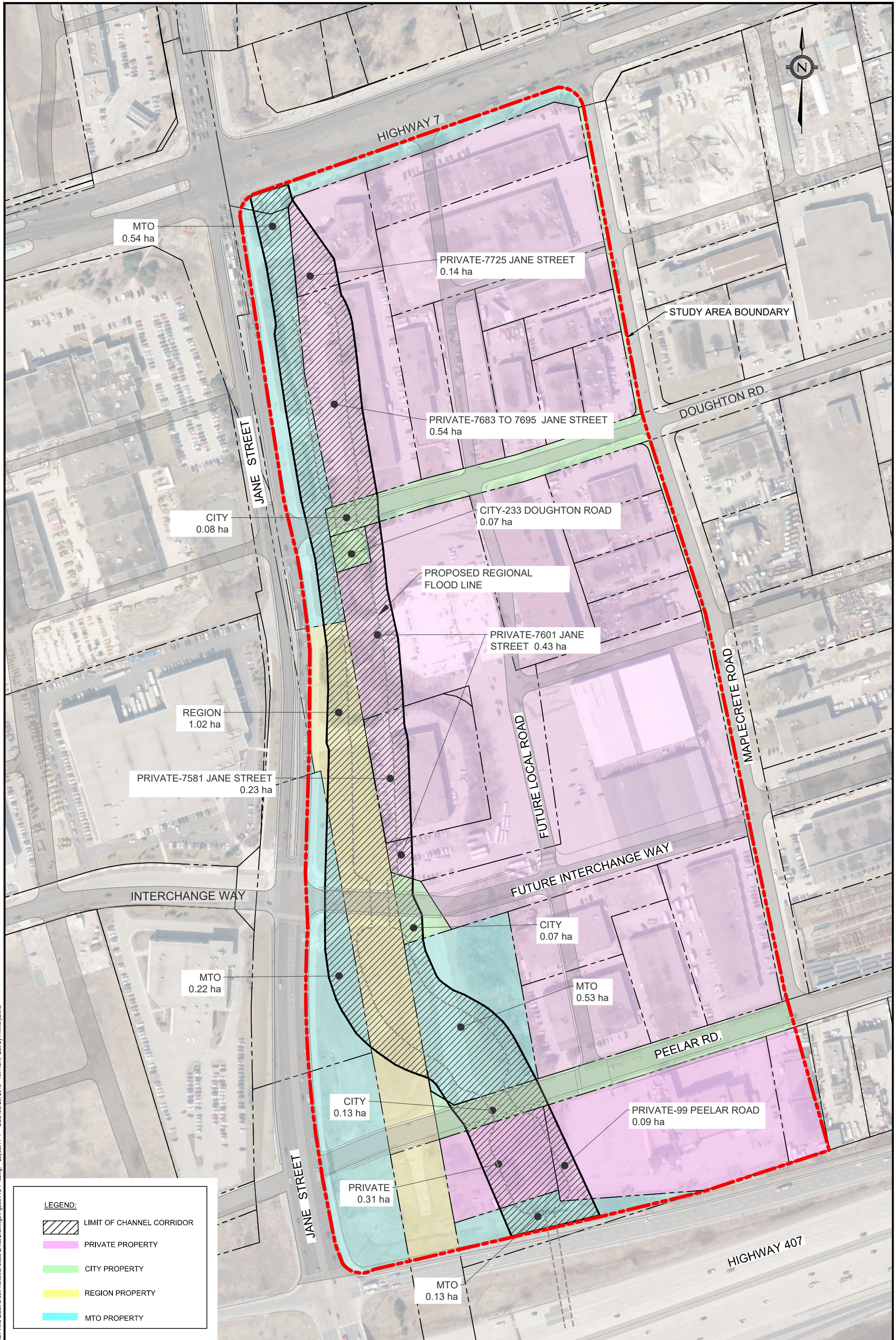
VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA

ALTERNATIVE #3
JANE STREET ALIGNMENT

SCALE: AS SHOWN	PROJECT No. 12122
DATE: AUGUST 2018	FIGURE No. 5-2
DESIGNED BY: T.D.	DRAWN BY: M.M.
CHECKED BY: S.H.	CHECKED BY:



