## ORDINANCE NO 2002-1 GRADING AND DRAINAGE ORDINANCE

As amended November 4, 2010 As amended February 6, 2019

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# BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF EDGEWOOD, NEW MEXICO:

#### 1. SHORT TITLE.

This chapter may be cited as the "Grading and Drainage Ordinance," and shall be included in the Edgewood Municipal Codes under that Name

#### 2. PURPOSE.

The provisions of this chapter are to complement the subdivision ordinance and the zoning ordinance, and to make the uses permitted by these ordinances more feasible and acceptable in the interest of the individual property owner, the adjacent property owner and the general public. It shall be the purpose of this chapter:

- A. To ensure that proposed grading shall result in the minimum possible disturbance of terrain and natural land features necessary to construct residences or other permitted buildings or structures, or to conduct other legal land uses;
- B. To prevent grading which unnecessarily changes the terrain, other natural features, or creates flood problems which will have an adverse effect on the physical character or economic viability of the community;
- C. To ensure that the grading will not adversely affect the natural topographic drainage features, arroyos or other drainage features or alter natural surface runoff

#### 3. COMPLIANCE WITH PROVISIONS.

- A. No grading shall be done within the Town without complying with the requirements of this chapter. No blasting shall be done within the Town without a grading permit. A copy of the grading permit must be posted on the grading site during hours of operation.
- B. Work for which a grading permit has been issued under this chapter shall be executed in conformance with the grading plan approved by the Town and shall not be abandoned or left incomplete.
  - 1. Failure to continue significant work on a grading site once grading has begun may be determined by the Town to be an abandonment of the work required by the permit, and such abandonment will constitute a violation of this chapter. The permittee is responsible for notifying the Town within 7 days of stoppage for extenuating circumstances.
  - 2. Having persons or equipment at a site but not prosecuting the work is not construed to be significant work.
  - 3. Projects shall not be considered complete until restoration has been made inaccordance with National Pollution Discharge Elimination System requirements.

#### 4. PERMITS REQUIRED.

- A. Clearing and access permit. Clearing shall mean the removal of surface vegetation without disturbance of the root system. A clearing and access permit shall be issued:
  - 1. To permit the grading of a driveway/access or road to a site;
  - 2. To permit clearing of vegetation when this work is necessary to allow proper preliminary engineering on the site;
  - 3. To provide security for a site from unauthorized grading or dumping by clearing, loosening and berming the soil in a narrow band around the perimeter of the property;
  - 4. For such other purposes as the Town may determine are proper but which do not entail reshaping of the contour of the land to any significant degree.

- B. Grading Permit: A grading permit shall be issued by the Town:
  - 5. Submittals shall be prepared and certified by a New Mexico professional engineer.
  - 6. Grading permits shall be issued based upon approved preliminary subdivision plat; building or such other improvement plans as are necessary for development of the property on which such permit is requested.
  - 7. No on-site borrow is permitted except as part of necessary cuts.
  - 8. On-site processing of materials is limited to those used for preparation or construction of improvements within the site covered by the grading permit.
  - 9. A grading plan shall show the methods of dust, erosion and drainage control as provided in Section 18 Engineering Controls for Grading.

#### C. Right-Of-Way Excavation/Restoration Permit

- 10. Shall be required for any work performed within the right-of-way of a Town maintained roadway or easement.
- 11. Compaction tests will be required to follow NMDOT General Specifications for Highway & Street Construction as outlined on permit application.
- 12. It is the Contractor's responsibility to maintain a clean and safe work zone at all times during construction. These requirements will be enforced as the project progresses.
- a. Clean all trash/debris (Road Hazards) from site to include but not limited to (Rocks, Stumps, Branches, Concrete, Asphalt).
- b. Scarify or disc and reseed (May 1<sup>st</sup> thru August 31<sup>st</sup> only) all areas that are disturbed or denuded of vegetation according to 17NMAC 4.2 Section 12.5.
- c. Arroyo Crossings need to be restored to natural state with the channel bottom graded to allow positive drainage.
- d. Repair or replace Rip Rap if removed or damaged.
- e. All open trenches in the roadway prism need to be back filled and compacted to 95% of maximum dry density determined by a standard compaction test. (Compaction test reports must be available for review upon request)
- f. All open trenches outside the \*\*roadway prism are required to be compacted to a density equal to the surrounding undisturbed soil. (Must be returned to the natural contour of the surrounding surface if outside the prism of the road.)
- g. Ditch flow lines need to be cleaned and restored to the condition prior to construction.
- h. Disturbed areas within highway right of way by utility operations must be kept to a minimum and restored to the satisfaction of the Town of Edgewood.
- i. All paved driveway cuts must be patch and paved with Town of Edgewood approved material to match existing thickness of base coarse and hot mix asphalt.
- j. All gravel driveways will need to be re-graveled.
- l. All existing erosion control measures that were removed need to be reinstalled
- m. All drainage culverts need to be clear of obstructions.
- n. Replace all roadway signs that were removed or damaged during construction.
- o. All new utility facilities (manhole covers, valve covers, pull boxes, etc.) must be at ground level (finish grade of road if the roadway prism or surrounding undisturbed soil if outside the road prism).
- p. Repair fences (in accordance with Town of Edgewood specifications) that were damaged as a result of the construction project.
- q. Grade dirt to the natural contour of the surrounding surface if outside the prism of the road and compact to surrounding soil density.
- r. Maintain traffic control in accordance with MUTCD at all times during

