## #4 - Maintenance Standards for Control Structure/Flow Restrictor:

| V | Drainage<br>System<br>Feature | Defect or<br>Problem                       | Condition When Maintenance is<br>Needed   | Results Expected<br>When Maintenance is<br>Performed   |
|---|-------------------------------|--|---|--|
|   | General                       | Trash and Debris<br>(Includes<br>Sediment) | Material exceeds 25 percent of sump depth or 1 foot below orifice plate.                    | No trash and debris blocking or potentially blocking control structure orifice.                  |
|   | General                       | Structural<br>Damage                       | Structure is not securely attached to manhole wall.   | Structure securely attached to wall and outlet pipe.   |
|   | General                       | Structural<br>Damage                       | Structure is not in upright position (allow up to 10 percent from plumb).                   | Structure in correct position.   |
|   | General                       | Structural<br>Damage                       | Connections to outlet pipe are not watertight and show signs of rust.                       | Connections to outlet pipe are watertight; structure repaired or replaced and works as designed. |
|   | General                       | Structural<br>Damage                       | Any holes–other than designed holes–in the structure.                                       | Structure has no holes other than designed holes.  |
|   | Cleanout Gate                 | Damaged or<br>Missing                      | Cleanout gate is not watertight or is missing.  | Gate is watertight and works as designed.  |
|   | Cleanout Gate                 | Damaged or<br>Missing                      | Gate cannot be moved up and down by one maintenance person.                                 | Gate moves up and down easily and is watertight.   |
|   | Cleanout Gate                 | Damaged or<br>Missing                      | Chain/rod leading to gate is missing or damaged.  | Chain is in place and works as designed.   |
|   | Cleanout<br>Gate              | Damaged or<br>Missing                      | Gate is rusted over 50 percent of its surface area.   | Gate is repaired or replaced to meet design standards.   |
|   | Orifice Plate                 | Damaged or<br>Missing                      | Control device is not working properly due to missing, out of place, or bent orifice plate. | Plate is in place and works as designed.   |
|   | Orifice Plate                 | Obstructions                               | Any trash, debris, sediment, or vegetation blocking the plate.                              | Plate is free of all obstructions and works as designed.   |
|   | Overflow<br>Pipe              | Obstructions                               | Any trash or debris blocking (or having the potential of blocking) the overflow pipe.       | Pipe is free of all obstructions and works as designed.  |
|   | Manhole                       | Cover Not in<br>Place                      | Cover is missing or only partially in place. Any open manhole requires maintenance.         | Manhole access cover/<br>lid is in place and<br>secure.  |

## #4 – Maintenance Standards for Control Structure/Flow Restrictor:

| $\sqrt{}$ | Drainage<br>System<br>Feature | Defect or<br>Problem                | Condition When Maintenance is<br>Needed  | Results Expected<br>When Maintenance is<br>Performed                           |
|-----------|-------------------------------|-------------------------------------|--|--|
|           | Manhole                       | Locking<br>Mechanism Not<br>Working | Mechanism cannot be opened by one maintenance person with proper tools. Bolts into frame have less than one-half inch of thread (may not apply to self- locking lids). | Mechanism opens with proper tools.   |
|           | Manhole                       | Cover Difficult to<br>Remove        | One maintenance person cannot remove lid after applying normal lifting pressure. Intent is to keep cover from sealing off access to maintenance.                       | Cover can be removed and reinstalled by one maintenance person.                |
|           | Manhole                       | Ladder Rungs<br>Unsafe              | Ladder is unsafe due to missing rungs, misalignment, not securely attached to structure wall, rust, or cracks.   | Ladder meets design<br>standards. Allows<br>maintenance person safe<br>access. |