



FRUIT HEIGHTS CITY PUBLIC HEARING NOTICE

NOTICE IS HEREBY GIVEN that the Fruit Heights City Council will hold a Public Hearing on Tuesday, April 9, 2024, at 7 pm in the Council Chambers of City Hall located at 910 S. Mountain Road, Fruit Heights, Utah, 84037.

PUBLIC HEARING FOR THE FOLLOWING: Storm Water and Drainage

See more information on the pages below.

CHAPTER 4

STORM WATER AND DRAINAGE

4.1 Storm Water Utility

- A. **Purpose.** The purpose of this Chapter is to comply with The Act, EPA, and DEQ mandate that the City fund its storm water program in order to protect public health, safety, and welfare. The purpose of the funds collected under this Chapter shall be used at the sole discretion of the City for: implementing the objectives of the storm water program, establishing and implementing Best Management Practices (BMPs), improving the storm water system, employing staff and equipment, managing storm water runoff, protecting property and infrastructure, pollution prevention, protecting the water supply, protecting receiving waters, protecting the irrigation system, preserving wetlands and wildlife habitat, protecting flood plain and open space, and establishing a viable method of financing the construction, operation, and maintenance of the storm water system.
- B. **Policy.** A storm water utility is the most equitable and efficient method of funding the storm water program in the City and ensuring that each property pays its share of the amount that the property contributes to, benefits from, and otherwise uses the storm water system.
- C. **Creation.** The City Council hereby creates and establishes a storm water utility as part of the overall storm water program.
- D. **Funding.** The funds collected from the storm water utility shall be deposited in an enterprise fund and held in reserve to manage income, expenses, and other financial transactions related to the storm water program.
- E. **Facilities.** The storm water enterprise fund operates independently of the general fund. The storm water enterprise fund shall have the same relationship to the City as other utilities or enterprise funds. The City storm water system is hereby transferred to the storm water enterprise fund in consideration for the storm water enterprise fund taking primary responsibility for planning, designing, constructing, maintaining, administering, and operating the storm water system.
- F. **Administration.** The storm water enterprise fund shall be administered by the City department designated by the Mayor. The department may use another City fund in conjunction with the storm water enterprise fund to accomplish the objectives of the storm water program.

4.1.1 Storm Water Utility Fee

- A. **Imposed.** Each developed parcel of real property in the City shall be charged a monthly storm water utility fee to fund the federal mandate under Phase II of the Clean Water Act.
- B. **ERU.** The fee shall be based on the number of equivalent service units (ERUs) contained in the parcel. The City Council finds that the ERU is the most accurate measurement for determining the amount that each parcel contributes to, benefits from, and otherwise uses

the storm water utility. Based on the recommendation of the City Engineer, the City Council determines that one ERU equals 2,800 square feet of impervious surface area.

- C. **Calculation.** Each single-family residential parcel contributes approximately the same amount of storm water runoff. Therefore, each developed single family residential parcel shall pay a base rate of one (1) ERU. All non-single family residential parcels shall pay a multiple of this base rate, expressed in ERUs, according to the total measured impervious area on the parcel being imposed a fee.
- D. **Fee.** The monthly storm water utility fee is established by ordinance or resolution as set forth in the current adopted Consolidated Fee Schedule.
- E. **Policies.** The City may adopt policies and procedures consistent with the municipal code to assist in the application, administration, and interpretation of storm water regulations.
- F. **Appeals.** A person may appeal to the Public Works Director any storm water utility fee imposed upon the same based upon error in the method the rate was calculated, interpreted, or applied. The appeal shall be in writing, shall state any facts supporting the appeal, and shall be made within ten (10) days of the decision, action, or bill being appealed. If the person or entity is not satisfied with the decision, a further appeal may be made to the City Manager. The decision of the City Manager shall be final.
- G. **Enforcement.** Violations, enforcement, and penalties of this Chapter are set forth in Section 4.2.13.

4.1.2 Billing

- A. **Policy.** The storm water utility is consistent with other interrelated services of the City that provide for the public health, safety, and general welfare in an environmentally responsible and financially sound manner.
- B. **Billing.** Billing for the storm water utility shall be completed in conjunction with the regular monthly utility billing statement of the City.
- C. **General Provisions.** The following general provisions apply:
 - 1. For parcels where there is no utility bill for the property, there is no storm water utility fee imposed.
 - 2. A utility fee is a civil debt owed to the City by the person paying for the City utility services provided to the property.
 - 3. All properties receiving water service shall be charged the applicable utilities incurred under the municipal code regardless of whether the owner or occupant of the property requests the storm water utility.

4. Failure to pay any portion of the utility bill may result in termination of water service.

D. **Administration.** The Mayor or their designee may modify, reduce, impose, or rebate erroneous billing charges not to exceed a three (3) month consecutive time period. The Mayor or their designee may make special exceptions on billing charges based upon special circumstances on a case-by-case basis.

4.2 STORM WATER REGULATIONS

4.2.1 Purpose and Findings

- A. **Purpose.** The purpose of the storm water regulations set forth in the municipal code is to comply with Phase II of the Clean Water Act (Act) and the applicable regulations of the Environmental Protection Agency (EPA) and the Utah Department of Environmental Quality (DEQ).
- B. **Findings.** The City Council makes the following findings regarding storm water:
1. **Facilities.** The City operates a storm water system consisting of a network of man-made and natural facilities, structures and conduits, that collect and route storm water runoff.
 2. **Endangerment.** Uncontrolled or inadequately controlled storm water runoff endangers public health and safety by causing, among other things: flooding, pollution, property damage, erosion, traffic and emergency response interruption, and impacts the ground water supply.
 3. **Pollution.** Storm water runoff carries concentrations of oil, grease, nutrients, chemicals, heavy metals, toxic materials, and other undesirable materials that can damage the integrity of ground waters and receiving waters, including the culinary water supply.
 4. **Impervious Surfaces.** Developed properties in the City contribute to the storm water system by converting natural ground cover into impervious surfaces.
 5. **Maintenance.** Developed properties in the City make use of and benefit from the City's operation and maintenance of the storm water system.
 6. **Regulations.** The Act, EPA, DEQ, and applicable rules mandate storm water regulations that apply to the City and otherwise.
 7. **Operation.** Effective maintenance, operation, regulation, and control of the storm water system is necessary for the health, safety, and general welfare of the City, its residents, and its businesses.

4.2.2 Applicability

The storm water regulations in the municipal code apply to all developments of one (1) or more acres of land, or any part of a common development plan regardless of the size of any of the individually owned or developed sites.