construction.

- s. Remove traffic control when project is finalized.
- t. Verify that all valve boxes have lids.
- u. Verify that all manholes have lids.
- v. Sweep all asphalt that has been affected by construction.
- w. Remove all construction equipment from the right of way.
- x. Repair or notify the utility owner to repair all utilities that were damaged as a result of the construction project.
- y. Bury all utilities (in accordance with Town of Edgewood requirements) that were exposed as a result of the project construction.
- \*\* Roadway Prism That portion of the roadway right of way between back of ditch, bottom of ditch, back of curbs including slopes, shoulders, pavement and a median of less than sixteen feet in width.

#### 5. EXCEPTIONS FROM PERMITS.

Grading permits will not be required under the following circumstances, which are exceptions concerning only the obligation to apply for a permit, and do not relieve the landowner from complying with the remaining provisions of this chapter. The person engaged in grading shall have the burden of establishing that he comes within any of the following exceptions:

- A. Residential new construction, remodeling, additions, or other alterations to existing structures are exempt from the requirements of this section provided that they meet the following conditions:
  - a. No slopes greater than 10% are disturbed; and
  - b. Existing drainage patterns on the property are not changed in a way that would increase the amount of storm water runoff leaving the property.
- B. Commercial new construction, remodeling, additions, or other alterations to existing structures are exempt from the requirements of this section provided that they meet the following conditions:
  - a. Less than 1000 square feet of total land area is disturbed;
  - b. No slopes greater than 10% are disturbed; and
  - c. Existing drainage patterns on the property are not changed in a way that would increase the amount of storm water runoff leaving the property.
- C. Where the work to be performed is routine agricultural or land management operations necessary for cultivation of the soil of a farm or ranch;
- D. Where the work is a trenching operation for the construction or repair of pipelines and other underground utilities;
- E. Where the work is small in depth, area or effect such as, but not limited to, tree planting, intermittent and minor landscaping.

#### 6. PROPOSED SUBDIVISIONS.

If property is required to be subdivided by the Subdivision Ordinance, no grading permit will be issued until a preliminary subdivision plat has been approved and a grading and clearing plan has been approved by the Town.

#### 7. PERMIT APPLICATION.

Any person desiring a permit under this chapter shall apply to the Town upon forms furnished by the Town. The application will be signed by the owner of the property where the work is to be performed or by his duly authorized agent. The applicant shall assure that all application data are correct. Any falsification of application data shall invalidate the permit.

- A. Every application will contain the following information.
  - 1. Location, nature and extent of the proposed work and a statement as to the intended use of the site. Changes in the intended use of the land involved will require reapplication for a permit.
  - 2. The name and address of the owner of record (and owners, if more than one) of the property on which the work is to be performed.
  - 3. The names and addresses of the persons or organizations that will perform the work and of the person who will be in effective control of the work.
  - 4. For all roads or other excavations where the volume of earth to be moved exceeds 1,000 cubic yards, cross-sections of contour maps showing the height of cuts and fills at a maximum of 100-foot intervals and at any major breaks in the terrain shall be required by the Town.
  - 5. An as-built certification signature block to be executed by a New Mexico professional engineer after the project completion to ensure that the construction complies with the approved plans.
- B. An application for a grading permit shall include a topographic survey and grading plan with elevation contours shown at not more than two-foot intervals on slopes up to 30%- and five-foot intervals on slopes greater than 30% which shows:
  - 1. All areas with slopes 0-20%; 21-30%; and 31% and greater, differentiated through shading, tone, color, or line weight;
  - 2. All areas to be graded on the site and the final contours to be achieved by the grading:
  - 3. All finished floor or grade elevations;
  - 4. The location of temporary erosion control structures and methods used, including staging and stockpile areas;
  - 5. All facilities for control and disposition of storm water runoff.
  - 6. All significant trees and areas with substantial grass coverage to be removed;
  - 7. A construction schedule when the project will be developed in phases;
  - 8. The location of fencing around the areas to be protected;
  - 9. The ratio of horizontal to vertical measurement for cut and fill slopes:
  - 10. The total volume, in cubic yards, of earth to be moved; all existing disturbed areas; and
  - 11. FEMA flood hazard areas.
- C. Applicants may also be required to notify the Federal Environmental Protection Agency (EPA), the Federal Emergency Management Agency (FEMA), the New Mexico Environment Department, and/or the United States Army Corps of Engineers. It is the responsibility of each applicant to determine whether additional notification or permitting is required.

