

LEGEND:

- CONSTRUCTED SHERIDAN DEVELOPMENT
- PROPOSED BAYFIELD DEVELOPMENT
- PROPOSED NORTHWEST CONFEDERATION DEVELOPMENT
- PROPOSED DEVINS DEVELOPMENT
- EXISTING DEVELOPMENT

TRIB. ID
 POPULATION
 AREA (HA)

1200mm DIA. SANITARY MANHOLE

SANITARY SEWER
 200mm DIA. PVC @ 0.50%

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
 UTM ZONE 17, NAD83 (CSRS) (2010.0)
 DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999990.
 ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB.
 ELEVATION NOTE
 ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 00119540598F
 ELEVATION=286.735m, No. 02018968361 ELEVATION=252.480m
 LOCAL BENCHMARK
 CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
 ELEVATION=271.20m
 ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

REVISION	BLOCK	DATE	APPR. BY
2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.

**RESIDENTIAL SUBDIVISION DEVELOPMENT
 2147925 ONTARIO INC.**



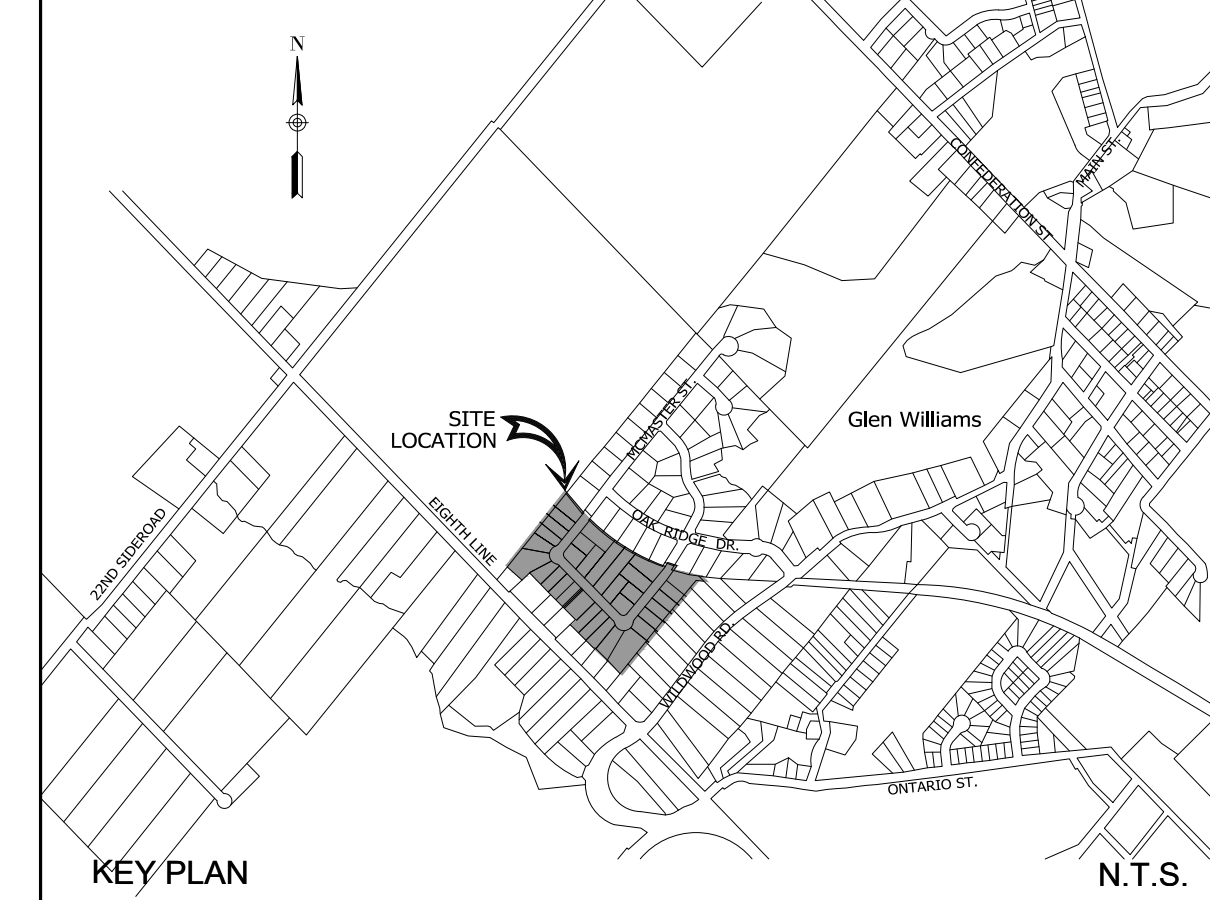
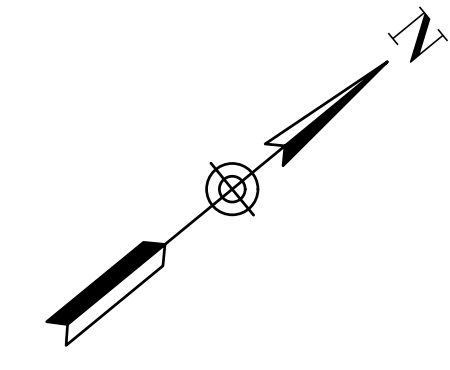
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 CONSULTING ENGINEERS & PROJECT MANAGERS
 350 Creditstone Road, Unit 200 P: (905) 695-2096
 Concord, Ontario L4K 3Z2 F: (905) 695-2099



**FIGURE 1 - GLEN WILLIAMS PUMP
 STATION SANITARY TRIBUTARY PLAN**

DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-01	CITY FILE:
SCALE HOR 1:6000	Sheet: 01 OF 18	REGION FILE:

Vacant Lands



KEY PLAN

PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND:

- SANITARY DRAINAGE AREA
- AREA (HA)
- POPULATION
- No. OF UNITS
- PROPOSED SANITARY MANHOLE
- SANITARY SEWER FLOW DIRECTION

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
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ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
LOCAL BENCHMARK
CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
ELEVATION=271.26m
ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

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TOWN OF
HALTON HILLS
Working Together Working for You!

Halton
REGION

**FIGURE 2 - PROPOSED ON SITE
SANITARY TRIBUTARY PLAN**

DESIGNED BY:	M.E.H.	DATE:	MARCH 2021	CHECKED BY:	M.E.H.
DRAWN BY:	A.G./V.B./G.M.	DRAWING NO.:	09-015-02	CITY FILE:	
SCALE:	HOR 1:750	Sheet:	02 OF 18	REGION FILE:	

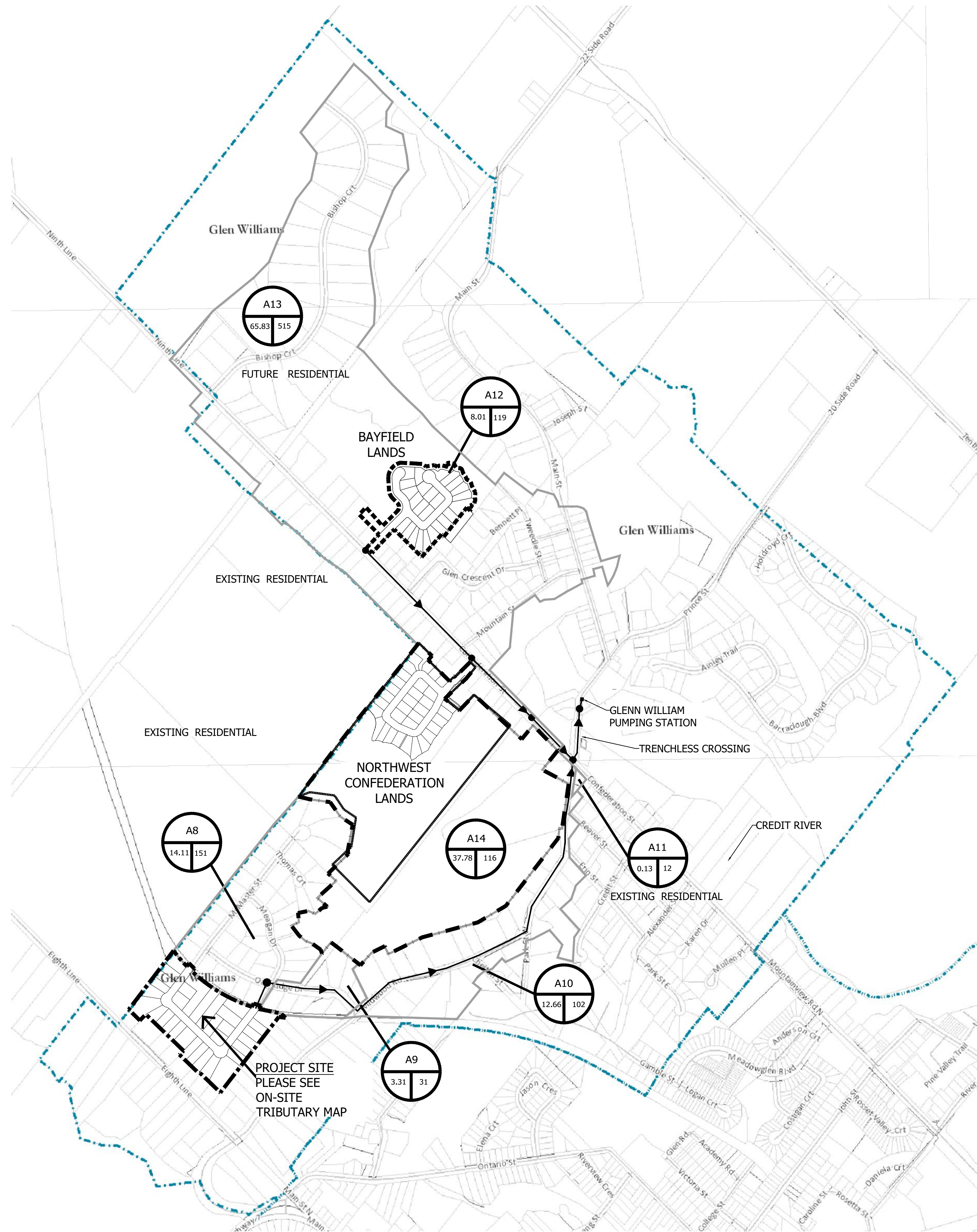


McMASTER STREET (DEDICATED BY REGISTERED PLAN 20M-471)
MEAGAN DRIVE (DEDICATED BY REGISTERED PLAN 20M-471)
OAK RIDGE DRIVE (DEDICATED BY REGISTERED PLAN 20M-471)
STREET 'A'
73.85m-200mm PVC SAN. @ 1.0%
15.09m-200mm PVC SAN. @ 1.0%
94.00m-200mm PVC SAN. @ 1.0%
96.00m-200mm PVC SAN. @ 1.0%
16.99m-200mm PVC SAN. @ 1.0%
44.56m-200mm PVC SAN. @ 1.0%
89.86m-200mm PVC SAN. @ 1.0%
88.04m-200mm PVC SAN. @ 1.0%
94.30m-200mm PVC SAN. @ 0.5%
92.00m-200mm PVC SAN. @ 0.5%

0.513HA 2 7
1.257HA 7 25
1.230HA 10 4 21
1.2915HA 6 21
1.534HA 8 28
0.202HA 1 4
0.418HA 2 7

RESIDENTIAL
Existing Residential
POND BLOCK 33

LOT 1 LOT 2 LOT 3 LOT 4 LOT 5 LOT 6 LOT 7 LOT 8 LOT 9
PART 1 PART 2 PART 3 PART 4 PART 5 PART 6 PART 7 PART 8 PART 9 PART 10 PART 11 PART 12
2 0 R - 3 8 2 4



LEGEND:

- PROPOSED BAYFIELD DEVELOPMENT
 - - - - - PROPOSED NORTHWEST CONFEDERATION DEVELOPMENT
 - PROPOSED DEVINS DEVELOPMENT
 - EXISTING DEVELOPMENT
- TRIB. ID
 POPULATION
 AREA (HA)
- 1200mm DIA. SANITARY MANHOLE
- SANITARY SEWER
 200mm DIA. PVC @ 0.50%

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 ELEVATION NOTE
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 ELEVATION=258.735m, No. 008196583E1 ELEVATION=522.460m
 LOCAL BENCHMARK
 CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
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 ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

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**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

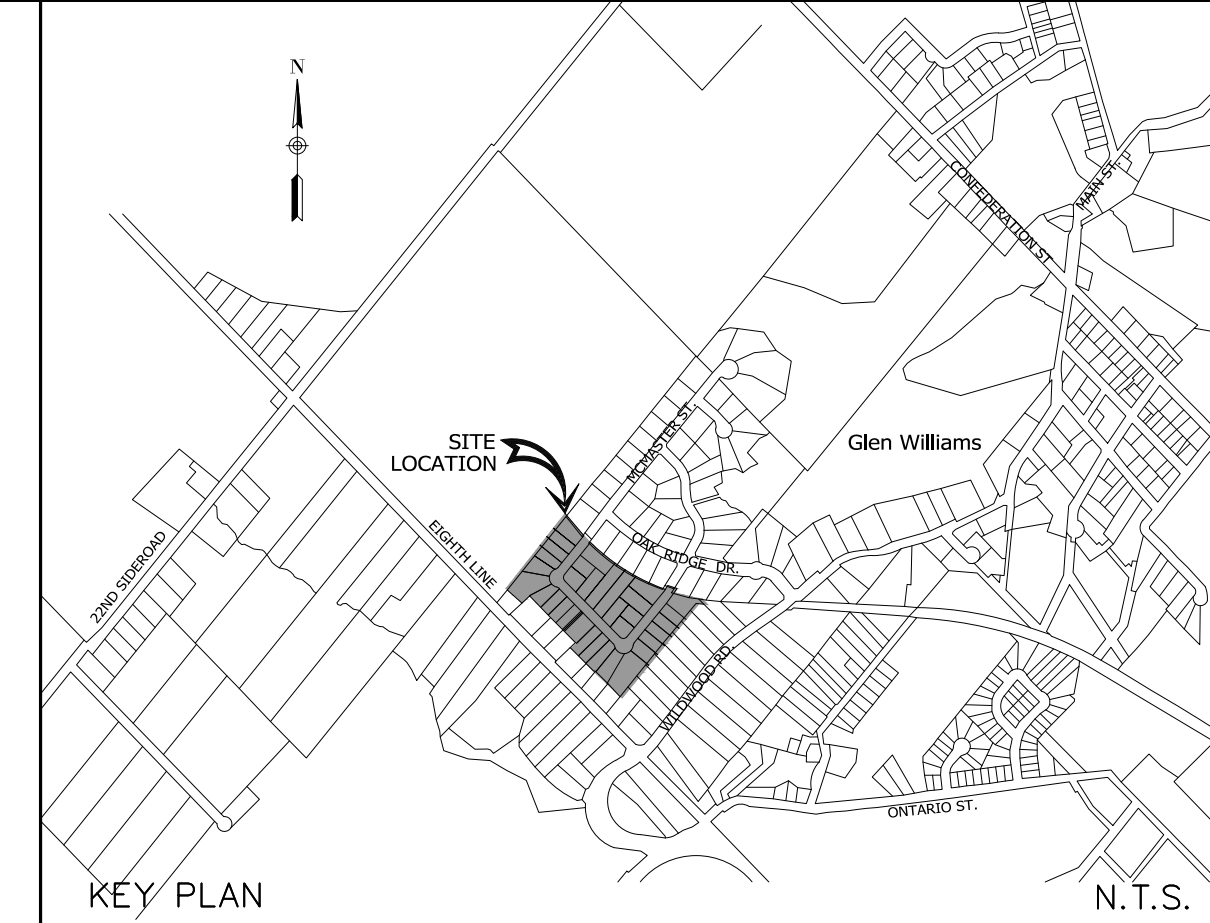
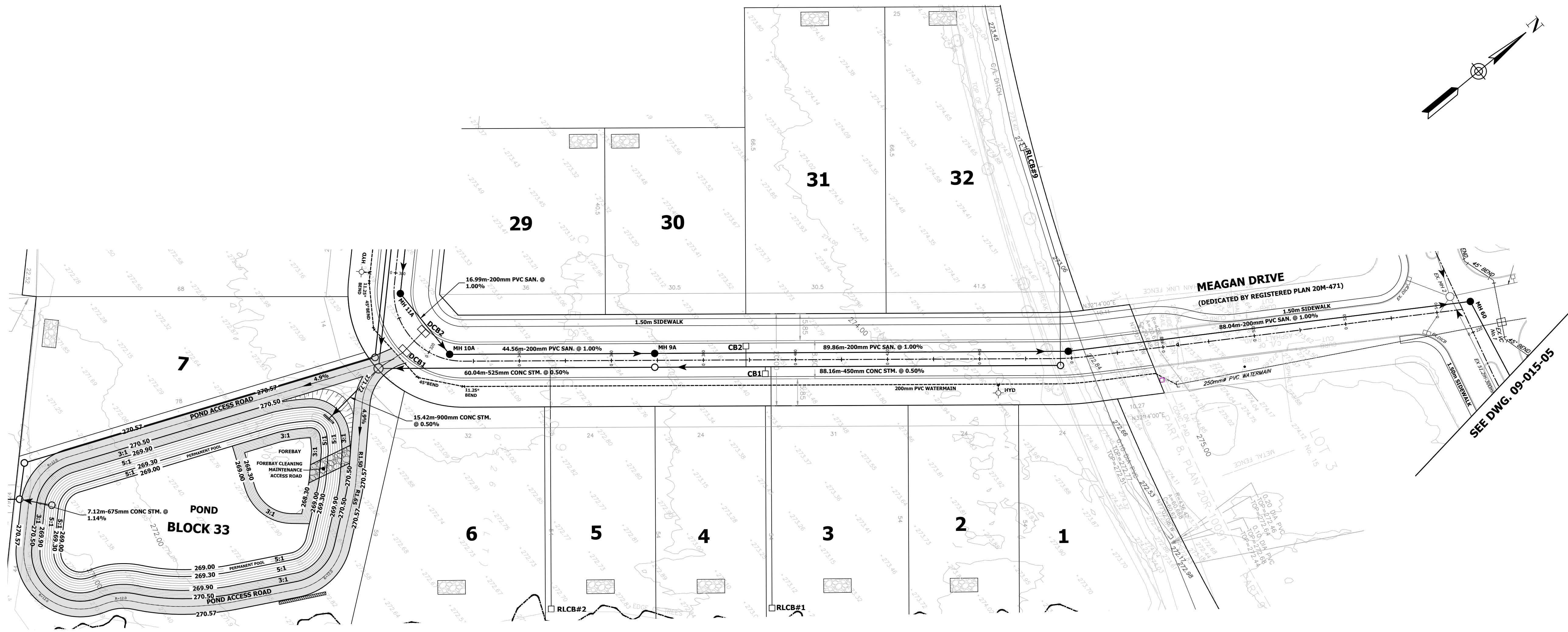


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**FIGURE 3 - PROPOSED EXTERNAL
SANITARY TRIBUTARY PLAN**

DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-03	CITY FILE:
SCALE HOR 1:5000	Sheet: 03 OF 18	REGION FILE:



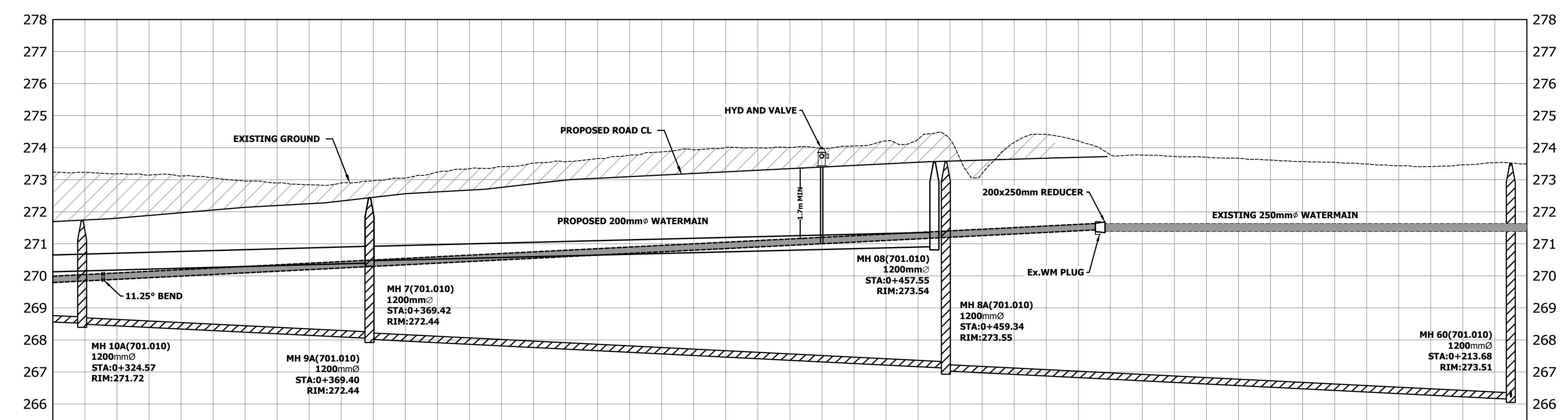
PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

<ul style="list-style-type: none"> 150mm PVC WATERMAIN 100m-200mm PVC SAN @ 1.00% 100m-600mm CONC STM @ 1.00% 100m-900mm CONC STM @ 1.00% 250mm PVC WATERMAIN 200mm PVC WATERMAIN PROPOSED SANITARY SERVICE PROPOSED STORM SERVICE PROPOSED WATER SERVICE AND CURB STOP PROPOSED CENTERLINE/STA 	<ul style="list-style-type: none"> EXISTING WATERMAIN EXISTING STORM EXISTING DITCH INLET CATCHBASIN EXISTING STORM MANHOLE EXISTING WATERMAIN PLUG PROPOSED SANITARY SEWER DIRECTION OF FLOW PROPOSED STORM SEWER DIRECTION OF FLOW PROPOSED STORM SEWER >900mm DIRECTION OF FLOW PROPOSED WATERMAIN PROPOSED SANITARY SERVICE PROPOSED STORM SERVICE PROPOSED WATER SERVICE AND CURB STOP PROPOSED CENTERLINE/STA 	<ul style="list-style-type: none"> LOT LINE PROPOSED SANITARY MANHOLE & NUMBER PROPOSED STORM MANHOLE & NUMBER PROPOSED CATCHBASIN PROPOSED REAR LOT CATCHBASIN PROPOSED DOUBLE CATCHBASIN PROPOSED HEADWALL PROPOSED HYDRANT & VALVE PROPOSED WATER VALVE & BOX
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REVISION	BLOCK	DATE	APPR. BY



SANITARY SEWER INVERT	W268.52 NE268.49	44.56m-200mm PVC SAN. @ 1.00%	SW268.05 NE268.02	89.86m-200mm PVC SAN. @ 1.00%	SW267.12 NE267.03	88.04m-200mm PVC SAN. @ 1.00%	E266.21 SW266.15	SANITARY SEWER INVERT				
STORM SEWER INVERT	NE270.47 SW270.40	60.04m-525mm CONC STM. @ 0.50%	NE270.40 SW270.40	88.16m-450mm CONC STM. @ 0.50%	SW270.01			STORM SEWER INVERT				
STORM SEWER INVERT								STORM SEWER INVERT				
PROPOSED/EXISTING CENTERLINE ELEVATION	271.970 272.116	272.251 272.893	272.621 272.228	272.990 272.567	273.196 272.894	273.396 272.989	273.582 274.259	274.211	273.791	273.543	272.865	PROPOSED/EXISTING CENTERLINE ELEVATION
CENTERLINE CHAINAGE	0+340	0+360	0+380	0+400	0+420	0+440	0+460	0+480	0+500	0+520	0+540	CENTERLINE CHAINAGE