4.2.3 Definitions

The following words and phrases shall be defined in the municipal code relating to storm water as follows:

- A. **“Best Management Practices or BMPs”** means a range of management procedures, schedules of activities, prohibitions of practices, maintenance procedures, and other management practices which have been demonstrated to effectively control the quality and/or quantity of storm water runoff and which are compatible with the planned land use. BMPs also include treatment requirements, operating procedures, and practices to control site runoff, spillage or leaks, sludge or water disposal, or drainage from raw material storage. A list of sample BMP’s and their effectiveness ratings can be found in the most current version of the Storm Water Management Plan adopted by the City or as otherwise provided.
- B. **“Catch Basin”** means a drain inlet designed to keep out large or obstructive matter.
- C. **“City”** means the geographical boundaries of Fruit Heights City, Utah, and also refers to the classification of the jurisdictional area within a municipal separate storm sewer system (MS4).
- D. **“Common Development Plan”** means development that is contiguous to an area where multiple separate distinct construction activities may be taking place at different times or different schedules under an overall plan. For example, if a developer buys a large parcel and subdivides lots, builds roads, installs pipes, and runs electricity with the intention of constructing homes or other structures, this would be considered a common development plan. If the land is parceled off or sold, and construction occurs on plots that are less than one (1) acre by separate, independent builders, this activity still would be subject to storm water permitting requirements. The common development plan also applies to other types of land development such as industrial or business parks.
- E. **“Debris”** means any dirt, rock, sand, vegetation, trash, junk, or litter.
- F. **“Detention Basin”** means an area designed to detain peak flows from storm water runoff and to regulate release rates of that water into the storm drainage system, also allowing debris to settle out. Detention basin outlets may also be connected to downstream storm drains. Flows entering detention basins are released via outlet piping.
 - 1. Regional Detention Basins mean large detention basins owned and maintained by the City.

2. Local Detention Basins mean smaller basins typically in a development or subdivision that is constructed by the development or subdivision which, following construction and acceptance, the ownership, operation, and maintenance may either be conveyed and maintained by the City, association, or private owner(s) as determined by the City.
- G. **“Development”** means any man-made change to improved or unimproved real estate of any parcel to alter it from its natural condition by site preparation, grading, filling, and/or the construction of improvements or other impervious surfaces. It also includes a site plan, building permit, subdivision, or construction of facilities, buildings, or other structures.
- H. **“Director”** means the person designated by the City to enforce storm water regulations.
- I. **“Disturb”** means to alter the physical condition, natural terrain, or vegetation of land by clearing, grubbing, grading, excavating, filling, building, or other construction activity.
- J. **“Drain Inlet”** means a point of entry into a sump, detention basin, or storm drain system.
- K. **“Source Protection Zone”** means an area that is protected as a source of culinary or drinking water determined by geo-hydrology and designed to protect groundwater aquifers and well from development or pollution.
- L. **“Equivalent Residential Unit or ERU”** means the average amount of impervious surface, expressed in square feet, on developed single family residential parcels in the City. One ERU equals 2,800 square feet of impervious surface area.
- M. **“Hazardous Material”** means any material, including any substance, waste, or combination thereof, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause, or significantly contribute to, a substantial presence or potential hazard to human health, safety, property, or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. Hazardous material includes, but is not limited to, any hazardous substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.
- N. **“Illicit Connection”** means an unlawful connection of:
1. Any drain or conveyance, whether on the surface or subsurface, which may allow an illicit discharge to enter the storm drain system. Examples include, but are not limited to:
 - a. Any conveyance which allows non storm water discharge such as sewage, processed wastewater, or any other wastewater (black or grey) to enter the storm drain system.
 - b. Any connections to the storm drain system from indoor drains or sinks, regardless of whether said drain or connection had been previously allowed, permitted, or approved by a government agency.

2. Any drain or conveyance connected to or discharging to the storm drain system, which has not been:
 - a. Documented as part of approved plans, maps, or equivalent records of the City.
 - b. Otherwise approved in writing by the City.
- O. **“Illicit Discharge”** means any non-storm water discharge to the storm water system. Illicit discharges include both:
1. Direct connections, including but not limited to: wastewater piping either mistakenly or deliberately connected to the storm water system.
 2. Indirect connections, including but not limited to: infiltration into the storm water system or spills collected by drain inlets.
- P. **“Impervious Surface”** means any hard surface, other than the natural surface, that prevents or retards the absorption of water into the soil, or that causes water to run off the surface in greater quantities or at a greater rate of flow than the natural surface. Such impervious surfaces include, but are not limited to: roofs, concrete, asphalt, and similar improvements that prevent or impede the natural absorption of water into the soil.
- Q. **“Municipal Separate Storm Sewer System or MS4”** means a conveyance or system of conveyances including: road drainage systems, catch basins, curbs, gutters, ditches, man-made channels, or storm drains.
- R. **“Percolation”** means the ability of a soil to absorb water. Typically measured by a Standard Percolation Test in units of minute per inch.
- S. **“Person”** means any individual, corporation, partnership, association, company, or political body, including any agency of the State of Utah and the United States government.
- T. **“Pollutant”** means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, industrial, municipal and agricultural waste, paints, varnishes, solvents; oil and other automotive fluids, non-hazardous liquid and solid wastes and yard wastes, refuse, rubbish, trash, garbage, litter, or other discarded or abandoned objects, articles; and accumulations, that may cause or contribute to pollution such as floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coliform and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure (including but not limited to sediments, slurries, and concrete resins); and noxious or offensive matter of any kind.
- U. **“Redevelopment”** means alterations of a property that change the impervious surface on the site more than ten (10) percent.

- V. **“Retention Basin”** means a ground depression area designed to retain flows from storm water runoff, to encourage infiltration into surrounding sub surface soils, and may include overflow piping. A retention basin allows debris to settle from the storm water discharge and must be periodically cleaned and dredged.
- W. **“Sanitary Sewer Overflow or SSOs”** means a discharge of untreated sanitary wastewater or SSOs.
- X. **“Storm Drain”** means a closed conduit for conducting collected storm water.
- Y. **“Storm Water”** means any flow that occurs during or following any form of natural precipitation. Storm water includes only the portion of such flow that is composed of precipitation.
- Z. **“Storm Water Construction Activity Permit”** means a permit issued by the City before any person may excavate, grub and clear, grade, or perform any type of construction activity that will disrupt or cause a change in the natural landscape in the City of one (1) acre or more, or any part of a common development plan. This permit is required in conjunction with a SWPPP.
- AA. **“Storm Water Program”** means the overall approach by the City in administering, funding, creating and implementing policies that support the objectives of The Act, EPA, and DEQ relating to storm water management in conjunction with the ongoing maintenance and operation of the storm water system.
- BB. **“Storm Water Pollution Prevention Plan or SWPPP”** means the required plan as approved by DEQ and the City before any construction activity occurs as part of a development.
- CC. **“Storm Water System”** means the system of conveyances including, but not limited to: sidewalks, road drainage systems, catch basins, detention basins, curbs, gutters, ditches, man made channels, sumps, and storm drains generally owned and operated by the City or its designee, designed and used for collecting or conveying storm water. The storm water system is also referred to as MS4.
- DD. **“Storm Water Run-off”** means water generated by storm water flows over land.
- EE. **“Sump”** means a City approved formalized underground structure, surrounded by drain rock, that is used in rare special conditions to collect storm water, which allows the slow release of water into the surrounding sub soil.

