

**CITY OF JORDAN
ORDINANCE NO. 2022-01**

**AN ORDINANCE OF THE CITY OF JORDAN, MINNESOTA AMENDING SECTIONS
153.11(K)(2)(d)(4), 154.334(C)(1), and 154.335 (C)(12) & (13) of the Jordan City Code OF THE CITY CODE
TO UPDATE THE STORM WATER REQUIREMENTS TO ALIGN WITH THE 2040 COMPREHENSIVE
PLAN UPDATE**

Subdivision 1. PURPOSE. The City is required by Minnesota Statute to update its storm water ordinances to align with the current Comprehensive Surface Water Management Plan (CSWMP) adopted within its 2040 comprehensive plan.

Subdivision 2. AMENDMENT. NOW BE IT ORDAINED AND ENACTED by the City Council of the City of Jordan that Section 153.11 (K) (2) (d) (4) is hereby amended to read as follows:

(K) Storm water.

(2) All subdivision design shall incorporate adequate provisions for storm water runoff consistent with the Jordan Comprehensive Surface Water Management Plan (CSWMP) as amended, and with established city policies, and conform to the following standards:

(d) All storm water detention, retention and/or quality ponds shall be located in separate outlots and dedicated to the city. In addition, the subdivider shall provide adequate access to these outlots by means of easements or any other appropriate mechanism. The subdivider must provide the following:

4. Storm water runoff volumes and rates for the 2, 10 and 100-year events for the existing and proposed conditions. Rainfall depths for these storms are ~~2.8, 4.2 and 6.0~~ 2.86, 4.24, and 7.28 inches, with a Type II rainfall distribution.

Subdivision 3. AMENDMENT. NOW BE IT ORDAINED AND ENACTED by the City Council of the City of Jordan that Section 154.334 (C) (1) is hereby amended to read as follows:

(C) *Bluff protection criteria.*

(1) *Minimum bluff standards.* Any land disturbing activity, development, or redevelopment of land in an area that meets the minimum criteria of bluff standards in the comprehensive surface water management plan (CSWMP) shall require a current topographic survey to determine if a bluff is present. At its discretion, the city may waive the topographic survey requirement where a review of the available contour information clearly indicates a bluff is not present. Where bluffs are present the following rules shall apply:

(a) All grading, clear cutting, removal of vegetation and/or other land disturbing activities are prohibited in the bluff impact zone and/of bluff face;

(b) All ~~principal~~ structures shall be set back a minimum of ~~20~~ 50 feet from the top of the bluff ~~impact zone on all new lots or parcels created after the date of this ordinance adoption.~~ Agricultural buildings shall be set back a minimum of 30 feet from the top of the bluff;

~~(c) All accessory structures including, but not limited to, patios, unenclosed decks, sheds and fences shall be set back a minimum of 5 feet from the top of the bluff impact zone;~~

~~(d)~~ (c) All individual and community sewage treatment systems (ISTS or CSTS) shall be set back a minimum of 50 feet from the top of the bluff impact zone; and

~~(e)~~ (d) All stormwater ponds, swales, infiltration basins, or other soil saturation-type features shall be set back a minimum of 50 feet from the top of the bluff impact zone.

Subdivision 4. AMENDMENT. NOW BET IT ORDAINED AND ENACTED by the City Council of the City of Jordan that Section 154.335 is hereby amended to read as follows:

§ 154.335 STORMWATER MANAGEMENT.

(C) Criteria. Project-specific stormwater management plans shall comply with the following criteria:

(2) Stormwater runoff rates for the proposed activities, development, or redevelopment shall:

(a) Not exceed existing runoff rates for the 2-year, 10-year and 100-year, 24-hour, storm events;

(b) Not accelerate on- or off-site water course erosion, downstream nuisance, flooding or damage as demonstrated by the applicant according to division (C)(3)(d) below; and

(c) Be restricted to less than the existing rates when necessary for the public health, safety, and general welfare of the city.

