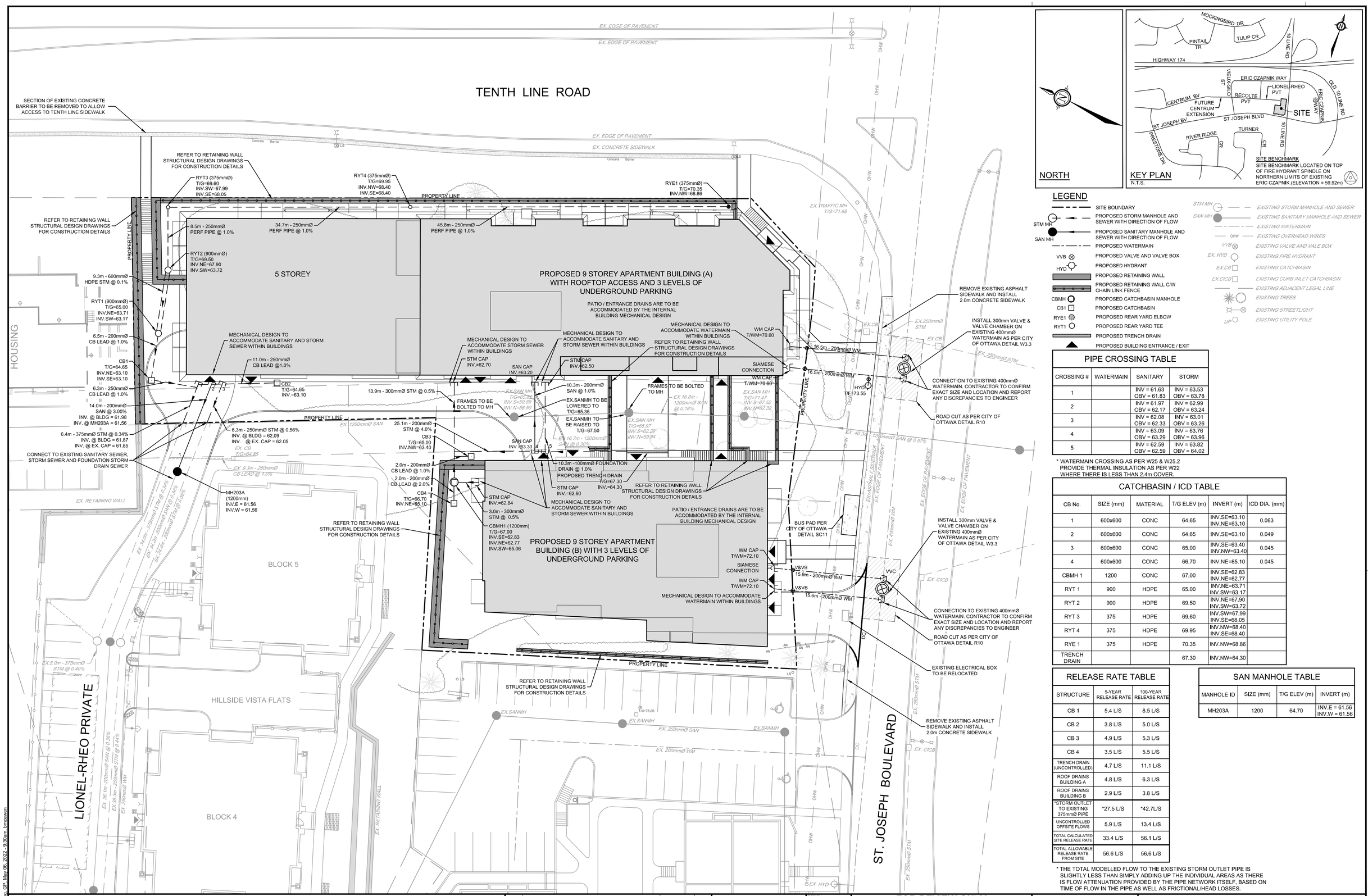

LEGEND

- SITE BOUNDARY
- PROPOSED STORM MANHOLE AND SEWER WITH DIRECTION OF FLOW
- PROPOSED SANITARY MANHOLE AND SEWER WITH DIRECTION OF FLOW
- PROPOSED WATERMAIN
- PROPOSED VALVE AND VALVE BOX
- PROPOSED HYDRANT
- PROPOSED RETAINING WALL
- PROPOSED RETAINING WALL C/W CHAIN LINK FENCE
- PROPOSED CATCHBASIN MANHOLE
- PROPOSED CATCHBASIN
- PROPOSED REAR YARD ELBOW
- PROPOSED REAR YARD TEE
- PROPOSED TRENCH DRAIN
- PROPOSED BUILDING ENTRANCE / EXIT
- EXISTING STORM MANHOLE AND SEWER
- EXISTING SANITARY MANHOLE AND SEWER
- EXISTING WATERMAIN
- EXISTING OVERHEAD WIRES
- EXISTING VALVE AND VALE BOX
- EXISTING FIRE HYDRANT
- EXISTING CATCHBASIN
- EXISTING CURB INLET CATCHBASIN
- EXISTING ADJACENT LEGAL LINE
- EXISTING TREES
- EXISTING STREETLIGHT
- EXISTING UTILITY POLE

PIPE CROSSING TABLE

CROSSING #	WATERMAIN	SANITARY	STORM
1		INV = 61.63 OBV = 61.83	INV = 63.53 OBV = 63.78
2		INV = 61.97 OBV = 62.17	INV = 62.99 OBV = 63.24
3		INV = 62.08 OBV = 62.33	INV = 63.01 OBV = 63.26
4		INV = 63.09 OBV = 63.29	INV = 63.76 OBV = 63.96
5		INV = 62.59 OBV = 62.59	INV = 63.82 OBV = 64.02

* WATERMAIN CROSSING AS PER W25 & W25.2
PROVIDE THERMAL INSULATION AS PER W22
WHERE THERE IS LESS THAN 2.4m COVER.

