

NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION
 TOPOGRAPHIC INFORMATION PROVIDED BY R-PE SURVEYING LTD.,
 REFERENCE No. 22-049, CAD FILE No.22049tp05, SURVEY
 RECEIVED FEBRUARY 16, 2023.

LEGAL INFORMATION
 SITE PLAN PROVIDED BY KNYMH INC., PROJECT NUMBER 21407,
 FOR GARITO BARBUTO TOR PH 2 BLOCK 458, RECEIVED SEPTEMBER 11, 2024.

BENCHMARK (MINISTRY OF TRANSPORTATION)
 No. 00819828155 ELEVATION = 185.351m

No.	DATE	BY	DESCRIPTION	APPROVED
2	24-10-07	C.J.M.	2nd SUBMISSION	
1	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: 1:500	REFERENCES
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APPROVALS	FIELD NOTES
MUNICIPAL APPROVAL	BELL <input type="checkbox"/> HYDRO <input type="checkbox"/>
DEVELOPMENT SERVICES	GAS <input type="checkbox"/> CABLE <input type="checkbox"/>
	TRAFFIC <input type="checkbox"/> WATER <input type="checkbox"/>
	STAMP
REGIONAL APPROVAL	
LEGISLATIVE AND PLANNING SERVICES	

DSEL
 600 Alden Road, Suite 606
 Markham, Ontario, L3R 0E7
 Tel: (905) 475-3080
 Fax: (905) 475-3081
 www.DSEL.ca

MILTON TOWN OF MILTON DEVELOPMENT SERVICES
 TOWN OF MILTON FILE No: XXXXXXX

Halton REGION The Regional Municipality of Halton
 REGION OF HALTON FILE No: XXXXXXX

DEVELOPER: **MATTAMY (BROWNIDGE) LIMITED**

DEVELOPMENT MANAGER: **mattamy HOMES** PROJECT: **TOR SUBNODE SITEPLAN**

TITLE: **STORM DRAINAGE PLAN** © DSEL

DRAWN BY: H.P.	CHECKED BY: E.G.
DESIGNED BY: H.C.	CHECKED BY: C.J.M.
PROJECT NO. 24-1377	SHEET 6 OF 18

LEGEND

- MH 303, MH 304: UPSTREAM MH TO DOWNSTREAM MH
- 0.06, 0.75: RUN-OFF COEFFICIENT
- DRAINAGE AREA IN HECTARES
- UPSMH, DWSM: UPSTREAM MH TO DOWNSTREAM MH
- 0.10, 0.50: RUN-OFF COEFFICIENT
- DRAINAGE AREA IN HECTARES (EXTERNAL)
- EXTERNAL FLOW DIRECTION
- EXTERNAL OVERLAND FLOW DIRECTION
- SINGLE/DOUBLE CATCHBASIN
- SUMP PUMP TO DISCHARGE TO STORM CONNECTION
- STORM SEWER TRIBUTARY BOUNDARY
- STORM TRIBUTARY SUB-CATCHMENT BOUNDARY
- EXTERNAL STORM TRIBUTARY BOUNDARY
- OTHER PHASES

LOCATION			CONTRIBUTING AREA				FLOW		SEWER DESIGN												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
STREET	FROM MANHOLE	TO MANHOLE	AREA "A" (ha)	STORM COEFFICIENT "C"	SECTION A/C	ACCUMULATE A/C	HYDRATIONAL INTENSITY "I" (mm/hr)	FLOW Q (L/s)	LENGTH (m)	SLOPE (%)	DIAMETER (mm)	FULL FLOW CAPACITY (L/s)	FULL FLOW VELOCITY (m/s)	TIME OF FLOW IN PIPE (min)	TIME OF CONCENTRATION (min)	FALL IN PIPE SECTION (m)	MANHOLE INLET INVERT (m)	MANHOLE LOSSES (m)	MANHOLE OUTLET INVERT (m)	PIPE % CAPACITY	
LANE 'B'				0.08	0.81	0.06									10.00						
	PLUG	377	0.37	0.90	0.33	0.40								10.00							
Contribution From LANE 'A', Pipe 374 - 377							105.37	116	12.0	0.50	450	202	1.27	0.16	10.16					58%	
Contribution From LANE 'A', Pipe 376 - 377															11.05						
Contribution From LANE 'C', Pipe 384 - 383				0.14	0.81	0.11	0.91								10.41						
Contribution From LANE 'C', Pipe 384 - 383				0.00	0.91	0.00	100.05	254	29.0	0.35	600	363	1.28	0.38	11.42					70%	
To LANE 'D', Pipe 378 - 379				0.21	0.81	0.17	98.28	296	32.5	0.35	600	363	1.28	0.42	11.84					81%	
WALKWAY																					
Contribution From LANE 'D', Pipe 378 - 379															12.06						
Contribution From LANE 'D', Pipe 386 - 379															10.93						
Contribution From LANE 'D', Pipe 386 - 379				0.12	0.81	0.10	1.31								10.00						
Contribution From LANE 'D', Pipe 386 - 379				0.00	1.31	0.00	95.46	347	54.5	0.25	675	420	1.17	0.77	12.83					83%	
Contribution From LANE 'D', Pipe 386 - 379				0.06	0.81	0.05	1.36								10.00						
Contribution From LANE 'D', Pipe 386 - 379				0.00	1.36	0.00	92.25	348	9.0	0.25	825	848	1.59	0.09	12.93					41%	
To STIRLING TODD TERRACE (PHASE 1), Pipe Ex 114 - Ex 115 TEE															12.93						
LANE 'C'															10.00						
To LANE 'A', Pipe 385 - 381							105.37	0	42.0	0.50	300	81	1.14	0.61	10.61					0%	
To LANE 'A', Pipe 385 - 381															10.61						
To LANE 'A', Pipe 385 - 381															10.00						
To LANE 'B', Pipe 383 - 378				0.00	0.00	0.00	105.37	0	47.0	0.50	300	81	1.14	0.69	10.69					0%	
To LANE 'B', Pipe 383 - 378															10.69						

NOTES:
Q = 2.78ACI L/s Initial time of concentration = 10 min.
C = Runoff Co-efficient
I = Intensity (mm/hr)
A = Area (hectares)
n = 0.013 (conc.) for sewers >=525mm

PROJECT: TOR PH2-SUBNODE
PROJECT NO: 24-1377
CONSULTANT: DAVID SCHAEFFER ENGINEERING LTD.

DESIGNED BY: H.C.
CHECKED BY: C.J.M.
DATE: 09 Sep 2024
TOWN OF MILTON
STORM SEWER DESIGN
SHEET 1 OF 3

LOCATION			CONTRIBUTING AREA				FLOW		SEWER DESIGN												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
STREET	FROM MANHOLE	TO MANHOLE	AREA "A" (ha)	STORM COEFFICIENT "C"	SECTION A/C	ACCUMULATE A/C	HYDRATIONAL INTENSITY "I" (mm/hr)	FLOW Q (L/s)	LENGTH (m)	SLOPE (%)	DIAMETER (mm)	FULL FLOW CAPACITY (L/s)	FULL FLOW VELOCITY (m/s)	TIME OF FLOW IN PIPE (min)	TIME OF CONCENTRATION (min)	FALL IN PIPE SECTION (m)	MANHOLE INLET INVERT (m)	MANHOLE LOSSES (m)	MANHOLE OUTLET INVERT (m)	PIPE % CAPACITY	
LANE 'A'				0.03	0.81	0.02									10.00						
Contribution From LANE 'A', Pipe 374 - 377							105.37	7	10.5	0.50	300	81	1.14	0.15	10.15					9%	
To LANE 'B', Pipe 377 - 383							104.55	7	24.0	0.90	300	106	1.53	0.26	10.41					7%	
Contribution From LANE 'C', Pipe 384 - 385				0.28	0.81	0.23	0.23								10.00						
Contribution From LANE 'C', Pipe 384 - 385				0.00	0.23	0.00	105.37	66	24.0	0.50	300	81	1.14	0.35	10.35					82%	
To LANE 'D', Pipe 381 - 118							102.18	64	31.0	0.50	300	81	1.14	0.45	11.06					80%	
To LANE 'D', Pipe 381 - 118															11.06						
To LANE 'D', Pipe 381 - 118															10.00					0%	
To LANE 'D', Pipe 381 - 118				0.42	0.90	0.00	0.00	105.37	0	42.5	0.50	300	81	1.14	0.62	10.62					
To LANE 'D', Pipe 381 - 118							0.38								10.00						
To LANE 'D', Pipe 381 - 118							105.37	111	11.0	0.50	450	202	1.27	0.14	10.14					55%	
To LANE 'D', Pipe 381 - 118							102.15	107	23.5	0.50	450	202	1.27	0.31	10.93					53%	
To LANE 'D', Pipe 381 - 118							100.62	106	9.0	0.50	450	202	1.27	0.12	11.05					52%	
To LANE 'D', Pipe 381 - 118															11.05						
LANE 'D'															10.00						
To WALKWAY, Pipe 379 - 113							105.37	0	64.0	0.50	300	81	1.14	0.93	10.93					0%	
To WALKWAY, Pipe 379 - 113															10.93						
Contribution From LANE 'A', Pipe 385 - 381															11.06						
Contribution From LANE 'A', Pipe 385 - 381				0.36	0.81	0.29	0.52								10.00						
Contribution From LANE 'A', Pipe 385 - 381				0.16	0.90	0.14	0.66								10.00						
Contribution From LANE 'A', Pipe 385 - 381							99.97	184	66.0	0.60	450	221	1.39	0.79	11.86					83%	

NOTES:
Q = 2.78ACI L/s Initial time of concentration = 10 min.
C = Runoff Co-efficient
I = Intensity (mm/hr)
A = Area (hectares)
n = (conc.) for sewers >=525mm

PROJECT: TOR PH2-SUBNODE
PROJECT NO: 24-1377
CONSULTANT: DAVID SCHAEFFER ENGINEERING LTD.

DESIGNED BY: H.C.
CHECKED BY: C.J.M.
DATE: 09 Sep 2024
TOWN OF MILTON
STORM SEWER DESIGN
SHEET 2 OF 3

LOCATION			CONTRIBUTING AREA				FLOW		SEWER DESIGN												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	
STREET	FROM MANHOLE	TO MANHOLE	AREA "A" (ha)	STORM COEFFICIENT "C"	SECTION A/C	ACCUMULATE A/C	HYDRATIONAL INTENSITY "I" (mm/hr)	FLOW Q (L/s)	LENGTH (m)	SLOPE (%)	DIAMETER (mm)	FULL FLOW CAPACITY (L/s)	FULL FLOW VELOCITY (m/s)	TIME OF FLOW IN PIPE (min)	TIME OF CONCENTRATION (min)	FALL IN PIPE SECTION (m)	MANHOLE INLET INVERT (m)	MANHOLE LOSSES (m)	MANHOLE OUTLET INVERT (m)	PIPE % CAPACITY	
Ex CTRL 118 Ex 124							0.00	0.66	96.33	177	16.5	0.50	525	304	1.40	0.20	12.05			58%	
To FERGUSON DRIVE (PHASE 1), Pipe Ex 124 - Ex 125															12.05						
Contribution From LANE 'B', Pipe 383 - 378															11.84						
Contribution From LANE 'B', Pipe 383 - 378				0.16	0.81	0.13	1.21								10.00						
Contribution From LANE 'B', Pipe 383 - 378							1.21								10.00						
To WALKWAY, Pipe 379 - 113							96.39	325	15.0	0.25	675	420	1.17	0.21	12.06					77%	
To WALKWAY, Pipe 379 - 113															12.06						

NOTES:
Q = 2.78ACI L/s Initial time of concentration = 10 min.
C = Runoff Co-efficient
I = Intensity (mm/hr)
A = Area (hectares)
n = (conc.) for sewers >=525mm

PROJECT: TOR PH2-SUBNODE
PROJECT NO: 24-1377
CONSULTANT: DAVID SCHAEFFER ENGINEERING LTD.

DESIGNED BY: H.C.
CHECKED BY: C.J.M.
DATE: 09 Sep 2024
TOWN OF MILTON
STORM SEWER DESIGN
SHEET 3 OF 3

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No. 00819828155 ELEVATION = 185.351m

No.	DATE	BY	DESCRIPTION	APPROVED
2.	24-10-07	C.J.M.	2nd SUBMISSION	
1.	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: NTS

APPROVALS

MUNICIPAL APPROVAL

DEVELOPMENT SERVICES

REGIONAL APPROVAL

LEGISLATIVE AND PLANNING SERVICES

REFERENCES

FIELD NOTES

BELL HYDRO

GAS CABLE

TRAFFIC WATER

STAMP

PROFESSIONAL ENGINEER
C. J. MANZO
100511578
24-10-07
PROVINCE OF ONTARIO

DSEL

600 Alden Road, Suite 606
Markham, Ontario, L3R 0E7
Tel: (905) 475-3080
Fax: (905) 475-3981
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MILTON TOWN OF MILTON
DEVELOPMENT SERVICES

TOWN OF MILTON
FILE NO: XXXXXXX

Halton REGION
The Regional Municipality of Halton

REGION OF HALTON
FILE NO: XXXXXXX

DEVELOPER

MATTAMY (BROWNBRIDGE) LIMITED

DEVELOPMENT MANAGER

mattamy HOMES

PROJECT

TOR SUBNODE SITEPLAN

TITLE

STORM DESIGN SHEETS

© DSEL

DRAWN BY: H.P.

DESIGNED BY: H.C.

PROJECT NO: 24-1377

CHECKED BY: E.G.

CHECKED BY: C.J.M.

SHEET 7 OF 18

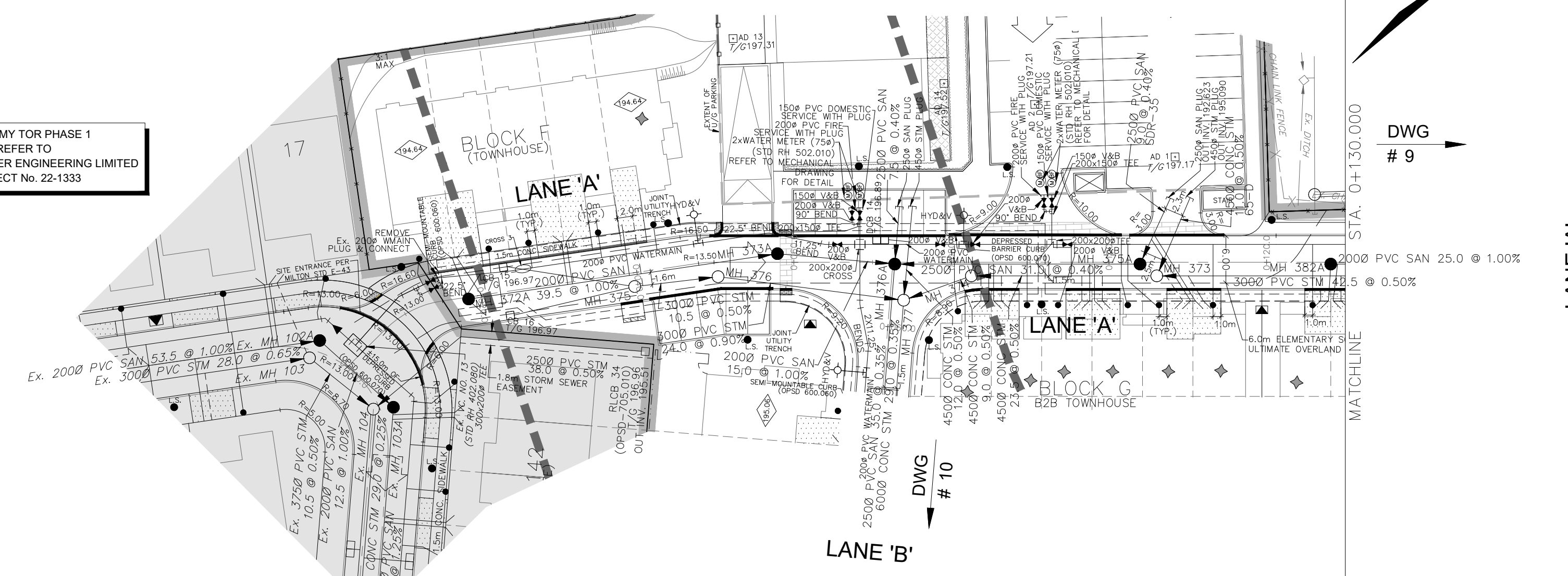
PAVEMENT DESIGN

- 40mm HL-3
- 50mm HL-8
- 150mm OF 19mm LIMESTONE
- 300mm GRANULAR "B", TYPE II

NOTES:

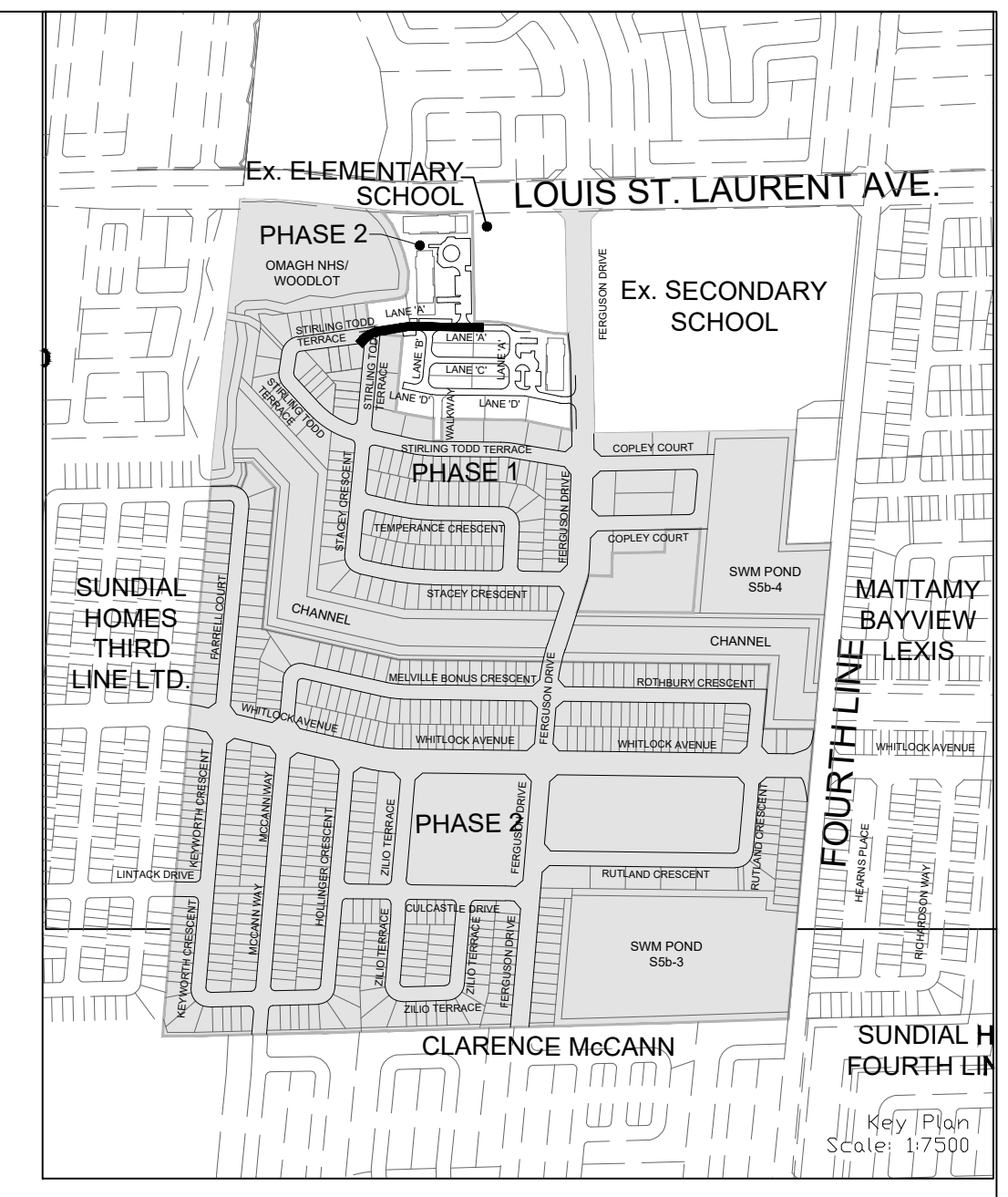
1. ALL EXISTING BUILDINGS, POST & WIRE FENCE, TREES, UTILITY POLES, CULVERTS AND RETAINING WALLS, ETC. WITHIN LOTS AND BLOCKS TO BE REMOVED, UNLESS OTHERWISE NOTED.
2. EXISTING MH AND CB COVERS, WATER V&Bs, WATER V&Cs AND UTILITY PEDESTALS ETC. TO BE ADJUSTED WITHIN NEW ROADWAYS AND BOULEVARDS, WHERE APPLICABLE.
3. CONTRACTOR TO VERIFY THE PRECISE LOCATIONS AND INVERT ELEVATIONS OF EX. UNDERGROUND SERVICES AND EX. UTILITIES PRIOR TO STARTING CONSTRUCTION.
4. ANY DISTURBED AREA DURING CONSTRUCTION TO BE RESTORED TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITIES HAVING JURISDICTION.
5. WRITTEN PERMISSION REQUIRED FOR WORK ON ADJACENT LANDS.
6. SERVING AND GRADING DESIGN FOR FUTURE LOTS LANDS SHOWN ON THE DRAWINGS ARE CONCEPTUAL, WHICH ARE TO BE FURTHER REVIEWED / FINALIZED UPON FUTURE DEVELOPMENT.
7. WORKS WITHIN THE CH REGULATION LIMIT WILL REQUIRE A PERMIT FROM CONSERVATION HALTON UNDER ONTARIO REGULATION 162/06.
8. ALL DWELLINGS WITH THE EXCEPTION OF SLAB-ON-GRADE UNITS, SHALL BE PROVIDED WITH SUMP PUMPS IN ACCORDANCE WITH SECTION 11.2.7.1, STD DWG. E-25, TO THE SATISFACTION OF THE TOWN OF MILTON.
9. ALL RESIDENTIAL UNITS EXCEPT CONDO AND SCHOOL BLOCKS SHOULD HAVE PRESSURE REDUCING VALVES.
10. THE LOCATIONS OF ANTI-SEEPAGE COLLARS SHALL BE DETERMINED BY THE PROJECT GEOTECHNICAL ENGINEER DURING SEWER CONSTRUCTION ON THE SITE.
11. EXISTING WATERMAIN STUBS WILL REQUIRE SWABBING, FLUSHING, AND SAMPLING, WORK TO BE COMPLETED BY REGION OF HALTON STAFF AT THE DEVELOPER'S EXPENSE.
12. INSULATION REQUIRED FOR WATERMAIN/WATER SERVICE WHERE THE SEPARATION BETWEEN WATERMAIN/WATER SERVICES AND OTHER SERVICES AND STRUCTURES IS LESS THAN 1.2m AND/OR THE COVER IS LESS THAN 1.7m (SEE REGION STANDARD RH 408.020).
13. SUMP PUMPS SHALL OUTLET ONTO CONCRETE SPLASH PAD LOCATED IN THE REAR YARD.