(3) Runoff rates for the proposed activities in unincorporated areas shall:

(a) Not exceed pre-settlement runoff rates for the 2-year, 10-year, and 100-year, 24-hour storm events for land areas annexed into the city that are currently within unincorporated areas of the Scott WMO (Note: As land is annexed into a city, the land being annexed carries with it the existing condition. **Parcels developed after the date of this Standard within unincorporated areas will be regulated using pre-settlement conditions and this would then become the existing condition for the city once the area is annexed. If agricultural land is annexed, agriculture is the existing condition. If roads or streets are present they are part of the existing condition.**)

(b) The following curve numbers shall be used to analyze pre-settlement conditions:

Hydrologic Soil Group	Runoff Curve Number
A	30
B	55
C	71
D	77

(c) For post-development runoff, drained hydric soils shall be assumed to revert to an undrained condition unless the applicant demonstrates that publicly owned and maintained drainage facilities shall be adequate to maintain the drained condition.

(d) Post-development runoff shall not accelerate on or off-site water course erosion, downstream nuisance, flooding or damage as demonstrated by the applicant according to division (C)(4) below; and

(e) Runoff rates may be restricted to less than the pre-settlement runoff rates when necessary for the public health, safety, and general welfare of the City of Jordan.

(f) In situations where the smallest practical outlet as identified by the City is being used and the site will not meet the 2-year discharge rates as identified in the pre-settlement conditions, the site discharge may exceed the pre-settlement 2-year discharge rate if the

volume of the 2-year critical duration event being discharged is less than existing 2-year discharge volume from the site and the assessment required in paragraph (4) below is provided and shows no impacts from the increased discharge rate.

(4) An assessment of the potential for adverse impacts downstream of proposed site improvements, whether on- or off-site, is required except when the proposed activity, development or redevelopment is less than 20 acres and less than 8% of the site is covered by impervious surface, or when the rate control provisions of divisions (C)(2), (3), and (5), as applicable, are met; and the proposed activity, development, or redevelopment does not increase runoff volume for the 2-year, 24-hour, storm event (not including snow melt). To demonstrate that the proposed activity does not accelerate on- or off-site erosion, downstream nuisance, flooding or damage, the applicant shall complete an evaluation downstream to the point where the proposed activity is 10% of the drainage area (e.g. a 10 acre development shall evaluate downstream to the point where the drainage area is 100 acres). The evaluation at a minimum shall consist of and include an assessment of:

(a) Potential impacts to areas surrounding landlocked lakes or ponds, or lakes or ponds with inadequate outlets where flood levels would be increased by added runoff volume;

(b) Water levels in the receiving water bodies resulting from the contributing watershed's full annual runoff yield during a 100-year wet year using the simplified hydrologic yield method (SHYM), or other approved methods for back-to-back 100-year, 24-hour storm events, for both existing conditions and fully developed watershed conditions; and

(c) The identification of public and private structures (including low floor and entry elevations of residences, and ISTS), and infrastructure (sanitary sewer, stormwater pipes and facilities, and roads) surrounding the receiving water bodies and located within 2 vertical feet of the future conditions water level elevation predicted using the SHYM, or the elevation for the back-to-back 100-year, 24-hour storm event.

(5) If there are public or private structures or infrastructure located within 2 vertical feet of the future conditions SHYM, or back-to-back 100-year, 24-hour storm event elevation, the applicant shall either demonstrate that no adverse impacts to health, safety, welfare, or property damage, would occur; or shall provide corrective actions. Corrective actions shall include the following as necessary to mitigate in proportion to the proposed project impact:

(a) Controlling post-development runoff volumes at existing conditions;

(b) Controlling runoff rates to less than existing conditions;

(c) Protecting or re-locating impacted structures or infrastructure, or securing easements for additional flooded areas; or

(d) Other approved actions necessary to mitigate the impact.