4.2.3 Prohibited Obstructions

- A. **Unlawful Obstructions.** It is unlawful for any person to:
 1. Obstruct the flow of water in the storm water system.
 2. Contribute to the obstruction of the flow of water in the storm water system.

3. Cover or obstruct any drain inlet.

B. Exemptions. The following obstructions are exempt:

1. Street and/or storm water improvement projects authorized by the City.
2. Flood control and prevention activities performed by the City.
3. Obstructions approved by the City and/or state as part of a SWPPP.
4. Obstructions occurring during clean up periods established by the City.

4.2.4 Prohibited Discharges

A. Unlawful Discharges. It is unlawful for any person to discharge non storm water discharges to the MS4 including spills, illicit connections, illegal dumping, and SSOs into the storm sewer system. All SSOs must be reported to the Division of Water Quality and to the MS4s local wastewater treatment facility.

B. Exemption. The following discharges are exempt:

1. Water line flushing.
2. Landscape irrigation.
3. Irrigation water.
4. Lawn watering runoff.
5. Diverted stream flows.
6. Rising ground waters.
7. Uncontaminated ground water infiltration.
8. Uncontaminated pumped ground water.
9. Discharges from potable water sources.
10. Foundation drains.
11. Air conditioning condensation.
12. Springs.
13. Water from crawl space pumps.
14. Footing drains.
15. Private individual residential car washing.
16. Flows from riparian habitats and wetlands.
17. Dechlorinated swimming pool or aesthetic pool/pond/fountain discharge.

18. Residual street wash water.
19. Dechlorinated water reservoir discharge.
20. Discharges or flows from emergency firefighting activities.

4.2.5 Prohibited Storage and Debris

It is unlawful for any person to maintain, store, keep, deposit, or leave any pollutant or hazardous material, or any item containing a pollutant or hazardous material, in a manner that may result in the discharge of the pollutant or hazardous material to the storm water system.

4.2.6 Best Management Practices

Any person connecting to the storm water system, developing a parcel of one (1) acre or more, or developing a common development plan shall employ the appropriate BMPs as adopted by the City. The BMPs may be structural and/or nonstructural, depending on the needs of the site. The BMPs employed shall be designed to ensure that the quality and quantity of storm water released to the storm water system meets the requirements of applicable law and the City's NPDES permit. Design shall ensure that the development shall not exceed the designed capacity of the storm water system or jeopardize the integrity of the storm water system.

4.2.7 Authority to Enter or Inspect

- A. **Access.** The director may enter all private properties for the purposes of inspecting, observing, measuring, sampling, repairing, or maintaining any portion of the storm water facilities lying within an actual or prescriptive easement. The director shall perform other duties necessary for the proper operation of the storm water system. All entry and maintenance shall be completed according to any special terms of any easement.
- B. **Inspections.** Whenever necessary to make an inspection to enforce any provision of the municipal code, or whenever the City has cause to believe that there exists, or potentially exists, a condition which constitutes a violation of the municipal code, the City may direct its qualified personnel to enter the premises at all reasonable times to inspect, detect, investigate, eliminate, and enforce any suspected non storm water discharges, including illicit discharges, illegal dumping, or other violation. During the same time the City may inspect and collect records related to storm water compliance.
- C. **Refusal.** In the event an owner or occupant refuses entry after a request to enter and inspect has been made, the City is hereby empowered to seek assistance from any court of competent jurisdiction in obtaining such entry.
- D. **Access.** The access for the City to inspect storm water control measures on private property that is vested under this section and includes both construction phase and post construction access. Upon approval of the director, the City may allow the owner/operators or a qualified third party to conduct maintenance so long as:

1. That at least annual certification, in the form of inspection documentation which has been performed, is provided to the City.
 2. The structural controls are adequately operating and maintained as such were designed to protect water quality as provided in the original maintenance agreement and plans submitted upon vesting and approval of the site.
 3. A maintenance agreement is required on private property that is vested after the effective date of this Chapter and includes both construction phase and post construction access and where owner/operators or a qualified third party to conduct maintenance as provided herein. Said maintenance agreement shall be promulgated in the form and manner as determined by the director so long as the agreement includes at a minimum:
 - a. Allows the City oversight authority of the storm water measures.
 - b. A provision that the agreement acts as a covenant that runs with the land.
 - c. Allows the City to inspect and perform necessary maintenance or corrective actions neglected by the owner/operators or the qualified third party.
 - d. Allows the City to recoup the costs from the owner/operator as necessary to cover the expenses for necessary actions conducted by the City.
- E. **Interpretation.** The City interprets this regulation as secondary and subservient to the United States Constitution and the Utah State Constitution as applied to property rights, land use, development, and similar rights. Specifically, the intent of this regulation is not to be applied to violate vested property rights nor to be a physical invasion of property rights as determined by the United States Supreme Court in *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982). The City recognizes that the United States Supreme Court interprets property right in conjunction with the laws and constitutions of each state. Therefore, Utah law also plays an important role in defining property rights. For the purpose of determining when a property right is vested the City shall continue to apply the Utah Supreme Court ruling in *Western Land Equities, Inc. v. City of Logan*, 617 P.2d 388 (1980), that states a property owner is vested to follow the City regulations in effect at the time a land use application is filed. Furthermore, where there is vagueness in any land use regulation, including the storm water regulations, it shall be interpreted in favor of the property owner.

4.2.8 Requirement to Monitor and Analyze

If a test or inspection by the City, its designee, or other authorized agency indicates that a site is causing or contributing to storm water pollution, illegal discharges, and/or non-storm water discharges to the storm water system or waters of the United States, and if the violation continues after notice of the same, the City or other authorized agency may require any person engaged in the illicit activity and/or the owner or operator of the site to provide, at their own expense, monitoring and analyses as required by the City or other applicable agency to ensure compliance with the municipal code.

4.2.9 Damage System

Any person who damages any portion of the storm water system or any irrigation system shall be responsible for repairing the damage. The damage shall be repaired by a licensed contractor and, where applicable, be repaired in accordance with the current adopted Public Works Standards for Development, Design, & Construction adopted by the City. It is unlawful to remove or alter any portion of the storm water system or irrigation system without permission from the director or owner of the irrigation system.

4.2.10 Authorized Access

It is unlawful for any person to open any storm water access hole, grate, lid, cover, inlet, head gate, valve, pipe or other otherwise access any storm water facility without express permission from the director.