MATTAMY TOR PHASE 1
REFER TO
DAVID SCHAEFFER ENGINEERING LIMITED
PROJECT No. 22-1333



LEGEND

- STORM MANHOLE
- CATCHBASIN MANHOLE
- SANITARY MANHOLE
- SANITARY MANHOLE BY OTHERS
- STORM MANHOLE BY OTHERS
- PAIRED SINGLE SANITARY HOUSE CONNECTION
- SINGLE SANITARY HOUSE CONNECTION
- SINGLE STORM HOUSE CONNECTION
- WATER CONNECTION
- HYDRANT
- TEE
- CURB STOP SERVICE VALVE & BOX
- VALVE & CHAMBER
- HYDRO TRANSFORMER
- LIGHT STANDARD
- SINGLE/DOUBLE CATCHBASIN
- SUMP PUMP TO DISCHARGE TO STORM CONNECTION
- BOREHOLE
- STREETLIGHT PEDESTAL
- ANTI-SEEPAGE COLLAR
- ACUSTIC FENCE (TOWN STD. NO. E29)
- 1.5m HIGH CHAIN LINK FENCE (TOWN STD. NO. E27)
- 1.8m PRIVACY FENCE (TOWN STD. NO. E28)
- TEMPORARY PROTECTION FENCE (TOWN STD. NO. P-3)
- PROPOSED OVERLAND FLOW
- EXTERNAL OVERLAND FLOW
- CH APPROX. REGULATION LIMIT
- PHASE LINE
- OTHER PHASES



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BENCHMARK (MINISTRY OF TRANSPORTATION)
No. 00819828155 ELEVATION = 185.351m

No.	DATE	BY	DESCRIPTION	APPROVED
2.	24-10-07	C.J.M.	2nd SUBMISSION	
1.	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: HORZ 1:500 VERT 1:50

REFERENCES: BELL HYDRO GAS CABLE TRAFFIC WATER

APPROVALS:

MUNICIPAL APPROVAL: _____

DEVELOPMENT SERVICES: _____ DATE: _____

REGIONAL APPROVAL: _____

DESIGN OF SANITARY, WATER SERVICES AND REGIONAL ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCAL APPROVAL FROM AREA MUNICIPALITY

LEGISLATIVE AND PLANNING SERVICES: _____ DATE: _____

PROFESSIONAL ENGINEER: C. J. MANZO, 100511578, 24-10-07, PROVINCE OF ONTARIO

DSEL 600 Alden Road, Suite 606 Markham, Ontario, L3R 0E7 Tel: (905) 475-3080 Fax: (905) 475-3081 www.DSEL.ca

MILTON TOWN OF MILTON DEVELOPMENT SERVICES TOWN OF MILTON FILE No: XXXXXXX

Halton REGION The Regional Municipality of Halton REGION OF HALTON FILE No: XXXXXXX

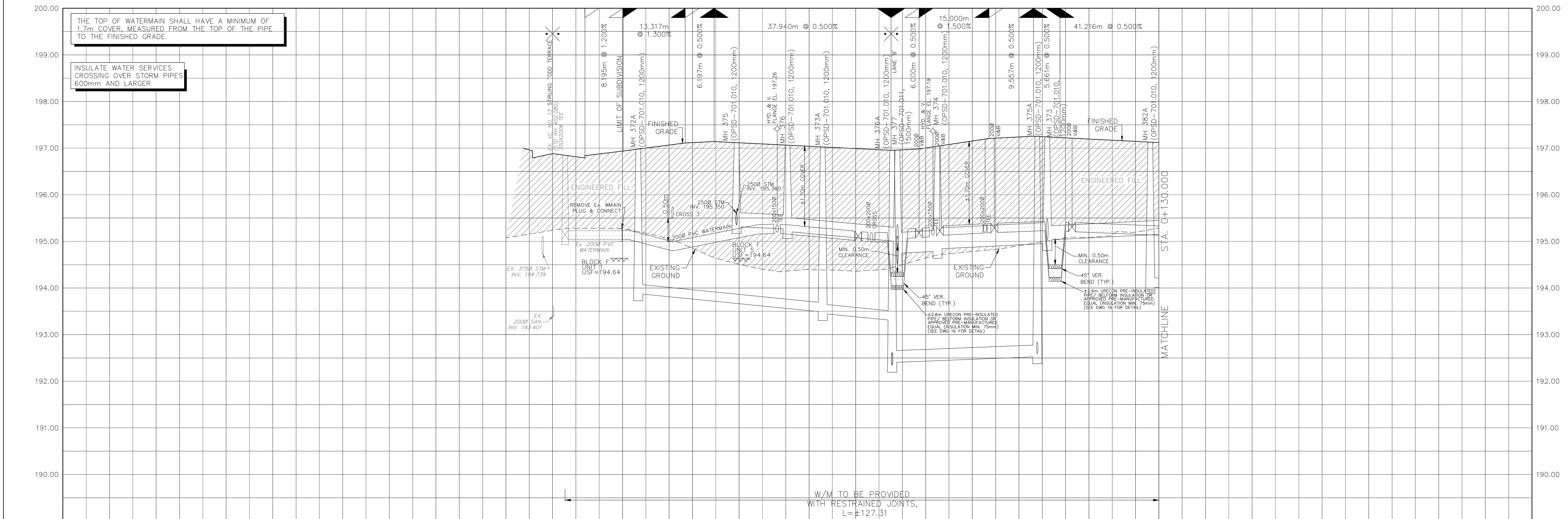
DEVELOPER: **MATTAMY (BROWNIDGE) LIMITED**

DEVELOPMENT MANAGER: **mattamy HOMES** PROJECT: **TOR SUBNODE SITEPLAN**

TITLE: **LANE 'A'** © DSEL

STA. 0+000.000 TO STA. 0+130.000

DRAWN BY: H.P.	CHECKED BY: E.G.
DESIGNED BY: H.C.	CHECKED BY: C.J.M.
PROJECT NO. 24-1377	SHEET 8 OF 18



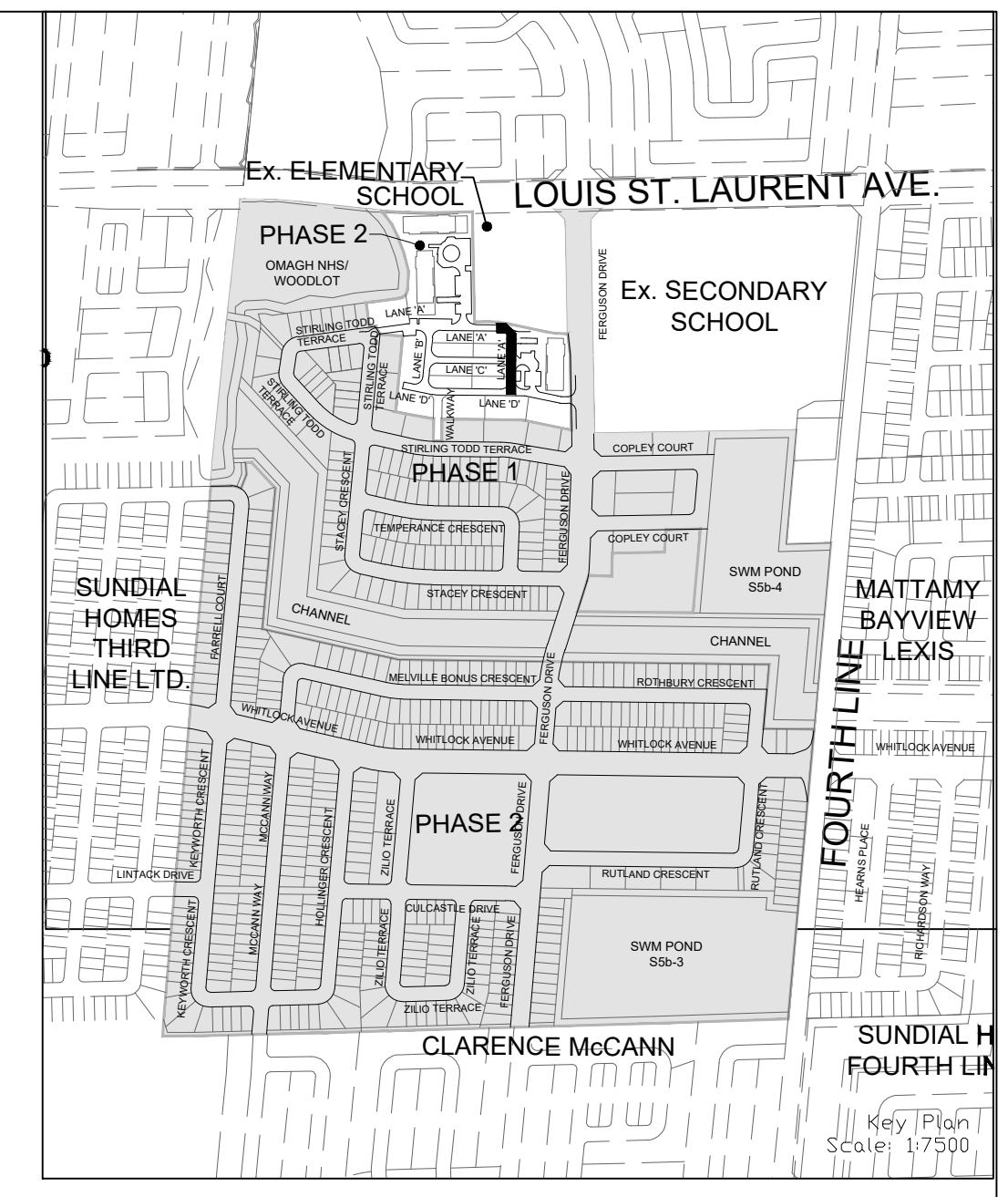
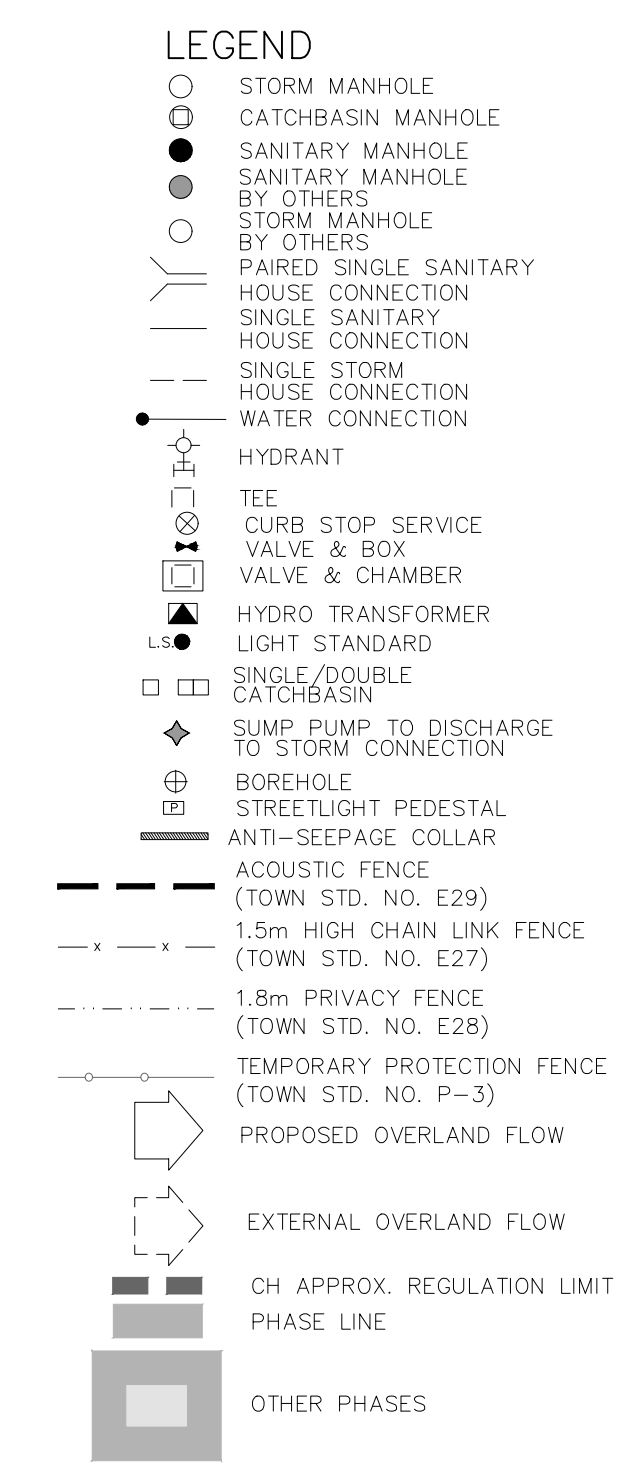
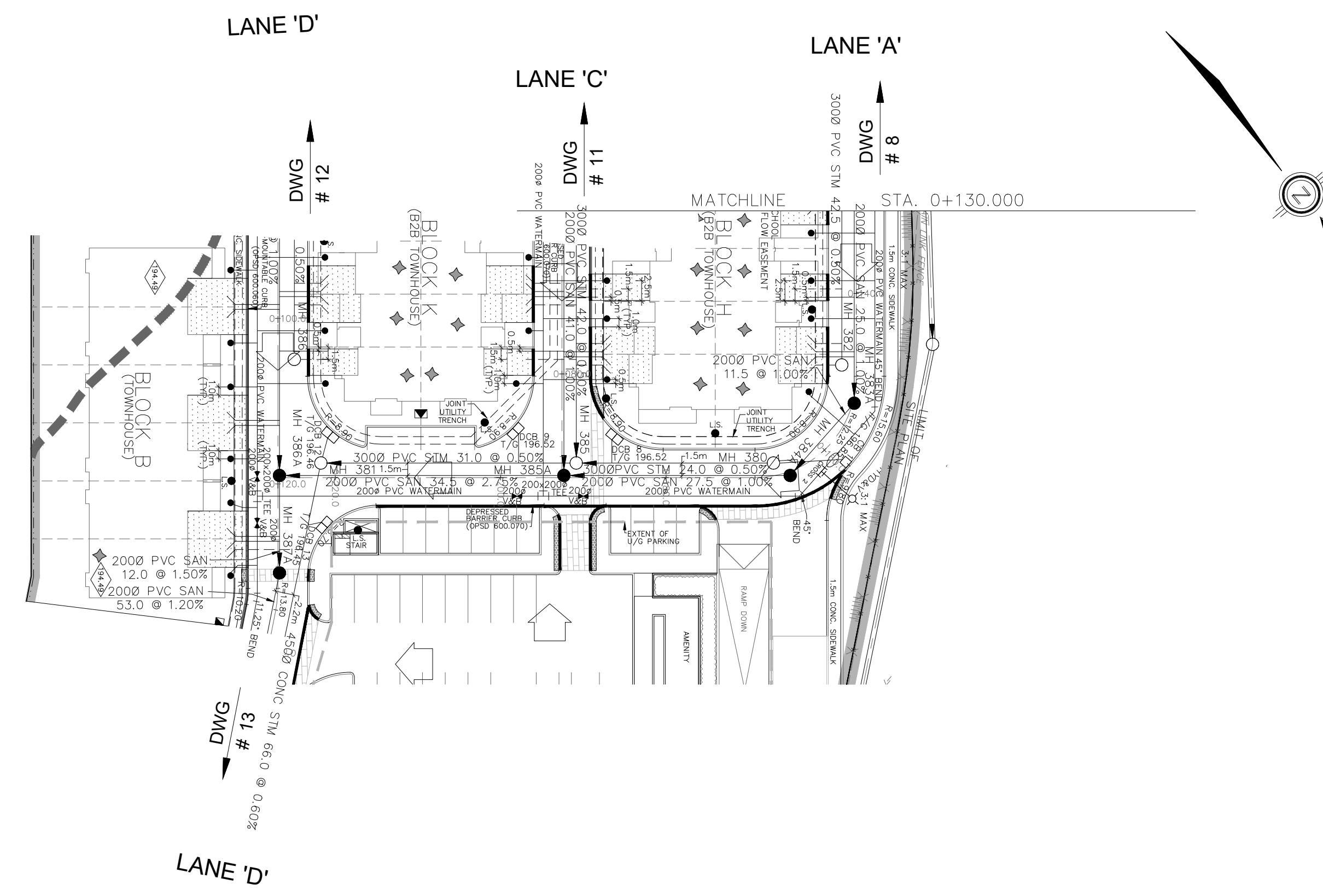
SAITARY INVERT	STORM INVERT	PROPOSED GRADES	CENTERLINE CHAINAGE
NE 193.879	NE 193.864	196.84	PI 0+000.000-
2008 PVC SAN 39.5 @ 1.00% SDR-35	3008 PVC STM 10.5 @ 0.50% SDR-35	196.94	0+006.933-
NE 193.854	NE 193.839	197.00	0+015.128-
2008 PVC SAN 31.0 @ 0.40% SDR-35	3008 PVC STM 10.5 @ 0.50% SDR-35	197.11	0+020.000-
NE 193.830	NE 193.815	197.14	0+028.445-
2500 PVC SAN 31.0 @ 0.40% SDR-35	4500 CONC STM 23.5 @ 0.50% 65-D	197.14	0+034.642-
NE 193.805	NE 193.790	197.17	0+040.000-
2008 PVC SAN 25.0 @ 1.00% SDR-35	3008 PVC STM 42.5 @ 0.50% SDR-35	197.21	0+060.000-
NE 194.029	NE 194.014	197.24	PI 0+072.582-
2008 PVC SAN 39.5 @ 1.00% SDR-35	3008 PVC STM 10.5 @ 0.50% SDR-35	197.25	0+080.000-
NE 194.004	NE 193.989	197.23	0+093.582-
2500 PVC SAN 31.0 @ 0.40% SDR-35	3008 PVC STM 10.5 @ 0.50% SDR-35	197.23	0+100.000-
NE 194.029	NE 194.014	197.23	0+103.139-
2008 PVC SAN 25.0 @ 1.00% SDR-35	3008 PVC STM 42.5 @ 0.50% SDR-35	197.23	PI 0+108.800-
NE 194.029	NE 194.014	197.17	0+120.000-
2008 PVC SAN 39.5 @ 1.00% SDR-35	3008 PVC STM 10.5 @ 0.50% SDR-35	197.17	0+130.000

PAVEMENT DESIGN

- 40mm HL-3
- 50mm HL-8
- 150mm OF 19mm LIMESTONE
- 300mm GRANULAR "B", TYPE II

NOTES:

1. ALL EXISTING BUILDINGS, POST & WIRE FENCE, TREES, UTILITY POLES, CULVERTS AND RETAINING WALLS, ETC. WITHIN LOTS AND BLOCKS TO BE REMOVED, UNLESS OTHERWISE NOTED.
2. EXISTING MH AND CB COVERS, WATER V&Bs, WATER V&Cs AND UTILITY PEDESTALS ETC. TO BE ADJUSTED WITHIN NEW ROADWAYS AND BOULEVARDS, WHERE APPLICABLE.
3. CONTRACTOR TO VERIFY THE PRECISE LOCATIONS AND INVERT ELEVATIONS OF EX. UNDERGROUND SERVICES AND EX. UTILITIES PRIOR TO STARTING CONSTRUCTION.
4. ANY DISTURBED AREA DURING CONSTRUCTION TO BE RESTORED TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITIES HAVING JURISDICTION.
5. WRITTEN PERMISSION REQUIRED FOR WORK ON ADJACENT LANDS.
6. SERVICING AND GRADING DESIGN FOR FUTURE LOTS SHOWN ON THE DRAWINGS ARE CONCEPTUAL, WHICH ARE TO BE FURTHER REVIEWED / FINALIZED UPON FUTURE DEVELOPMENT.
7. WORKS WITHIN THE CH REGULATION LIMIT WILL REQUIRE A PERMIT FROM CONSERVATION HALTON UNDER ONTARIO REGULATION 162/06.
8. ALL DWELLINGS WITH THE EXCEPTION OF SLAB-ON-GRADE UNITS, SHALL BE PROVIDED WITH SUMP PUMPS IN ACCORDANCE WITH SECTION 1.1.27.1, STD DWG. E-25, TO THE SATISFACTION OF THE TOWN OF MILTON.
9. ALL RESIDENTIAL UNITS EXCEPT CONDO AND SCHOOL BLOCKS SHOULD HAVE PRESSURE REDUCING VALVES.
10. THE LOCATIONS OF ANTI-SEEPAGE COLLARS SHALL BE DETERMINED BY THE PROJECT GEOTECHNICAL ENGINEER DURING SEWER CONSTRUCTION ON THE SITE.
11. EXISTING WATERMAIN STUBS WILL REQUIRE SWABBING, FLUSHING, AND SAMPLING, WORK TO BE COMPLETED BY REGION OF HALTON STAFF AT THE DEVELOPER'S EXPENSE.
12. INSULATION REQUIRED FOR WATERMAIN/WATER SERVICE WHERE THE SEPARATION BETWEEN WATERMAIN/WATER SERVICES AND OTHER SERVICES AND STRUCTURES IS LESS THAN 1.2m AND/OR THE COVER IS LESS THAN 1.7m (SEE REGION STANDARD RH 408.020).
13. SUMP PUMPS SHALL OUTLET ONTO CONCRETE SPLASH PAD LOCATED IN THE REAR YARD.



NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION
 TOPOGRAPHIC INFORMATION PROVIDED BY R-PE SURVEYING LTD.,
 REFERENCE No. 22-049, CAD FILE No.22049ip05, SURVEY
 RECEIVED FEBRUARY 16, 2023.