File: C:\projects\20181212 - Vaughan VMC Black Creek Renewal Class EA - Design\Figures\Fig 5-3 Alternative #4.dwg Layout: 5-3 PRP Date: Jul 20, 2018 10:38am. EDR By: mmopolan



MTO
0.54 ha

PRIVATE-7725 JANE STREET
0.14 ha

STUDY AREA BOUNDARY

PRIVATE-7683 TO 7695 JANE STREET
0.54 ha

CITY
0.08 ha

CITY-233 DOUGHTON ROAD
0.07 ha

PROPOSED REGIONAL
FLOOD LINE

PRIVATE-7601 JANE
STREET 0.43 ha

REGION
1.02 ha

PRIVATE-7581 JANE STREET
0.23 ha

INTERCHANGE WAY

FUTURE LOCAL ROAD

MAPLECRETE ROAD

FUTURE INTERCHANGE WAY

MTO
0.22 ha

CITY
0.07 ha

MTO
0.53 ha

CITY
0.13 ha

PRIVATE-99 PEELAR ROAD
0.09 ha

JANE STREET

PRIVATE
0.31 ha

MTO
0.13 ha

PEELAR RD.

HIGHWAY 407

LEGEND:

- LIMIT OF CHANNEL CORRIDOR
- PRIVATE PROPERTY
- CITY PROPERTY
- REGION PROPERTY
- MTO PROPERTY



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**VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
PROPERTY REQUIREMENTS**

SCALE: 1:2500

DATE: AUGUST 2018

DESIGNED BY: T.D.

DRAWN BY: M.M.

CHECKED BY: S.H.

CHECKED BY:

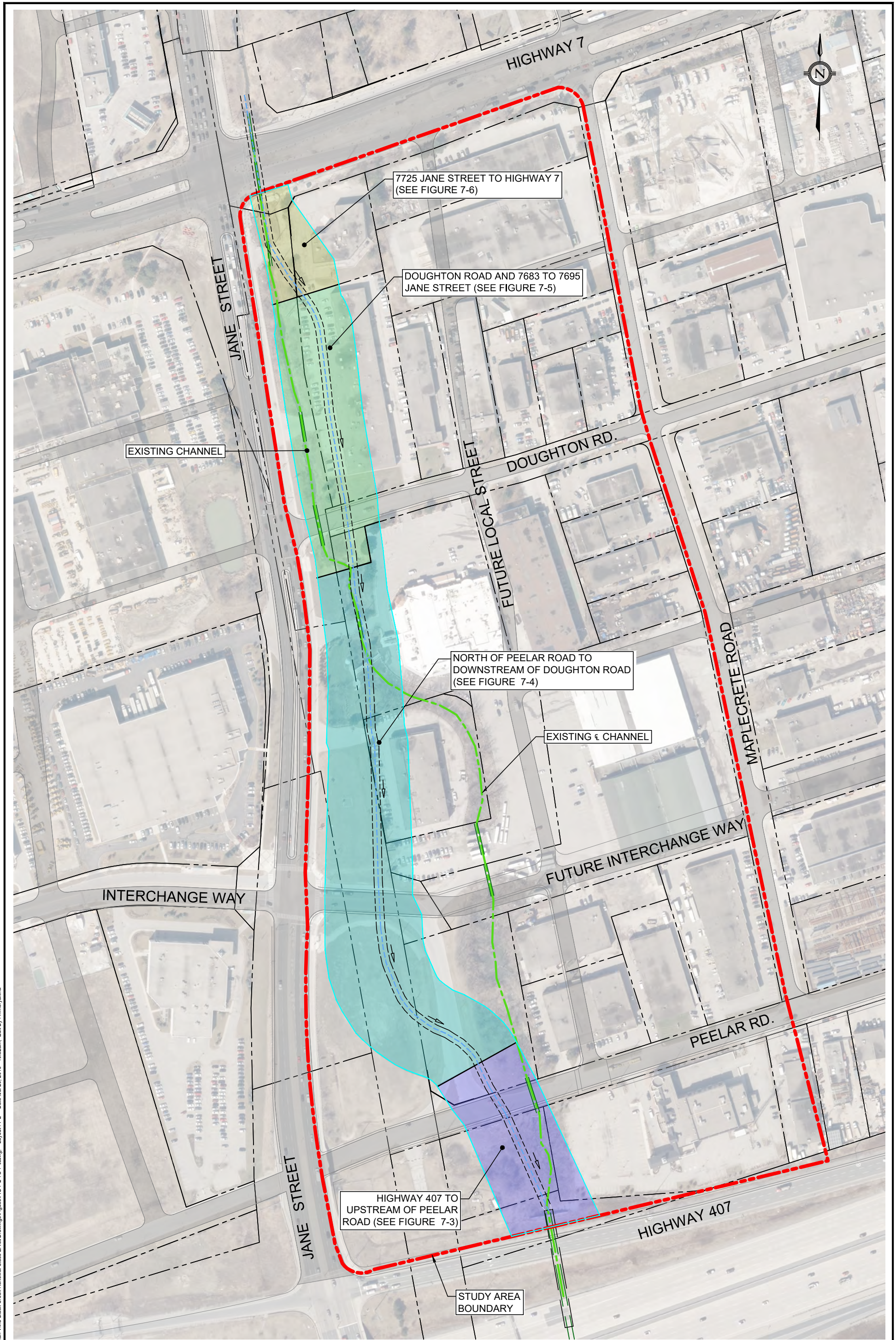
PROJECT No.