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2147925 ONTARIO INC.**

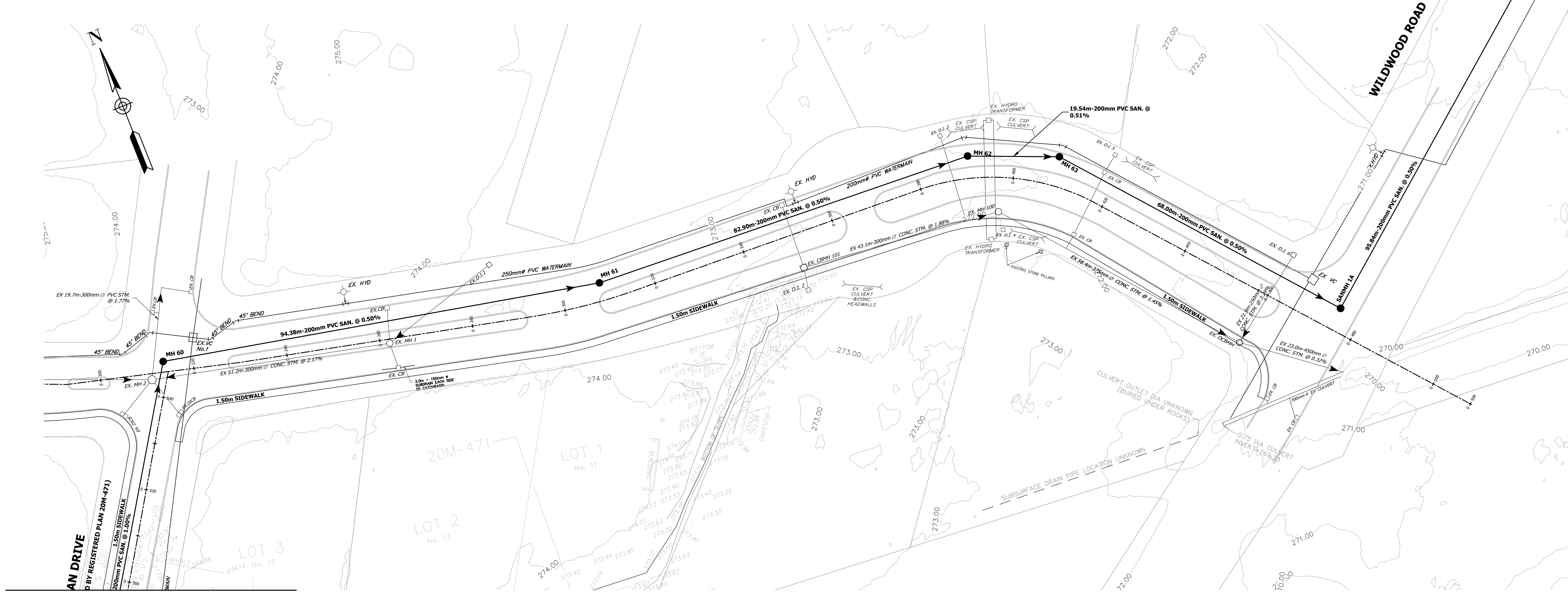
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TOWN OF HALTON HILLS
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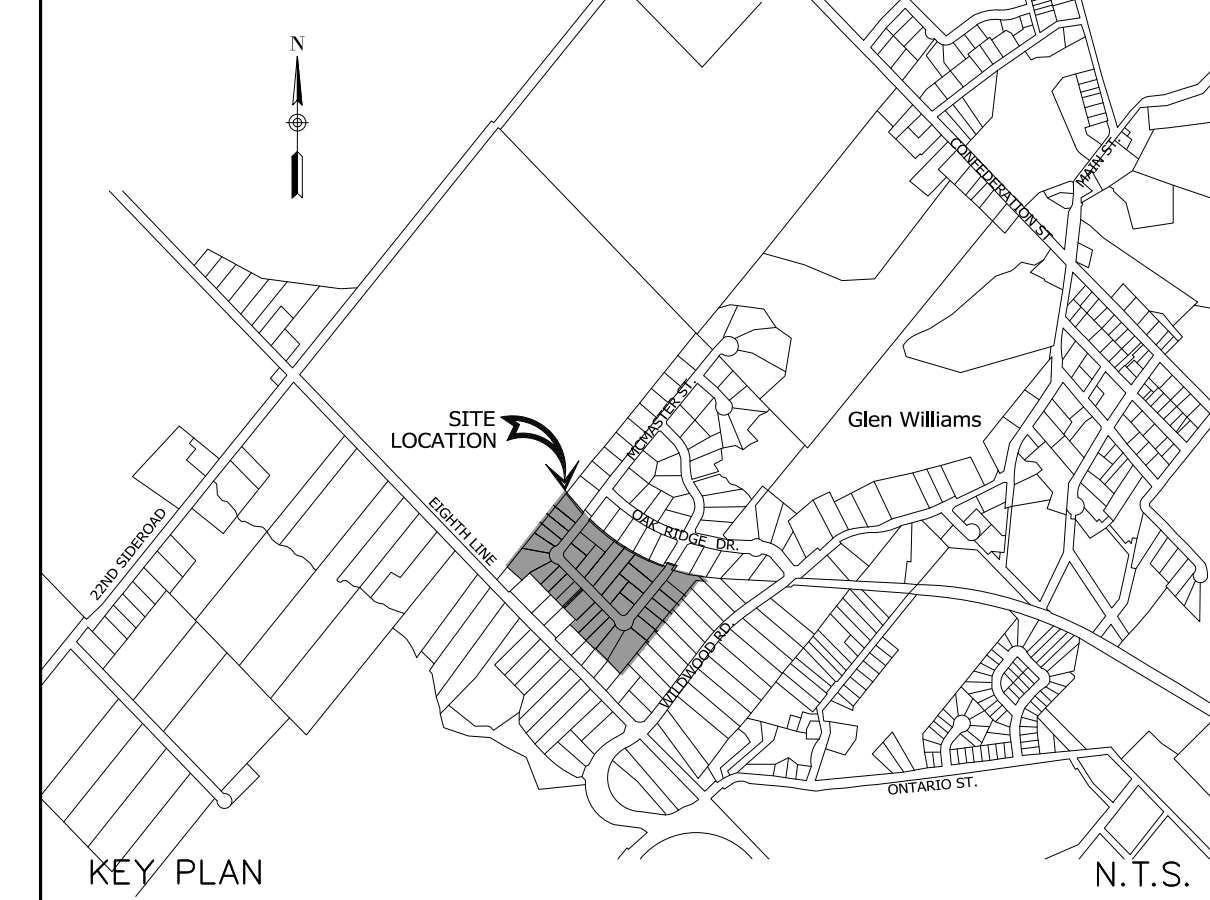
Halton REGION

FIGURE 4.1 - EXTERNAL SANITARY SEWER PLAN AND PROFILE

DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-04	CITY FILE:
SCALE HOR 1:500 VER 1:100	Sheet: 04 OF 18	REGION FILE:



SEE DWG. 09-015-04



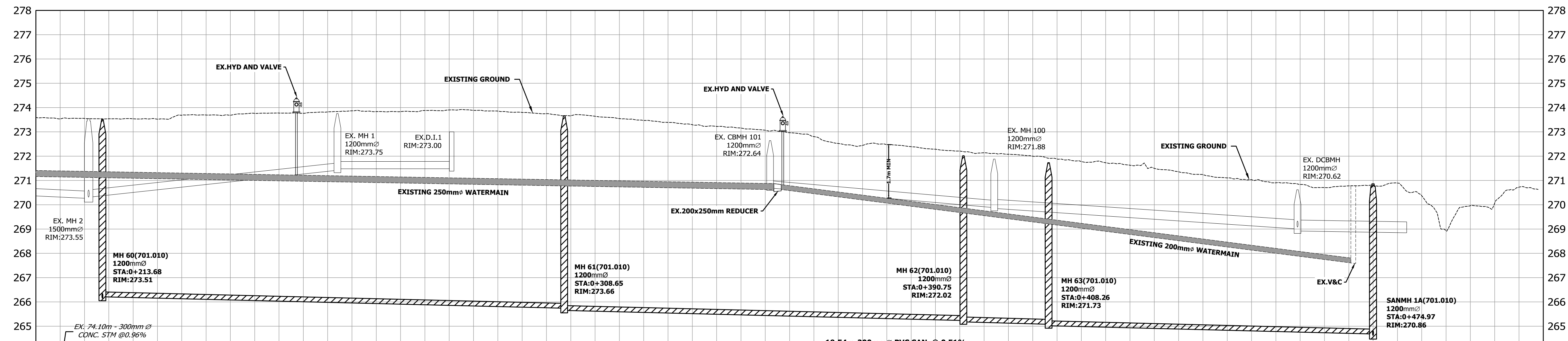
PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY TOWN OF HALTON HILLS REGIONAL MUNICIPALITY OF HALTON

LEGEND

EX. 250mm PVC WATERMAIN	EXISTING WATERMAIN	PROPOSED CENTERLINE/STA
EX. 50mm-200mm PVC STM	EXISTING STORM	PROPOSED SANITARY MANHOLE & NUMBER
EX. D.I.	DIRECTION OF FLOW	PROPOSED STORM MANHOLE & NUMBER
EX. DIB	EXISTING DITCH INLET	
EX. CB	EXISTING DITCH INLET CATCHBASIN	
EX. DCB/MH	EXISTING CATCHBASIN	
EX. MH	EXISTING DOUBLE CATCHBASIN MANHOLE	
EX. HYD	EXISTING STORM MANHOLE	
EX. HW	EXISTING HYDRANT & VALVE	
EX. V&B	EXISTING HEADWALL	
100mm-200mm PVC SAN @ 1.00%	EXISTING WATER VALVE & BOX	
100mm-900mm CONC STM @ 1.00%	PROPOSED SANITARY SEWER DIRECTION OF FLOW	
	PROPOSED STORM SEWER > 900mm DIRECTION OF FLOW	

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS. UTM ZONE 17, NAD83 (CSRS) (2010.0) DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999998. ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB. ELEVATION NOTE: ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 0011954U598F ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m LOCAL BENCHMARK: CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124. ELEVATION=271.26m ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

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2		REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1		REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.



SEWER TYPE	PIPE SIZE & SLOPE	MANHOLE/STRUCTURE	CHAINAGE
SANITARY SEWER INVERT	94.38m-200mm PVC SAN. @ 0.50%	MH 60(701.010) 1200mm @ STA:0+213.68 RIM:273.51	0+220 to 0+300
SANITARY SEWER INVERT	82.90m-200mm PVC SAN. @ 0.50%	MH 61(701.010) 1200mm @ STA:0+308.65 RIM:273.66	0+300 to 0+400
SANITARY SEWER INVERT	19.54m-200mm PVC SAN. @ 0.51%	MH 62(701.010) 1200mm @ STA:0+308.75 RIM:272.02	0+400 to 0+420
SANITARY SEWER INVERT	68.00m-200mm PVC SAN. @ 0.50%	MH 63(701.010) 1200mm @ STA:0+408.26 RIM:271.73	0+420 to 0+480
SANITARY SEWER INVERT	EX. 74.10m-300mm CONC. STM @ 0.96%	EX. MH 2 150mm @ RIM:273.55	0+220 to 0+240
EX. STORM SEWER INVERT	EX. 51.20m-300mm CONC. STM @ 2.17%	EX. MH 1 1200mm @ RIM:273.75	0+240 to 0+260
EX. STORM SEWER INVERT	EX. 26.96m-300mm CONC. STM.	EX. D.I.1 RIM:273.00	0+260 to 0+280
EX. STORM SEWER INVERT	EX. 43.09m-300mm CONC. STM. @ 1.88%	EX. CBMH 101 1200mm @ RIM:272.64	0+280 to 0+320
EX. STORM SEWER INVERT	EX. 58.39m-375mm CONC. STM. @ 1.45%	EX. MH 100 1200mm @ RIM:271.88	0+320 to 0+400
EX. STORM SEWER INVERT	EX. 22.97m-450mm CONC. STM. @ 0.32%	EX. DCB/MH 1200mm @ RIM:270.62	0+400 to 0+480
EX. STORM SEWER INVERT	EX. V&B	EX. V&B	0+480 to 0+500

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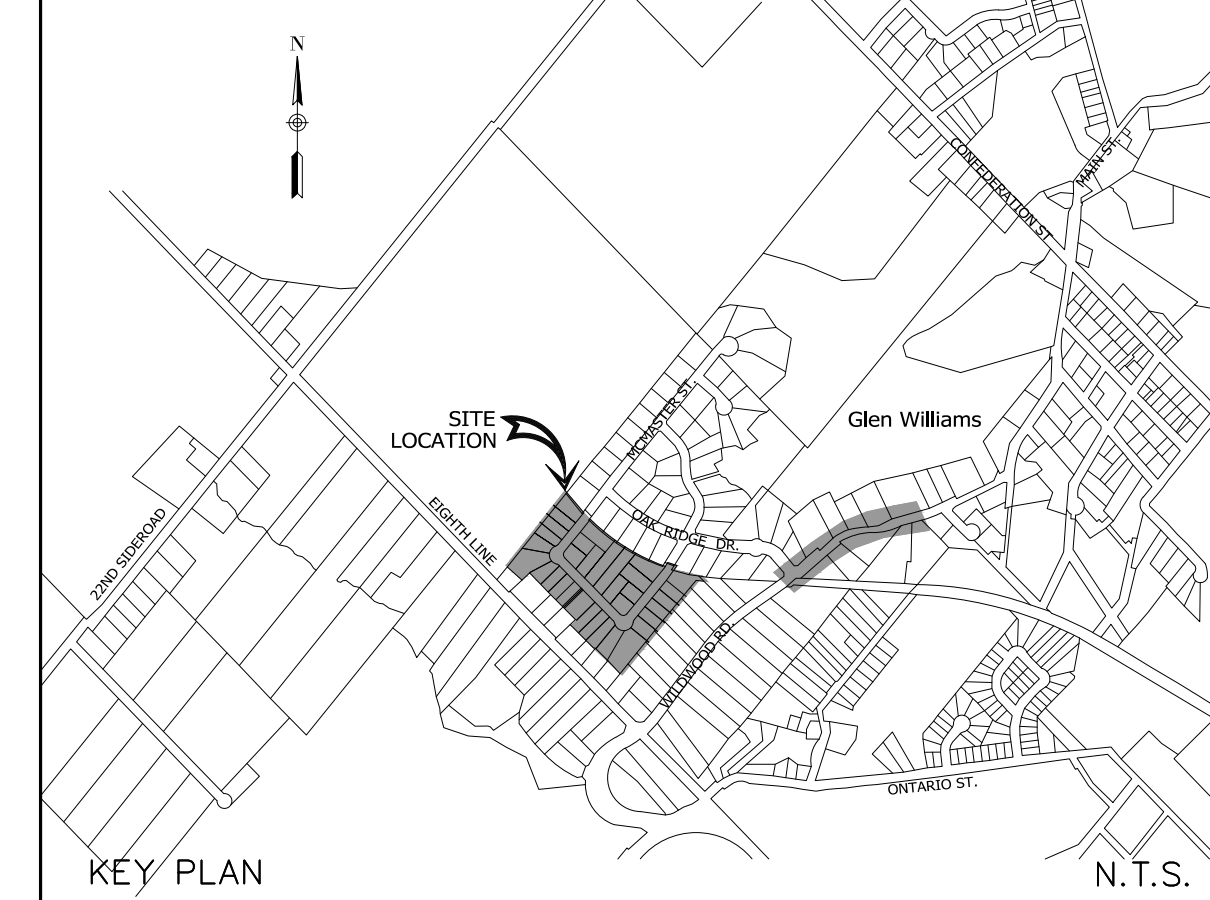
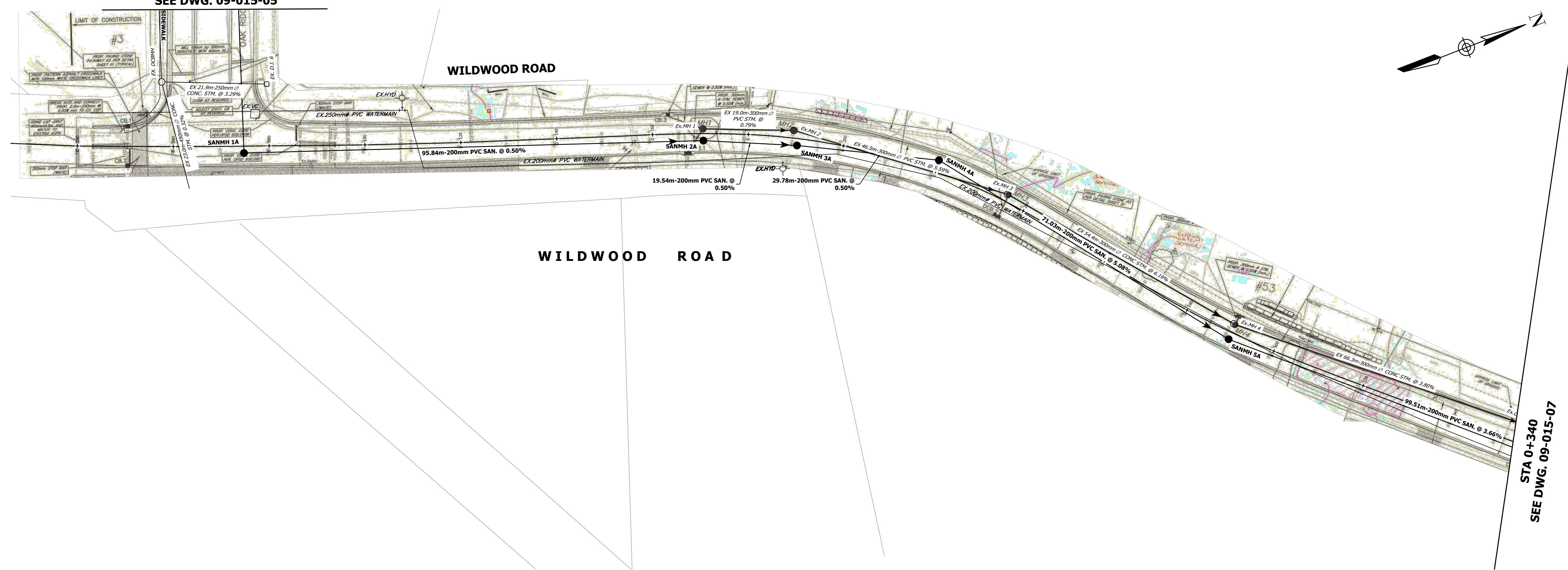
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 Concord, Ontario L4K 3Z2 F: (905) 695-2099



FIGURE 4.2 - EXTERNAL SANITARY SEWER PLAN AND PROFILE

DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-05	CITY FILE:
SCALE: HOR 1:500 VER 1:100	Sheet: 05 OF 18	REGION FILE:

SEE DWG. 09-015-05



PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

- 100mm-300mm PVC SAN @ 1.00% PROPOSED SANITARY SEWER DIRECTION OF FLOW
- MH20A PROPOSED SANITARY MANHOLE & NUMBER
- 100mm-600mm CONC STM @ 1.00% EXISTING STORM SEWER DIRECTION OF FLOW
- MH20 EXISTING STORM MANHOLE & NUMBER

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ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
LOCAL BENCHMARK
CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
ELEVATION=271.26m
ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

REVISION	BLOCK	DATE	APPR. BY
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1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.

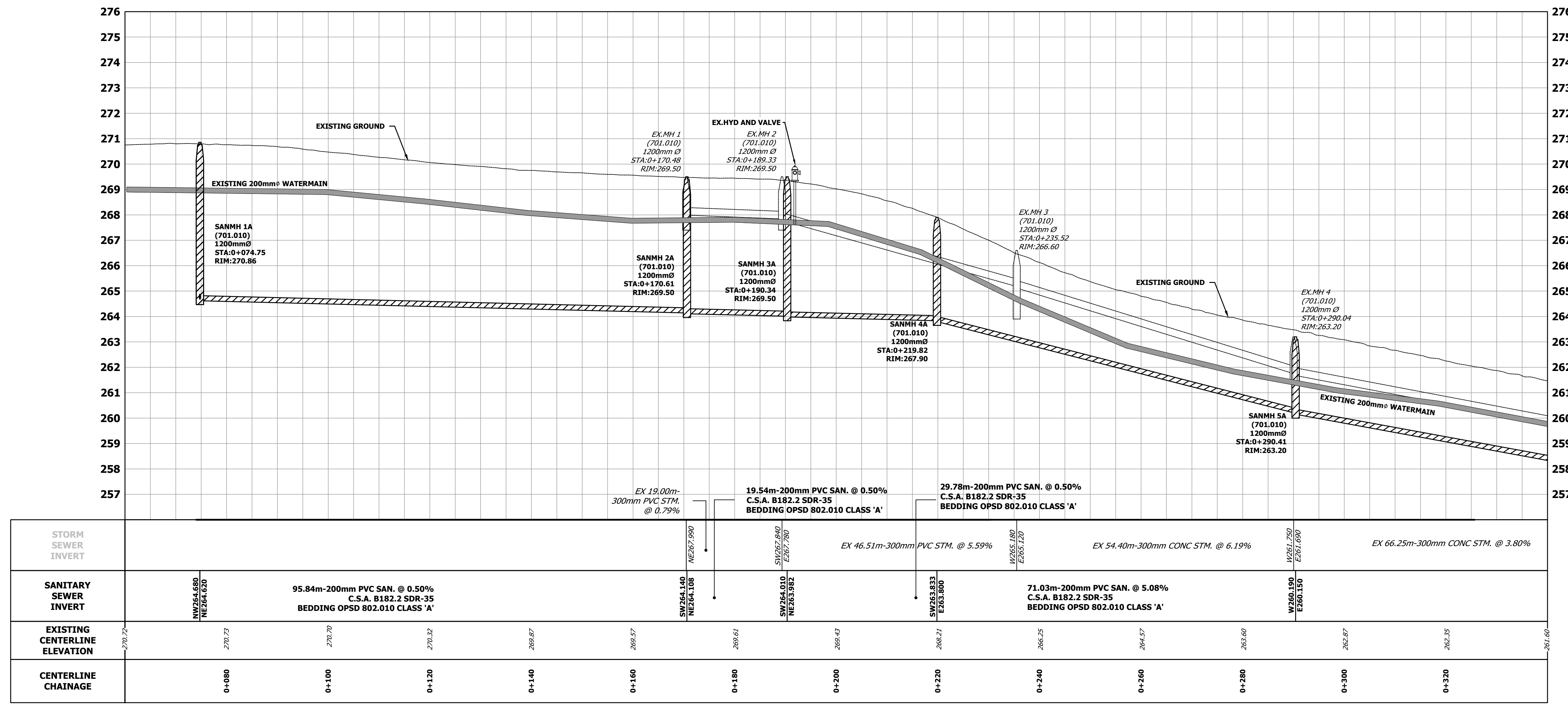
**RESIDENTIAL SUBDIVISION DEVELOPMENT
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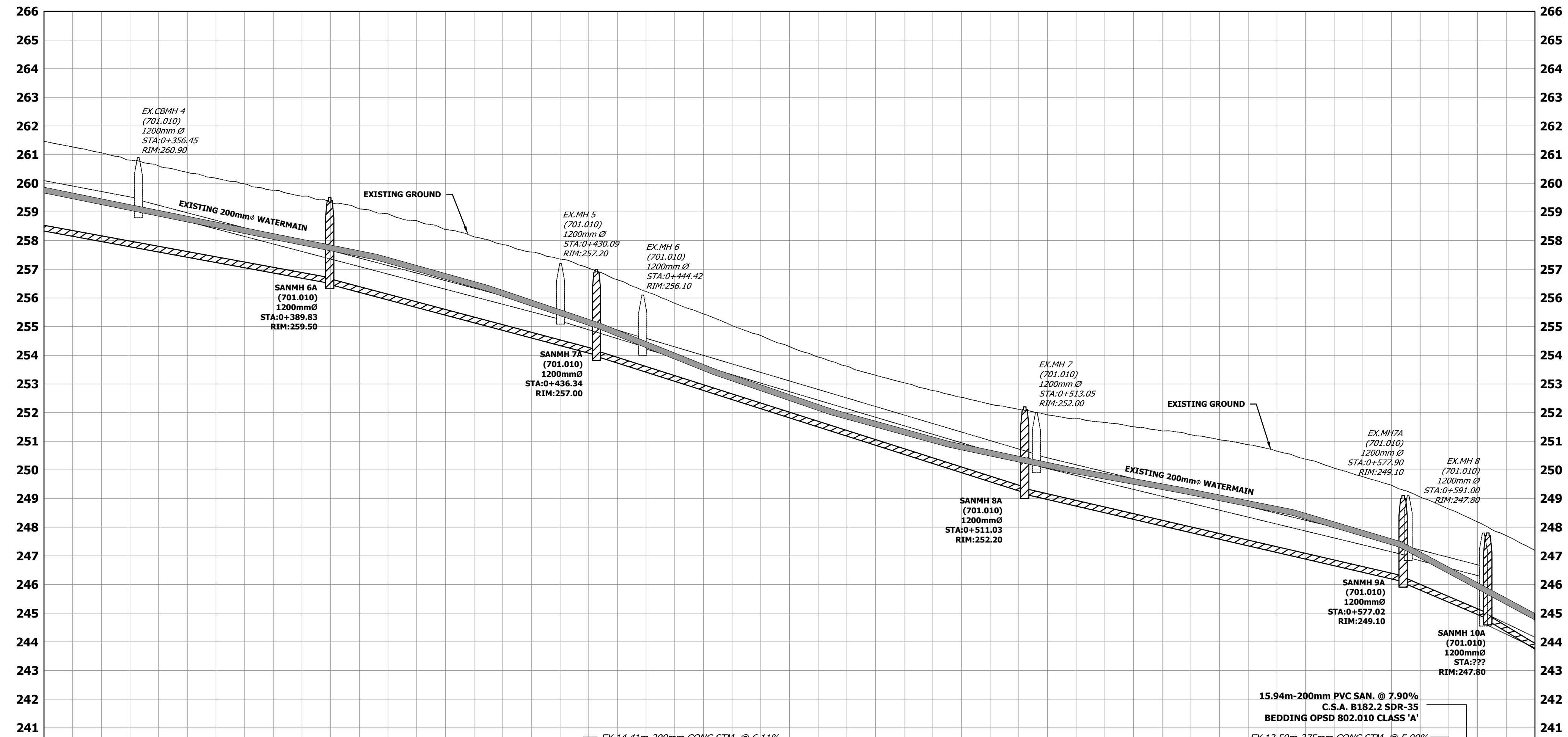
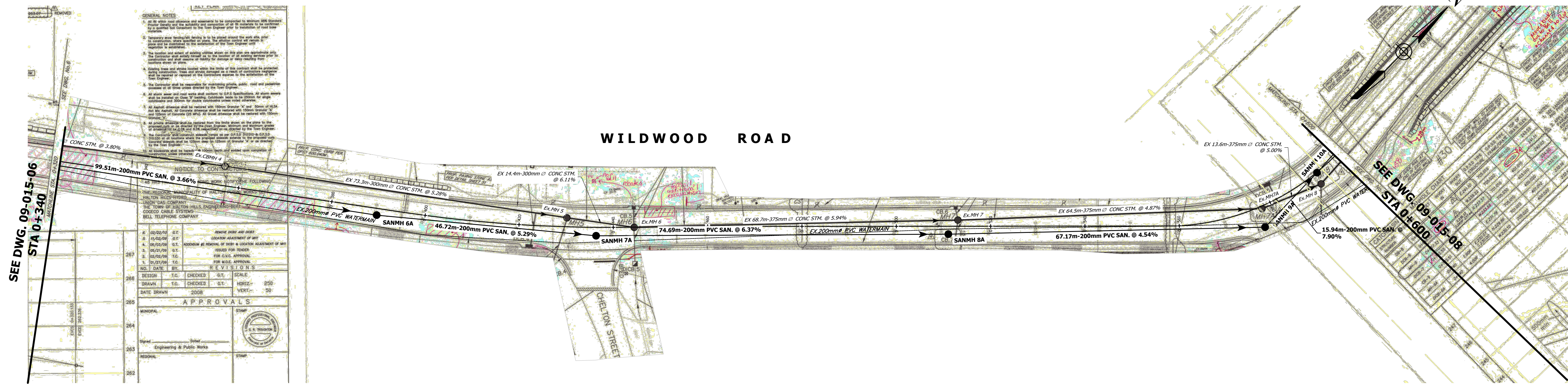
TOWN OF
HALTON HILLS
Working Together Working for You!