LEGAL INFORMATION
 SITE PLAN PROVIDED BY KNYMH INC., PROJECT NUMBER 21407,
 FOR GARITO BARBUTO TOR PH 2 BLOCK 458, RECEIVED SEPTEMBER 11, 2024.
 BENCHMARK (MINISTRY OF TRANSPORTATION)
 No. 00819828155 ELEVATION = 185.351m

No.	DATE	BY	DESCRIPTION	APPROVED
2.	24-10-07	C.J.M.	2nd SUBMISSION	
1.	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: HORZ 1:500 VERT 1:50

REFERENCES

APPROVALS

MUNICIPAL APPROVAL

DEVELOPMENT SERVICES

REGIONAL APPROVAL

DESIGN OF SANITARY, WATER SERVICES AND REGIONAL ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCAL APPROVAL FROM AREA MUNICIPALITY

LEGISLATIVE AND PLANNING SERVICES

STAMP: LICENSED PROFESSIONAL ENGINEER C. J. MANZO 100511578 24-10-07 PROVINCE OF ONTARIO

DSEL 600 Alden Road, Suite 606 Markham, Ontario, L3R 0E7 Tel: (905) 475-3080 Fax: (905) 475-3081 www.DSEL.ca

MILTON TOWN OF MILTON DEVELOPMENT SERVICES TOWN OF MILTON FILE No: XXXXXXX

Halton REGION The Regional Municipality of Halton REGION OF HALTON FILE No: XXXXXXX

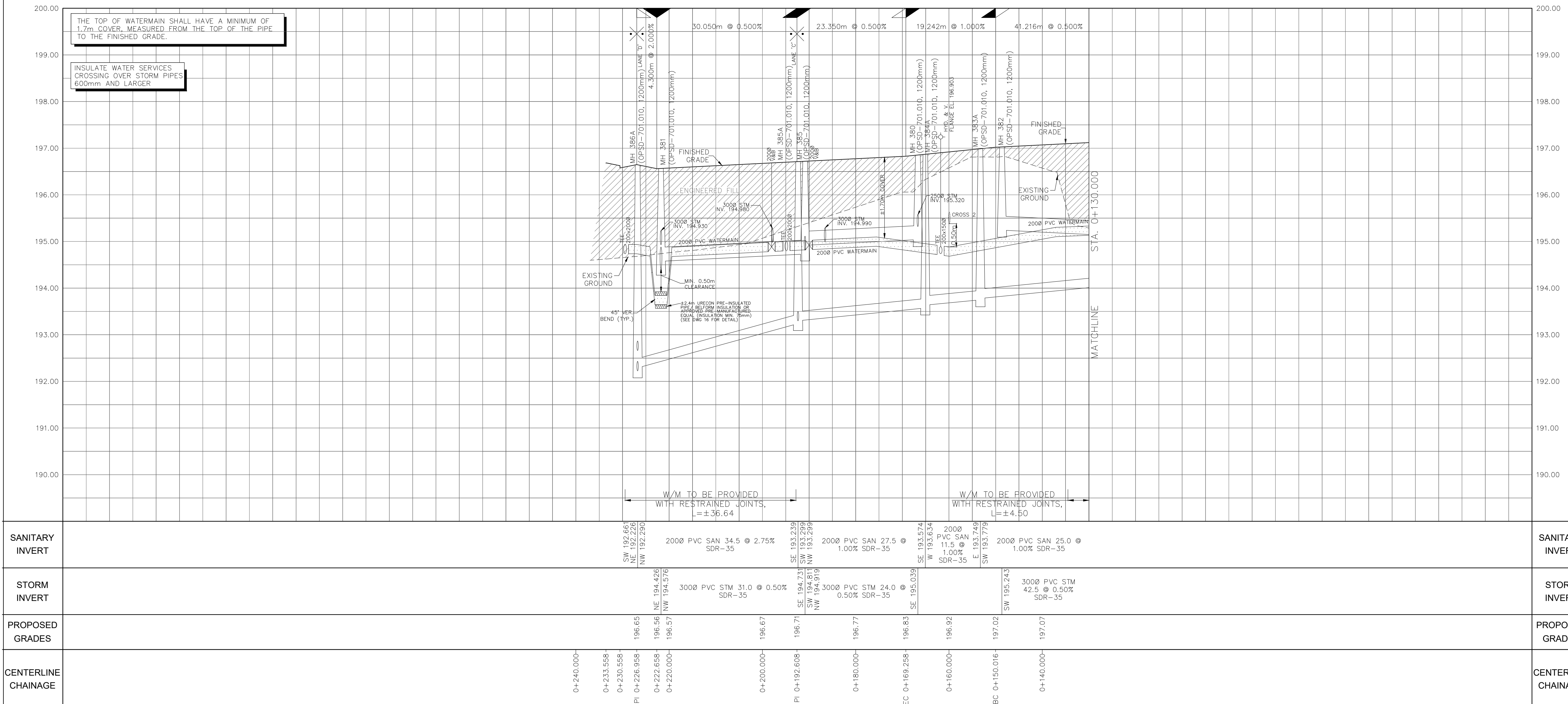
DEVELOPER **MATTAMY (BROWNBRIDGE) LIMITED**

DEVELOPMENT MANAGER **mattamy HOMES** PROJECT **TOR SUBNODE SITEPLAN**

TITLE **LANE 'A'** © DSEL

STA. 0+130.000 TO STA. 0+236.958

DRAWN BY: H.P.	CHECKED BY: E.G.
DESIGNED BY: H.C.	CHECKED BY: C.J.M.
PROJECT NO. 24-1377	SHEET 9 OF 18



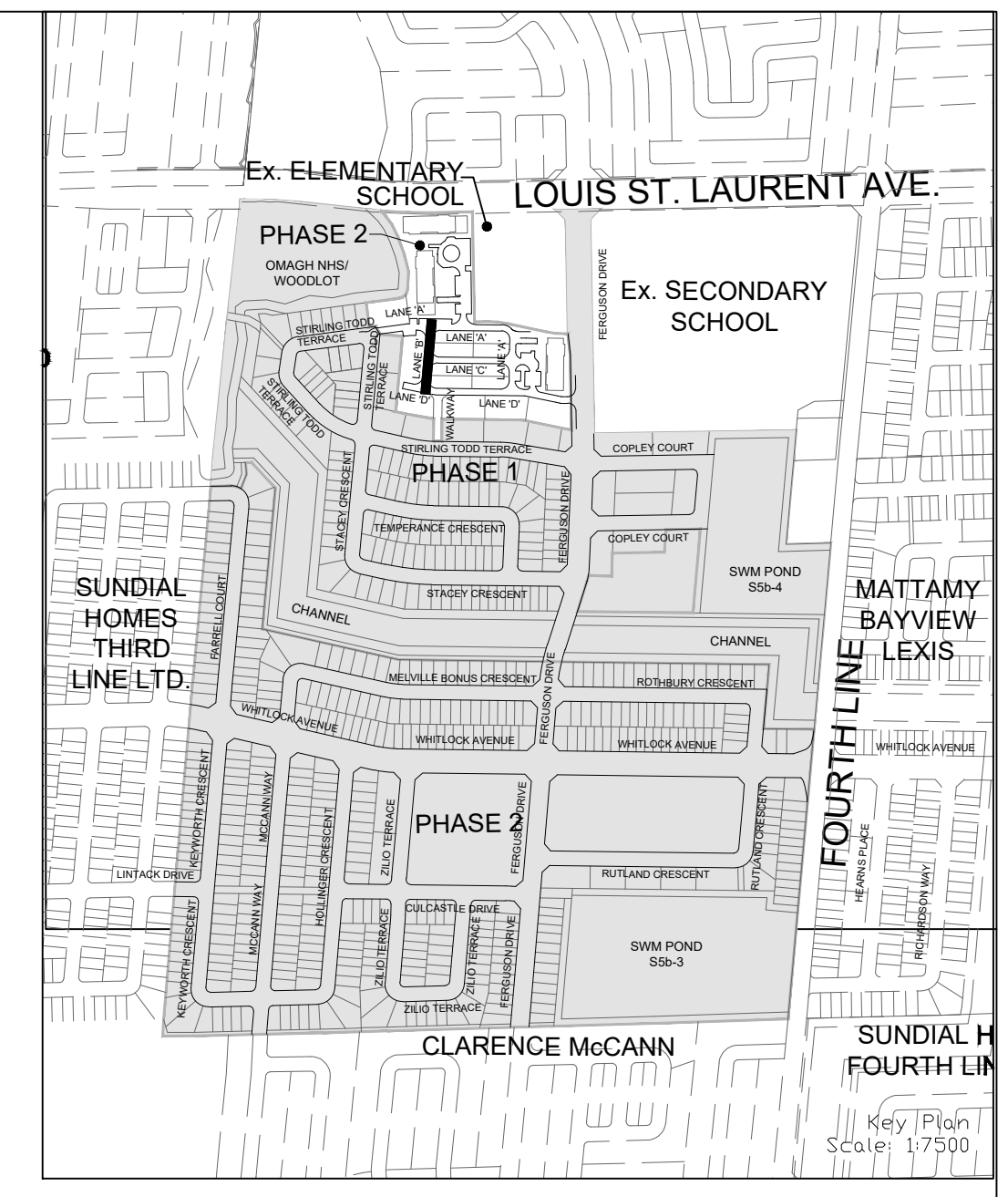
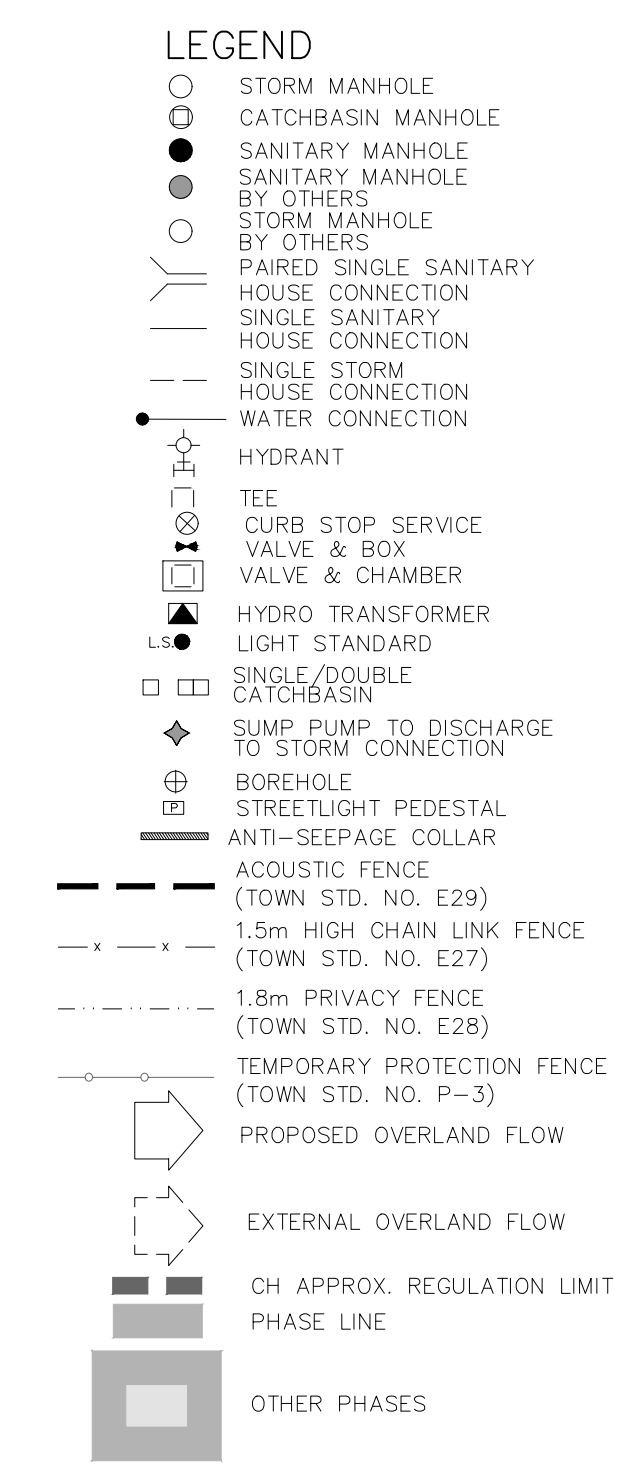
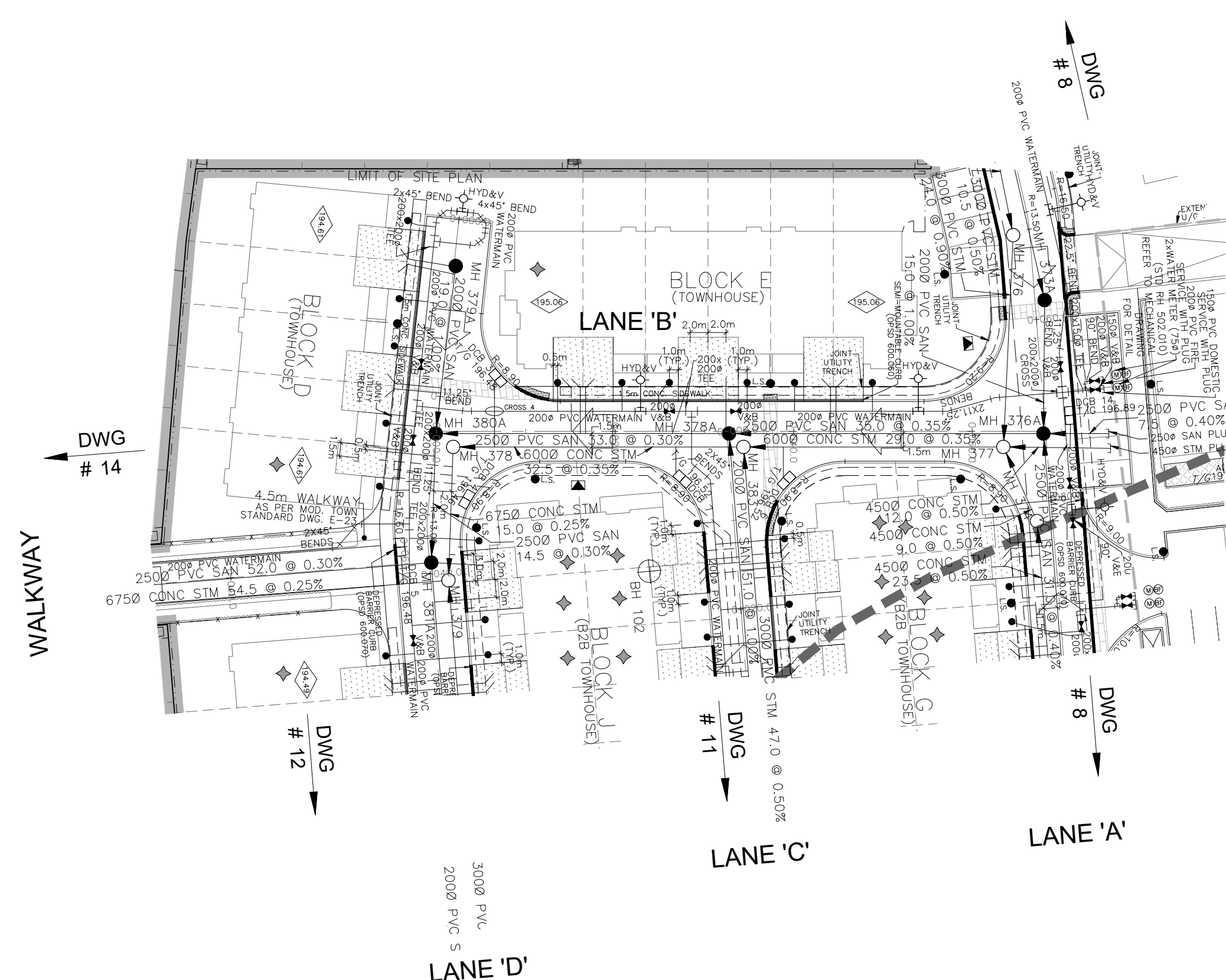
PIPE TYPE	START STATION	END STATION	INVERT ELEVATION	SLOPE	SDR
2000 PVC SAN	0+240.000	0+236.958	192.86	2.75%	35
2000 PVC SAN	0+236.958	0+222.658	192.26	2.75%	35
2000 PVC SAN	0+222.658	0+220.000	194.26	2.75%	35
3000 PVC STM	0+220.000	0+200.000	194.26	0.50%	35
2000 PVC SAN	0+200.000	0+192.608	193.29	1.00%	35
2000 PVC SAN	0+192.608	0+180.000	193.29	1.00%	35
2000 PVC SAN	0+180.000	0+169.258	193.29	1.00%	35
2000 PVC SAN	0+169.258	0+160.000	193.29	1.00%	35
2000 PVC SAN	0+160.000	0+150.016	193.29	1.00%	35
2000 PVC SAN	0+150.016	0+140.000	193.29	1.00%	35

PAVEMENT DESIGN

- 40mm HL-3
- 50mm HL-8
- 150mm OF 19mm LIMESTONE
- 300mm GRANULAR "B", TYPE II

NOTES:

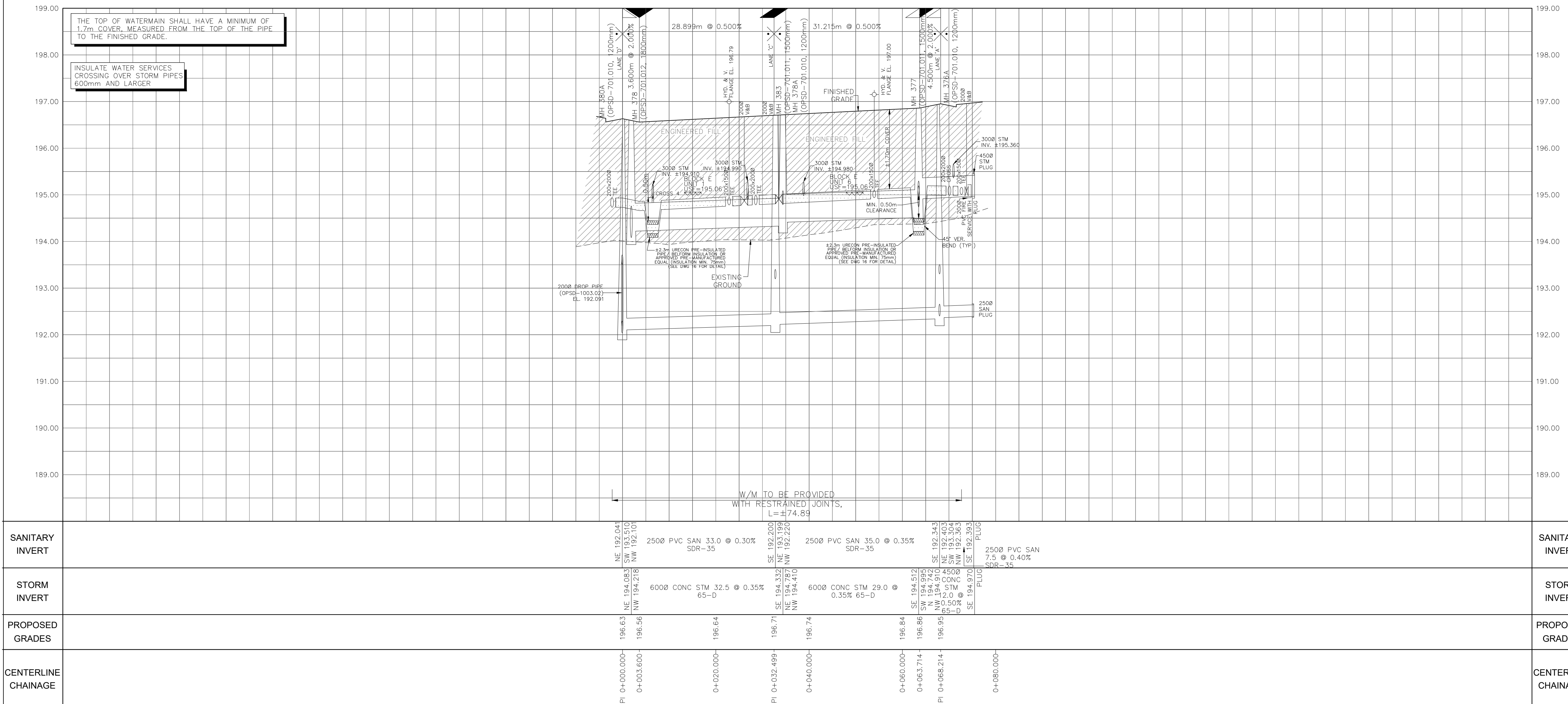
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BENCHMARK (MINISTRY OF TRANSPORTATION)
 No. 00819828155 ELEVATION = 185.351m



