

City of Fayetteville, Arkansas

113 West Mountain Street Fayetteville, AR 72701 (479) 575-8323

Legislation Text

File #: 2018-0202, Version: 1

ADM 18-6130 (UDC AMENDMENT CHAPTERS 156, 166, AND 169: SEQUENCE OF GRADING PERMITS):

AN ORDINANCE TO AMEND § 156.04 - PHYSICAL ALTERATION OF LAND AND STORMWATER DRAINAGE AND EROSION CONTROL OF CHAPTER 156 **VARIANCES**; § 166.02 - DEVELOPMENT REVIEW PROCESS OF CHAPTER 166 **DEVELOPMENT**; AND VARIOUS SECTIONS OF CHAPTER 169 **PHYSICAL ALTERATION OF LAND** OF THE FAYETTEVILLE UNIFIED DEVELOPMENT CODE TO CLARIFY THE APPROVAL PROCESS FOR GRADING PERMITS, TO GENERALLY REQUIRE DEVELOPMENT APPROVAL PRIOR TO THE ISSUANCE OF GRADING PERMITS, AND TO MAKE ADMINISTRATIVE CHANGES

WHEREAS, the Unified Development Code currently allows grading permits to be issued prior to development approval; and

WHEREAS, this has resulted in a loophole that has allowed site grading without staff or the Planning Commission reviewing plans for conformance with all Unified Development Code requirements; and

WHEREAS, clarification of code sections pursuant to their stated intent and purpose strengthens the development review process;

NOW THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF FAYETTEVILLE, ARKANSAS:

<u>Section 1</u>: That the City Council of the City of Fayetteville, Arkansas hereby amends §156.01 by inserting the following language at the beginning of the section:

"A variance of the requirements of §§ 166.02 and 169.03 requiring development approval prior to issuance of grading permit may be granted by the Planning Commission subject to the General Requirements of § 156.03."

<u>Section 2</u>: That the City Council of the City of Fayetteville, Arkansas hereby amends §166.02(D)(2) by repealing the title of the subsection and replacing it with "Preliminary Plat, Large Scale Development and Small or Large Site Improvement Plans."

Section 3: That the City Council of the City of Fayetteville, Arkansas hereby amends §169.01(B) by replacing "and cutting (or similar activities)" with "excavation, or land alteration of any kind."

<u>Section 4</u>: That the City Council of the City of Fayetteville, Arkansas hereby repeals § 169.03 - Permits Required/Exceptions and enacts a replacement § 169.03 as follows:

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- (A) Permit Required. Unless exempted by §169.03(C), all grading, clearing, filling, excavation, or land alteration of any kind shall require:
 - (1) Prior development approval as specified in Chapter 166, except for general grading to an existing developed site that does not impact trees or floodplains and does not significantly alter the natural landform;
 - (2) A grading permit pursuant to this chapter; and
 - (3) An Arkansas Department of Environmental Quality Stormwater Construction Permit and incorporated Stormwater Pollution Prevention Plan, if required by state law.
- (B) Residential Grading Permit Required. When located within the Hillside/Hilltop Overlay District boundaries:
 - (1) Construction of up to two (2) single-family residences or a duplex on a single lot shall require a grading permit;
 - (2) Residential building additions of 2,000 square feet or more on a single lot shall require a grading permit;
 - (3) Residential building additions of less than 2,000 square feet where associated land alteration activities are not beyond the scope of what is necessary to construct said addition and no trees are impacted do not require a grading permit;
 - (4) Parcels of land divided by the Hillside/Hilltop Overlay District boundary shall only be subject to the requirements of this chapter on that portion of land lying within the boundary.
- (C) Exceptions to Permit Requirements. Grading permits are not required for the following:
 - (1) Excavation Below Finished Grade. Excavations below finished grade for basements, swimming pools, hot tubs, septic systems, retaining walls under 4 feet in height, and like structures authorized by a valid building permit.
 - (2) Cemetery graves.
 - (3) Refuse Disposal. Refuse disposal sites controlled by other regulations.
 - (4) Single Family/Duplex. Construction of up to two (2) single-family residences on a single lot, or duplex unless located within the Hillside/Hilltop Overlay District per §169.03(B) above.
 - (5) Building Additions. Building additions of less than 2,000 square feet unless located within the Hillside/Hilltop Overlay District per §169.03(B) above.
 - (6) Other minor fill, clearing or grading for maintenance purposes such as landscaping, yard grading, maintenance, farming, gardens, and similar activities.
- (D) Grading Permit Application and Approval. No grading permit shall be issued until the grading plan, endorsed by a landscape architect, or engineer licensed in the state of Arkansas, is approved by the City Engineer. A separate permit shall be required for each site. Grading permits may be issued jointly for parcels of land that are contiguous, so long as erosion control measures are in place until project completion. Any application for a required grading permit under this chapter shall be submitted concurrently with the application and calculations for a drainage permit if such a drainage permit is required by §170.03. Tree Preservation and Protection is required in accordance with Chapter 167.
- (E) Permit Posted. A copy of the grading permit cover page shall be posted at or near the street right-of-way line and shall be clearly visible from the street."

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Section 5: That the City Council of the City of Fayetteville, Arkansas hereby amends § 169.04 by replacing each instance of "minimal" with "minimum" in the section title, introductory paragraph, and subsection (A), by replacing "Ordinance No. XXXX" with "Ordinance No. 5702" in subsection (A), and by inserting the following after the first sentence in subsection (F): "All necessary modifications to stormwater best management practices should be immediately implemented in order to prevent further track-out."

Section 6: That the City Council of the City of Fayetteville, Arkansas hereby amends § 169.06 - Land Alteration Requirements by repealing §169.06(C)(2) and enacting a replacement § 169.06(C)(2) as follows: "(2) Maximum Length. The maximum length of ay cut or fill slope without a terrace (as described in § 169.06 (D) and (E) below) shall be 100 feet as measured along the ground. The terrace shall be at least 6 feet wide."; by inserting "designated protected streams;" before "established TMDL water bodies" in subsection (F)(3); by striking "in accordance with" in subsection (G) and replacing it with "equal to"; and by striking "a registered professional engineer" in subsection (H)(1) and replacing it with "an Arkansas registered professional engineer."

Section 7: That the City Council of the City of Fayetteville, Arkansas hereby amends § 169.07(A) Grading Plan by striking "at a scale no smaller than 1 inch equals 50 feet" in subsection (1); by repealing subsection (5) and replacing it with "Engineer/Architect. Seal of an Arkansas registered engineer or landscape architect certifying that the plan complies with the chapter."; by repealing subsection (11) and replacing it with "Acreage. Total project acreage and disturbed area."; by inserting "in accordance with the Drainage Criteria Manual" at the end of subsection (12); by inserting ", including final cover type" at the end of subsection (14); and by replacing "straw bales" with "silt fences" and replacing "brush check dams" with "rock check dams" in subsection (16).

Section 8: That the City Council of the City of Fayetteville, Arkansas hereby amends § 169.08 - Grading Plan Submittal by repealing subsection (A) and enacting a replacement (A) as follows: "Preliminary Grading Plan. A preliminary grading plan shall be submitted at the time of preliminary plat submission for subdivisions or plat submission for large scale developments and site improvement plans, whichever is applicable."; by inserting "and receive a residential grading permit prior to building permit" at the end of subsection (B); and by repealing subsection (D) in its entirety.

<u>Section 9</u>: That the City Council of the City of Fayetteville, Arkansas hereby amends § 169.09 - Minor Modifications by repealing the last sentence and replacing it with "When applicable, major modifications must be approved through the City planning process."