12122

FIGURE No.

7-1

File: G:\Projects\2012\12122 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\Fig 7-1.dwg, Layout: 7-1 Date: Jul 20, 2018 - 10:41am, Edit By: mmoyakina



File: G:\Projects\2017\12122 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\Fig 7-2 TO 7-6.dwg Layout: 7-2 Date: Jul 20, 2018 - 10:52am. Edit By: rmmomyakina

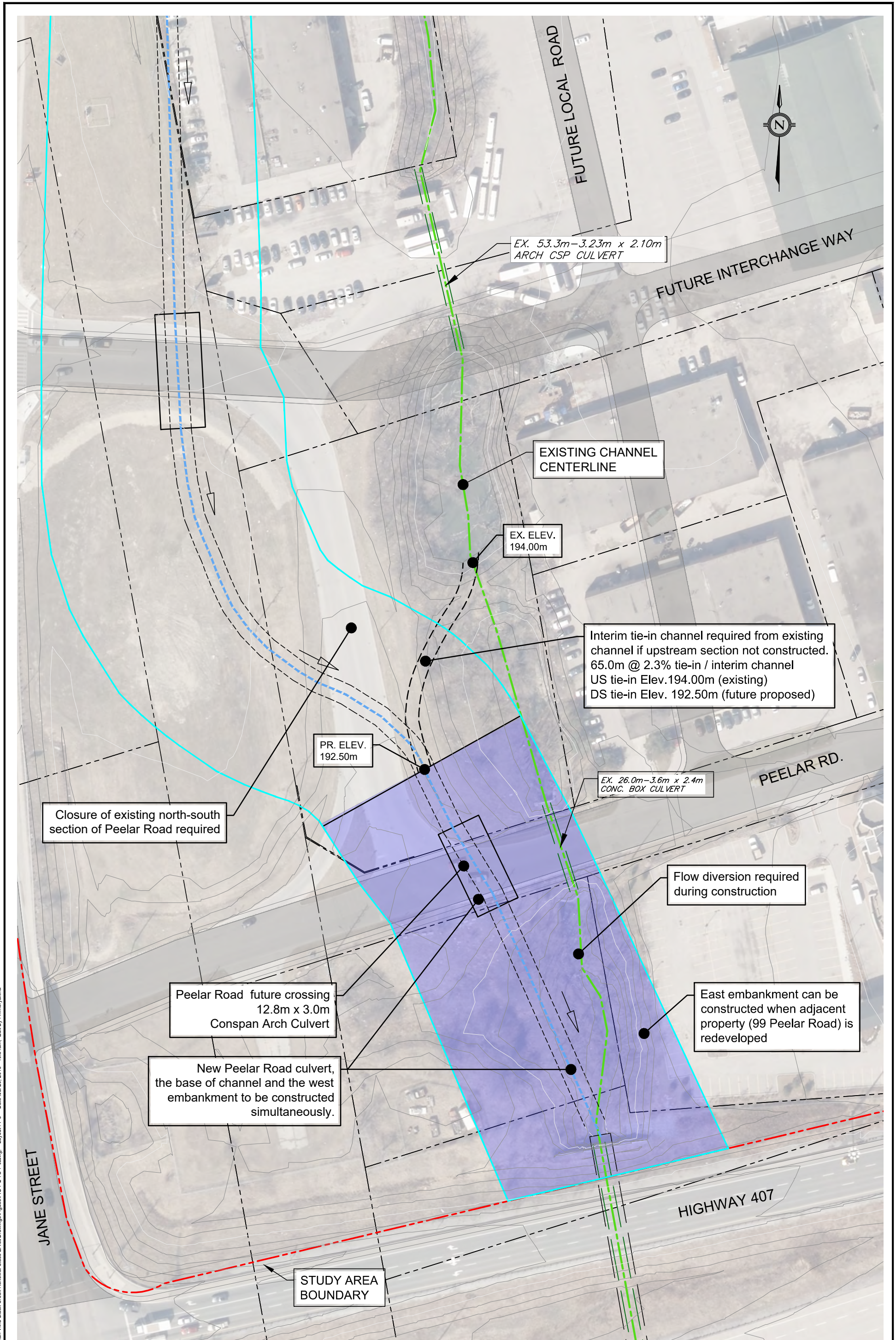
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**VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
CONSTRUCTION STAGING/PHASING
FOR NEW CHANNEL CORRIDOR**

