THE VILLAGE OF INNIS LANDING 800 YONGE STREET CITY OF BARRIE



TATHAM PROJECT NO. 422426

SITE PLAN APPROVAL - FOURTH SUBMISSION

OCTOBER 8, 2024







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LEGEND

M Perty line	EXISTING	PROPOSED
LINE		
TERLINE		
E OF ASPHALT		
CRETE CURB		
E OF GRAVEL SHOULDER		
H/DIRECTION OF FLOW	·	·
NAGE SWALE/DIRECTION OF FLOW		
ERMAIN/SIZE	150ø W/M	150ø W/M
ER SERVICE		
HYDRANT	·\$\rightarrow HYD	→ HYD
TING WATER VALVE	₩ W	₩V
B STOP VALVE		► CSV
ERMAIN PLUG AND THRUST BLOCK	<u> </u>	_
ERMAIN BLOWOFF	⊗ BLOWOFF	⊗ ^{BLOWOF}
ERMAIN REDUCER	D	•
TARY SEWER/SIZE/DIRECTION OF FLOW		200ø SAN
TARY MAINTENANCE HOLE	SAN MH	SAN M
TARY SERVICE	_·—·—·—	
TARY FORCEMAIN		
RM SEWER/SIZE/DIRECTION OF FLOW		375ø STM
RM MAINTENANCE HOLE	○ STM MH	● STM MH
CH BASIN	□ <i>CB</i>	■ CB4
BLE CATCH BASIN	□ DCB	■ DCB4
CH BASIN MAINTENANCE HOLE	—	• СВМН4
BLE CATCH BASIN MAINTENANCE HOLE	⊕ DCBMH	Ф рсвин-
H INLET CATCH BASIN		■ DICB4
VERT		E =======
_ UNDERGROUND	BU	——— ви ———
_ AERIAL	BA	——— ВА ————
LE UNDERGROUND	CU	cu
LE AERIAL	CA	CA
RO UNDERGROUND	HU	——— ни ———
RO AERIAL	——— НА ———	—— на ——
MAIN/SERVICE	GAS	GAS
DE	— x — x —	— x —— x —
DERAIL		
HLINE/TREELINE	~~~~~	~~~~~
TOUR	179.00	179.00
T ELEVATION	× 179.00	×179.00
DING DIRECTION/GRADE PERCENTAGE	1.9%	1.9%
NAGE FLOW		4
FFIC SIGN	Þ SIGN	▶ SIGN
FFIC POLE/TRAFFIC SIGNAL	0 <i>TLS</i>	● P1
T STANDARD	0 <i>LS</i>	
LARD LIGHT	0 20	å •
RO POLE	O HP	• HP
WIRE)—	—
POLE	<i>,</i> ○ <i>BP</i>	•
_ MAINTENANCE HOLE	○ BELL MH	
PEDESTAL/VAULT	B	
LE PEDESTAL/VAULT		
RO TRANSFORMER/VAULT	oxdot	
	□ GAS VALVE	
VALVE MARKER	⊕ GAS	
	M	
BOX		
NDARD IRON BAR	÷ SIB	
I BAR	■ IB	
PORARY BENCHMARK	⊕ <i>TBM#1</i>	
·	BH/MW1	
PORARY BENCHMARK EHOLE/MONITORING WELL IDUOUS/CONIFEROUS TREE, SHRUB/BUSH	⊕ BH/MW1 € 3	

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Drawing Name: 422426—IN01 1.

BENCHMARK

	No.	REVISION DESCRIPTION	DATE
SOUTHWEST CORNER OF ST.	1.	SITE PLAN APPROVAL — FIRST SUBMISSION	JULY 17/24
E OF CONCRETE FOUNDATION RCH, AT NORTH—EAST CORNER	2.	ISSUED FOR BUILDING PERMIT APPROVAL	AUG. 15/24
BEL POLE AND 9.2 m BIRCH TREES 15 cm BELOW	3.	SITE PLAN APPROVAL - SECOND SUBMISSION	SEPT. 6/24
	4	SITE PLAN APPROVAL — THIRD SUBMISSION	OCT. 4/24
	5	SITE PLAN APPROVAL — FOURTH SUBMISSION	OCT. 8/24

ENGINEER STAMP



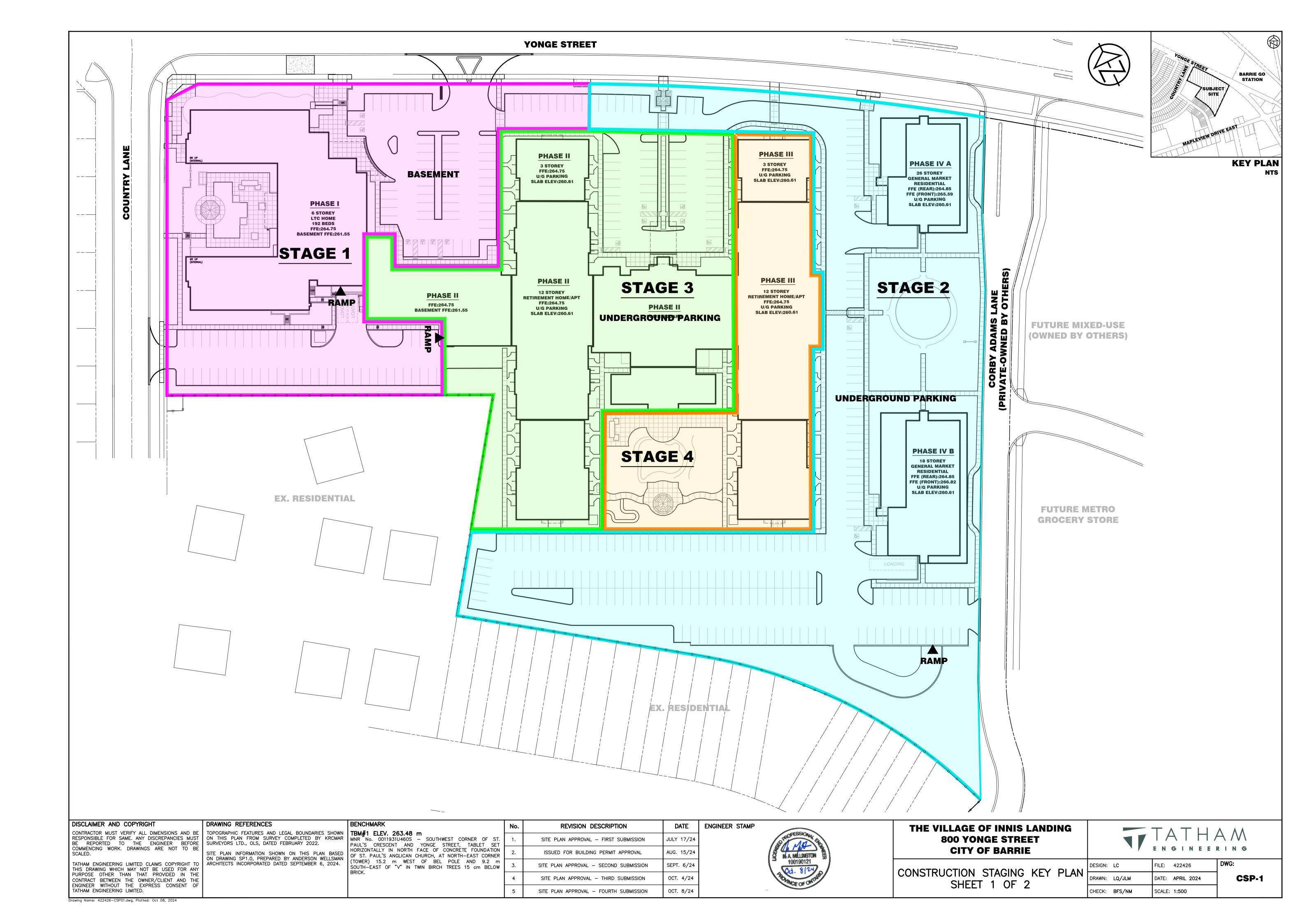
THE VILLAGE OF INNIS LANDING **800 YONGE STREET CITY OF BARRIE**

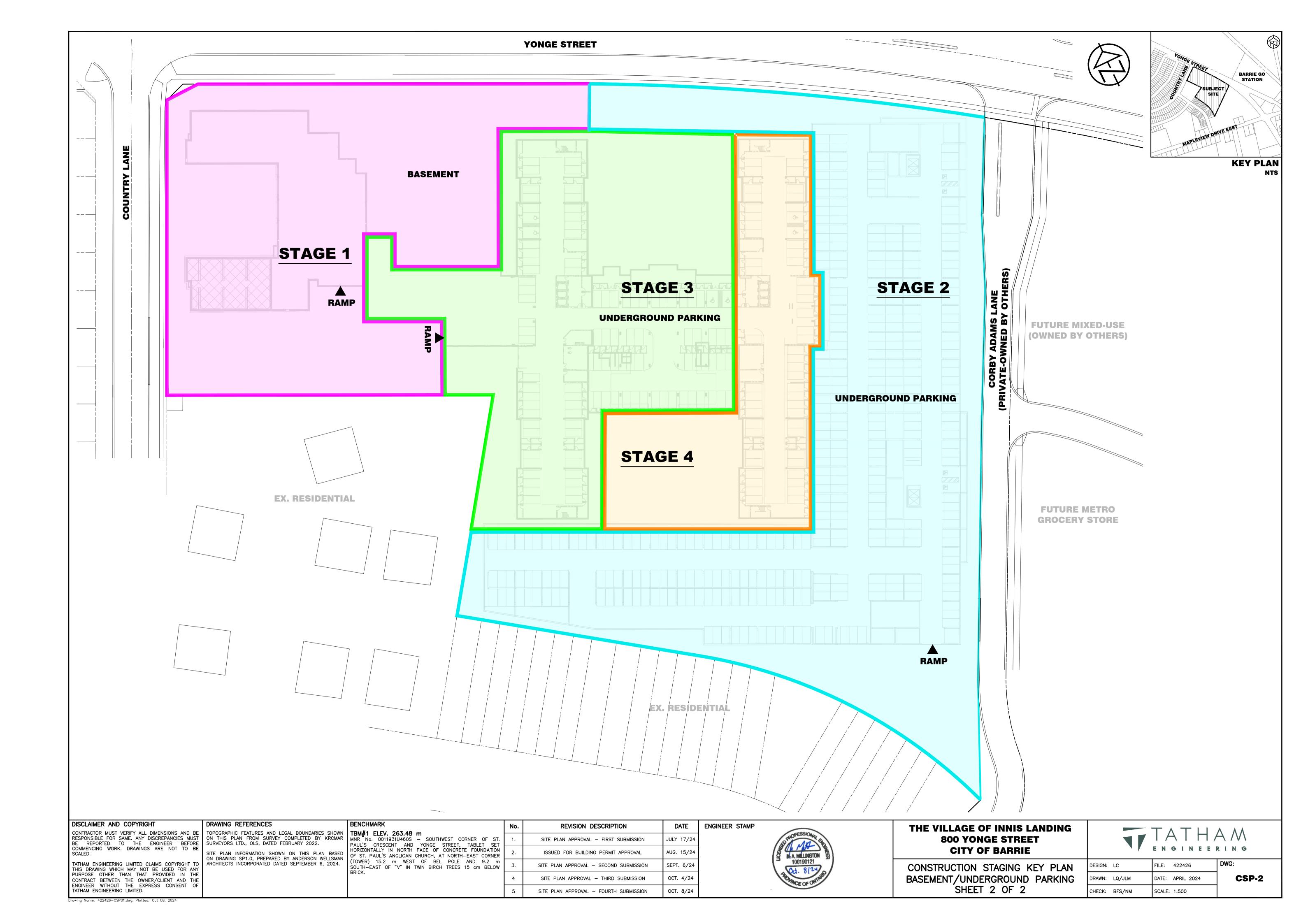


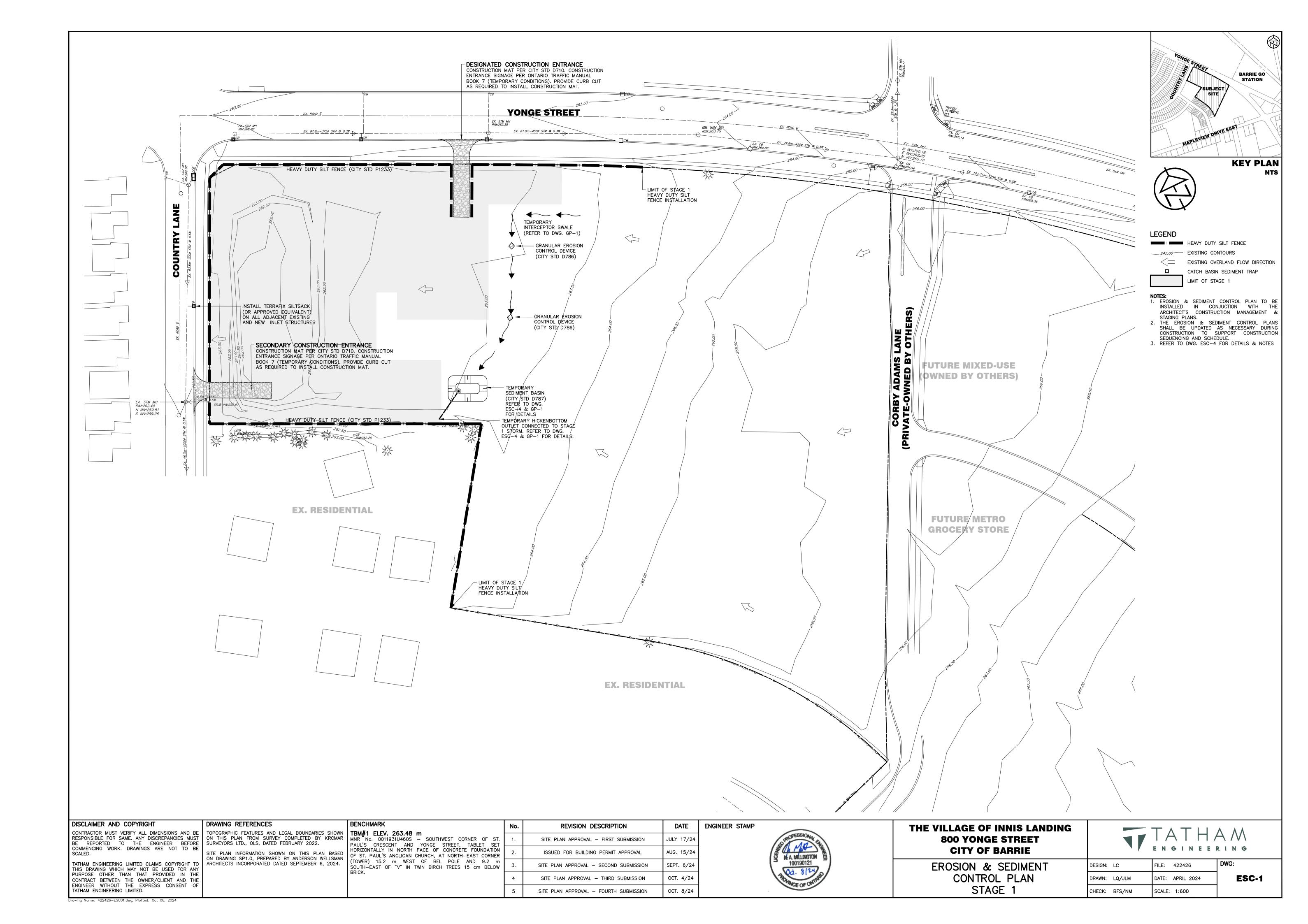
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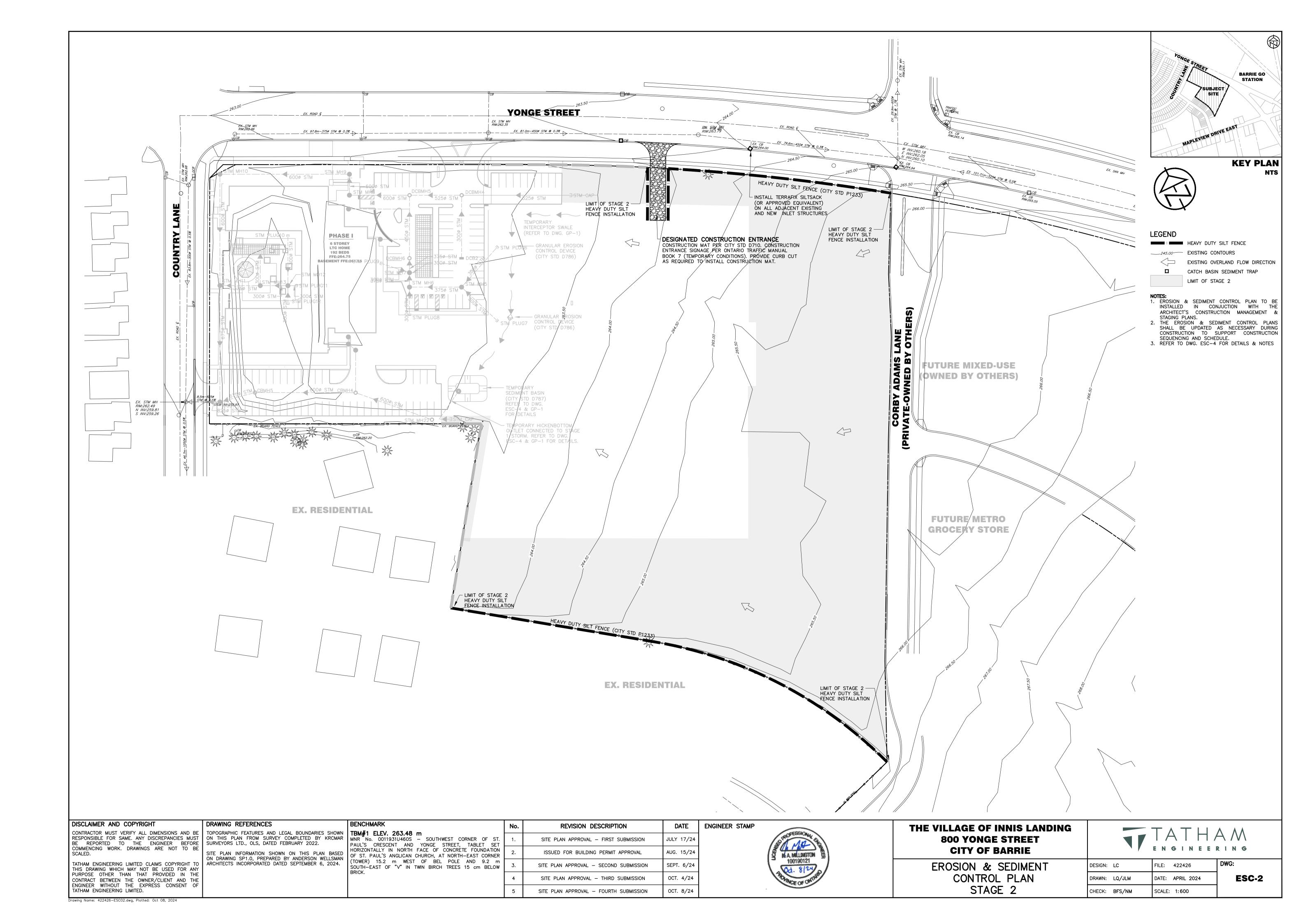
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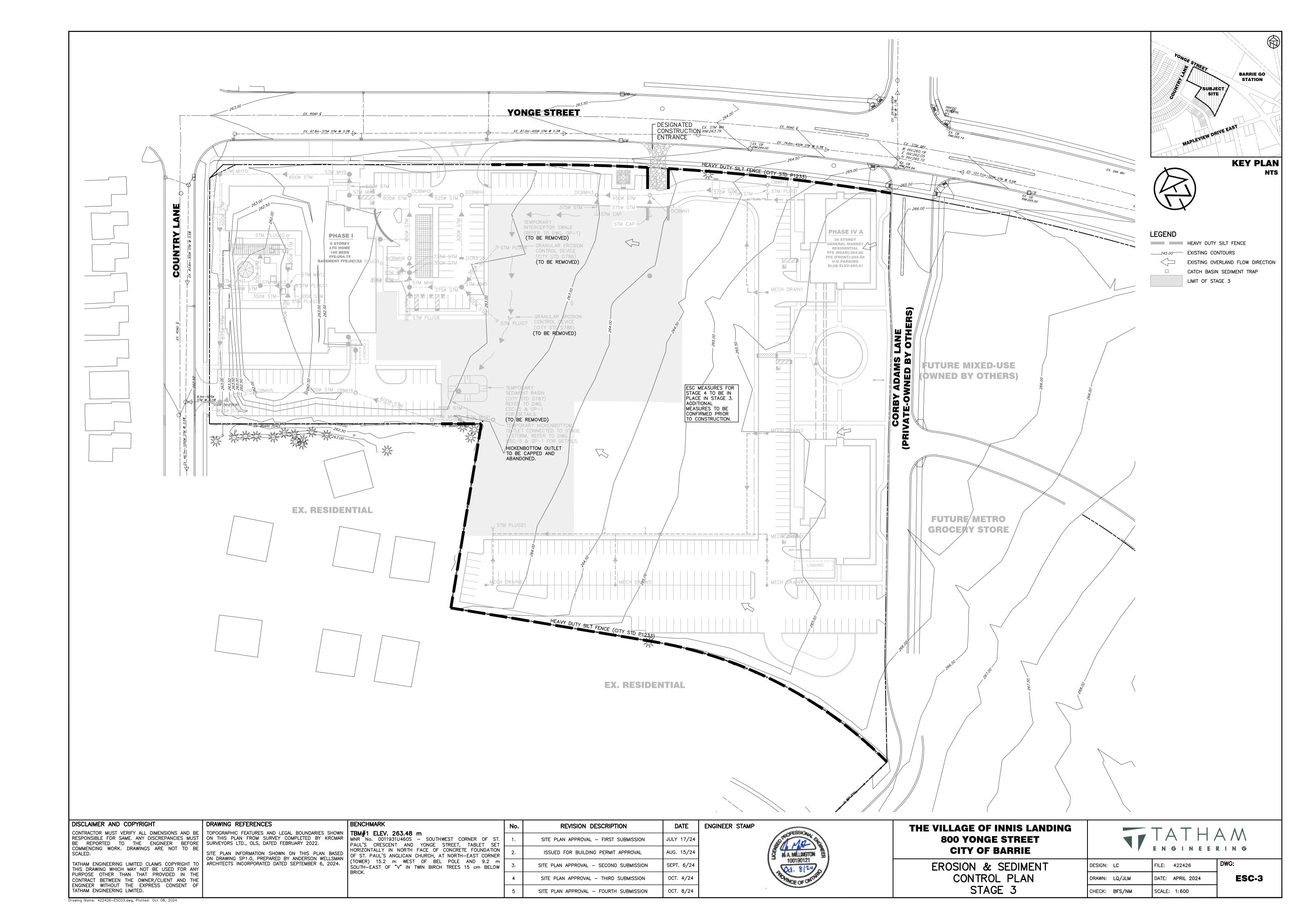
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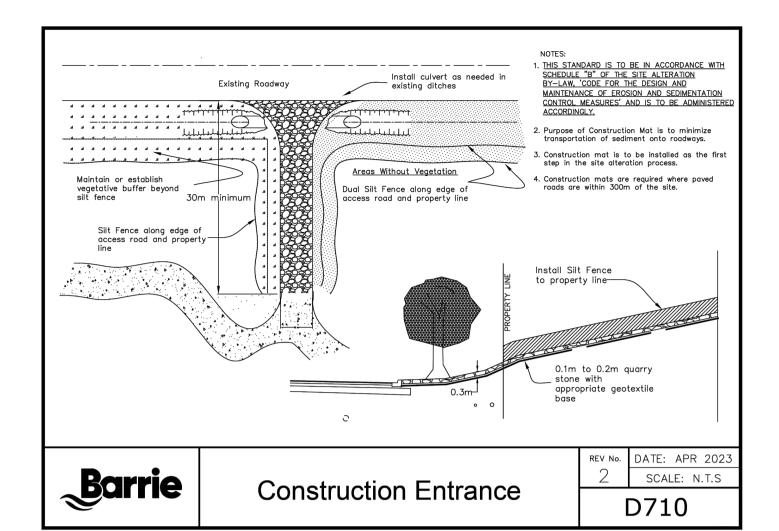