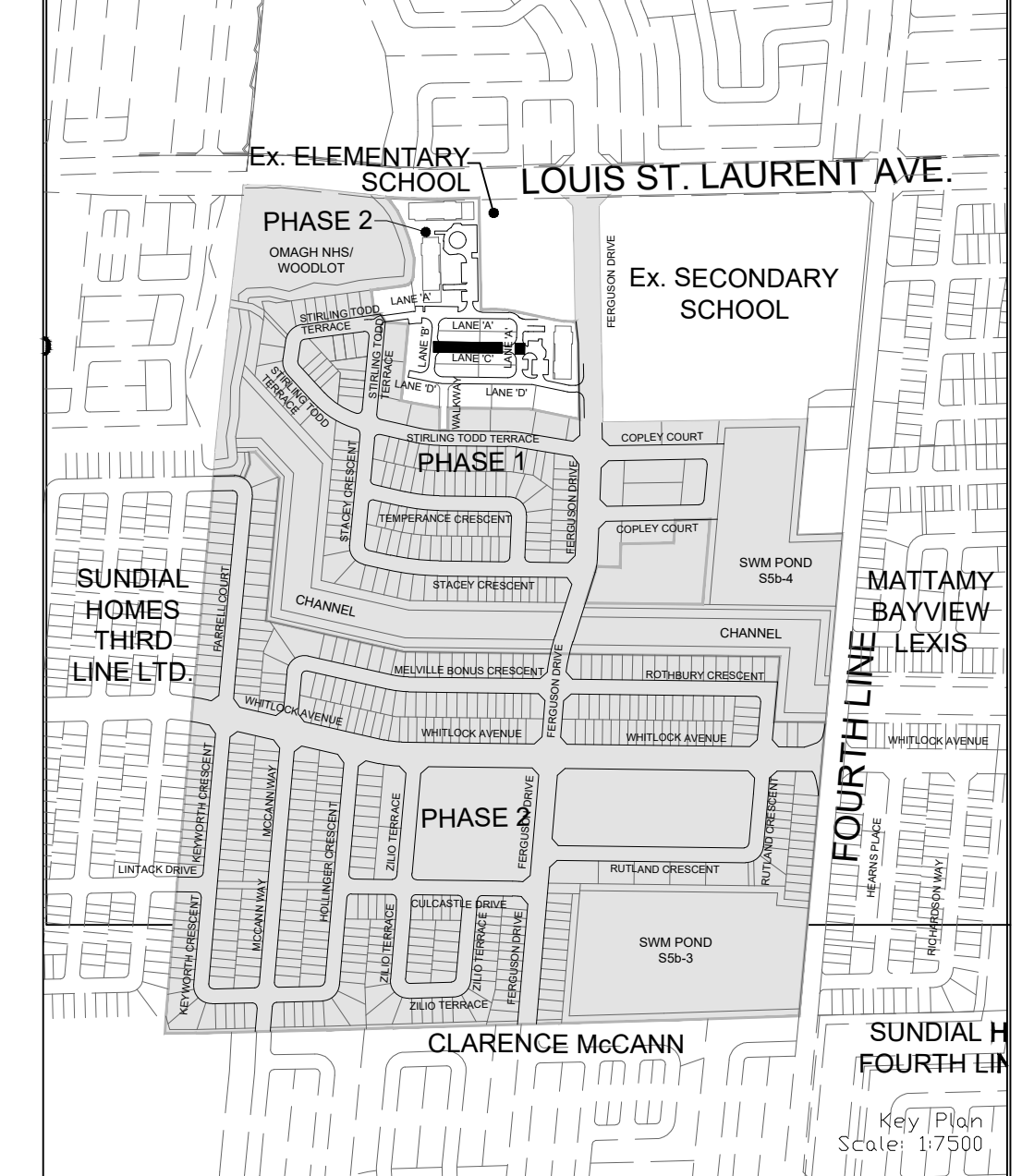
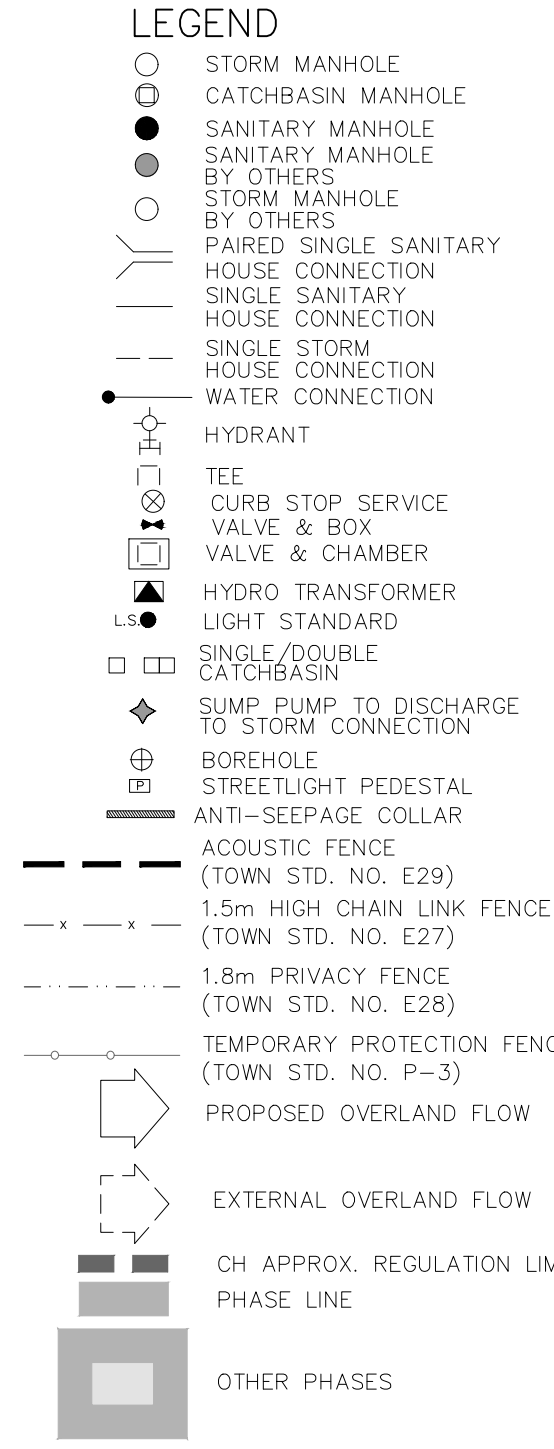
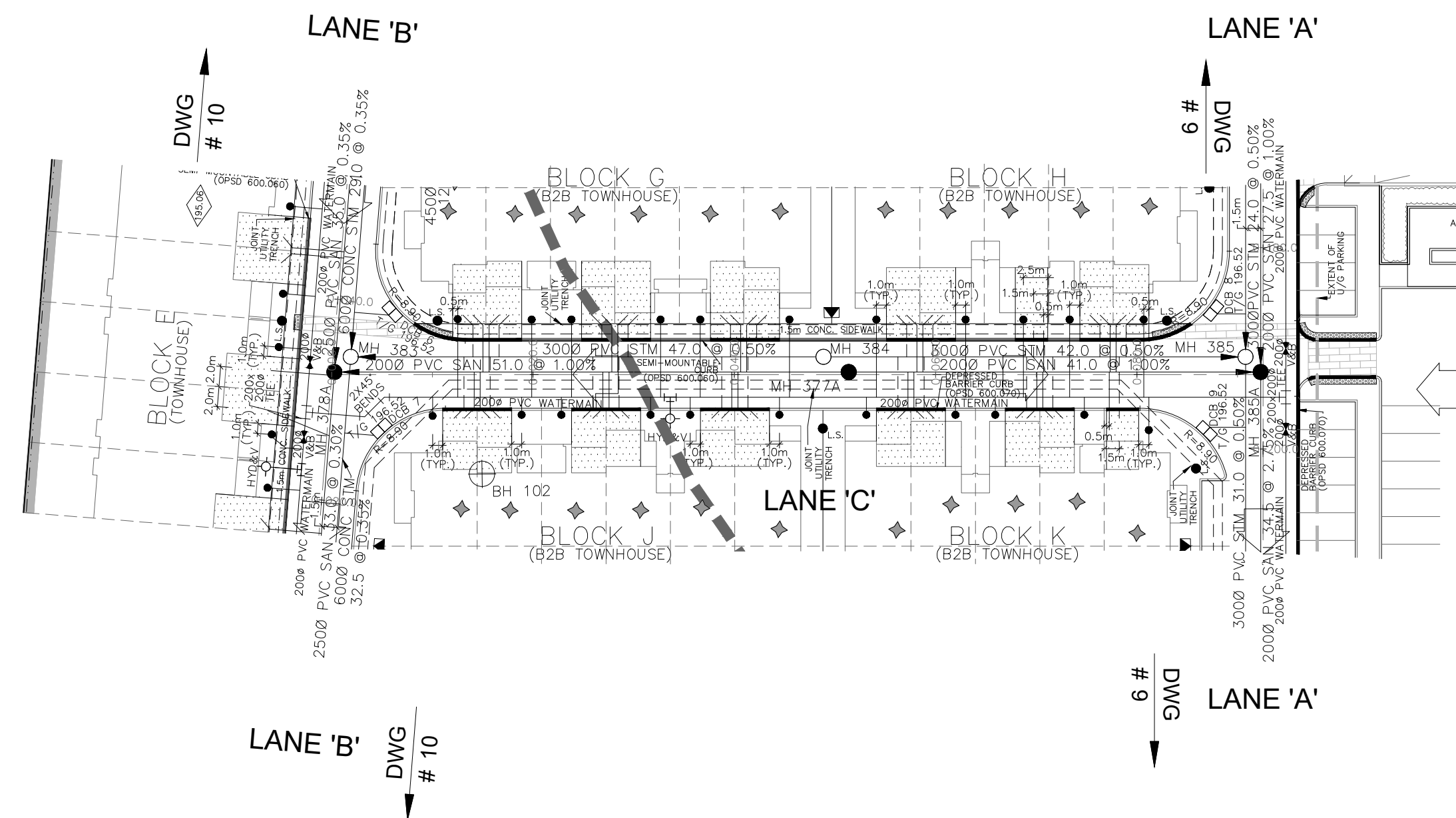
2. 24-10-07 C.J.M. 2nd SUBMISSION		APPROVED	
1. 24-04-05 C.J.M. 1st SUBMISSION			
No.	DATE	DESCRIPTION	APPROVED
SCALE:		REFERENCES	
HORIZ: 1:500		FIELD NOTES	
VERT: 1:50		BELL <input type="checkbox"/> HYDRG <input type="checkbox"/>	
APPROVALS		GAS <input type="checkbox"/> CABLE <input type="checkbox"/>	
MUNICIPAL APPROVAL		TRAFFIC <input type="checkbox"/> WATER <input type="checkbox"/>	
DEVELOPMENT SERVICES		STAMP	
REGIONAL APPROVAL			
LEGISLATIVE AND PLANNING SERVICES			
		TOWN OF MILTON DEVELOPMENT SERVICES FILE No: XXXXXXX	
		The Regional Municipality of Halton REGION OF HALTON FILE No: XXXXXXX	
DEVELOPER			
MATTAMY (BROWNBRIDGE) LIMITED			
DEVELOPMENT MANAGER		PROJECT	
		TOR SUBNODE SITEPLAN	
TITLE		© DSEL	
LANE 'B'			
STA. 0+000.000 TO STA. 0+78.214			
DRAWN BY: H.P.		CHECKED BY: E.G.	
DESIGNED BY: H.C.		CHECKED BY: C.J.M.	
PROJECT NO.		SHEET 10 OF 18	
24-1377			

PAVEMENT DESIGN

- 40mm HL-3
- 50mm HL-8
- 150mm OF 19mm LIMESTONE
- 300mm GRANULAR "B", TYPE II

NOTES:

- ALL EXISTING BUILDINGS, POST & WIRE FENCE, TREES, UTILITY POLES, CULVERTS AND RETAINING WALLS, ETC. WITHIN LOTS AND BLOCKS TO BE REMOVED, UNLESS OTHERWISE NOTED.
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LEGAL INFORMATION
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 FOR GARITO BARBUTO TOR PH 2 BLOCK 458, RECEIVED SEPTEMBER 11, 2024.

BENCHMARK (MINISTRY OF TRANSPORTATION)
 No. 00819828155 ELEVATION = 185.351m

No.	DATE	BY	DESCRIPTION	APPROVED
2.	24-10-07	C.J.M.	2nd SUBMISSION	
1.	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: HORIZ 1:500 VERT 1:50

REFERENCES: BELL, HYDRO, GAS, CABLE, TRAFFIC, WATER

APPROVALS: MUNICIPAL, DEVELOPMENT SERVICES, REGIONAL, LEGISLATIVE AND PLANNING SERVICES

STAMP: C. J. MANZO, LICENSED PROFESSIONAL ENGINEER, 24-10-07, PROVINCE OF ONTARIO

DSEL 600 Alden Road, Suite 606 Markham, Ontario, L3R 0E7 Tel: (905) 475-3080 Fax: (905) 475-3081 www.DSEL.ca

MILTON TOWN OF MILTON DEVELOPMENT SERVICES FILE No: XXXXXXX

Halton REGION The Regional Municipality of Halton REGION OF HALTON FILE No: XXXXXXX

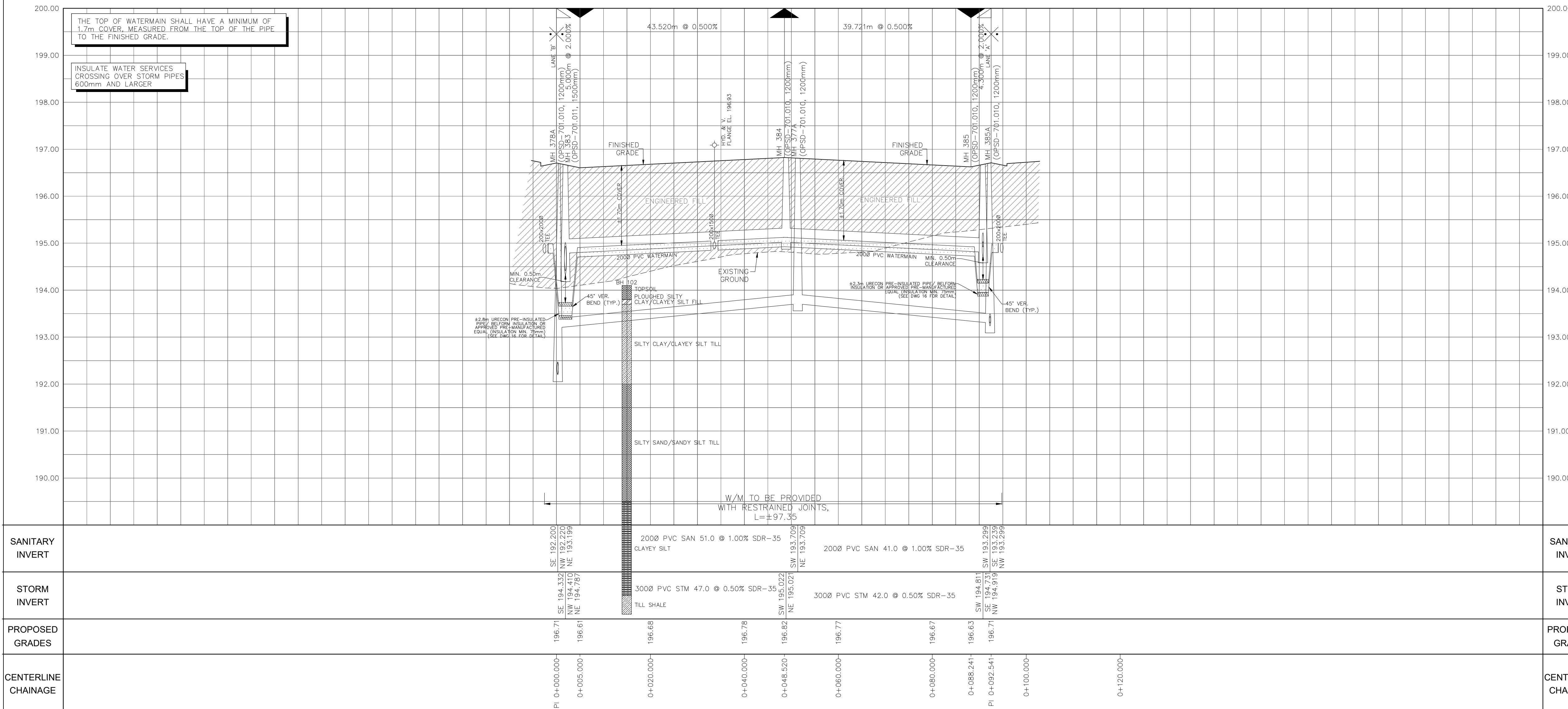
DEVELOPER: **MATTAMY (BROWNBRIDGE) LIMITED**

DEVELOPMENT MANAGER: **mattamy HOMES** PROJECT: **TOR SUBNODE SITEPLAN**

TITLE: **LANE 'C'** © DSEL

STA. 0+000.000 TO STA. 0+102.541

DRAWN BY: H.P. CHECKED BY: E.G.
 DESIGNED BY: H.C. CHECKED BY: C.J.M.
 PROJECT NO. 24-1377 SHEET 11 OF 18



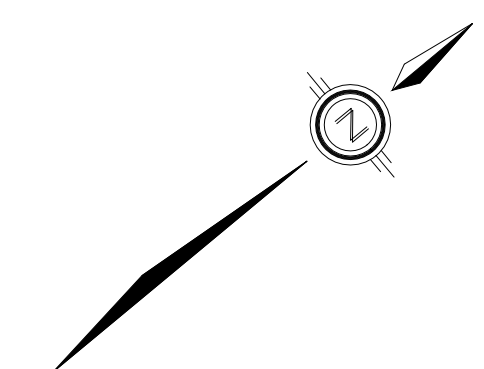
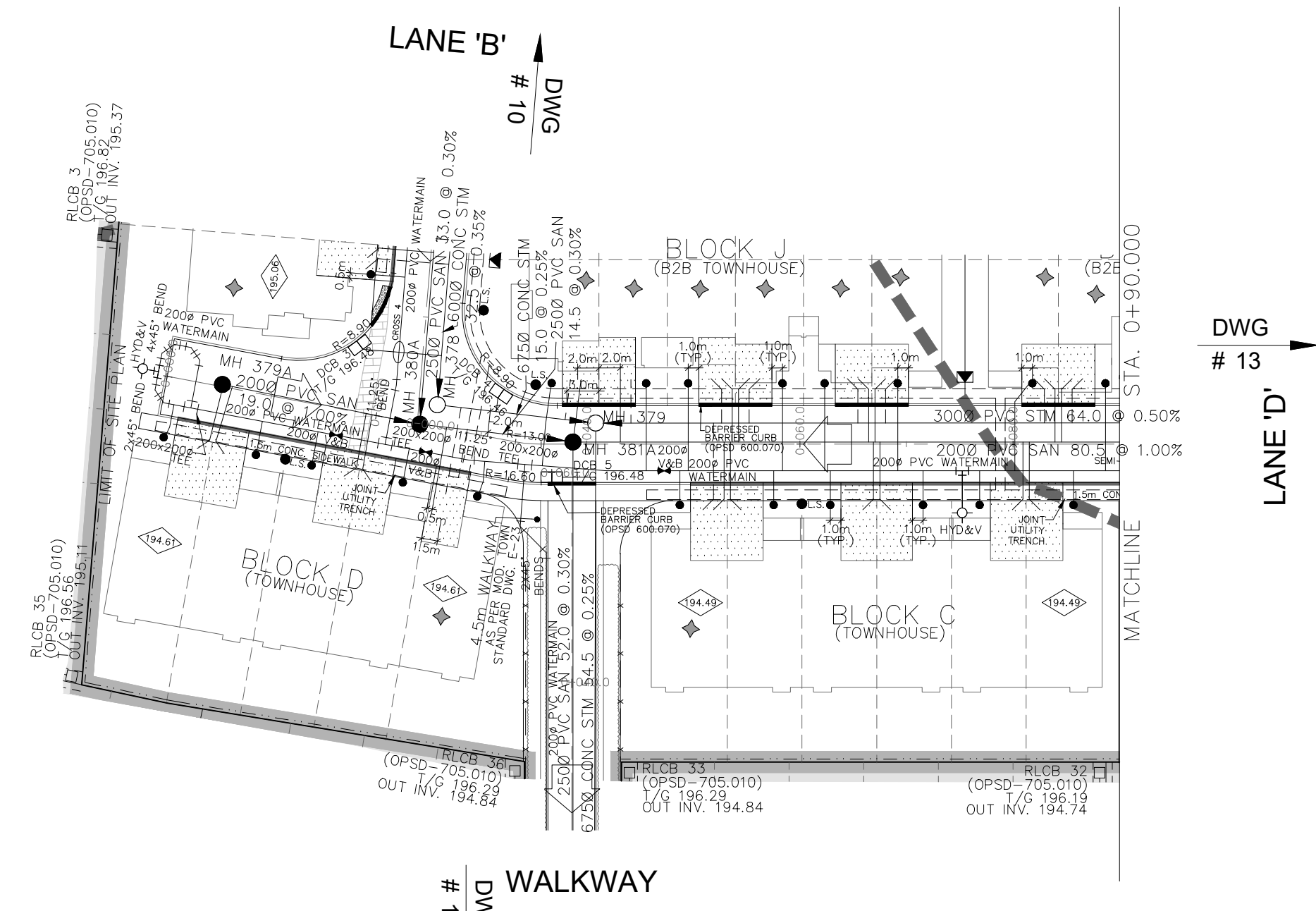
PAVEMENT DESIGN

- 40mm HL-3
- 50mm HL-8
- 150mm OF 19mm LIMESTONE
- 300mm GRANULAR "B", TYPE II

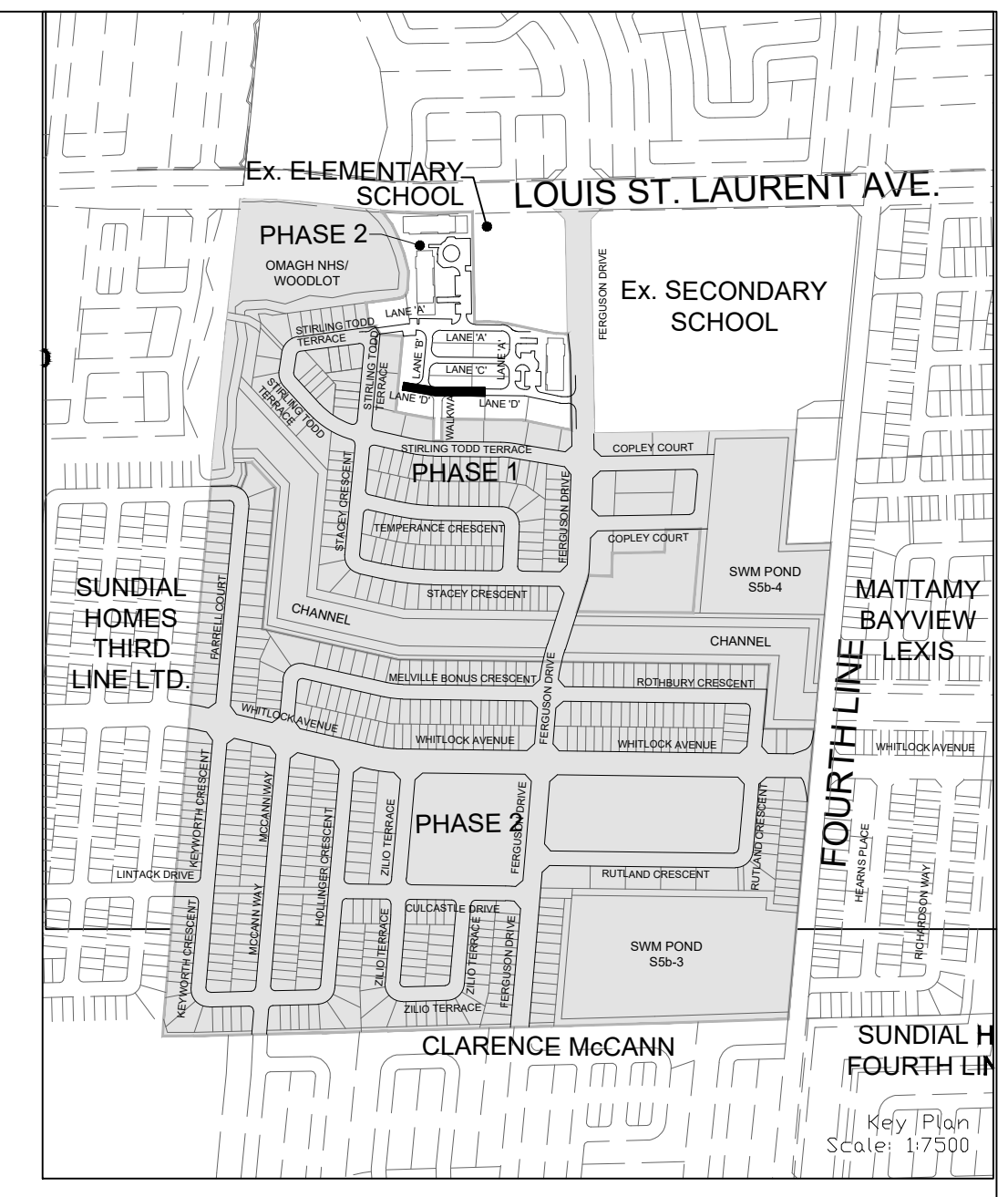
NOTES:

1. ALL EXISTING BUILDINGS, POST & WIRE FENCE, TREES, UTILITY POLES, CULVERTS AND RETAINING WALLS, ETC. WITHIN LOTS AND BLOCKS TO BE REMOVED, UNLESS OTHERWISE NOTED
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8. ALL DWELLINGS WITH THE EXCEPTION OF SLAB-ON-GRADE UNITS, SHALL BE PROVIDED WITH SUMP PUMPS IN ACCORDANCE WITH SECTION 11.27.1, STD DWG. E-25, TO THE SATISFACTION OF THE TOWN OF MILTON
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MATTAMY TOR PHASE 1
REFER TO
DAVID SCHEFFER ENGINEERING LIMITED
PROJECT No. 22-1333



- LEGEND**
- STORM MANHOLE
 - CATCHBASIN MANHOLE
 - SANITARY MANHOLE
 - SANITARY MANHOLE BY OTHERS
 - STORM MANHOLE BY OTHERS
 - PAIRED SINGLE SANITARY HOUSE CONNECTION
 - SINGLE SANITARY HOUSE CONNECTION
 - SINGLE STORM HOUSE CONNECTION
 - WATER CONNECTION
 - HYDRANT
 - TEE
 - CURB STOP SERVICE VALVE & BOX
 - VALVE & CHAMBER
 - HYDRO TRANSFORMER
 - LIGHT STANDARD
 - SINGLE/DOUBLE CATCHBASIN
 - SUMP PUMP TO DISCHARGE TO STORM CONNECTION
 - BOREHOLE
 - STREETLIGHT PEDESTAL
 - ANTI-SEEPAGE COLLAR
 - ACOUSTIC FENCE (TOWN STD. NO. E29)
 - 1.5m HIGH CHAIN LINK FENCE (TOWN STD. NO. E27)
 - 1.8m PRIVACY FENCE (TOWN STD. NO. E28)
 - TEMPORARY PROTECTION FENCE (TOWN STD. NO. P-3)
 - PROPOSED OVERLAND FLOW
 - EXTERNAL OVERLAND FLOW
 - CH APPROX. REGULATION LIMIT
 - PHASE LINE
 - OTHER PHASES



NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION
TOPOGRAPHIC INFORMATION PROVIDED BY R-PE SURVEYING LTD., REFERENCE No. 22-049, CAD FILE No.22049ip05, SURVEY RECEIVED FEBRUARY 16, 2023.