SCALE:	1:2500
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
DRAWN BY:	M.M.
CHECKED BY:	S.H.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	7-2



Closure of existing north-south section of Peelar Road required

EX. 53.3m-3.23m x 2.10m ARCH CSP CULVERT

EXISTING CHANNEL CENTERLINE

EX. ELEV. 194.00m

Interim tie-in channel required from existing channel if upstream section not constructed.
65.0m @ 2.3% tie-in / interim channel
US tie-in Elev. 194.00m (existing)
DS tie-in Elev. 192.50m (future proposed)

PR. ELEV. 192.50m

EX. 26.0m-3.6m x 2.4m CONC. BOX CULVERT

Flow diversion required during construction

Peelar Road future crossing 12.8m x 3.0m Conspan Arch Culvert

East embankment can be constructed when adjacent property (99 Peelar Road) is redeveloped

New Peelar Road culvert, the base of channel and the west embankment to be constructed simultaneously.

STUDY AREA BOUNDARY

File : G:\Projects\2017\12122 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\FIG 7-2 TO 7-6.dwg Layout: 7-3 Date: Jul 20, 2018 - 10:51 am. Edit By: rmmoryakina

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**VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
CONSTRUCTION STAGING/PHASING
FOR HWY 407 TO UPSTREAM OF PEELAR ROAD**

SCALE:	1:1000
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
DRAWN BY:	M.M.
CHECKED BY:	S.H.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	7-3

EX. 62.7m-3.66m x 1.52m
CONC. BOX CULVERT

HIGHWAY 7



EX. 17.5m-3.75m x 1.50m
CONCRETE BOX CULVERT

JANE STREET

EX. ELEV.
195.90m

PR. ELEV.
195.72m

EXISTING CHANNEL

EX. 21.3m-3.23m x 2.10m
ARCH CSP CULVERT

Interim tie-in channel required from existing channel if upstream section not constructed
60.0m @ 0.3% tie-in / interim channel
US tie-in Elev. 195.90m (existing)
DS tie-in Elev. 195.72m (future proposed)

Flow diversion required during construction

Future Doughton Road Crossing
12.8m x 2.44m
Conspan Arch Culvert

FUTURE LOCAL STREET

DOUGHTON RD.

EX. 29.4m-3.54m x 2.27m
ARCH CSP CULVERT

PR. ELEV.
195.30m

Short interim tie-in channel required from existing channel if downstream section not constructed

EX. ELEV.
195.25m

EX. 19.5m-3.23m x 2.10m
ARCH CSP CULVERT

STUDY AREA BOUNDARY

JANE STREET

File : G:\Projects\2017\1212 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\FIG 7-2 TO 7-6.dwg Layout : 7-5 Date : Jul 20, 2018 - 10:47am. Edit By : rmonoyakina