Halton
REGION

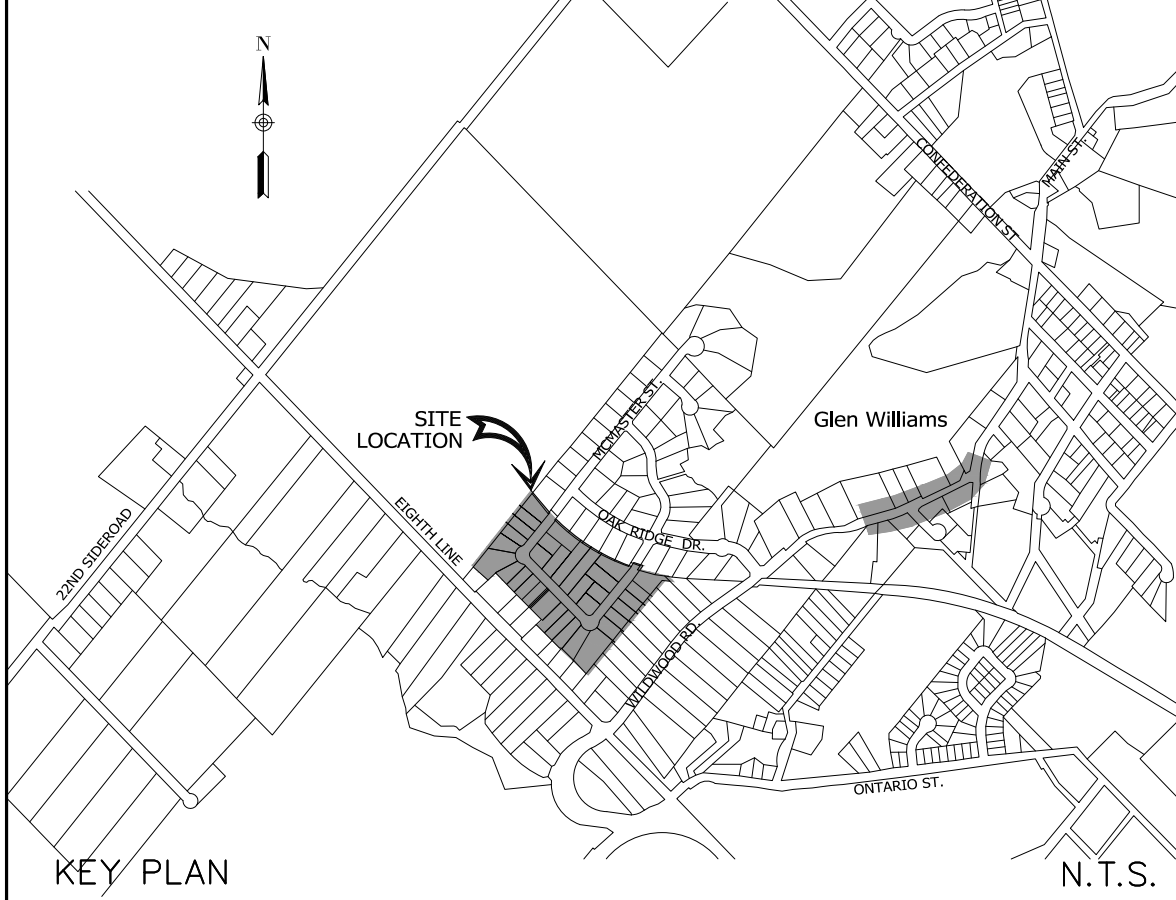
**FIGURE 4.3 - EXTERNAL SANITARY SEWER
PLAN AND PROFILE**



DESIGNED BY:	M.E.H.	DATE:	MARCH 2021	CHECKED BY:	M.E.H.
DRAWN BY:	A.G./V.B./G.M.	DRAWING NO.:	09-015-06	CITY FILE:	
SCALE:	HOR 1:500	Sheet:	06 OF 18	REGION FILE:	



STORM SEWER INVERT	M/259.170 E/259.120	EX 73.34m-300mm CONC STM. @ 5.28%				M/256.250 E/255.750	M/254.710 E/253.160	EX 68.65m-375mm CONC STM. @ 5.94%				M/249.150 E/250.140	EX 64.53m-375mm CONC STM. @ 4.87%				M/246.000 E/246.000	M/244.800 E/244.800
SANITARY SEWER INVERT	99.51m-200mm PVC SAN. @ 3.66% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'				46.72m-200mm PVC SAN. @ 5.29% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'				74.69m-200mm PVC SAN. @ 6.37% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'				67.17m-200mm PVC SAN. @ 4.54% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'				15.94m-200mm PVC SAN. @ 7.90% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'	
EXISTING CENTERLINE ELEVATION	261.00	260.79	259.88	259.18	258.06	256.71	255.11	252.74	252.64	251.79	251.05	250.26	249.07	247.80	246.82			
CENTERLINE CHAINAGE	0+360	0+380	0+400	0+420	0+440	0+460	0+500	0+520	0+540	0+560	0+580	0+600	0+620	0+640				



PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

100mm-300mm PVC SAN @ 1.00% PROPOSED SANITARY SEWER DIRECTION OF FLOW

MH200A PROPOSED SANITARY MANHOLE & NUMBER

100mm-600mm CONC STM @ 1.00% EXISTING STORM SEWER DIRECTION OF FLOW

MH200 EXISTING STORM MANHOLE & NUMBER

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
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ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
LOCAL BENCHMARK
CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
ELEVATION=271.26m
ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

PROFESSIONAL ENGINEER
Michael Hall
M.E. HALL
MAR/24/2021
PROVINCE OF ONTARIO

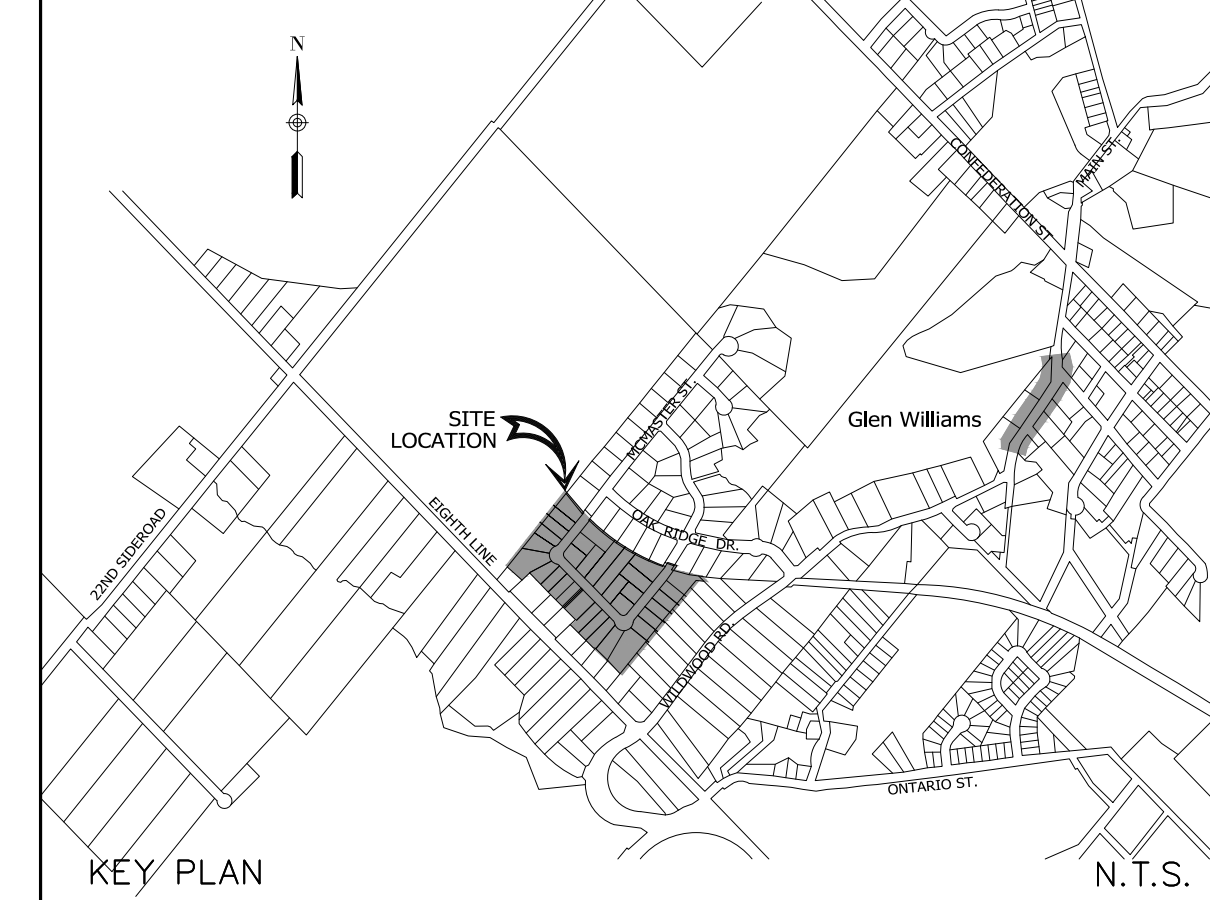
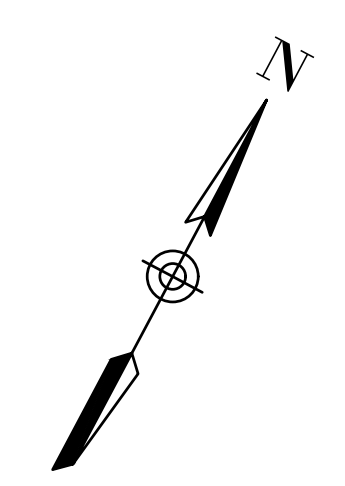
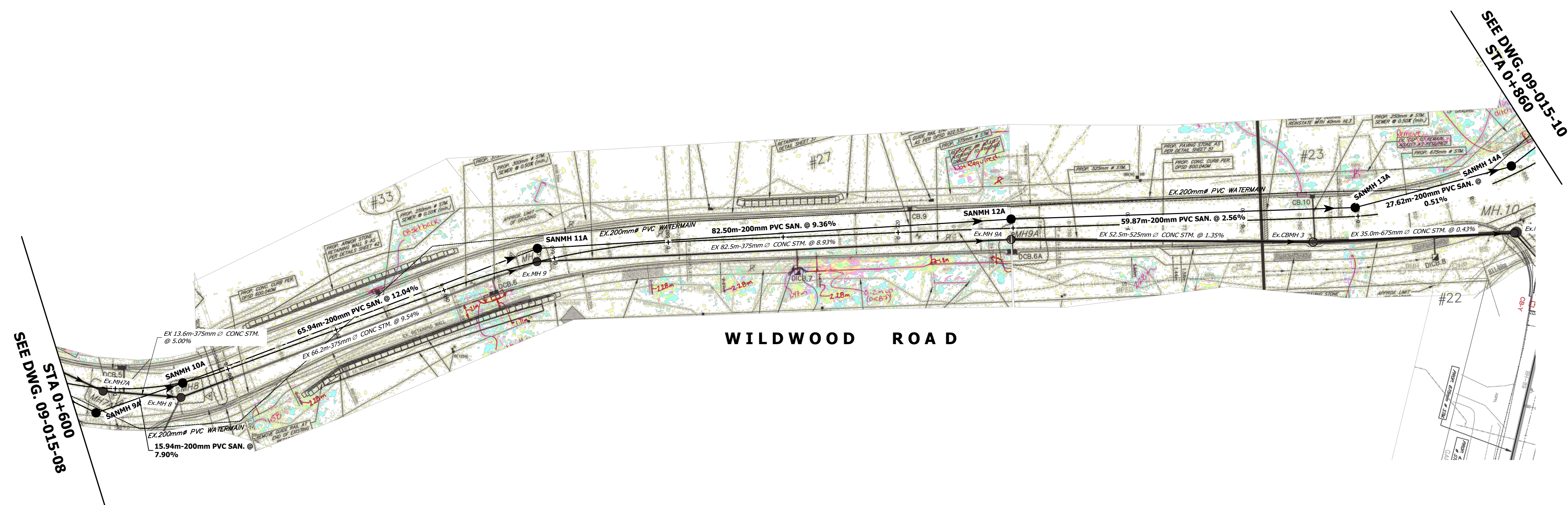
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TOWN OF
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Halton
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**FIGURE 4.4 - EXTERNAL SANITARY
SEWER PLAN AND PROFILE**

DESIGNED BY:	M.E.H.	DATE:	MARCH 2021	CHECKED BY:	M.E.H.
DRAWN BY:	A.G./V.B./G.M.	DRAWING NO.:	09-015-07	CITY FILE:	
SCALE:	HOR 1:500	Sheet:	07 OF 18	REGION FILE:	

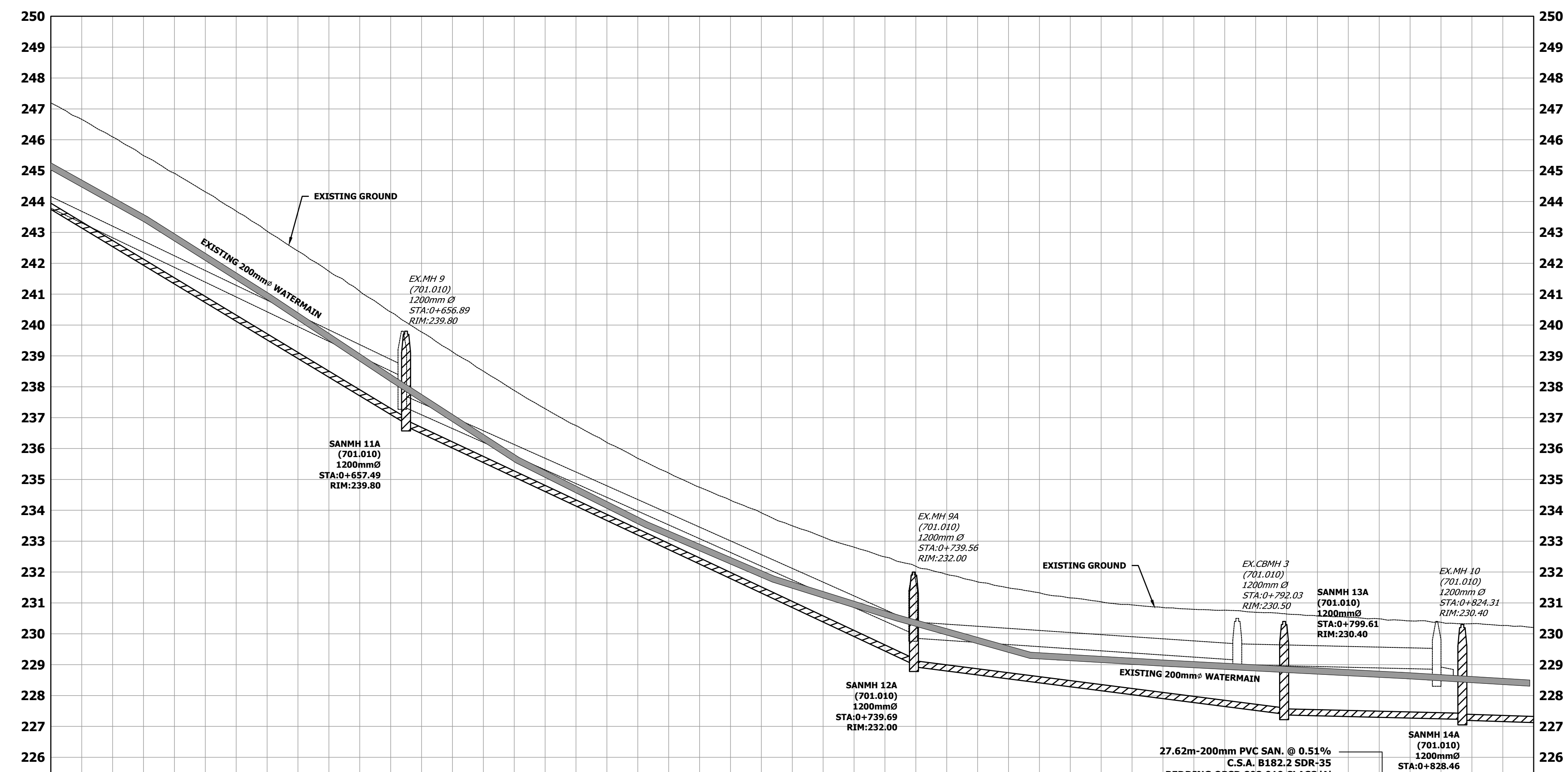


KEY PLAN
PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

	PROPOSED SANITARY SEWER DIRECTION OF FLOW
	PROPOSED SANITARY MANHOLE & NUMBER
	EXISTING STORM SEWER DIRECTION OF FLOW
	EXISTING STORM MANHOLE & NUMBER

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
UTM ZONE 17, NAD83 (CSRS) (2010.0)
DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY
THE COMBINED SCALE FACTOR OF 0.999998
ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB.
ELEVATION NOTE
ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM
AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 0011954U598F
ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
LOCAL BENCHMARK
CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
ELEVATION=271.26m
ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED. PIPE SIZES ARE IN MILLIMETRES.



STORM SEWER INVERT	EX 66.23m-375mm CONC STM. @ 9.54%		EX 82.50m-375mm CONC STM. @ 8.93%		EX 52.52m-525mm CONC STM. @ 1.35%		EX 35.02m-675mm CONC STM. @ 0.43%	
SANITARY SEWER INVERT	65.94m-200mm PVC SAN. @ 12.04% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'		82.50m-200mm PVC SAN. @ 9.36% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'		59.87m-200mm PVC SAN. @ 2.56% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'		27.62m-200mm PVC SAN. @ 0.51% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'	
EXISTING CENTERLINE ELEVATION	246.82	244.63	242.44	239.78	237.19	234.89	233.25	232.07
CENTERLINE CHAINAGE	0+620	0+640	0+660	0+680	0+700	0+720	0+740	0+760

2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

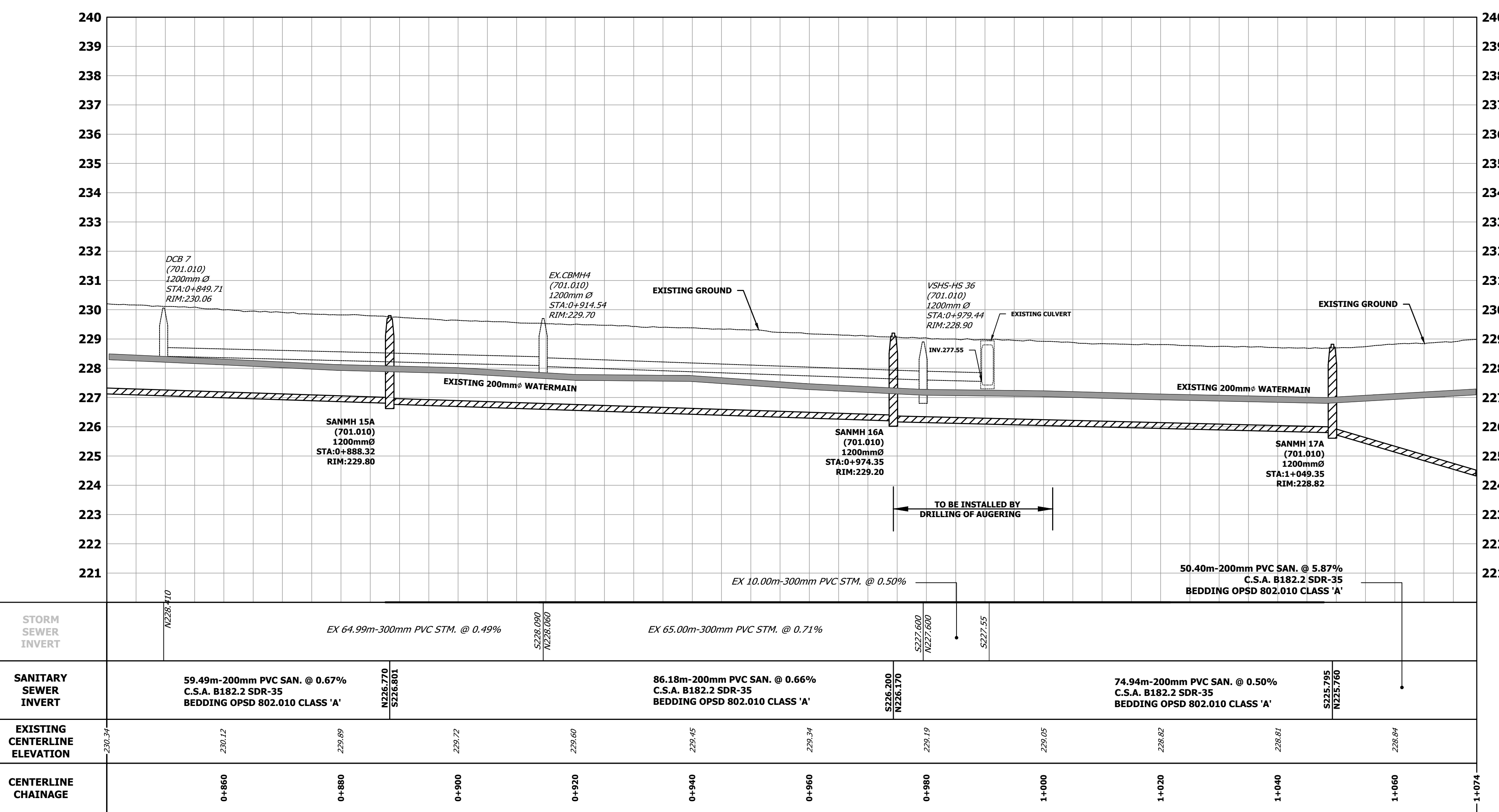
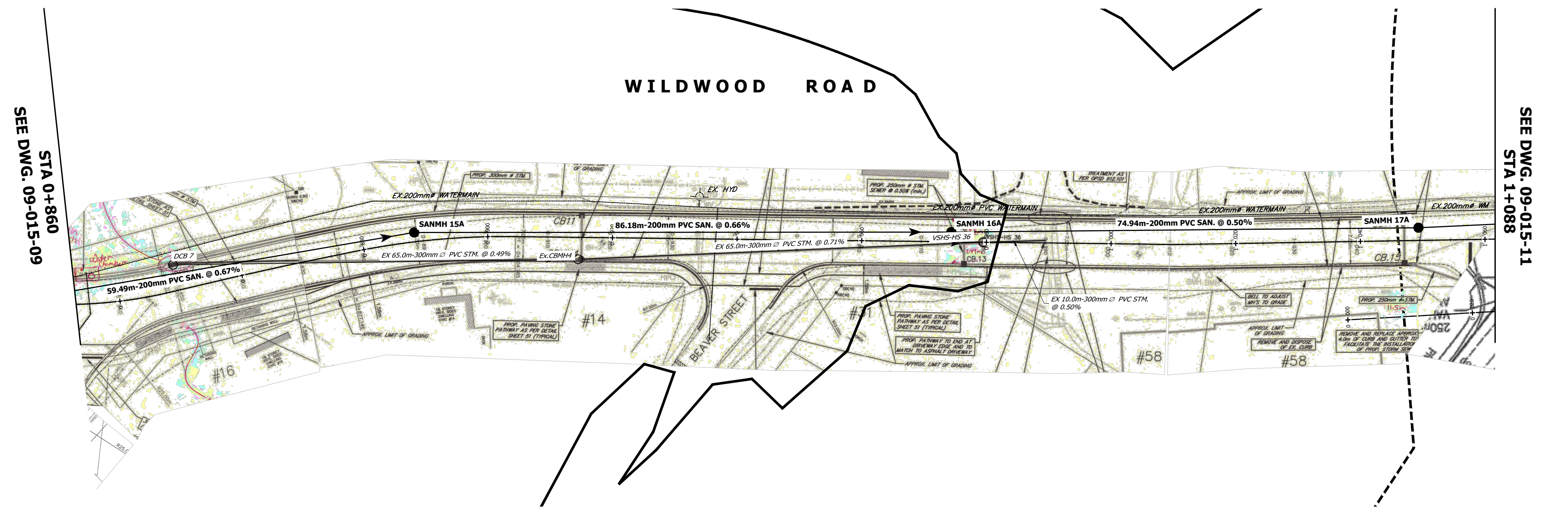
**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