4.2.11 Wetlands and Permits

Any development that may affect any wetland or potential wetland, regardless of whether such wetlands are identified or unidentified, shall provide to the City an accurate wetland delineation that has been completed within the past eighteen (18) months prior to City approval of the development. Any delineated wetland shall be accurately shown on all construction plans and any plat map relating to the development. Prior to issuance of any building permit, the developer shall accurately stake and install appropriate BMPs all on site delineated wetlands and shall maintain such until the notice of termination has been completed. The developer shall also provide to the City a copy of the EPA wetlands 404 permit, stream alteration permit, regulator letters, and other related permit or regulator documents required by any regulatory agency relating to the development.

4.2.12 Federal and State Compliance

Nothing in the storm water regulations shall be interpreted to relieve any person from an obligation to comply with an applicable federal, state, or local law.

4.2.13 Violation and Enforcement

Where a person has violated the municipal code storm water regulations the following procedure applies:

- A. **Warning.** A verbal warning shall be issued and documented in the City records by the City Official who issued the warning.
 1. **Correction Period.** The City shall give seven (7) calendar days for the violation to be corrected.
 2. **Follow-Up Inspection.** A follow-up inspection shall be conducted following the correction period and the violation either deemed resolved or escalated to a written warning.

3. **Exemption.** The City may skip this procedural step and immediately proceed with other more severe actions against the violator if:
 - a. The violator has committed the same violation in the past.
 - b. The violation, in the opinion of the City, creates a risk to persons, the environment or property.
 - c. The City deems the violation to constitute an risk.
- B. **Written Violation.** Issue a written notice of violation to the person in violation and document the written violation in the City records by the City Official who issued the written notice of violation.
 1. **Notice Requirements.** Such notice may require without limitation one or more of the following as may be applicable:
 - a. The performance of monitoring, analyses, and reporting.
 - b. The elimination of illicit connections or discharges.
 - c. That violating discharges, practices, or operations shall cease and desist.
 - d. The abatement and/or remedy of storm water pollution or contamination hazards and the restoration of any affected property.
 - e. Payment to cover administrative, mitigation, monitoring, analyses, and reporting costs.
 - f. The implementation of source control or treatment BMPs.
 2. **Correction Period.** The City shall give seven (7) calendar days for the violation to be corrected.
 3. **Follow-Up Inspection.** A follow-up inspection shall be conducted following the correction period and the violation either deemed resolved or escalated.
- C. **Prosecution.** The City may skip the written notice of violation procedure set forth in this section and immediately proceed with criminal and/or civil action against the violator if any of the following may have occurred:
 1. The violator has committed the same violation in the past.
 2. The violation, in the opinion of the City, creates a serious risk to persons, the environment or property.
 3. The City deems the violation to constitute an emergency.

D. **Penalty.** The follows penalties apply for each violation:

1. **Criminal.** The violation by any person of any provision of a governing storm water regulation in the municipal code is a class B misdemeanor. Each day that a violation continues shall constitute a separate offense.
2. **Civil.** In addition to other penalties and remedies, any person violating or permitting the violation of any governing storm water regulation is subject to a civil fine not to exceed a \$1,000.00, per violation, per day, in addition to reasonable attorney's fees and costs incurred by the City for enforcement of storm water regulations.
3. **Recovery.** The City is entitled to seek and receive recovery of damages equal to the cost to make all repairs and/or replace any materials in addition to any criminal or civil fines and/or penalties imposed.
4. **State Penalties.** A violation of storm water regulations may also be subject to any penalties that may be imposed by the State of Utah, under the authority of the Utah Water Quality Act, Title 19, Chapter 5 of the Utah Code Annotated.
5. **Federal Penalties.** A violation of storm water regulations may also be subject to prosecution, fines, and penalties imposed by the United States of America.
6. **Permit.** The Small MS4 General UPDES Permit, Permit No. UTR090000 defines the maximum penalties for violations of Permit conditions as follows:
 - a. The General UPDES Permit provides that any person who violates a Permit condition implementing provisions of the Act is subject to a civil penalty not to exceed \$10,000 per day of such violation. Any person who willfully or negligently violates Permit conditions or the Act is subject to a fine not exceeding \$25,000 per day of violation. Any person convicted under Utah Code Annotated §19 5 115(2) a second time shall be punished by a fine not exceeding \$50,000 per day.
 - b. The General UPDES Permit provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under the Permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction be punished by a fine of not more than \$10,000, per violation, or by imprisonment for not more than six (6) months per violation, or by both in accordance with Utah Code Annotated §19 5 115(4).
 - c. The General UPDES Permit provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this Permit shall, upon conviction, be punished by a fine of not more than \$10,000, per violation, or by imprisonment for not more than six (6) months per violation, or by both.

7. **Stop Work Order.** In addition to other fines and penalties, a stop work order may be issued by the director or designee upon the discovery of work being conducted without a required permit. No construction activity may commence or continue at any site for which a permit has been revoked or suspended until the permit has been reinstated or reissued.
8. **Injunctive Action.** The City may seek injunctive relief or take other lawful corrective action to install and/or maintain appropriate storm water control measures on any site required to have such measures in place and seek reimbursement for the same, including penalties, administrative costs, attorney's fees, and court costs.

4.3 Storm Water Construction Activity Permit

4.3.1 Purpose and Intent

The purpose of this Chapter is to prevent the discharge of sediment and other construction related pollutants from construction sites. Sediment and debris from construction sites are a major source of pollution to waterways and water systems located within the City and surrounding areas. Each year storm water runoff carries tons of sediment from construction sites into local drainage systems, irrigation systems, canals, rivers, and lakes. Sediment from storm water runoff clogs and obstructs storm drains, culverts, and canals. Storm water sediment also damages private property, wetlands, wildlife habitat, and water quality.

4.3.2 Activity Permit Required

A Storm Water Construction Activity Permit is required in conjunction with the SWPPP before any person may excavate, grub and clear, grade, or perform any type of construction activity that will disrupt or cause a change in the natural landscape within the City that is one (1) acre or more, or any part of a common development plan. Development of a subdivision greater than or equal to one acre in size qualifies under this Section even if each of the individual lots in the subdivision are smaller than one (1) acre.

4.3.3 Activity Permit Issuance

- A. **Process.** Any person or entity desiring a storm water construction activity permit must first submit a "Notice of Intent" (NOI) with DEQ. Upon DEQ approval of the NOI, any person desiring a storm water construction activity permit must file the SWPPP with the City along with any documentation necessary for the City to calculate the number of ERUs for each parcel upon completion of development. The storm water construction activity permit is approved and issued in conjunction with a building permit.
- B. **Compliance.** Failure to submit a SWPPP required for the required storm water construction activity permit is grounds for denying a development application.
- C. **Fee.** The storm water construction activity permit fee as stated in the current adopted Consolidated Fee Schedule shall be added to each building permit unless another fee or fee schedule is established by ordinance or resolution.