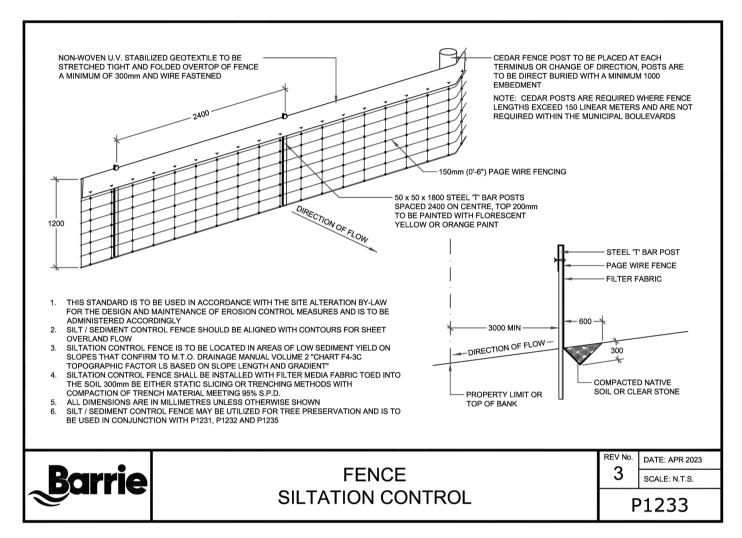


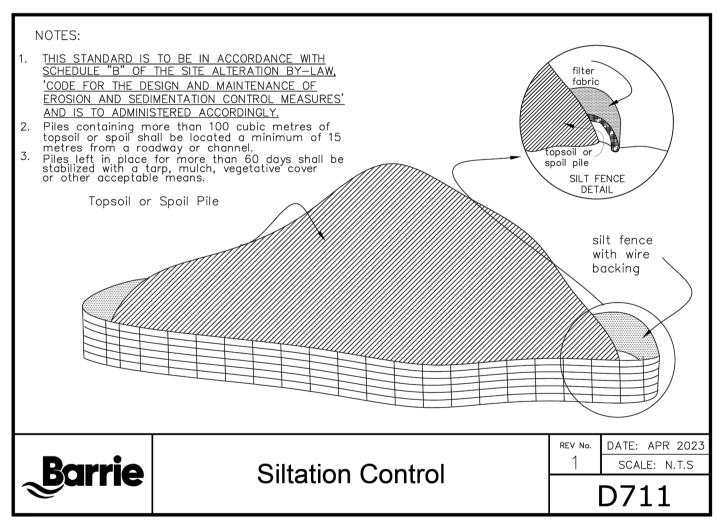


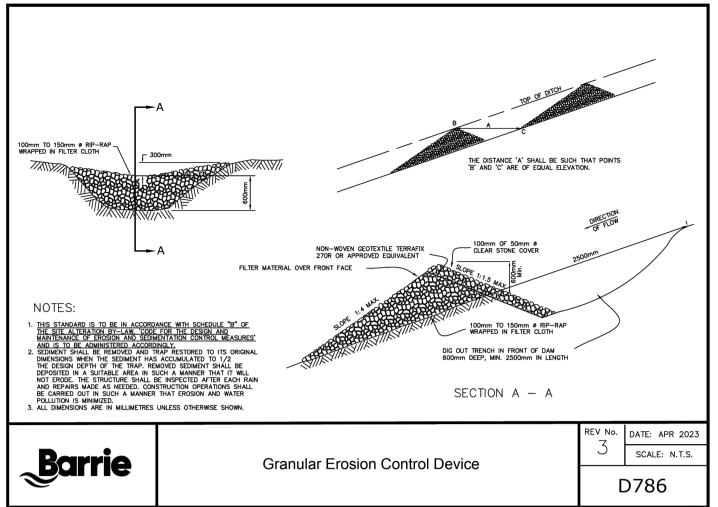


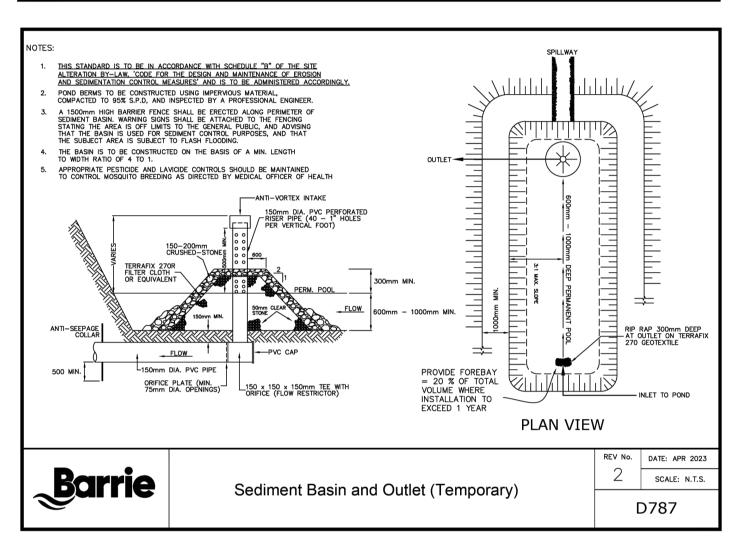


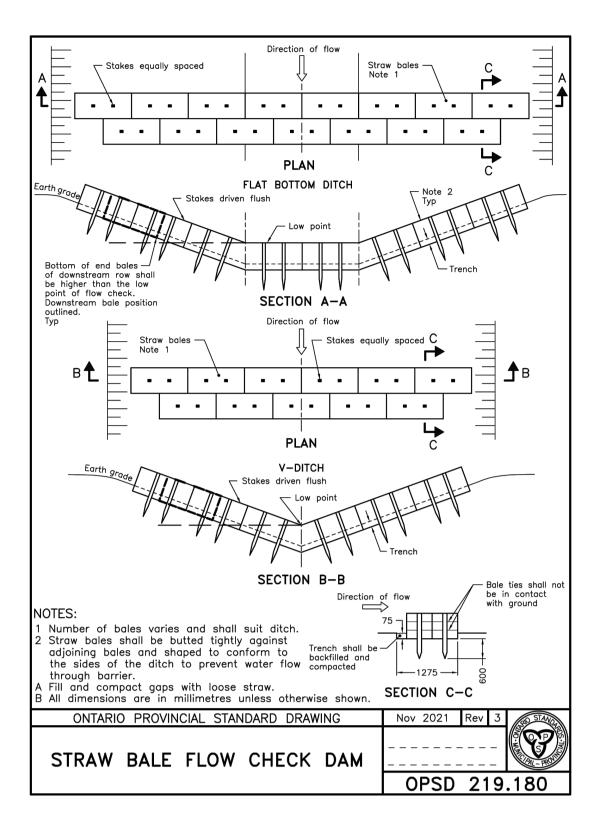






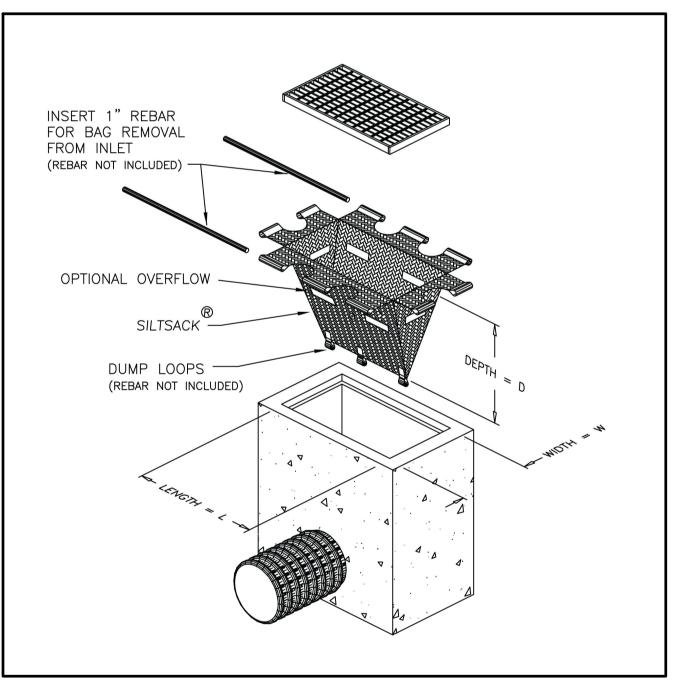






EROSION & SEDIMENT CONTROL

- A. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED. EROSION AND SEDIMENT CONTROL MEASURES THAT ARE DESIGNED TO CONTROL RUNOFF FROM SPECIFIC AREAS MUST BE INSTALLED PRIOR TO ANY DISTURBANCE OF THAT PART OF THE SITE. THE LOCATION OF ALL EROSION AND SEDIMENT CONTROL WORKS TO BE REVIEWED ON SITE AND MAY BE REVISED AS DIRECTED BY THE CONTRACT ADMINISTRATOR.
- B. THE CONTRACTOR MAY CONSIDER ALTERNATIVE EROSION AND SEDIMENT CONTROL MEASURES. SUCH MEASURES MUST BE PRESENTED IN WRITING TO THE CONTRACT ADMINISTRATOR FOR APPROVAL BY THE CITY OF BARRIE.
- C. THE CONTRACTOR SHALL HAVE MATERIALS AVAILABLE ON—SITE TO REPAIR SEDIMENT AND EROSION CONTROL MEASURES IN THE EVENT OF UNFORESEEN CONDITIONS: HIGH WATER, EXTREME RAINFALL EVENTS, ETC.
- D. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE INSPECTED, CLEANED AND REPAIRED BY THE CONTRACTOR AFTER EACH STORM EVENT AS NECESSARY TO PREVENT ANY OFF-SITE ENVIRONMENTAL IMPACTS (CITY OF BARRIE SITE ALTERATION BY-LAW 2014-100). ALL WORKS WILL BE INSPECTED BY THE CONTRACT ADMINISTRATOR WEEKLY AND AFTER EACH MAJOR STORM EVENT.
- E. CONSTRUCTION OF ALL EROSION AND SEDIMENT CONTROL WORKS ARE TO BE IN ACCORDANCE WITH THE FOLLOWING STEPS:
- 1. INSTALL CONSTRUCTION ENTRANCE MUD MAT IN ACCORDANCE WITH D710. 2. INSTALL SILTATION CONTROL FENCE IN ACCORDANCE WITH P1233.
- 3. INSTALL TEMPORARY SILTSACKS BY TERRAFIX (OR APPROVED EQUIVALENT) AS SHOWN ON DWG. ESC 1-4 AND AS DIRECTED BY THE CONTRACT ADMINISTRATOR. SILTSACKS TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. ALL CATCH BASINS TO REMAIN SCREENED UNTIL BASE COURSE ASPHALT IS PLACED AND THE SITE HAS BEEN STABILIZED.
- 4. INSTALL TEMPORARY SEDIMENT BASIN(S) IN ACCORDANCE WITH D787. 5. INSTALL TEMPORARY INTERCEPTOR SWALES.
- 6. INSTALL GRANULAR EROSION CONTROL DEVICES IN ACCORDANCE WITH D786 AND STRAW BALE FLOW CHECK DAMS IN ACCORDANCE WITH OPSD 219.180.
- F. ALL CONSTRUCTION VEHICLES TO ACCESS SITE USING THE DESIGNATED CONSTRUCTION
- G. EROSION AND SEDIMENT CONTROL MEASURES TO BE REMOVED BY THE CONTRACTOR ONCE GROUND COVER IS ESTABLISHED AND LANDSCAPING IS COMPLETE AND AS APPROVED BY THE CONTRACT ADMINISTRATOR.
- H. ALL STOCKPILE LOCATIONS ARE TO BE APPROVED BY THE CONTRACT ADMINISTRATOR. STOCKPILES TO BE CONSTRUCTED IN ACCORDANCE WITH D711.
- PROVIDE SNOW FENCE OR APPROVED EQUAL ACROSS ALL CONSTRUCTION ENTRANCES DURING PERIODS OF INACTIVITY.
- J. CONSTRUCTION AREAS THAT EXCEED 30 DAYS OF INACTIVITY SHALL BE STABILIZED BY SEEDING. THIS SHALL INCLUDE STOCKPILES OF FILL AND TOPSOIL.



TYPICAL CATCH BASIN SEDIMENT CAPTURE DEVICE TYPE "B" (FROM TERRAFIX GEOSYNTHETICS INC.)

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TOPOGRAPHIC FEATURES AND LEGAL BOUNDARIES SHOWN ON THIS PLAN FROM SURVEY COMPLETED BY KRCMAR SURVEYORS LTD., OLS, DATED FEBRUARY 2022.

TBM#1 ELEV. 263.48 m MNR "No. 0011931U460S - SOUTHWEST CORNER OF ST. PAUL'S CRESCENT AND YONGE STREET, TABLET SET HORIZONTALLY IN NORTH FACE OF CONCRETE FOUNDATION SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH-EAST CORNER ON DRAWING SP1.0, PREPARED BY ANDERSON WELLSMAN (TOWER) 15.2 m WEST OF BEL POLE AND 9.2 m ARCHITECTS INCORPORATED DATED SEPTEMBER 6, 2024. SOUTH-EAST OF "V" IN TWIN BIRCH TREES 15 cm BELOW

BENCHMARK

No.	REVISION DESCRIPTION	DATE
1.	SITE PLAN APPROVAL — FIRST SUBMISSION	JULY 17/2
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ENGINEER STAMP

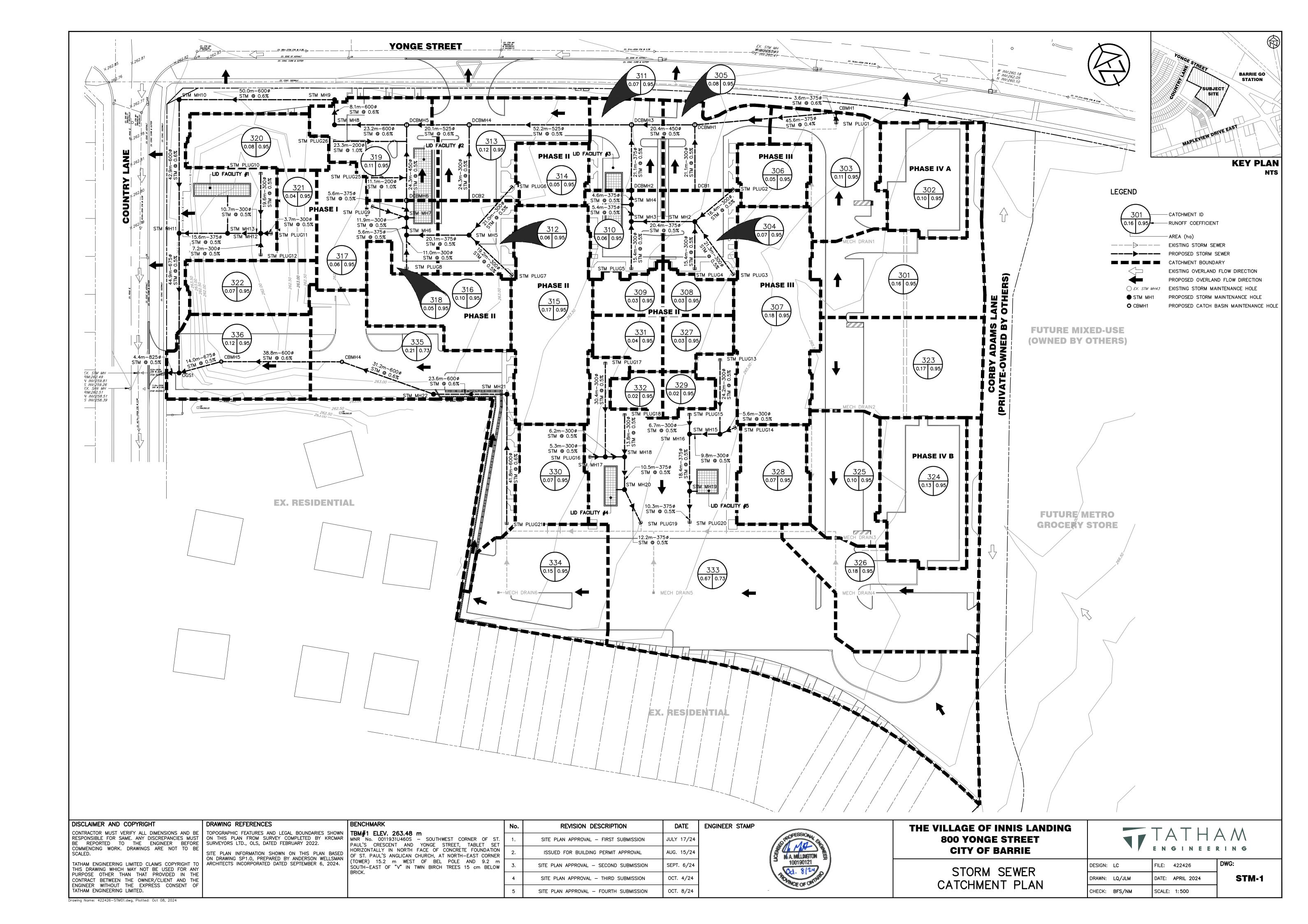


THE VILLAGE OF INNIS LANDING **800 YONGE STREET** CITY OF BARRIE

EROSION & SEDIMENT CONTROL DETAILS & NOTES



DESIGN: LC FILE: 422426 DRAWN: LQ/JLM DATE: APRIL 2024 CHECK: BFS/NM SCALE: AS NOTED



TATHAM

Project Information The Village of Innis Landing, 800 Yonge Street Drawing Reference Prepared By September 6/24 September 6/24

 Year
 A
 B

 10
 1.00
 0.00

 25
 1.10
 0.00

 50
 1.20
 0.00

 100
 1.25
 0.00

10 mins

Year A B C
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 675.59
 4.68
 0.78