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SCALE: HORIZ 1:500 VERT. 1:50

REFERENCES

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MUNICIPAL APPROVAL

DEVELOPMENT SERVICES

REGIONAL APPROVAL

LEGISLATIVE AND PLANNING SERVICES

600 Alden Road, Suite 606
Markham, Ontario, L3R 0E7
Tel: (905) 475-3080
Fax: (905) 475-3081
www.DSEL.ca

TOWN OF MILTON
DEVELOPMENT SERVICES

The Regional Municipality of Halton

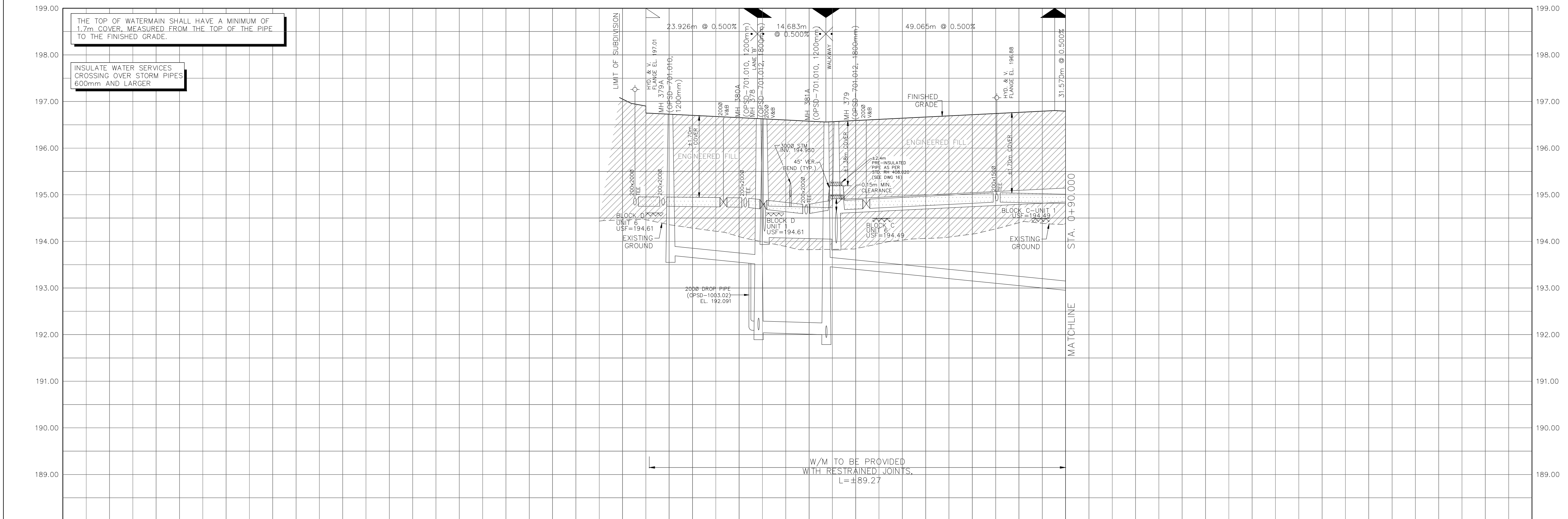
DEVELOPER
MATTAMY (BROWNBRIDGE) LIMITED

DEVELOPMENT MANAGER
mattamy HOMES

PROJECT
TOR SUBNODE SITEPLAN

TITLE
LANE 'D'

© DSEL



PIPE TYPE	START STA.	END STA.	DIAMETER	SLOPE	SDR	ELEVATION
SANITARY INVERT	193.700	194.61	200Ø PVC SAN	1.00%	35	193.700
SANITARY INVERT	194.61	196.67	250Ø PVC SAN	0.30%	35	194.61
SANITARY INVERT	196.67	198.67	200Ø PVC SAN	1.00%	35	196.67
STORM INVERT	194.61	196.67	675Ø CONC. STM	0.25%	65	194.61
STORM INVERT	196.67	198.67	300Ø PVC STM	0.50%	35	196.67
PROPOSED GRADES	193.700	194.61				193.700
PROPOSED GRADES	194.61	196.67				194.61
PROPOSED GRADES	196.67	198.67				196.67
CENTERLINE CHAINAGE	0+005.663	0+023.926				0+005.663
CENTERLINE CHAINAGE	0+023.926	0+040.000				0+023.926
CENTERLINE CHAINAGE	0+040.000	0+057.674				0+040.000

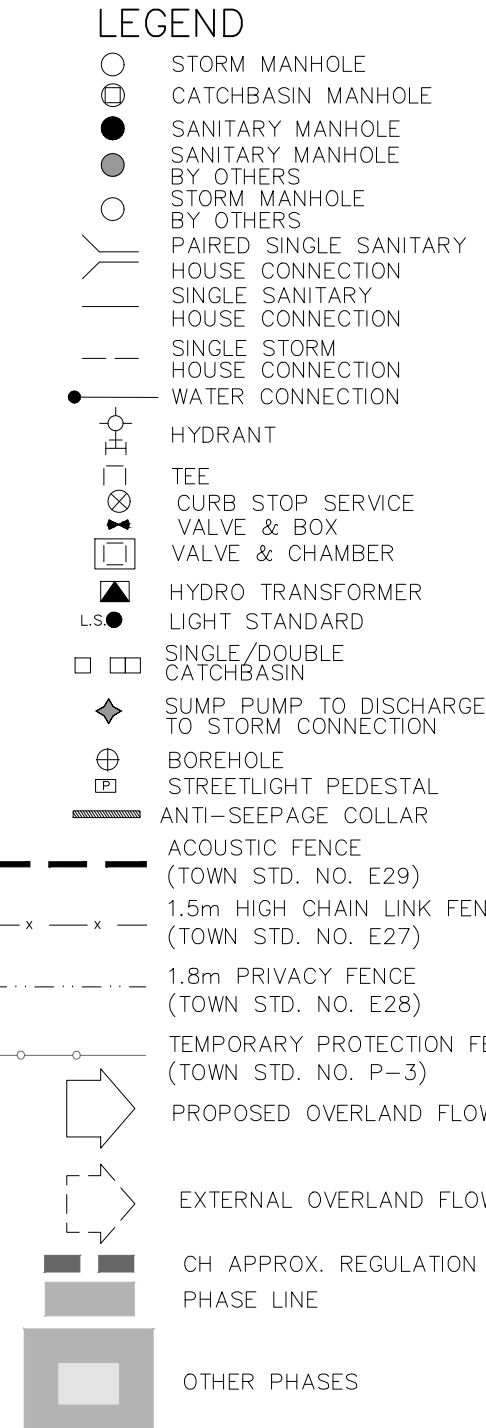
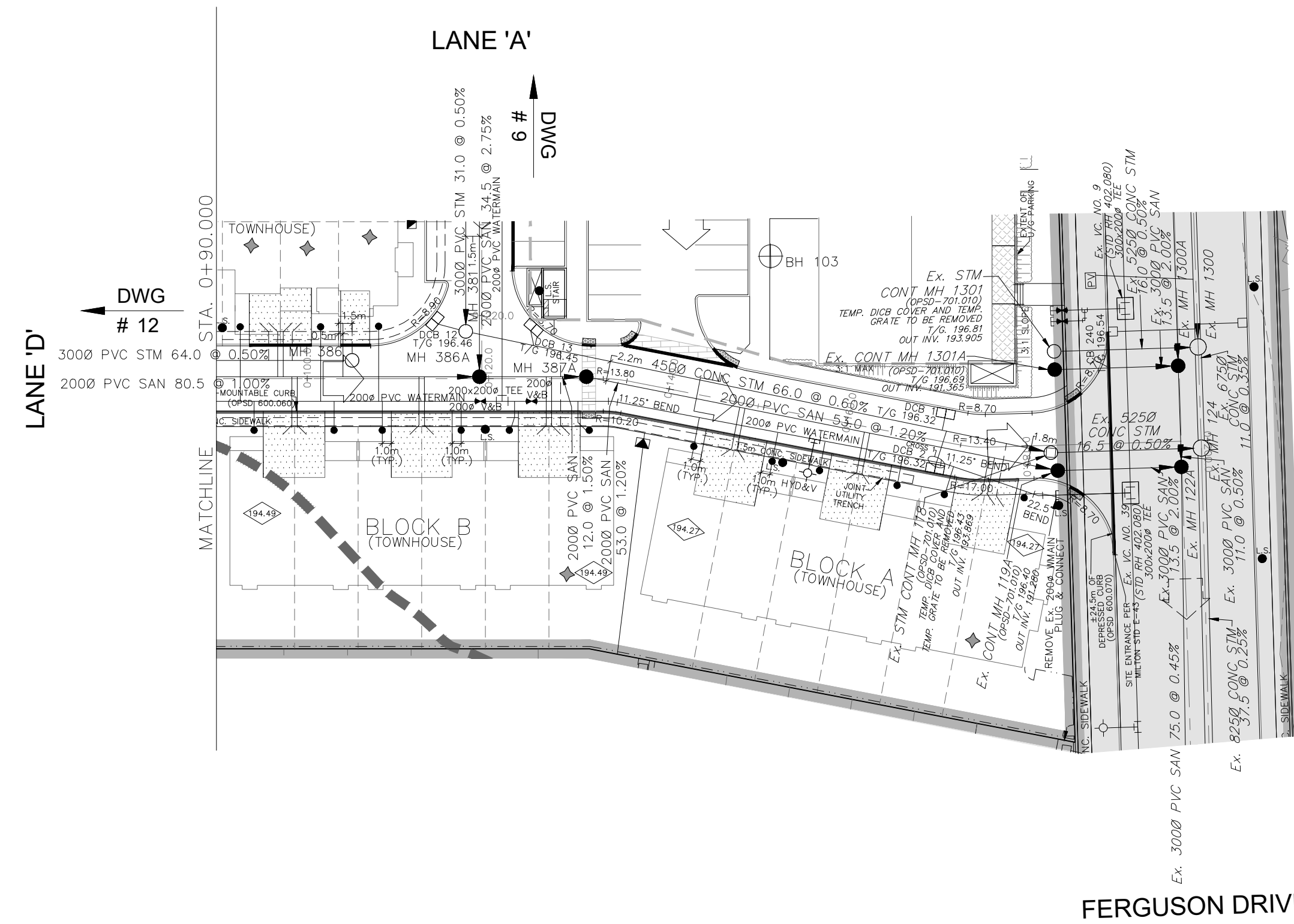
DRAWN BY: H.P.	CHECKED BY: E.G.
DESIGNED BY: H.C.	CHECKED BY: C.J.M.
PROJECT NO. 24-1377	SHEET 12 OF 18

PAVEMENT DESIGN

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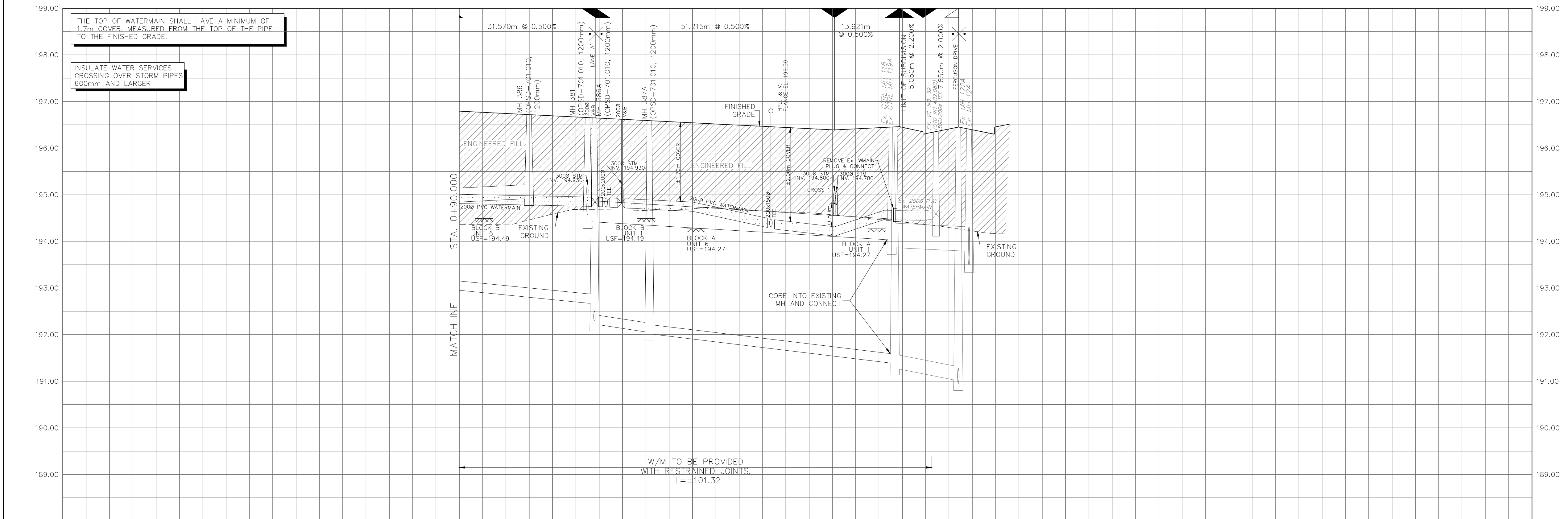
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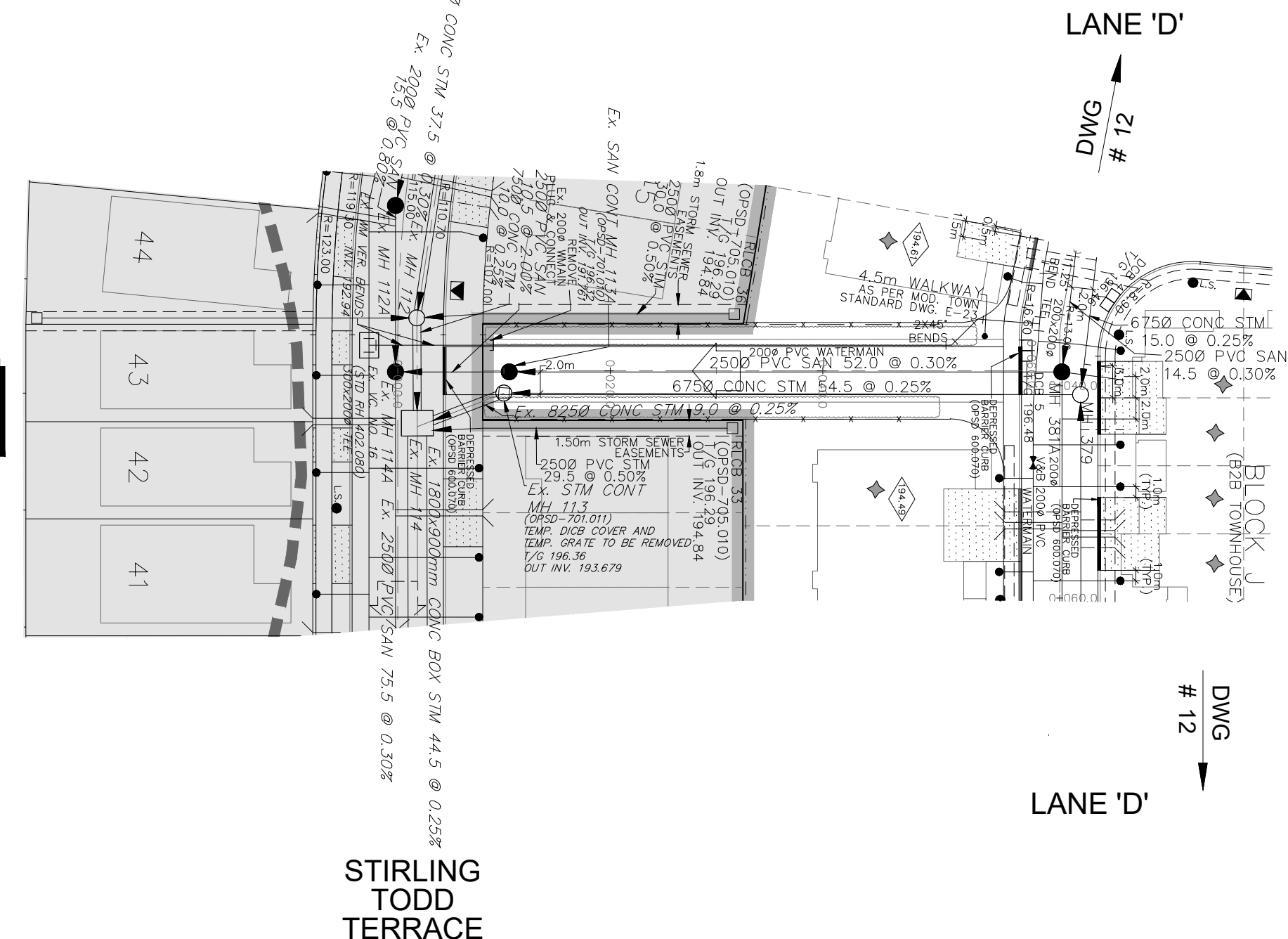
SANITARY INVERT	2008 PVC SAN 80.5 @ 1.00% SDR-35	2008 PVC SAN 12.0 @ 1.50% SDR-35	2008 PVC SAN 53.0 @ 1.20% SDR-35	3008 PVC SAN 13.5 @ 2.00% SDR-35	3008 PVC SAN 16.5 @ 0.50% SDR-35
STORM INVERT	3008 PVC STM 64.0 @ 0.50% SDR-35	4500 CONC STM 66.0 @ 0.60% 65-D			
PROPOSED GRADES	196.74	196.62	196.54	196.44	196.39
CENTERLINE CHAINAGE	0+100.000	0+120.000	0+140.000	0+160.000	0+170.459

2. 24-10-07 C.J.M. 2nd SUBMISSION 1. 24-04-05 C.J.M. 1st SUBMISSION		APPROVED
No. DATE BY DESCRIPTION		
SCALE: HORIZ 1:500 VERT 1:50	REFERENCES	
APPROVALS		FIELD NOTES
MUNICIPAL APPROVAL		BELL <input type="checkbox"/> HYDRO <input type="checkbox"/> GAS <input type="checkbox"/> CABLE <input type="checkbox"/> TRAFFIC <input type="checkbox"/> WATER <input type="checkbox"/>
DEVELOPMENT SERVICES DATE		STAMP
REGIONAL APPROVAL DESIGN OF SANITARY, WATER SERVICES AND REGIONAL ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCALITIONAL APPROVAL FROM AREA MUNICIPALITY		
LEGISLATIVE AND PLANNING SERVICES DATE		
		600 Alden Road, Suite 606 Markham, Ontario, L3R 0E7 Tel: (905) 475-3080 Fax: (905) 475-3081 www.DSEL.ca
TOWN OF MILTON DEVELOPMENT SERVICES		TOWN OF MILTON FILE No: XXXXXXX
The Regional Municipality of Halton		REGION OF HALTON FILE No: XXXXXXX
DEVELOPER MATTAMY (BROWNBRIDGE) LIMITED		
DEVELOPMENT MANAGER 		PROJECT TOR SUBNODE SITEPLAN
TITLE LANE 'D' © DSEL		
STA. 0+90.000 TO STA. 0+207.080		
DRAWN BY: H.P. DESIGNED BY: H.C. PROJECT NO. 24-1377		CHECKED BY: E.G. CHECKED BY: C.J.M. SHEET 13 OF 18

NOTES:

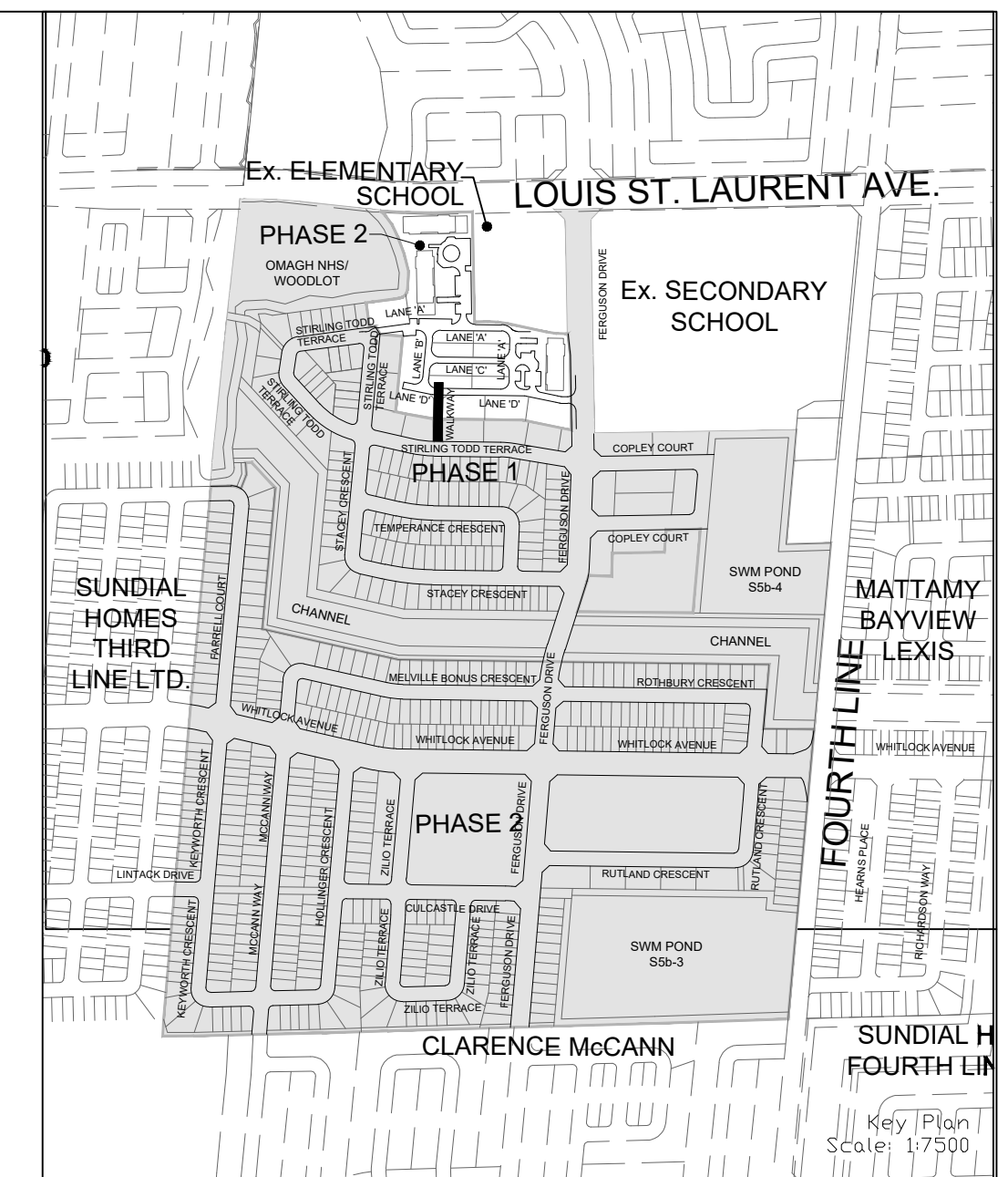
- ALL EXISTING BUILDINGS, POST & WIRE FENCE, TREES, UTILITY POLES, CULVERTS AND RETAINING WALLS, ETC. WITHIN LOTS AND BLOCKS TO BE REMOVED, UNLESS OTHERWISE NOTED
- EXISTING MH AND CB COVERS, WATER V&Bs, WATER V&Cs AND UTILITY PEDESTALS ETC. TO BE ADJUSTED WITHIN NEW ROADWAYS AND BOULEVARDS, WHERE APPLICABLE
- CONTRACTOR TO VERIFY THE PRECISE LOCATIONS AND INVERT ELEVATIONS OF EX. UNDERGROUND SERVICES AND EX. UTILITIES PRIOR TO STARTING CONSTRUCTION
- ANY DISTURBED AREA DURING CONSTRUCTION TO BE RESTORED TO THE ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE AUTHORITIES HAVING JURISDICTION
- WRITTEN PERMISSION REQUIRED FOR WORK ON ADJACENT LANDS
- SERVICING AND GRADING DESIGN FOR FUTURE LOTS LANDS SHOWN ON THE DRAWINGS ARE CONCEPTUAL, WHICH ARE TO BE FURTHER REVIEWED / FINALIZED UPON FUTURE DEVELOPMENT
- WORKS WITHIN THE CH REGULATION LIMIT WILL REQUIRE A PERMIT FROM CONSERVATION HALTON UNDER ONTARIO REGULATION 162/06
- ALL DWELLINGS WITH THE EXCEPTION OF SLAB-ON-GRADE UNITS, SHALL BE PROVIDED WITH SUMP PUMPS IN ACCORDANCE WITH SECTION 11.27.1, STD DWG. E-25, TO THE SATISFACTION OF THE TOWN OF MILTON
- ALL RESIDENTIAL UNITS EXCEPT CONDO AND SCHOOL BLOCKS SHOULD HAVE PRESSURE REDUCING VALVES
- THE LOCATIONS OF ANTI-SEEPAGE COLLARS SHALL BE DETERMINED BY THE PROJECT GEOTECHNICAL ENGINEER DURING SEWER CONSTRUCTION ON THE SITE
- EXISTING WATERMAIN STUBS WILL REQUIRE SWABBING, FLUSHING, AND SAMPLING, WORK TO BE COMPLETED BY REGION OF HALTON STAFF AT THE DEVELOPER'S EXPENSE
- INSULATION REQUIRED FOR WATERMAIN/WATER SERVICE WHERE THE SEPARATION BETWEEN WATERMAIN/WATER SERVICES AND OTHER SERVICES AND STRUCTURES IS LESS THAN 1.2m AND/OR THE COVER IS LESS THAN 1.7m (SEE REGION STANDARD RH 408.020)
- SUMP PUMPS SHALL OUTLET ONTO CONCRETE SPLASH PAD LOCATED IN THE REAR YARD.

MATTAMY TOR PHASE 1
REFER TO
DAVID SCHAEFFER ENGINEERING LIMITED
PROJECT No. 22-1333



LEGEND

- STORM MANHOLE
- CATCHBASIN MANHOLE
- SANITARY MANHOLE
- SANITARY MANHOLE BY OTHERS
- STORM MANHOLE BY OTHERS
- PAIRED SINGLE SANITARY HOUSE CONNECTION
- SINGLE SANITARY HOUSE CONNECTION
- SINGLE STORM HOUSE CONNECTION
- WATER CONNECTION
- HYDRANT
- TEE
- CURB STOP SERVICE VALVE & BOX
- VALVE & CHAMBER
- HYDRO TRANSFORMER
- LIGHT STANDARD
- SINGLE/DOUBLE CATCHBASIN
- SUMP PUMP TO DISCHARGE TO STORM CONNECTION
- BOREHOLE
- STREETLIGHT PEDESTAL
- ANTI-SEEPAGE COLLAR
- ACOUSTIC FENCE (TOWN STD. NO. E29)
- 1.5m HIGH CHAIN LINK FENCE (TOWN STD. NO. E27)
- 1.8m PRIVACY FENCE (TOWN STD. NO. E28)
- TEMPORARY PROTECTION FENCE (TOWN STD. NO. P-3)
- PROPOSED OVERLAND FLOW
- EXTERNAL OVERLAND FLOW
- CH APPROX. REGULATION LIMIT PHASE LINE
- OTHER PHASES



NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION
TOPOGRAPHIC INFORMATION PROVIDED BY R-PE SURVEYING LTD., REFERENCE No. 22-049, CAD FILE No.22049ip05, SURVEY RECEIVED FEBRUARY 16, 2023.

LEGAL INFORMATION
SITE PLAN PROVIDED BY KNYMH INC., PROJECT NUMBER 21407, FOR GARITO BARBUTO TOR PH 2 BLOCK 458, RECEIVED SEPTEMBER 11, 2024.
BENCHMARK (MINISTRY OF TRANSPORTATION)
No. 00819828155 ELEVATION = 185.351m

No.	DATE	BY	DESCRIPTION	APPROVED
2	24-10-07	C.J.M.	2nd SUBMISSION	
1	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: HORZ 1:500, VERT 1:50

REFERENCES: MUNICIPAL APPROVAL, DEVELOPMENT SERVICES, REGIONAL APPROVAL, LEGISLATIVE AND PLANNING SERVICES

APPROVALS: MUNICIPAL APPROVAL, DEVELOPMENT SERVICES, REGIONAL APPROVAL, LEGISLATIVE AND PLANNING SERVICES

FIELD NOTES: BELL, GAS, HYDRO, CABLE, TRAFFIC, WATER

STAMP: LICENSED PROFESSIONAL ENGINEER C. J. MANZO 100511578 24-10-07 PROVINCE OF ONTARIO

DSEL 600 Alden Road, Suite 606 Markham, Ontario, L3R 0E7 Tel: (905) 475-3080 Fax: (905) 475-3081 www.DSEL.ca

MILTON TOWN OF MILTON DEVELOPMENT SERVICES TOWN OF MILTON FILE No: XXXXXXX

Halton REGION The Regional Municipality of Halton REGION OF HALTON FILE No: XXXXXXX

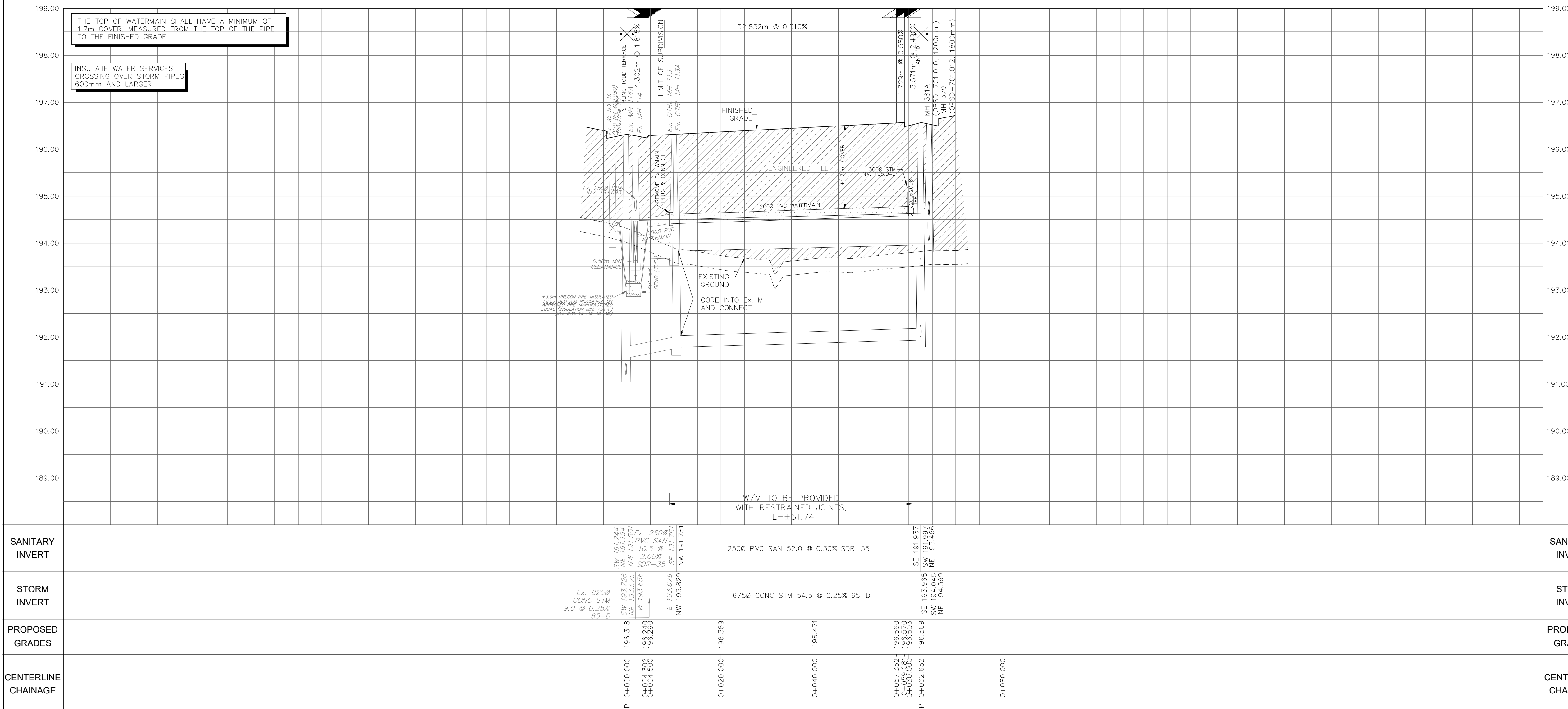
DEVELOPER: **MATTAMY (BROWNBRIDGE) LIMITED**

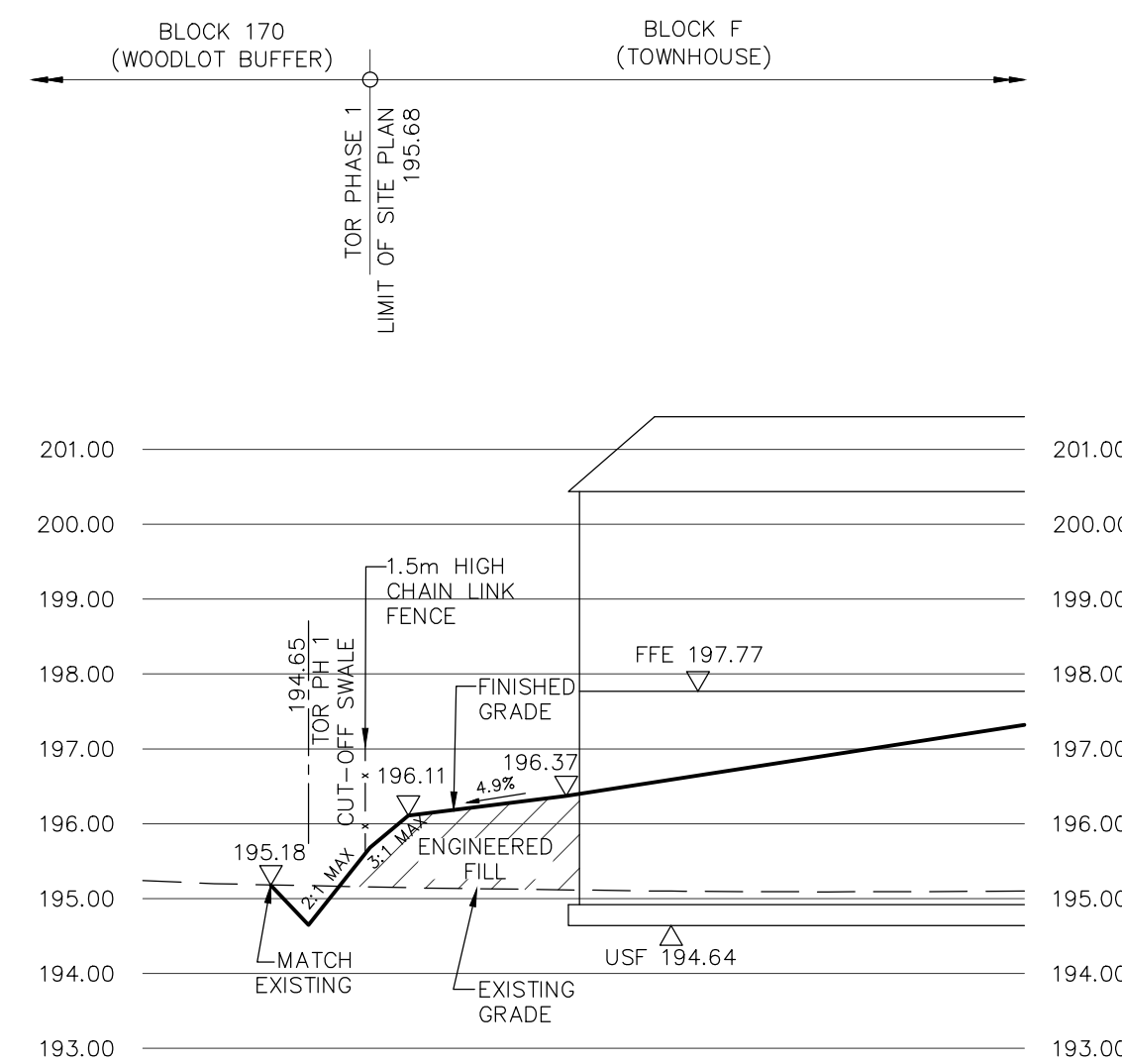
DEVELOPMENT MANAGER: **mattamy HOMES** PROJECT: **TOR SUBNODE SITEPLAN**

TITLE: **WALKWAY** © DSEL

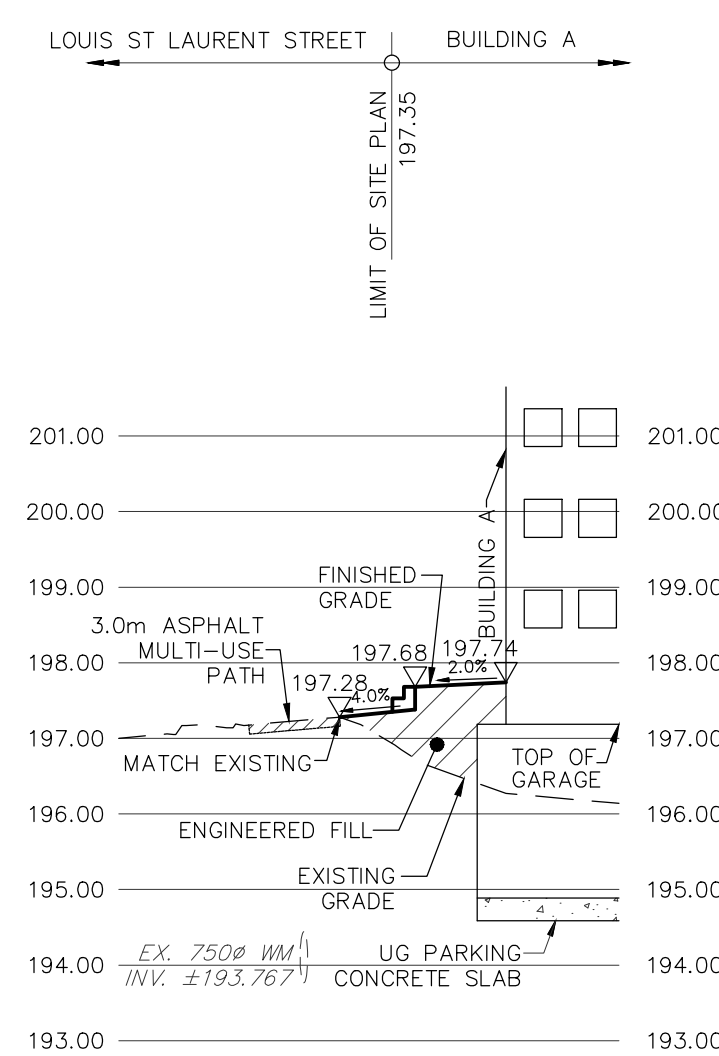
STA. 0+000.000 TO STA. 0+723.319

DRAWN BY: H.P. CHECKED BY: E.G.
DESIGNED BY: H.C. CHECKED BY: C.J.M.
PROJECT NO. 24-1377 SHEET 14 OF 18

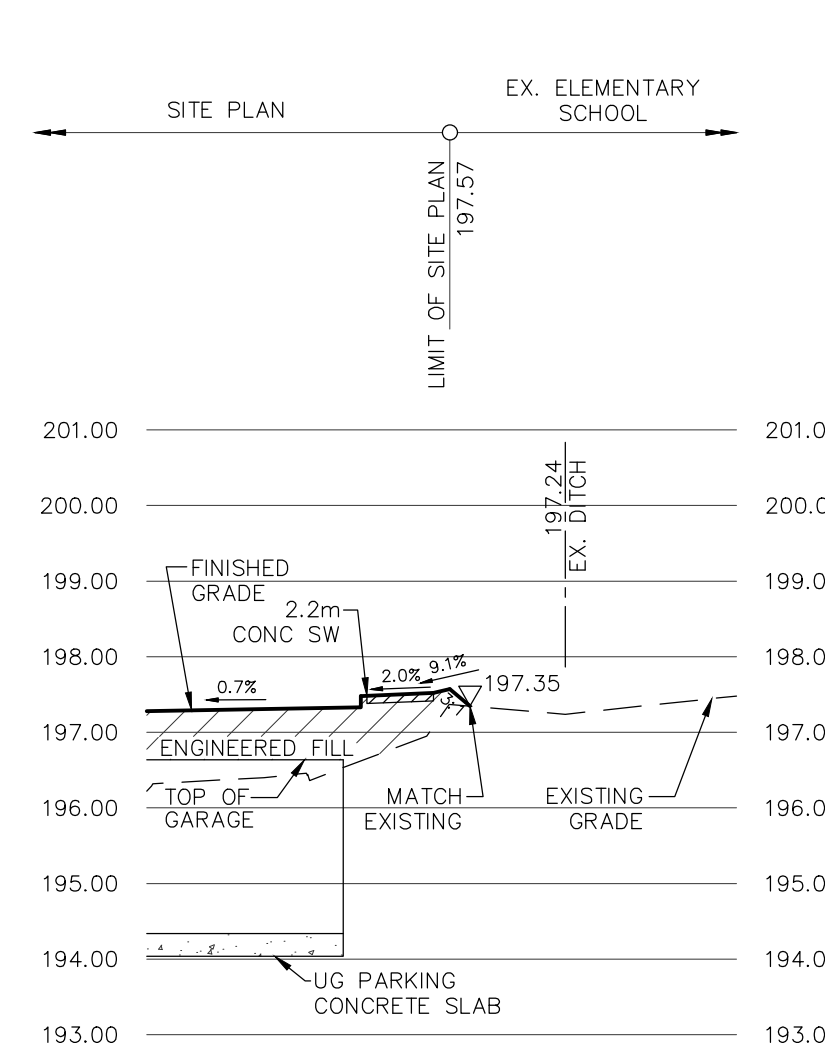




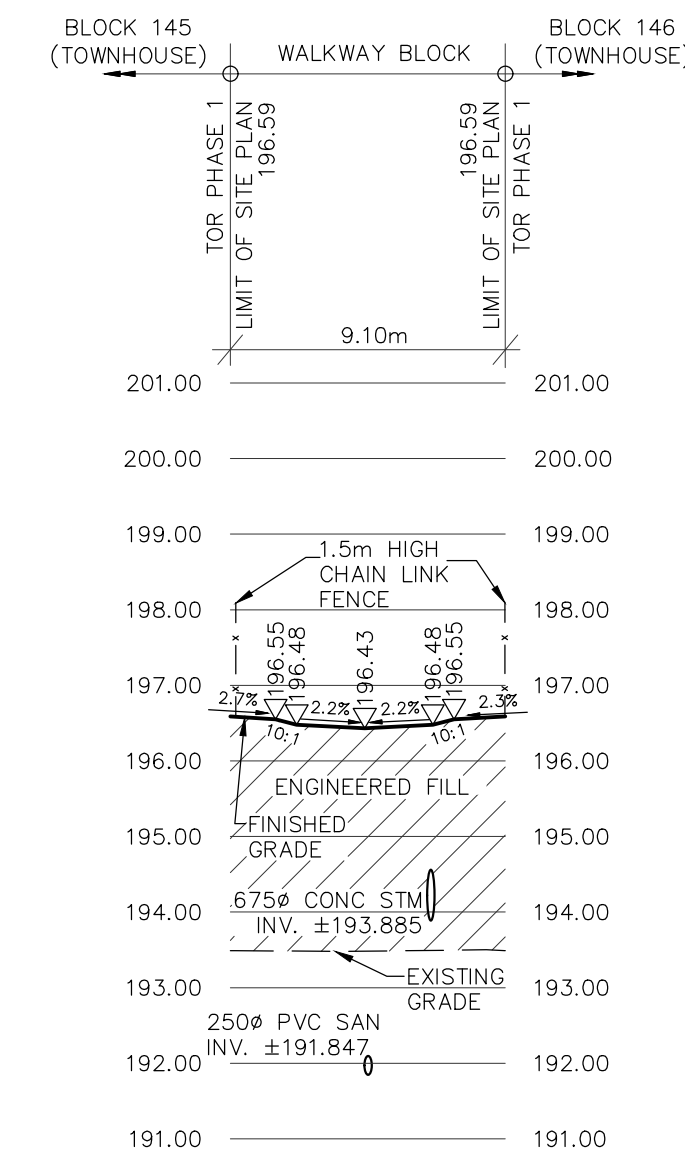
SECTION 1-1
(SEE DWG. 3)
SCALE HOR. 1:250
VER. 1:100