(6) Potential impacts. In the event impacts to public or private structures, downstream infrastructure, and erosion along the drainage path or in downstream public waters are identified, an evaluation shall be required. Evaluations shall include:

(a) The identification of existing public and private drainage easements;

(b) The locations, condition, and dimensions of the existing drainage infrastructure to the nearest regional stormwater facility;

(c) The location and elevation of structures with low floors, or entries within 2 vertical feet of the 100-year flood level;

- (d) The location and description of known existing flooding problems;
- (e) A hydrologic and hydraulic assessment of flooding impacts of the proposed project on downstream public and private structures;
- (f) An assessment of existing and potential watercourse erosion, bank stability, bank protection, and watercourse slope;
- (g) An assessment of the hydrologic and hydraulic capacity of the downstream public and private infrastructure;
- (h) An assessment of property damages including health, safety, and welfare impacts relative to increased flooding of public and private infrastructure. Minnesota Department of Transportation guidelines shall be used to assess safety of flood levels at downstream driveways and road crossings.

(7) Identified property damage. In the event property damage, erosion, public health, safety, and welfare impacts are identified the applicant shall provide approved corrective action. Corrective actions shall include the following as necessary to mitigate in proportion to the proposed project impact:

- (a) Actions described in § 154.334;
- (b) Obtaining easements;
- (c) The installation of stream bank stability and protection measures;
- (d) The upgrading, protecting, or re-locating impacted infrastructure; or
- (e) Other approved actions necessary to mitigate the impact.

(8) Wetlands. Evaluate potential impacts to wetlands with exceptional vegetative diversity or functional value (see § 154.337 for determination of exceptional value wetlands). Evaluations shall include:

- (a) Delineation and functional assessment of wetlands according to § 154.337.
- (b) A hydrologic and hydraulic analysis of the before and after project water level bounce and period of inundation for wetlands with exceptional vegetative diversity for the 1-year, 2-year and 10-year, 24-hour storm events.
- (c) The applicant shall provide corrective actions that mitigate in proportion to the proposed project impacts as specified in this rule; if the water level bounce and period of inundation created by the storms evaluated in this section exceeds the limit specified in Table (9)(a).
- (d) Corrective actions shall consist of runoff rate and volume controls necessary to keep the water level bounce and period of inundation within the limits specified in Table (9)(a).
- (9) All storm drainage conveyance systems shall have capacity for the runoff from a 10-year, 24-hour, storm event. All storm drainage ponds and related facilities shall be designed to store the runoff from the 100-year, 24-hour, storm event or accumulative antecedent conditions without damage to the system or facility, downstream areas and/or significant risk to public health, safety, and welfare unless waived in accordance with this section.

(a)

Hydroperiod standard	Highly susceptible wetlands*	Moderately susceptible wetlands*	Slightly susceptible wetlands*	Least-susceptible wetlands*
Storm Bounce 1 & 2-year events	Existing	Existing plus 0.5 feet	Existing plus 1.0 feet	No limit
Period of Inundation for 1 & 2-year events	Existing	Existing plus 1 day	Existing plus 2 days	Existing plus 7 days
Period of inundation for 10-year event	Existing	Existing plus 7 days	Existing plus 14 days	Existing plus 21 days

* See Definitions.

(b) Regional detention basins shall be utilized to manage peak flow rates and runoff volumes, and meet water quality objectives when required by the city. On-site stormwater detention basins, volume control facilities, and permanent sedimentation and water quality ponds shall be utilized for land disturbing activities, the development or redevelopment of land that creates greater than 1 acre of impervious surface when regional basins are not in place or feasible, or would not otherwise meet requirements for the protection of downstream areas according to §§ 154.331 through 154.341 that are located between the project and the regional basin.

(c) The city may approve alternative BMPs instead of permanent sedimentation and water quality ponds if it finds that the water quality performance of the proposed alternative BMPs is equivalent to that of a permanent sedimentation and water quality pond designed according to the criteria set forth for permanent sedimentation and water quality ponds in division (C)(12) below. The generally accepted performance of permanent sedimentation and water quality ponds designed to these criteria is 80% total suspended solids removal on an annual average basis. The assumed performance for the proposed BMPs shall be based on information from independent laboratory work, studies, or reference materials including the Minnesota Urban Small Sites BMP Manual (Metropolitan Council 2001), as such manual may be amended, revised, or supplemented. The city may require monitoring of alternative practices and contingency plans similar to the requirements for the General Permit Authorization to Discharge Stormwater Associated with Construction Activity under the NPDES/SDS Permit Program Permit MN R100001 (NPDES/SDS General Construction Permit) issued by the Minnesota Pollution Control Agency, August 1, 2003, as amended.