 5
 843.02
 4.58
 0.76

 10
 976.90
 4.75
 0.76

 25
 1133.12
 4.73
 0.76

 50
 1251.47
 4.85
 0.75

 100
 1383.63
 4.91
 0.75

Engineer Stamp

Storm Sewer Design Sheet

	a ID / Label	Upstream Maintenance Hole	Downstream Maintenance Hole	Area (ha)	5 Year Runoff Coefficient (C)	Design Storm (Year)	Adjusted Runoff Coefficient (C)	Area × Runoff Coefficient	Cumulative Area (ha)	Cumulative Area × Adjusted Runoff Coefficient	Time of Concentration (min)	Rainfall Intensity (mm/hr)	Peak Flow (m³/s)	Manning's Roughness Coefficient	Sewer Length (m)	Sewer Slope (%)	Actual Sewer Diameter (mm)	Full Flow Velocity (m/s)	Full Flow Capacity (m³/s)	Actual Velocity (m/s)	Travel Time (min)	Calculated Sewer Diameter (mm)	Percentage of Full Flow Capacity (%)	Total Time of Travel (min)
Street Name	Area	Ups	Dov	Are	, v o	Des	Adj	Are	Cur	CO A CU	F S E	Rai (m)	Pea (m³	Ma Rou Co	Sev	Sev	Act	Ful	Cap	Act	Tra	Cal	Per	Tot
North Sewers TBD by Mech	301	DRAIN1	STM PLUG1	0.16	0.95	5	0.95	0.15	0.16	0.15	10.00	109.11	0.046	0.013	37.5	0.5%	300	0.97	0.068	0.97	0.65	259	67.4%	10.65
Ph. 4A Roof Leader TBD by Mech	302	Ph. 4A Roof	STM PLUG1	0.10	0.95	5	0.95	0.10	0.10	0.10	10.00	109.11	0.029	0.013	11.0	0.5%	300	0.97	0.068	0.86	0.21	217	42.1%	10.21
North Sewers North Sewers	303	STM PLUG1 CBMH1	CBMH1 DCBMH1	0.11	0.95	5	0.95	0.00	0.26	0.25	10.65	105.55	0.072	0.013	3.6 45.6	0.5%	375 375	1.12	0.124	1.09	0.05	306 349	58.4% 82.9%	10.70
North Sewers	304	DCB1	DCBMH1	0.07	0.95	5	0.95	0.07	0.07	0.07	10.00	109.11	0.020	0.013	21.1	0.5%	300	0.97	0.068	0.78	0.45	190	29.5%	10.45
North Sewers	305	DCBMH1	DCBMH3	0.08	0.95	5	0.95	0.08	0.52	0.49	11.38	101.84	0.140	0.013	20.4	0.5%	450	1.27	0.202	1.27	0.27	392	69.3%	11.65
North Sewers	306	STM PLUG2	STM MH2	0.05	0.95	5	0.95	0.05	0.05	0.05	10.00	109.11	0.014	0.013	16.4	0.5%	300	0.99	0.070	0.72	0.38	166	20.6%	10.38
North Sewers	307	STM PLUG3	STM MH2	0.18	0.95	5	0.95	0.17	0.18	0.17	10.00	109.11	0.052	0.013	21.3	0.5%	300	0.97	0.068	0.97	0.37	270	75.8%	10.37
North Sewers	308	STM PLUG4	STM MH2	0.03	0.95	5	0.95	0.03	0.03	0.03	10.00	109.11	0.009	0.013	15.4	0.5%	300	0.97	0.068	0.62	0.41	138	12.6%	10.41
North Sewers	-	STM MH2	STM MH3	-	-	5	-	0.00	0.26	0.25	10.37	107.06	0.073	0.013	20.4	0.5%	375	1.12	0.124	1.10	0.31	308	59.2%	10.68
North Sewers	309	STM PLUG5	STM MH3	0.03	0.95	5	0.95	0.03	0.03	0.03	10.00	109.11	0.009	0.013	15.4	0.5%	300	0.97	0.068	0.62	0.41	138	12.6%	10.41
North Sewers North Sewers	-	STM MH3	STM MH4 DCBMH2	-	-	5	-	0.00	0.29	0.28	10.68 10.76	105.39 104.97	0.081	0.013	5.4 4.6	0.5%	375 375	1.12	0.124 0.124	1.12 1.12	0.08	319 319	65.1% 64.8%	10.76 10.83
North Sewers	310	DCBMH2	DCBMH3	0.06	0.95	5	0.95	0.06	0.35	0.33	10.83	104.62	0.097	0.013	21.1	0.5%	375	1.12	0.124	1.12	0.31	341	77.9%	11.14
North Sewers	311	DCBMH3	DCBMH4	0.07	0.95	5	0.95	0.07	0.94	0.89	11.65	100.55	0.249	0.013	52.2	0.5%	525	1.40	0.304	1.40	0.62	487	82.0%	12.27
North Sewers North Sewers	312 313	DCB2 DCBMH4	DCBMH4 DCBMH5	0.06	0.95 0.95	5	0.95 0.95	0.06	0.06	0.06	10.00 12.27	109.11 97.72	0.017	0.013	24.3	0.5%	300 525	0.97 1.54	0.068	0.75 1.54	0.54	179 497	25.3% 86.7%	10.54
North Sewers	314	STM PLUG6	STM MH5	0.05	0.95	5	0.95	0.05	0.05	0.05	10.00	109.11	0.014	0.013	21.0	0.5%	300	0.97	0.068	0.71	0.49	167	21.1%	10.49
North Sewers North Sewers	315	STM PLUG7	STM MH5	0.17	0.95	5	0.95	0.16	0.17	0.16 0.21	10.00	109.11 107.25	0.049	0.013	19.2 20.1	0.5%	300 375	0.97	0.068	0.97 1.05	0.33	265 290	71.6% 50.2%	10.33
North Sewers	316	STM PLUG8	STM MH6	0.10	0.95	5	0.95	0.10	0.10	0.10	10.00	109.11	0.029	0.013	11.0	0.5%	300	0.97	0.068	0.86	0.21	217	42.1%	10.21
North Sewers	-	STM MH6	STM MH7	-	-	5	-	0.00	0.32	0.30	10.65	105.53	0.089	0.013	5.6	0.5%	375	1.12	0.124	1.12	0.08	331	71.9%	10.73
North Sewers	317	STM PLUG9	STM MH7	0.06	0.95	5	0.95	0.06	0.06	0.06	10.00	109.11	0.017	0.013	11.9	0.5%	300	0.97	0.068	0.75	0.26	179	25.3%	10.26
North Sewers North Sewers	- 318	STM MH7 DCBMH6	DCBMH6	0.05	0.95	5	- 0.95	0.00	0.38	0.36	10.73 10.82	105.10 104.66	0.105 0.119	0.013	5.6 24.3	0.5%	375 450	1.12	0.124	1.12	0.08	353 369	85.0% 58.9%	10.82
North Sewers	319	DCBMH5	STM MH8	0.11	0.95	5	0.95	0.10	1.66	1.58	12.48	96.77	0.424	0.013	23.2	0.6%	600	1.68	0.476	1.68	0.23	574	89.1%	12.71
North Sewers North Sewers	-	STM MH8 STM MH9	STM MH9 STM MH10	-	-	5	-	0.00	1.66	1.58	12.71	95.79 95.45	0.420	0.013	50.0	0.6%	600	1.68	0.476	1.68	0.08	572 571	88.2% 87.9%	12.79
West Sewers	-	STM MH10	STM MH11	-	-	5	-	0.00	1.66	1.58	13.29	93.42	0.409	0.013	42.9	0.6%	600	1.68	0.476	1.68	0.43	567	86.0%	13.71
West Sewers	320	STM PLUG10	STM MH12	0.08	0.95	5	0.95	0.08	0.08	0.08	10.00	109.11	0.023	0.013	19.6	0.5%	300	0.97	0.068	0.81	0.40	199	33.7%	10.40
West Sewers	321	STM PLUG11	STM MH12	0.04	0.95	5	0.95	0.04	0.04	0.04	10.00	109.11	0.012	0.013	3.7	0.5%	300	0.97	0.068	0.67	0.09	154	16.8%	10.09
West Sewers	322	STM PLUG12	STM MH12	0.07	0.95	5	0.95	0.07	0.07	0.07	10.00	109.11	0.020	0.013	7.2	0.5%	300	0.97	0.068	0.78	0.15	190	29.5%	10.15
West Sewers West Sewers	-	STM MH12 STM MH13	STM MH13	-	-	5	-	0.00	0.19	0.18	10.40 10.59	106.86 105.87	0.054	0.013	10.7 15.6	0.5%	300 375	0.97	0.068 0.124	0.97	0.18	274 273	78.4% 42.8%	10.59
West Sewers	-	STM MH11	OGS1	-	-	5	-	0.00	1.85	1.76	13.71	91.76	0.448	0.013	44.9	0.5%	675	1.66	0.594	1.66	0.45	607	75.4%	14.16
South Sewers TBD by Mech	323	DRAIN2	DRAIN3	0.17	0.95	5	0.95	0.16	0.17	0.16	10.00	109.11	0.049	0.013	40.9	0.5%	300	0.97	0.068	0.97	0.70	265	71.6%	10.70
Ph. 4B Roof Leader TBD by Mech	324	Ph. 4B Roof	DRAIN3	0.13	0.95	5	0.95	0.12	0.13	0.12	10.00	109.11	0.037	0.013	5.0	0.5%	300	0.97	0.068	0.92	0.09	239	54.7%	10.09
South Sewers TBD by Mech	325 326	DRAIN3	DRAIN4	0.10	0.95 0.95	5	0.95 0.95	0.10	0.40	0.38	10.33	107.25 105.98	0.113	0.013	17.4 58.5	0.6%	375 450	1.23	0.136 0.202	1.23 1.27	0.24	350 415	83.4% 80.5%	10.57
South Sewers TBD by Mech	326	DRAIN4	DRAIN5	0.18	0.95	5	0.95	0.17	0.58	0.55	10.57	105.98	0.162	0.013	58.5	0.5%	450	1.27	0.202	1.27	0.77	415	80.5%	11.54
South Sewers	327	STM PLUG13	STM MH15	0.03	0.95	5	0.95	0.03	0.03	0.03	10.00	109.11	0.009	0.013	24.2	0.5%	300	0.97	0.068	0.62	0.65	138	12.6%	10.65
South Sewers South Sewers	328	STM PLUG14	STM MH15	0.07	0.95	5	0.95	0.07	0.07	0.07	10.00	109.11	0.020	0.013	5.6 9.8	0.5%	300 300	0.93	0.066	0.76 0.86	0.12	193 215	30.7% 41.1%	10.12
South Sewers South Sewers	329	STM PLUG15 STM MH16	STM MH16 STM MH19	0.02	0.95	5	0.95	0.02	0.02	0.02	10.00	109.11	0.006	0.013	6.7 18.4	0.5%	300 375	0.97 1.12	0.068	0.56	0.20	119 229	8.4% 27.0%	10.20
South Sewers South Sewers TBD by Mech	-	STM MH19 STM PLUG20	STM PLUG20 DRAIN5	-	-	5 5	-	0.00	0.12	0.11	10.99 11.18	103.79 102.81	0.033	0.013	10.3 33.9	0.5%	375 375	1.12	0.124 0.124	0.88	0.19	228 227	26.5% 26.3%	11.18 11.82
	770			0.07	0.05																			
South Sewers	330	STM PLUG16	STM MH17	0.07	0.95	5	0.95	0.07	0.07	0.07	10.00	109.11	0.020	0.013	5.3	0.5%	300	0.97	0.068	0.78	0.11	190	29.5%	10.11
South Sewers South Sewers	331	STM PLUG17 STM MH17	STM MH17 STM MH18	0.04	0.95	5 5	0.95	0.04	0.04	0.04	10.00 10.45	109.11	0.012	0.013	30.4 6.2	0.5%	300 300	0.97	0.068	0.67	0.75 0.12	154 223	16.8% 45.3%	10.75 10.57
South Sewers	332	STM PLUG18	STM MH18	0.02	0.95	5	0.95	0.02	0.02	0.02	10.00	109.11	0.006	0.013	13.8	0.5%	300	0.97	0.068	0.56	0.41	119	8.4%	10.41
South Sewers South Sewers	-	STM MH18	STM MH20	-	-	5	-	0.02	0.02	0.02	10.00	109.11	0.036	0.013	10.5	0.5%	375	1.12	0.124	0.56	0.19	237	29.3%	10.76
South Sewers South Sewers TBD by Mech	-	STM MH20 STM PLUG19	STM PLUG19 DRAIN5	-	-	5 5	-	0.00	0.13	0.12	10.76 10.99	104.95 103.79	0.036	0.013	12.2 26.2	0.5%	375 375	1.12	0.124 0.124	0.90	0.22	236 235	29.0% 28.7%	10.99
South Sewers TBD by Mech South Sewers TBD by Mech	333 334	DRAIN5 DRAIN6	DRAIN6 STM PLUG21	0.67 0.15	0.73 0.95	5	0.73 0.95	0.49	1.50 1.65	1.28 1.42	11.34 11.88	102.05 99.47	0.362	0.013	49.9 22.2	0.5%	600 600	1.54 1.68	0.434	1.54 1.68	0.54	560 558	83.4% 82.5%	11.88
Storm Sewers	-	STM PLUG21	STM MH21	-	-	5	-	0.00	1.65	1.42	12.10	98.47	0.388	0.013	41.8	0.6%	600	1.68	0.476	1.68	0.41	556	81.7%	12.51
Storm Sewers Storm Sewers	-	STM MH21 STM MH22	STM MH22 CBMH4	-	-	5	-	0.00	1.65 1.65	1.42 1.42	12.51 12.75	96.65 95.65	0.381	0.013	23.6 31.2	0.6%	600 600	1.68	0.476 0.476	1.68 1.68	0.23	552 550	80.2% 79.3%	12.75 13.05
Storm Sewers Storm Sewers	335 336	CBMH4 CBMH5	CBMH5 OGS1	0.21	0.73 0.95	5	0.73 0.95	0.15	1.86	1.57 1.69	13.05 13.44	94.37 92.83	0.412	0.013	38.8 14.0	0.6%	600 675	1.68	0.476 0.594	1.68 1.66	0.38	569 600	86.7% 73.2%	13.44
OUTLET	-	OGS1	EX. STUB	-	-	5	-	0.00	3.83	3.44	14.16	90.07	0.862	0.013	4.4	0.5%	825	1.90	1.015	1.90	0.04	776	84.9%	14.20

DISCLAIMER AND COPYRIGHT

DRAWING REFERENCES CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST ON THIS PLAN FROM SURVEY COMPLETED BY KRCMAR SURVEYORS LTD., OLS, DATED FEBRUARY 2022.

COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TOPOGRAPHIC FEATURES AND LEGAL BOUNDARIES SHOWN ON THIS PLAN FROM SURVEY COMPLETED BY KRCMAR SURVEYORS LTD., OLS, DATED FEBRUARY 2022.

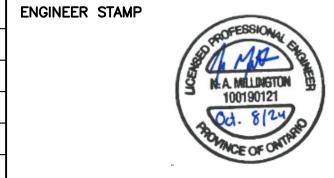
SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH—EAST CORNER OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH—EAST CORNER SCALED.

SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED ON DRAWING SP1.0, PREPARED BY ANDERSON WELLSMAN ARCHITECTS INCORPORATED DATED SEPTEMBER 6, 2024.

PURPOSE OTHER THAN THAT PROVIDED IN THE PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF

BENCHMARK OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH-EAST CORNER (TOWER) 15.2 m WEST OF BEL POLE AND 9.2 m SOUTH-EAST OF "V" IN TWIN BIRCH TREES 15 cm BELOW

REVISION DESCRIPTION SITE PLAN APPROVAL - FIRST SUBMISSION JULY 17/24 AUG. 15/24 ISSUED FOR BUILDING PERMIT APPROVAL SEPT. 6/24 SITE PLAN APPROVAL - SECOND SUBMISSION OCT. 4/24 SITE PLAN APPROVAL - THIRD SUBMISSION SITE PLAN APPROVAL - FOURTH SUBMISSION OCT. 8/24



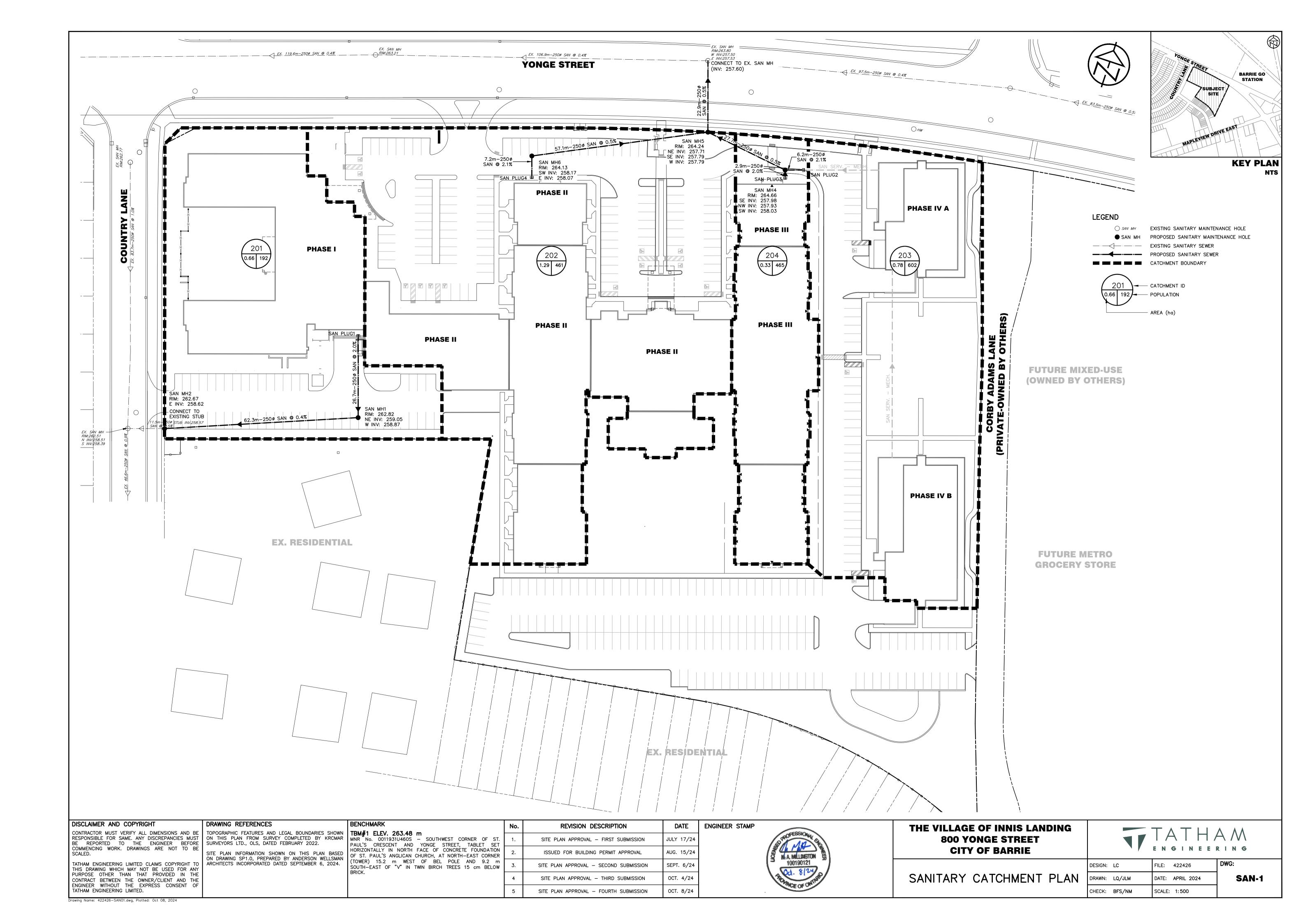
THE VILLAGE OF INNIS LANDING **800 YONGE STREET CITY OF BARRIE**

STM-2

STORM SEWER DESIGN SHEET

DESIGN:	LC	FILE:	422426	DW
DRAWN:	LQ/JLM	DATE:	APRIL 2024	
CHECK:	BFS/NM	SCALE:	-	

TATHAM ENGINEERING LIMITED.





The Village of Innis Landing, 800 Yonge Street

Sanitary Sewer Catchment Plan (Drawing SAN-1)

Project Information

Drawing Reference

Prepared By

Reviewed By

Municipality

City of Barrie

422426

September 06/24

September 06/24

September 06/24

Population Density Capita Medium 3.13

Infiltration 0.10

nfil	tratio	on	(L/:	s/ha)		(

M	lan	ni	ng'	S	Co	ef	fic	ie	nt

Pipe Material	Value
Concrete	0.013
PVC	0.013
Applied	0.013

Development Type Average (L/cap/dav) Peaking

Developilient Type	Average (L/ Cap/ day)	Factor			
Residential	225	2			
Development Type	Average (L/ha/day)	Peaking Factor			
nstitution	28,000	2			
Commercial	28,000	2			
ndustrial (High)	55,000	-			
ndustrial (Low)	50,000	-			

Notes 1) Average flow and peak flow values obtained from "Sanitary Flow Calculations" design sheet.

2) Phase 1 - LTC Home population density (PPU) calculated to be 1.00 per "Sanitary Flow Calculations" design sheet.

Version Date: September 6, 2024 Version Number: 2

Sanitary Sewer Design Sheet

						1	: I 🛱		Peaking Factor	Area (ha)		Average Flow (L/s)			Peak Flow (L/s)			Proposed Sanitary Sewer							
Street Name	Area Label/ID	Upstream Maintenance Hole	Downstream Maintenance Hole	Development Type	Population Density	Number of Units		(cap) Accumulated Population (cap)			Cumulative Area (ha)	Development	Infiltration	Total	Development	Infiltration	Total	Sewer Length (m)	Sewer Slope (%)	Actual Sewer Diameter (mm)	Full Flow Velocity (m/s)	Full Flow Capacity (L/s)	Actual Velocity (m/s)	Calculated Sewer Diameter (mm)	Percentage of Full Flow Capacity (%)
Country Lane	201	SAN PLUG1	SAN MH1	Phase 1 - LTC Home	1.00	192	192	192	3.64	0.66	0.66	1.19	-	1.19	4.02	0.07	4.09	26.7	2.0%	250	1.71	84.10	0.87	80	4.9%
Country Lane	-	SAN MH1	SAN MH2	Phase 1 - LTC Home	-	-	-	192	3.64	-	0.66	1.19	-	1.19	4.02	0.07	4.09	62.3	0.4%	250	0.77	37.61	0.48	109	10.9%
Country Lane	-	SAN MH2	EX. MH1	Phase 1 - LTC Home	-	-	-	192	3.64	-	0.66	1.19	-	1.19	4.02	0.07	4.09	11.5	0.5%	250	0.86	42.05	0.52	104	9.7%
Yonge Street	202	SAN PLUG4	SAN MH6	Phase 2 - Retire. Home	1.67	276	461	461	3.64	1.29	1.29	1.42	-	1.42	4.79	0.13	4.92	7.2	2.1%	250	1.76	86.18	0.93	85	5.7%
Yonge Street	-	SAN MH6	SAN MH5	Phase 2 - Retire. Home	-	-	-	461	3.64	-	1.29	1.42	-	1.42	4.79	0.13	4.92	57.1	0.4%	250	0.77	37.61	0.51	117	13.1%
Yonge Street	203	SAN PLUG2	SAN MH4	Phase 4 - Market/Res	1.67	360	602	602	3.64	0.78	0.78	1.85	-	1.85	6.26	0.08	6.34	2.9	2.1%	250	1.76	86.18	1.00	94	7.4%
Yonge Street	204	SAN PLUG3	SAN MH4	Phase 3 - Retire. Home	1.67	278	465	465	3.64	0.33	0.33	1.36	-	1.36	4.70	0.03	4.73	6.2	2.0%	250	1.71	84.10	0.91	85	5.6%
Yonge Street	-	SAN MH4	SAN MH5	Phase 3 - Retire. Home	-	-	-	1,067	-	-	1.11	-	-	3.21	-	-	11.07	27.7	0.4%	250	0.77	37.61	0.63	158	29.4%
Yonge Street	-	SAN MH5	EX. MH2	Phase 3 - Retire. Home	-	-	-	1,528	-	-	2.40	-	-	4.63	-	-	15.99	22.9	0.4%	250	0.77	37.61	0.70	181	42.5%

DISCLAIMER AND COPYRIGHT CONTRACTOR MUST VERIFY ALL DIMENSIONS AND BE

TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO ARCHITECTS INCORPORATED DATED SEPTEMBER 6, 2024. THIS DRAWING WHICH MAY NOT BE USED FOR ANY PURPOSE OTHER THAN THAT PROVIDED IN THE CONTRACT BETWEEN THE OWNER/CLIENT AND THE ENGINEER WITHOUT THE EXPRESS CONSENT OF

DRAWING REFERENCES TOPOGRAPHIC FEATURES AND LEGAL BOUNDARIES SHOWN TBM#1 ELEV. 263.48 m

RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST
BE REPORTED TO THE ENGINEER BEFORE COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TO COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TO COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

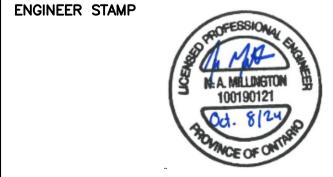
TO COMMENCING SAME. ANY DISCREPANCIES AND LEGAL BOUNDARIES SHOWN ON THIS PLAN FROM SURVEY COMPLETED BY KRCMAR SURVEYORS LTD., OLS, DATED FEBRUARY 2022.