City of Fayetteville Staff Review Form

2018-0202

Legistar File ID

4/17/2018

City Council Meeting Date - Agenda Item Only N/A for Non-Agenda Item

3/29/2018

ENGINEERING (621)

Corey Granderson

Comments:

Submitted By		Submitted Date	Division / D	Department (
Action Recommendation:					
City Staff and Planning Commission Code Chapters 156, 166, and 169 at a full development plan prior to alt	s shown ii	n the attached exhibits to maint	•	·	
Budget Impact:					
n/a			n/a		
Account Number			Fund		
n/a			n/a		
Project Number			Project Title		
Budgeted Item?	NA	Current Budget	\$	-	
		Funds Obligated	\$		
		Current Balance	\$	-	
Does item have a cost?	NA	Item Cost			
Budget Adjustment Attached?	NA	Budget Adjustment			
•		Remaining Budget	\$	-	
Purchase Order Number:	n/a Previous O		e or Resolution#	V20180321 n/a	
Change Order Number:	n/a	Approval Date:		n/a	
Original Contract Number:	n/a				



CITY COUNCIL MEMO

MEETING OF APRIL 17, 2018

TO: Mayor and City Council

THRU: Don Marr, Chief of Staff

Garner Stoll, Development Services Director

Chris Brown, City Engineer

FROM: Corey Granderson, Staff Engineer

DATE: March 29, 2018

SUBJECT: ADM 18-6130: Administrative Item (UDC Amendment Chapters 156, 166,

and 169: Sequence of Grading Permits): Submitted by CITY STAFF for revisions to UDC Chapters 156, 166, and 169. The proposed code changes would clarify the development approval process for grading permits and other

administrative changes.

RECOMMENDATION:

City Staff and Planning Commission recommend that the City Council amend the Fayetteville Unified Development Code Chapters 156, 166, and 169 as shown in the attached exhibits to maintain the intent of the UDC for review of a full development plan prior to alteration of land.

BACKGROUND:

Prior to constructing buildings or other site improvements, certain development projects require significant earthwork to create a suitable landform. This could include large cuts, fills, or undercut/removal of poor soils based on site topography and soil conditions. On a small scale these activities can occur quickly, but there exists a subset of development projects that require weeks or months to complete this initial earth work. In the latter instance, developers often seek to begin grading activities as soon as possible in the entitlement and permitting process.

In past years, there have been "early" or "preliminary" grading plans approved on projects with substantial earthwork. These plans only include earthwork and no site improvements. Most of these were approved <u>after</u> the entitlement process (e.g., planning commission) but prior to the full grading permit. As the review of drainage, streets, water, and sewer infrastructure can take several weeks to complete, this "early" grading permit allows the development's critical path schedule to progress while permit review is finalized. In these instances, since development entitlement has already occurred, all tree protection, access points, and other project encumbrances are established, with little remaining subjectivity or risk to the developer.

DISCUSSION:

As currently allowed in the Unified Development Code (UDC), and driven by developer-interest, recent "early" grading permits have been approved by staff <u>prior</u> to entitlement approval (e.g. planning commission). To illustrate, a developer may wish to begin a 3-month filling process prior

to submittal of a Large Scale Development plan for review. The current language in UDC Chapter 169: Physical Alteration of Land does not clearly state that development entitlement is required prior to a grading permit being issued. This has resulted in a loophole where developers can bypass the intended development approval process, and proceed directly to site grading without staff or the planning commission reviewing plans for conformance with all UDC requirements. Staff proposes a code amendment to close this loophole. The proposed code amendment would require "prior development approval as specified in §166" in order to obtain a grading permit. The language leaves leeway for staff to approve "early" grading permits that do "not impact trees or floodplains" or "significantly alter the natural landform." Furthermore, proposed changes to UDC 156.04 would give the planning commission authority to approve a variance allowing an "early" grading permit on sites which may impact trees, floodplains, or other significant landforms.

The remaining code changes to UDC 166 and 169 are administrative in nature, to provide clarity and reduce errors/omissions.

The specific code changes are generally listed below and shown in the attached strikeouthighlight and clean versions of the code.

Proposed Amendments to UDC Chapter 169

- Section 169.03 Permits Required/Exceptions
 - o Added requirement for development approval prior to grading permit issuance.
 - o Re-crafted language to reduce the number of "exemptions" listed.
- Other administrative changes.

Proposed Amendments to UDC Section 156.04

Additional language allowing a variance to the changes in Section 169.03.

Proposed Amendments to UDC Section 166.02

Administrative changes.

BUDGET/STAFF IMPACT:

No budget or staff impacts are associated with this request.

Attachments:

Proposed code changes

156.04 - Physical Alteration Of Land And Stormwater Drainage And Erosion Control

A variance of the requirements of Chapter 166.02 and 169.03 requiring development approval prior to issuance of grading permit may be granted by the Planning Commission subject to the General Requirements of §156.03.

Variances of the requirements of Chapters 169 and 170 may be approved by the City Engineer, subject to the following criteria:

Criteria. Variances of the physical alteration of land and stormwater management, drainage, and erosion control regulations may be applied for as follows:

(A) Chapter 169 Criteria. A variance may be granted from any requirements of the Physical Alteration of Land regulations dependent upon on the soil types encountered, planned slopes, planned vegetation, and investigative engineering reports.

166.02 - Development Review Process

- (D) Plat Recordation or Construction Plan Approval. After obtaining approval by the appropriate governing body, the applicant shall follow the procedures set forth below in order to record the plat or obtain construction plan approval.
 - (1) Property Line Adjustment, Lot Split, Final Plat, Concurrent Plat. The applicant shall submit copies of the approved plats containing all required signatures to the Planning Division for final approval. The plats shall be recorded by the applicant and copies of the recorded plats provided to the Planning Division as required.
 - (2) Preliminary Plat, Large Scale Development and Small or Large Site Improvement Plans. Receipt of the approval authorizes the applicant to proceed with:
 - (a) The preparation of plans, reports and specifications in accordance with City Engineering requirements including but not limited to:
 - (i) Street plans, profiles and specification accompanied by soil analyses and design calculations;
 - (ii) Storm drainage plans, profiles and specifications accompanied by soil analyses and design calculations; and
 - (iii) Water and sewer plans, profiles and specifications, accompanied by design calculations, to be reviewed and approved by City Engineering.
 - (iv) Final site plans, landscape plans, and other plans, reports and specifications required by the city to obtain approval.
 - (b) Once all approvals that are required have been obtained, the applicant may proceed with site preparation and construction in accordance with the permitted plans.

CHAPTER 169 - PHYSICAL ALTERATION OF LAND

169.01 - Intent

(A) It is the city's intent to safeguard the health, safety, and welfare of Fayetteville citizens by implementing standards and procedures for the physical alteration of land. It is not the city's intent to supersede federal or state regulations such as, but not limited to, the Occupational Health & Safety Act. (B) The purpose of this chapter is to control grading, clearing, filling, and cutting (or similar activities) excavation, or land alteration of any kind which alone or in combination cause landslides, flooding, degradation of water quality, erosion and sedimentation in storm sewer systems and water storage basins. It is also the intent of this chapter that through the implementation of the guidelines and regulations contained herein, the existing scenic character and quality of the neighborhood and city as a whole not be diminished.

(Code 1991, §161.01; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.02 - General Requirements

- (A) Protection. Persons engaged in land alteration activities regulated by this chapter shall take measures to protect public and private properties from damage by such activities. Adjacent and nearby properties affected by land alterations shall be restored in accordance with the requirements of this chapter.
- (B) Site Conditions. Development shall generally conform to the natural contours of the land, natural drainage ways, and other existing site conditions.
- (C) Adjacent Properties. All developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such development. More specifically, new development may not unreasonably impede water runoff from higher properties nor may it unreasonably channel water onto lower properties.
- (D) Restoration. Land shall be revegetated and restored as close as practically possible to its original conditions so far as to minimize runoff and erosion are concerned. Previously forested areas shall follow the City's Landscape Manual for mitigation of forested areas.

