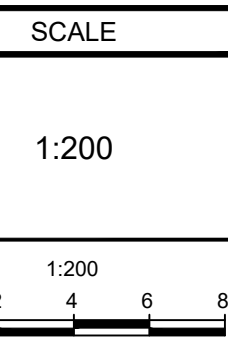


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NOTE:
THE POSITION OF ALL POLE LINES, CONDUITS,
WATERMANS, SEWERS AND OTHER
UNDERGROUND AND OVERGROUND UTILITIES AND
STRUCTURES IS NOT NECESSARILY SHOWN ON
THE CONTRACT DRAWINGS, AND WHERE SHOWN,
THE ACCURACY OF THE POSITION OF SUCH
UTILITIES AND STRUCTURES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

No	REVISION	DATE	BY
5.	ISSUED FOR REVIEW	JUN 13/25	ARM
4.	ISSUED FOR COORDINATION	JUN 05/25	ARM
3.	ISSUED FOR COORDINATION	FEB 18/25	ARM
2.	ISSUED WITH ADDENDUM #3	OCT 19/22	ARM
1.	ISSUED FOR PHASE 4/5 REVISION	OCT 6/22	ARM



DESIGN	AAR
CHECKED	ARM
DRAWN	AAR
CHECKED	ARM
APPROVED	SMG

FOR REVIEW ONLY

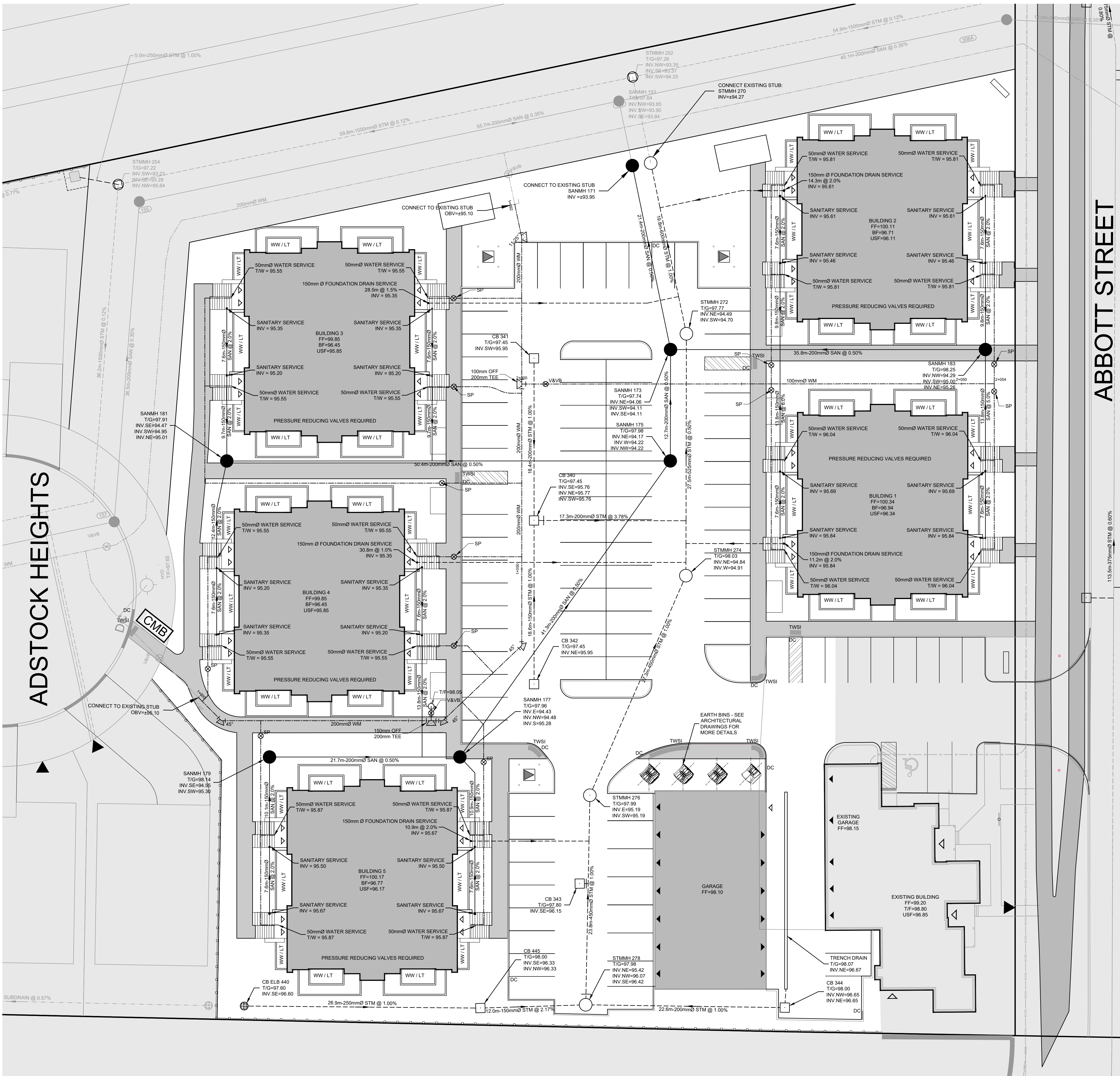


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SPB DEVELOPMENT INC.
(METRIC HOMES) SUBDIVISION - BLOCK 123
950 TERRY FOX DRIVE

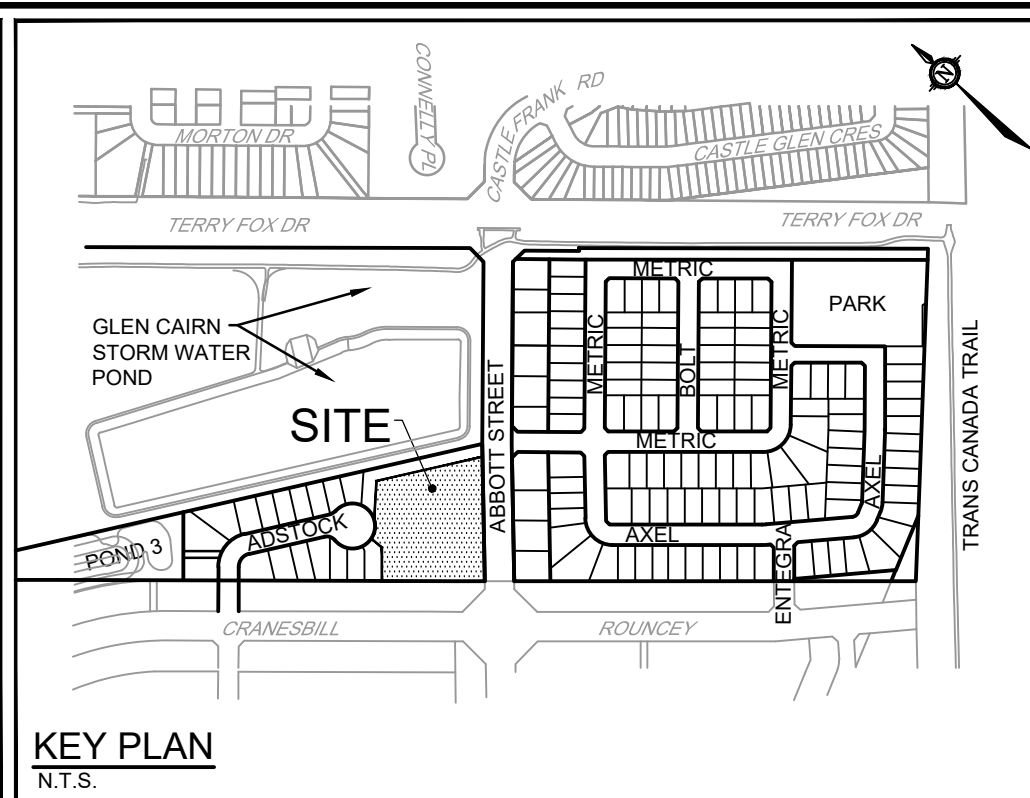
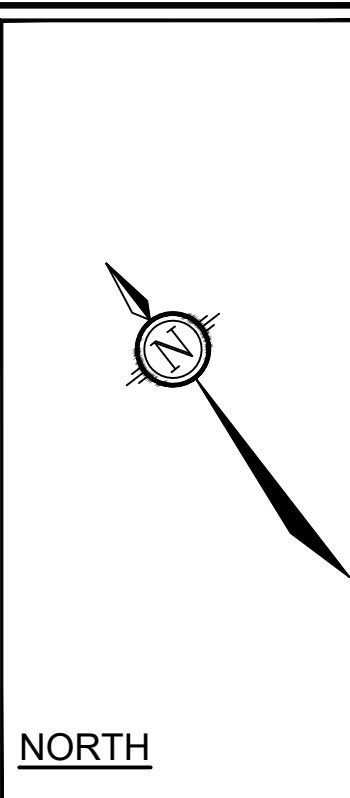
DRAWING NAME
**GENERAL PLAN OF SERVICES
BLOCK 123**