(d) Analysis of flood levels, storage volumes, and flow rates for downstream water bodies and detention basins shall be based on the range of rainfall and snow melt durations producing the critical flood levels and discharges.

(10) Landlocked water basins may be provided with outlets if an outcome based analysis and resource oriented management review regarding downstream impacts is completed that demonstrates:

(a) A hydrologic regimen is maintained that complies with §§ 154.337 and 154.339;

(b) Dead storage is provided to retain the fully developed future conditions SHYM predicted water volumes, or the back to back 100-year, 24-hour storm event volume, above the

highest anticipated groundwater elevation to the extent possible while preventing damage to property adjacent to the basin;

(c) The outlet does not create adverse downstream flooding or water quality conditions, or materially affect stability of downstream watercourses according to the criteria in division (C)(4) of this section;

(d) Proposed development tributary to the land-locked basin has incorporated runoff volume control practices to the extent practical;

(e) There is a demonstrated need for an outlet to protect existing structures and infrastructure; and

(f) The outlet design is part of an approved project-specific SWPPP.

(11) ~~Temporary sedimentation~~ Detention ponds and other permanent stormwater quality management basins shall be designed to provide:

(a) An outlet structure to control the 2-year, 10-year, and 100-year, 24-hour storm events to runoff rates specified in §§ 154.331 through 154.341 amended;

(b) An identified overflow spillway and downstream route sufficiently stabilized to convey the 100-year, 24-hour storm event;

(c) A normal water elevation above the ordinary high water (OHW) of adjacent water bodies or normal water level (NWL) where an OHW is not established; and

(d) Ten-foot wide vehicular access road to the outlet control structure for future maintenance.

(12) ~~Permanent stormwater quality management must be provided in accordance with the NPDES General Construction Permit No: MN R100001 (as amended). Permanent sedimentation and water quality ponds shall be designed to Nationwide Urban Runoff Program (NURP) Wet Pond Design Standards and shall provide:~~

~~—(a) Water quality features consistent with NURP criteria and approved BMPs;~~

~~—(b) A permanent wet pool with a minimum dead storage volume equal to the volume generated from a 2.5-inch storm event over the contributing subcatchment;~~

~~—(c) Ponds shall be designed to prevent short-circuiting of the flow from pond inlet to the outlet;~~

~~—(d) A normal water elevation above the OHW of adjacent water bodies, or NWL where an OHW is not established;~~

~~—(e) A skimming outlet control structure discharging at no greater than 0.5 feet per second (fps) during the 1-year, 24-hour, storm event and/or a submerged outlet with a minimum 0.5 feet below the NWL to the crown of the outlet pipe; and~~

~~—(f) Ten-foot wide vehicular access road to the outlet control structure for future maintenance.~~

(13) Any new residential, commercial, industrial, and other habitable structures shall be constructed with the following minimum low floor elevations:

(a) Where the 100-year flood level has been established, low floor elevations shall be at least 1 foot above the 100-year flood level. Where the HWL of an adjacent basin has been established, low floor elevations shall be at least 1 foot above the HWL. Elevation of the lowest opening of a structure shall be a minimum of ~~2 feet~~ 1 foot above the emergency overflow

elevation, or ~~1 foot~~ 2 feet above the HWL of the adjacent pond or waterbody, whichever is higher.

~~(b) When possible, storm water pond designs shall include an emergency overflow to provide an outlet 2 feet below the lowest opening of any adjacent structure for added safety. Overland flow routes shall be incorporated into the design for ponds and maintained during development. For public waters and public water wetlands [DNR protected water bodies] where the 100-year flood level has not been established, low floor elevations shall be at least 3 feet above the ordinary high water level (OHW).~~

(c) The city shall require a minimum of 3 feet of freeboard above the 100-year back to back 24-hour rainfall event elevation for landlocked basins or ponds where emergency overflows cannot be provided.

(d) In all other cases, the low floor elevation shall be at least 3 feet above the highest known water level.