(Code No. 1991, §161.02; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5431, 8-16-11; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.03 - Permits Required/Exceptions

- (A) Permit Required. No-<u>Unless exempted by §169.03(C), all</u> grading, <u>clearing.</u> filling, excavation, or land alteration of any kind shall take place without first obtaining require:
 - (1) Prior development approval as specified in §166, except for general grading to an existing developed site that does not impact trees or floodplains and does not significantly alter the natural landform.
 - (1)(2) A grading permit pursuant to this chapter except as specified in §169.03(B);
 - (2) A stormwater management, drainage and erosion control permit (hereinafter referred to as a "drainage permit") except as specified in §170.03(C) and §170.03(D); and
 - (3) An Arkansas Department of Environmental Quality Stormwater Construction Permit and incorporated Stormwater Pollution Prevention Plan, if required by state law.
- (B) —(4) Residential Grading Permit Required. When located A grading permit is required by the city for any development occurring within the Hillside/Hilltop Overlay District boundaries.
 - (1) Construction of up to two (2) single-family residences or a duplex on a single lot shall require a grading permit;
 - (2) Residential building additions of 2,000 square feet or more on a single lot shall require a grading permit;

- (3) Residential building additions of less than 2,000 square feet where associated land alteration activities are not beyond the scope of what is necessary to construct said addition and no trees are impacted do not require a grading permit;
- (4) Parcels of land divided by the Hillside/Hilltop Overlay District boundary shall only be subject to the requirements of this chapter on that portion of land lying within the boundary.
- (B)(C) Exceptions to Where No Grading Permit Is Required Requirements. Grading permits are not required for the following:
 - (1) Excavation Below Finish Grade. Excavations below finished grade for basements, swimming pools, hot tubs, septic systems, retaining walls under 4 feet in height, and like structures authorized by a valid building permit.
 - (2) Cemetery Graves . Cemetery graves.
 - (3) Refuse Disposal . Refuse disposal sites controlled by other regulations.
 - (4) Single-Family/Duplex. Construction of up to two (2) single-family residences on a single lot, or duplex not unless located within the one hundred (100) year flood plain, the Hillside/Hilltop Overlay District per §169.03(B) above, or on a slope 15% or greater.
 - (5) Building Additions. Building additions of less than 2,000 square feet where associated land alteration activities are not beyond the scope of what is necessary to construct said addition and are not unless located within the one hundred (100) year flood plain, the Hillside/Hilltop Overlay District per §169.03(B) above, or on a slope 15% or greater.
 - (6) Other minor fill, clearing or grading for maintenance purposes such as landscaping, yard grading, maintenance, farming, gardens, and similar activities.
- (C)(D) Grading Permit Application and Approval. No grading permit shall be issued until the grading plan, endorsed by a registered architect, landscape architect, or engineer licensed in the state of Arkansas, is approved by the City Engineer. A separate permit shall be required for each site; it may cover both excavations and fills. Grading permits may be issued jointly for parcels of land that are contiguous, so long as erosion control measures are in place until project completion. Any application for a required grading permit under this chapter shall be submitted concurrently with the application and calculations for a drainage permit if such a drainage permit is required by §170.03., coordination with Chapter 167. Tree Preservation and Protection is required in accordance with §167.
- (D)(E) Permit Posted . A copy of the grading permit cover page shall be posted at or near the street right-of-way line and shall be clearly visible from the street.

(Code 1991, §161.03; Ord. No. 3551, 6-5-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 4313, 5-15-01; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14; Ord. No. 5945, §18, 1-17-17)

169.04 - Minimal Minimum Erosion Control Requirements

If exempt under 169.03, a grading permit is not required. However, exempt as well as non-exempt activities shall be subject to the following minimal minimum erosion and sedimentation control measures.

(A) The City Council hereby adopts by reference the *Drainage Criteria Manual*, prepared for the City of Fayetteville, and adopted by Ordinance No. XXXX 5702 of the City of Fayetteville and as may be amended from time to time by the City Engineer. All minimal minimum erosion and sediment control standards contained therein shall have the same force and effect as if printed word for word in this chapter. Development projects also must comply with their Arkansas Department of Environmental Quality general construction permit. All projects shall follow Chapter 8, Construction Site Stormwater Management, of the Drainage Criteria Manual as well to achieve site compliance.

- (B) Stabilization. A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the erosion and sediment control plan. Except as provided in (1) and (2) below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased.
 - (1) Where the initiation of stabilization measures by the fourteenth day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.
 - (2) Where construction activity will resume on a portion of the site within twenty-one (21) days from when activities ceased, (e.g. the total time period that construction activity is temporarily ceased is less than twenty-one (21) days) then stabilization measures do not have to be initiated on that portion of the site by the fourteenth day after construction activity temporarily ceased.
 - (3) Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures. See Chapter 167 of the UDC for tree protection requirements.
- (C) Intermittent/Perennial Streams. No intermittent or perennial stream, including a 25-foot perimeter strip measured from the top of the bank, shall be graded, developed, channeled, or physically altered unless adequate guarantees are made for erosion and sedimentation control both during construction and post construction. Likewise, cuts or fills shall be setback sufficiently from intermittent and perennial streams and other stormwater drainage systems to guarantee that there will be no damage from erosion or sedimentation. Final erosion and sedimentation control measures shall be approved by the City Engineer.
- (D) Excavation Material. Excavation material shall not be deposited in or so near streams and other stormwater drainage systems where it may be washed downstream by high water or runoff. All excavation material shall be stabilized immediately with erosion control measures.
- (E) Fording Streams . Fording of streams with construction equipment or other activities which destabilize stream banks shall not be permitted.
- (F) Debris, Mud, and Soil in Public Streets. Debris, mud and soil shall not be allowed on public streets but if any debris, mud, or soil from development sites reaches the public street it shall be immediately removed via sweeping or other methods of physical removal. All necessary modifications to stormwater best management practices should be immediately implemented in order to prevent further track-out. Debris, mud, or soil in the street may not be washed off the street or washed into the storm drainage system. Storm drainage systems downstream of a development site should be protected from debris, mud, or soil in the event that debris, mud, or soil reaches the drainage system.

(Code 1991, §161.04; Ord. No. 3551, 6-5-91; Ord. No. 3947, §1, 2-6-96; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.05 - One-Time Approvals

(A) Utilities. Public and private utility organizations may obtain a one-time approval from the City Engineer for all routine underground electric, water, sewer, natural gas, telephone, or cable facilities. The approval will include a utility organization and its contractors, agents, or assigns and will be permanent in nature as long as the original approved procedures are followed. (B) Stockpiling Materials. One-time approval may be obtained by public or private entities for the stockpiling of fill material, rock, sand, gravel, aggregate, or clay at particular locations, subject to Zoning, Chapters 160 through 165.

(Code 1991, §161.05; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.06 - Land Alteration Requirements

- (A) Applicability. This section shall apply to all land alteration activities, including those that do not require a grading permit.
- (B) Requirements Varied. Variances of this chapter's requirements may be approved by the City Engineer. The extent to which variations may be made will depend on the soil types encountered, planned slopes, planned vegetation, and investigative engineering reports. In no case shall the City Engineer waive or modify any of the minimum erosion control requirements as given in §169.04.
- (C) Cut or Fill Slopes.
 - (1) Finish Grade. Cut or fill slopes shall have a finish grade no steeper than 33% (3.00 horizontal to 1 vertical), unless otherwise approved by the City Engineer. Land located within the Hillside/Hilltop Overlay District may have cut or fill slopes with a finish grade no steeper than 50% (2.00 horizontal to 1 vertical) unless otherwise approved by the City Engineer.
 - (2) Maximum Length. The maximum length of any cut or fill slope without a terrace (as described in 169.06 (D) and (E) below) shall be 100 feet as measured along the ground. The terrace shall be at least 6 feet wide.
 - (3) Existing Topography. Cut or fill slopes shall be constructed to eliminate sharp angles of intersection with the existing terrain and shall be rounded and contoured to blend with the existing topography.
 - (4) Setback Requirements. The following setback requirements shall be reviewed by the City Engineer for purposes of assessing safety, stability, and drainage problems: (See illustrations).
 - (a) Setback from Top or Toe of Cut or Fill. Buildings shall be setback from the top or toe of a cut or fill in accordance with Zoning, Chapters 160 through 165; Building Regulations, Chapter 173; or the approved grading plan, whichever is greatest.
 - (b) Setbacks from Property Lines. The required setback of retaining walls, cut slopes, and fill slopes from property lines shall be as given in the illustrations. Property lines may be filled over or cut if a grading plan for the cut or fill is submitted jointly by the owner of both properties or with written permission from the adjacent property owner and if no utility easements are involved. If utility easements are involved, approval is required as given in (c) below in addition to the joint submittal requirement.
 - (c) Setbacks from the Edge of an Easement. The required setback of retaining wall, cut slopes, and fill slopes from the edge of easements shall be as given in the illustrations. Where no utilities are present in an easement, or where utilities are planned to be relocated, and where such action is approved by all utilities, in writing, then easements may fall within a cut or fill section.
 - (d) Setbacks from Structures. The required setback of retaining walls, cut slopes, and fill slopes from structures shall be as given in the illustrations. If a structure forms an integral part of the retaining wall, then the setbacks do not apply to that structure.
 - (e) Calculating Setbacks. For the purpose of calculating setbacks, any cut or fill section which is on a slope of one (1) to one (1) or greater shall be considered a retaining wall.