PROJECT No. 110037
REV # 5
DRAWING No. 110037-GP123



ABBOTT STREET

ADSTOCK HEIGHTS



LEGEND

200mmØ WM	PROPOSED WATERMAIN AND DIAMETER
Ø V&VB	PROPOSED VALVE AND VALVE BOX
○	PROPOSED HYDRANT C&V VALVE & LEAD
T/B = 98.45	PROPOSED TOP OF BOTTOM FLANGE
○	PROPOSED BEND AND THRUSTBLOCK 11.25', 22.5', 45' or TEE
○ SP	PROPOSED WATER SERVICE STANDPOST
200mmØ STM	PROPOSED STORM SEWER AND FLOW DIRECTION
200mmØ SAN	PROPOSED SANITARY SEWER AND FLOW DIRECTION
○	PROPOSED SANITARY MH
○	PROPOSED STORM MH
□	PROPOSED CATCHBASIN
—	BARRIER CURB
■	DEVELOPMENT BY OTHERS PART OF SEPARATE APPLICATION
▶	PROPOSED TRANSFORMER c/w PAD AND BOLLARDS
WW / LT	WINDOW WELL / LOWERED TERRACE - SEE ARCHITECTURAL DRAWING FOR MORE DETAILS

GENERAL NOTES:

- COORDINATE AND SCHEDULE ALL WORK WITH OTHER TRADES AND CONTRACTORS.
- DETERMINE THE EXACT LOCATION, SIZE, MATERIAL AND ELEVATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION. PROTECT AND ASSUME RESPONSIBILITY FOR ALL EXISTING UTILITIES WHETHER OR NOT SHOWN ON THIS DRAWING.
- OBTAIN ALL NECESSARY PERMITS AND APPROVALS FROM THE CITY OF OTTAWA BEFORE COMMENCING CONSTRUCTION.
- BEFORE COMMENCING CONSTRUCTION OBTAIN AND PROVIDE PROOF OF COMPREHENSIVE, ALL RISK AND OPERATIONAL LIABILITY INSURANCE FOR \$5,000,000.00. INSURANCE POLICY TO NAME OWNERS, ENGINEERS AND ARCHITECTS AS CO-INSURED.
- RESTORE ALL DISTURBED AREAS ON-SITE AND OFF-SITE, INCLUDING TRENCHES AND SURFACES ON PUBLIC ROAD ALLOWANCES TO EXISTING CONDITIONS OR BETTER TO THE SATISFACTION OF THE CITY OF OTTAWA AND ENGINEER.
- REMOVE FROM SITE ALL EXCESS EXCAVATED MATERIAL, ORGANIC MATERIAL AND DEBRIS UNLESS OTHERWISE INSTRUCTED BY ENGINEER. EXCAVATE AND REMOVE FROM SITE ANY CONTAMINATED MATERIAL. ALL CONTAMINATED MATERIAL SHALL BE DISPOSED OF AT A LICENSED LANDFILL FACILITY.
- ALL ELEVATIONS ARE GEODETIC.
- REFER TO GEOTECHNICAL REPORT (No. P82658-3, DATED FEBRUARY 21, 2025), PREPARED BY PATERSON GROUP FOR SUBSURFACE CONDITIONS, CONSTRUCTION RECOMMENDATIONS, AND GEOTECHNICAL INSPECTION REQUIREMENTS. THE GEOTECHNICAL CONSULTANT IS TO REVIEW ON-SITE CONDITIONS AFTER EXCAVATION PRIOR TO PLACEMENT OF THE GRANULAR MATERIAL.
- REFER TO ARCHITECT'S AND LANDSCAPE ARCHITECT'S DRAWINGS FOR BUILDING AND HARDSURFACE AREAS AND DIMENSIONS.
- REFER TO STORMWATER MANAGEMENT REPORT (R-2025-013) PREPARED BY NOVATECH ENGINEERING CONSULTANTS LTD.
- SAW CUT AND KEY GRIND ASPHALT AT ALL ROAD CUTS AND ASPHALT TIE IN POINTS AS PER CITY OF OTTAWA STANDARDS (R10).
- PROVIDE LINE/PARKING PAINTING.
- CONTRACTOR TO PROVIDE THE CONSULTANT WITH A GENERAL PLAN OF SERVICES INDICATING ALL SERVING AS-BUILT INFORMATION SHOWN ON THIS PLAN, AS-BUILT INFORMATION MUST INCLUDE: PIPE MATERIAL, SIZES, LENGTHS, SLOPES, INVERT AND T/G ELEVATIONS, STRUCTURE LOCATIONS, VALVE AND HYDRANT LOCATIONS, T/W/ELEVATIONS AND ANY ALIGNMENT CHANGES, ETC.