TO COMMENCING WORK. DRAWINGS ARE NOT TO BE SCALED.

TO COMMENCING WORK. DRAWINGS ARE NOT TO BE SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH—EAST CORNER OF ST. PAUL'S ANGLICAN CHURCH CH PAUL'S CRESCENT AND YONGE STREET, TABLET SET HORIZONTALLY IN NORTH FACE OF CONCRETE FOUNDATION SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED ON DRAWING SP1.0, PREPARED BY ANDERSON WELLSMAN OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH-EAST CORNER (TOWER) 15.2 m WEST OF BEL POLE AND 9.2 m SOUTH-EAST OF "V" IN TWIN BIRCH TREES 15 cm BELOW

BENCHMARK

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THE VILLAGE OF INNIS LANDING **800 YONGE STREET** CITY OF BARRIE

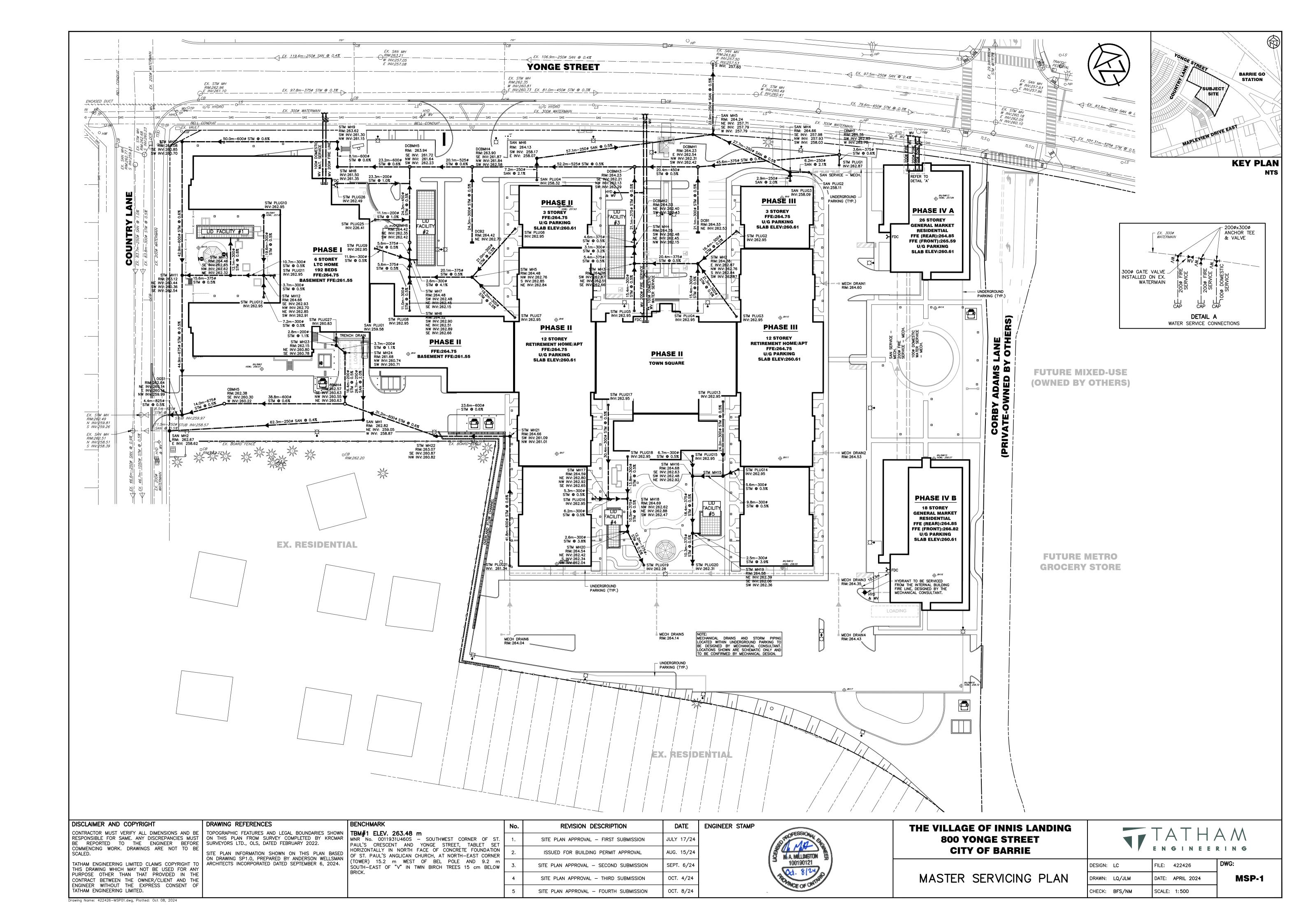
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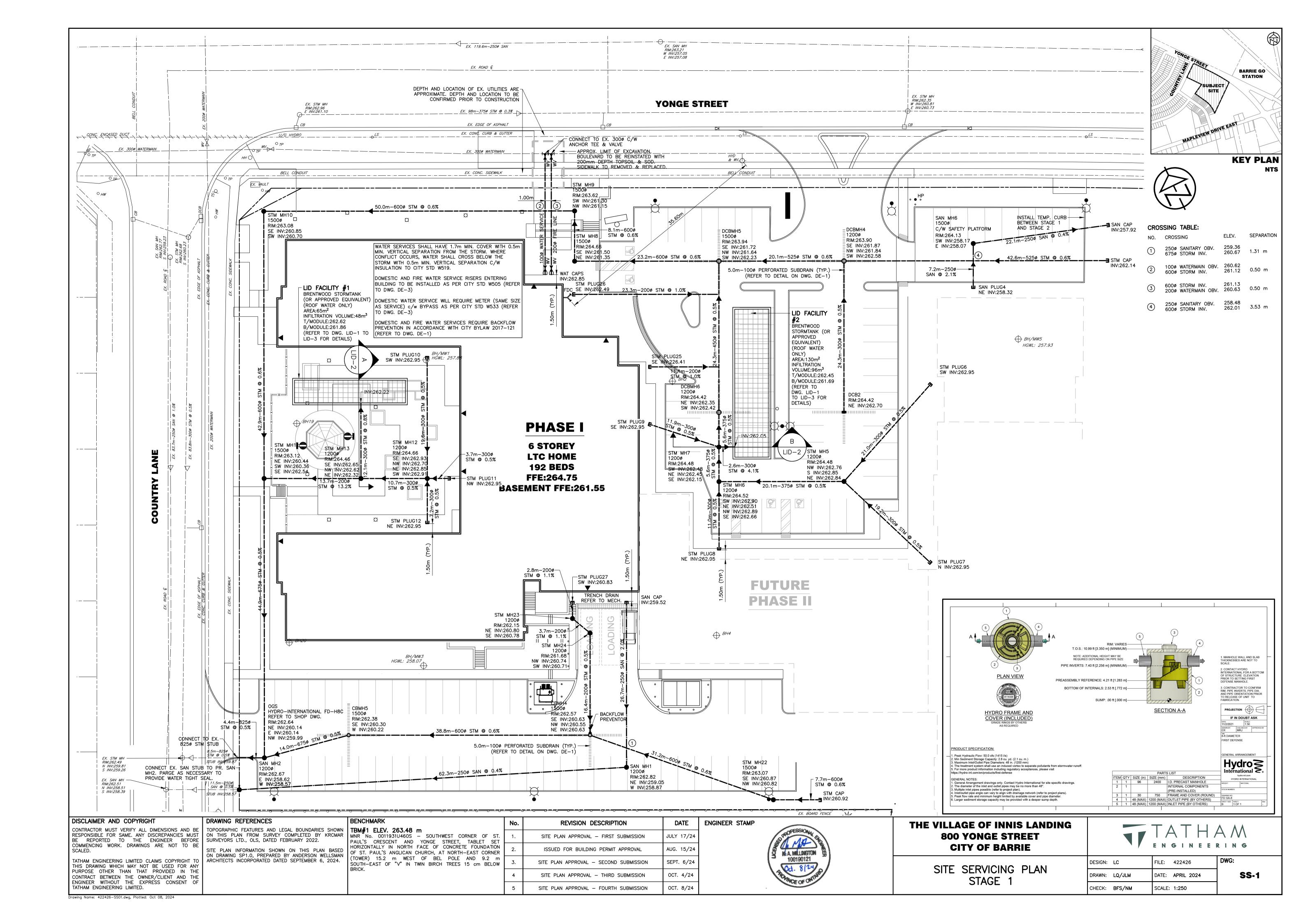
DESIGN SHEET

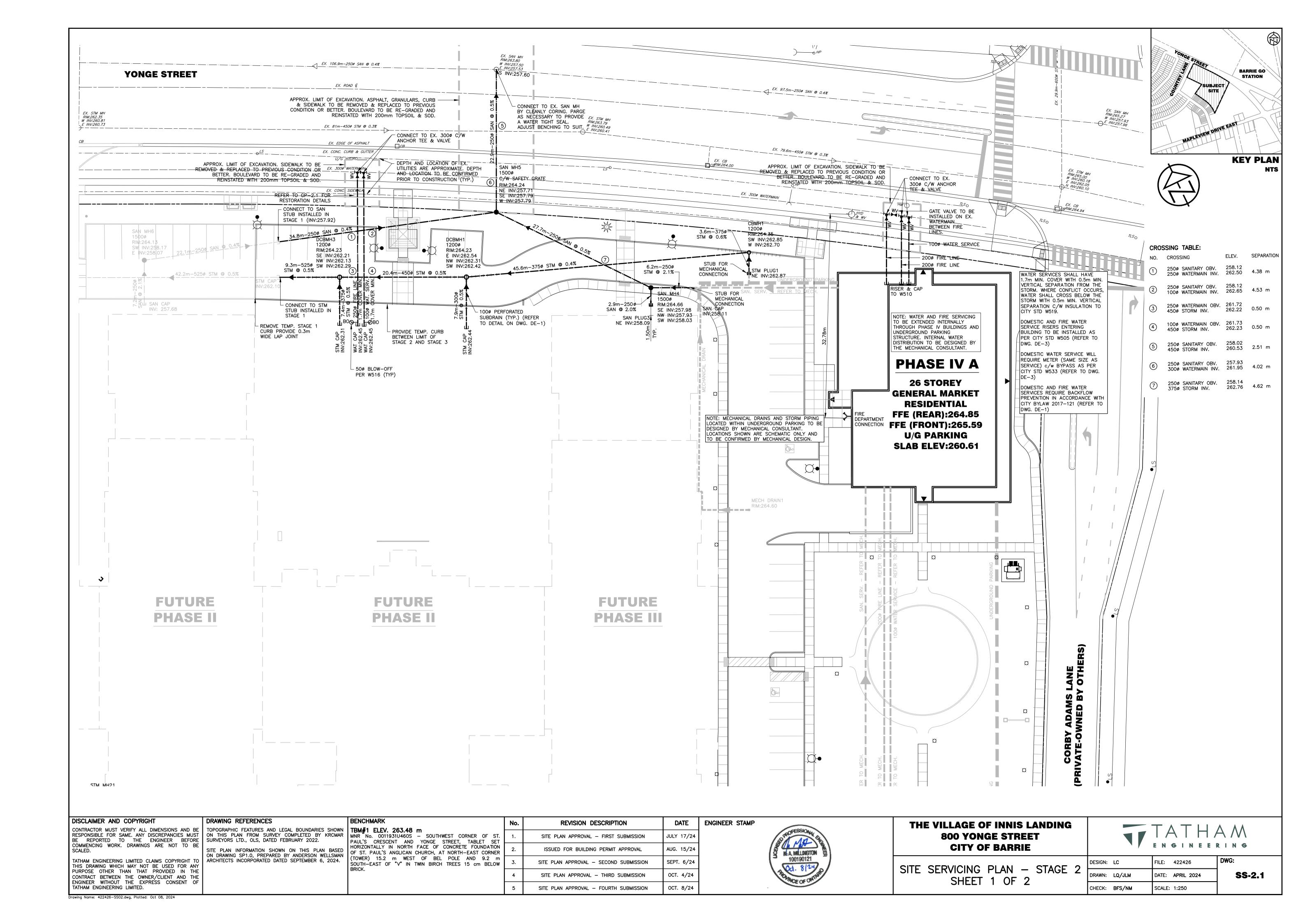
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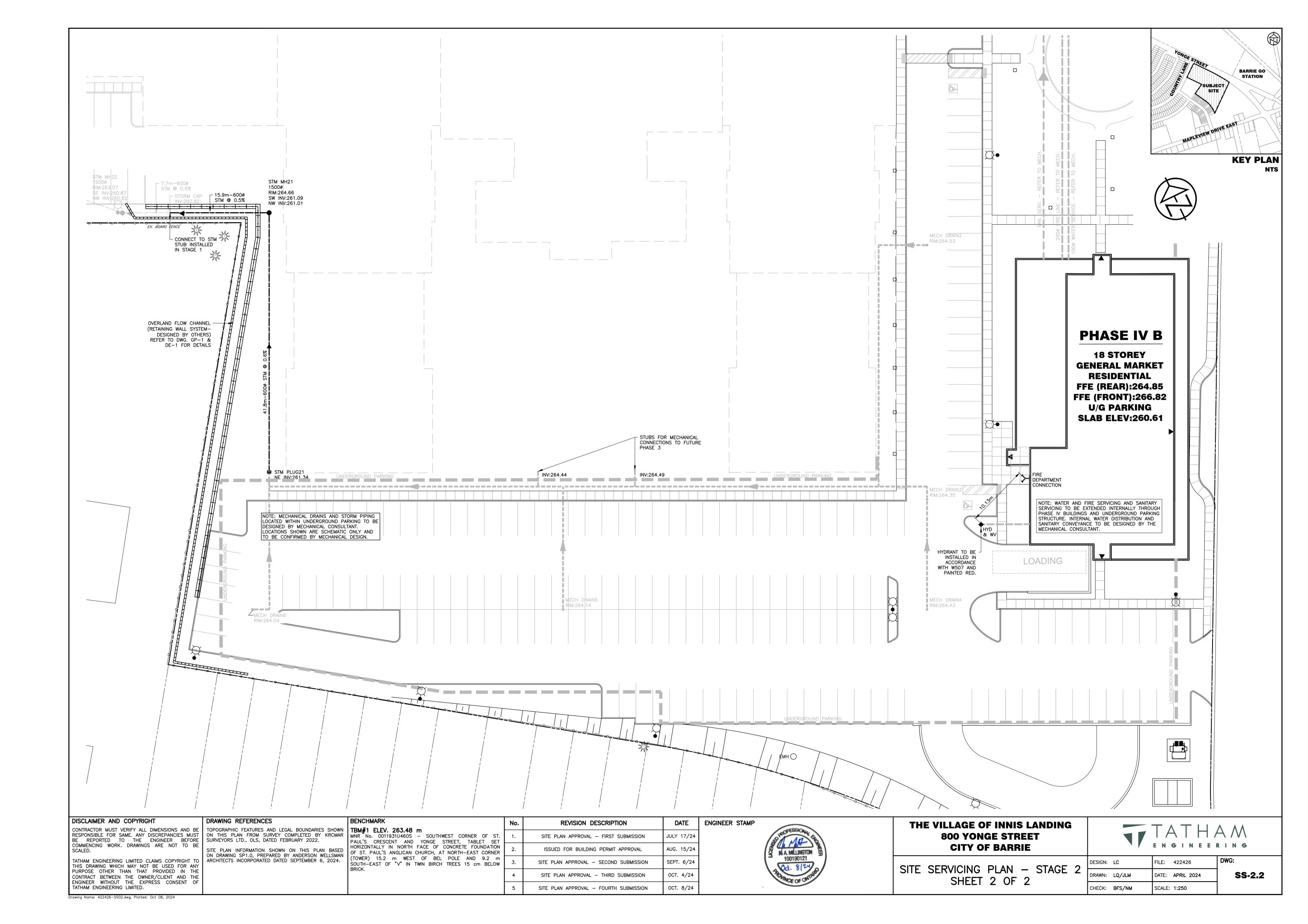
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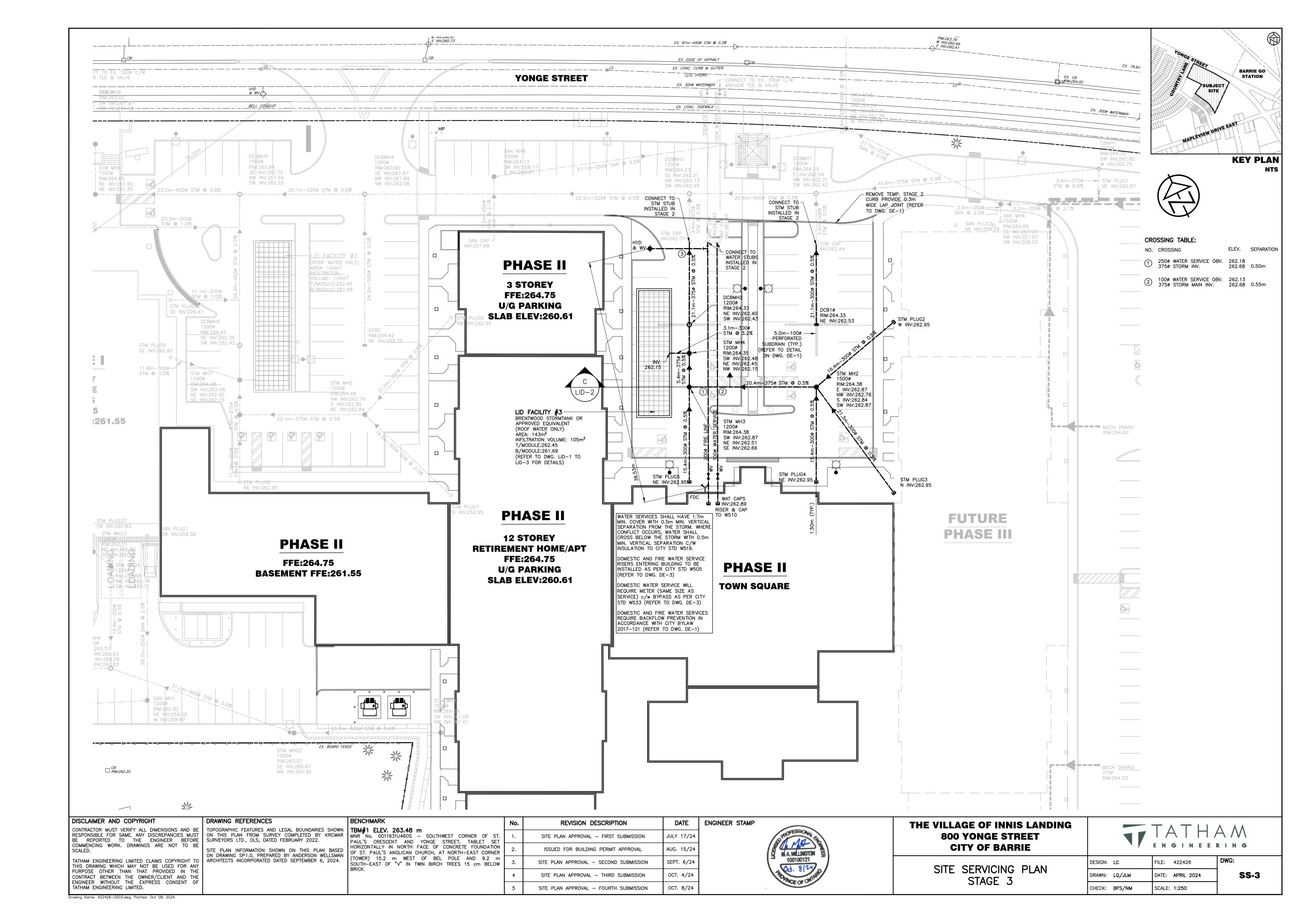
SAN-2