- (f) Administrative Variance. Setbacks from easement lines and structures may be varied administratively by the City Engineer if geotechnical and/or structural information is provided that in the opinion of the City Engineer justifies the variance.
- (g) Additional Information Required. The City Engineer may require further geotechnical and/or structural information to show that setbacks greater than those given are not needed to protect property, utilities, or the integrity of property lines.

(D) Cuts.

- (1) Vertical Height. Cuts shall be limited to 10 feet in vertical height unless information demonstrating slope stability, erosion control, and drainage control is provided together with a re-vegetation plan. For nonsolid rock cuts, terraces shall be required for cuts greater than 10 feet in height. It is recommended that terracing be at a maximum ratio of 1 foot of horizontal terrace for every foot of vertical surface.
- (2) Maximum Vertical Cut. In solid rock, as determined by geotechnical and engineering data approved by the City Engineer, the maximum vertical cut shall be 30 feet.
- (3) *Fill Material*. In no case shall a cut be allowed primarily for the purpose of obtaining fill material to a different site, unless the exporting site is located within an extraction district.

(E) Fills.

- (1) Rocks/Fill. All imported fill shall be free of rocks greater than twelve (12) inches in diameter and any detrimental organic material or refuse debris.
- (2) Compaction. Fill shall be placed and compacted as to minimize sliding or erosion of soil. Fill compaction shall equal the compaction of undisturbed, adjacent soil, except fills covered by Building Regulations, Chapter 173, or other structural fills. The City Engineer may require soil tests during compaction work or upon its completion at the expense of the permittee.
- (3) *Grade*. Fill shall not be placed on existing slope with a grade steeper than 15% (6.67 horizontal to 1 vertical) unless keyed into steps in the existing grade and thoroughly stabilized by mechanical compaction.
- (4) Vertical Height. Fills shall be limited to 10 feet in vertical height unless information demonstrating slope stability, erosion control, and drainage control is provided together with a re-vegetation plan.
- (5) Terraces. Terraces shall be required for fills greater than 10 feet in height. It is recommended that terracing be at a maximum ratio of one foot of horizontal terrace for every foot of vertical surface.

(F) Erosion and Sedimentation Control.

- (1) Permanent Improvements. Permanent improvements such as streets, storm sewers, curb and gutters, and other features for control of runoff shall be scheduled coincidental to removing vegetative cover from the area so that large areas are not left exposed beyond the capacity of temporary control measures.
- (2) Phased Construction. The area of disturbance onsite at any one time shall be limited to 20 acres. An additional 20 acres (a maximum of 40 acres of disturbance at any one time) may be stripped with the permission of the City Engineer in order to balance cut and fill onsite. No additional area may be open without the permission of the City Engineer until the previously disturbed areas have been temporarily or permanently stabilized.
- (3) Stockpiling of Top Soil. Top soil may be stockpiled and protected for later use on areas requiring landscaping. All storage piles of soil, dirt or other building materials (e.g. sand) shall be located more than 25 feet from a roadway, drainage channel or stream (from top of bank), wetland, and stormwater facility. The City Engineer may also require top soil stockpiles to be located up to fifty feet from a drainage channel or stream, as measured from the top of the bank to the stockpile, for designated protected streams; established TMDL water bodies; streams

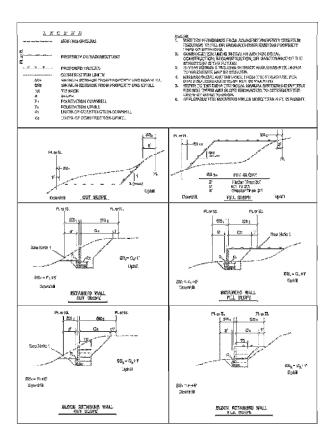
listed on the State 303(d) list; an Extraordinary Resource Water, Ecologically Sensitive Waterbody, and/or Natural and Scenic Waterbody, as defined by Arkansas Pollution Control and Ecology Commission Regulation No. 2; and/or any other uses at the discretion of the City Engineer.

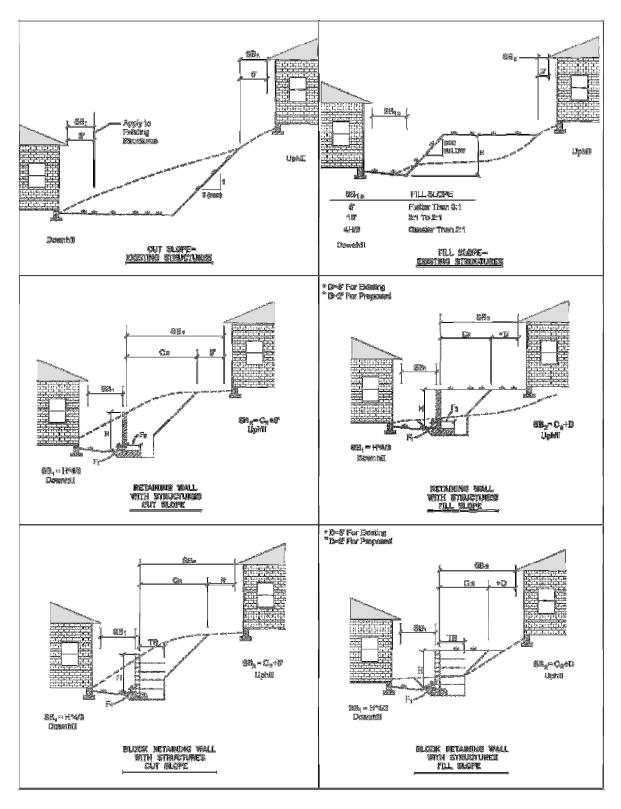
Topsoil piles surfaces must be immediately stabilized with appropriate stabilization measures. Stabilization practices may include: temporary seeding (i.e. annual rye or other suitable grass), mulching, and other appropriate measures. Sediment control measures such as buffer strips, wattles, or silt fence shall be provided immediately for stockpiles and remain in place until other stabilization is in place. Storm drain inlets must be protected from potential sedimentation from storage piles by silt fence or other appropriate barriers.

Properly stabilized topsoil stockpiles may be used for sedimentation control.

- (4) Plant/Water. Plant materials shall be watered or irrigated and tended. Where irrigation or regular watering is not available, only native or acclimated plant species shall be used. If the soil cannot properly sustain vegetation, it must be appropriately amended. If re-vegetation is not firmly established and healthy after one (1) year, the urban forester shall require that it be redone in part or total.
- (5) Permanent Erosion Control. The developer shall incorporate permanent erosion control features at the earliest practical time. Temporary erosion control measures will be used to correct conditions that develop during construction that were unforeseen during the design stage, that are needed prior to installation of permanent erosion control features, or that are needed temporarily to control erosion that develops during normal construction projects, but are not associated with permanent control features on the project.
- (G) Percentage of Land Disturbance. Land disturbance percentage within the Hilltop/Hillside Overlay District shall be in accordance with equal to the percent minimum canopy required on site per Chapter 167, Tree Preservation & Protection.
- (H) Required Retaining Wall and Rock Cut Design.
 - (1) Design/Inspection. Any retaining wall more than 4 feet in height shall be designed by an Arkansas registered professional engineer, and shall be field inspected by the design engineer. The design engineer shall provide proof of inspection and certify that the wall was constructed in conformance with the design. The City Engineer may require retaining walls less than 4 feet in height to be designed by a professional engineer.
 - (2) Investigation/Report. All proposed rock cuts and any cut or fill 10 feet or greater will require a geotechnical investigation and a formal report submitted by a registered professional engineer qualified to make such investigations.
 - (3) Safety Railings. Safety railings may be required on any retaining wall 2.5 feet or higher. The decision as to whether to require safety railing shall be based on potential pedestrian and public access to the retaining wall and applicable building codes. This requirement for safety rails shall also apply to vertical or near vertical rock cuts and to steep (greater than 3:1) cut or fill slopes.