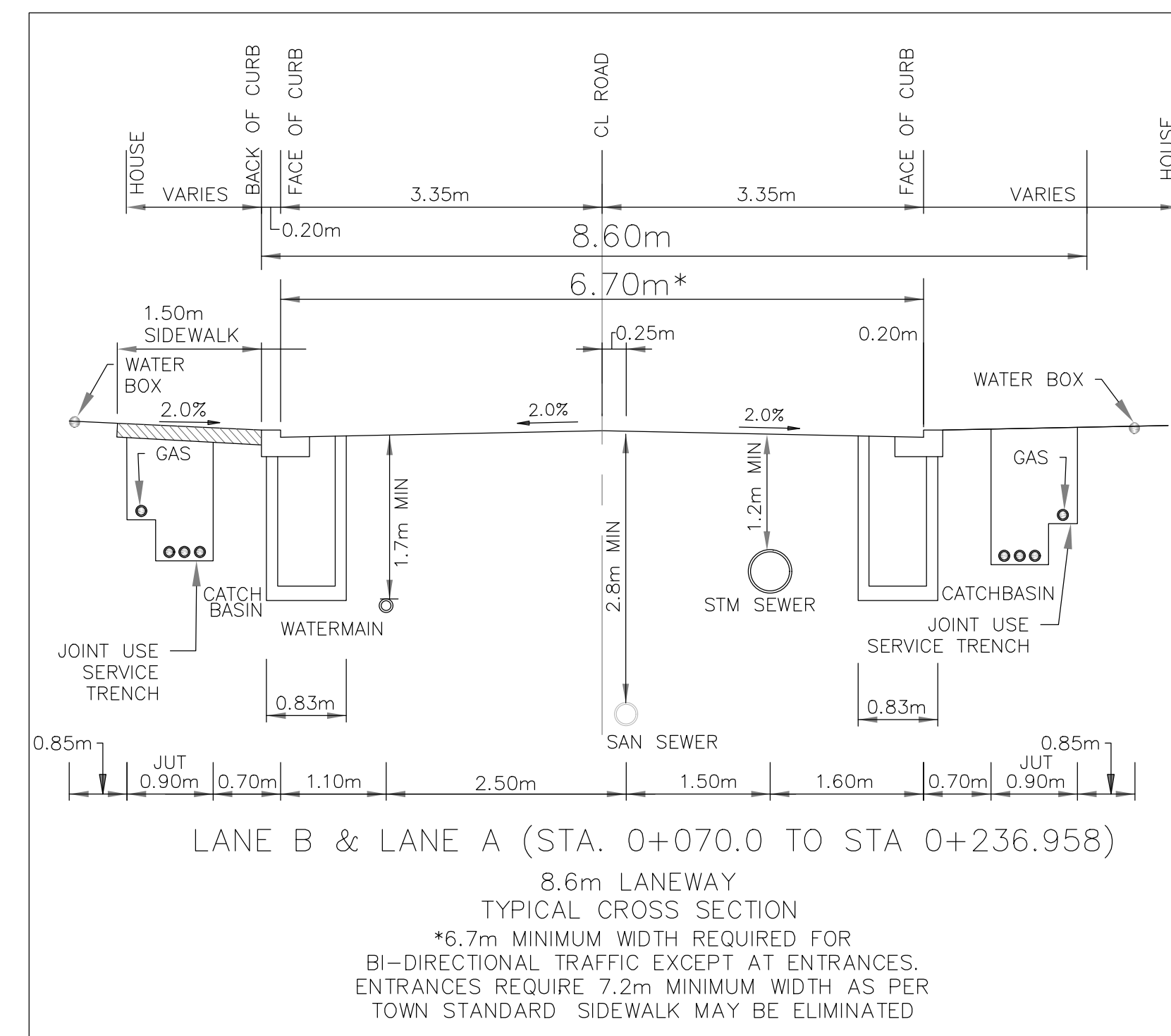
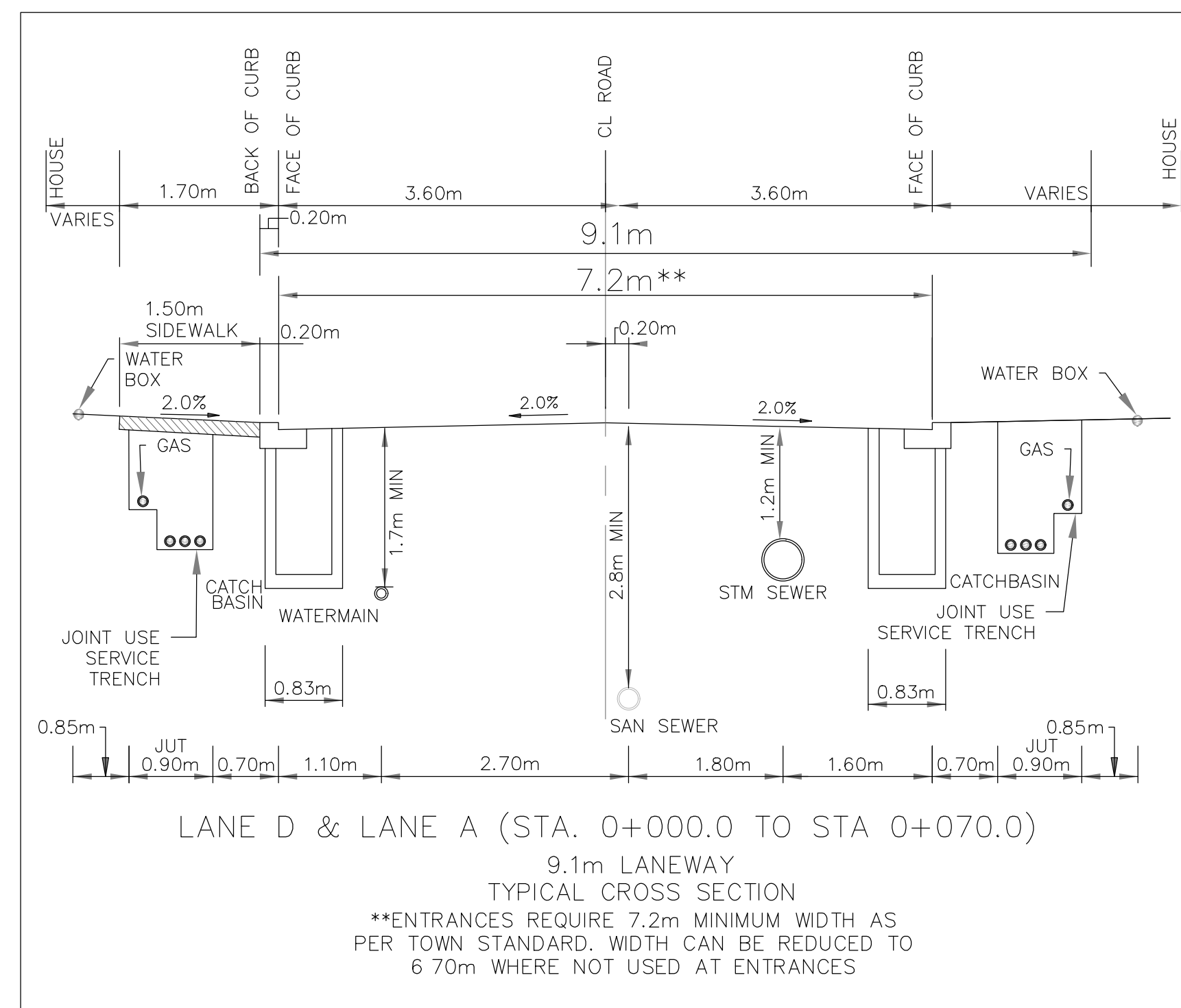
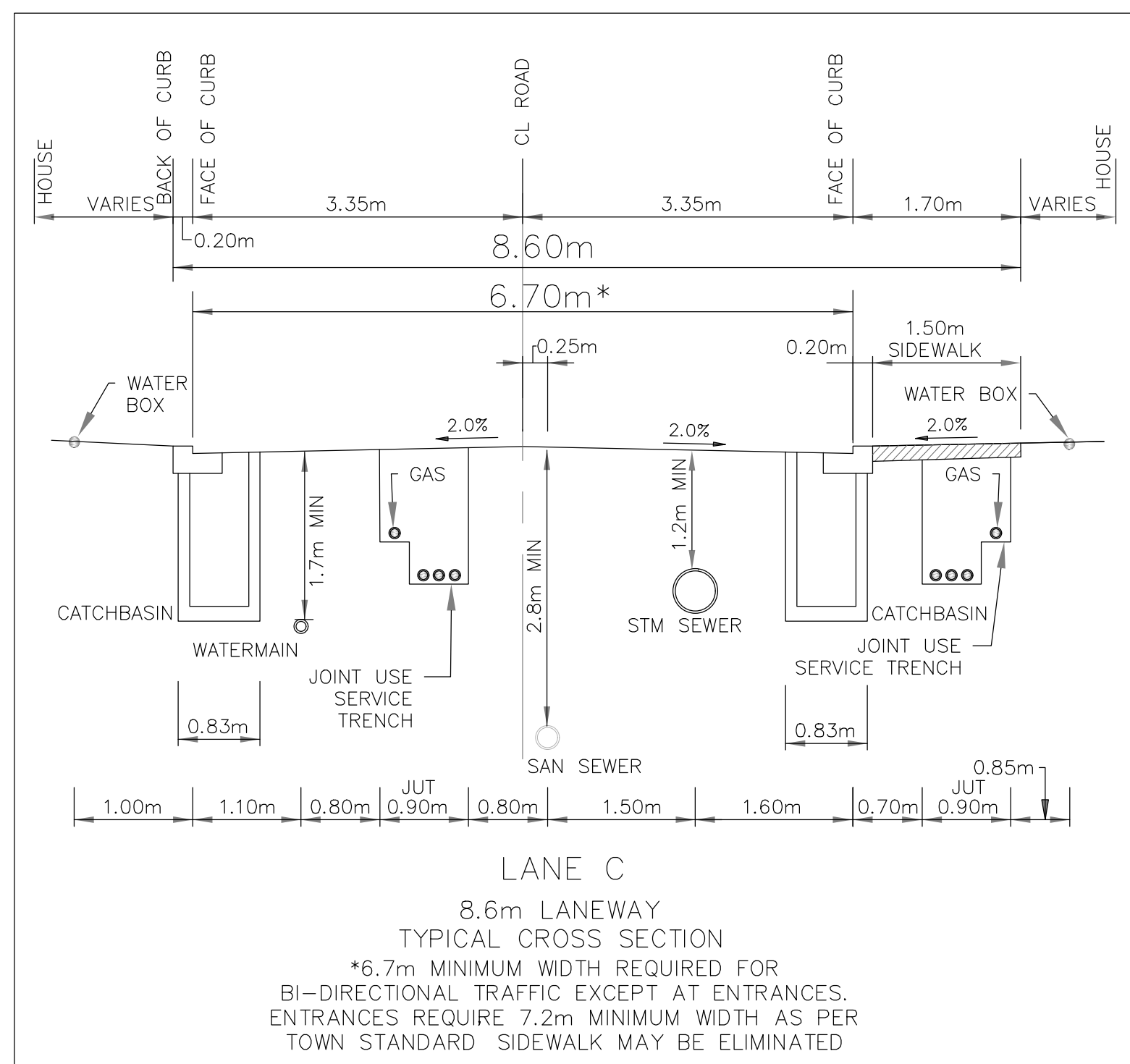
SECTION 2-2
(SEE DWG. 3)
SCALE HOR. 1:250
VER. 1:100



SECTION 3-3
(SEE DWG. 3)
SCALE HOR. 1:250
VER. 1:100



SECTION 4-4
(SEE DWG. 3)
SCALE HOR. 1:250
VER. 1:100



NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION
TOPOGRAPHIC INFORMATION PROVIDED BY R-PE SURVEYING LTD.,
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No. 00819828155 ELEVATION = 185.351m

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SCALE: NTS	REFERENCES
APPROVALS	
MUNICIPAL APPROVAL	FIELD NOTES
DEVELOPMENT SERVICES	BELL <input type="checkbox"/> HYDRO <input type="checkbox"/>
	GAS <input type="checkbox"/> CABLE <input type="checkbox"/>
	TRAFFIC <input type="checkbox"/> WATER <input type="checkbox"/>
REGIONAL APPROVAL	STAMP
DESIGN OF SANITARY, WATER SERVICES AND REGIONAL ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCAL APPROVAL FROM AREA MUNICIPALITY	
LEGISLATIVE AND PLANNING SERVICES	DATE

DSEL
600 Alden Road, Suite 606
Markham, Ontario, L3R 0E7
Tel: (905) 475-3080
Fax: (905) 475-3081
www.DSEL.ca

MILTON TOWN OF MILTON DEVELOPMENT SERVICES
TOWN OF MILTON FILE No: XXXXXXX

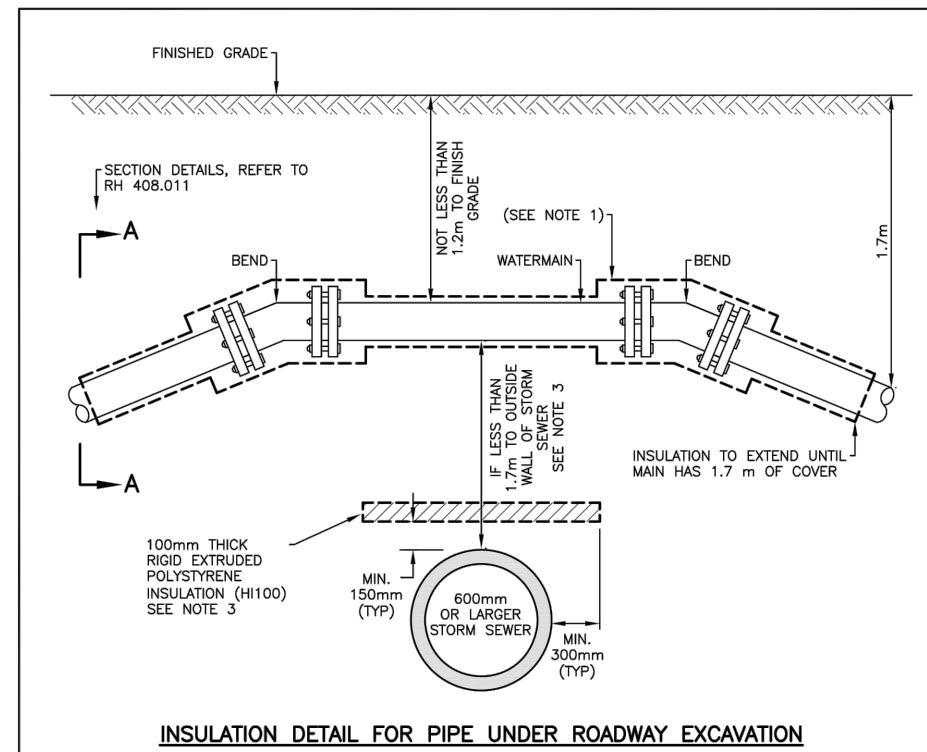
Halton The Regional Municipality of Halton
REGION OF HALTON FILE No: XXXXXXX

DEVELOPER: **MATTAMY (BROWNBRIDGE) LIMITED**

DEVELOPMENT MANAGER: **mattamy** PROJECT: **TOR SUBNODE SITEPLAN**

TITLE: **STANDARD ROADWAY SECTIONS & CROSS SECTIONS** © DSEL

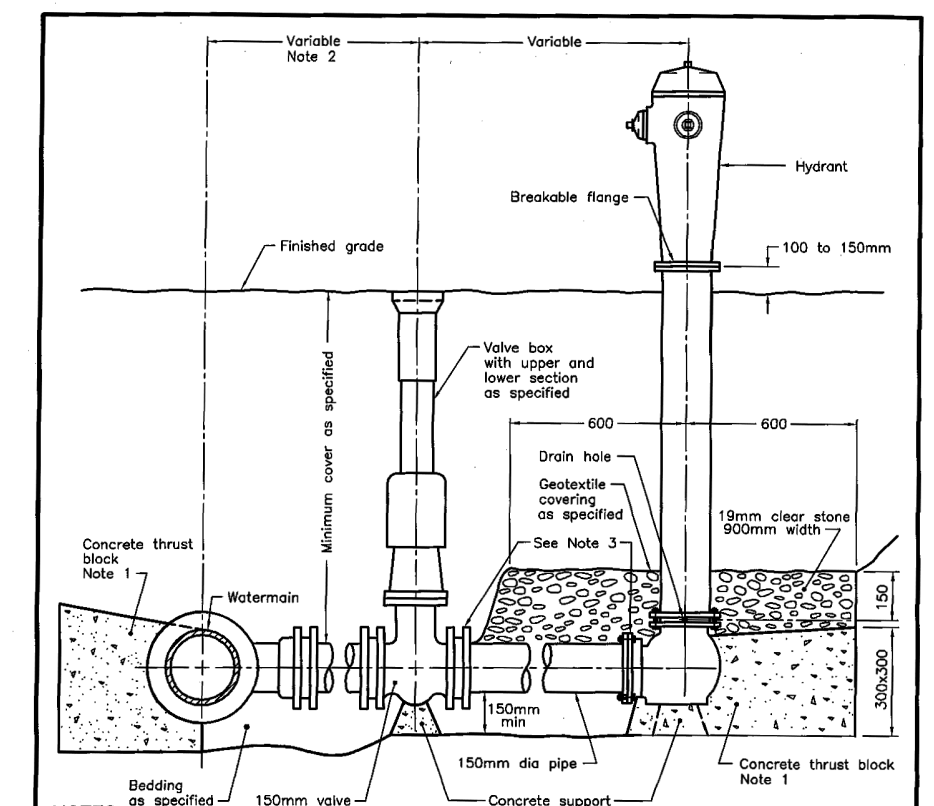
DRAWN BY: H.P.	CHECKED BY: E.G.
DESIGNED BY: H.C.	CHECKED BY: C.J.M.
PROJECT NO. 24-1377	SHEET 15 OF 18



INSULATION DETAIL FOR PIPE UNDER ROADWAY EXCAVATION

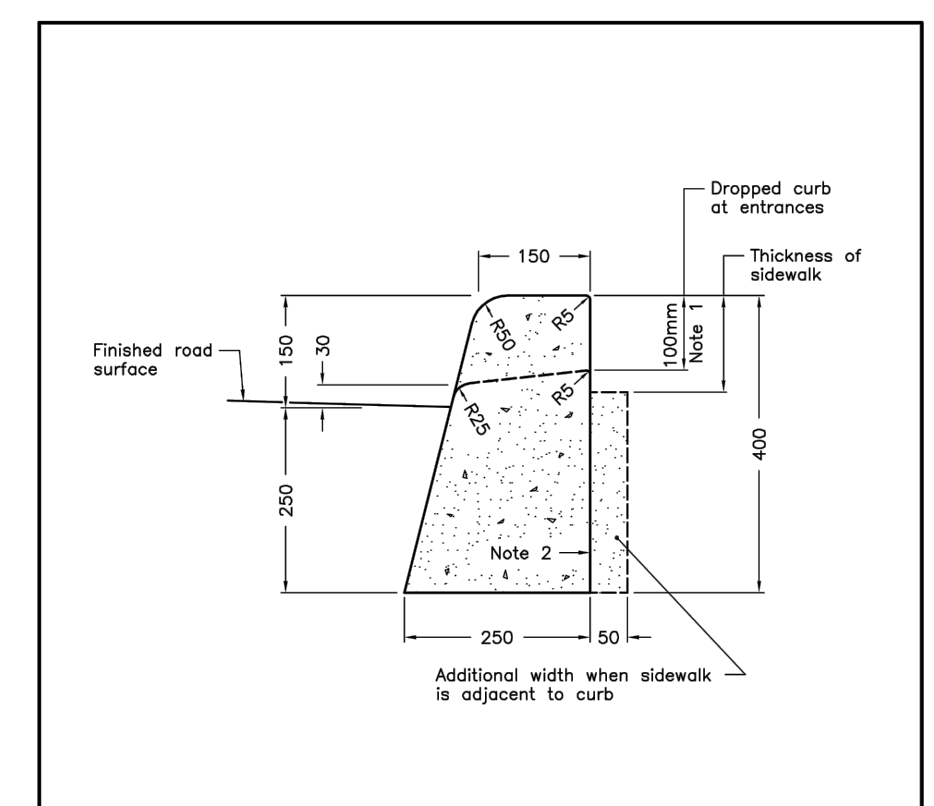
- NOTES:
- USE OF PRE-INSULATED PIPE IS REQUIRED WHEN COVER IS LESS THAN 1.7m.
 - THE LENGTH OF WATERMAIN TO BE PRE-INSULATED SHALL BE FULL LENGTH OF WATERMAIN CROSSING WITHIN 1.7m MIN. OF A 600mm OR LARGER STORM SEWER (FROM OUTSIDE WALL OF STORM SEWER). THE STORM SEWER TO BE INSULATED WITH RIGID POLYSTYRENE INSULATION (R4100) AS INSTRUCTED BY CONTRACT ADMINISTRATOR.
 - ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.