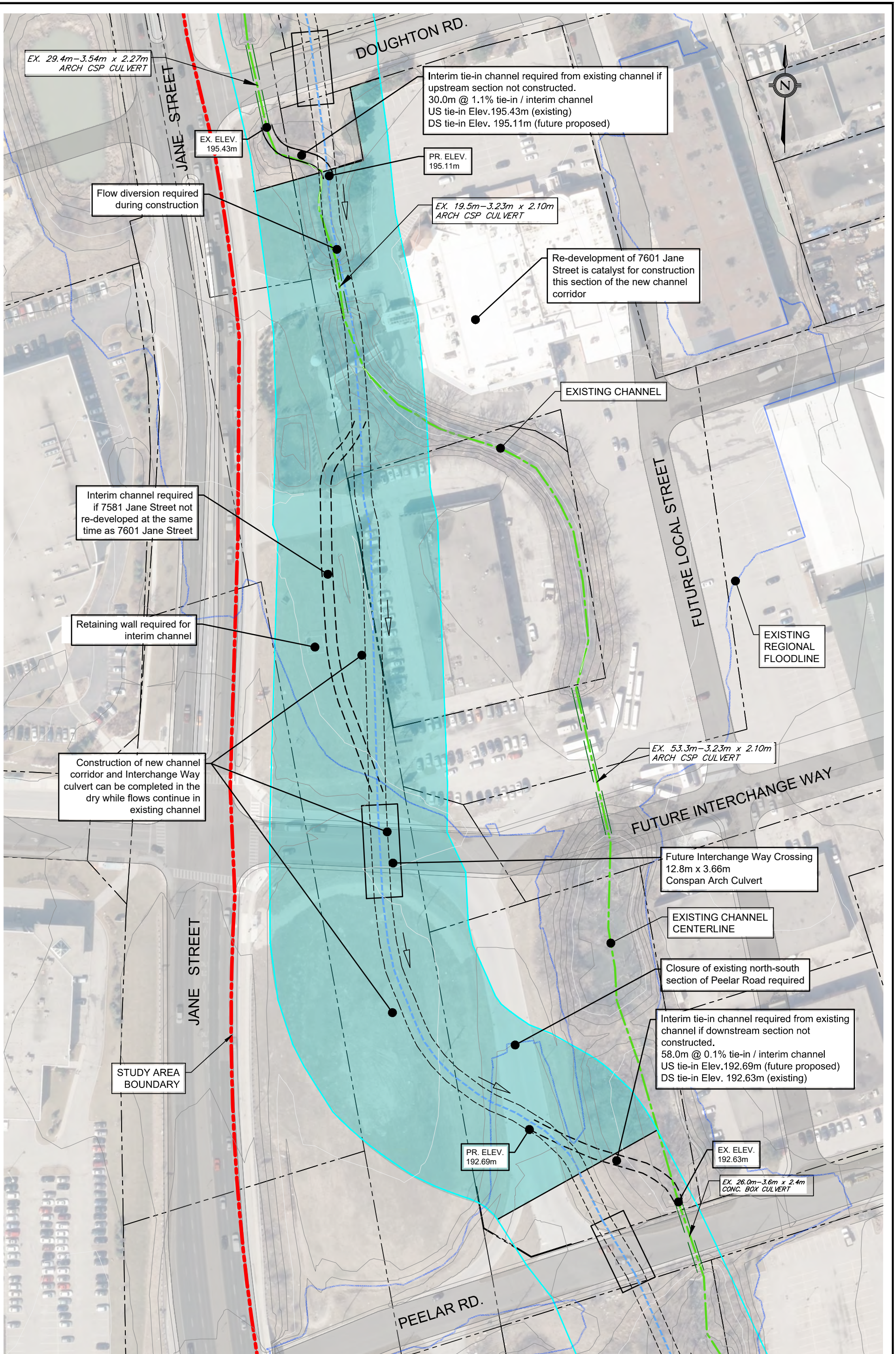


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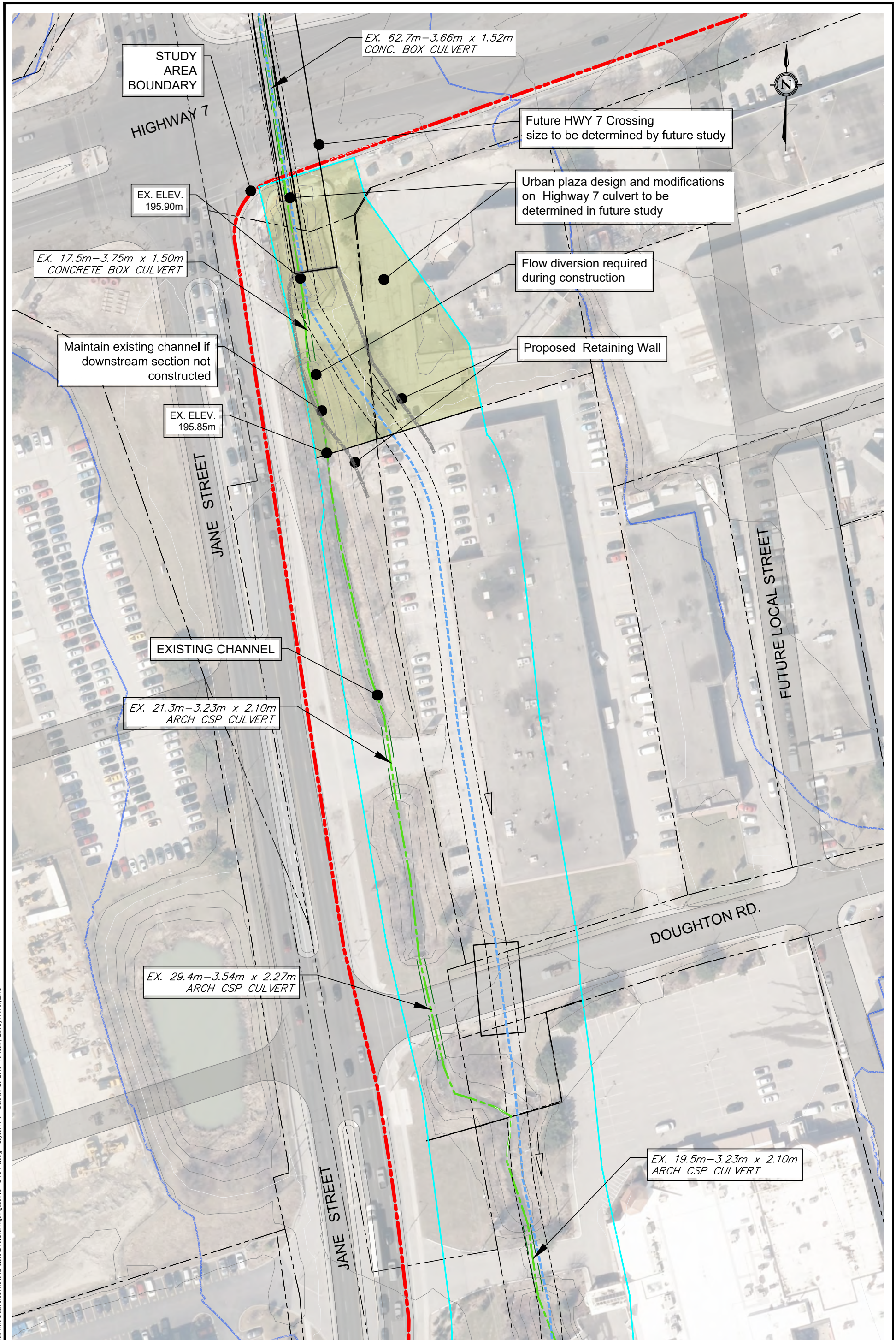
VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
CONSTRUCTION STAGING/PHASING FOR DOUGHTON
ROAD AND 7683 TO 7695 JANE STREET

SCALE:	1:1000
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
DRAWN BY:	M.M.
CHECKED BY:	S.H.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	7-5



File: G:\Projects\2017\1212 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\Fig 7-2 TO 7-6.dwg. Layout: 7-4 Date: Jul 20, 2018 - 10:49am. Edit By: rmmoyakina



File: G:\Projects\2017\1212 - Vaughan VMC Black Creek Renewal Class EA\6. Drawings\Figures\FIG 7-2 TO 7-6.dwg Layout: 7-6 Date: Jul 20, 2018 - 10:46am. Edit By: rmonoykina

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**VAUGHAN VMC BLACK CREEK RENEWAL CLASS EA
CONSTRUCTION STAGING/PHASING FOR 7725 JANE
STREET TO HIGHWAY 7**

SCALE:	1:1000
DATE:	AUGUST 2018
DESIGNED BY:	T.D.
DRAWN BY:	M.M.
CHECKED BY:	S.H.
CHECKED BY:	

PROJECT No.	12122
FIGURE No.	7-6