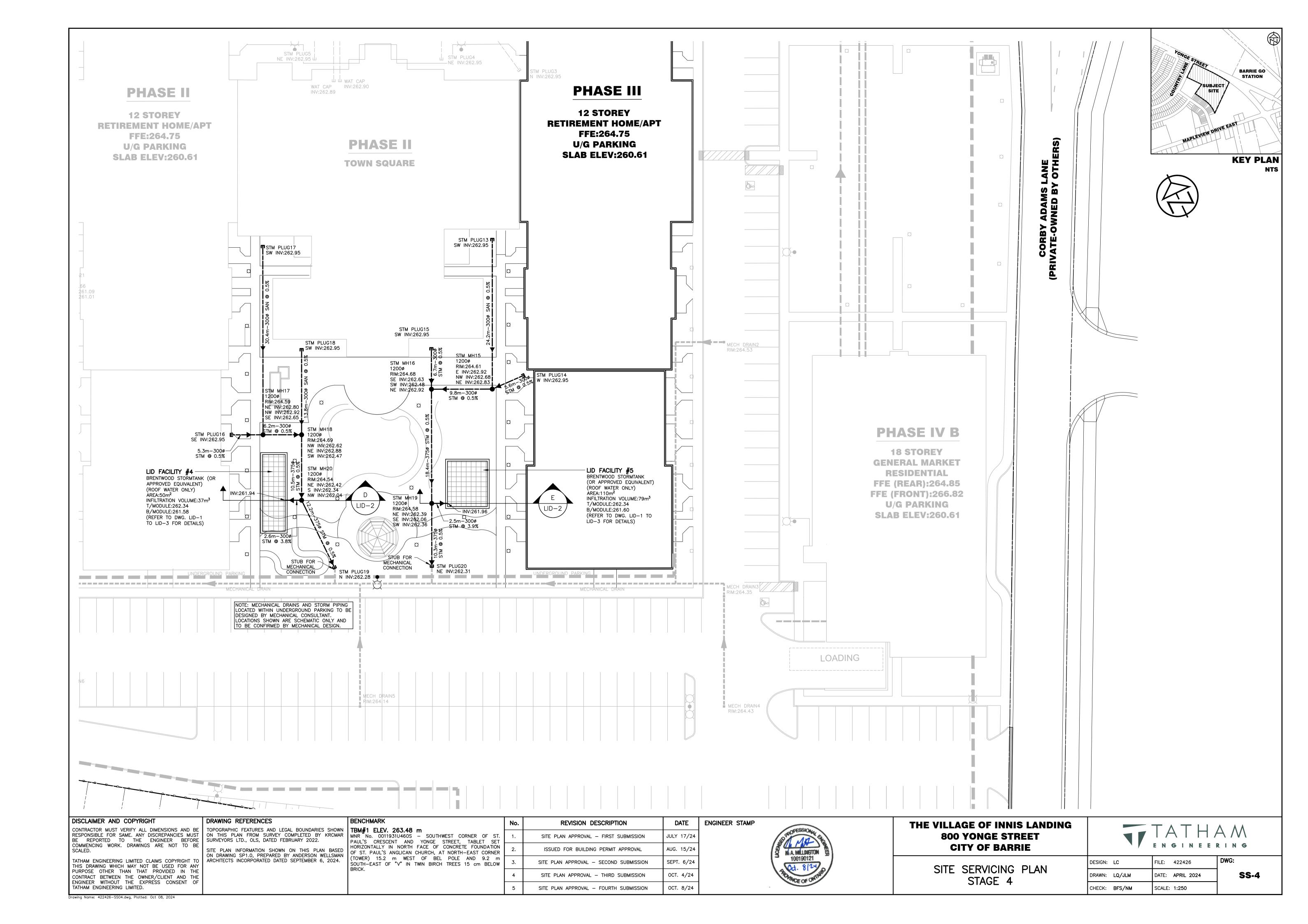


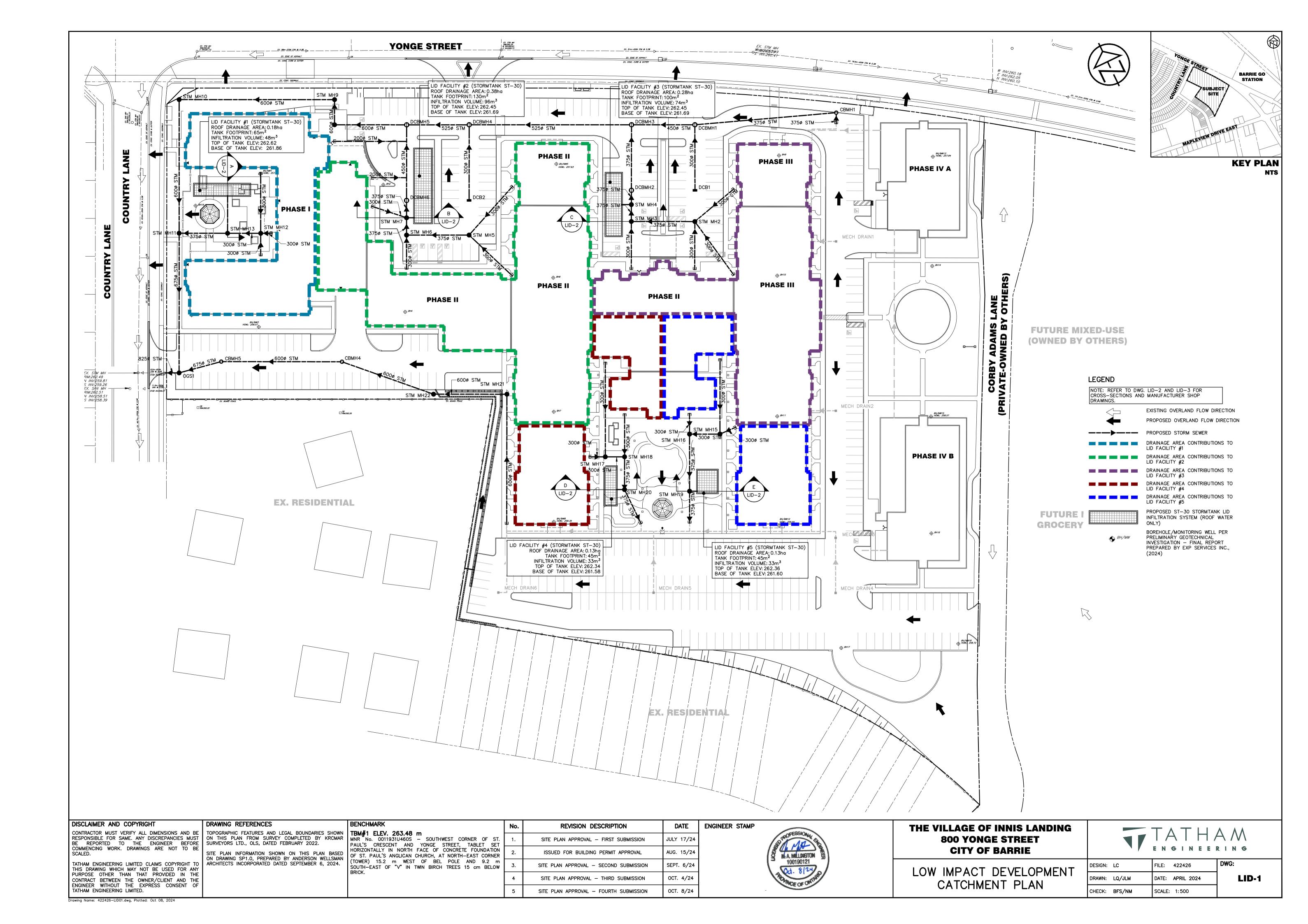


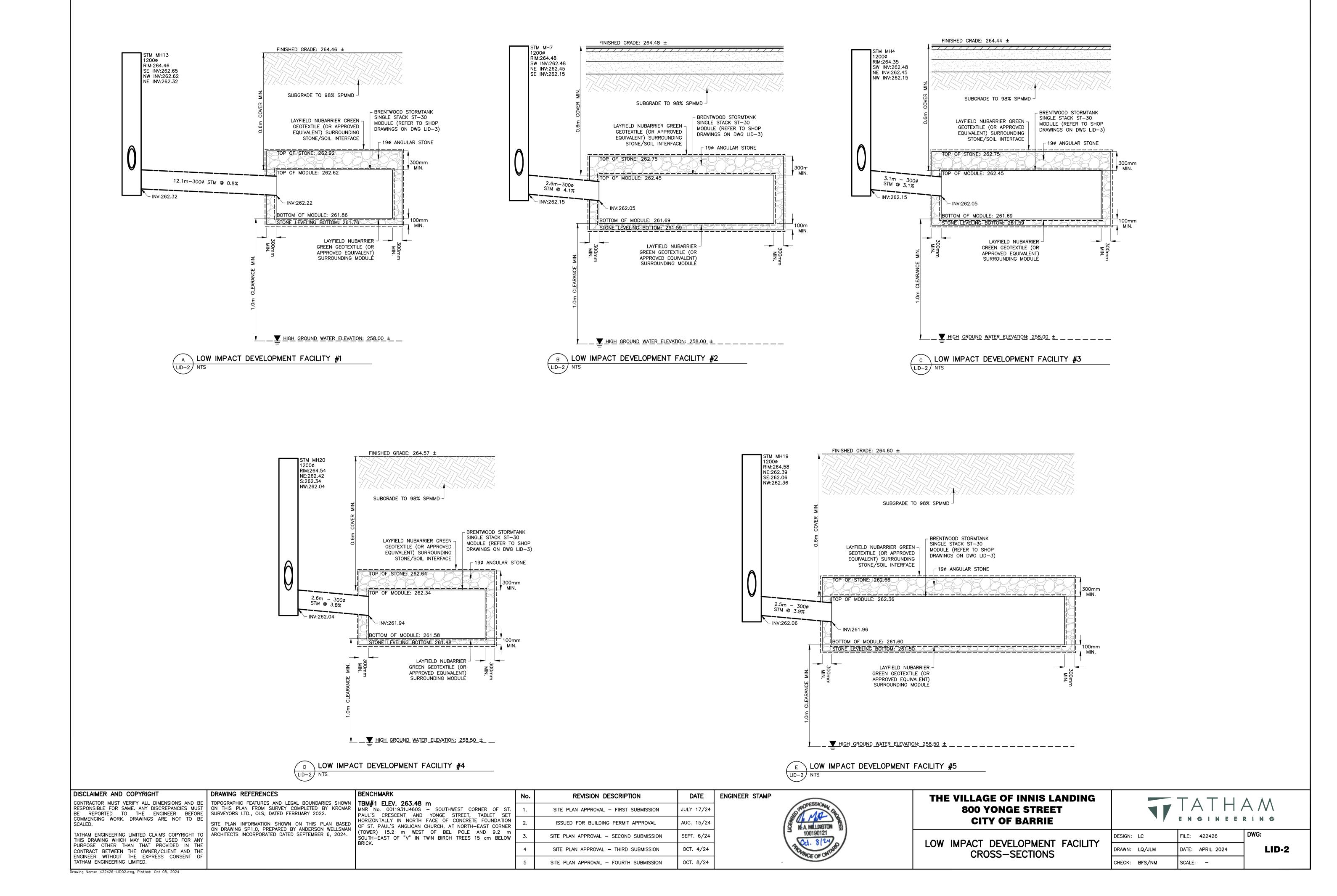


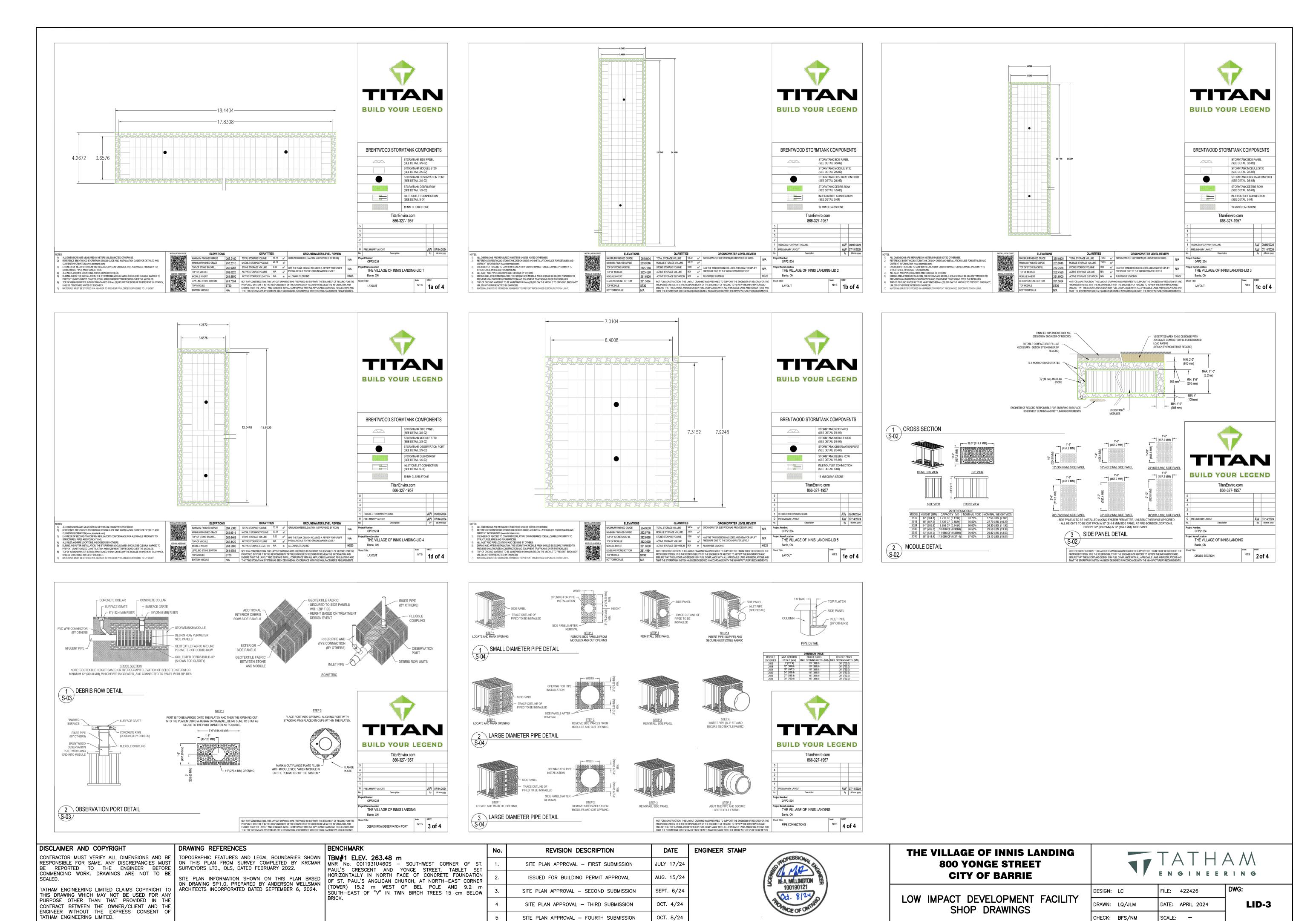




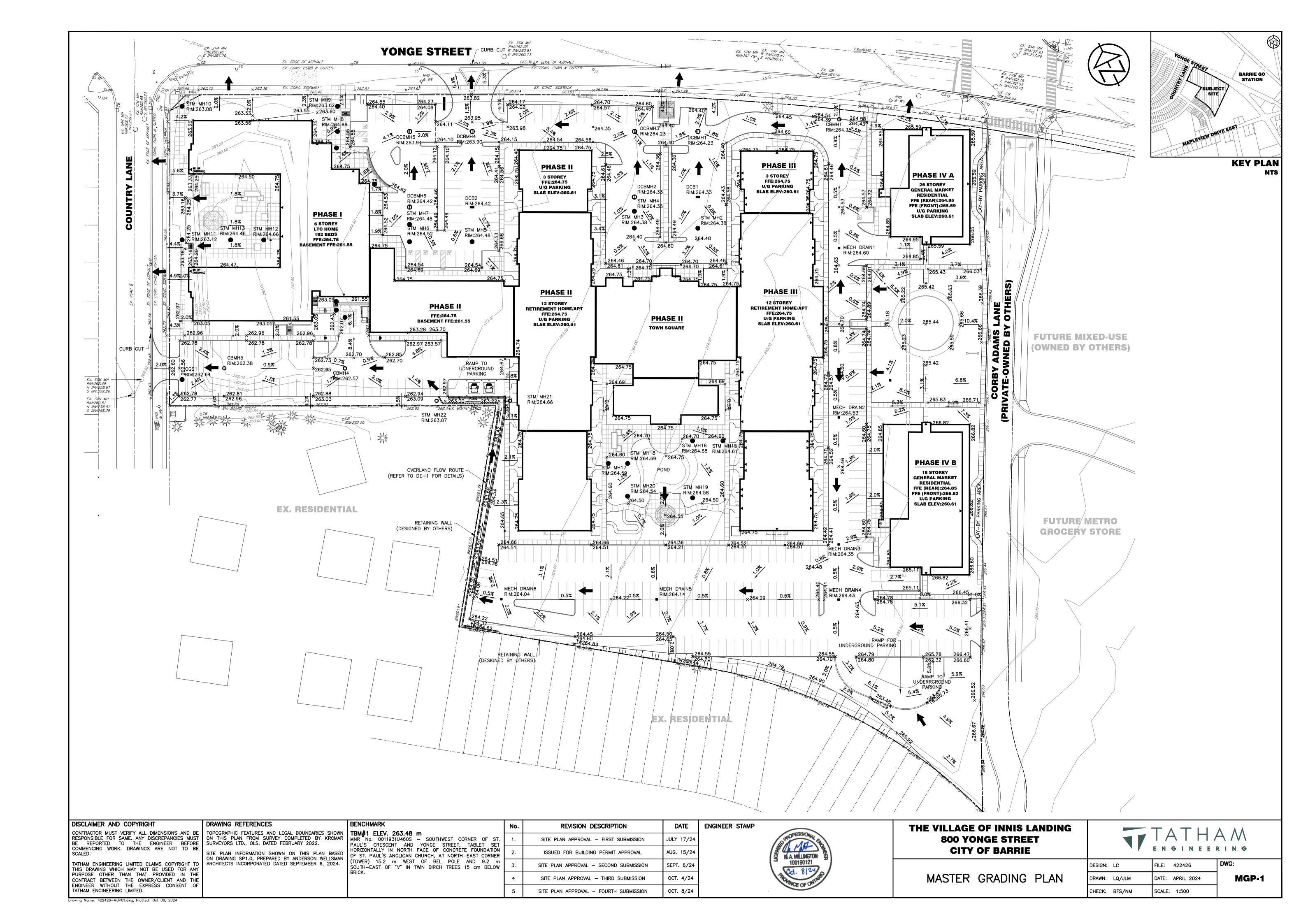


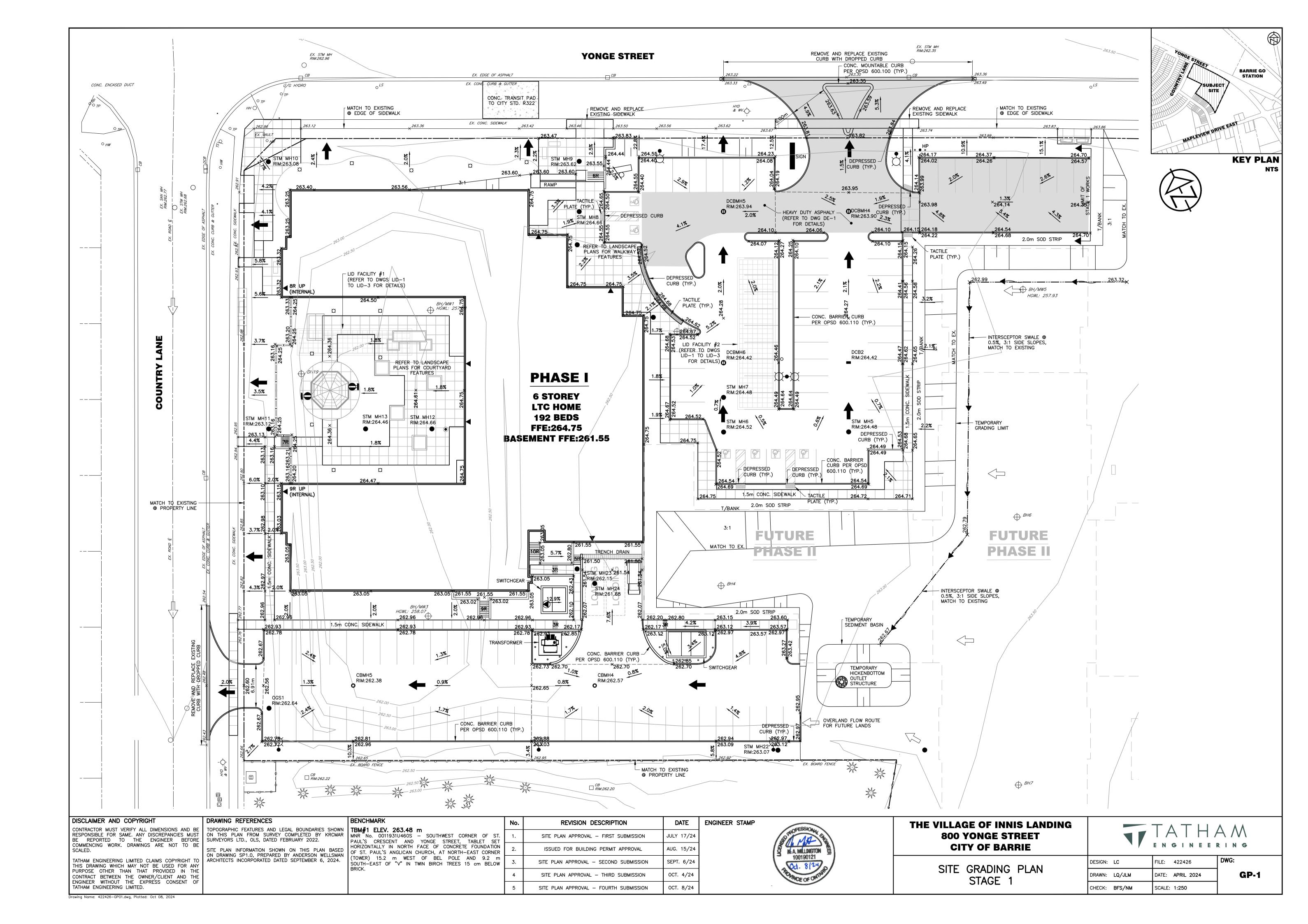