(Code 1991, §161.07; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5431, 8-16-11; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)





169.07 - Grading Plan Specifications

(A) Grading Plan. The applicant shall prepare a grading plan as follows:

- (1) Site Plan. Site plan at a scale no smaller than 1 inch equals 50 feet, showing property lines; vicinity map; name of owner, developer and adjacent property owners.
- (2) Existing Grades. Existing grades shall be shown with dashed line contours and proposed grades with solid line contours. Grading plans shall be required to show both the proposed grade and the undisturbed area. Contour intervals shall be a maximum of 2 feet. Spot elevations shall be indicated.
- (3) Designation of Grade. Areas with 0 to 10%, 10 to 15%, 15 to 20% and more than 20% grade shall each be identified in a distinguishing manner.
- (4) Identify Land to Be Disturbed. Land areas to be disturbed shall be clearly identified.
- (5) Engineer/Architect . Seal of an Arkansas registered engineer, architect, or landscape architect certifying that the plan complies with this chapter.
- (6) Cuts and Fills. All cuts and fills, including height and slope, shall be clearly shown on the plan.
- (7) Streets and Rights-of-Way. Location and names of all existing or platted streets or rights-of-way within or adjacent to tract and location of all utilities and easements within or adjacent to the property shall all be indicated.
- (8) Lot/Building, Etc., Identification. The proposed location of lots, buildings, streets, parking lots and parks, playgrounds or green space shall be indicated. Also to be indicated is any existing or proposed building within 100 feet of the site.
- (9) Natural Features. Location of natural features such as drainage ways, ponds, rock outcroppings, and tree cover. Indication of 100 year floodplains as defined by FEMA.
- (10) Streets and Drainage Ways. Profiles and cross sections for proposed streets and drainage ways.
- (11) Acreage. Total project acreage and disturbed area.
- (12) Surface Water. Provisions for collecting and discharging surface water in accordance with the Drainage Criteria Manual.
- (13) *Underground Utilities.* Profiles and cross sections of streets, drainage systems, and underground utilities, if they are necessary to clarify the grading plan in terms of potential erosion or runoff, or if the grading on site has the potential of disturbing the utility line.
- (14) *Treatment of Slopes and Benches.* The method of treatment for all slopes and benches shall be indicated, including final cover type.
- (15) Natural Vegetation Preservation. Proposals for preserving natural vegetation and description of re-vegetation or other permanent erosion control strategy.
- (16) Runoff/Sedimentation. Specification of measures to control runoff and sedimentation during construction indicating what will be used such as straw bales silt fences, silt dams, brush rock check dams, lateral hillside ditches, catch basins, and the like.
- (17) Preliminary Plat Master Build-Out Grading Plan. The applicant shall prepare a master grading plan to be followed during individual lot development to convey runoff to a public drainage easement or right of way. The following shall be required for individual lot drainage design:
 - (a) Identify lot lines and conceptual foot print of residence.
 - (b) Indicate individual lot drainage with the use of contours and flow arrows or other indications of direction of drainage.
 - (i) In general, drainage should be routed on the shortest practicable flow path to the public right-of-way or drainage easement.
 - (c) Nonstructural grassed swales for rear lot drainage concentration is discouraged and shall not be installed in combination with a utility easement.

- (d) Right-of-way, utility easements and drainage easements shall be graded and shaped in accordance with the master build out grading plan during preliminary plat construction.
 - (i) Utility easements adjacent to the right-of-way shall be no steeper than 15%.
 - (ii) Provisions will be considered to accommodate positive drainage until build-out occurs.
- (B) Preliminary Grade Plan. The preliminary grading plan shall have adequate detail for review.

(Code 1991, §161.08; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, 8-18-98; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.08 - Grading Plan Submittal

- (A) Preliminary Grading Plan. A preliminary grading plan shall be submitted at the time of preliminary plat submission for subdivisions or plat submission for large scale developments and site improvement plans, whichever is applicable.
- (B) Final Grading Plan. No subdivision may be finalized, nor large scale development plat approved before a final grading plan has been submitted to the City Engineer and approved. The final grading plan and the final plat of land located within the Hillside/Hilltop Overlay District shall have the following plat note stating: "Property and lot owners of lands located within the Hillside/Hilltop Overlay District shall have foundation plans designed, approved and sealed by a professional architect or engineer and receive a residential grading permit prior to building permit."
- (C) A copy of the stormwater pollution prevention plan (SWPPP) is required to be submitted with the grading plan for sites 1 acre or larger.
- (D) In cases where neither subdivision plat, nor LSD plat is applicable, proof of notification of adjacent property owners and grading plan must be submitted simultaneously with the application for a grading permit.

(Code 1991, §161.09; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4855, 4-18-06; Ord. No. 5308, 3-16-10; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.09 - Minor Modifications

Finish grades shall be allowed no more than a 0.50 foot tolerance from the grading plan. However, the City Engineer may authorize in writing minor modifications so long as they do not alter the direction of run-off and otherwise comply with the intent of this chapter. When applicable, major modifications must be brought before the Subdivision Committee for their approval approved through the City planning process.

(Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.10 - Approval

Approval of a grading permit is contingent on meeting all the requirements of this ordinance plus any set of varied requirements approved by the Planning Commission.

(Code 1991, §161.10; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, 8-18-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.11 - Discovery Of Historic Resources

Whenever, during the conduct of grading any historical, pre-historical, or paleontological materials are discovered, grading shall cease and the City Engineer shall be notified.

(Code 1991, §161.21; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.12 - Certificate Of Occupancy

All re-vegetation and grading plan improvements shall be in place before a certificate of occupancy shall be issued, including cleanup and restoration/revegetation of adjacent and nearby property affected by construction activities. When a property owner has finished building construction but has yet to install plant material, said owner may apply for a temporary certificate of occupancy. In evaluating whether or not to grant a temporary certificate of occupancy, the City Engineer shall consider weather conditions and temporary stabilization measures.

(Code 1991, §161.15; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10, Ord. No. 5431, 8-16-11; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.13 - Owner Responsibility

The property owner shall be responsible both for his or her employees and for all contractors and subcontractors from the onset of development until the property is fully stabilized. If property is transferred anytime between the onset of development and at the time it is fully stabilized, all responsibility and liability for meeting the terms of the chapter shall be likewise transferred to the new property owner.

(Code 1991, §161.16; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.14—169.99 - Reserved

(Ord. 5702, Repealed & Replaced Chp. 169, 8-5-14)

156.04 - Physical Alteration Of Land And Stormwater Drainage And Erosion Control

A variance of the requirements of Chapter 166.02 and 169.03 requiring development approval prior to issuance of grading permit may be granted by the Planning Commission subject to the General Requirements of §156.03.

Variances of the requirements of Chapters 169 and 170 may be approved by the City Engineer, subject to the following criteria:

Criteria. Variances of the physical alteration of land and stormwater management, drainage, and erosion control regulations may be applied for as follows:

(A) Chapter 169 Criteria. A variance may be granted from any requirements of the Physical Alteration of Land regulations dependent upon on the soil types encountered, planned slopes, planned vegetation, and investigative engineering reports.

166.02 - Development Review Process

- (D) Plat Recordation or Construction Plan Approval. After obtaining approval by the appropriate governing body, the applicant shall follow the procedures set forth below in order to record the plat or obtain construction plan approval.
 - (1) Property Line Adjustment, Lot Split, Final Plat, Concurrent Plat. The applicant shall submit copies of the approved plats containing all required signatures to the Planning Division for final approval. The plats shall be recorded by the applicant and copies of the recorded plats provided to the Planning Division as required.
 - (2) Preliminary Plat, Large Scale Development and Small or Large Site Improvement Plans. Receipt of the approval authorizes the applicant to proceed with:
 - (a) The preparation of plans, reports and specifications in accordance with City Engineering requirements including but not limited to:
 - (i) Street plans, profiles and specification accompanied by soil analyses and design calculations;
 - (ii) Storm drainage plans, profiles and specifications accompanied by soil analyses and design calculations; and
 - (iii) Water and sewer plans, profiles and specifications, accompanied by design calculations, to be reviewed and approved by City Engineering.
 - (iv) Final site plans, landscape plans, and other plans, reports and specifications required by the city to obtain approval.
 - (b) Once all approvals that are required have been obtained, the applicant may proceed with site preparation and construction in accordance with the permitted plans.

