TORONTO

GENERAL INFORMATION:

GI Identifier:	Inspection Type (Check one): Construction ☐ Warranty ☐ Routine Operation ☐ Maintenance Verification ☐ Performance Verification ☐
Address:	**Location:**
GI Construction Date:	**GI Warranty Date:**

VISUAL INDICATORS:

Inspection date and time: MM/DD/YYYY HH:MM:SS	Weather (24 hours prior to inspection):
Inspected by:	**Inspection duration (minutes):**

COMPONENT	INDICATOR	CONDITION		FOLLOW-UP
Contributing Drainage Area	**Contributing drainage area condition:** Area differs by >10% from design or as-built drawing; Excessive trash, debris, sediment or other pollutant load is present or impairing function of the GI; Land cover has changed	Comment/Measurements:		Action:
		Pass ☐ **Fail** ☐		Timeframe:
Inlet	**Inlet structural integrity:** Damage to inlet or sediment pad structure is impairing function of the GI	Comment/Measurements:		Action:
		Pass ☐ **Fail** ☐		Timeframe:

COMPONENT	INDICATOR	CONDITION	FOLLOW-UP
Inlet *(Continued)*	**Inlet obstruction:** Sediment/trash/debris/vegetation ≥5cm deep or blocking inflow over one third (33%) of the width	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Pretreatment sediment accumulation: Device is ≥50% full of sediment/trash/debris or inflow of water to the GI is impaired	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Inlet erosion: Gullies or bare soil areas ≥30cm in length are visible	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
Perimeter	**GI dimensions:** Differ from design or as-built drawing by >10%	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Side slope erosion: Gullies, ruts or bare soil areas ≥30cm in length are visible	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Surface ponding area: Maximum surface ponding area differs from design by >25%	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Pavement Surface Condition / Tree Opening *(if applicable)***:** Differential settlement, cracking or other grade abnormalities at tree opening or over covered soil trenches.	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:

TORONTO

COMPONENT	INDICATOR	CONDITION	FOLLOW-UP
Filter Bed	**Standing water:** Standing water ponded on filter bed surface >24 hours after the end of a storm event	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:
	Trash: Trash is visible and impairing aesthetics or function of the GI	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:
	Filter bed erosion: Gullies, ruts or bare soil areas ≥30cm in length are visible	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:
	Mulch depth: Average depth is less than 5cm or greater than 15cm or bare soil areas are visible	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:
	Filter bed sediment accumulation: Mean or local accumulation of sediment is ≥5cm in depth	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:
	Surface ponding depth: Maximum differs from design or as-built drawing by >10%	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:
	Filter bed surface sinking: Local surface depressions are ≥10cm in depth or animal burrows are visible	Comment/Measurements:	Action:
		Pass ☐　　**Fail** ☐	Timeframe:

COMPONENT	INDICATOR	CONDITION	FOLLOW-UP
Filter Bed *(Continued)*	**Check dams** *(if applicable)*: Structures are missing or buried in sediment	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
Planting Area	**Tree condition** *(if applicable)*: Tree is not thriving, displaying signs of damage, stress, pests or disease.	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Vegetation cover: Less than 80% of planting area is covered by living vegetation	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Vegetation condition: Vegetation is over-grown or over-crowded and is impairing aesthetics or obstructing sight lines needed for safety	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Vegetation composition: More than 50% of the vegetation is undesirable (e.g. weeds, invasive) or not the species specified in the planting details	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
Outlet	**Monitoring well condition:** Structural damage or sediment clog is visible and impairing its function or cap is missing	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:
	Underdrain obstruction: Structural damage, sediment clog or vegetation roots are visible and reducing conveyance capacity of the pipe by ≥ 33%	Comment/Measurements:	Action:
		Pass ☐ **Fail** ☐	Timeframe:

COMPONENT	INDICATOR	CONDITION	FOLLOW-UP
Outlet *(Continued)*	**Overflow outlet obstruction:** Structural damage, sediment/trash/debris is obstructing outflow, structure is full of water or grate is missing	Comment/Measurements:	Action:
		Pass ☐ Fail ☐	Timeframe:
	Trench drain obstruction *(if applicable)*: Structural damage, sediment clog or vegetation are visible and reducing conveyance capacity of the drain by ≥ 33%	Comment/Measurements:	Action:
		Pass ☐ Fail ☐	Timeframe:

Simplified Notation:

Inspection Type: C = Construction; W = Warranty; RO = Routine Operation; MV = Maintenance Verification; PV = Performance Verification
Comments: N/A = Not Applicable; N/I = Not Inspected
Actions: 0 = No Action Required; 1 = Routine Maintenance Required; 2 = Structural Repair Required; 3 = Further Investigation Required

Photographs:

Notes and Sketches:

TORONTO

SOIL CHARACTERIZATION TESTING:

GI Identifier:	Inspection Type (Check one): Construction ☐ Warranty ☐ Routine Operation ☐ Maintenance Verification ☐ Performance Verification ☐
Sampling date and time: MM/DD/YYYY HH:MM:SS	**Weather (24 hours prior sampling):**
Sampled by:	**Sampling duration (minutes):**

Sample ID/ Sample #	Sampling Location	Sample Collected? (Yes/No)	Filter Media Depth (cm)	Maximum Penetrometer Reading* (PSI, kg/cm² or kPa)	Sample ID/ Sample #	Sample Location	Sample Collected? (Yes/No)	Filter Media Depth (cm)	Maximum Penetrometer Reading* (PSI, kg/cm² or kPa)

Notes and Sketches:

Reference ASTM D6951/D6951M Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications

NATURAL OR SIMULATED STORM EVENT TESTING:

GI Identifier:	Inspection Type (Check one):
	Construction ☐ Warranty ☐ Routine Operation ☐
	Maintenance Verification ☐ Performance Verification ☐
Testing date and time: MM/DD/YYYY HH:MM:SS	Subsurface water storage reservoir depth (mm):
Tested by:	Test duration (hours):

	Parameter	Test #1	Test #2	Test #3	Average
A	**Volume of water directed to the GI (L or m^3, estimated from contributing drainage area and rainfall depth for natural storm events, measured by magnetic flow meter for simulated storm events)**				
B	Maximum post-storm filter bed surface water level (mm, at end of rainfall or delivery of water to the GI)				
C	Date/time (mm/dd/yyyy hh:mm:ss) of maximum post-storm filter bed surface water level				
D	Date/time (mm/dd/yyyy hh:mm:ss) when filter bed surface water level reaches 50mm				
E	Minimum post-storm filter bed surface water level (mm, zero or static reading or level just prior to onset of next rain storm):				
F	Date/time (mm/dd/yyyy hh:mm:ss) of minimum post-storm filter bed surface water level (zero or static reading or level just prior to onset of next rain storm):				
G	Date/time (mm/dd/yyyy hh:mm:ss) when filter bed surface is fully drained (zero or static water level reading):				
H	**Filter bed surface ponding event duration (h, (G-C)*24)**				
I	**Filter bed surface infiltration rate estimate (mm/h, (F-D)*24)**				
J	Maximum post-storm subsurface storage reservoir water level (mm, at end of rainfall or delivery of water to the GI)				

	Parameter	Test #1	Test #2	Test #3	Average
K	Date/time (mm/dd/yyyy hh:mm:ss) of maximum post-storm subsurface storage reservoir water level				
L	Subsurface storage reservoir starting water level (mm, half full water level):				
M	Date/time (mm/dd/yyyy hh:mm:ss) of subsurface storage reservoir starting water level (half full)				
N	Subsurface storage reservoir ending water level (mm, one quarter full water level)				
O	Date/time (mm/dd/yyyy hh:mm:ss) of subsurface storage reservoir ending water level (one quarter full)				
P	Date/time (mm/dd/yyyy hh:mm:ss) when subsurface storage reservoir is fully drained (zero or static water level reading)				
Q	**Subsurface water storage reservoir drainage period duration (h, (P-K)*24)**				
R	**Subsurface water storage reservoir drainage rate (mm/h, (L-N)/(M-O)*24)**				

Acceptance Criteria:

- Water flows into GI as intended
- Filter bed surface infiltration rate ≥25 mm/h and ≤203 mm/h, or consult manufacturer or vendor for an acceptable range specific to the product
- Surface water storage reservoir (i.e., surface ponding) fully drains within 24 hours of the end of the storm
- Underdrain peak flow rate is within +/- 15% of design specification
- Active subsurface water storage reservoir volume drains within 48 to 72 hours of the end of the storm for newly constructed GIs, and within 48 to 96 hours for in-service GIs