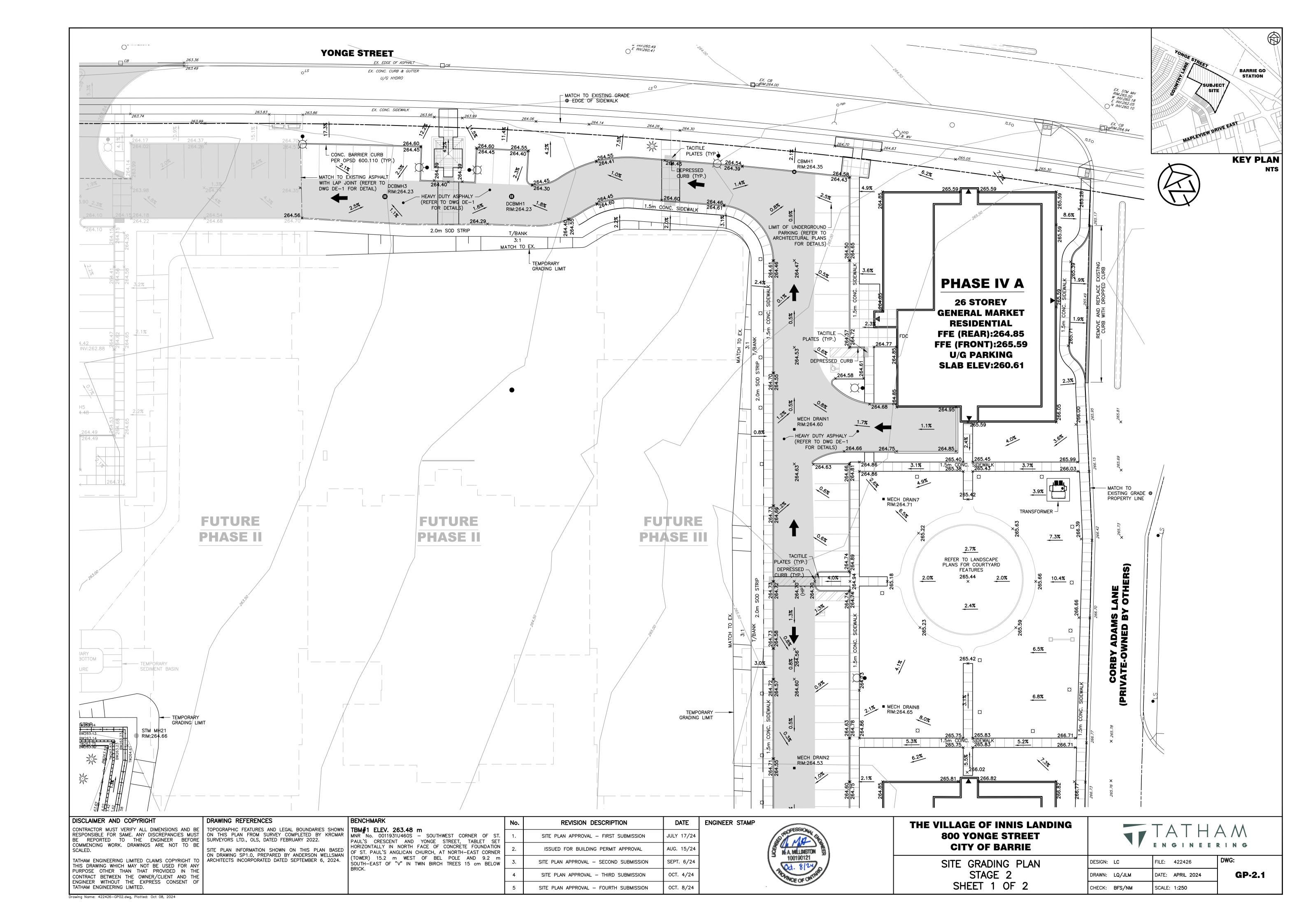


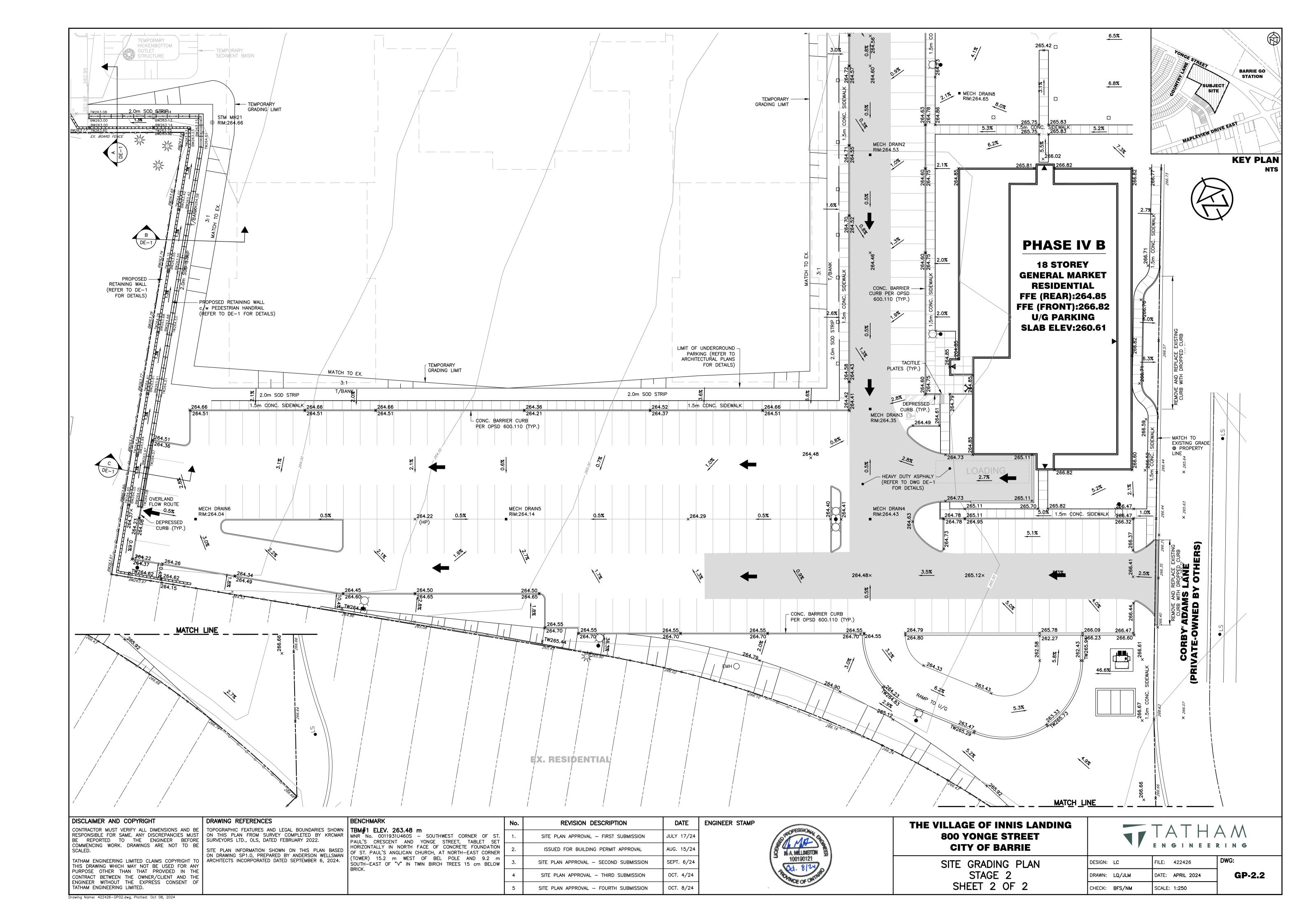


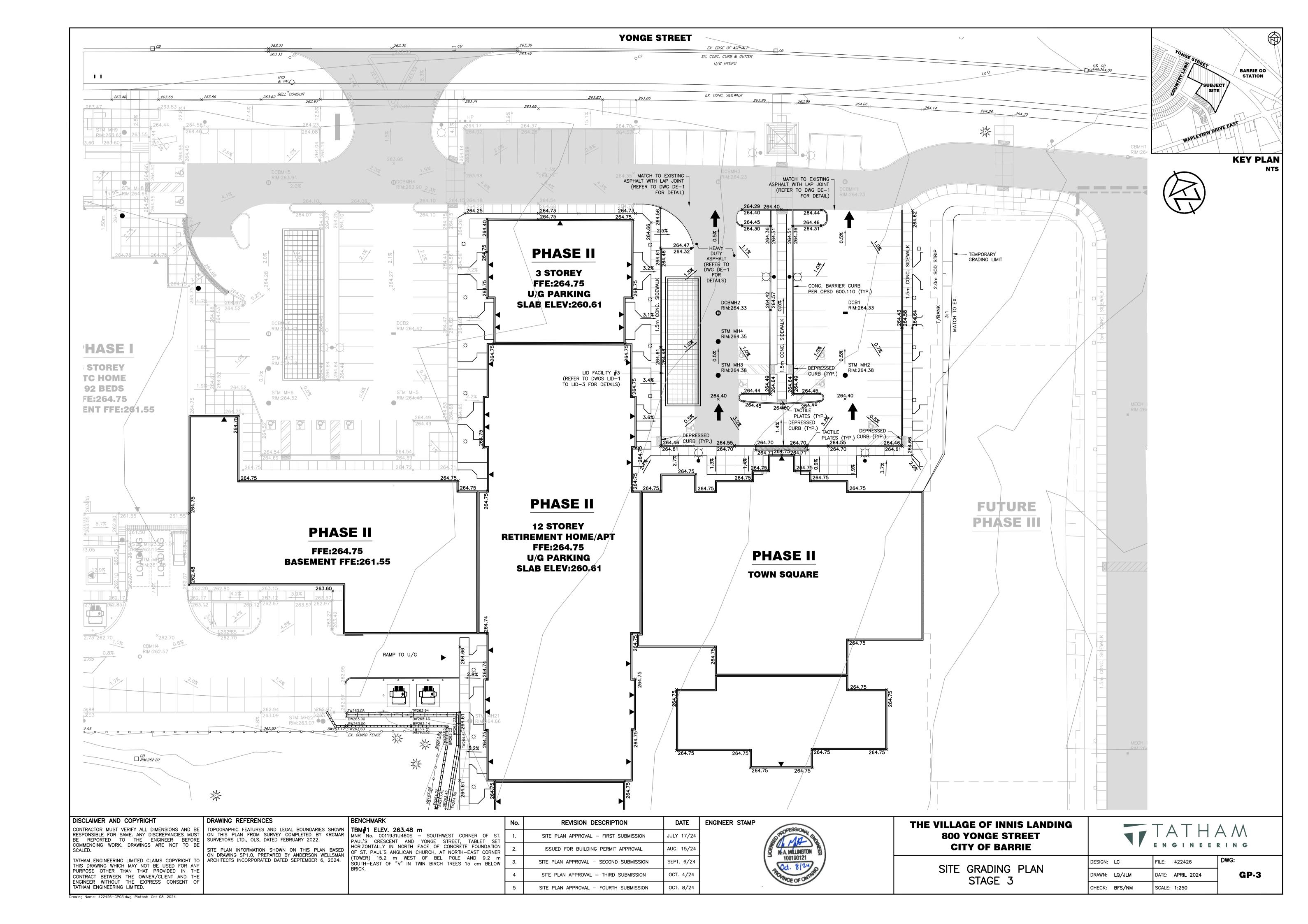
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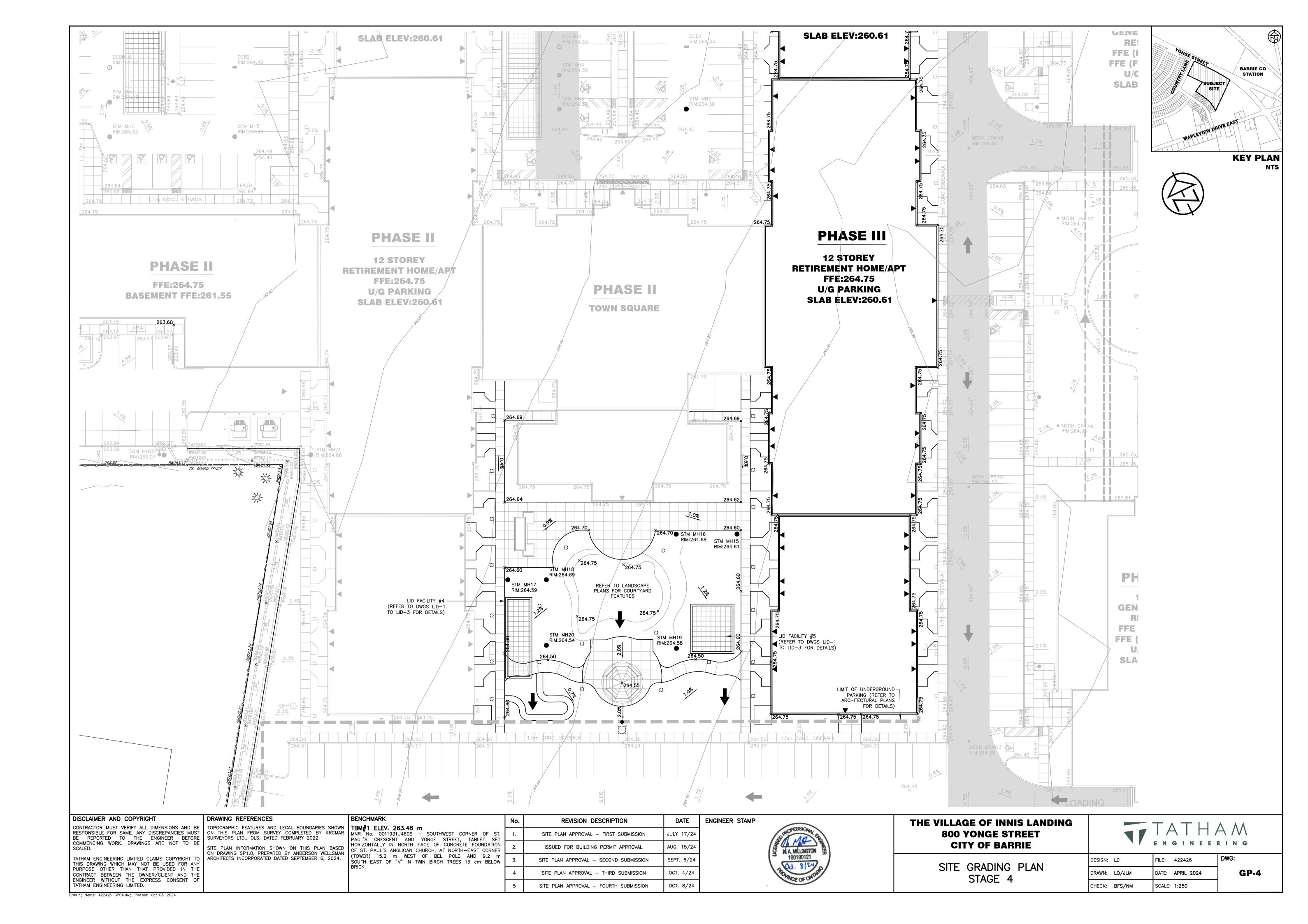