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CONSULTING ENGINEERS & PROJECT MANAGERS
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Concord, Ontario L4K 3Z2 F: (905) 695-2099

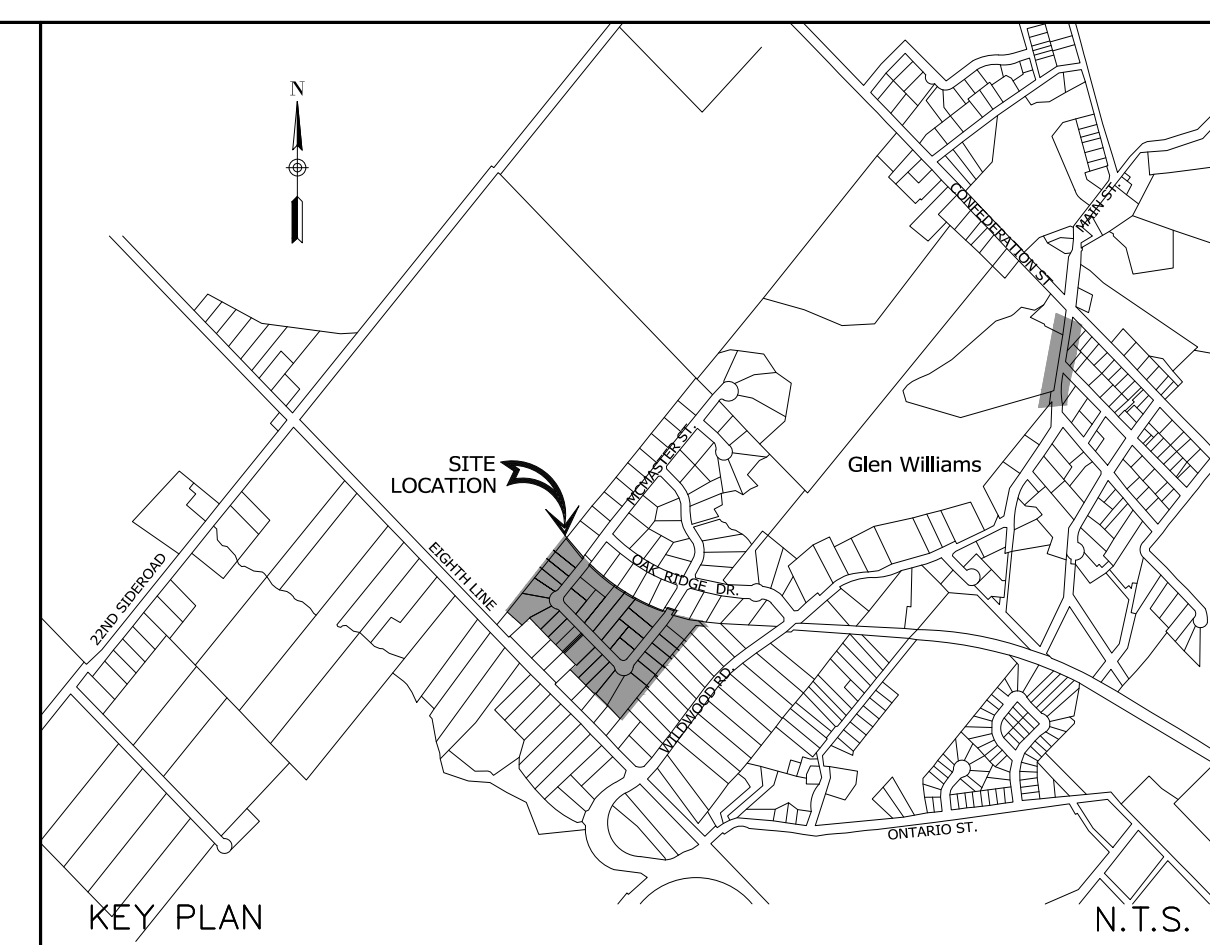
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FIGURE 4.5 - EXTERNAL SANITARY SEWER PLAN AND PROFILE

DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-09	CITY FILE:
SCALE: HOR 1:750	Sheet: 09 OF 18	REGION FILE:



STORM SEWER INVERT	N226.710	EX 64.99m-300mm PVC STM. @ 0.49%	N226.090 N226.090	EX 65.00m-300mm PVC STM. @ 0.71%	S226.600 N226.170	INV.277.55	S227.55	50.40m-200mm PVC SAN. @ 5.87% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'	S225.795 N225.760	1+074		
SANITARY SEWER INVERT		59.49m-200mm PVC SAN. @ 0.67% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'	N226.770 N226.801	86.18m-200mm PVC SAN. @ 0.66% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'	S226.200 N226.170			74.94m-200mm PVC SAN. @ 0.50% C.S.A. B182.2 SDR-35 BEDDING OPSD 802.010 CLASS 'A'	S225.795 N225.760			
EXISTING CENTERLINE ELEVATION	230.34	230.17	229.89	229.77	229.60	229.45	229.34	229.19	229.05	228.87	228.81	228.84
CENTERLINE CHAINAGE	0+860	0+880	0+900	0+920	0+940	0+960	0+980	1+000	1+020	1+040	1+060	1+074



PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

	PROPOSED SANITARY SEWER DIRECTION OF FLOW
	PROPOSED SANITARY MANHOLE & NUMBER
	EXISTING STORM SEWER DIRECTION OF FLOW
	EXISTING STORM MANHOLE & NUMBER
	100YR FLOODLINE
	REGULATORY FLOODLINE

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
UTM ZONE 17, NAD83 (CSRS) (2010.0)
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ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB.
ELEVATION NOTE
ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 0011954U598F
ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
LOCAL BENCHMARK
CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
ELEVATION=271.26m
ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

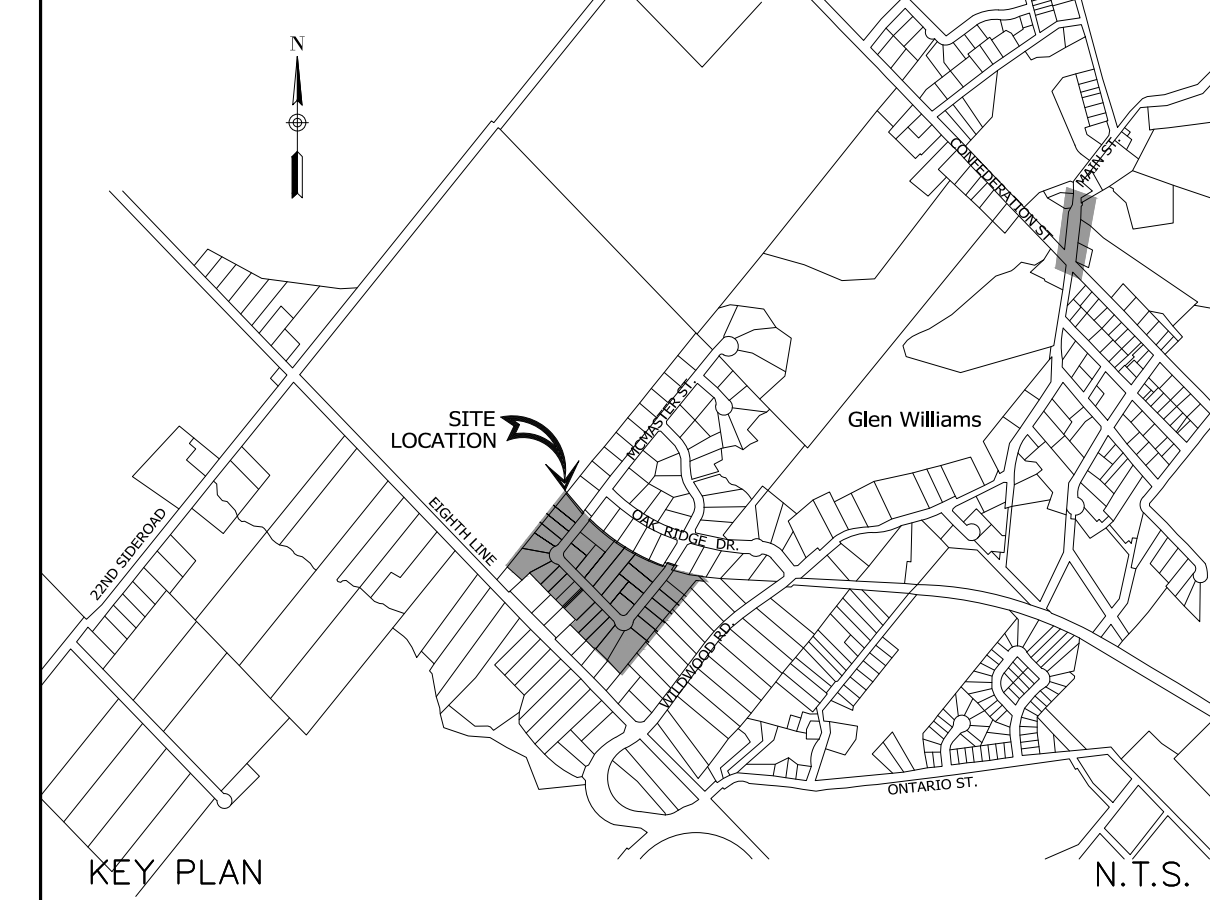
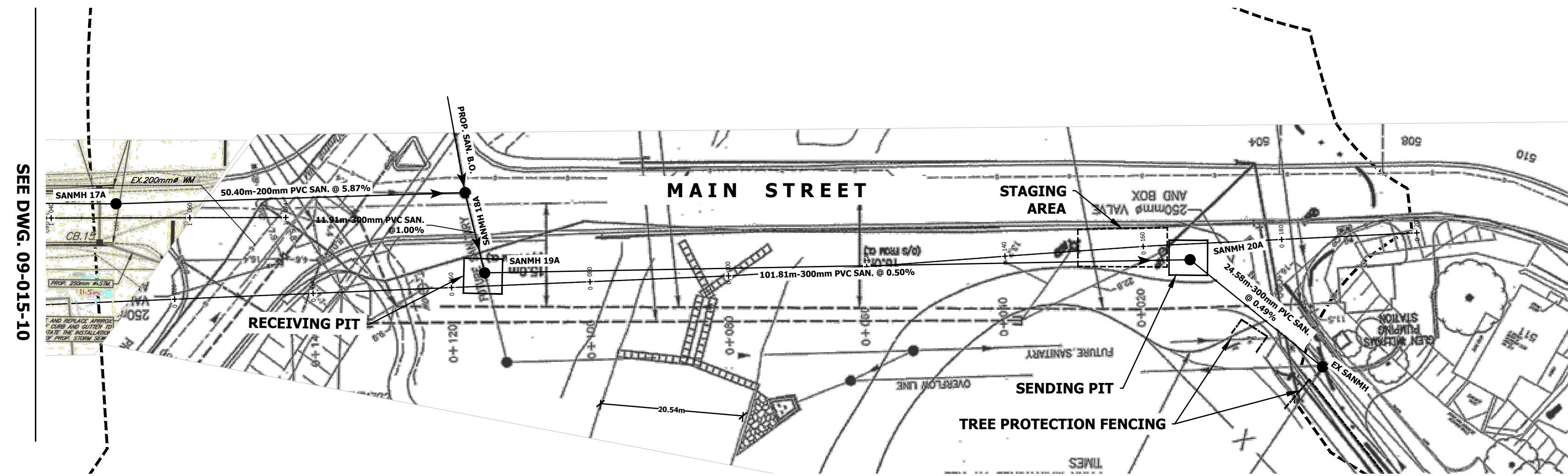
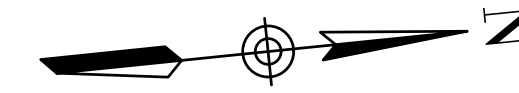
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FIGURE 4.6 - EXTERNAL SANITARY SEWER PLAN AND PROFILE

DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-10	CITY FILE:
SCALE HOR 1:500 VER 1:100	Sheet: 10 OF 18	REGION FILE:

NOTE:
THE CROSSING OF THE WATER COURSE IS TO BE UNDERTAKEN DURING THE COLD-WATER TIMING WINDOW OF JUNE 15th - SEPTEMBER 15th



PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
 TOWN OF HALTON HILLS
 REGIONAL MUNICIPALITY OF HALTON

LEGEND

- PROPOSED SANITARY SEWER DIRECTION OF FLOW
- 100YR FLOODLINE
- REGULATORY FLOODLINE
- PROPOSED SANITARY MANHOLE & NUMBER

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
 UTM ZONE 17, NAD83 (CSRS) (2010.0)
 DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.999999.
 ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB.
 ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 0011954U598F
 LOCAL BENCHMARK: ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
 CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124.
 ELEVATION=271.26m
 ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

REVISION	BLOCK	DATE	APPR. BY
2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.

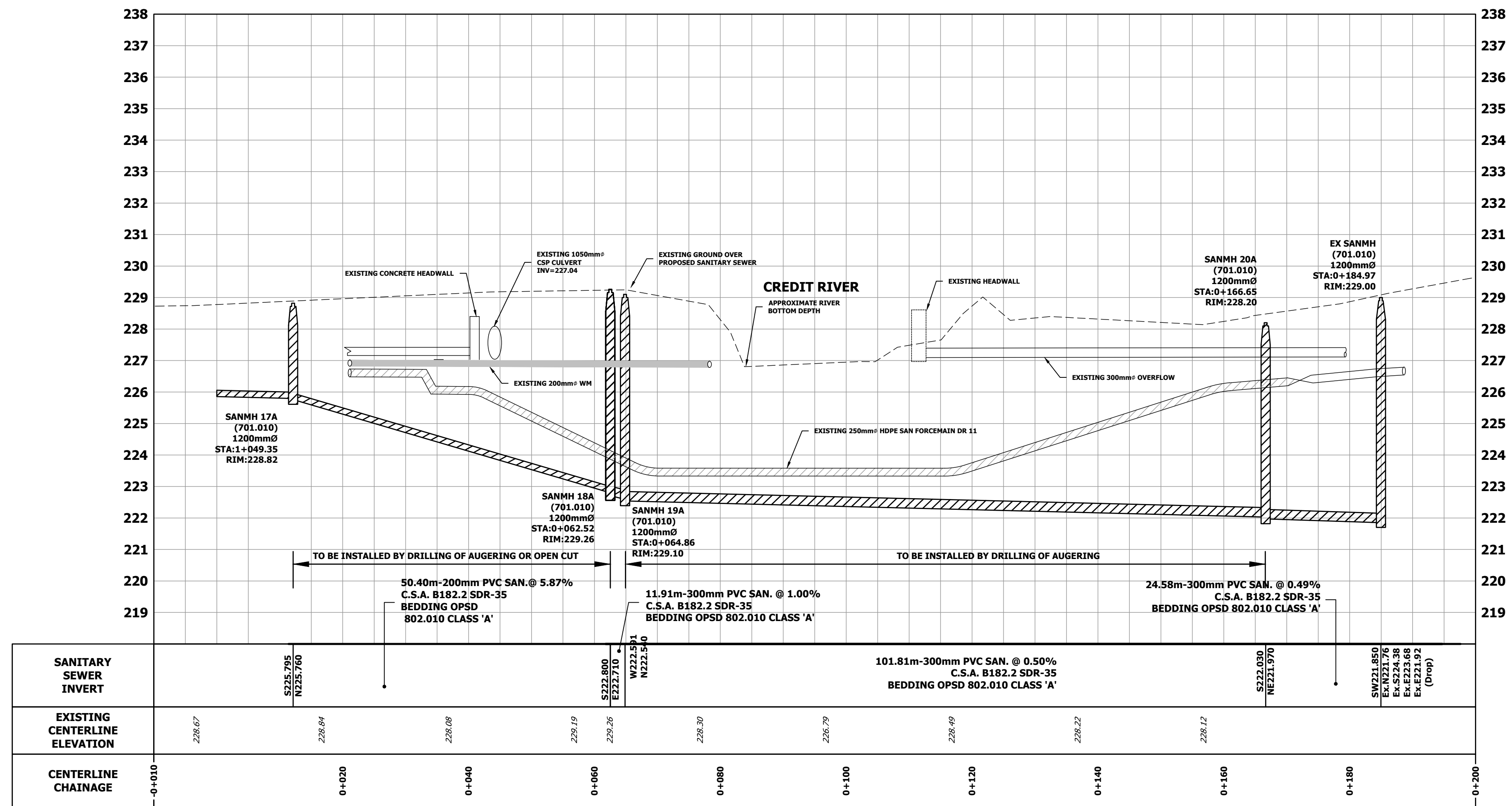
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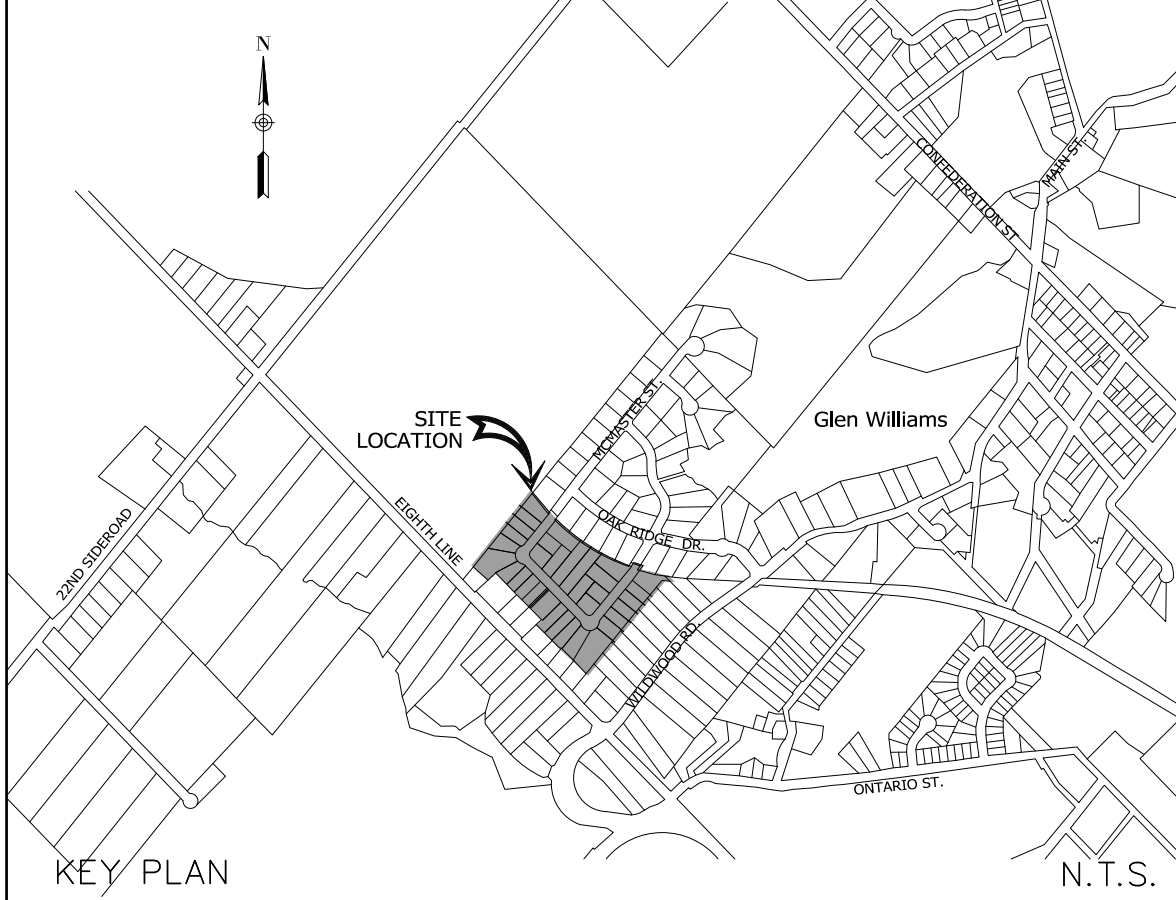
Halton
 REGION

**FIGURE 4.7 - EXTERNAL SANITARY SEWER
 PLAN AND PROFILE**



DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-11	CITY FILE:
SCALE: HOR 1:500	Sheet: 11 OF 18	REGION FILE:

Vacant Lands



PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

- EX. 200mm PVC WATERMAIN
- EX. 50m-200mm PVC STM
- EX. D.I.
- EX. DGB
- EX. CB
- EX. DCB/MH
- EX. M.H.
- EX. HYD
- EX. HW
- EX. V&B
- 100m-200mm PVC SAN @ 1.00%
- 100m-600mm CONC STM @ 1.00%
- 150mm PVC WATERMAIN
- 100m-600mm CONC STM @ 1.00%
- DEMOTES INFILTRATION GALLERY/ SOAKAWAY PIT LOCATION
- PROPOSED SANITARY SERVICE
- PROPOSED STORM SERVICE
- PROPOSED WATER SERVICE AND CURB STOP
- PROPOSED CENTERLINE/STA
- LOT LINE
- SOLID TREE PROTECTION
- HOARDING
- PROPOSED SANITARY MANHOLE & NUMBER
- PROPOSED STORM MANHOLE & NUMBER
- PROPOSED CATCHBASIN
- PROPOSED DOUBLE CATCHBASIN
- PROPOSED POND CONTROL STRUCTURE
- PROPOSED HEADWALLS
- PROPOSED HYDRANT & VALVE
- PROPOSED WATER VALVE & BOX

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
UTM ZONE 17, NAD83 (CRS) (2011).
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ELEVATION=271.26m
ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED PIPE SIZES ARE IN MILLIMETRES