CHAPTER 169 - PHYSICAL ALTERATION OF LAND

169.01 - Intent

(A) It is the city's intent to safeguard the health, safety, and welfare of Fayetteville citizens by implementing standards and procedures for the physical alteration of land. It is not the city's intent to supersede federal or state regulations such as, but not limited to, the Occupational Health & Safety Act. (B) The purpose of this chapter is to control grading, clearing, filling, excavation, or land alteration of any kind which alone or in combination cause landslides, flooding, degradation of water quality, erosion and sedimentation in storm sewer systems and water storage basins. It is also the intent of this chapter that through the implementation of the guidelines and regulations contained herein, the existing scenic character and quality of the neighborhood and city as a whole not be diminished.

(Code 1991, §161.01; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.02 - General Requirements

- (A) Protection. Persons engaged in land alteration activities regulated by this chapter shall take measures to protect public and private properties from damage by such activities. Adjacent and nearby properties affected by land alterations shall be restored in accordance with the requirements of this chapter.
- (B) Site Conditions. Development shall generally conform to the natural contours of the land, natural drainage ways, and other existing site conditions.
- (C) Adjacent Properties. All developments shall be constructed and maintained so that adjacent properties are not unreasonably burdened with surface waters as a result of such development. More specifically, new development may not unreasonably impede water runoff from higher properties nor may it unreasonably channel water onto lower properties.
- (D) Restoration. Land shall be revegetated and restored as close as practically possible to its original conditions so far as to minimize runoff and erosion are concerned. Previously forested areas shall follow the City's Landscape Manual for mitigation of forested areas.

(Code No. 1991, §161.02; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5431, 8-16-11; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.03 - Permits Required/Exceptions

- (A) Permit Required. Unless exempted by §169.03(C), all grading, clearing, filling, excavation, or land alteration of any kind shall require:
 - (1) Prior development approval as specified in §166, except for general grading to an existing developed site that does not impact trees or floodplains and does not significantly alter the natural landform.
 - (2) A grading permit pursuant to this chapter;
 - (3) An Arkansas Department of Environmental Quality Stormwater Construction Permit and incorporated Stormwater Pollution Prevention Plan, if required by state law.
- (B) Residential Grading Permit Required. When located within the Hillside/Hilltop Overlay District boundaries:
 - (1) Construction of up to two (2) single-family residences or a duplex on a single lot shall require a grading permit;
 - (2) Residential building additions of 2,000 square feet or more on a single lot shall require a grading permit;
 - (3) Residential building additions of less than 2,000 square feet where associated land alteration activities are not beyond the scope of what is necessary to construct said addition and no trees are impacted do not require a grading permit;

- (4) Parcels of land divided by the Hillside/Hilltop Overlay District boundary shall only be subject to the requirements of this chapter on that portion of land lying within the boundary.
- (C) Exceptions to Permit Requirements. Grading permits are not required for the following:
 - (1) Excavation Below Finish Grade. Excavations below finished grade for basements, swimming pools, hot tubs, septic systems, retaining walls under 4 feet in height, and like structures authorized by a valid building permit.
 - (2) Cemetery Graves . Cemetery graves.
 - (3) Refuse Disposal . Refuse disposal sites controlled by other regulations.
 - (4) Single-Family/Duplex. Construction of up to two (2) single-family residences on a single lot, or duplex unless located within the Hillside/Hilltop Overlay District per §169.03(B) above.
 - (5) Building Additions. Building additions of less than 2,000 square feet unless located within the Hillside/Hilltop Overlay District per §169.03(B) above.
 - (6) Other minor fill, clearing or grading for maintenance purposes such as landscaping, yard grading, maintenance, farming, gardens, and similar activities.
- (D) Grading Permit Application and Approval. No grading permit shall be issued until the grading plan, endorsed by a landscape architect, or engineer licensed in the state of Arkansas, is approved by the City Engineer. A separate permit shall be required for each site. Grading permits may be issued jointly for parcels of land that are contiguous, so long as erosion control measures are in place until project completion. Any application for a required grading permit under this chapter shall be submitted concurrently with the application and calculations for a drainage permit if such a drainage permit is required by §170.03. Tree Preservation and Protection is required in accordance with §167.
- (E) *Permit Posted*. A copy of the grading permit cover page shall be posted at or near the street right-of-way line and shall be clearly visible from the street.

(Code 1991, §161.03; Ord. No. 3551, 6-5-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 4313, 5-15-01; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14; Ord. No. 5945, §18, 1-17-17)

169.04 - Minimum Erosion Control Requirements

If exempt under 169.03, a grading permit is not required. However, exempt as well as non-exempt activities shall be subject to the following minimum erosion and sedimentation control measures.

- (A) The City Council hereby adopts by reference the *Drainage Criteria Manual*, prepared for the City of Fayetteville, and adopted by Ordinance No. 5702 of the City of Fayetteville and as may be amended from time to time by the City Engineer. All minimum erosion and sediment control standards contained therein shall have the same force and effect as if printed word for word in this chapter. Development projects also must comply with their Arkansas Department of Environmental Quality general construction permit. All projects shall follow Chapter 8, Construction Site Stormwater Management, of the Drainage Criteria Manual as well to achieve site compliance.
- (B) Stabilization. A record of the dates when grading activities occur, when construction activities temporarily or permanently cease on a portion of the site, and when stabilization measures are initiated shall be included in the erosion and sediment control plan. Except as provided in (1) and (2) below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased.
 - (1) Where the initiation of stabilization measures by the fourteenth day after construction activity temporarily or permanently ceases is precluded by snow cover, stabilization measures shall be initiated as soon as practicable.

- (2) Where construction activity will resume on a portion of the site within twenty-one (21) days from when activities ceased, (e.g. the total time period that construction activity is temporarily ceased is less than twenty-one (21) days) then stabilization measures do not have to be initiated on that portion of the site by the fourteenth day after construction activity temporarily ceased.
- (3) Stabilization practices may include: temporary seeding, permanent seeding, mulching, geotextiles, sod stabilization, vegetative buffer strips, protection of trees, and preservation of mature vegetation and other appropriate measures. See Chapter 167 of the UDC for tree protection requirements.
- (C) Intermittent/Perennial Streams. No intermittent or perennial stream, including a 25-foot perimeter strip measured from the top of the bank, shall be graded, developed, channeled, or physically altered unless adequate guarantees are made for erosion and sedimentation control both during construction and post construction. Likewise, cuts or fills shall be setback sufficiently from intermittent and perennial streams and other stormwater drainage systems to guarantee that there will be no damage from erosion or sedimentation. Final erosion and sedimentation control measures shall be approved by the City Engineer.
- (D) Excavation Material. Excavation material shall not be deposited in or so near streams and other stormwater drainage systems where it may be washed downstream by high water or runoff. All excavation material shall be stabilized immediately with erosion control measures.
- (E) Fording Streams . Fording of streams with construction equipment or other activities which destabilize stream banks shall not be permitted.
- (F) Debris, Mud, and Soil in Public Streets. Debris, mud and soil shall not be allowed on public streets but if any debris, mud, or soil from development sites reaches the public street it shall be immediately removed via sweeping or other methods of physical removal. All necessary modifications to stormwater best management practices should be immediately implemented in order to prevent further track-out. Debris, mud, or soil in the street may not be washed off the street or washed into the storm drainage system. Storm drainage systems downstream of a development site should be protected from debris, mud, or soil in the event that debris, mud, or soil reaches the drainage system.

(Code 1991, §161.04; Ord. No. 3551, 6-5-91; Ord. No. 3947, §1, 2-6-96; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.05 - One-Time Approvals

- (A) *Utilities.* Public and private utility organizations may obtain a one-time approval from the City Engineer for all routine underground electric, water, sewer, natural gas, telephone, or cable facilities. The approval will include a utility organization and its contractors, agents, or assigns and will be permanent in nature as long as the original approved procedures are followed.
- (B) Stockpiling Materials. One-time approval may be obtained by public or private entities for the stockpiling of fill material, rock, sand, gravel, aggregate, or clay at particular locations, subject to Zoning, Chapters 160 through 165.

(Code 1991, §161.05; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.06 - Land Alteration Requirements

(A) Applicability. This section shall apply to all land alteration activities, including those that do not require a grading permit.