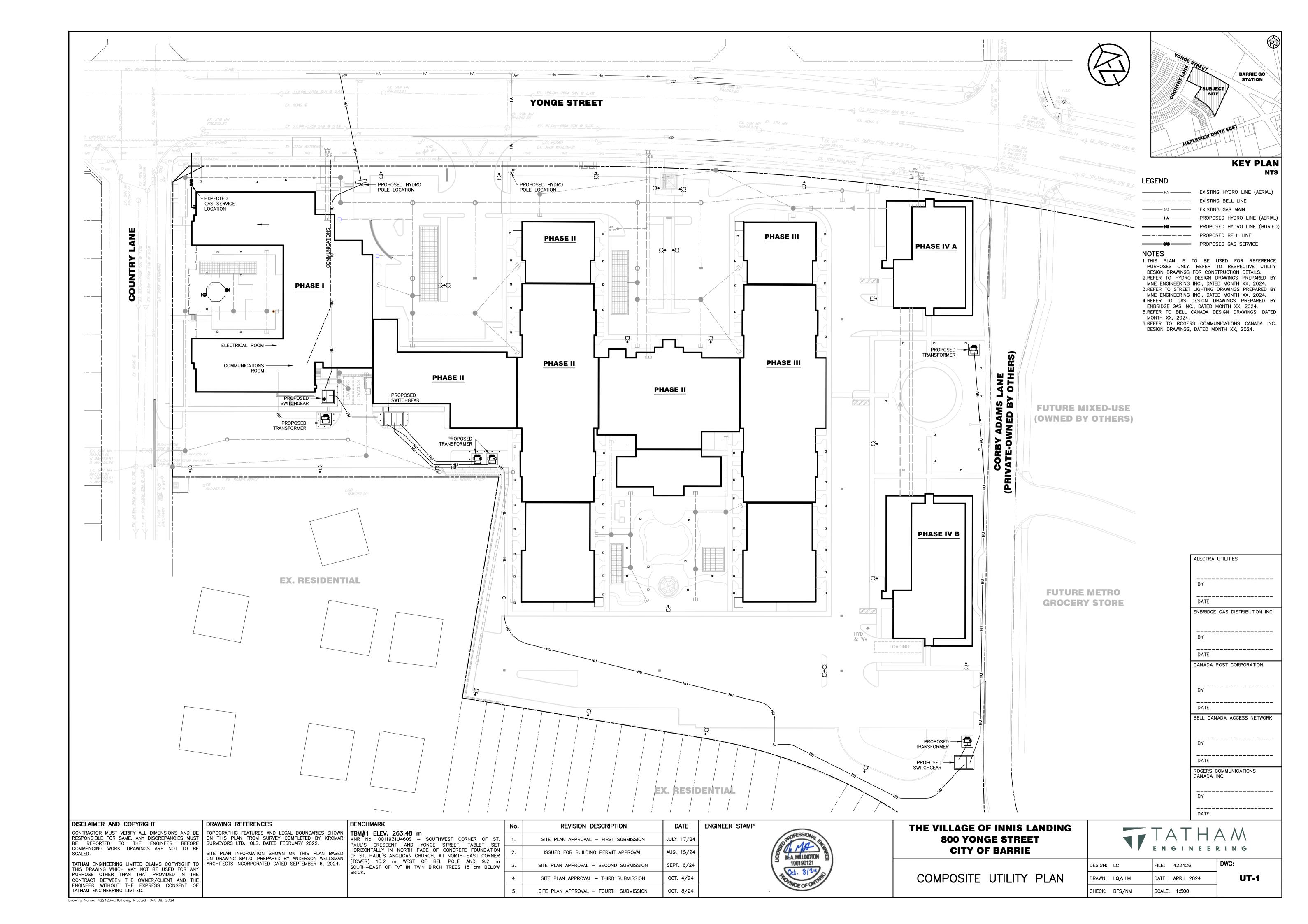


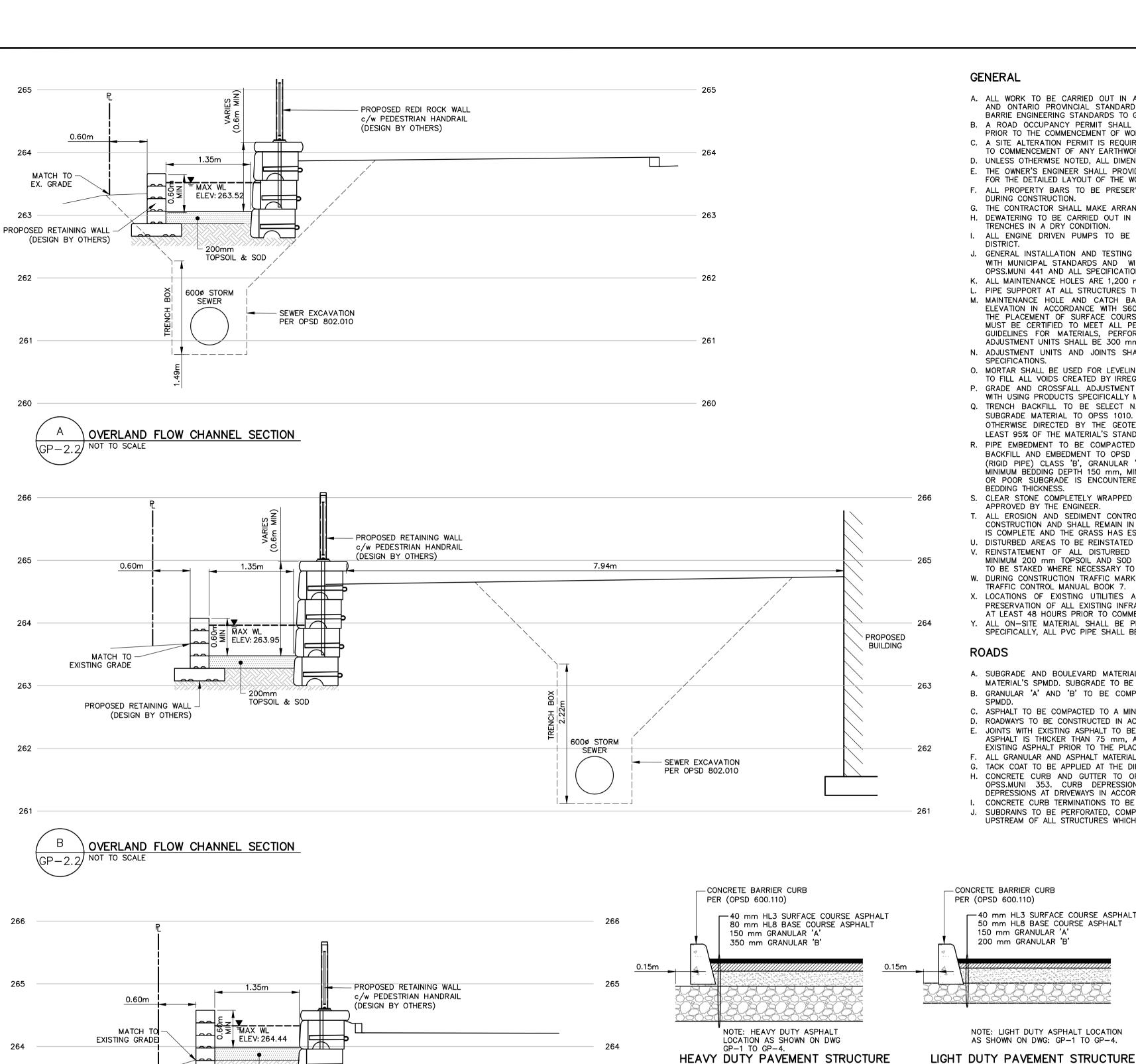


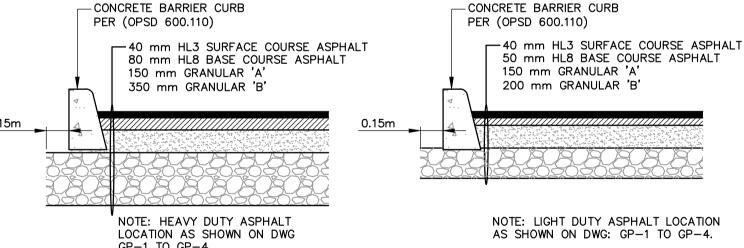


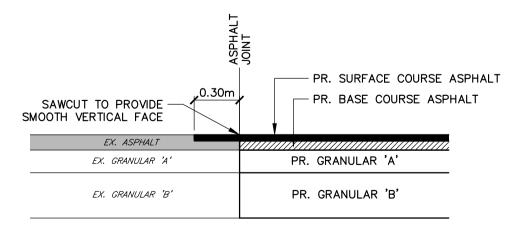












NOT TO SCALE

LAP JOINT DETAIL NOT TO SCALE

- 100ø PERFORATED GRANULAR 'A' - FILTER FABRIC

100¢ PERFORATED SUBDRAIN IN PARKING AREA NOT TO SCALE

NOT TO SCALE

- A. ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH CURRENT CITY OF BARRIE ENGINEERING STANDARDS AND ONTARIO PROVINCIAL STANDARD SPECIFICATIONS AND DRAWINGS. WHERE CONFLICT OCCURS, CITY OF BARRIE ENGINEERING STANDARDS TO GOVERN.
- B. A ROAD OCCUPANCY PERMIT SHALL BE OBTAINED FROM THE DEVELOPMENT SERVICES ROWA DEPARTMENT PRIOR TO THE COMMENCEMENT OF WORK WITHIN THE CITY ROAD ALLOWANCE.
- C. A SITE ALTERATION PERMIT IS REQUIRED FROM THE DEVELOPMENT SERVICES APPROVALS DEPARTMENT PRIOR
- TO COMMENCEMENT OF ANY EARTHWORKS ON SITE. D. UNLESS OTHERWISE NOTED, ALL DIMENSIONS ARE IN MILLIMETERS AND ALL ELEVATIONS ARE IN METERS.
- E. THE OWNER'S ENGINEER SHALL PROVIDE BENCHMARK ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETAILED LAYOUT OF THE WORK.
- F. ALL PROPERTY BARS TO BE PRESERVED AND REPLACED BY OLS AT CONTRACTOR'S EXPENSE IF REMOVED DURING CONSTRUCTION.
- G. THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE SUPPLY OF TEMPORARY WATER AND POWER. H. DEWATERING TO BE CARRIED OUT IN ACCORDANCE WITH OPSS.MUNI 517 AND OPSS.MUNI 518. MAINTAIN ALL
- TRENCHES IN A DRY CONDITION. I. ALL ENGINE DRIVEN PUMPS TO BE ADEQUATELY SILENCED, SUITABLE FOR OPERATION IN A RESIDENTIAL
- J. GENERAL INSTALLATION AND TESTING OF SEWERS, WATERMAIN AND APPURTENANCES TO BE IN ACCORDANCE WITH MUNICIPAL STANDARDS AND WITH OPSS 407, 408, 409 (CCTV), OPSS MUNI.410, OPSS.MUNI 421, AND
- OPSS.MUNI 441 AND ALL SPECIFICATIONS REFERENCED WITHIN THÈSE SECTIONS. K. ALL MAINTENANCE HOLES ARE 1,200 mm DIAMETER, UNLESS OTHERWISE SPECIFIED.
- L. PIPE SUPPORT AT ALL STRUCTURES TO OPSD 708.020. M. MAINTENANCE HOLE AND CATCH BASIN FRAMES AND GRATES TO BE SET TO BASE COURSE ASPHALT ELEVATION IN ACCORDANCE WITH S606. FRAME AND GRATES TO BE RAISED TO FINISHED GRADE PRIOR TO THE PLACEMENT OF SURFACE COURSE ASPHALT USING CONCRETE ADJUSTMENT UNITS. ADJUSTMENT UNITS MUST BE CERTIFIED TO MEET ALL PERTINENT OPS, CSA, ASTM AND MTO-DSM LISTS, OR OTHER INDUSTRY GUIDELINES FOR MATERIALS, PERFORMANCE AND USE AS APPLICABLE. MAXIMUM COMBINED HEIGHT OF
- ADJUSTMENT UNITS SHALL BE 300 mm. N. ADJUSTMENT UNITS AND JOINTS SHALL BE SEALED AND PARGED IN COMPLIANCE WITH MANUFACTURER'S
- O. MORTAR SHALL BE USED FOR LEVELING PRECAST UNITS ONLY. THE THICKNESS OF MORTAR SHALL BE 10 mm
- TO FILL ALL VOIDS CREATED BY IRREGULARITIES IN THE PRECAST UNITS TO ENSURE AN EVEN SURFACE ONLY. P. GRADE AND CROSSFALL ADJUSTMENT OF MAINTENANCE HOLE AND CATCH BASIN FRAMES SHALL BE MADE WITH USING PRODUCTS SPECIFICALLY MANUFACTURED FOR THAT PURPOSE.
- Q. TRENCH BACKFILL TO BE SELECT NATIVE MATERIAL AS APPROVED BY ENGINEER, OR IMPORTED SELECT SUBGRADE MATERIAL TO OPSS 1010. BACKFILL TO BE PLACED IN MAXIMUM 200 mm THICK LIFTS (OR AS OTHERWISE DIRECTED BY THE GEOTECHNICAL CONSULTANT) AND COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD).
- R. PIPE EMBEDMENT TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMDD. BACKFILL AND EMBEDMENT TO OPSD 802.010 (FLEXIBLE PIPE), GRANULAR 'A' EMBEDMENT OR OPSD 802.031 (RIGID PIPE) CLASS 'B', GRANULAR 'A' BEDDING, GRANULAR 'B' COVER (MAX. AGGREGATE SIZE 25 mm). MINIMUM BEDDING DEPTH 150 mm, MINIMUM COVER DEPTH 300 mm ON ALL PIPES. WHERE EXCESSIVELY WE'T OR POOR SUBGRADE IS ENCOUNTERED AT THE INVERT LEVEL, IT MAY BE NECESSARY TO INCREASE THE
- BEDDING THICKNESS. S. CLEAR STONE COMPLETELY WRAPPED IN FILTER FABRIC MAY BE SUBSTITUTED FOR EMBEDMENT MATERIAL IF APPROVED BY THE ENGINEER.
- T. ALL EROSION AND SEDIMENT CONTROL DEVICES ARE TO BE IN PLACE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETE AND THE GRASS HAS ESTABLISHED GROWTH, SUBJECT TO THE APPROVAL OF THE CITY.
- U. DISTURBED AREAS TO BE REINSTATED TO PREVIOUS CONDITION OR BETTER. V. REINSTATEMENT OF ALL DISTURBED BOULEVARDS AND DITCHES TO INCLUDE REGRADING, PLACEMENT OF MINIMUM 200 mm TOPSOIL AND SOD IN ACCORDANCE WITH OPSS 802, OPSS 803 AND OPSS.MUNI 804. SOD
- TO BE STAKED WHERE NECESSARY TO AVOID MOVEMENT. W. DURING CONSTRUCTION TRAFFIC MARKERS AND SIGNS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MTO
- TRAFFIC CONTROL MANUAL BOOK 7. X. LOCATIONS OF EXISTING UTILITIES ARE NOT GUARANTEED. THE CONTRACTOR IS RESPONSIBLE FOR THE PRESERVATION OF ALL EXISTING INFRASTRUCTURE/FACILITIES AS WELL AS NOTIFYING ALL UTILITY COMPANIES
- AT LEAST 48 HOURS PRIOR TO COMMENCING WORK AND COORDINATE CONSTRUCTION ACCORDINGLY. Y. ALL ON-SITE MATERIAL SHALL BE PROPERLY STORED, SECURED, MONITORED AND COVERED AS REQUIRED. SPECIFICALLY, ALL PVC PIPE SHALL BE COVERED WHILE STORED ON-SITE.

- A. SUBGRADE AND BOULEVARD MATERIAL TO BE COMPACTED TO A DRY DENSITY OF AT LEAST 95% OF THE MATERIAL'S SPMDD. SUBGRADE TO BE PROOF ROLLED AND CERTIFIED PRIOR TO PLACING GRANULAR 'B'.
- B. GRANULAR 'A' AND 'B' TO BE COMPACTED TO A DRY DENSITY OF 100% OF THE MATERIAL'S RESPECTIVE
- C. ASPHALT TO BE COMPACTED TO A MINIMUM OF 97% OF THE MARSHALL BULK DENSITY.
- D. ROADWAYS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DETAILS ON THIS PLAN. JOINTS WITH EXISTING ASPHALT TO BE SAW CUT STRAIGHT PRIOR TO PLACING NEW ASPHALT. WHERE EXISTING ASPHALT IS THICKER THAN 75 mm, A 300 mm WIDE BY 40 mm DEEP LAP JOINT SHALL BE GROUND INTO
- EXISTING ASPHALT PRIOR TO THE PLACEMENT OF SURFACE COURSE ASPHALT ALL GRANULAR AND ASPHALT MATERIAL TO BE PLACED IN ACCORDANCE WITH OPSS 310 AND OPSS.MUNI 314.
- TACK COAT TO BE APPLIED AT THE DIRECTION OF THE ENGINEER. H. CONCRETE CURB AND GUTTER TO OPSD 600.040 AND CONCRETE BARRIER CURB TO OPSD 600.110 AND
- OPSS.MUNI 353. CURB DEPRESSIONS AT SIDEWALK CROSSINGS IN ACCORDANCE WITH R318. CURB DEPRESSIONS AT DRIVEWAYS IN ACCORDANCE WITH R319. CONCRETE CURB TERMINATIONS TO BE CONSTRUCTED IN ACCORDANCE WITH OPSD 608.010.
- SUBDRAINS TO BE PERFORATED, COMPLETE WITH FILTER SOCK, OTHER THAN THE 2.0 m SECTION IMMEDIATELY UPSTREAM OF ALL STRUCTURES WHICH SHALL BE NON-PERFORATED.

- CONCRETE BARRIER CURB

— 40 mm HL3 SURFACE COURSE ASPHALT

80 mm HL8 BASE COURSE ASPHALT

200 mm GRANULAR 'A'

NOTE: PAVEMENT STRUCTURE ASPHALT

PAVEMENT STRUCTURE ABOVE

UNDERGROUND PARKING STRUCTURE

NOT TO SCALE

LOCATION AS SHOWN ON DWG: GP-1 TO GP-4.

PER (OPSD 600.110)

STORM SEWER

- A. STORM MAINTENANCE HOLES AND CATCH BASIN MAINTENANCE HOLES IN ACCORDANCE WITH OPSD 701.010, 701.011 AND 701.012.
- B. MAINTENANCE HOLES TO BE BENCHED IN ACCORDANCE WITH OPSD 701.021. MINIMUM BENCHING WIDTH SHALL
- BE 230 mm. CATCH BASIN MAINTENANCE HOLES TO HAVE A 900 mm SUMP IN ACCORDANCE WITH OPSD
- C. MAINTENANCE HOLE AND CATCH BASIN MAINTENANCE HOLE STEPS IN ACCORDANCE WITH OPSD 405.010. D. MAINTENANCE HOLE FRAME AND GRATES IN ACCORDANCE WITH OPSD 401.010, TYPE 'A' CLOSED COVER.
- E. FROST STRAPS SHALL BE INSTALLED ON ALL MAINTENANCE HOLES IN ACCORDANCE WITH OPSD 701.100. F. CATCH BASINS AND DOUBLE CATCH BASINS IN ACCORDANCE WITH OPSD 705.010 AND 705.020 C/W 900 mm
- G. CATCH BASINS AND DOUBLE CATCH BASINS FRAME AND GRATES IN ACCORDANCE WITH OPSD 400.050 C./W COVERS TO OPSD 401.080 (FISH TYPE COVER).
- H. MAINTENANCE HOLES AND CATCH BASIN ADJUSTMENT UNITS SHALL BE IN ACCORDANCE WITH S606. CATCH BASIN LATERALS TO BE INSTALLED WITH MINIMUM 2.0% GRADE. MINIMUM PIPE SIZE 250 mm DIA.
- SINGLE, 300 mm DIA. DOUBLE. ALL CONNECTIONS TO THE STORM SEWER SHALL BE MADE WITH A STORM MAINTENANCE HOLE OR AN
- APPROVED FACTORY TEE CONNECTION IN ACCORDANCE WITH OPSD 708.010 OR OPSD 708.030.
- K. STORM SEWER TO BE MINIMUM 250 mm DIAMETER WITH JOINTS CONFORMING TO CSA STANDARD A257.3 ALL PIPE BEDDING MUST BE IN ACCORDANCE WITH OPSD, MAXIMUM COVER TABLE. NO FLEXIBLE PIPE SEWERS WILL BE INSTALLED WITH A DEPTH OF COVER GREATER THAN 6 m UNLESS SPECIFICALLY APPROVED BY THE
- M. ALL PIPE HANDLING INSTALLATIONS MUST BE IN STRICT COMPLIANCE WITH MANUFACTURER'S INSTALLATION GUIDES AND THE ONTARIO CONCRETE PIPE ASSOCIATION OR UNIBELL GUIDELINES.

SANITARY SEWER

- A. SANITARY MAINTENANCE HOLES IN ACCORDANCE WITH OPSD 701.010 AND OPSD 701.011.
- B. SANITARY MAINTENANCE HOLES TO BE BENCHED IN ACCORDANCE WITH OPSD 701.021. ALL CONNECTION TO
- MAINTENANCE HOLES TO INCLUDE KOR-N-SEAL RUBBER BOOT CONNECTION. FROST STRAPS SHALL BE INSTALLED ON ALL MAINTENANCE HOLES IN ACCORDANCE WITH OPSD 701.100.
- D. MAINTENANCE HOLE STEPS IN ACCORDANCE WITH OPSD 405.010
- MAINTENANCE HOLE FRAME AND COVER TO OPSD 401.010, TYPE 'A' CLOSED COVER. MAINTENANCE HOLE FRAMES ARE TO BE SET TO BASE COURSE ASPHALT GRADE AND ADJUSTED TO FINAL GRADE WHEN THE TOP LIFT OF ASPHALT IS PLACED. ALL ADJUSTMENTS TO BE IN ACCORDANCE WITH S606.

. MAINTENANCE HOLE STRUCTURES EXCEEDING 5.0 m IN DEPTH TO INCLUDE SAFETY PLATFORM IN

- ACCORDANCE WITH OPSD 404.020. H. DROP STRUCTURES AT MAINTENANCE HOLES IN ACCORDANCE WITH S605.
- I. MAXIMUM DEFLECTION FROM COMBINED LIVE AND DEAD LOADING SHALL NOT EXCEED ANY CSA, OPSS OR MANUFACTURER'S SPECIFICATIONS.
- PVC, CONCRETE AND PROFILE WALL PVC SEWERS SHALL HAVE RUBBER GASKET TYPE JOINTS AND SHALL BE CERTIFIED TO CONFORM TO ALL APPLICABLE CURRENT CSA SPECIFICATIONS.
- SANITARY MAINTENANCE HOLES SHALL BE WATERPROOFED WITH HENRY COMPANY CANADA BLUESKIN WP200 SELF ADHESIVE AT SECTION JOINTS. ADHESIVE SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATIONS.
- ALL CONNECTIONS TO NEW SANITARY MAINS SHALL BE MADE WITH PRE-MANUFACTURED, FABRICATED TEES. M. RADIUS BENDS TO BE USED ON ALL SEWER CONNECTIONS WHERE THE ANGLE OF CONNECTION BETWEEN THE SERVICE AND SEWER EXCEEDS 90°.

- GENERAL INSTALLATION AND TESTING OF WATERMAIN TO BE IN ACCORDANCE WITH OPSS.MUNI 421. OPSS.MUNI 701 AND CITY OF BARRIE ENGINEERING STANDARDS. ALL WORK ON THE EXISTING WATERMAIN TO BE
- COORDINATED WITH THE CITY OF BARRIE. B. CONTRACTORS SHALL INFORM THE CITY OF BARRIE WATER OPERATIONS DEPARTMENT A MINIMUM OF 48
- HOURS IN ADVANCE OF THEIR INTENTIONS TO PERFORM WORK ON WATER INFRASTRUCTURE. OPERATION OF HYDRANTS AND VALVES ON THE POTABLE WATER SYSTEM BY OTHER THAN QUALIFIED WATER OPERATIONS STAFF IS PROHIBITED BY CITY BY-LAW. CITY SERVICE FEES ARE PER THE CURRENT FEES
- D. MINIMUM COVER OVER WATERMAIN SHALL BE 1.7m. WITH 0.5m VERTICAL SEPARATION FROM SEWERS, WHERE WATERMAIN CONFLICTS WITH SEWER PIPES, DEFLECT WATERMAIN BELOW SEWER WHILE PROVIDING 0.5m CLEARANCE BETWEEN WATERMAIN AND SEWERS AND INSUATION. INSULATION TO BE PROVIDED WHERE MINIMUM
- COVER CAN NOT BE ACHIEVED. WATERMAIN SHALL NOT BE INSTALLED WITH COVER LESS THAN 1.2m. THE MINIMUM HORIZONTAL SEPARATION BETWEEN WATERMAIN AND SEWERS SHALL BE 2.5m.
- HYDRANTS TO BE CONSIDERED PRIVATE, INSTALLED IN ACCORDANCE WITH W507 AND PAINTED RED. G. CONTRACTOR SHALL PROVIDE CATHODIC PROTECTION ON THE WATER DISTRIBUTION SYSTEM. IN DETERMINING THE MODE OF PROTECTION, AN ELECTRICAL RESISTIVITY OF 4000-4500 OHM-CM SHOULD BE USED. THE
- CONTRACTOR SHALL PROPOSE METHODS AND MATERIALS TO BE USED FOR APPROVAL BY THE CONTRACT ADMINISTRATOR AND CITY OF BARRIE WATER OPERATIONS DEPARTMENT. H. TRACER WIRE SHALL BE #12 AWG HIGH STRENGTH COPPER CLAD (HS-CSS) AND SHALL BE INSTALLED ON THE TOTAL LENGTH OF ALL WATERMAIN AND BROUGHT UP AT EACH HYDRANT AND CONNECTED TO FLANGE
- BOLT. ALL SPLICES TO UTILIZE CONNECTORS AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR THE DOMESTIC SERVICE WILL REQUIRE A SAME SIZED WATER METER C/W BYPASS ASSEMBLY AS PER W533.
- BOTH DOMESTIC AND FIRE SERVICES WILL REQUIRE BACKFLOW PREVENTION INSTALLED AS PER CITY OF BARRIE BYLAW
- K. SERVICE TAPPINGS SHALL BE PLACED AT A MINIMUM SEPARATION OF 1.0 m AND A MINIMUM OF 0.6 m FROM JOINTS (ENDS OF PIPE).
- RISER PIPES ARE TO BE INSTALLED AS PER W510, AND REMOVED AS DIRECTED. SWABBING SCHEDULE TO BE SUPPLIED BY A WATER OPERATIONS FIELD REPRESENTATIVE. ALL RISERS ARE TO BE RESTRAINED OR THRUST
- M. ALL NEW CURB STOPS AND BOXES TO BE LOCATED ON PROPERTY LINE AND OUT OF DRIVEWAYS AND

PAVEMENT MARKINGS

- A. REFER TO ARCHITECTURAL DRAWINGS FOR PAVEMENT MARKINGS AND SIGNAGE PLAN.
- B. PAVEMENT MARKING MATERIALS TO BE ORGANIC SOLVENT BASED OR WATER-BORNE TRAFFIC PAINT COMPLETE WITH GLASS BEADS IN ACCORDANCE WITH 1712
- C. PAVEMENT MARKING MATERIALS FOR CROSSWALKS AND SYMBOLS ARE TO BE DURABLE HOT APPLIED THERMOPLASTIC PAVEMENT MARKING MATERIAL AS PER OPSS 1713, OR FIELD REACTED POLYMERIC PAVEMENT
- MARKING MATERIAL AS PER OPSS 1714. D. PAVEMENT MARKINGS REQUIRE TWO APPLICATIONS OF PAINT FOR NEW ASPHALT. THE SECOND APPLICATION
- SHALL NOT BE APPLIED UNTIL THE FIRST IS TACK FREE. E. PAVEMENT MARKINGS SHALL ONLY BE APPLIED WHEN TEMPERATURE IS ABOVE 10 DEGREES CELSIUS, THE
- PAVEMENT IS PERFECTLY DRY AND UPON THE AUTHORIZATION OF THE CONTRACT ADMINISTRATOR.
- F. WORK TO BE IN ACCORDANCE WITH OPSS 532, OPSS 710 AND THE ONTARIO TRAFFIC MANUAL BOOK 11, MINISTRY OF TRANSPORTATION OF ONTARIO.

