[Date]

[Contact]

City of Longmont

385 Kimbark Street

Longmont, CO 80501

**Re: [Development Name] Detention Facility & PSC Certification Letter**

City of Longmont Staff:

The intent of this letter is to formally certify that the extended detention basin installed at [development name] was designed to meet all detention and water quality technical standards outlined in Title 14.24 and 14.26 of the City of Longmont (City) Municipal Code, and was inspected and confirmed to be constructed in general conformance with the City-approved construction documents and specifications.

[Summarize any deviations from approved construction plans and specifications, if any. Identify why these changes do not impact the claim above.]

The as-constructed [10-year/EURV] and 100-year flood detention volumes are within #.#% of the design volumes, and the release rates have been verified to not exceed the designed requirements. A freeboard of #.## ft was also confirmed to be provided by the constructed facility.

The basin shape is adequate to minimize short circuiting. Basin side slopes have been installed to the correct slope and in a stable manner to help facilitate maintenance and safety in the basin. A maintenance path providing access to basin components including the forebay(s) and the outlet structure has been installed.

The inlet(s) to the facility have been constructed as designed, and the forebay(s) have been properly constructed to dissipate energy from in-flowing water in a manner consistent with the design documents. The trickle channel is properly poured with a minimum #.#% slope through the entire basin, and the grading adjacent to the trickle channel is flush so as to avoid erosion issues moving forward.

The micropool has been installed correctly, providing a ponding depth of 2.5-feet. The well screen has been properly installed, and has been submerged to the bottom of the micropool. The micropool side-slopes match the design intent.

The outlet structure and orifice plate(s) were correctly installed to facilitate attenuation and release of the Water Quality Capture Volume within XX hours, which meets or exceeds the minimum 40-hour drain down time. Further, we have verified that all basin storage volumes identified in the Final Drainage Report associated with this development will be provided in the facility as demonstrated by the updated as-built documents and stage storage curves.

The emergency spillway has been properly installed to convey the un-detained 100-year storm. Vegetation has been / will be established throughout the facility as identified in the landscaping drawings, and all other supporting documentation.

Key metrics used in the approved design have been updated for the as-built condition, and are identified in the table below:

|  |  |  |  |
| --- | --- | --- | --- |
| **Metric** | **Design** | **As-built** | **Units** |
| 100-Yr Storage Volume |  |  | Ac-ft |
| 100-Yr WSE^ |  |  | Ft |
| 100-Yr Release Rate |  |  | cfs |
| 10-Yr/EURV Storage Volume |  |  | Ac-ft |
| 10-Yr/EURV WSE^ |  |  | Ft |
| 10-Yr Release Rate/EURV Drain Time |  |  | cfs or Hours |
| WQCV |  |  | Ac-ft |
| WQCV WSE^ |  |  | Ft |
| WQCV Drain Time |  |  | Hours |
| ^ WSE: Water surface elevation | | | |

Attached to this letter you will find:

* Original design construction documents including all relevant details and calculations for the detention and water quality facility
* As-built construction documents for the detention and water quality facility (includes a topographic survey of the constructed facility including the as-built elevations of pipe inverts, outlet structure elevations, and overflow spillway).
* Updated calculations for the facility including a stage storage curve for the as-built facility as well as the outlet structure design indicating appropriate release rates and drain down time were met.
* Updated Operations and Maintenance Manual associated with the PSC. The Manual should be adjusted based on any changes that were made during construction and should contain the stamped as-built details for the PSC.
* Photograph Documentation of Extended Detention Basin
  + Outlet Structure & Micropool (prior to being filled with water demonstrating the trash rack extends to the bottom of the micropool)
* Provide the Stormwater Detention & Infiltration (SDI) worksheet necessary to submit to the Compliance Portal. After the SDI sheet and the PSC is structurally approved you will need to submit to the compliance portal.
  + [SDI Worksheet](mhfd.org/wp-content/uploads/2020/04/SDI_Design_Data_v2.00.xlsm)
  + [Compliance Portal](https://maperture.digitaldataservices.com/gvh/?viewer=cswdif)

Sincerely,

First Last Name, P.E.

Title

Organization Name

NOTE: THIS LETTER MUST BE STAMPED AND SIGNED BY A COLORADO LICENSED PROFESSIONAL ENGINEER