WATERMAIN NOTES:

- SPECIFICATIONS:
ITEM: WATERMAIN TRENCHING
THERMAL INSULATION IN SHALLOW TRENCHES
WATERMAIN CROSSING BELOW SEWER
WATERMAIN
SPEC. No.: W1P
W22
W25
PVC DR 18
REFERENCE: CITY OF OTTAWA
CITY OF OTTAWA
CITY OF OTTAWA
- SUPPLY AND CONSTRUCT ALL WATERMANS AND APPURTENANCES IN ACCORDANCE WITH THE CITY OF OTTAWA STANDARDS AND SPECIFICATIONS. EXCAVATION, INSTALLATION, BACKFILL AND RESTORATION OF ALL WATERMANS BY THE CONTRACTOR. CONNECTIONS AND SHUT-OFFS AT THE MAIN AND CHLORINATION OF THE WATER SYSTEM SHALL BE PERFORMED BY CITY OFFICIALS.
- WATERMAIN SHALL BE MINIMUM 2.4m DEPTH BELOW GRADE UNLESS OTHERWISE INDICATED.
- PROVIDE MINIMUM 0.25m CLEARANCE BETWEEN OUTSIDE OF PIPES AT ALL CROSSINGS.
- WATER SERVICE IS TO BE CONSTRUCTED TO WITHIN 1.0m OF FOUNDATION WALL AND CAPPED, UNLESS OTHERWISE INDICATED.

ICD DATA TABLE

STRUCTURE No.	T/G ELEVATION	INVERT OUT ELEVATION	ICD DIA. (mm)	OUTLET DIA. (mm)
CB 340	97.45	95.76	127	200
CB 343	97.65	96.15	83	200
STMMH 278	97.98	95.42	108	450

SEWER NOTES:

- SPECIFICATIONS:
ITEM: CATCHBASIN (600x600mm)
STORM / SANITARY MANHOLE (1200)
CB, FRAME & COVER
SEWER TRENCH - BEDDING (GRANULAR A)
COVER (GRANULAR A OR GRANULAR B TYPE I, WITH MAXIMUM PARTICLE SIZE=25mm)
STORM SEWER
SANITARY SEWER
CATCHBASIN LEAD
SPEC. No.: 705.010
701.010
S19.1, S22.1 & S 23
S24, S24.1, & S25
CITY OF OTTAWA
CITY OF OTTAWA
CITY OF OTTAWA
- INSULATE ALL PIPES (SAN/STM) THAT HAVE LESS THAN 1.5m COVER WITH 50mmx1200mm HI-40 INSULATION. PROVIDE 150mm CLEARANCE BETWEEN PIPE AND INSULATION.
- SERVICES ARE TO BE CONSTRUCTED TO 1.0m FROM FACE OF BUILDING AT A MINIMUM SLOPE OF 1.0%.
- PIPE BEDDING, COVER AND BACKFILL ARE TO BE COMPACTED TO AT LEAST 95% OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY. THE USE OF CLEAR CRUSHED STONE AS A BEDDING LAYER SHALL NOT BE PERMITTED.
- FLEXIBLE CONNECTIONS ARE REQUIRED FOR CONNECTING PIPES TO MANHOLES (FOR EXAMPLE KOR-SEAL, P33; POSITIVE SEAL AND DURASEAL). THE CONCRETE CRADLE FOR THE PIPE CAN BE ELIMINATED.
- THE OWNER SHALL REQUIRE THAT THE SITE SERVING CONTRACTOR PERFORM FIELD TESTS FOR QUALITY CONTROL OF ALL SANITARY SEWERS. LEAKAGE TESTING SHALL BE COMPLETED IN ACCORDANCE WITH OPS-410/07/16, 410/07/16/04 AND 407/24 DYE TESTING IS TO BE COMPLETED ON ALL SANITARY SERVICES TO CONFIRM PROPER CONNECTION TO THE SANITARY SEWER MAIN. THE FIELD TESTS SHALL BE PERFORMED IN THE PRESENCE OF A CERTIFIED PROFESSIONAL ENGINEER WHO SHALL SUBMIT A CERTIFIED COPY OF THE TEST RESULTS.
- STORM MANHOLES AND CBHMS ARE TO HAVE 300mm SLUMPS UNLESS OTHERWISE INDICATED.
- CONTRACTOR TO TELETYPE (CCTV) ALL PROPOSED SEWERS, 200mmØ OR GREATER PRIOR TO BASE COURSE ASPHALT. UPON COMPLETION OF CONTRACT, THE CONTRACTOR IS RESPONSIBLE TO FLUSH AND CLEAN ALL SEWERS & APPURTENANCES.