2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

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2147925 ONTARIO INC.**

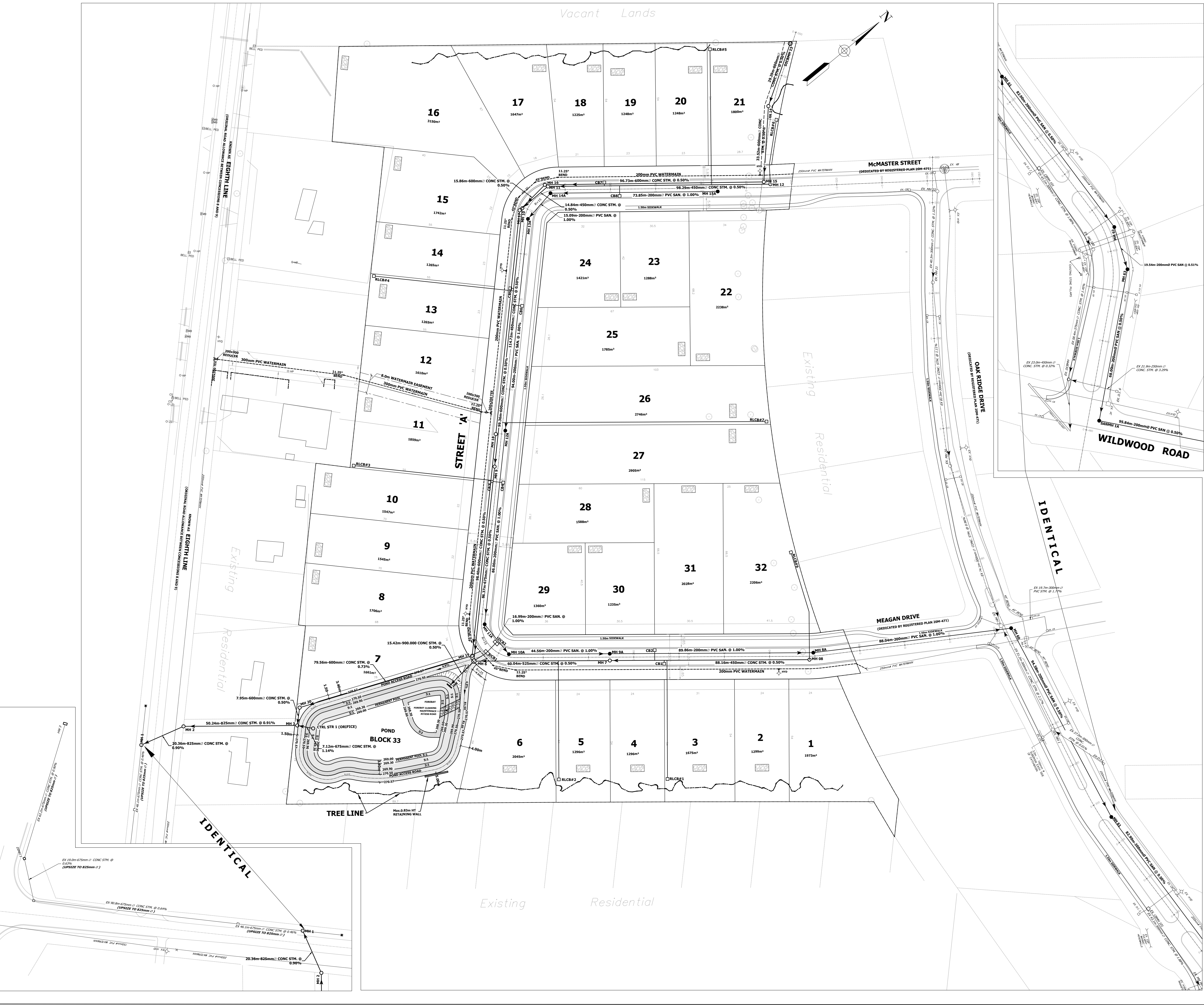


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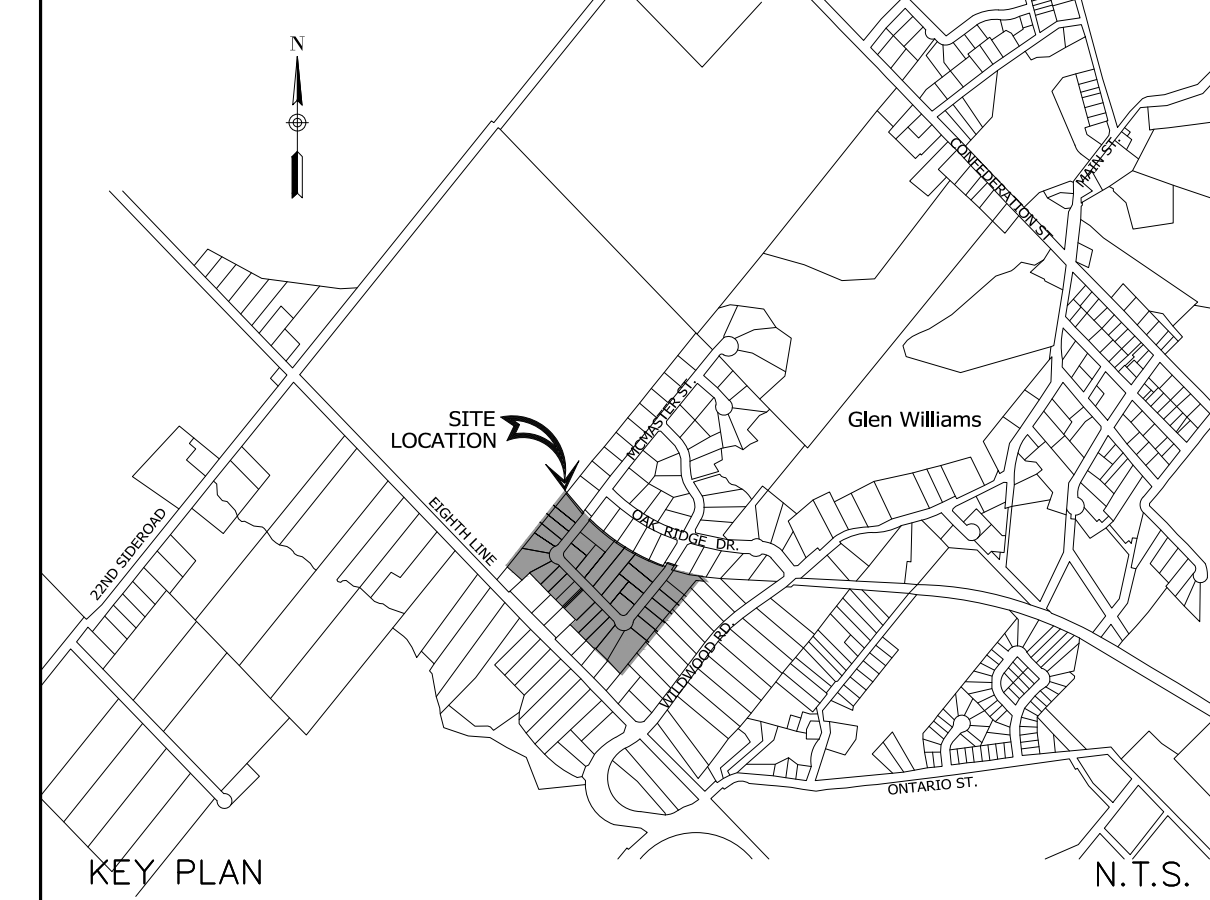
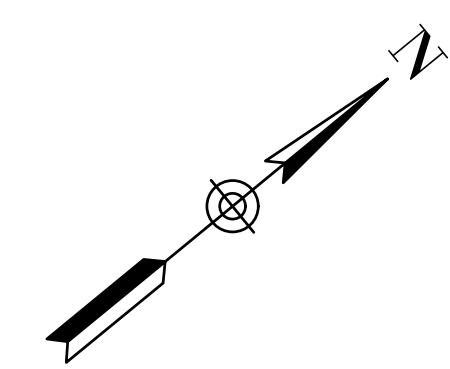
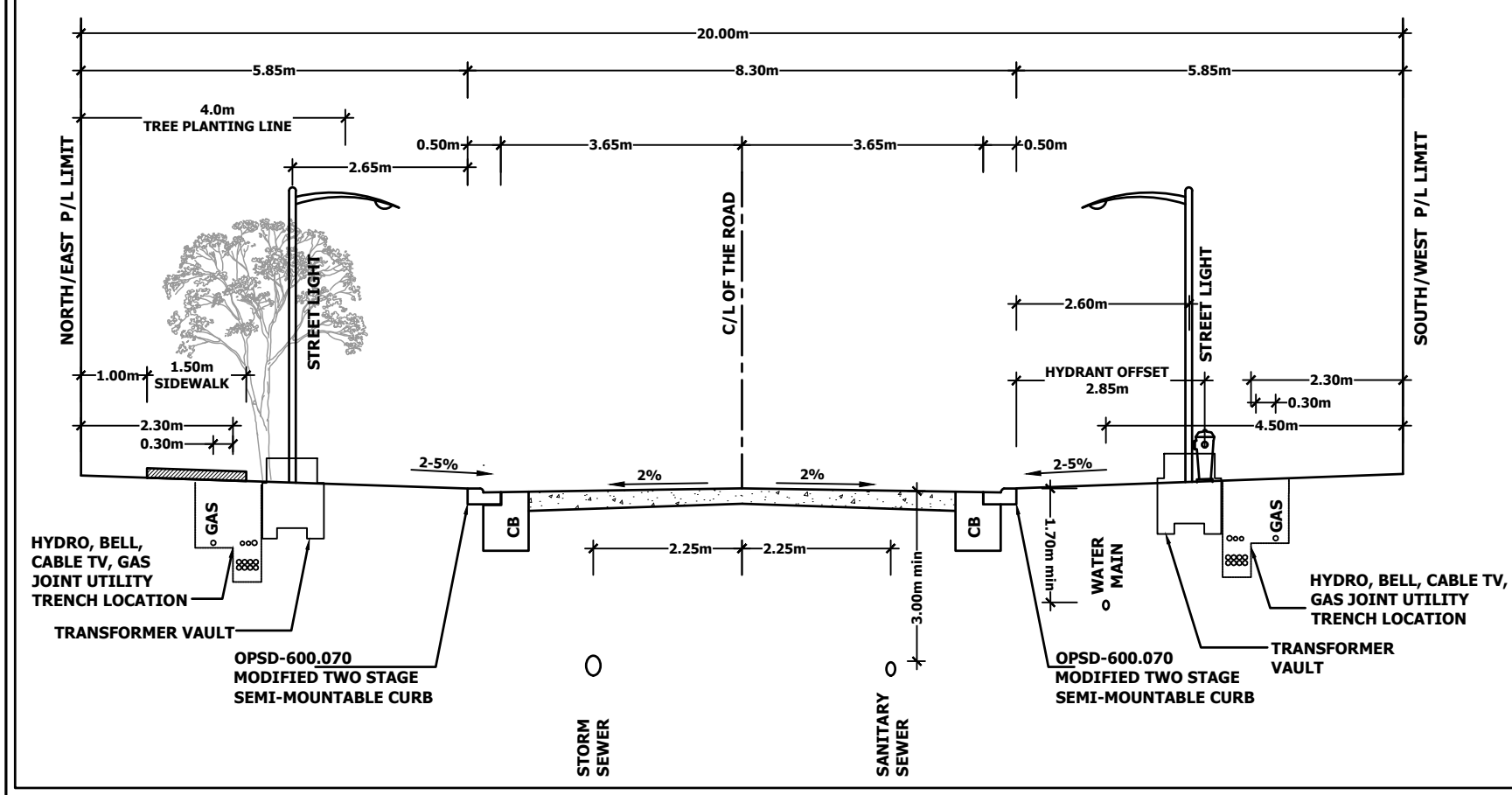


FIGURE 5 - CONCEPTUAL SERVICING PLAN

DESIGNED BY:	M.E.H.	DATE:	MARCH 2021	CHECKED BY:	M.E.H.
DRAWN BY:	A.G./V.B./G.M.	DRAWING NO.:	09-015-12	CITY FILE:	
SCALE:	HOR 1:750	Sheet:	12 OF 18	REGION FILE:	



PROPOSED CROSS-SECTION DETAILS MODIFIED STD No.402
TOWN OF HALTON HILL



LEGEND

- +191.84 PROPOSED ELEVATION
- + EX.191.84 EXISTING ELEVATION
- +HP 191.84 PROPOSED HIGH POINT ELEVATION
- + EX.191.84 EXISTING TOPO ELEVATION
- LOT LINE
- PROPOSED CENTERLINE/STA
- SOLID TREE PROTECTION HOARDING

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
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ELEVATION NOTE
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AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 0011954U598F
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ELEVATION=258.735m, No. 00819668361 ELEVATION=252.480m
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ELEVATION=271.26m
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2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

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2147925 ONTARIO INC.

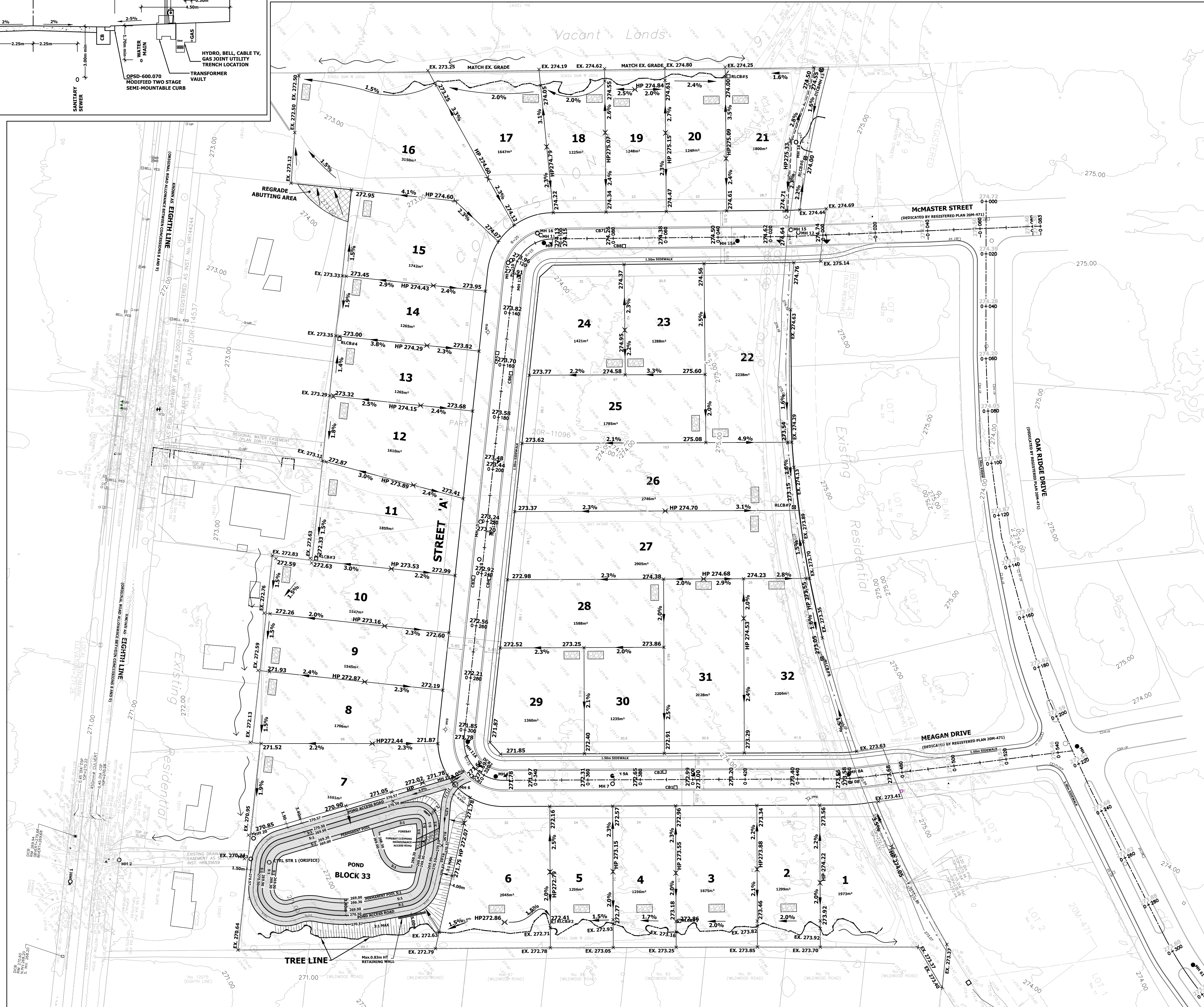
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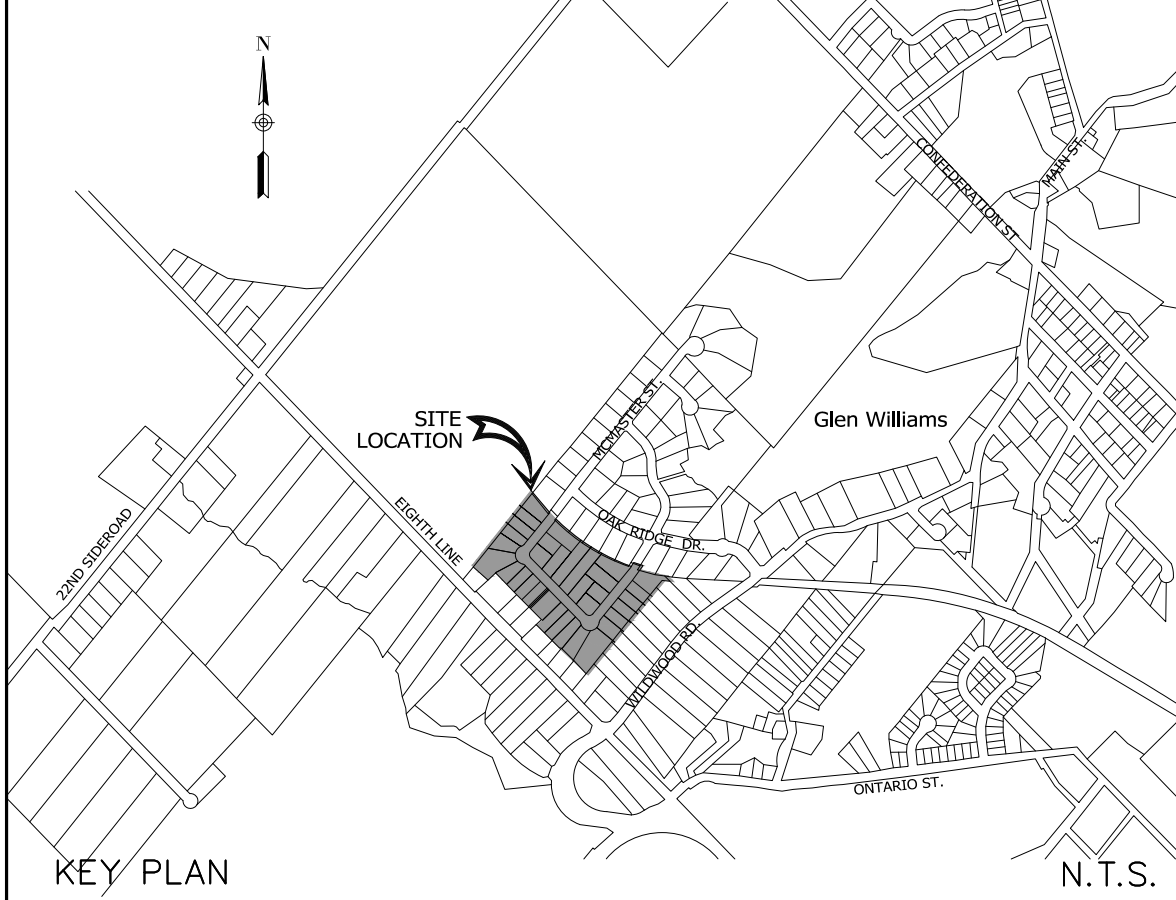
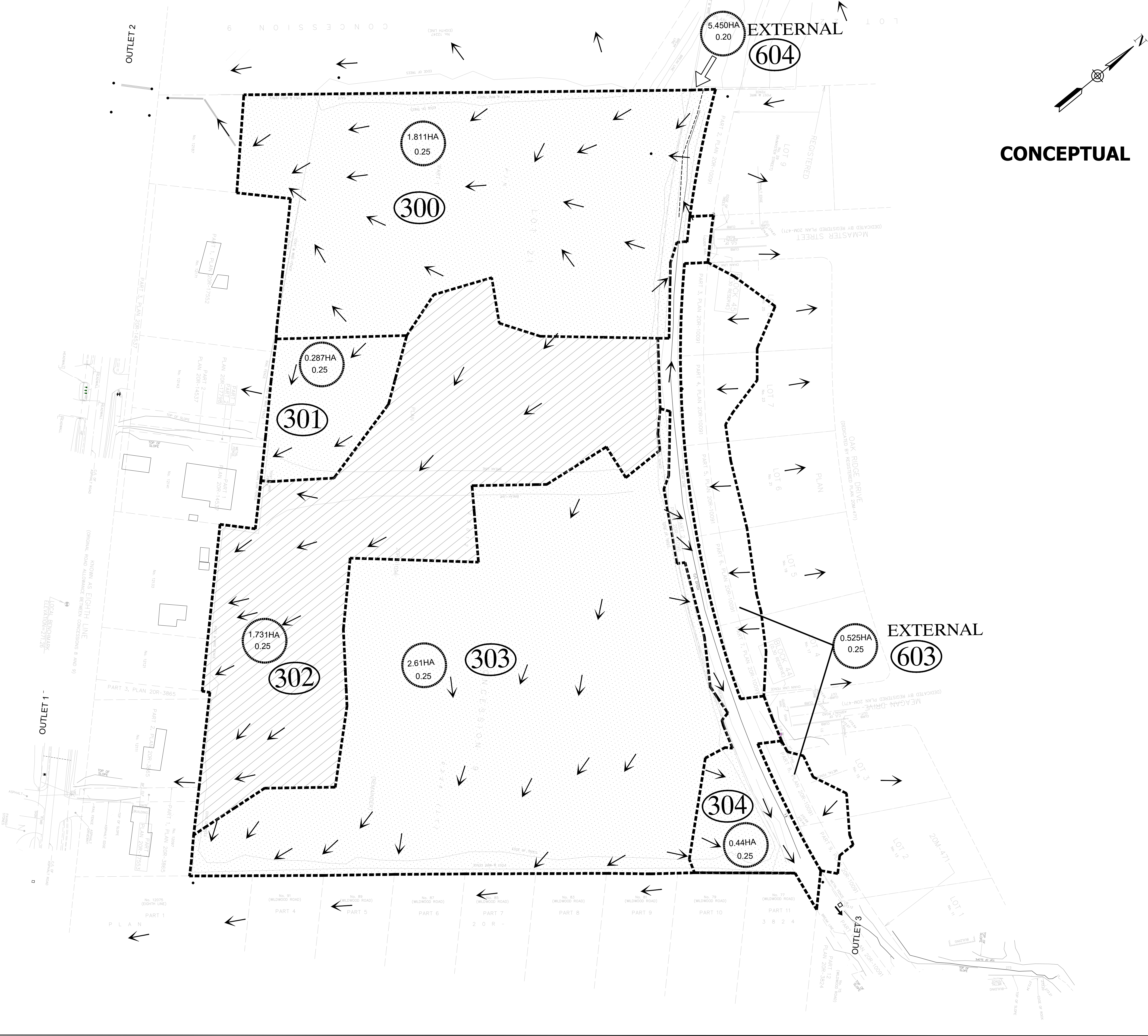
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FIGURE 6 - CONCEPTUAL GRADING PLAN

DESIGNED BY:	M.E.H.	DATE:	MARCH 2021	CHECKED BY:	M.E.H.
DRAWN BY:	A.G./V.B./G.M.	DRAWING NO.:	09-015-13	CITY FILE:	
SCALE:	HOR 1:750	Sheet:	13 OF 18	REGION FILE:	





PLAN OF SURVEY ILLUSTRATING TOPOGRAPHY
TOWN OF HALTON HILLS
REGIONAL MUNICIPALITY OF HALTON

LEGEND

- PROPERTY LINE
- TRIBUTARY AREA BOUNDARY
- 1.000HA
0.5 STORM TRIBUTARY AREA HA
RUNOFF COEFFICIENT
- 300 SUB CATCHMENT AREA ID.
- FLOW DIRECTION

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
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REVISION	BLOCK	REVISION AS PER TOWN/REGION/CBC COMMENTS	DATE	APPR. BY
2		REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1		REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.