MATERIALS

- A. SANITARY SEWER SDR 35 PVC, UNLESS OTHERWISE NOTED.
- B. WATERMAIN PVC DR18 CL150 MINIMUM; DUCTILE IRON CL52 AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR WATER SYSTEMS LIST.
- C. WATER SERVICES AS PER THE APPROVED MANUFACTURERS PRODUCTS FOR LINEAR WATER SYSTEMS LIST. D. MAIN STOPS - 1" to 2" 301NL-A4B4 (NO LEAD, LIFETIME GUARANTEED AGAINST LEAD LEACHATE FROM THE
- CASTING), BALL STYLE c/w STAINLESS STEEL STEM, AWWA THREAD BY COMPRESSION CAMBRIDGE BRASS. E. VALVES - RESILIENT SEATED GATE VALVE, MECHANICAL JOINT, OPEN LEFT CLOW OR MUELLER WITH 5 SL-48
- SLIDING VALVE BOX. PROVIDE VALVE STEM EXTENSIONS WHERE WATERMAIN EXCEEDS 1.7m DEPTH.
- F. MECHANICAL JOINT DUCTILE FITTINGS AWWA/ANSI C153/A21.53.
- G. RESTRAINING GLANDS SIGMA ONE-LOK. H. FILTER FABRIC - TERRAFIX 270R OR APPROVED EQUAL.
- I. PERFORATED SUBDRAINS 100mm CORRUGATED SLOTTED PE WITH GEOTEXTILE FILTER SOCK OR APPROVED
- J. STORM SEWER PVC CERTIFIED TO CSA STANDARDS 182.2 AND 182.4 (MAX. PIPE DIAMETER 450 mm) OR
- REINFORCED CONCRETE WITH A MINIMUM STRENGTH OF 50 N/m/mm CERTIFIED TO CSA STANDARD A247.2-1982. CLASS 100-D.
- K. ALL SPECIFIED AGGREGATES TO OPSD 1010.

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PROPOSED RETAINING WALL

(DESIGN BY OTHERS)

VERLAND FLOW CHANNEL SECTION

263

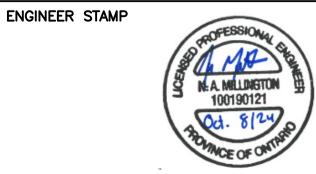
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DRAWING REFERENCES TOPOGRAPHIC FEATURES AND LEGAL BOUNDARIES SHOWN SURVEYORS LTD., OLS, DATED FEBRUARY 2022. SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED ON DRAWING SP1.0, PREPARED BY ANDERSON WELLSMAN ARCHITECTS INCORPORATED DATED SEPTEMBER 6, 2024.

TOPSOIL & SOD

BENCHMARK TBM#1 ELEV. 263.48 m ON THIS PLAN FROM SURVEY COMPLETED BY KRCMAR MNR No. 0011931U460S - SOUTHWEST CORNER OF ST PAUL'S CRESCENT AND YONGE STREET. TABLET SET HORIZONTALLY IN NORTH FACE OF CONCRETE FOUNDATION OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH-EAST CORNER (TOWER) 15.2 m WEST OF BEL POLE AND 9.2 m SOUTH-EAST OF "V" IN TWIN BIRCH TREES 15 cm BELOW

REVISION DESCRIPTION SITE PLAN APPROVAL - FIRST SUBMISSION JULY 17/24 ISSUED FOR BUILDING PERMIT APPROVAL AUG. 15/24 SITE PLAN APPROVAL - SECOND SUBMISSION SEPT. 6/24 OCT. 4/24 SITE PLAN APPROVAL - THIRD SUBMISSION OCT. 8/24 SITE PLAN APPROVAL - FOURTH SUBMISSION



THE VILLAGE OF INNIS LANDING 800 YONGE STREET CITY OF BARRIE



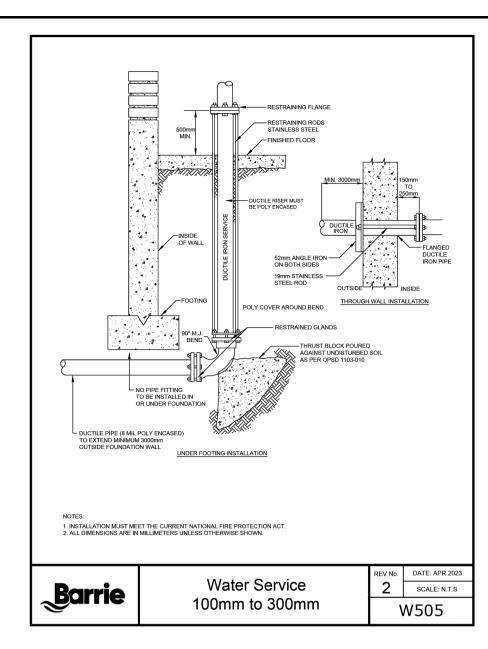
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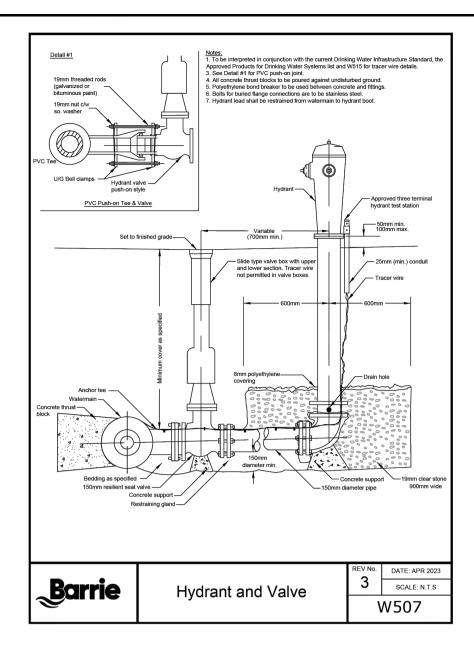
DETAILS & NOTES

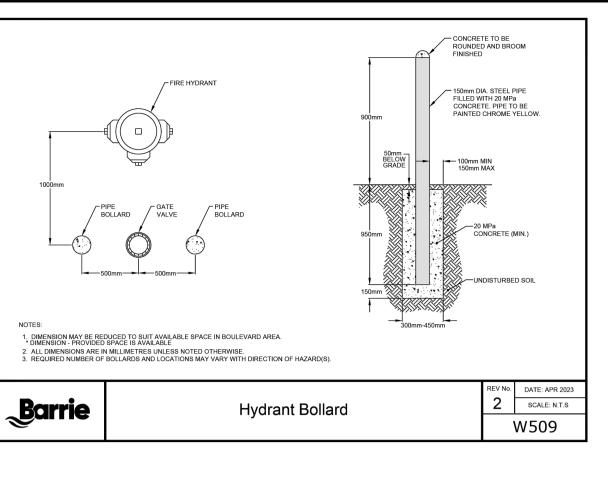
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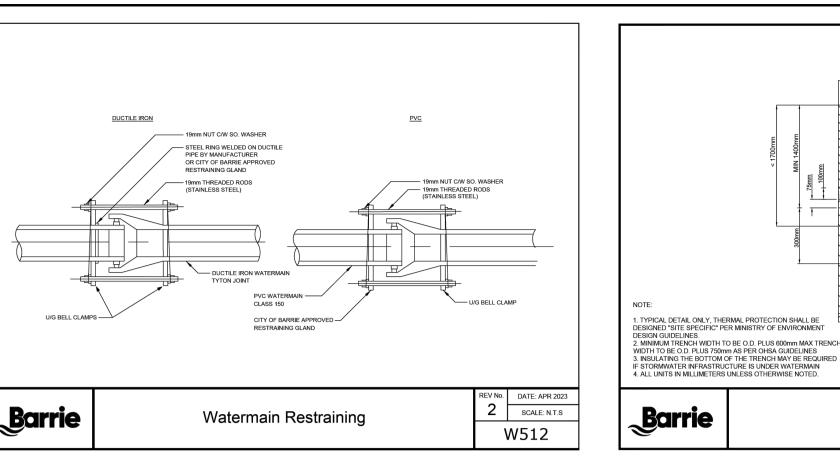
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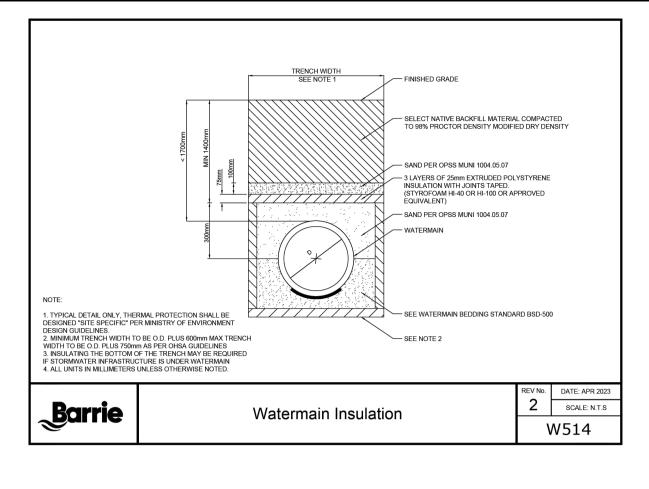
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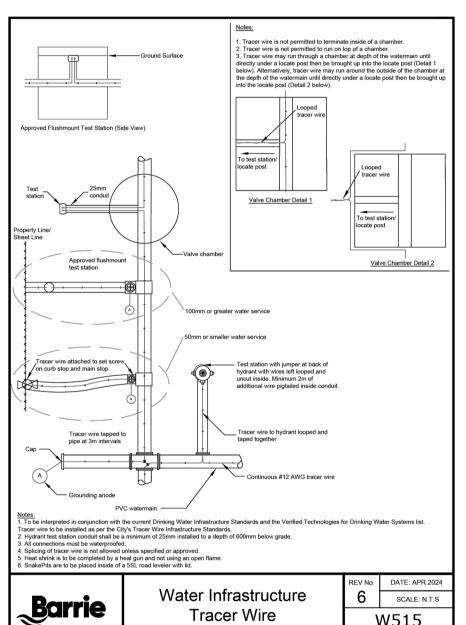


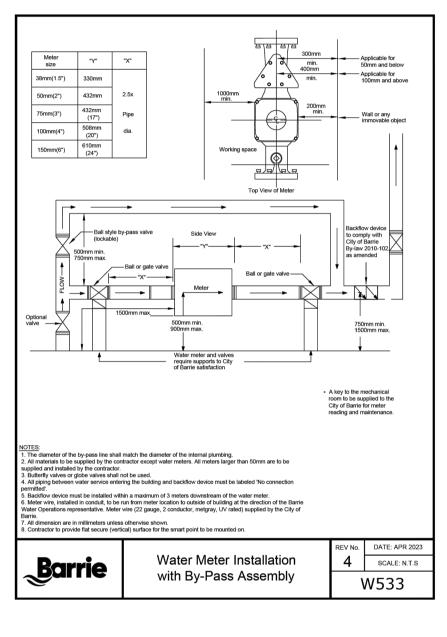


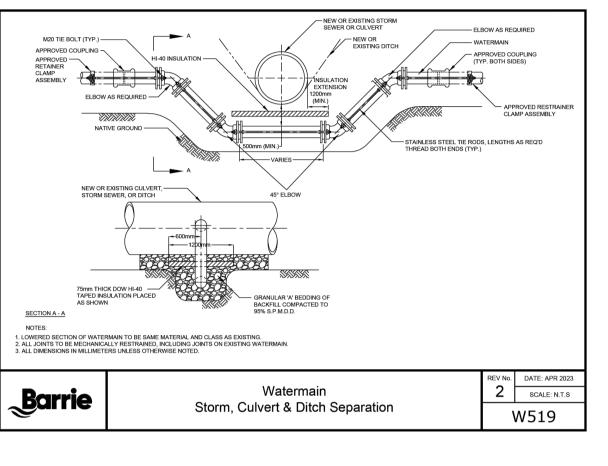


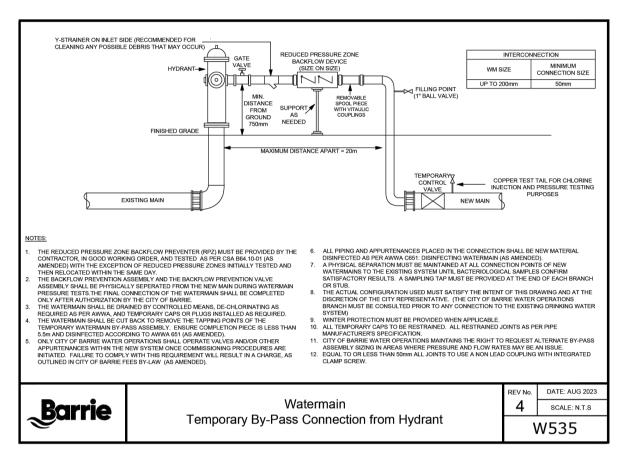


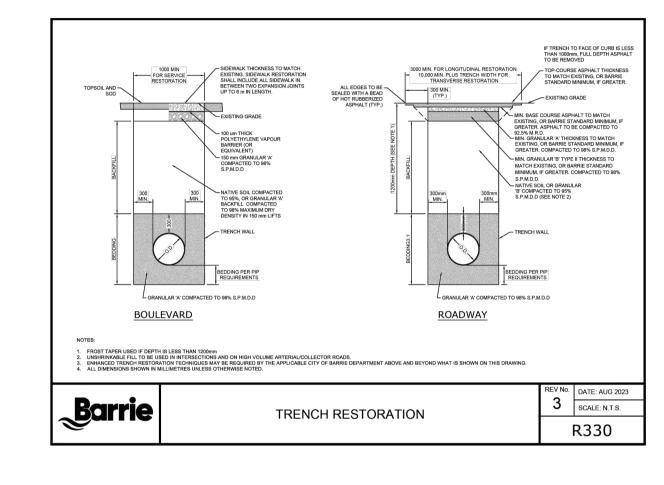


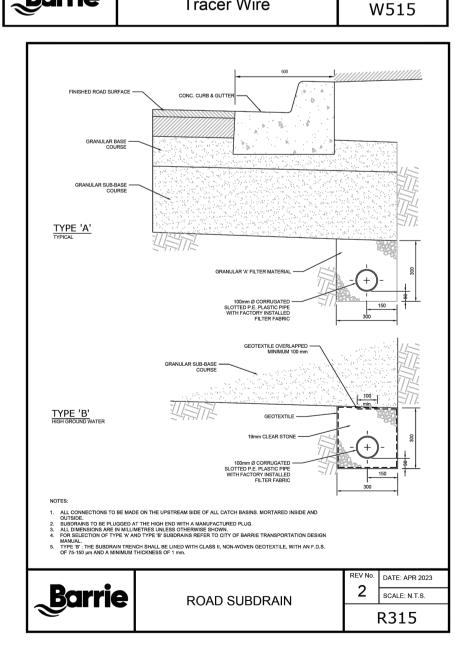


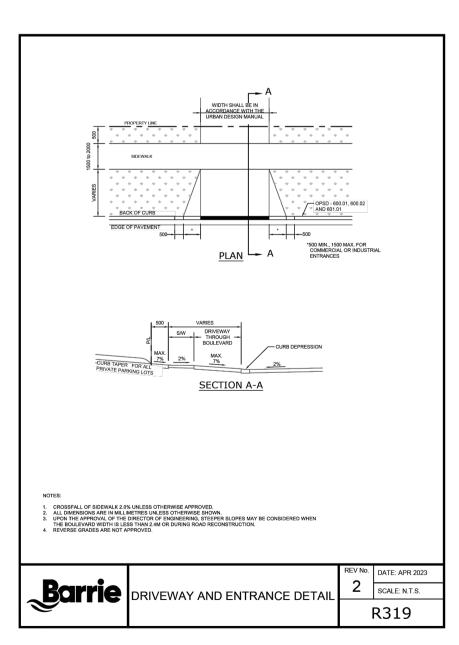


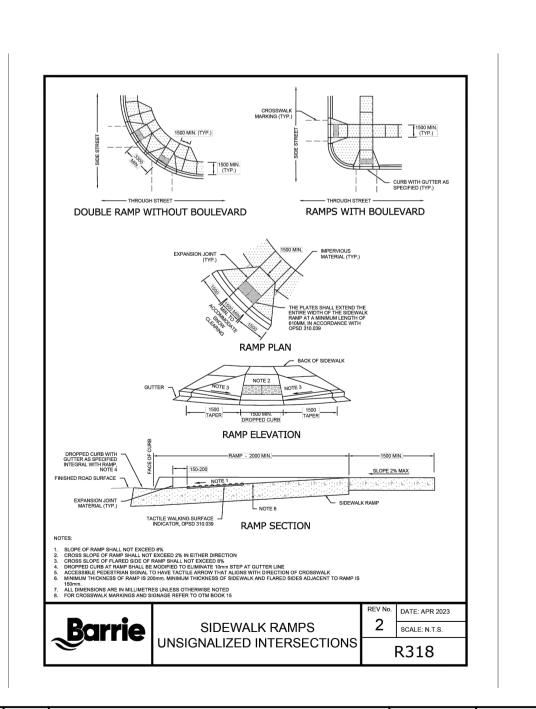


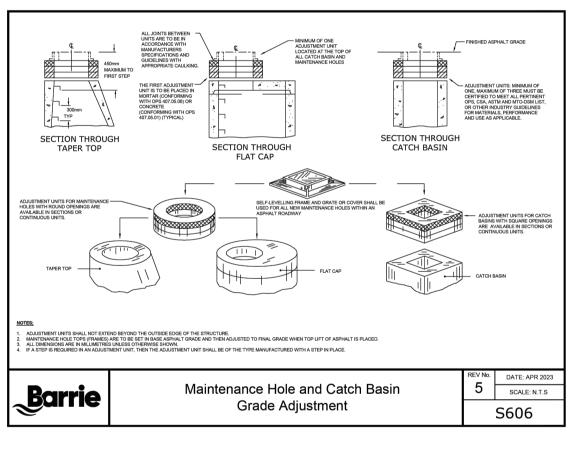


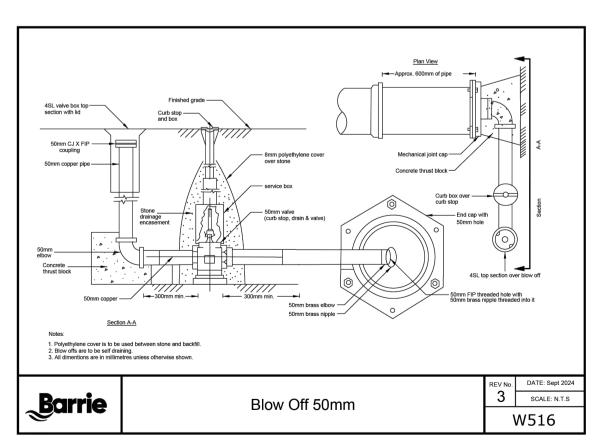


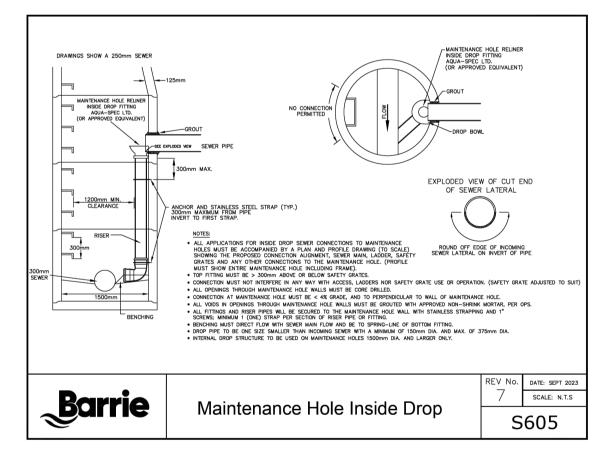


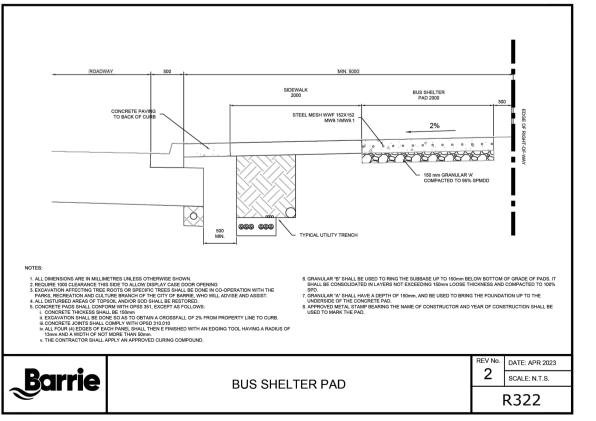


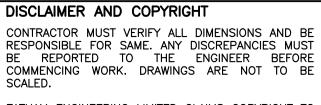












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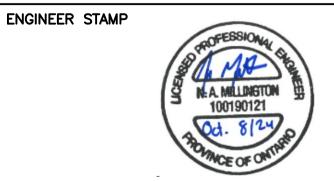
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TOPOGRAPHIC FEATURES AND LEGAL BOUNDARIES SHOWN | TBM#1 ELEV. 263.48 m RESPONSIBLE FOR SAME. ANY DISCREPANCIES MUST ON THIS PLAN FROM SURVEY COMPLETED BY KRCMAR MNR No. 0011931U460S — SOUTHWEST CORNER OF BE REPORTED TO THE ENGINEER BEFORE SURVEYORS LTD., OLS, DATED FEBRUARY 2022. SITE PLAN INFORMATION SHOWN ON THIS PLAN BASED ON DRAWING SP1.0, PREPARED BY ANDERSON WELLSMAN TATHAM ENGINEERING LIMITED CLAIMS COPYRIGHT TO ARCHITECTS INCORPORATED DATED SEPTEMBER 6, 2024. THIS DRAWING WHICH MAY NOT BE USED FOR ANY

DRAWING REFERENCES

BENCHMARK PAUL'S CRESCENT AND YONGE STREET, TABLET HORIZONTALLY IN NORTH FACE OF CONCRETE FOUNDATI OF ST. PAUL'S ANGLICAN CHURCH, AT NORTH-EAST CORN (TOWER) 15.2 m WEST OF BEL POLE AND 9.2 SOUTH-EAST OF "V" IN TWIN BIRCH TREES 15 cm BELO

	No.	REVISION DESCRIPTION	DATE
ST. SET TION NER M LOW	1.	SITE PLAN APPROVAL — FIRST SUBMISSION	JULY 17/24
	2.	ISSUED FOR BUILDING PERMIT APPROVAL	AUG. 15/24
	3.	SITE PLAN APPROVAL - SECOND SUBMISSION	SEPT. 6/24
	4	SITE PLAN APPROVAL — THIRD SUBMISSION	OCT. 4/24
	5	SITE PLAN APPROVAL — FOURTH SUBMISSION	OCT. 8/24



THE VILLAGE OF INNIS LANDING **800 YONGE STREET CITY OF BARRIE**

> CITY OF BARRIE STANDARD DETAILS

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TATHAM ENGINEERING LIMITED.