~~(d)~~ (e) The lowest exposed floor or opening elevation of structures that are adjacent to ponds shall be indicated on the site grading plan to ensure adequate freeboard. All new structures must have a certificate of survey supplied by the applicant for the City that clearly identifies the as-built low floor elevation and lowest opening elevations. Low floor elevations and lowest opening elevations must comply with the approved development plans, where applicable.

~~— (14) Volume control. Development and redevelopment that creates impervious surfaces and increases runoff volumes above existing conditions for the 2 year, 24 hour storm event (not including snow melt events) shall incorporate runoff volume control practices into the design. The design shall explicitly address the use of BMPs to limit the loss of pervious area, and limit runoff volume increases from impervious areas to the extent feasible considering site-specific conditions.~~

~~— (a) At a minimum, volume control practices shall provide a reduction in the site runoff discharge volume greater than or equal to ½ inch of runoff from all new impervious surfaces.~~

~~— (b) Volume controls shall be greater than ½ inch from new impervious surfaces if necessary to mitigate downstream impacts in accordance with division (C)(4) of this section, as amended.~~

~~— (c) When using infiltration for volume control, infiltration volumes and facility sizes shall be calculated using the appropriate hydrological soil group classification and saturated infiltration rate from the table below, and shall be capable of infiltrating the required volume within 72 48 hours. Provided the facility is at grade, documented site-specific infiltration or hydraulic conductivity measurements completed by a licensed soil scientist or geotechnical engineer may be used in place of the values in the following table.~~

~~— (d) Refer to the City of Jordan standard details for accepted infiltration BMPs.~~

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Hydrologic Soils Type	Infiltration Rate	Soil Texture
A	0.30 inches/hour	Sand, loamy sand, or sand loam
B	0.15 inches/hour	Silt loam or loam
C	0.07 inches/hour	Sandy clay loam

D

0.03 inches/hour Clay loam, silt clay loam, silty clay, or clay

Source: Urban Hydrology for Small Watersheds (SCS, 1986), as amended, revised or supplemented.

~~—(e) Infiltration areas shall be limited to the horizontal areas subject to prolonged wetting.~~

~~—(f) Areas of permanent pools tend to lose infiltration capacity over time and shall not be accepted as an infiltration practice.~~

~~—(g) Before infiltrating runoff, pretreatment shall be required for parking lot runoff and for runoff from new road construction that enters the infiltration system. The pretreatment shall be designed to protect the infiltration system from clogging and to protect groundwater quality. Pretreatment options may include, but are not limited to, oil/grease separation, sedimentation, biofiltration, filtration, swales or filter strips. To minimize potential groundwater impacts it is desirable to infiltrate the cleanest runoff. To achieve this, a design may propose greater infiltration of runoff from low pollutant sources such as roofs, and less from higher pollution source areas such as parking lots.~~

~~—(h) Infiltration systems shall be designed to bypass higher flows without incurring damage from erosion or loss of topsoils.~~

~~—(i) Infiltration areas shall be fenced or otherwise protected from compaction and/or disturbance before and during all land disturbing activities.~~

~~—(15) Exceptions. Constructed infiltration practices, such as infiltration ponds and trenches, as the BMP for volume control shall be avoided by using other appropriate volume control practices, or areas of project sites, and shall not be used:~~

~~—(a) For runoff from fueling and vehicle maintenance areas,~~

~~—(b) On areas with less than 3 feet vertical separation from the bottom of the infiltration system to the elevation of seasonal high groundwater or top of bedrock,~~

~~—(c) For areas with runoff from industrial, commercial, and institutional parking lots and roads where there is less than 5 feet separation from the bottom of the infiltration system to the elevation of the seasonal high groundwater,~~

~~—(d) On areas with Type D soils, without adequate underdrains.~~

~~—(e) Constructed infiltration facilities in areas of medium or high groundwater susceptibility shown in the City of Jordan wellhead protection plan, as amended; within 400 feet of a community water system, or within 100 feet of a private well shall have acceptable pretreatment of runoff; see wellhead protection plan, as amended.~~