**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

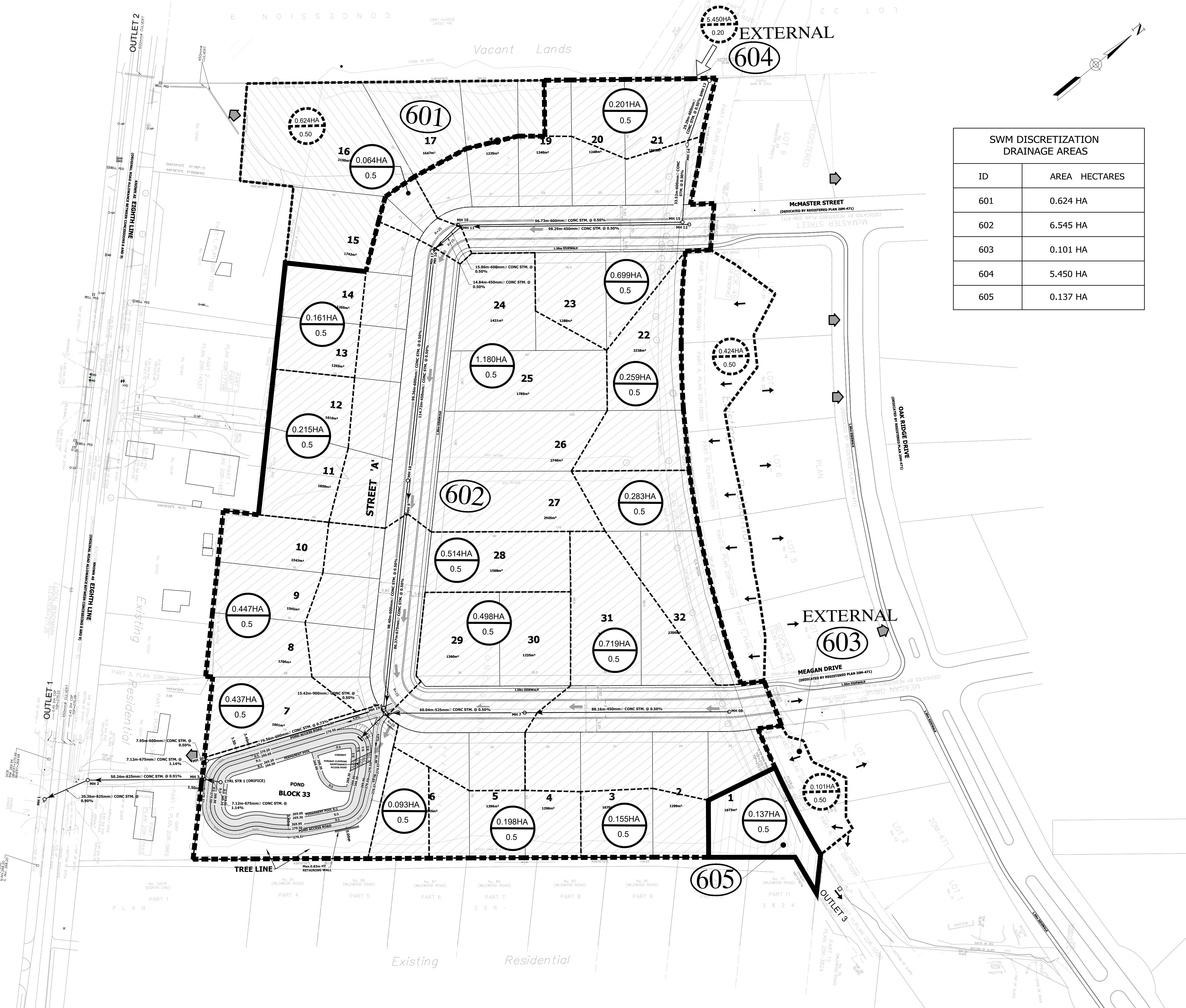
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CONSULTING ENGINEERS & PROJECT MANAGERS
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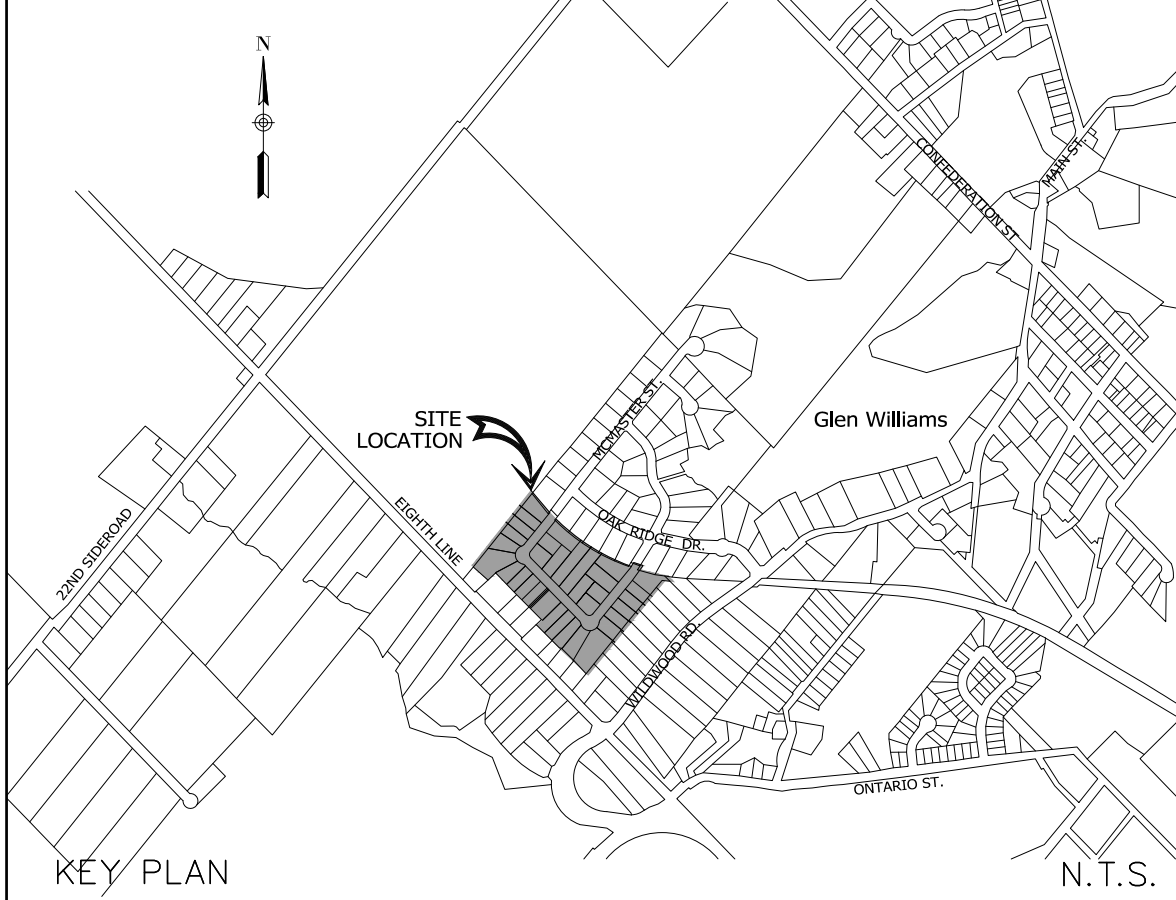
Halton
REGION

**FIGURE 7 - PRE-DEVELOPMENT STORM
TRIBUTARY PLAN**

DESIGNED BY:	M.E.H.	DATE:	MARCH 2021	CHECKED BY:	M.E.H.
DRAWN BY:	A.G./V.B./G.M.	DRAWING NO.:	09-015-14	CITY FILE:	
SCALE:	HOR 1:750	Sheet:	14 OF 18	REGION FILE:	



SWM DISCRETIZATION DRAINAGE AREAS	
ID	AREA HECTARES
601	0.624 HA
602	6.545 HA
603	0.101 HA
604	5.450 HA
605	0.137 HA



LEGEND

- TRIBUTARY AREA BOUNDARY
- STORM TRIBUTARY AREA (HA)
- RUNOFF COEFFICIENT
- EXTERNAL TRIBUTARY AREA BOUNDARY
- EXTERNAL STORM TRIBUTARY AREA (HA)
- EXTERNAL RUNOFF COEFFICIENT
- SUB CATCHMENT AREA ID.
- OVERLAND FLOW ARROW

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS.
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 ELEVATION=271.26m
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REVISION	BLOCK	DATE	APPR. BY
2		REVISD AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021 M.E.H.
1		REVISD AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019 M.E.H.

**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

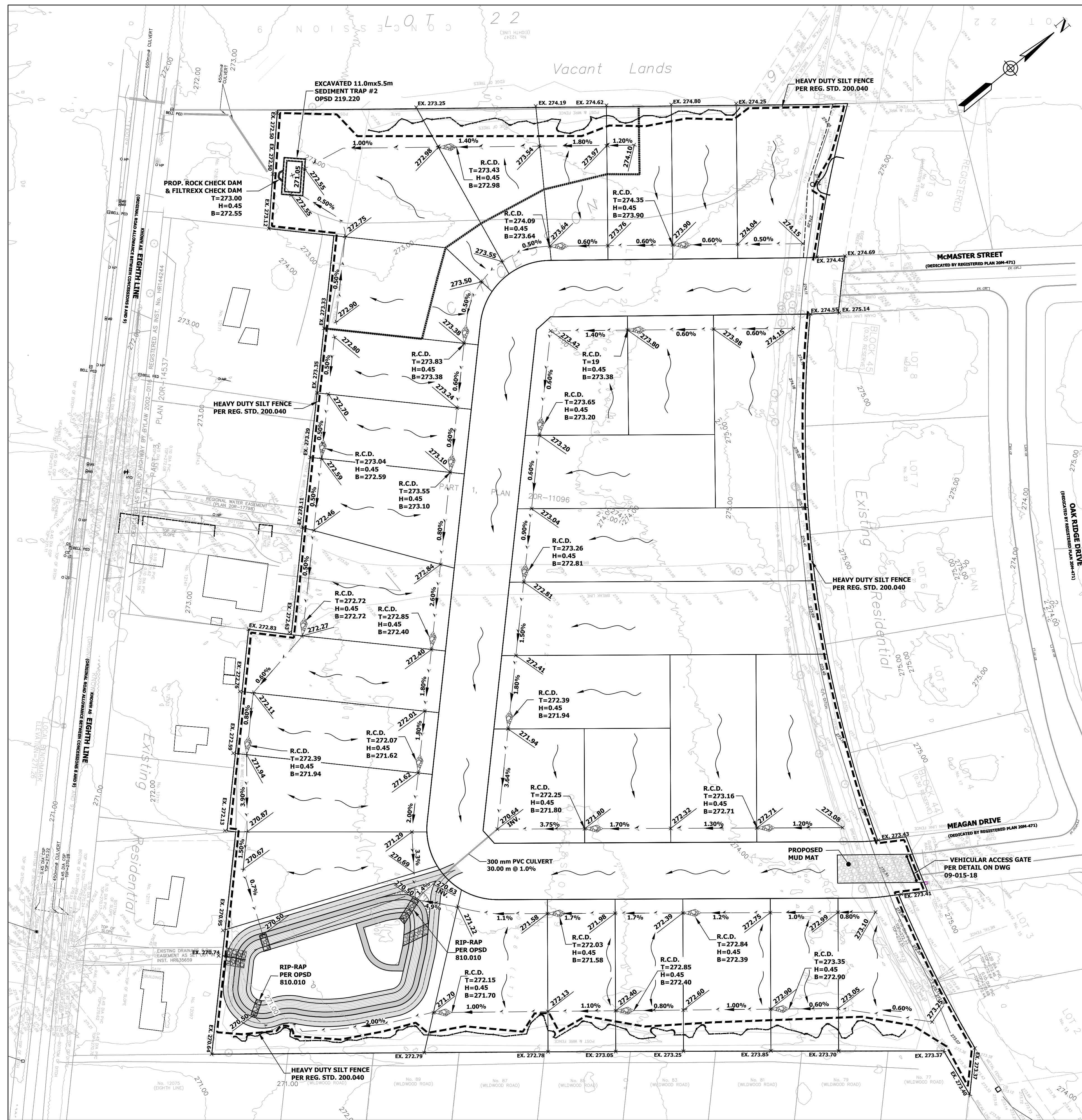
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FIGURE 8 - POST DEVELOPMENT STORM TRIBUTARY PLAN

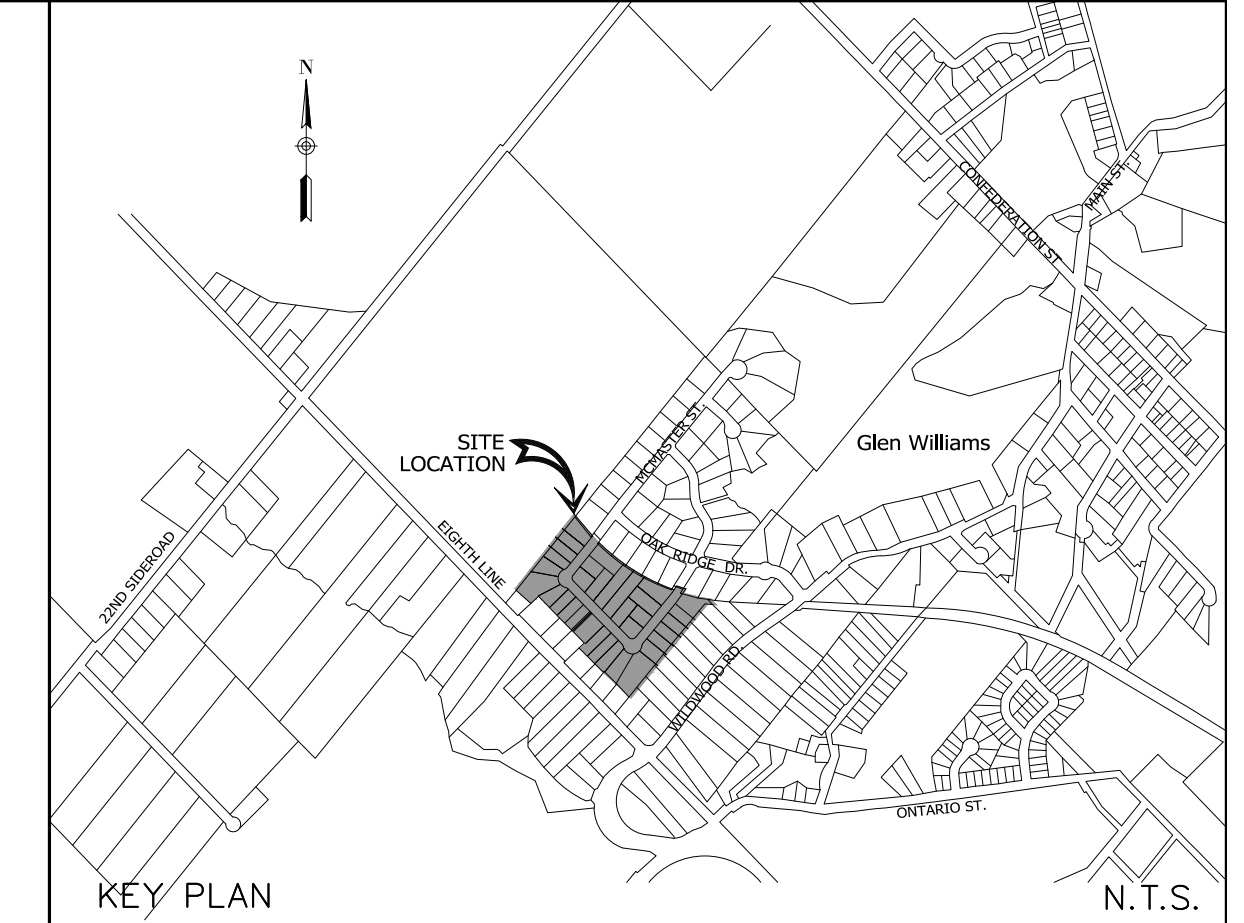
DESIGNED BY: M.E.H.	DATE: MARCH 2021	CHECKED BY: M.E.H.
DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-15	CITY FILE:
SCALE: HOR 1:750	Sheet: 15 OF 18	REGION FILE:



EXCAVATED SEDIMENTATION TRAP CALCULATION (125 cu.m/ha)

TRAP ID	TRAP AREA (ha)	VOLUME REQUIRED (cu.m)	LENGTH (m)	WIDTH (m)	DEPTH (m)	VOLUME PROVIDED (cu.m)
1 (POND)	6.26	783	-	-	-	2441
2	0.62	78	11	5.5	1.5	91

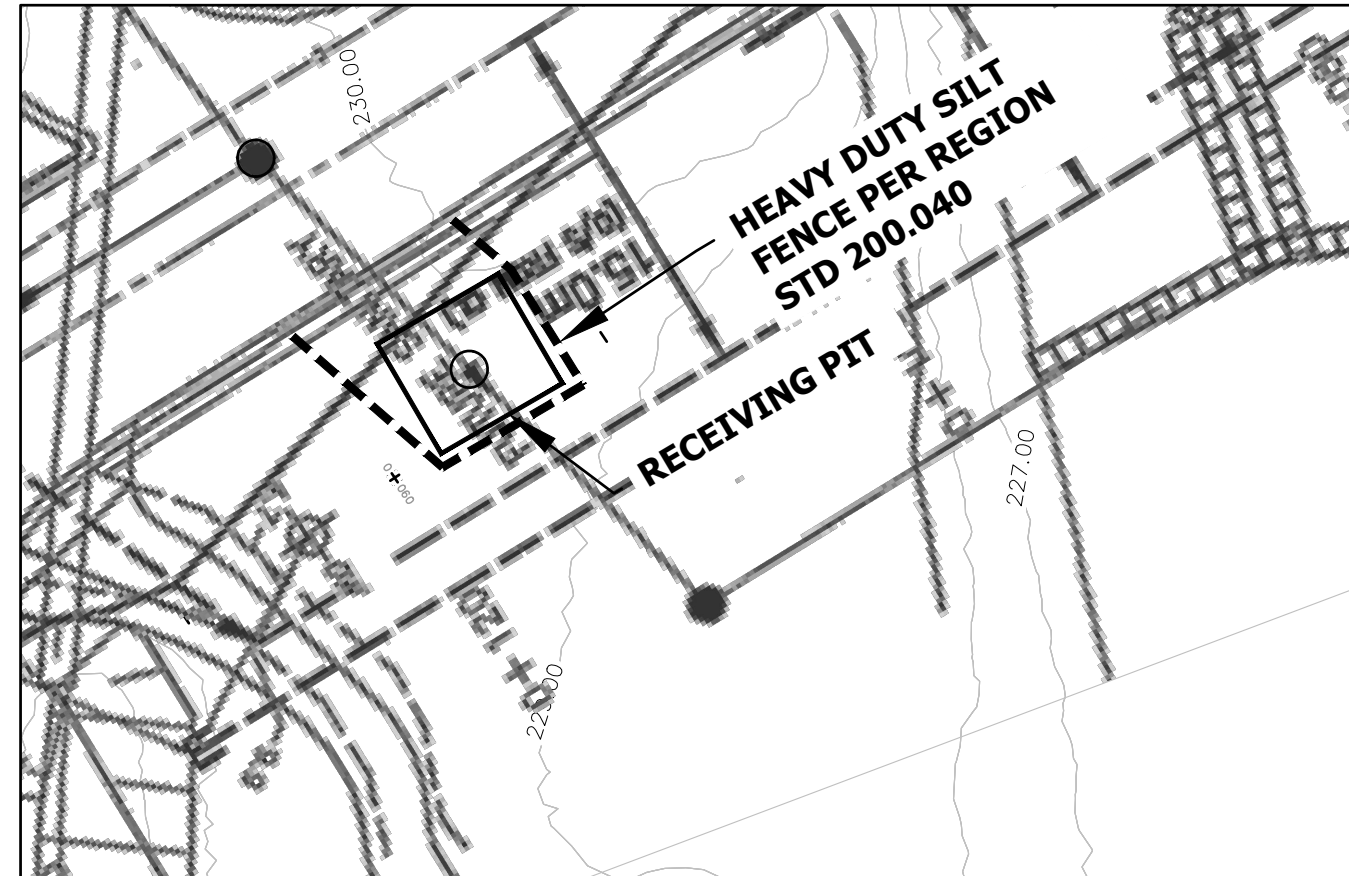
NOTE:
FOR EROSION SEDIMENT CONTROL
DETAILS SEE DRAWING 09-015-18



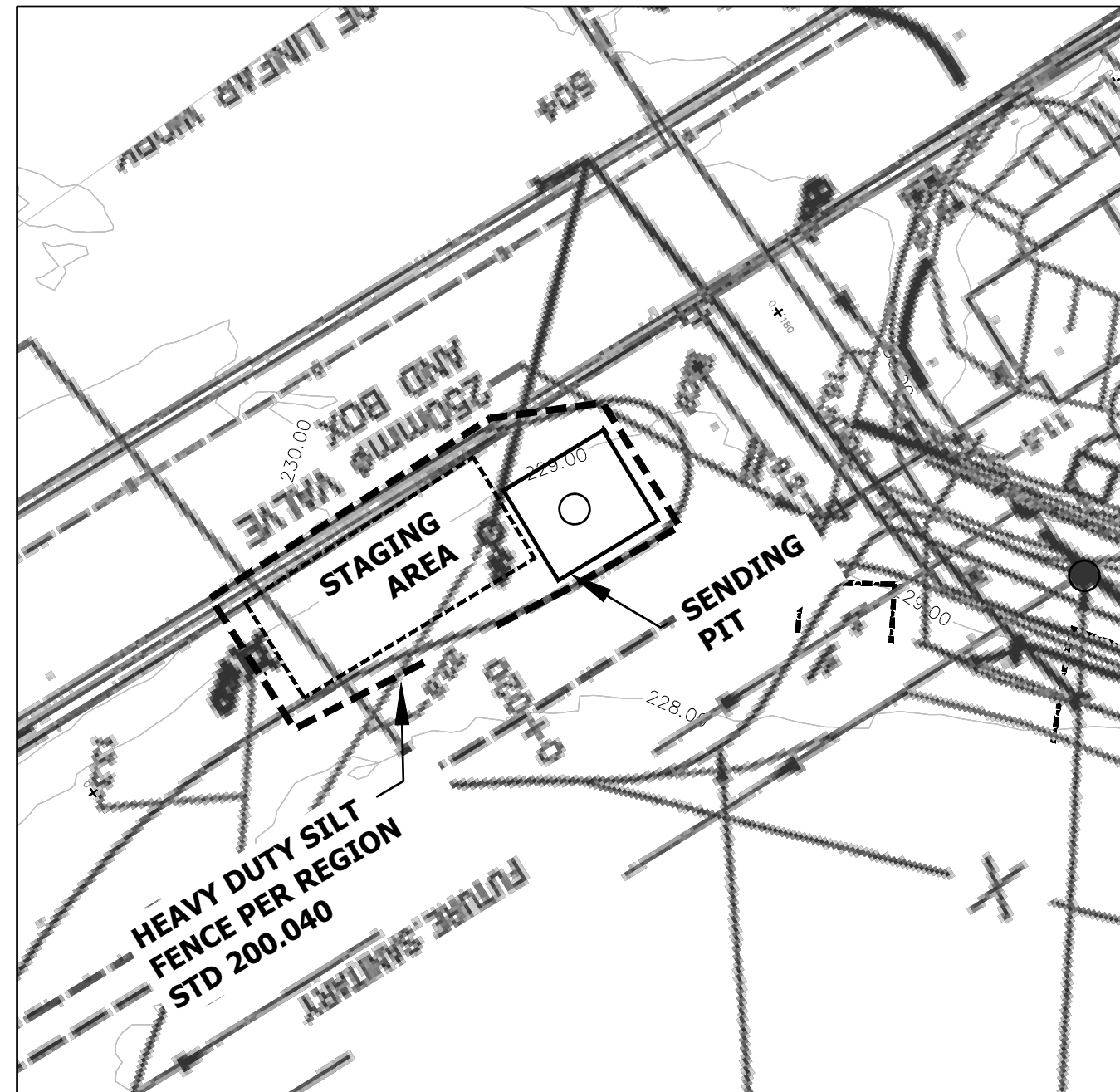
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LEGEND

- +191.84 PROPOSED ELEVATION
- SILT FENCE
- 0.3% INTERCEPTION SWALE
- DENOTES SHEET FLOW
- DENOTES SEDIMENTATION TRAP
- PROPOSED MUD-MAT



RECEIVING PIT ESC DETAIL



SEND PIT ESC DETAIL

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS, UTM ZONE 17, NAD83 (CSRS) (2010.0). DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99990. ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB. ELEVATION NOTE: ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 0011954U598F ELEVATION=258.735m, No. 00619668361 ELEVATION=252.480m LOCAL BENCHMARK CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124. ELEVATION=271.20m ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED. PIPE SIZES ARE IN MILLIMETRES

REVISION	BLOCK	DATE	APPR. BY
2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.