- D. **Approval.** Approval of the building permit includes issuance of the storm water construction permit. The City may impose conditions in connection with the approval of a building permit to enforce the SWPPP and include specific measures to prevent erosion, unlawful discharge, sediment accumulation, debris removal, and other storm water measures for the construction site.
- E. **Effect.** Unless otherwise revoked or suspended for a violation, a storm water construction activity permit is effective for the full period of the construction activity. The construction activity will not be considered to be completed until the following events occur:
 - 1. **Termination.** The storm water construction activity permit shall be considered terminated after the permittee notifies the City of completion of the project and a final inspection is performed to verify site stabilization. The permittee shall also verify the site is stabilized and give “Notice of Termination” to DEQ. The permittee shall keep and maintain all permit required improvements on the site until termination.
 - 2. **Amendments.** If the proposed construction activity for a site to which a permit pertains is materially altered from the SWPPP, an amended SWPPP shall be submitted for approval by permittee.

4.3.4 Storm Water Pollution Prevention Plan

A SWPPP is required for all sites disturbing one (1) acre or more or any part of a common development plan. The SWPPP shall contain the information required in the general permit and by DEQ. The City may require additions, changes, modifications, and amendments to the SWPPP in order to conform to the Storm Water Management Plan adopted by the City or to remedy deficiencies occurring at the construction site during construction.

4.3.5 Erosion and Sediment Control

The permittee of a SWPPP shall install the erosion and sediment control measures required by the approved SWPPP prior to commencing other construction activity on the site where the SWPPP. The erosion and sediment control measures shall be properly installed and maintained in accordance with the SWPPP, specifications of a manufacturer, and best practices. The Permittee shall maintain such measures on the site until the City accepts termination.

4.3.6 Inspection and Entry

Issuance of a storm water activity permit authorizes the EPA, DEQ, City, or other applicable agency to enter the site and inspect compliance with the SWPPP. The permittee shall also make available upon request inspection of storm water records for the construction site.

4.3.7 Revocation or Suspension of a Permit

- A. **Action.** A storm water construction permit issued under this Chapter may be revoked or suspended by the City upon the occurrence of any one of the following:

1. Failure of permittee to comply with the SWPPP or any related condition.
 2. Failure of permittee to comply with the storm water regulations in the municipal code.
 3. A determination by the City that the erosion and sediment control measures implemented by a permittee pursuant to the SWPPP are inadequate to prevent or minimize, to the greatest extent practicable, the discharge of sediment, debris or other pollutants from the construction site by storm water.
- B. Notice.** The City shall provide permittees with written notice of noncompliance before revoking or suspending a permit. The notice shall:
1. State the location and nature of the noncompliance and shall also specify what action is required for the permittee to avoid revocation or suspension of the permit.
 2. Allow the permittee a reasonable time to take the necessary corrective action to avoid revocation or suspension of the permit which time, in the absence of exceptional circumstances, shall not be less than ten (10) nor more than thirty (30) days.
 3. Be delivered or mailed to the address listed for the permittee in the building permit application or the site of the construction activity, or both.
 4. If the permittee fails to correct the problems identified in the notice during the time specified in the notice, the City may suspend or revoke the permit by recording a certificate of noncompliance on the property where the violation occurred.
 5. The permittee may appeal a suspension or revocation determination of any permit as provided in this Chapter.
- C. Circumstances.** The City may take any steps necessary to mitigate, remedy, or alleviate exceptional circumstances and recover the costs from the same from the permittee and person responsible for creating an exceptional circumstance. For purposes of this Chapter, exceptional circumstances include, but are not limited to:
1. Situations which involve a risk of injury to persons.
 2. Damage to storm drain facilities.
 3. Damage to other property or the environment.
 4. Discharge of a pollutant into the environment.
- D. Order.** The City may issue a stop work order upon a violation of the storm water regulations, SWPPP, the revocation or suspension of a permit, or upon the discovery of work being conducted without a required permit. No construction activity may be commenced or

continued on any site where a stop work order has been issued, or where a permit has been revoked or suspended until the permit has been reinstated or corrected.

E. **Reinstatement.** A permit may be reinstated upon:

1. Correction and compliance with all storm water regulations.
2. Correction of substandard performance.
3. Correction of non-compliance issues.
4. Upon the filing of an amended SWPPP which corrects the deficiencies of the original SWPPP.

4.3.8 Connection Permit

A. **Permit.** A permit is required to make any connection, directly or indirectly, to the storm water system.

B. **Application.** For a person to connect to the storm water system the person must:

1. Submit a completed application form as provided by the City.
2. Incorporate BMPs that meet the requirements of the storm water regulations.
3. Provide a maintenance plan, including any maintenance agreement outlining how the applicant will maintain the storm water improvements listed in the application.
4. The application may be submitted to the City in conjunction with a building permit or subdivision approval, whichever is applicable.

C. **Approval.** The storm water connection permit application shall be reviewed by the City and may be issued, modified, or denied in conjunction with the building permit.

D. **Consideration.** In considering whether to issue a connection permit, the City shall determine:

1. Whether the application is complete.
2. Whether all development fees have been paid.
3. Whether the application complies with all storm water regulations and policies.
4. Whether the application conforms to City storm water system plans.
5. Whether the application incorporates effective BMPs.

6. The potential for the connection to introduce pollutants into the storm drain system.
 7. Whether the proposed connection creates a safety hazard.
 8. Whether the proposed connection affects the integrity of the storm sewer system infrastructure.
 9. Whether the proposed connection endangers any ground water or drinking water supply.
 10. Whether the applicant has submitted a maintenance plan and any maintenance agreement ensuring the proper maintenance and upkeep of the applicant's connection and on-site storm water improvements.
- E. **Failure.** Failure to construct or maintain storm water improvements in accordance with an approved storm water connection permit shall be a violation of this Chapter.
- F. **Drawings.** Any person connecting to the storm water system shall provide the "as built" drawings showing the details and the location of the connection along with any location device. The plans shall be provided in a format acceptable to the City.

4.3.9 Exemptions

The following activities are exempt from the requirements of this Chapter:

- A. **Public.** Activities of a public utility or government entity. Activities to remove or alleviate an emergency condition, restore utility service, restore transportation, or otherwise protect public health, safety, and welfare.
- B. **Agriculture.** Bona fide agricultural and farming operations.

4.3.10 Enforcement and Appeals

Violations, enforcement, and penalties of this Chapter are set forth in Section 4.2.13. An aggrieved person may appeal to the City appeal authority by filing an appeal in writing, stating the facts supporting the appeal, within ten (10) days of the decision being appealed. All appeals shall be handled in accordance with the procedure in the municipal code for the appeal authority. The decision of the appeal authority shall be final.

4.4 STORM DRAIN DESIGN AND CONSTRUCTION

4.4.1 General Provisions

- A. **Findings.** The City Council make the following findings:
1. The City has unique topographical challenges resulting from sensitive lands, geological limitations, hillsides, and conditions that present slope failure or landslide risks.

