

ENGINEERING REVIEW CHECKLIST 2018
WITH RESUBMISSIONS PROVIDE A COPY
OF RETURN COMMENTS AND A REVISED PDF

1. Chapter 106 – Stormwater Drainage

(Ord. No. 2999, § 1, 6-27-00; Ord. No. 5245, § 1, 1-23-18)

- **106.1** - The Grading Plan & SWPPP and Specifications shall be prepared by the Engineer of Record, who is a licensed professional engineer of the State of Arkansas.
 - o Requires a 1"=200' minimum scale 2-foot contour map.
 - o Show existing and proposed contours.
- **106.1.3.3**
 - o Minimum floor elevation shall be shown a minimum of 2-feet above the 100-year flood elevation on each lot when located in and adjacent to a designated FEMA floodplain and in areas where flooding is known to occur. (Show Minimum Finished Floor Elevation [FFE] on proposed structures)
 - o Minimum floor elevations for other areas shall be a minimum of 1-foot above the calculated 100-year WSE of open channels, swales, or overland flow. (Show Minimum Finished Floor Elevation [FFE] on proposed structures)
- **106.9.7** - Channel Lining Design
 - o Temporary linings and check dams are required in accordance with an approved SWPPP throughout any project.
- **106.10.5.2.1** - Temporary Construction Entrances
 - o Course Aggregate 2-3 inch stone required at Construction Entrances.
 - o Construction entrance must be a minimum of 50' long and 12' wide.
 - o Required at all locations where construction traffic moves to public road or other paved areas.
- **106.10.5.2.5** - Straw Wattle or Hay Bale Barrier
 - o This is a temporary barrier constructed across or at the toe of the slope. Its purpose is to intercept and detain sediment from areas one-half acre or smaller where only sheet erosion may be a problem. Neither may be used in the flowline of a channel.
- **106.10.5.3 (6)** - Miscellaneous Practices
 - o Any time heavy equipment is required to enter a tributary, being defined as any area between two top of banks within said tributary, a copy of a filed Short Term Activity Authorization, or a document deemed equivalent by the Director of Engineering, shall be provided to the City of Springdale before the project requiring such activities may be approved.

2. Chapter 106 – Stormwater Drainage

- **106.1.2**** - Submit a preliminary drainage report, as outlined in the City of Springdale Drainage Criteria Manual.
 - o Need to provide the City Staff with detailed calculations to support all drainage improvements.
 - o Need to show spot elevations at the drives to prove that there is a high spot so that water does not drain to the street.
 - o All storm water flowing off-site must be maintained in drainage structures/facilities and cannot flow onto neighboring sites.
 - o Submit a PDF of the signed and sealed Drainage Report to Engineering

- **106.2.1**** - Storm water runoff shall be computed on the total drainage basin assuming full development of the area in accordance with the Land Use Plan at the time of development
- **106.2.3.6**** - The maximum allowable length for sheet flow shall be 100 feet unless there is documented engineering justification to use a longer length.
- **106.3.3.5**** - Any earthen channels with velocities greater than 3f/s will need to be concrete channels.
- **106.4.6**** - All piping in right of way and easements must be reinforced concrete.
- **106.5.1**** - Increases in post-development peak discharge from new development areas shall be mitigated with on-site or off-site storage.
- **106.5.3**** - All detention ponds shall be the dry-type and shall fully dewater within 48 hours.
- **106.5.3**** - A concrete trickle channel with a minimum width of 4 feet and a minimum slope of 0.40% shall be required for all detention ponds other than permanent lakes.
- **106.5.4.10**** - "An easement shall be provided in Plans for detention facilities. A minimum 20' wide drainage easement shall be provided around the 100-year flood pool, connecting the tributary pipes and the discharge system along the most passable routing of piping system." Ownership of the detention facility will remain with the land.
- **106.5.4.10**** - Easements
 - o Easements shall be filed before acceptance and approval of plans.
 - o No structure may be constructed in an Access Easement or Drainage Easement.
 - o Fences built across drainage easements shall not impede the flow of storm water flow and must have removable panels to allow drainage system maintenance.
- **106.5.4.11.1**** - A General Note is needed on the Site Plan stating that "A City of Springdale Detention/Retention Certification form must be completed, stamped, and signed by a Certified Professional Engineer, post-development and submitted to the City of Springdale Engineering Department." <http://www.springdalear.gov/DocumentCenter/Home/View/3315>
- **106 Section XI**** - Cave Springs Area Karst Resource Conservation Regulations
 - o This development is in a Karst Zone and is therefore subject to additional requirements as specified in Section XI of Chapter 106.

3. Chapter 107 – Stormwater Pollution

(Ord. No. 3673, § 1, 5-10-05; Ord. No. 4796, § 1, 6-10-14; Ord. No. 5220, § 1, 10-24-17)

- **107.1** - Show & Label all temporary construction stockpiles, parking, entrances, egress, roads, or access as "Temporary" on the Grading or Erosion Control Plan.
- **107.3**
 - o The site area of disturbance is greater than 0.5 acre. A Grading Permit Application, a SWPPP delineating all anticipated disturbed areas, a plan in those areas to achieve final stabilization (which at minimum must provide 80% grass coverage and 100% stabilization), a Dust Control Plan with appropriate BMPs designed to control dust, and an appropriate fee as shown on the application must be submitted to the City of Springdale Stormwater Manager for review prior to receiving final plan approval.
 - o Phasing on larger construction sites 5 acres or more must be utilized to allow only disturbance on near term construction areas. Construction sites requiring cutting and filling must be seeded once the cutting and filling activity is finished.
- **107.3** - The following note is required as a General Note on the Site Plan:

"Stockpiling of construction spoil material at particular locations shall only be allowed for a limited time period, not to exceed (6) months. Prior to a final inspection of the Grading Permit, the following standards shall be achieved for Completion of Construction:

- a) development and grading within the disturbed area is complete and matches plans as approved by the Planning Commission, and
 - b) the disturbed soil area is observed to have 80% grass coverage and 100% stability, and
 - c) No slopes steeper than a 3:1 pitch unless otherwise approved in writing by the Director of Engineering, and
 - d) Notice of Violations issued have all corrective actions approved with an inspection report signed by a representative of the Director of Engineering, and
 - e) all heavy equipment, stockpiles, and construction site materials have been removed from the Construction Site."
- **107.3.D.c** - A grading and drainage plan is required for all developments showing that each lot drains to the street right-of-way, a dedicated drainage easement with improvements, or an existing drainage way without flowing across a neighboring lot. No drainage from roof drains, landscaping, or lot runoff may be directed or diverted onto neighboring properties.

4. Chapter 110 – Streets, Sidewalks and Other Public Places

(Ord. No. 3258, § 1, 11-12-02)

- **110.7** - Maintain obstruction free (3-ft above street pavement) area on the corner lot within 30-ft of the street line (ROW).
- **110.31** - Sidewalks are required one-foot (1') inside the right-of-way line.
 - o Sidewalks shall be constructed with a minimum transverse slope of one-fourth inch (1/4") per foot.
 - o The sidewalk shall have a minimum width of five feet (5') and a minimum thickness of four inches (4").
 - o The sidewalk shall have expansion joints at each structure, curb and at minimum intervals of 200 feet. Transverse joints between expansion joints shall be scored at five-foot (5') intervals.
 - o Need to show details of sidewalks on the right-of-way.
- **110.54** - All crossings under roadways by open cut must be backfilled with flowable fill.
- **110.111** - The developer is required to improve the abutting street to the City of Springdale standards and in accordance with the Master Street Plan, including constructing sidewalks, curb and gutter, pave or widen the existing street, or install or construct drainage facilities.

5. Chapter 112 – Subdivisions

(Code 1973, § 30-1)

- **112.3** - Show the final contours as a part of the Grading Plan.
- **112.3 (3)** - *Plans and specifications*: After the approval of the preliminary plat but before improvements are started, the subdivider shall submit engineering plans, a final drainage report, and specifications for the streets, grading, and storm drainage improvements including, but not limited to, profiles, specifications, and cross-sections along with grading and storm drainage plans and computations, pursuant to and in compliance with chapter 106, Stormwater Drainage and chapter 107, Physical Alteration of Land, of this Code, as adopted or amended hereafter, to the director of the planning and community development division for review and written approval prior to commencement of improvements. During the same period, the subdivider shall submit water and sewer plans and specifications to the water and sewer department. No work shall begin without prior approval of the director of the planning and community development division.

- All streets within the subdivision boundaries shall be dedicated and constructed in conformance with the master street plan and chapter 110 of this Code, with right-of-way dedicated when such right-of-way is needed to conform to the master street plan.
- **112-4** - Streetlights are required at each intersection and along the street at intervals of 300 to 350 feet as measured along the centerline of the street.
 - The minimum initial rating for the streetlight shall be 6,800 lumens for a local street, 11,000 lumens for a collector street, or 20,000 lumens for an arterial street.
 - Label all lights as Proposed or Existing
 - Show the direction of the mast arm
 - Show the size and type of lights based on the location and classification of the street
 - Add note to determine if the light is designed for area parking lot lights or as a street illuminator
 - Include a note stating if the lights are public or private lights and who will be responsible for maintenance and billing
- **112.7 - Street Design Standards**
 - Sight Distance: 90-ft Ordinary / 70-ft hilly
 - Max grades w/in 100-ft of intersection: 4%
 - Min intersection angle: 75°
 - Min curb radius 25-ft minor St / 50-ft collector St
 - The right-of-way must be graded so that the entire width slopes toward the street at a 2% slope toward the street centerline.

6. Chapter 130 – Zoning Ordinance

(Ord. No. 3307, 3-25-03)

- **130.7.9** Entrance/Exit Drives
 - Need to note that modified curb is required at the drives and a modified curb detail.
- **130.7.6.1** ADA requirements.
 - Accessibility for persons with disabilities in parking lots and building approaches shall be as required by the current ADA and as may from time to time be amended.

7. Chapter 50 – Floods

(Ord. No. 4110, § 1, 9-11-07)

- **4110.6.2** - Need to submit a floodplain development application at the time of resubmittal. See Applications & Forms / Floodplain at <http://www.springdalear.gov/298/Forms-Documents>

8. Other:

- **Permitting** - Some development within the City of Springdale may require additional state or federal permits not administered by the City of Springdale to be granted prior to approval of the project. This includes, but may not be limited to, any work that is being proposed within rights-of-way and/or easements within the jurisdiction of the Arkansas Department of Transportation, the Arkansas Natural Resources Commission, the Arkansas Department of Environmental Quality, or the U.S. Army Corps of Engineers. Prior to final approval of this project, please provide a copy of any required Federal, State, and Local permits that are required. Final approval of this project does not waive or exempt any requirements by State or Federal laws.
- **Construct-ability Review** – At the request of the Director of Engineering, this project has been submitted to the Large Scale Inspector for a Construct-ability review. Comments from the Large Scale Inspector will be provided in a future round of comments.

- *Request to Table* - It is the opinion of the Engineering Department that a **REQUEST TO TABLE** this project is necessary until a date in which the submitted development may align with the standards set by the City of Springdale City Council Code of Ordinance.