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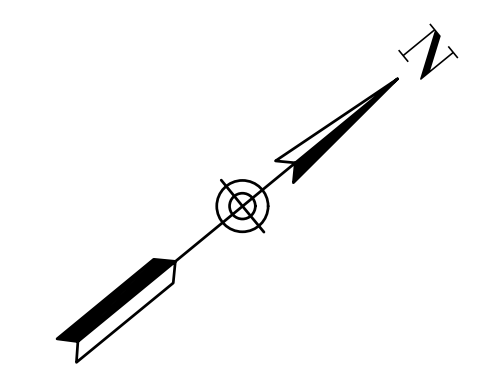
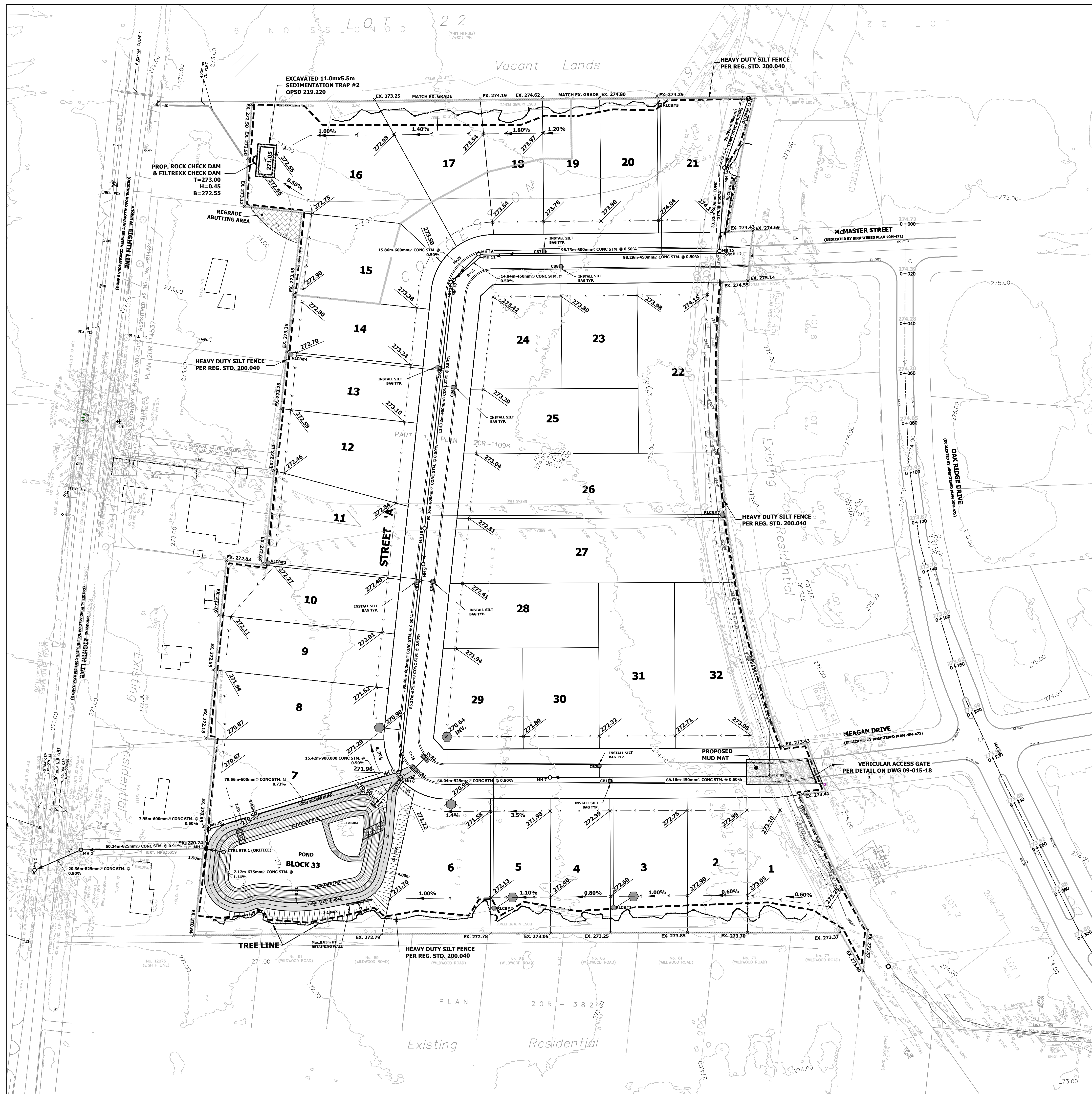
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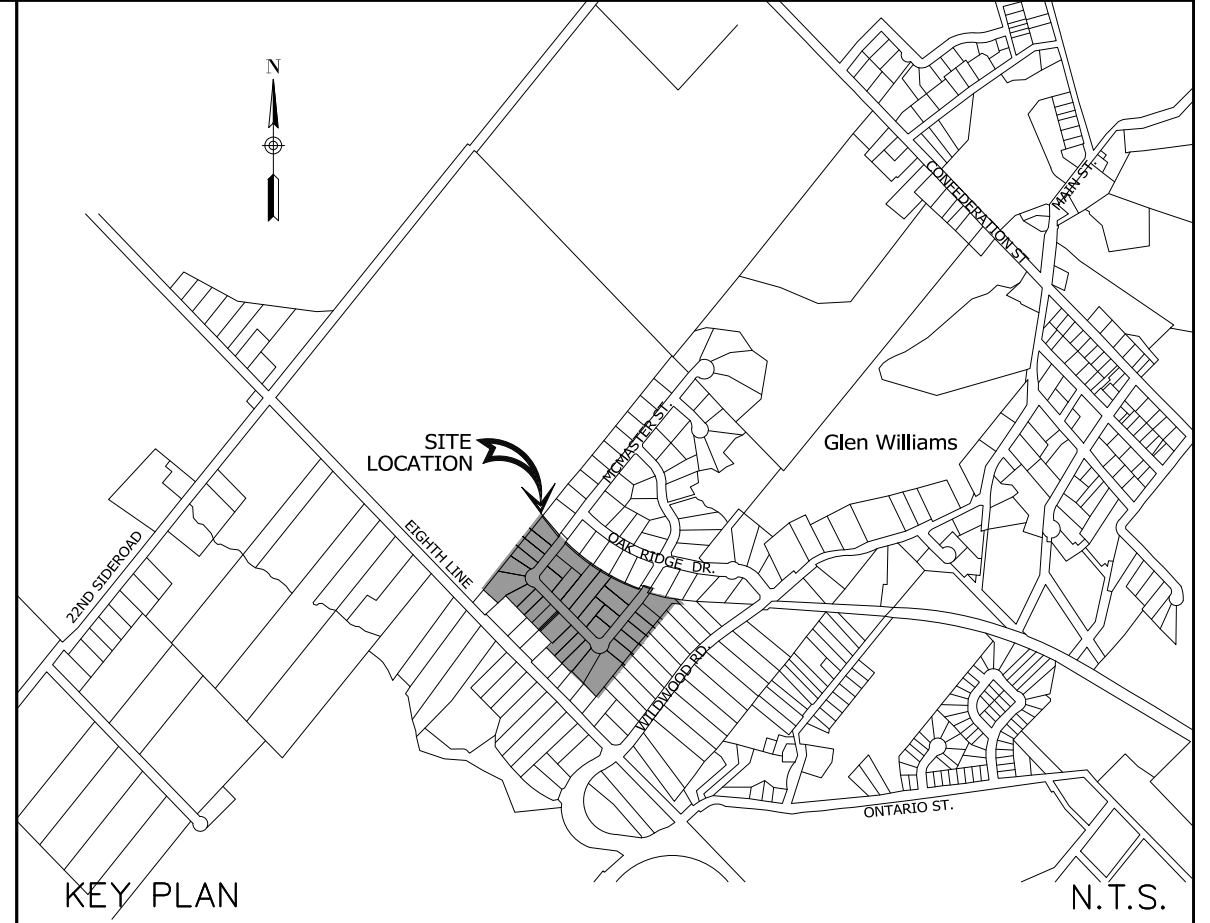
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**FIGURE 9 - CONCEPTUAL EROSION AND
SEDIMENT CONTROL PLAN STAGE I**

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SCALE	Sheet: 16 OF 18	REGION FILE:
HOR 1:750		



NOTE:
FOR EROSION SEDIMENT CONTROL
DETAILS SEE DRAWING 09-015-18



- LEGEND**
- MH20 PROPOSED STORM MANHOLE & NUMBER
 - CB PROPOSED CATCHBASIN
 - dCB PROPOSED DOUBLE CATCHBASIN
 - PCS PROPOSED POND CONTROL STRUCTURE
 - HW - HW PROPOSED HEADWALLS
 - 100m-600mm CONC STM @ 1.00% PROPOSED STORM SEWER DIRECTION OF FLOW
 - PROPOSED STORM SERVICE
 - SF --- SOLID TREE PROTECTION HOARDING
 - SILT FENCE
 - 0.3% INTERCEPTION SWALE
 - DENOTES SILT PROTECTION FOR STREET CBS
 - DENOTES SHEET FLOW
 - DENOTES SEDIMENTATION TRAP

BEARINGS ARE UTM GRID, DERIVED FROM REAL TIME NETWORK (RTN) OBSERVATIONS, UTM_ZONE 17, NAD83 (CSRS) (2010.0). DISTANCES ARE GROUND AND CAN BE CONVERTED TO GRID BY MULTIPLYING BY THE COMBINED SCALE FACTOR OF 0.99999. ALL CURB ELEVATIONS ARE SHOWN TO THE TOP FACE OF CURB. ELEVATION NOTE: ELEVATIONS SHOWN ON THIS PLAN ARE RELATED TO GEODETIC DATUM AND ARE DERIVED FROM GEOLOGICAL SURVEY OF CANADA BENCH MARK: No. 00119540588F ELEVATION=252.735m, No. 00619668361 ELEVATION=252.493m LOCAL BENCHMARK CONCRETE NAIL LOCATED ON THE SOUTHWEST SIDE OF EIGHTH LINE, OPPOSITE MAIL BOX FOR ADDRESS No. 12124. ELEVATION=271.28m. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED. PIPE SIZES ARE IN MILLIMETRES.

2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
REVISION	BLOCK	DATE	APPR. BY

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2147925 ONTARIO INC.**

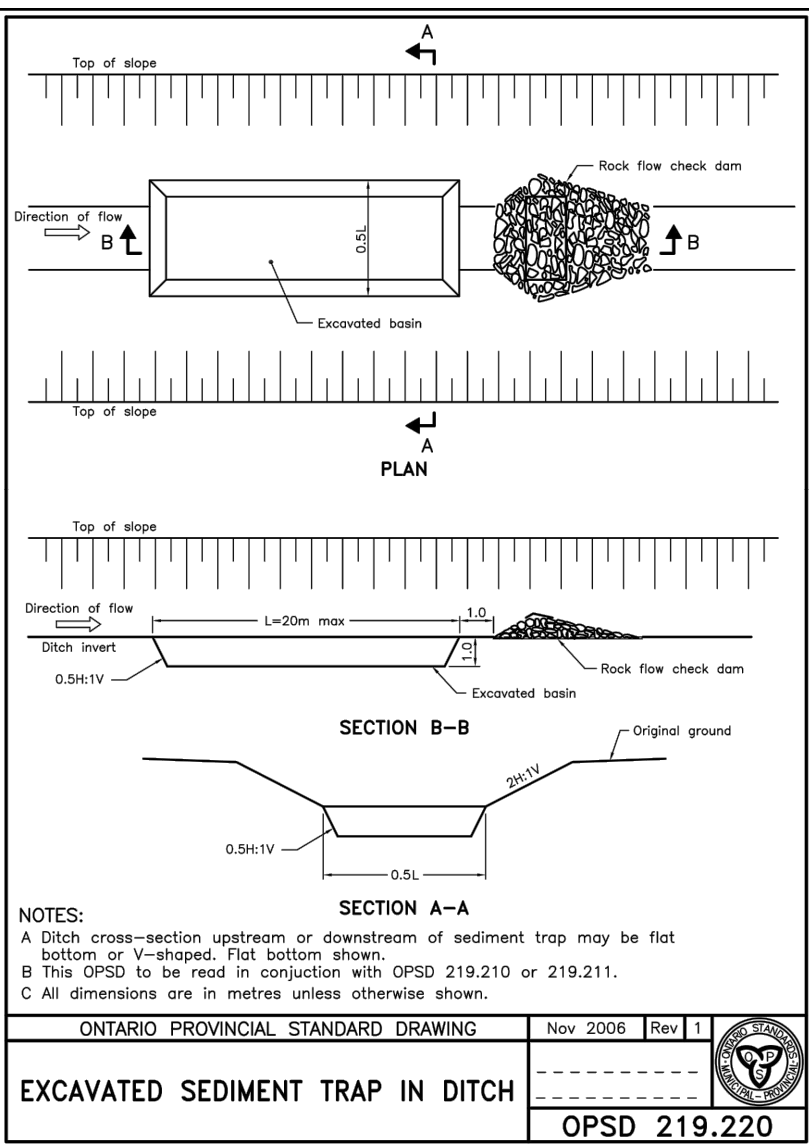
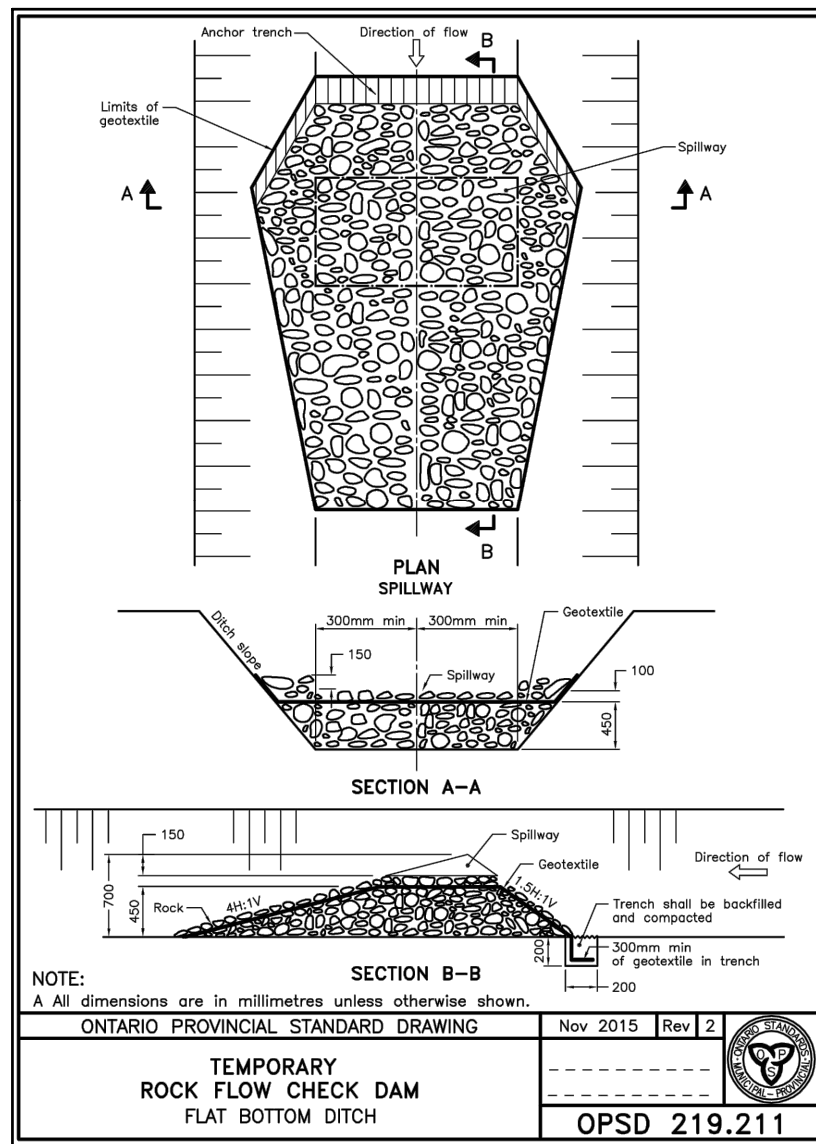


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**FIGURE 10-CONCEPTUAL EROSION AND
SEDIMENT CONTROL PLAN STAGE II**

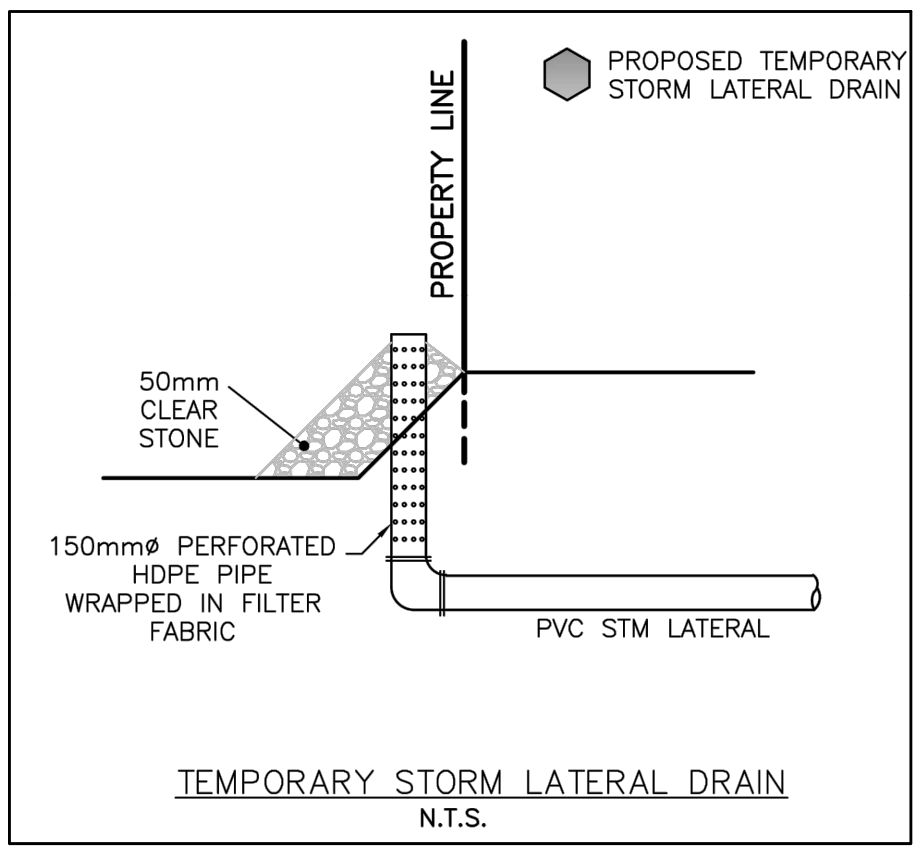
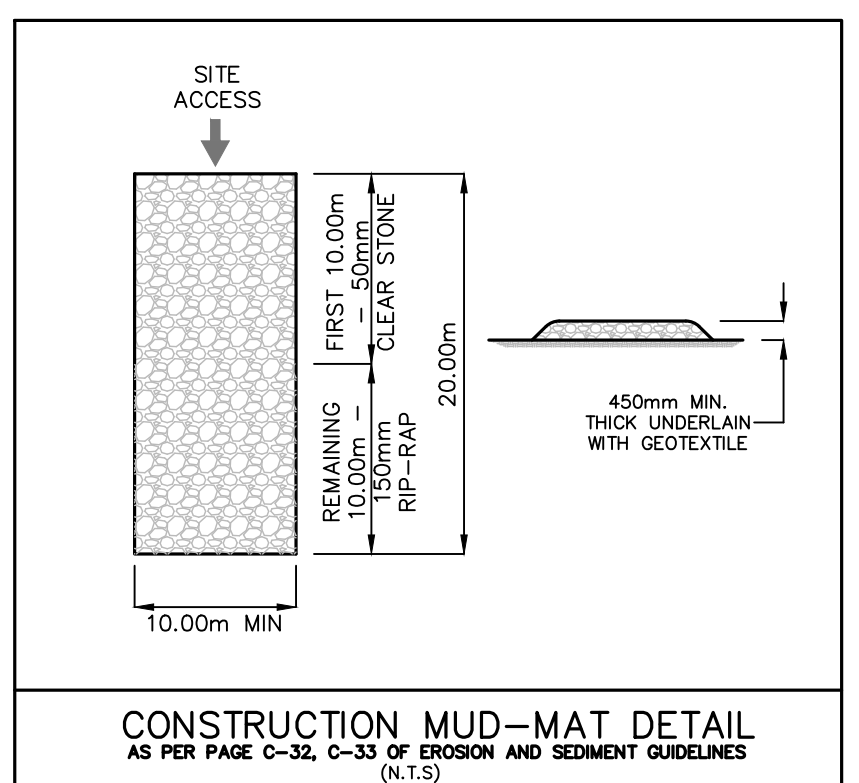
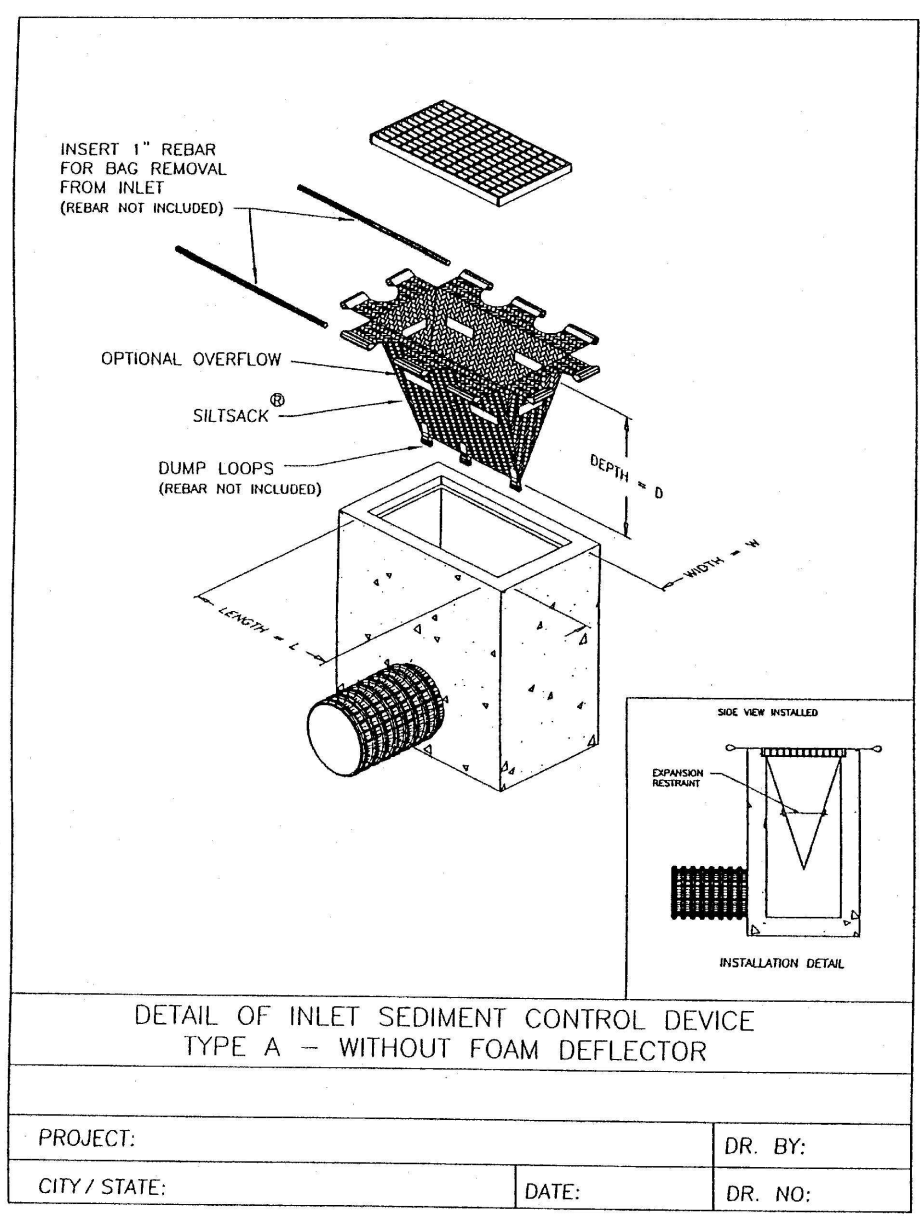
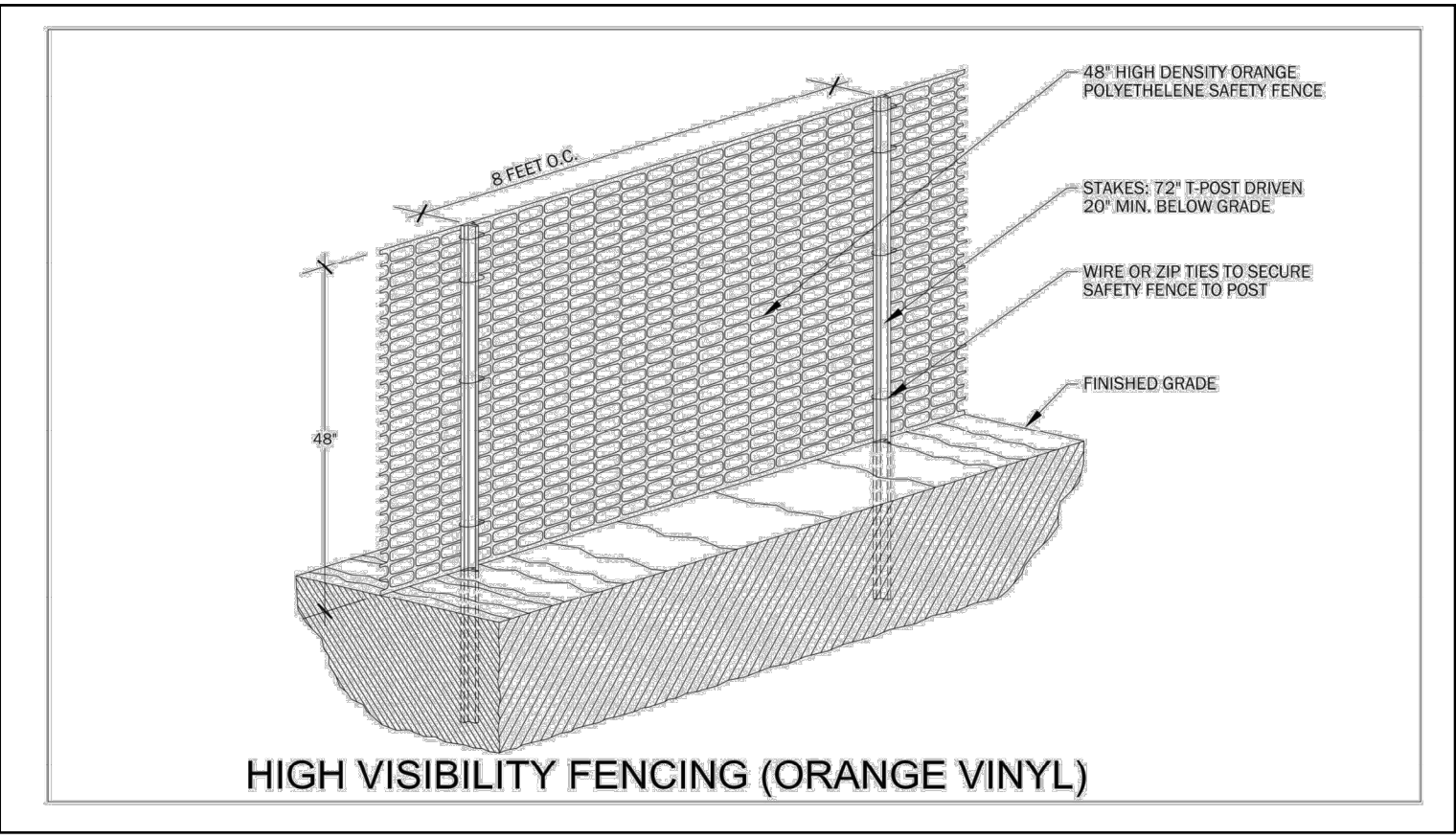
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DRAWN BY: A.G./V.B./G.M.	DRAWING NO. 09-015-17	CITY FILE:
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ESC MEASURE INTERNAL TO THE SITE	TIMING FOR INSTALLATION	INSPECTION/MAINTENANCE REQUIREMENTS	TIMING FOR REMOVAL
PHASE 1 - Topsoil Stripping and Area Grading			
-Siltation Control Fence placed at grading limits (OPSD 219.131)	Prior to topsoil stripping.	Consultant to arrange inspection with Town Staff once installation is complete.	Just prior to final grading, replacement with phase 2 measures, or construction of municipal services.
-Additional Siltation Control Fence placed at rear lot limits as shown on ESC plan (OPSD 219.131)	Prior to topsoil stripping.	Consultant to undertake weekly inspections and after each rainfall event, including weekly reporting. Regular maintenance to remove accumulated sediment once 50% of capacity.	
-Construction Mud Mat (detailed on ESC drawing) DS-217	During pre-grading works.		
-Drainage/Interceptor swales (OPSD 219.221)	During pre-grading works.		
-Rock Check Dams (OPSD 219.220)	During pre-grading works.		
-Sediment Trap (illustrated on ESC drawing) (OPSD 219.220)	During pre-grading works.		
-Others as required by Town or CVC.	Prior to topsoil stripping.		
PHASE 2 - Municipal Servicing Construction			
-Grass Vegetation hydroseeding of topsoil & restoration areas	Topsoil and restoration areas to be seeded within 2 weeks after grading is completed.	Consultant to undertake weekly inspections and after each rainfall event, including weekly reporting. Regular maintenance to remove accumulated sediment once 50% of capacity is exceeded and repair ESC measures as required. Dynamic relocation of swales based on construction process	Just prior to final grading or building construction.
-Drainage/Interceptor swales (OPSD 219.211)			
-Storm drain inlet protection (detailed on ESC drawing)			
-Others as required by Town or TRCA	To be assessed as the issue is identified.		
PHASE 3 - Building Construction			
-Maintenance and repairs to all remaining ESC measures as per detailed inspection with Town Inspector.	Prior to building construction, ESC measures to be repaired as per Town deficiency list.	Detailed inspection of all remaining ESC measures with Town Inspector. Consultant to undertake weekly inspections and after each rainfall event, including weekly reporting. Regular maintenance to remove accumulated sediment once 40% of capacity is exceeded.	Just prior to final topsoil and sodding of lot/block areas.
-Removal of identified Phase 1 or 2 measures			
-CB's to have silt traps until lots sodded			