2. Storm water and saturation can exacerbate slope failure and landslide risk along with causing hillside erosion.
 3. The City must manage potential pollution sources that pose a danger to the health, safety, and welfare of the public in the City.
 4. There exists high ground water in the City and precludes certain storm water control measures, limits ground storage, necessitates extensive storm water facility design, requires landscape and open space preservation, requires additional construction standards, and implementation of specific policies set forth in this Chapter.
- B. **Purpose.** This Chapter establishes construction standards for development within the City relating to storm water to conform with the Act and applicable storm water mandate from the EPA and DEQ.
- C. **Intent.** This Chapter is intended to follow the natural flow of storm water from initial rainfall hydrology, to conveying the rainwater to the storm water system, to a basin, then discharging to a natural or other outlet location, along with best practices and penalties for violations.

4.4.2 Rainfall Hydrology

- A. **IDF Rational Method.** The equations for the “Rational Method” of rainfall hydrology is based upon the “Intensity-Duration- Frequency” (IDF) curve. The City Engineer may develop a table and data for the Rational Method.
- B. **Calculation.** For all development and subdivisions, the equation for the Rational Method and IDF curve may be used, unless a hydrology computer model is required by the City Engineer.
- C. **Rainfall Pattern.** For computer modeling the rainfall pattern used is based upon the “Farmer Flecher Distribution.” This pattern is for a one (1) inch unit storm and must be multiplied by rainfall depth for storms of other magnitudes.
- D. **Rainfall Totals.** Rainfall calculations shall use the rainfall pattern total obtained from the “NOAA Atlas” based upon a one (1) hour storm event.

4.4.3 Storm Water System

- A. **Irrigation Policy.** Storm waters shall not be conveyed, used, or discharged in to any irrigation canals, ditches, or facilities that are not abandoned for irrigation use. Irrigation water may generally not be conveyed, used, or discharged in the storm water system except where allowed by the City. Nothing in this part shall be construed to limit the ability of the City to convert any part of an irrigation system to storm water use or vice versa or share tailwater.
- B. **System Specifications.** All storm water systems and storm water basins either local, regional or otherwise, including detention and retention shall be designed and installed to

accommodate a minimum one hundred (100) year storm event, unless a higher minimum is required by the City Engineer. The storm water system shall be designed and constructed to withhold the eightieth (80th) percentile of a storm event before any discharge into any outlet. The storm duration used for the sizing of the storm water system shall be based upon the worst-case scenario and not the time of concentration.

- C. **Piping Specifications.** Storm water system piping shall be designed and installed to accommodate a minimum ten (10) year storm event, if the above ground conveyance, detention, or retention will support the difference to the one hundred (100) year storm event, unless a higher minimum is required by the City Engineer. The storm duration used for the sizing of piping shall be based upon the worst-case scenario and not the time of concentration.
 - 1. Piping shall be Re-enforced Concrete Pipe (RCP), of appropriate class.
 - 2. The minimum size for piping main lines shall be fifteen (15) inch diameter.
 - 3. For specific piping specifications refer to the Public Works Standards for Development, Design, & Construction.
 - 4. Where determined by the City Engineer, larger system piping shall be installed to accommodate future development.
- D. **System Costs.** The cost to provide an adequate storm water system for a development shall be borne by the developer.
- E. **Installation.** The storm water system shall be installed in accordance to the Public Works Standards for Development, Design, & Construction.
- F. **Access.** The storm water system shall have clean out boxes, inlets, manholes, and other facilities installed as appropriate and in conjunction with changes in grade or alignment, at maximum distance of typically four hundred (400) feet between accesses, unless the Public Works Standards for Development, Design, & Construction specify otherwise.
- G. **LID.** The system shall be designed to include the LID specifications required by law.

4.4.4 Storm Water Basins

- A. **Policy.** It is the policy of the City:
 - 1. To require the proper design, construction, and maintenance of adequate storm drainage basins for all development.
 - 2. All development and redevelopment sites are required to have a storm water basin and system as provided in this Chapter.
 - 3. An on-site basin(s) is/are required on each parcel sought for development in the City.

- B. **Water Source.** It is critical that any development in close proximity to a river, stream, well, aquifer, or source protection zone as defined by the state be set back as determined by the state, City Engineer, or other affected entity. All basin designs and calculations shall be reviewed by the City Engineer for approval.
- C. **Basin Types.** The ownership of storm water basins is specified as follows:
1. **Private Basin.** A private basin is allowed where the development provides for a owner association responsible for the ownership, operation, maintenance, repair, and replacement of the private basin(s) subject to a written agreement with the City.
 2. **Local Basins.** In subdivisions, a local detention basin shall be constructed by the developer as part of the development. Following acceptance of the construction, the ownership, operation, maintenance, repair, and replacement shall be the City or owner association subject to a written agreement with the City.
 3. **Regional Basins.** Regional basins shall be owned, operated, maintained, repaired, and replaced by the City as constructed in accordance with the criteria provided by the City Engineer.
- D. **Access.** Basin access shall be as follows:
1. **Private Basin.** The owner association of a private basin shall provide to the City a construction and service access easement from a public road around the basin in sufficient size to make all necessary repairs by standard equipment used for such purpose.
 2. **Other Basins.** As part of site approval of any development the City shall be granted a construction and service access easement from a public road around the basin in sufficient size to make all necessary repairs by standard equipment used for such purpose.
- E. **Basin Design and Construction.** Basins shall be constructed to enhance safety, health, and aesthetics of the area as follows:
1. **Setback.** Each basin shall be constructed where possible with a flat rim circling the basin which shall be setback from a property line, adjoining property, and from any structure an appropriate distance determined by the City Engineer to prevent erosion and to allow a backhoe and dump truck to circle the rim for maintenance and repair.
 2. **Percolation.** No reduction is allowed for percolation in a basin based upon volume due to the nature of basins silting in over time and also possible frost conditions in conjunction with a storm event.
 3. **Engineering.** Basins, whether detention or retention, must be designed and approved by a licensed civil engineer.