- (B) Requirements Varied. Variances of this chapter's requirements may be approved by the City Engineer. The extent to which variations may be made will depend on the soil types encountered, planned slopes, planned vegetation, and investigative engineering reports. In no case shall the City Engineer waive or modify any of the minimum erosion control requirements as given in §169.04.
- (C) Cut or Fill Slopes.
 - (1) Finish Grade. Cut or fill slopes shall have a finish grade no steeper than 33% (3.00 horizontal to 1 vertical), unless otherwise approved by the City Engineer. Land located within the Hillside/Hilltop Overlay District may have cut or fill slopes with a finish grade no steeper than 50% (2.00 horizontal to 1 vertical) unless otherwise approved by the City Engineer.
 - (2) Maximum Length. The maximum length of any cut or fill slope without a terrace (as described in 169.06 (D) and (E) below) shall be 100 feet as measured along the ground. The terrace shall be at least 6 feet wide.
 - (3) Existing Topography. Cut or fill slopes shall be constructed to eliminate sharp angles of intersection with the existing terrain and shall be rounded and contoured to blend with the existing topography.
 - (4) Setback Requirements. The following setback requirements shall be reviewed by the City Engineer for purposes of assessing safety, stability, and drainage problems: (See illustrations).
 - (a) Setback from Top or Toe of Cut or Fill. Buildings shall be setback from the top or toe of a cut or fill in accordance with Zoning, Chapters 160 through 165; Building Regulations, Chapter 173; or the approved grading plan, whichever is greatest.
 - (b) Setbacks from Property Lines. The required setback of retaining walls, cut slopes, and fill slopes from property lines shall be as given in the illustrations. Property lines may be filled over or cut if a grading plan for the cut or fill is submitted jointly by the owner of both properties or with written permission from the adjacent property owner and if no utility easements are involved. If utility easements are involved, approval is required as given in (c) below in addition to the joint submittal requirement.
 - (c) Setbacks from the Edge of an Easement. The required setback of retaining wall, cut slopes, and fill slopes from the edge of easements shall be as given in the illustrations. Where no utilities are present in an easement, or where utilities are planned to be relocated, and where such action is approved by all utilities, in writing, then easements may fall within a cut or fill section.
 - (d) Setbacks from Structures. The required setback of retaining walls, cut slopes, and fill slopes from structures shall be as given in the illustrations. If a structure forms an integral part of the retaining wall, then the setbacks do not apply to that structure.
 - (e) Calculating Setbacks. For the purpose of calculating setbacks, any cut or fill section which is on a slope of one (1) to one (1) or greater shall be considered a retaining wall.
 - (f) Administrative Variance. Setbacks from easement lines and structures may be varied administratively by the City Engineer if geotechnical and/or structural information is provided that in the opinion of the City Engineer justifies the variance.
 - (g) Additional Information Required. The City Engineer may require further geotechnical and/or structural information to show that setbacks greater than those given are not needed to protect property, utilities, or the integrity of property lines.

(D) Cuts.

(1) Vertical Height. Cuts shall be limited to 10 feet in vertical height unless information demonstrating slope stability, erosion control, and drainage control is provided together with a re-vegetation plan. For nonsolid rock cuts, terraces shall be required for cuts greater than 10 feet in height. It is recommended that terracing be at a maximum ratio of 1 foot of horizontal terrace for every foot of vertical surface.

- (2) Maximum Vertical Cut. In solid rock, as determined by geotechnical and engineering data approved by the City Engineer, the maximum vertical cut shall be 30 feet.
- (3) *Fill Material*. In no case shall a cut be allowed primarily for the purpose of obtaining fill material to a different site, unless the exporting site is located within an extraction district.

(E) Fills.

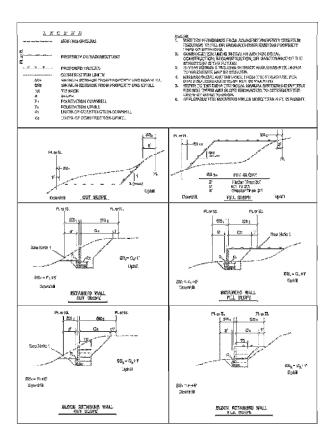
- (1) Rocks/Fill. All imported fill shall be free of rocks greater than twelve (12) inches in diameter and any detrimental organic material or refuse debris.
- (2) Compaction. Fill shall be placed and compacted as to minimize sliding or erosion of soil. Fill compaction shall equal the compaction of undisturbed, adjacent soil, except fills covered by Building Regulations, Chapter 173, or other structural fills. The City Engineer may require soil tests during compaction work or upon its completion at the expense of the permittee.
- (3) *Grade.* Fill shall not be placed on existing slope with a grade steeper than 15% (6.67 horizontal to 1 vertical) unless keyed into steps in the existing grade and thoroughly stabilized by mechanical compaction.
- (4) Vertical Height. Fills shall be limited to 10 feet in vertical height unless information demonstrating slope stability, erosion control, and drainage control is provided together with a re-vegetation plan.
- (5) Terraces. Terraces shall be required for fills greater than 10 feet in height. It is recommended that terracing be at a maximum ratio of one foot of horizontal terrace for every foot of vertical surface.
- (F) Erosion and Sedimentation Control.
 - (1) Permanent Improvements. Permanent improvements such as streets, storm sewers, curb and gutters, and other features for control of runoff shall be scheduled coincidental to removing vegetative cover from the area so that large areas are not left exposed beyond the capacity of temporary control measures.
 - (2) Phased Construction. The area of disturbance onsite at any one time shall be limited to 20 acres. An additional 20 acres (a maximum of 40 acres of disturbance at any one time) may be stripped with the permission of the City Engineer in order to balance cut and fill onsite. No additional area may be open without the permission of the City Engineer until the previously disturbed areas have been temporarily or permanently stabilized.
 - (3) Stockpiling of Top Soil. Top soil may be stockpiled and protected for later use on areas requiring landscaping. All storage piles of soil, dirt or other building materials (e.g. sand) shall be located more than 25 feet from a roadway, drainage channel or stream (from top of bank), wetland, and stormwater facility. The City Engineer may also require top soil stockpiles to be located up to fifty feet from a drainage channel or stream, as measured from the top of the bank to the stockpile, for designated protected streams; established TMDL water bodies; streams listed on the State 303(d) list; an Extraordinary Resource Water, Ecologically Sensitive Waterbody, and/or Natural and Scenic Waterbody, as defined by Arkansas Pollution Control and Ecology Commission Regulation No. 2; and/or any other uses at the discretion of the City Engineer.

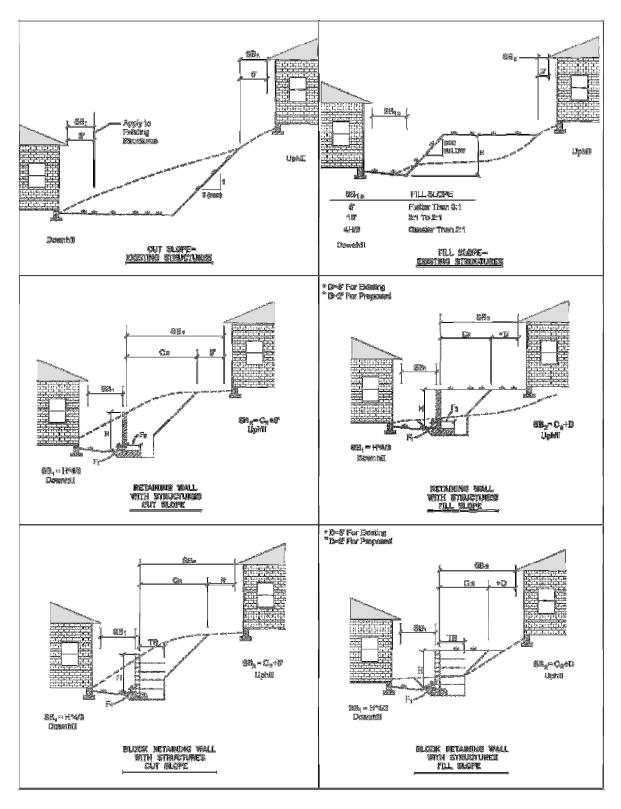
Topsoil piles surfaces must be immediately stabilized with appropriate stabilization measures. Stabilization practices may include: temporary seeding (i.e. annual rye or other suitable grass), mulching, and other appropriate measures. Sediment control measures such as buffer strips, wattles, or silt fence shall be provided immediately for stockpiles and remain in place until other stabilization is in place. Storm drain inlets must be protected from potential sedimentation from storage piles by silt fence or other appropriate barriers.