100mmØ WATERMAIN TABLE

STATION	SURFACE ELEVATION	TOP OF WM ELEVATION	DESCRIPTION
2+000	97.54	95.00	100 OFF 200 TEE c/w ISOLATION VALVE
2+001	97.50	95.00	CROSS UNDER 200mmØ CB LEAD (INV = 95.93, 0.9m CLEARANCE)
2+017	97.80	95.30 **	CROSS OVER 200mmØ SAN (OBV = 94.32, 0.9m CLEARANCE)
2+019	97.85	95.80 **	CROSS OVER 150mmØ STM (OBV = 95.15, 0.3m CLEARANCE) c/w VERTICAL BENDS AND INSULATION
2+025	98.03	95.60 **	100mmØ WM
2+028	98.20	95.80	50 OFF 100 CROSS (BUILDING 1 & 2 SERVICE) c/w STANDPOSTS
2+029	98.24	95.80	CROSS UNDER 150mmØ SAN SERV (INV = 94.49, 0.4m CLEARANCE)
2+050	98.38	95.95	100mmØ WM
2+053	98.35	95.95	CROSS UNDER 150mmØ SAN SERV (INV = 94.49, 0.4m CLEARANCE)
2+053.7	98.34	95.90	100 OFF 50 TEE (BUILDING 1 & 2 SERVICE) c/w STANDPOSTS

200mmØ WATERMAIN TABLE

STATION	SURFACE ELEVATION	TOP OF WM ELEVATION	DESCRIPTION
1+000	97.85	±95.10 *	CONNECT TO EXISTING 200mmØ WM STUBOUT
1+001	97.86	95.10	50 OFF 200 TEE (BUILDING 4 SERVICE) c/w STANDPOST
1+004	97.87	95.25	45° HORIZONTAL BEND
1+008	97.92	95.40	50 OFF 200 TEE (BUILDING 5 SERVICE) c/w STANDPOST
1+025	97.88	95.40	200mmØ WM
1+027	97.52	94.50	CROSS UNDER 150mmØ SAN SERV (INV = 95.51, 0.5m CLEARANCE) c/w VERTICAL BENDS
1+028	97.84	94.70	150 OFF 200 FIRE HYDRANT TEE
1+029	97.82	94.70	45° HORIZONTAL BEND
1+032	97.71	95.10	50 OFF 200 TEE (BUILDING 5 SERVICE) c/w STANDPOST
1+037	97.59	95.10	50 OFF 200 TEE (BUILDING 4 SERVICE) c/w STANDPOST
1+041	97.53	95.10	45° HORIZONTAL BEND
1+050	97.54	95.00	200mmØ WM
1+050.8	97.53	95.00	CROSS UNDER 150mmØ STM SERV (INV = 95.31, 0.5m CLEARANCE) c/w VERTICAL BENDS
1+051.4	97.52	95.00	50 OFF 200 TEE (BUILDING 4 SERVICE) c/w STANDPOST
1+060	97.51	95.10	50 OFF 200 TEE (BUILDING 3 SERVICE) c/w STANDPOST
1+062	97.54	95.20 **	CROSS OVER 200mmØ SAN (OBV = 94.50, 0.4m CLEARANCE) c/w INSULATION
1+069	97.52	95.00	50 OFF 200 TEE (BUILDING 3 SERVICE) c/w STANDPOST
1+070	97.49	95.00	100 OFF 200 TEE c/w ISOLATION VALVE
1+075	97.48	95.00	200mmØ WM
1+080	97.61	94.70	CROSS UNDER 150mmØ STM SERV (INV = 95.20, 0.5m CLEARANCE) c/w VERTICAL BENDS
1+081	97.62	94.70	50 OFF 200 TEE (BUILDING 3 SERV.) c/w STANDPOST
1+088	97.83	95.10	11.25° HORIZONTAL BEND
1+091.6	97.74	±95.10 *	CONNECT TO EXISTING 200mmØ WM STUBOUT

* CONNECTION TO EXISTING 200mmØ WATERMAIN.
EXACT ELEVATION TO BE FIELD DETERMINED.
** PROVIDE THERMAL INSULATION AS PER CITY OF OTTAWA DETAIL W23 AND DETAIL W22 WHERE COVER IS LESS THAN 2.4m AND/OR ADJACENT TO OPEN STRUCTURES.