



KEY PLAN  
EXISTING CONDITIONS  
1:500

WWS Flow Estimation				
	Pre-Dev		Post-Dev	Units
Use Bathroom	0.35	9.5	3.8	L/s
WWS Total Flow	9.82	3.8		L/s

**Note:**  
 - Pre-development flow based on 75mm diameter drain line and 650mm of head pressure (full wadding pool condition).  
 - Pre-development flow based on peak flow while draining the pool at end of day.  
 - Spray pad flow based on peak sequenced flow during pad operation.  
 - Existing bathroom flow estimated based on 38L/person/day\* using 6 hours for the operation day and 200 people over that time.  
 \*Reference: Supplementary Information for Onsite Wastewater Management Systems. Typical wastewater flowrate for a Swimming Pool used.

- Construction Specifications**
- Construction must conform to the City of Winnipeg, *Standard Construction Specifications* and all references contained herein refer to these specifications. "SD" refers to City of Winnipeg standard details.
  - All materials used for construction must conform to City of Winnipeg, *Approved Products for Underground Use Within the City of Winnipeg* except as indicated otherwise.
  - Water Service to CW-2110**
    - All water services to be saddle connection installed according to CW2110, SD-012.
    - Copper water service shall be in accordance with AWWA C800 and ASTM BB88M, Type K, seamless water tubing.
    - Use Class 'B' Bedding where required according to SD-001.
    - Minimum 2.4m burial.
    - For backfilling, refer to SD-002 as follows:
      - Class '5' Backfill in landscaped & untraveled areas
      - Class '2' Backfill in gravel, hard-surfaced & traveled areas
  - Gravity Sewers to CW-2030**
    - All WWS service installation shall be in accordance with CW 2030/2130, SD-014
    - 150mm WWS service pipe shall be in accordance with CAN/CSA B182.2 and ASTM D3034, SDR-35.
    - All pipe installations through road right of way shall be completed with trenchless methods. Any open trench construction on site shall be as follows:
      - Class 'B' Bedding to SD-001
      - Backfill to SD-002: Class '2' in gravel, hard-surfaces, and traveled areas; Class '5' in landscaped and untraveled areas.
  - Wastewater Flow Generation:**
    - Spray equipment is design-build by other. Spray features to be sequenced to provide max flow rate of 40-60 US GPM.
  - General Notes**
    - "HP" means high point.
    - Contractor to obtain all necessary permits.
    - Contractor to obtain clearances from all utilities before excavating. Confirm all existing infrastructure information in field before construction. Notify the Engineer immediately of any discrepancies that affect installation or design.
    - Confirm all dimensions before beginning construction.
    - Spray pad internal grading by Landscape Architect.
    - This is a combined sewer district.
    - Civil design to be read in coordination with architectural, structural, building plans, and geotechnical report where appropriate. Contractor is responsible to report any discrepancies to the Engineer or Project Manager.
    - It is the understanding of the engineer that the Bronx Spray Pad will not be subject to additional stormwater management measures, on the condition that the site C-value is not increased, and uncontrolled area is not increase. Based on the analysis of the pre and post surface conditions, these conditions are met.

PLAN  
SERVICING  
1:100

This is not a legal plan.  
 Contours shown are approximated for reference only.  
 Whole numbers are millimetres (mm).  
 Decimal numbers are metres (m).  
 Convert Metric to Standard 1.0m = 3.2808ft  
 This plan is prepared only for the Client and may not be used by any other party without written consent.

EXISTING	PROPOSED	EXISTING	PROPOSED	EXISTING	PROPOSED
1.98	SLOPE DIRECTION	2.98%	HYDRANT		CONTOUR
(394.98)	SURFACE ELEV.	(239.45)	CURB STOP		PONDING AREA
150 WM	WATERMAIN	150 WM	VALVE	-ELEC-	ELEC
250 WWS	WASTEWATER SEWER	250 WWS	WWS MANHOLE	-GAS-	GAS
300 LDS	LAND DRAINAGE SEWER	300 LDS	LDS CATCHBASIN	-COMM-	COMM
			LDS MANHOLE		TOPO SURVEY POINT

APPROVING AUTHORITY STAMP

B.M.	TOP OF FH	ELEV.
		231.650

**Sandbox**  
DESIGN & CONSULTING

DESIGNED BY	KP	CHECKED BY	DH
DRAWN BY	KP	APPROVED BY	DH
HOR. SCALE:	AS SHOWN	RELEASED FOR CONSTRUCTION:	
DATE	2024-03-01	DATE	

ENGINEER'S SEAL

**CITY OF WINNIPEG**  
DEAN SPEARMAN

SERVICING PLAN  
**BRONX PARK SPRAY PAD**  
720 HENDERSON HIGHWAY, WINNIPEG, MB

CONSULTANT DRAWING NO. C2

SHEET OF	1 OF 1
CAD FILE DRAWING NUMBER	23002-C-R3
PROJECT CODE	23-002