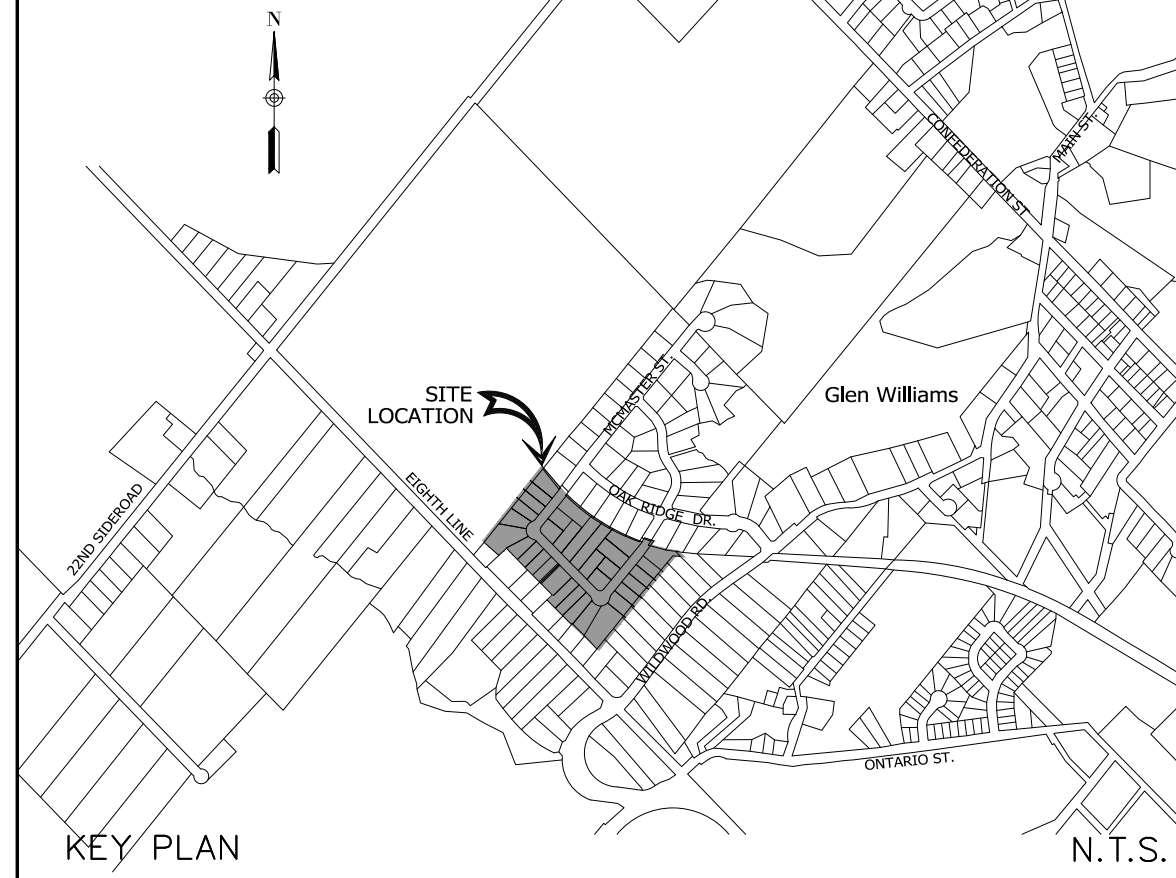
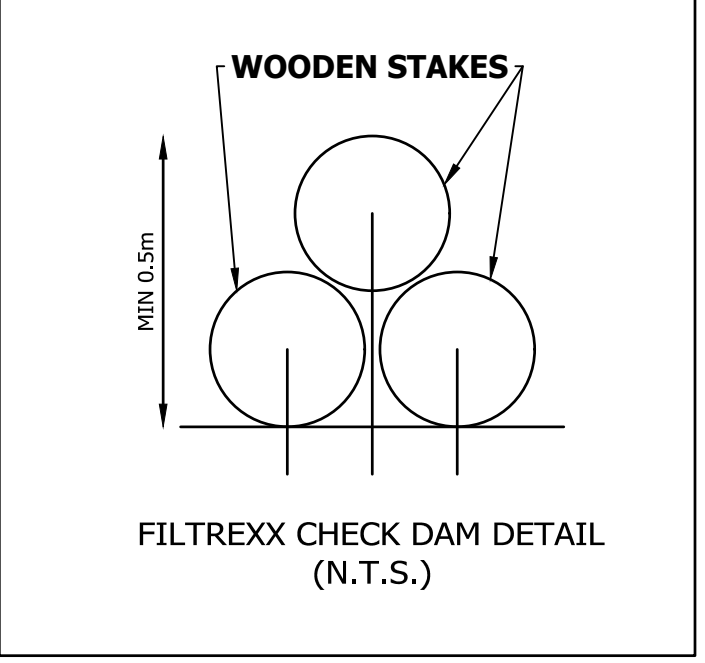
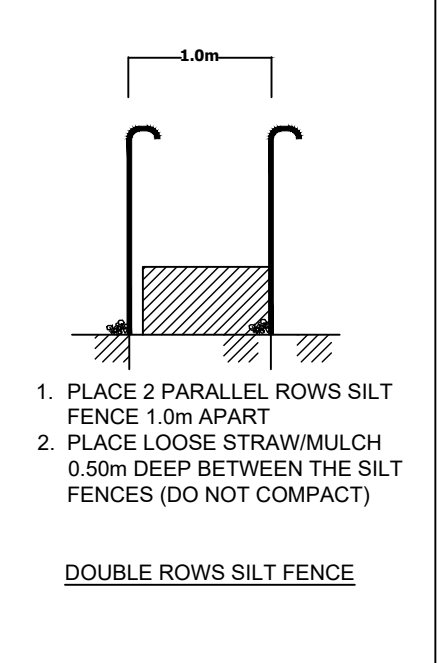
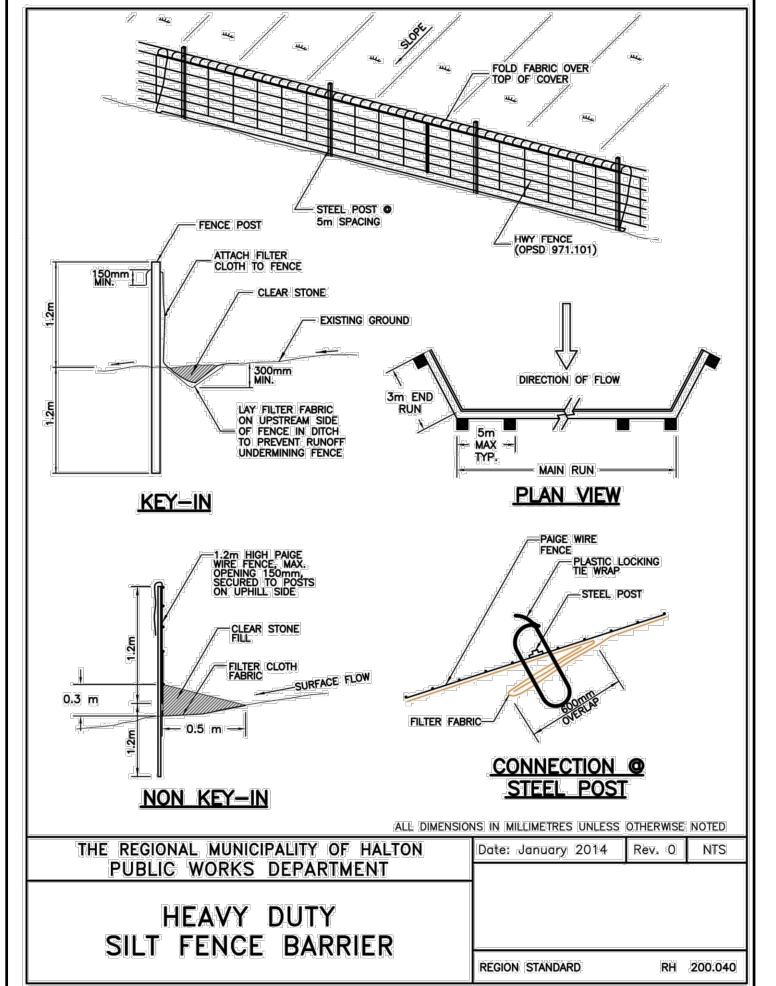
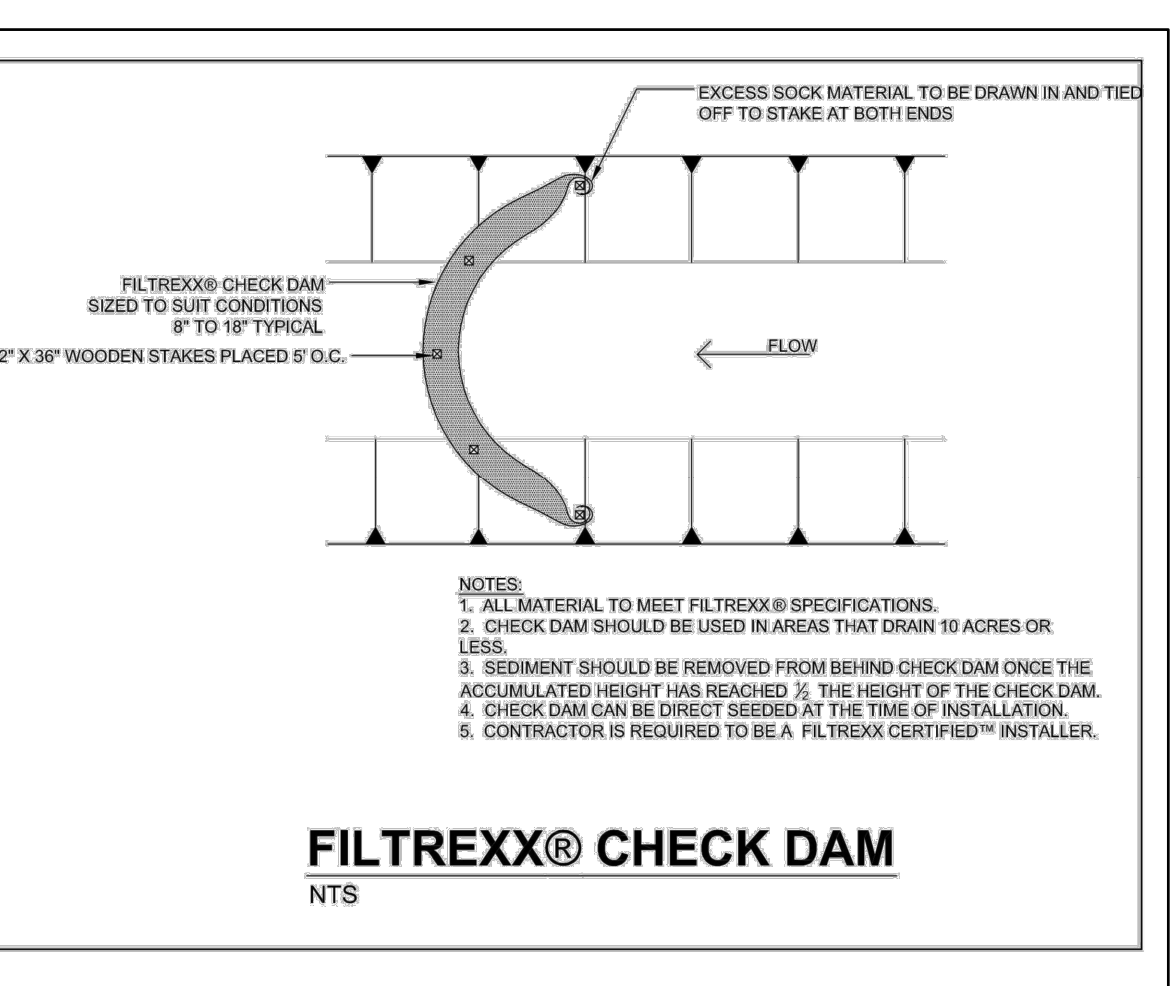
DISTURBED AREAS TO BE HYDROSEEDING FOLLOWING STAGE 1, INCLUDING SCARIFICATION OUTSIDE OF GROWING SEASON.

NOTE: FOR CONSTRUCTION STAGING PLEASE REFER TO CONSTRUCTION MANAGEMENT REPORT.



- STANDARD NOTES:**
- "EROSION AND SEDIMENT CONTROL (ESC) MEASURES WILL BE IMPLEMENTED PRIOR TO, AND MAINTAINED DURING THE CONSTRUCTION PHASES, TO PREVENT ENTRY OF SEDIMENT INTO THE WATER. ALL DAMAGED EROSION AND SEDIMENT CONTROL MEASURES SHOULD BE REPAIRED AND/OR REPLACED WITHIN 48 HOURS OF THE INSPECTION."
 - "DISTURBED AREAS WILL BE MINIMIZED TO THE EXTENT POSSIBLE, AND TEMPORARILY OR PERMANENTLY STABILIZED OR RESTORED AS THE WORK PROGRESSES."
 - "ALL IN-WATER AND NEAR WATER WORKS WILL BE CONDUCTED IN THE DRY WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS."
 - "THE EROSION AND SEDIMENT CONTROL STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO MINIMIZE SEDIMENT LADEN RUNOFF FROM LEAVING THE WORK AREAS. IF THE PRESCRIBED MEASURES ON THE PLANS ARE NOT EFFECTIVE IN PREVENTING THE RELEASE OF A DELETERIOUS SUBSTANCE, INCLUDING SEDIMENT, THEN ALTERNATIVE MEASURES MUST BE IMPLEMENTED IMMEDIATELY TO MINIMIZE POTENTIAL ECOLOGICAL IMPACTS. CVC ENFORCEMENT OFFICER SHOULD BE IMMEDIATELY CONTACTED. ADDITIONAL ESC MEASURES TO BE KEPT ON SITE AND USED AS NECESSARY."
 - "AN ENVIRONMENTAL MONITOR WILL ATTEND THE SITE TO INSPECT ALL NEW CONTROLS, AS WELL AS ON A REGULAR BASIS, OR FOLLOWING RAIN/SNOWMELT EVENT, TO MONITOR ALL WORKS, AND IN PARTICULAR WORKS RELATED TO EROSION AND SEDIMENT CONTROLS, DEWATERING OR UNWATERING, RESTORATION AND IN- OR NEAR- WATER WORKS. SHOULD CONCERNS ARISE ON SITE THE ENVIRONMENTAL MONITOR WILL CONTACT THE CVC ENFORCEMENT OFFICER AS WELL AS THE PROPONENT."
 - "ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OR PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER. VEHICULAR REFUELING AND MAINTENANCE WILL BE CONDUCTED A MINIMUM OF 30 METRES FROM THE WATER."
 - "ALL GRADES WITHIN THE REGULATORY FLOOD PLAN WILL BE MAINTAINED OR MATCHED."
 - "THE PROPONENT/CONTRACTOR SHALL MONITOR THE WEATHER SEVERAL DAYS IN ADVANCE OF THE ONSET OF THE PROJECT TO ENSURE THAT THE WORKS WILL BE CONDUCTED DURING FAVOURABLE WEATHER CONDITIONS. SHOULD AN UNEXPECTED STORM ARISE, THE CONTRACTOR WILL REMOVE ALL UNFIXED ITEMS FROM THE REGIONAL STORM FLOOD PLAN THAT WOULD HAVE THE POTENTIAL TO CAUSE A SPILL OR AN OBSTRUCTION TO FLOW, E.C., FUEL TANKS, PORTAPOTTIES, MACHINERY, EQUIPMENT, CONSTRUCTION MATERIALS, ETC."
 - "ALL DEWATERING/UNWATERING SHALL BE TREATED AND RELEASED TO THE ENVIRONMENT AT LEAST 30 METRES FROM A WATERCOURSE OR WETLAND AND ALLOWED TO DRAIN THROUGH A WELL-VEGETATED AREA. NO DEWATERING EFFLUENT SHALL BE SENT DIRECTLY TO ANY WATERCOURSE, WETLAND OR FOREST, OR ALLOWED TO DRAIN ONTO DISTURBED SOLS WITHIN THE WORK AREA. THESE CONTROL MEASURES SHALL BE MONITORED FOR EFFECTIVENESS AND MAINTAINED OR REVISED TO MEET THE OBJECTIVE OF PREVENTING THE RELEASE OF SEDIMENT LADEN WATER."
 - ALL ACCESS TO THE WORK SITE SHALL BE McMASTER STREET.

- NOTES:**
- SILTATION CONTROL FENCING, CONSTRUCTION MUD-MAT AND ROCK CHECK DAMS TO BE INSTALLED PRIOR TO ANY CONSTRUCTION ON SITE.
 - THE REGULAR INSPECTIONS SHOULD BE OCCURRING DURING ALL CONSTRUCTION STAGES. INSPECTION OF ALL SILTATION AND EROSION CONTROL DEVICES IS REQUIRED DURING EARTHWORKS, UNDERGROUND SERVICING, ROAD CONSTRUCTION AND BUILDING. COPY OF INSPECTION REPORT SHOULD BE SUBMITTED TO THE CITY GRADING & MUNICIPAL INSPECTION SECTION OF THE ENGINEERING DEPARTMENT.
 - WEEKLY. AFTER EVERY RAINFALL EVENT.
 - AFTER SIGNIFICANT SNOWMELT EVENT.
 - DAILY DURING EXTENDED RAIN OR SNOWMELT EVENT.
 - ALL REPAIRS TO BE COMPLETED WITHIN 48 HOURS OF NOTIFICATION BY BUILDER/CONTRACTOR.
 - VEHICLE TRACKING CONTROL/MUD MATS MUST BE MADE TO PREVENT THE TRANSPORT OF SEDIMENT ONTO THE PAVED SURFACE.
 - THE PAD SHOULD BE AS PER EROSION AND SEDIMENT CONTROL GUIDELINES (DECEMBER 2006).
 - THE GRANULAR MATERIAL WILL REQUIRE PERIODIC REPLACEMENT.
 - INTERCEPTOR SWALES TO BE CONSTRUCTED AS PER LAYOUT ON THIS DRAWING. SWALES SHOULD BE COMPACTED AND CONSTRUCTED WITH MAX. 2:1 SIDE SLOPES. RIP-RAP STABILIZATION REQUIRED AT THE OUTLET.
 - EROSION CONTROL MATS TO BE APPLIED TO CONVEYANCE SWALE AND DITCHES.
 - ALL FILL MATERIAL TO BE CLEAN AND FREE OF TRASH, RUBBISH, GLASS, LIQUID OR TOXIC CHEMICALS OR GARBAGE MATERIALS.
- NOTES:**
- THE ESC STRATEGIES OUTLINED ON THE PLANS ARE NOT STATIC AND MAY NEED TO BE UPGRADED/AMENDED AS SITE CONDITIONS CHANGE TO PREVENT SEDIMENT RELEASES TO THE NATURAL ENVIRONMENT. THE CVC ENFORCEMENT OFFICE WILL BE CONTACTED IMMEDIATELY SHOULD THE EROSION AND SEDIMENT CONTROL PLANS CHANGE FROM THE APPROVED PLANS. FAILED ESC MEASURES WILL BE REPAIRED IMMEDIATELY.
 - ALL ACTIVITIES, INCLUDING MAINTENANCE PROCEDURES, WILL BE CONTROLLED TO PREVENT THE ENTRY OF PETROLEUM PRODUCTS, DEBRIS, RUBBLE, CONCRETE OR OTHER DELETERIOUS SUBSTANCES INTO THE WATER. VEHICULAR REFUELING AND MAINTENANCE WILL BE CONDUCTED 30 MATERS FROM THE WATER.



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2	REVISED AS PER TOWN/REGION/CBC COMMENTS	MAR/24/2021	M.E.H.
1	REVISED AS PER TOWN/REGION/CBC COMMENTS	NOV/21-2019	M.E.H.
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**RESIDENTIAL SUBDIVISION DEVELOPMENT
2147925 ONTARIO INC.**

Professional Engineer
Michael Hall
M.E.HALL
MAR/24/2021
PROVINCE OF ONTARIO

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**FIGURE 11 - CONCEPTUAL EROSION AND
SEDIMENT CONTROL DETAILS**

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