~~—(16) Volume control credits. The following credits shall be allowed toward the ½ inch volume control requirement, and may be used as corrective actions for downstream impacts if required under division (C)(4) of this section. To receive credit applicants shall request the credits, provide calculations, and provide documentation showing that the following criteria are met:~~

~~—(a) Natural area conservation credit (NACC). A volume control credit shall be given when natural areas are conserved at development or redevelopment sites, thereby retaining or improving their pre-development hydrologic and water quality characteristics. To the extent practicable, these natural areas should be delineated to maximize contiguous land and avoid fragmentation. Credit shall be given for a runoff volume based on what the conserved area~~

~~could have been developed as under the current comprehensive land use plan for the city without conservation. To receive the NACC credit:~~

~~1. The area shall not be part of a density transfer where impervious area is transferred to another part of the site, but shall represent a net reduction in impervious area that can be constructed as part of the project;~~

~~2. The area shall be maintained in a natural vegetative state in an outlot and protected with a conservation easement (See § 154.337 for prohibited and allowed uses in conservation easements). Up to 50% of the area may be used as a back-up site for community soil absorption type of sewage treatment systems provided vegetation is maintained according to § 154.337(F), and buffers are maintained around wetlands in the natural area in accordance with § 154.337;~~

~~3. Mowed grass shall not be considered a natural vegetative state;~~

~~4. The area shall not be disturbed during the project construction (i.e., cleared or graded, except for temporary disturbances for utility construction); and~~

~~5. The area shall be protected by limits of disturbance clearly shown on all construction drawings.~~

~~(b) Disconnection of rooftop runoff credit (DRRC). A credit shall be given when rooftop runoff is "disconnected" and directed to a pervious area where it can either infiltrate or transpire. If a rooftop is disconnected, the disconnected impervious area can be deducted from the total impervious area thereby reducing the volume control requirement. To receive the DRRC credit:~~

~~1. Projects involving the subdivision of land shall include the maintenance and preservation of the disconnection as part of a recorded restrictive covenant;~~

~~2. The disconnection shall be designed to adequately address the issue of basement seepage;~~

~~3. The contributing length of rooftop to a discharge location shall be 75 feet or less;~~

~~4. The rooftop contributing area to any 1 discharge location shall not exceed 1,000 square feet;~~

~~5. Disconnections shall only be credited for residential lots sizes greater than 6,000 square feet;~~

~~6. The entire vegetative "disconnection" shall be on a slope less than or equal to 5.0%, and shall not channelize flow;~~

~~7. Where provided, downspouts shall be a minimum 10 feet away from the nearest impervious surface to discourage "re-connections";~~

~~8. Where a subsurface drain is used the drain shall not be directly connected to the public storm drainage piping network;~~

~~9. Soil evaluation and HSG classification is required and shall be submitted with the project hydraulic/hydrologic calculations;~~

~~10. For those rooftops draining to a stream buffer, the applicant shall only use either the rooftop disconnection credit or the buffer credit, not both; and~~

~~11. Rooftop disconnects shall only be allowed for vehicle fueling and maintenance areas if the rooftop runoff does not co-mingle with runoff from the paved vehicular surfaces.~~

~~—(c) Disconnection of non-rooftop runoff credit. A credit shall be given for practices that disconnect impervious surfaces by directing runoff as sheet flow to pervious areas where it is either infiltrated or transpired. These "disconnected" areas can be subtracted from the site impervious area when calculating the volume control requirement. To receive the credit:~~

- ~~—1. The site shall be graded to promote the flow of stormwater runoff to pervious areas;~~
- ~~—2. Maximum impervious flow path length shall be 75 feet;~~
- ~~—3. The length of disconnected pervious area shall be equal to or greater than the contributing length;~~
- ~~—4. The vegetated pervious area shall be on a slope less than or equal to 5.0% and shall not channelize flow;~~
- ~~—5. Disconnections shall only be credited for residential lots sizes greater than 6,000 square feet;~~
- ~~—6. For impervious surfaces draining to a stream buffer, the applicant shall only use either the non-rooftop disconnection credit or the buffer credit, not both; and~~
- ~~—7. Projects involving the subdivision of land shall include the maintenance and preservation of the disconnection(s) as part of recorded restrictive covenant.~~
- ~~—8. Soil evaluation and HSG classification shall be required and submitted with the project hydraulic/hydrologic calculations.~~