THE REGIONAL MUNICIPALITY OF HALTON PUBLIC WORKS DEPARTMENT
 Date: July 2019 Rev. 0 NTS
WATERMAIN AND WATER SERVICE INSULATION DETAIL
 SITE SPECIFIC - APPROVED BY HALTON REGION
 REGION STANDARD RH 408.020



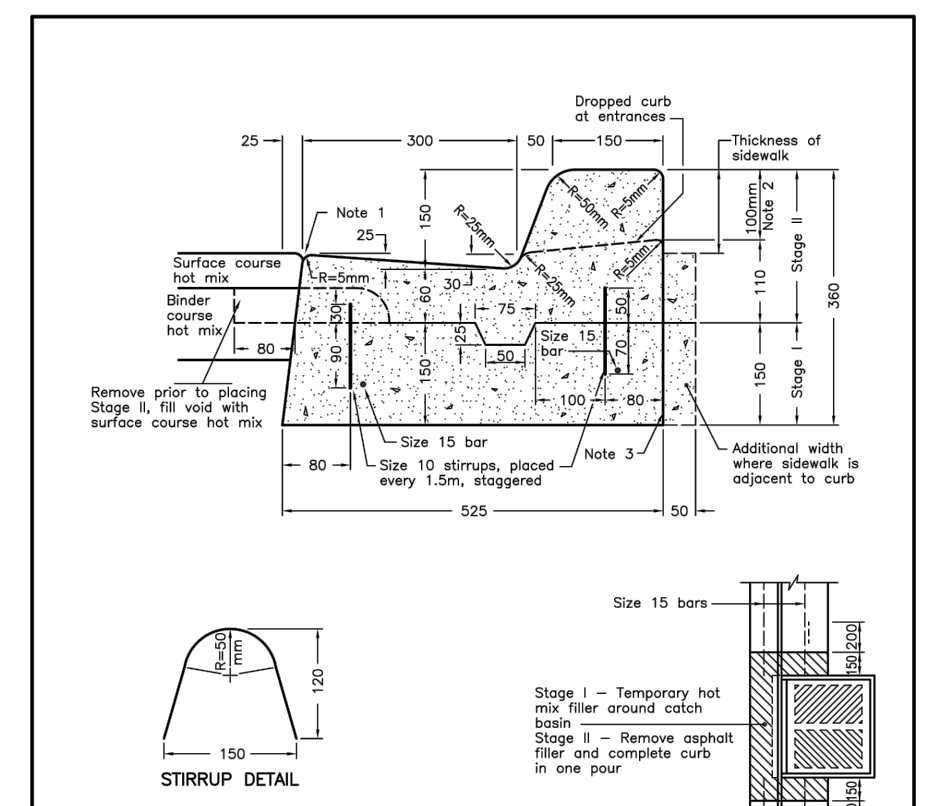
- NOTES:
- All concrete thrust blocks shall be poured against undisturbed ground.
 - When specified, for watermain 400mm and less, locate valve within 1.0m of centreline of watermain. Retaining and restraining devices shall be utilized. For watermain 600mm and over, both valve with flanged end directly to flanged tee.
 - When specified, retaining and restraining devices shall be utilized, in addition to thrust blocks.
 - A bond breaker shall be used between the concrete and the fittings and appurtenances.
 - Bolts and nuts for buried flange to flange connections shall be stainless steel.
 - When required, flange of standpipe extensions shall not be in front zone.
 - This OPSD shall be read in conjunction with OPSD 1103.010 and 1103.020.
 - Backfill material within 300mm of service box shall be native or imported, as specified.
 - All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2013 Rev 2
HYDRANT INSTALLATION
 OPSD 1105.010



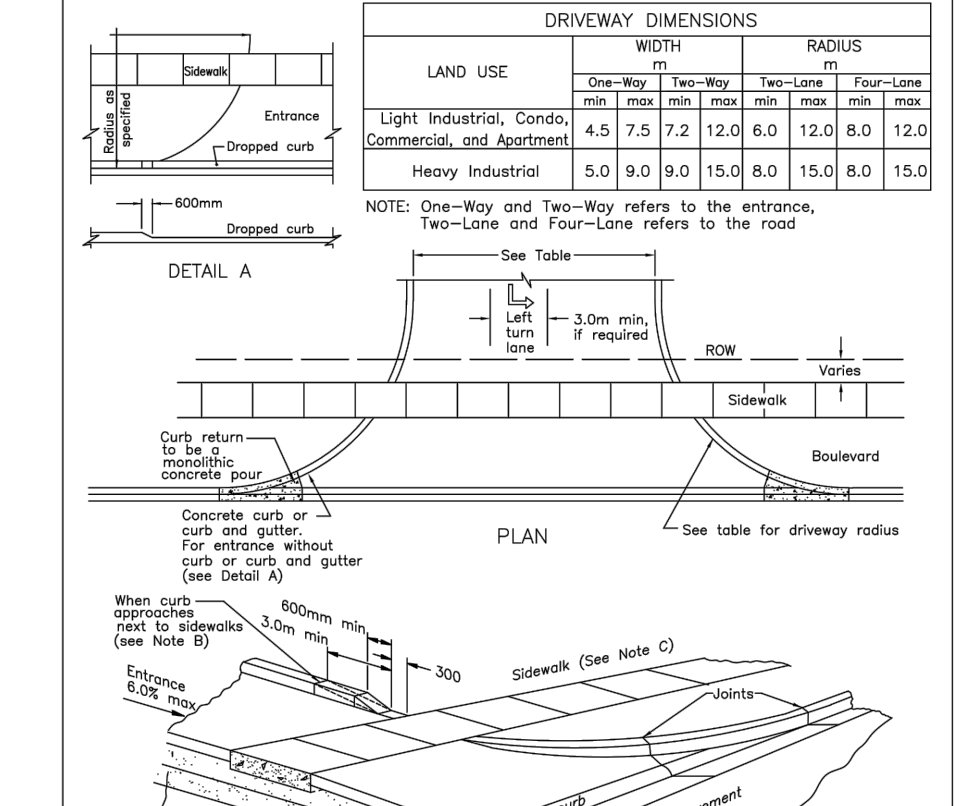
- NOTES:
- When sidewalk is continuously adjacent, the dropped curb at entrances shall be reduced to 75mm.
 - For slipforming procedure a 5% batter is acceptable.
 - A treatment at entrances shall be according to OPSD 351.010.
 - Outlet treatment shall be according to the OPSD 610 Series.
 - The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
 - All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2012 Rev 2
CONCRETE BARRIER CURB
 OPSD 600.110



- NOTES:
- Flexible and composite pavement shall be placed 5mm above the adjacent edge of gutter.
 - Where sidewalk is continuously adjacent, reduce the dropped curb at entrances to 75mm.
 - For slipforming procedure, a 5% batter is acceptable.
 - A treatment at entrances shall conform with OPSD-351.010.
 - Outlet treatment shall conform with OPSD-610 Series.
 - The length of transition from one curb type to another shall be 3.0m, except in conjunction with guide rail, it shall conform to OPSD-900 Series.
 - All dimensions are in millimetres unless otherwise shown.

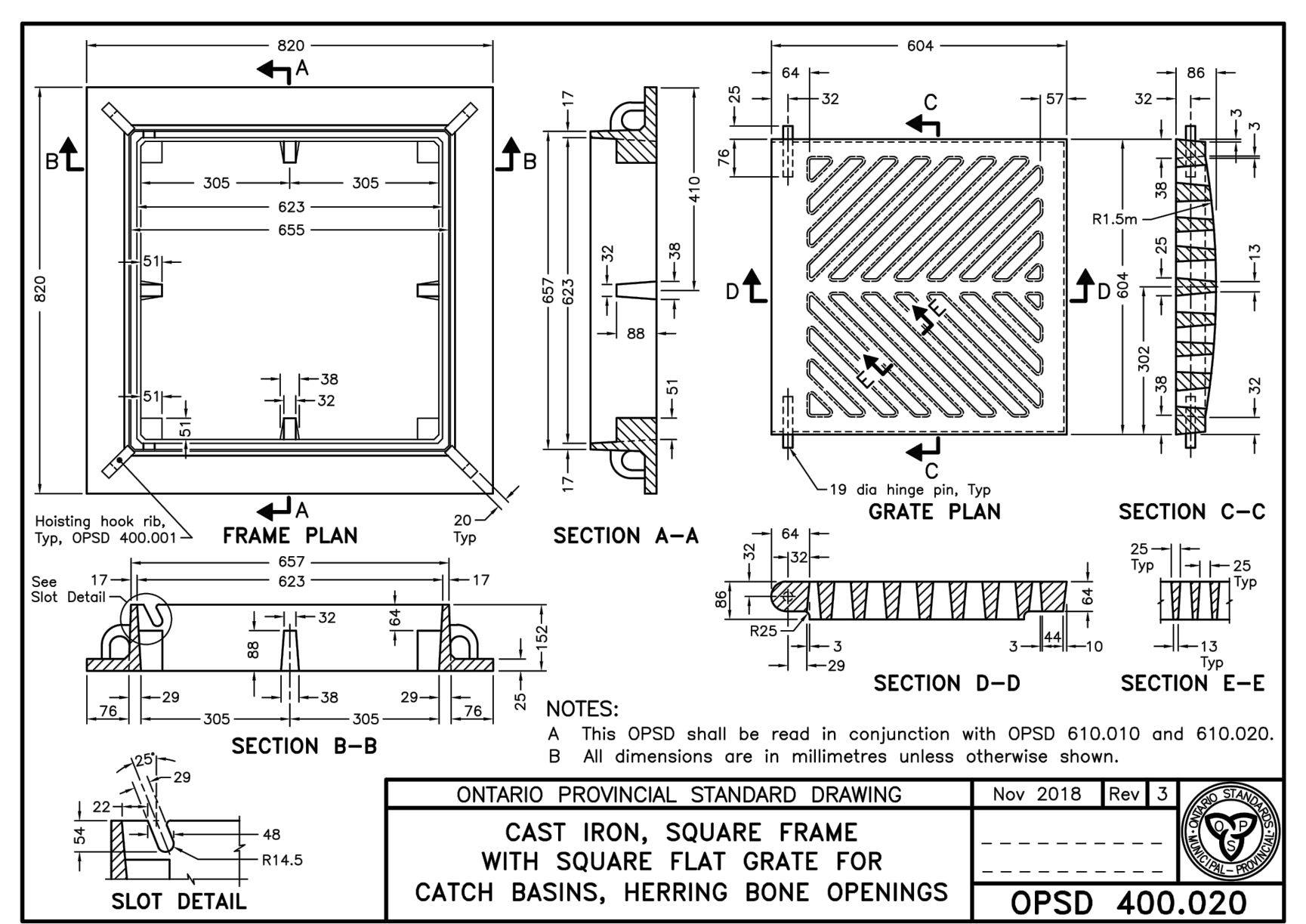
ONTARIO PROVINCIAL STANDARD DRAWING April 1999 Rev
CONCRETE BARRIER CURB WITH STANDARD GUTTER
 TWO STAGE CONSTRUCTION
 OPSD - 600.070



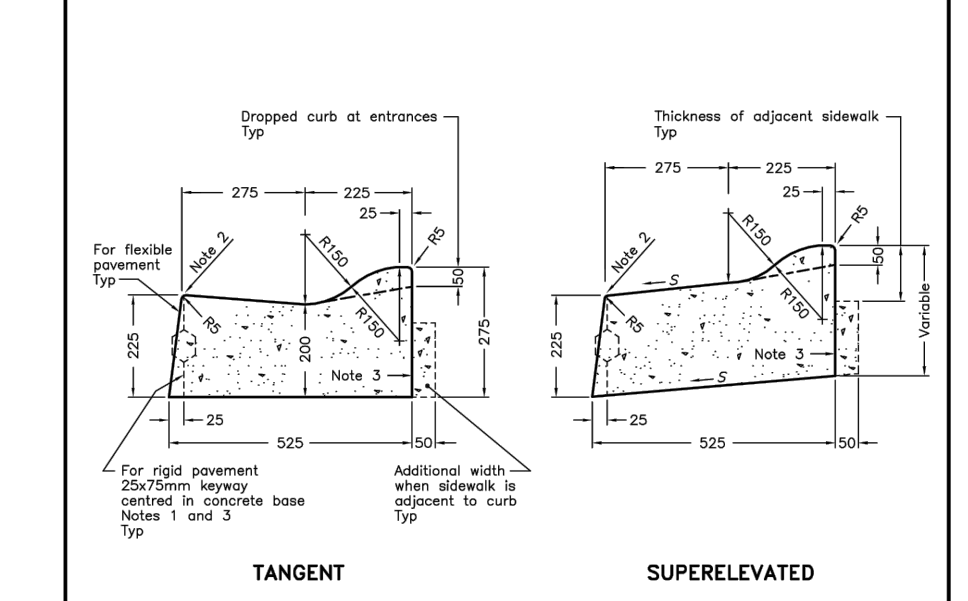
NOTES:

- All dimensions are in millimetres unless otherwise shown.
- Requires a 3.0m minimum transition to match sidewalk elevations.
- As per OPSD 310.010 and in compliance with the Accessibility For Ontarians With Disabilities Act.
- Where an asphalt trail/walkway crosses a site entrance, the trail/walkway shall be replaced with a 3.0m concrete sidewalk, constructed to meet applicable Standards and to a minimum of 1.5m beyond curb, on both sides of the entrance.

TOWN OF MILTON
 DATE: JAN 2018
 STD. NO. E-43
 MILTON



ONTARIO PROVINCIAL STANDARD DRAWING Nov 2018 Rev 3
CAST IRON, SQUARE FRAME WITH SQUARE FLAT GRATE FOR CATCH BASINS, HERRING BONE OPENINGS
 OPSD 400.020

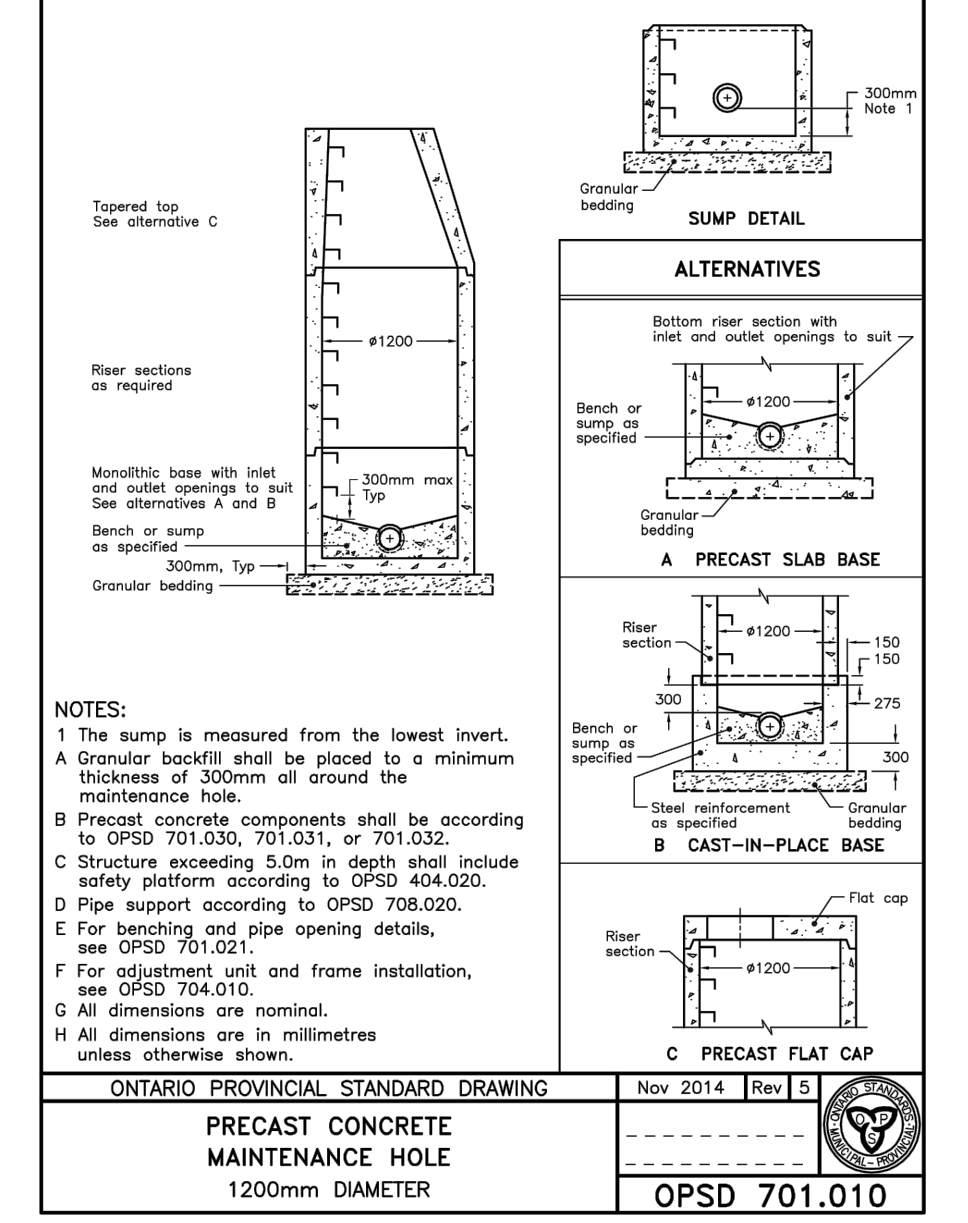


LEGEND:
 S - Rate of pavement super-elevation in percent, %.

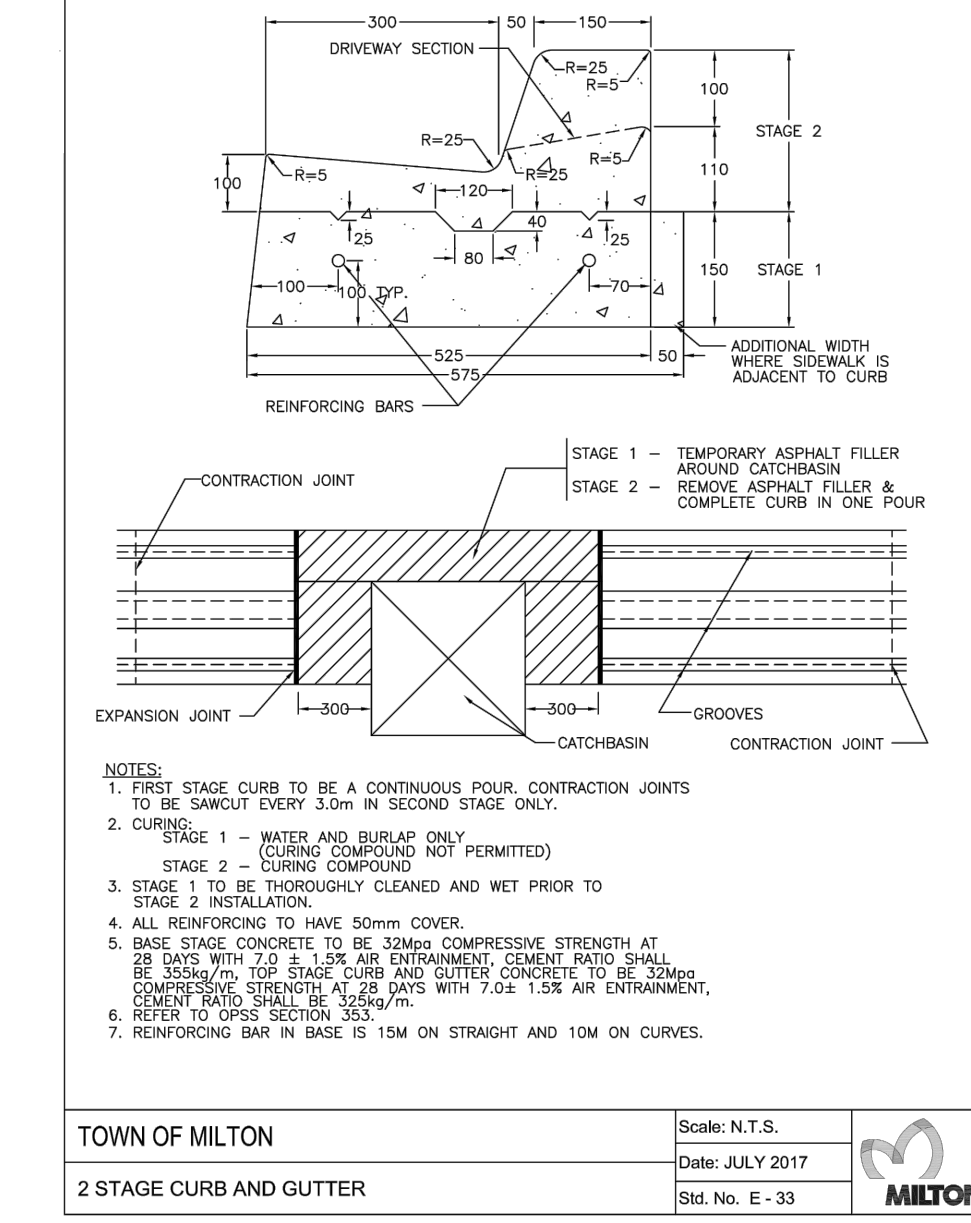
NOTES:

- When curb and gutter is adjacent to concrete pavement or base, this drawing shall be used in conjunction with OPSD 552.010 and 552.020.
- Flexible and composite pavement shall be placed 5mm above the adjacent edge of gutter.
- For slipforming procedure a 5% batter is acceptable.
- A treatment at entrances shall be according to OPSD 351.010.
- Outlet treatment shall be according to the OPSD 610 Series.
- The transition from one curb type to another shall be a minimum length of 3.0m, except in conjunction with guide rail where it shall be according to the OPSD 900 Series.
- All dimensions are in millimetres unless otherwise shown.

ONTARIO PROVINCIAL STANDARD DRAWING Nov 2012 Rev 2
CONCRETE SEMI-MOUNTABLE CURB WITH STANDARD GUTTER
 OPSD 600.060



ONTARIO PROVINCIAL STANDARD DRAWING Nov 2014 Rev 13
PRECAST CONCRETE MAINTENANCE HOLE
 1200mm DIAMETER
 OPSD 701.010



TOWN OF MILTON
 DATE: JULY 2017
 STD. NO. E-33
 MILTON

CB No.	FRAME ELEV	INVERT ELEV	CB LEAD			LEAD INV @ MAIN/MH
			LENGTH	SIZE (mm)	SLOPE (%)	
DCB 1	196.32	194.82	2	300	1	194.80
DCB 2	196.32	194.82	4.5	300	1	194.78
DCB 3	196.48	194.98	7.5	300	1	194.91
DCB 4	196.46	194.96	1.5	300	1	194.95
DCB 5	196.48	194.98	4	300	1	194.94
DCB 6	196.52	195.02	4	300	1	194.98
DCB 7	196.52	195.02	3.5	300	1	194.99
DCB 8	196.52	195.02	3	300	1	194.99
DCB 9	196.52	195.02	4	300	1	194.98
DCB 12	196.46	194.96	3.5	300	1	194.93
DCB 13	196.45	194.95	2	300	1	194.93
DCB 14	196.89	195.39	3.5	300	1	195.36
CB 1	196.85	195.40	8.5	250	1	195.32
CB 15	196.97	195.52	17	250	1	195.35
CB 16	196.97	195.52	16	250	1	195.36

NOT FOR CONSTRUCTION

TOPOGRAPHIC INFORMATION
 TOPOGRAPHIC INFORMATION PROVIDED BY R-PE SURVEYING LTD.,
 REFERENCE No. 22-049, CAD FILE No.22049tp05, SURVEY RECEIVED FEBRUARY 16, 2023.

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1	24-04-05	C.J.M.	1st SUBMISSION	

SCALE: NTS

MUNICIPAL APPROVAL

DEVELOPMENT SERVICES

REGIONAL APPROVAL

DESIGN OF SANITARY, WATER SERVICES AND REGIONAL ROAD WORKS APPROVED SUBJECT TO DETAIL CONSTRUCTION CONFORMING TO HALTON REGION STANDARDS & SPECIFICATIONS & LOCAL APPROVAL FROM AREA MUNICIPALITY

LEGISLATIVE AND PLANNING SERVICES

600 Alden Road, Suite 606
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TOWN OF MILTON DEVELOPMENT SERVICES

The Regional Municipality of Halton

MATTAMY HOMES TOR SUBNODE SITEPLAN

DETAILS AND TABLES

600 Alden Road, Suite 606
 Markham, Ontario, L3R 0E7
 Tel: (905) 475-3080
 Fax: (905) 475-3081
 www.DSEL.ca

TOWN OF MILTON FILE NO: XXXXXXX

REGION OF HALTON FILE NO: XXXXXXX

MATTAMY HOMES TOR SUBNODE SITEPLAN

DEVELOPER: MATTAMY HOMES

DEVELOPMENT MANAGER: MATTAMY HOMES

PROJECT: TOR SUBNODE SITEPLAN

TITLE: DETAILS AND TABLES

DRAWN BY: H.P. CHECKED BY: E.G.
 DESIGNED BY: H.C. CHECKED BY: C.J.M.
 PROJECT NO. 24-1377 SHEET 16 OF 18