4. **Location.** Detention basins shall be located with convenient access for maintenance and repair by maintenance personnel. This generally means that the basin property has frontage along a public roadway.
5. **Volume.** Basin volume and design shall be approved by the City Engineer. Volume is measure to the basin overflow or spillway elevation. Volume in pipes, drains, or swells is not considered in the volume calculation for a basin.
6. **Fencing.** A six (6) foot chain link fencing is required where standing water of more than three (3) feet may exist after a storm event. Fencing shall be installed in accordance with the Public Works Standards for Development, Design, & Construction.
7. **Slopes.** Side slopes of a basin shall be approximately 3:1 (horizontal to vertical) for proper landscaping, mowing, and access.
8. **Bottom Slope.** The basin floor shall be designed so as to prevent the permanent ponding of water. The slope of the floor of the basin shall not be less than one (1) percent to provide drainage of water to the outlet grate and prevent prolonged wet, soggy or unstable soil conditions. The preferred minimum slope is two (2) percent.
9. **Freeboard.** There should be at least one (1) foot of freeboard (berm above the high-water mark).
10. **Spillways.** Spillways shall:
 - a. Include a path with a maintained swell and drainage easement to a safe location.
 - b. Be designed to avoid erosion.
 - c. Overflow spillways are intended to introduce flows back into the main pipe and are typically downstream of the outlet control.
 - d. Emergency spillways are intended to carry flows beyond the capacity of the overflow spillway to a safe downstream location.
 - e. All spillways shall be designed to protect adjacent embankments, nearby structures, and surrounding properties.
11. **Outlet Control.** Basins shall include a calculated fixed orifice plate(s) mounted on the outlet of the basin as specified by the City Engineer. Where required by the City Engineer. Each basin shall have a locking screw type head gate(s) (such as a Waterman C 10 O.A.E.) set at a calculated opening height for the discharge and with a chain to fix the position.
12. **Grates.** All grates on inlets and outlets must be unpainted, hot dipped galvanized metal with bars generally spaced at three (3) inches.

13. **Low Flow Piping.** The inlet and outlet structures may be in different areas of the basin, requiring a buried pipe to convey any base flows that enter and exit the basin, rather than a cross gutter or surface flow. The minimum pipe size and material for the low flow shall be twelve (12) inch diameter or as approved by the City Engineer.
 14. **Surface.** The ground cover surface area of a basin may either be seeded, sodded, or covered with fabric and cobble, as specified by the City. Where seeded, measures shall be taken to eliminate erosion until grasses are established. A minimum of four (4) inches of topsoil must be installed prior to sod or seed placement. Cobble sizes shall be four (4) inches or greater in size overlying a weed barrier approved by the City Engineer. Grass or hydro seeding on all basins shall be installed in accordance with the Public Works Standards for Development, Design, & Construction. The basin shall be constructed with an automated sprinkler system previously approved by the City Engineer. The landscape shall be in accordance with the municipal code.
 15. **Embankment.** If a raised embankment is constructed for a basin, including construction of granular materials, it shall be provided with a minimum of six (6) inches of clay cover on the inside of the berm to prevent water passage through the soil.
 16. **Excavation.** If the basin is constructed primarily by excavation, then it may be necessary to provide an impermeable liner and land drain system when constructed in proximity of basements or other below grade structures as determined by a geotechnical study.
 17. **Open.** All storm water basins shall be open at the surface for visible inspection, to ensure adequate size, functionality, and proper maintenance.
- F. **Multi Use Basins.** Basins shall be designed as multi use recreation facilities to include amenities such as pavilions, picnic tables, playground equipment, ball courts, or other amenities where deemed appropriate. Structures shall be designed for saturated soil conditions and bearing capacities are to be reduced accordingly. Restrooms shall not be in areas of inundation. Inlet and outlet structures should be located as far as possible from all facilities. No wood chips or floatable objects shall be used in any basin design for the area is intended to be inundated.
- G. **Preferred Basin.** Detention Basins are preferred over retention basins. Above grade basins are preferred over below grade basins.
- H. **Prohibited.** The following are prohibited:
1. Groundwater injection well.
 2. Basins with standing groundwater.
 3. Non-landscaped basins.

- I. **Retention Basins.** Retention basins are basins which hold and store water until it is evaporated or percolated, and may be used when the following conditions are met:
1. A retention basin must be specifically approved by the City Engineer after all other alternatives are exhausted.
 2. Retention basins shall not be permitted within Zones 1, 2, or 3 of any source protection zone. Due to the silting in potential, no percolation rate may be used in the calculation of volume unless an approved oil separator and sand separator is installed upstream. The volume must be based upon the one hundred (100) year storm event with a three (3) hour duration based upon the IDF. The curve for such shall be approved by the City Engineer.
 3. The basin is greater than five hundred (500) feet or fifty (50) feet times the number of lots in the entire development (whichever is greater) from the storm drain system, and otherwise is topographically incapable of draining to the storm water system.
 4. The basin is not located within a hazardous area such as a steep slope, flood plain, high ground water area, or other hazard area.
 5. The percolation rate of the ambient soils must be considered using recommendation set forth in a site specific geo-technical study and account drain time and address future silting in of the basin.
- J. **Standing Water.** Permanent standing water shall be eliminated in basin design to minimize mosquitos and associated viruses, except this does not apply to wetlands.
- K. **Drainage.** Basins should completely drain within forth eight (48) hours of the primary storm event. Low flow bypass pipes may be required.
- L. **Landscape.** Each basin shall be landscaped, designed to eliminate erosion, minimize drowning risk, and enhance aesthetics of the area. Landscape shall be with approved trees, plants, and landscape material as provided in the municipal code.

4.4.5 Discharge

- A. **Policy.** It is the policy of the City to control storm water at the source and minimize the potential for flooding downstream.
- B. **Run-off.** Run-off leaving a development shall not exceed, as much as practicable, the predeveloped quantities and qualities. All development over one (1) acre shall prevent off-site discharge of precipitation from all rainfall events less than or equal to the eightieth (80th) percentile. The eightieth (80th) is generally calculated as .048 inches of rainfall.
- C. **Allowable Discharge.** The allowable discharge rate from any non-regional basin shall:

1. Not exceed the pre hard surfacing discharge for the entire site for the 100-year storm event.
 2. Not exceed the maximum discharge rate set by the City Engineer depending on the proposal, the facts and circumstances of the basin and historical flow, and the drainage within the surrounding area. If no maximum discharge rate is established, then a standard discharge rate of 0.1 cubic feet per second per total acre within the development draining to the basin is applied.
 3. Controlled discharge is allowed via an established orifice or adjustable headgate as approved by the City Engineer and in accordance with this Chapter.
- D. **Flow Concentration.** By nature of development, flows are concentrated to one or more locations where historically, sheet flow in lower concentrations may have left the site. Attempts shall be made to minimize the runoff concentrated quantity to the flows stated above by use of detention basins, downstream piping to safe areas or other methods as deemed necessary by the City Engineer.
- E. **BMPs.** Best Management Practices (BMPs) shall be used to the maximum practicable to ensure healthy water quality based upon national standards for the same. BMPs are included in the Storm Water Management Plan adopted by the City as implemented by the City Engineer relating to each development.
- F. **Overflows.** Attention shall be given to overflow locations and pathways to safe locations downstream for discharges. Drain easement shall be obtained as may be needed. Pipes and/or swales shall be sized to accommodate a one hundred (100) year flow.
- G. **Irrigation.** No storm water discharge is permitted into any irrigation facility, except where existing historical drainage occurs, and such shall be eliminated upon development. Nothing in this part prevents an abandoned irrigation facility from being converted to the storm water system. To comply with Utah Code Annotated §73-1-14 and §73-1-15, written permission should be obtained from the owner or operator of an irrigation facility before development occurs.
- H. **Prohibited.** Due to high water tables in the City, standard sump drains, injection facilities, and underground storm water facilities or tanks of any kind are prohibited. No parking lot, including sidewalks and all other impervious surfaces, shall be used for storm water storage of any kind above or below surface.