~~—(17) Buffer credit. This credit is given when a buffer is effectively used to disconnect and control stormwater runoff volumes by directing runoff from impervious areas to sheet flow across pervious areas within the buffer where it is either infiltrated or transpired. These "disconnected" areas may be subtracted from the site impervious area when calculating the volume control requirement. To receive the credit:~~

- ~~—(a) The site shall be graded to promote the flow of stormwater runoff to pervious areas in the buffer;~~
- ~~—(b) Minimum buffer widths shall be consistent with buffer requirements of § 154.337.~~
- ~~—(c) The depth to the seasonally high water table or top of bedrock shall be 3 feet or more;~~
- ~~—(d) Maximum impervious flow path length shall be 75 feet;~~
- ~~—(e) The length of disconnected pervious area shall be equal to or greater than the contributing length;~~
- ~~—(f) The vegetated pervious area shall be on a slope less than or equal to 5.0%, and shall not channelize flow;~~
- ~~—(g) Runoff shall enter the buffer as sheet flow. A level-spreading device shall be utilized where local site conditions prevent sheet flow from being maintained;~~
- ~~—(h) The credit shall not be applicable if rooftop or non-rooftop areas for divisions (C)(16)(b) and (c) of this section are already allowed for the same disconnection;~~
- ~~—(i) Buffers shall be protected by conservation easement or dedicated outlots, and maintained in a natural condition in accordance with § 154.337; and~~
- ~~—(j) Projects involving a subdivision of land shall include the maintenance and preservation of the disconnection(s) and buffer(s) as part of a recorded restrictive covenant.~~

~~—(18) Waivers. The City of Jordan may waive the volume control requirement for environmentally sensitive developments. Developments shall be considered environmentally sensitive when:~~

~~—(a) The total impervious surface footprint is less than 8% of the development;~~

~~—(b) A minimum of 25% of the site is protected in natural conservation areas that are protected with conservation easements (see § 154.337 for allowed and prohibited uses in conservation easements);~~

~~—(c) Buffers and wetlands are protected in accordance with § 154.337;~~

~~—(d) Rooftop runoff is disconnected in accordance with division (C)(16)(b) of this section, as amended;~~

~~—(e) Stormwater runoff rate control is provided in accordance with divisions (C)(2) and (3) of this section, as amended;~~

~~—(f) Stormwater runoff has been treated in accordance with division (C)(12) of this section, as amended;~~

~~—(g) Downstream impacts have been assessed and corrective actions have been incorporated in accordance with division (C)(6) of this section, as amended;~~

~~—(h) Buffers are recorded as conservation easements or outlots (see § 154.337 for allowed and prohibited uses in conservation easements); and~~

~~—(i) The maintenance and preservation of the disconnection(s) and environmental features are made part of a recorded restrictive covenant.~~

~~—(j) The City of Jordan may waive the on-site stormwater runoff rate control and water quality design criteria in division (C) of this section if the city has regional stormwater facilities capable of meeting the requirements therein. Waiver of the on-site stormwater facility siting requirements does not preclude the city from collecting appropriate stormwater fees.~~

~~—(k) Design for the 100-year, 24-hour storm event required per division (C)(9) of this section may be waived for limited use, low maintenance road crossings.~~

~~—(19) (15) Exhibits. The following represents the City of Jordan stormwater management project submittal checklist. The following exhibits shall accompany the project review application.~~

(a) Property lines and delineation of lands under ownership of the applicant.

(b) Existing and proposed site contour elevations at a minimum of 2-foot intervals.

(c) Delineation of the subwatershed contributing runoff from any/all off-site sources. Proposed and existing subwatersheds on-site. Emergency overflows and watercourses.

(d) Proposed and existing stormwater facilities location, alignment, and elevation.

(e) Delineation of existing on-site wetland, marsh, shoreland, and floodplain areas.

(f) For applications proposing infiltration as volume control; the identification, description, permeability, hydrologic soil group (HSG) classification and approximate delineation of site soils in both existing and proposed post-development conditions.

