



# Stormwater Operation and Maintenance Inspection Checklist: Underground Detention

City Code Chapter 96 Article I 96-14

City of Springfield, Department of Environmental Services: 290 E Central St Springfield, MO 65802 (417) 864-1944

<b>Inspector Name and Title:</b>	
<b>Date of Inspection:</b>	<b>Property Address:</b>
<b>Owner Name:</b>	<b>Owner Address:</b>
<b>Owner Phone:</b>	<b>Owner Email:</b>
<p><b>Inspection Requirements:</b> Conduct the inspection at least 48 hours after any rainfall event so as to get an accurate determination regarding standing water in the system.</p> <p><b>Confined Spaces:</b> Note that underground detention systems are considered confined spaces, and appropriate safety precautions should be taken. Always use the buddy system for inspection. Use a gas meter to detect the presence of any hazardous gases. If hazardous gases are present, do not enter the vault. Use a push camera to perform the inspection, or, if entry is required, use a venting system to address the hazard. Once it is determined to be safe, enter utilizing appropriate entry equipment such as a ladder and tripod with harness.</p>	

Circle a score (0,1 or 2 for each area/row)	<b>0 – Good Condition</b> Should monitor and continue routine maintenance	<b>1 – Degraded Condition</b> Routine maintenance or repair needed. Functionality could be affected if not addressed	<b>2 – Serious Condition</b> Immediate need for maintenance or repair to restore functionality
<b>TRASH/DEBRIS/SEDIMENT REMOVAL</b>			
<p><b>INLET:</b> Is there excessive trash/debris/sediment accumulation where stormwater enters the underground detention system?</p>	There is no accumulation of trash, debris or sediment at the inlets.	Trash/debris/sediment accumulation is visually unpleasant and/or could be preventing stormwater from entering the underground system as designed.	Stormwater cannot enter the underground system as designed because of the trash/debris/sediment accumulation at the inlets.
<p><b>UNDERGROUND CHAMBERS/PIPES:</b> Is there excessive trash/debris/sediment accumulation in the underground system? <b>Utilize the Maintenance Log at the end of the inspection form to track accumulation.</b></p>	There is no accumulation of trash, debris or sediment in the underground system affecting storage capacity or functionality.	Sediment accumulation is between 0 and 3". Maintenance does not need to be done at this time but the system needs to be monitored.	Trash/debris/sediment accumulation has significantly decreased the storage capacity of the detention basin making it not function as designed. Sediment depth is >3". The accumulation must be removed immediately using a Jet Vac or other means, in accordance with the manufacturer's maintenance plan.
<p><b>OUTLET:</b> Is trash/debris/sediment accumulation hindering stormwater from leaving the underground system as designed?</p>	There is no accumulation of trash, debris or sediment that could prevent stormwater from leaving the underground system.	Trash/debris/sediment accumulation is preventing stormwater from leaving the underground system as designed.	Trash/debris/sediment accumulation is completely blocking the outlet structure and preventing stormwater from leaving the underground system as designed. The accumulation must be removed immediately.
<b>STRUCTURAL MAINTENANCE</b>			
<p><b>INLET:</b> Structural condition of pipes/junction boxes, curb inlets and other inlets to the underground detention system?</p>	Infrastructure draining to the underground detention system is in good structural condition.	Structural components are cracked or broken but not affecting functionality.	Structural components have failed and are no longer functioning as designed. Repair or replace immediately.
<p><b>INSPECTION PORTS:</b> Structural condition of inspection ports or other access points?</p>	Inspection ports and other access points are in good structural condition.	Structural components are cracked or broken but not affecting functionality.	Structural components have failed and are no longer functioning as designed. Repair or replace immediately.

<p><b>CONFINED SPACES:</b> For sites that can be physically entered, are hazardous fumes or other dangers present?</p>	<p>No hazardous fumes or other dangers are present</p>	<p>N/A</p>	<p>Hazardous fumes or other dangers are present – inspection must be done using a push camera.</p>
<p><b>UNDERGROUND CHAMBERS/PIPES:</b> Condition of structural components (seepage, settlement, cracking, joint alignment, etc.)?</p>	<p>The structural components are in good condition.</p>	<p>Structural components are cracked or broken but not affecting functionality.</p>	<p>Structural components have failed and are creating a safety hazard and/or causing the underground system to not function as designed. The structural components need to be repaired.</p>
<p><b>OUTLET:</b> Condition of structural components such as the concrete outlet box, concrete weir, manhole, etc.</p>	<p>Outlet structure is in good condition and has no structural failures.</p>	<p>The structural components of the outfall structure are cracked or broken but not affecting functionality.</p>	<p>Outlet structure has failed and is preventing the underground system from functioning as designed (this includes any unreported modifications to the structure). The failure could be a potential safety hazard. Outlet structure must be repaired or replaced immediately.</p>
<p><b>DESIGN AND FUNCTIONALITY</b></p>			
<p><b>STANDING WATER:</b> Is there evidence of standing water longer than 48 hours (ponding, odors, algae)? <b>See note at top of inspection form. Inspections should be done at least 48 hours post rain event.</b></p>	<p>There is no evidence of standing water.</p>	<p>N/A</p>	<p>There is standing water and/or evidence of standing water. The issue must be addressed immediately- regrading or redesign of the underground system should be considered.</p>
<p><b>Inspection Comments:</b></p>			

**This inspection form and inspection photos\* should be turned in to Sarah Davis at [sedavis@springfieldmo.gov](mailto:sedavis@springfieldmo.gov) or 290 E Central St Springfield, MO 65802**

\*A minimum of three photos should be taken of the following: inlet(s), the entirety of the SCM and the outlet structure regardless of condition. Areas rated as 1 or 2 should have additional photo documentation.

Maintenance log:

Date	(1) Fixed point to chamber bottom*	(2) Fixed point to top of sediment	Sediment Depth (1) – (2)	Observations / Actions	Inspector

\*Refer to as-built submitted to the City Stormwater Engineering Division. If you need a copy of this document, contact Sarah Davis at [sedavis@springfieldmo.gov](mailto:sedavis@springfieldmo.gov).