Properly stabilized topsoil stockpiles may be used for sedimentation control.

- (4) Plant/Water. Plant materials shall be watered or irrigated and tended. Where irrigation or regular watering is not available, only native or acclimated plant species shall be used. If the soil cannot properly sustain vegetation, it must be appropriately amended. If re-vegetation is not firmly established and healthy after one (1) year, the urban forester shall require that it be redone in part or total.
- (5) Permanent Erosion Control. The developer shall incorporate permanent erosion control features at the earliest practical time. Temporary erosion control measures will be used to correct conditions that develop during construction that were unforeseen during the design stage, that are needed prior to installation of permanent erosion control features, or that are needed temporarily to control erosion that develops during normal construction projects, but are not associated with permanent control features on the project.
- (G) Percentage of Land Disturbance. Land disturbance percentage within the Hilltop/Hillside Overlay District shall be equal to the percent minimum canopy required on site per Chapter 167, Tree Preservation & Protection.
- (H) Required Retaining Wall and Rock Cut Design.
 - (1) Design/Inspection. Any retaining wall more than 4 feet in height shall be designed by an Arkansas registered professional engineer, and shall be field inspected by the design engineer. The design engineer shall provide proof of inspection and certify that the wall was constructed in conformance with the design. The City Engineer may require retaining walls less than 4 feet in height to be designed by a professional engineer.
 - (2) Investigation/Report. All proposed rock cuts and any cut or fill 10 feet or greater will require a geotechnical investigation and a formal report submitted by a registered professional engineer qualified to make such investigations.
 - (3) Safety Railings. Safety railings may be required on any retaining wall 2.5 feet or higher. The decision as to whether to require safety railing shall be based on potential pedestrian and public access to the retaining wall and applicable building codes. This requirement for safety rails shall also apply to vertical or near vertical rock cuts and to steep (greater than 3:1) cut or fill slopes.

(Code 1991, §161.07; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, §1, 8-18-98; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5431, 8-16-11; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)





169.07 - Grading Plan Specifications

(A) Grading Plan. The applicant shall prepare a grading plan as follows:

- (1) Site Plan. Site plan showing property lines; vicinity map; name of owner, developer and adjacent property owners.
- (2) Existing Grades. Existing grades shall be shown with dashed line contours and proposed grades with solid line contours. Grading plans shall be required to show both the proposed grade and the undisturbed area. Contour intervals shall be a maximum of 2 feet. Spot elevations shall be indicated.
- (3) Designation of Grade. Areas with 0 to 10%, 10 to 15%, 15 to 20% and more than 20% grade shall each be identified in a distinguishing manner.
- (4) Identify Land to Be Disturbed. Land areas to be disturbed shall be clearly identified.
- (5) Engineer/Architect. Seal of an Arkansas registered engineer or landscape architect certifying that the plan complies with this chapter.
- (6) Cuts and Fills. All cuts and fills, including height and slope, shall be clearly shown on the plan.
- (7) Streets and Rights-of-Way. Location and names of all existing or platted streets or rights-of-way within or adjacent to tract and location of all utilities and easements within or adjacent to the property shall all be indicated.
- (8) Lot/Building, Etc., Identification. The proposed location of lots, buildings, streets, parking lots and parks, playgrounds or green space shall be indicated. Also to be indicated is any existing or proposed building within 100 feet of the site.
- (9) Natural Features. Location of natural features such as drainage ways, ponds, rock outcroppings, and tree cover. Indication of 100 year floodplains as defined by FEMA.
- (10) Streets and Drainage Ways. Profiles and cross sections for proposed streets and drainage ways.
- (11) Acreage. Total project acreage and disturbed area.
- (12) Surface Water. Provisions for collecting and discharging surface water in accordance with the Drainage Criteria Manual.
- (13) *Underground Utilities.* Profiles and cross sections of streets, drainage systems, and underground utilities, if they are necessary to clarify the grading plan in terms of potential erosion or runoff, or if the grading on site has the potential of disturbing the utility line.
- (14) *Treatment of Slopes and Benches.* The method of treatment for all slopes and benches shall be indicated, including final cover type.
- (15) Natural Vegetation Preservation. Proposals for preserving natural vegetation and description of re-vegetation or other permanent erosion control strategy.
- (16) Runoff/Sedimentation. Specification of measures to control runoff and sedimentation during construction indicating what will be used such as silt fences, silt dams, rock check dams, lateral hillside ditches, catch basins, and the like.
- (17) Preliminary Plat Master Build-Out Grading Plan. The applicant shall prepare a master grading plan to be followed during individual lot development to convey runoff to a public drainage easement or right of way. The following shall be required for individual lot drainage design:
 - (a) Identify lot lines and conceptual foot print of residence.
 - (b) Indicate individual lot drainage with the use of contours and flow arrows or other indications of direction of drainage.
 - (i) In general, drainage should be routed on the shortest practicable flow path to the public right-of-way or drainage easement.
 - (c) Nonstructural grassed swales for rear lot drainage concentration is discouraged and shall not be installed in combination with a utility easement.

- (d) Right-of-way, utility easements and drainage easements shall be graded and shaped in accordance with the master build out grading plan during preliminary plat construction.
 - (i) Utility easements adjacent to the right-of-way shall be no steeper than 15%.
 - (ii) Provisions will be considered to accommodate positive drainage until build-out occurs.
- (B) Preliminary Grade Plan. The preliminary grading plan shall have adequate detail for review.

(Code 1991, §161.08; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, 8-18-98; Ord. No. 4855, 4-18-06; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.08 - Grading Plan Submittal

- (A) Preliminary Grading Plan. A preliminary grading plan shall be submitted at the time of preliminary plat submission for subdivisions or plat submission for large scale developments and site improvement plans, whichever is applicable.
- (B) Final Grading Plan. No subdivision may be finalized, nor large scale development plat approved before a final grading plan has been submitted to the City Engineer and approved. The final grading plan and the final plat of land located within the Hillside/Hilltop Overlay District shall have the following plat note stating: "Property and lot owners of lands located within the Hillside/Hilltop Overlay District shall have foundation plans designed, approved and sealed by a professional architect or engineer and receive a residential grading permit prior to building permit."
- (C) A copy of the stormwater pollution prevention plan (SWPPP) is required to be submitted with the grading plan for sites 1 acre or larger.

(Code 1991, §161.09; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4855, 4-18-06; Ord. No. 5308, 3-16-10; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.09 - Minor Modifications

Finish grades shall be allowed no more than a 0.50 foot tolerance from the grading plan. However, the City Engineer may authorize in writing minor modifications so long as they do not alter the direction of run-off and otherwise comply with the intent of this chapter. When applicable, major modifications must be approved through the City planning process.

(Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.10 - Approval

Approval of a grading permit is contingent on meeting all the requirements of this ordinance plus any set of varied requirements approved by the Planning Commission.

(Code 1991, §161.10; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 4113, 8-18-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.11 - Discovery Of Historic Resources

Whenever, during the conduct of grading any historical, pre-historical, or paleontological materials are discovered, grading shall cease and the City Engineer shall be notified.

(Code 1991, §161.21; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.12 - Certificate Of Occupancy

All re-vegetation and grading plan improvements shall be in place before a certificate of occupancy shall be issued, including cleanup and restoration/revegetation of adjacent and nearby property affected by construction activities. When a property owner has finished building construction but has yet to install plant material, said owner may apply for a temporary certificate of occupancy. In evaluating whether or not to grant a temporary certificate of occupancy, the City Engineer shall consider weather conditions and temporary stabilization measures.

(Code 1991, §161.15; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10, Ord. No. 5431, 8-16-11; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.13 - Owner Responsibility

The property owner shall be responsible both for his or her employees and for all contractors and subcontractors from the onset of development until the property is fully stabilized. If property is transferred anytime between the onset of development and at the time it is fully stabilized, all responsibility and liability for meeting the terms of the chapter shall be likewise transferred to the new property owner.

(Code 1991, §161.16; Ord. No. 3551, 6-4-91; Ord. No. 4100, §2 (Ex. A), 6-16-98; Ord. No. 5336, 8-3-10; Ord. No. 5702, Repealed & Replaced Chp. 169, 8-5-14)

169.14—169.99 - Reserved

(Ord. 5702, Repealed & Replaced Chp. 169, 8-5-14)