(g) The existing and proposed OHW and 100-year high water elevations on-site.

(h) Construction plans and specifications for all proposed stormwater management facilities, including design details for outlet controls.

(i) Stormwater runoff volume and rate analysis for the 2-year, 10-year, and 100-year, 24-hour storm events for existing and proposed conditions.

(j) All hydrologic, water quality, and hydraulic computations made in designing the proposed stormwater management facilities.

(k) Narrative addressing incorporation of infiltration BMP's.

(l) Delineation of all ponding flowage, drainage easement, or other property interest to be determined for stormwater management purposes.

~~—(20)~~ (16) Maintenance. All stormwater management structures and facilities shall be maintained in perpetuity to assure that the structures and facilities function as originally designed. The responsibility for maintenance shall be assumed either by the City of Jordan, or by the applicant entering into a compliance agreement with the city.

~~—(21)~~ (17) Easements. The applicant shall establish, in a form acceptable to the city, dedicated easements and/or outlots, for ponding, flowage, and drainage purposes over hydrologic features such as water bodies and stormwater basins. The outlots and/or easements shall include the right of ingress and egress for inspection, monitoring, maintenance, and enforcement purposes.

~~—(22)~~ (18) Outlots. The City of Jordan may require that the land be placed in an outlot or a conservation easement, in form acceptable to the city, to prevent the future expansion of impervious surface and the loss of infiltration capacity.

~~—(23)~~ (19) Exceptions. No surface water management permit or stormwater management plan shall be required under this rule for the following land disturbing activities:

(a) Minor land disturbing activities such as home gardens, repairs, and maintenance work, **including reseeding or sodding as necessary.**

(b) Construction, installation and maintenance of ISTS other than those on steep slopes, on riparian lots within a Shoreland District or in a bluff impact zone.

(c) Construction, installation and maintenance of public utility lines or individual service connections unless the activity disturbs more than 1 acre, in which event division (G)(4) of this section below shall apply.

(d) A land disturbing activity that does not cause off-site erosion, sedimentation, flooding, or other hazards or damage, and disturbs:

1. In the Shoreland District, an area less than 10,000 square feet or less than 100 linear feet of shoreline; in conformance with the City of Jordan Shoreland Subchapter for requiring erosion prevention and sediment control BMPs with building permits in a manner consistent with this rule and applicable city ordinances, as amended; or

2. Outside of the Shoreland District, an area of less than 1 acre in conformance with the City of Jordan Subdivision Ordinance for requiring erosion prevention and sediment control BMPs with building permits in a manner consistent with this rule and applicable city ordinances, as amended.

(e) Construction of any structure or associated land disturbing activity on an individual parcel in a subdivision with a stormwater management plan approved by the City, so long as any land disturbing activity complies with the approved plan.

(f) Development or redevelopment of, or construction of a structure on, an individual parcel with a land disturbing activity that does not cause off-site erosion, sedimentation, flooding, or other damage.

(e) Installation of any fence, sign, telephone, or electric poles, or other kinds of posts or poles.

(f) Emergency activity necessary to protect life or prevent substantial harm to persons or property.

(g) Redevelopment projects are exempt from criteria in divisions (C)(2) and ~~(14)~~ (12) of this section. Note: For the purposes of this rule if an activity creates more than 1-acre of new or additional impervious surface the activity is considered new development and the exception shall not apply.

(h) All land disturbing activities not required by §§ 154.331 through 154.341 to obtain a surface water management permit or have an approved stormwater management plan shall nevertheless be conducted in full compliance with § 154.334.

(i) Minor wetland impacts that have received a "Certificate of Exemption or No Loss Determination" by the City of Jordan in the capacity of administering the Wetland Conservation Act, as amended.

(j) All maintenance, repair, resurfacing, and reconditioning activities of existing roads, bridges, and highway systems which do not involve land disturbing activities outside of the existing surfaced roadway.

(k) Land disturbing activities associated with the construction of conservation practices by the SWCD or the Natural Resources Conservation Service (NRCS) provided that erosion prevention and sediment control practices are used in a manner consistent with this rule and applicable city ordinances, as amended.