CATCHBASIN / ICD TABLE

CB No.	SIZE (mm)	MATERIAL	T/G ELEV (m)	INVERT (m)	ICD DIA. (mm)
1	600x600	CONC	64.65	INV.SE=63.10 INV.NE=63.10	0.063
2	600x600	CONC	64.65	INV.SE=63.10	0.049
3	600x600	CONC	65.00	INV.SE=63.40 INV.NW=63.40	0.045
4	600x600	CONC	66.70	INV.NE=65.10	0.045
CBMH 1	1200	CONC	67.00	INV.SE=62.83 INV.NE=62.77	
RYT 1	900	HDPE	65.00	INV.NE=63.71 INV.SW=63.17	
RYT 2	900	HDPE	69.50	INV.NE=67.90 INV.SW=63.72	
RYT 3	375	HDPE	69.60	INV.SW=67.99 INV.SE=68.05	
RYT 4	375	HDPE	69.95	INV.NW=68.40 INV.SE=68.40	
RYE 1	375	HDPE	70.35	INV.NW=68.86	
TRENCH DRAIN			67.30	INV.NW=64.30	

RELEASE RATE TABLE

STRUCTURE	5-YEAR RELEASE RATE	100-YEAR RELEASE RATE
CB 1	5.4 L/S	8.5 L/S
CB 2	3.8 L/S	5.0 L/S
CB 3	4.9 L/S	5.3 L/S
CB 4	3.5 L/S	5.5 L/S
TRENCH DRAIN (UNCONTROLLED)	4.7 L/S	11.1 L/S
ROOF DRAINS BUILDING A	4.8 L/S	6.3 L/S
ROOF DRAINS BUILDING B	2.9 L/S	3.8 L/S
*STORM OUTLET TO EXISTING 375mmØ PIPE	*27.5 L/S	*42.7L/S
UNCONTROLLED OFFSITE FLOWS	5.9 L/S	13.4 L/S
TOTAL CALCULATED SITE RELEASE RATE	33.4 L/S	56.1 L/S
TOTAL ALLOWABLE RELEASE RATE FROM SITE	56.6 L/S	56.6 L/S

* THE TOTAL MODELLED FLOW TO THE EXISTING STORM OUTLET PIPE IS SLIGHTLY LESS THAN SIMPLY ADDING UP THE INDIVIDUAL AREAS AS THERE IS FLOW ATTENUATION PROVIDED BY THE PIPE NETWORK ITSELF, BASED ON TIME OF FLOW IN THE PIPE AS WELL AS FRICTIONAL/HEAD LOSSES.

SAN MANHOLE TABLE

MANHOLE ID	SIZE (mm)	T/G ELEV (m)	INVERT (m)
MH203A	1200	64.70	INV.E = 61.56 INV.W = 61.56

NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS, WATERMAINS, SEWERS AND OTHER UNDERGROUND AND OVERGROUND UTILITIES AND STRUCTURES IS NOT NECESSARILY SHOWN ON THE CONTRACT DRAWINGS, AND WHERE SHOWN, THE ACCURACY OF THE POSITION OF SUCH UTILITIES AND STRUCTURES IS NOT GUARANTEED. BEFORE STARTING WORK, DETERMINE THE EXACT LOCATION OF ALL SUCH UTILITIES AND STRUCTURES AND ASSUME ALL LIABILITY FOR DAMAGE TO THEM.

PRELIMINARY NOT FOR CONSTRUCTION

No.	REVISION	DATE	BY
4.	ISSUED FOR CITY OF OTTAWA REVIEW	MAY 06/22	DDB
3.	ISSUED FOR COORDINATION	APR 6/22	DDB
2.	ISSUED FOR CITY OF OTTAWA REVIEW	MAR 22/22	DDB
1.	ISSUED FOR CITY OF OTTAWA REVIEW	DEC 23/21	DDB

SCALE 1:250 (1:250, 0 2 4 6 8 10)

DESIGN DDB
CHECKED DDB
DRAWN MTM
CHECKED DDB
APPROVED DDB

FOR REVIEW ONLY

LICENSED PROFESSIONAL ENGINEER D. D. BLAIR 100122737 may 6 2022 PROVINCE OF ONTARIO

NOVATECH
Engineers, Planners & Landscape Architects
Suite 200, 240 Michael Cowpland Drive
Ottawa, Ontario, Canada K2M 1P6
Telephone (613) 254-9643
Facsimile (613) 254-5867
Website www.novatech-eng.com

CITY OF OTTAWA
HILLSIDE COMMONS
ORLEANS TOWN CENTER

DRAWING NAME
GENERAL PLAN OF SERVICES

PROJECT No. 120237-00
REV REV # 4
DRAWING No. 120237-GP

D07-12-21-0229

#18628

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