4.4.6 Low Impact Development Standards

- A. **Guide Adopted.** The DEQ published “A Guide to Low Impact Development within Utah” (Guide) dated December 2018, prepared by Michael Baker International, to implement Low Impact Development (LID) standards is hereby adopted by the City and incorporated herein by this reference.

- B. **Report.** A storm water quality report following the template provided in the Guide, as may be further defined by the City Engineer, shall be submitted to the City Engineer for each development or subdivision.
- C. **Standards.** The following standards may be further defined in the Public Works Standards and Technical Specifications. The following low impact development standards shall be implemented into each development to the greatest extent practicable as approved by the City Engineer:
1. **Rain Gardens.** Rain gardens are shallow bioretention areas with engineered or native soils.
 2. **Bioretention Cells.** These are shallow bioretention areas with engineered soil. They typically differ from rain gardens by having a delineation such as a curb, wall, or other distinct boundary.
 3. **Bioswales.** Bioswales are vegetated open channels designed to convey and treat storm water runoff.
 4. **Vegetated Strips.** These landscaped strips are designed to receive and treat sheet flow from adjacent surfaces.
 5. **Box Filters.** Box filters are typically used around trees as a bioretention systems appropriate in urban drainage areas where space is limited.
 6. **Green Roof.** A green roof is a vegetated system that is designed to retain and treat rooftop runoff.
 7. **Pervious Surfaces.** Pervious surfaces such as permeable pavement, concrete pavers, pervious concrete, modular open pavers, and other types of pervious surfaces provide structural support for light vehicle or pedestrian traffic while also providing open space for storm water infiltration.
 8. **Infiltration Basin.** Infiltration basins are shallow depressions that use existing soils to retain and provide treatment for storm water runoff by capturing and infiltrating runoff over a specified draw-down time.
 9. **Infiltration Trench.** An infiltration trench is a linear excavation backfilled with a combination of gravel, open graded stone, and sand layers that provides storage within the pore space of the specified layers.
 10. **Harvest System.** A harvest and reuse system refers to any type of runoff collection system that captures rainfall, stores it temporarily, and reuses it for irrigation, landscaping, or other non-potable uses.
 11. **Other.** Other standards may be reviewed and approved by the City Engineer as technology further develops for low impact devices.

D. **Feasibility.** Compliance with this Section shall be made to the greatest extent feasible under the circumstances and conditions of the site and subject to:

1. Issues related to ground water based upon geotechnical engineering.
2. Issues related to soil conditions based upon geotechnical engineering.
3. Issues related to sensitive lands as determined by the City Engineer.

4.4.7 Permits and Practices

In addition to the permits required by the municipal code, additional permits required for each development include:

- A. **UPDES.** Utah Pollution Discharge Elimination System Permit is a general storm water permit for construction activities required for all development of one (1) acre or more and includes: area used for staging, stockpiling, or any other temporary construction activity. This permit is obtained from DEQ online and requires a SWPPP.
- B. **Stream Alteration.** A stream alteration permit is required for any development affecting certain watercourses and is obtained from the Utah Department of Natural Resources, Division of Water Rights. This permit overlaps the 404 wetlands permit, discussed below, because it is applicable to the area equal to the stream plus two times the bank full width (up to 30 feet). Any modifications to the stream or banks within this area must comply with the stream alteration permit.
- C. **EPA 404 Permit.** This permit is filed with the US Army Corp of Engineers where wetlands or jurisdictional waters may be located. It is applicable for all wetlands within a development. This will apply to all wetlands depending upon the presence of water, soils type, low land classification, and vegetation. As part of this permit a wetlands delineation report must be completed. The scope of this permit applies to all jurisdictional waters of the United States up to and including the normal high-water mark. Any mitigation that may be required, must be done prior to recording a final plat. Any wetlands identified must be indicated on the final plat.
- D. **BMPs.** The Storm Water Management Plan contains a listing of BMPs that can be used on a site.
 1. BMPs typically fall into the following categories:
 - a. Perimeter control.
 - b. Erosion controls.
 - c. Sediment control.

- d. Materials handling and spill prevention.
 - e. Waste management.
 - f. Good housekeeping.
2. The application of some BMPs include, but are not limited to:
- a. Oil Separators (OWS). Oil Separators shall be required on all sites with parking facilities that exceed two (2) acres, automobile salvage or wrecking areas, or smaller sites anticipating oily discharges such as mechanic shops or similar facilities. Oil separators must be capable of removing particulate down to 150 microns. Possible products include, but are not limited to: BaySaver, Storm Cerptor, Vortechnic. Where oil separators are required, sizing and design of OWS must be reviewed by the City Engineer prior to installation. Consideration must be given to frequency and ease of maintenance of the structure. Basins shall have agreements in place with the City to periodically clean the separator in accordance with the manufacturer's specifications. Manufacturers recommendations for sizing shall be followed with calculations submitted to the City. The separator may either be installed upstream or downstream of the basin keeping in mind that flows on the outlet of the basin would be smaller.
 - b. Inlet Protection (IP). The Storm Water Management Plan may allow straw bales, silt fences, or curb snakes (after asphalt is placed). Filter fabric under the grate shall not be permitted since drainage is greatly inhibited.
 - c. Tracking Pads (CR). Sites must have a tracking pad to eliminate mud from being tracked onto the adjacent street. If mud is tracked, the contractor shall be responsible to sweep the streets as necessary.
 - d. Surface Sweeping (SC). If mud or dirt is tracked onto a travel surface such as a road or parking area, the developer or owner shall be responsible for sweeping the surface to remove the mud and dirt.
 - e. Concrete Washout (CWM). A place must be located within the subdivision or on the site for concrete washout. No washout will be permitted on the street which would then continue to the storm drain. The washout area may need to be maintained and temporarily excavated until the building foundations and driveways are constructed, or some other arrangement made.
 - f. Silt Fences (SF). Silt fences must be installed to prohibit the flow of sediments off the site in accordance with manufacturers recommendations and the Storm Water Management Plan.
 - g. Notice Sign. All development and subdivisions are required to at least one (1) notice sign that is clearly visible at each entryway to the subdivision indicating that the SWPPP must be obtained and followed. Said notice sign shall be maintained by the original development or subdivision applicant until termination. The specific

wording on the sign relating to storm water, and other related requirements, may be prescribed and modified by the City as needed to meet challenges created by development and to give notice to requirements of law.

4.4.8 Violations and Penalties

Violations, enforcement, and penalties of this Chapter are set forth in Section 4.2.13.