#### 8. LIABILITY INSURANCE REQUIRED.

General liability insurance shall be required as a condition for procurement of a grading permit.

Procurement and maintenance of such liability insurance policy shall be the sole responsibility of the applicant.

Before any grading permit is issued, the applicant shall attach a copy of a current certificate of insurance as evidence of general liability and contractual insurance to the application. The minimum limit of liability shall be three hundred thousand dollars (\$300,000.00) combined single limit. Such policy certificate shall provide that the insurance cannot be canceled, or the limit of coverage reduced without thirty (30) days prior written notice to the Town. Failure to provide the insurance certificate or failure to meet the minimum liability insurance requirements will result in no permit being issued. Should the liability insurance policy expire or be canceled, the Town shall revoke any outstanding grading permit under such policy.

The applicant shall be required to enter into a hold-harmless agreement with the Town of Edgewood protecting the Town, any of its departments, agencies; officers, or employees, from all cost, injury, and damage incurred by the applicant and from any other injury or damage to any person or property whatsoever caused by any activity, condition, or event arising out of any act authorized by the permit. The Town shall provide the approved form for this hold-harmless agreement.

## 9. ISSUANCE OR DENIAL OF PERMIT.

- A. The grading permit will be issued by the Town upon verification and approval of the information contained within the permit application.
- B. The Town can refuse to issue any grading permit whenever the proposed grading is contrary to the provisions of this ordinance.
- C. If any person does any grading or otherwise disturbs the ground cover of any property within the Town without a grading permit, he must apply for a grading permit and shall be subject to a double permit fee.

## 10. PERIOD OF VALIDITY OF PERMITS.

All permits issued shall expire within one year of the date of issuance of the permit.

## 11. PERMIT FEES.

1. The applicant shall be responsible for all fees for engineering consultant review by the Town's engineering consultant and fees are non-refundable.

A. The application for a permit shall be accompanied by a fee as indicated below.

0-5 acres - \$131.00

6-10 acres - \$315.00

11-20acres-\$367.00

21-30agres-\$420.00

31-40 acres - \$472.00

41-50 acres - \$525.00

51+ acres - \$577.00

The permit fee for Right-of-Way Excavation/Restoration shall be \$25.00 and \$25.00 Inspection Fee

The fee for a driveway/access permit shall be \$35.00.

#### 12. REVOCATION OF PERMITS.

After reasonable notice and opportunity to be heard, the Town may revoke a permit issued under this chapter if it finds that the work being done is in violation of this chapter or any other ordinance or law or creates an unreasonable hazard to persons or property.

#### 13. GRADING ON HOLIDAYS AND WEEKENDS.

No grading of any kind, except as permitted below, shall be permitted on holidays and weekends unless the landowner or his authorized agent has notified the Town by noon of the day before the holiday or by noon on Friday. A holiday shall be defined as an official Town holiday for Town employees, and the weekend shall be defined as that time period between 5 p.m. on Friday and 8:00 a.m. on the following Monday. Grading will not be permitted within 300 feet of a residentially zoned area before 8 a.m. or after 5 p.m. on weekends and holidays. Failure to notify the Town shall be considered a violation of this section. Notification is not required if the grading is performed in connection with a Town, county, state or federal public works project which is supervised by an inspector provided by that government entity.

#### 14. REMOVING HAZARDOUS CONDITIONS.

- A. If the Town finds that any grading (either completed or in progress) is causing a hazard to persons or property, it may notify the owner or his authorized agent and require that the hazard be removed or eliminated as soon as practicable depending upon the degree of urgency associated with the hazard involved. If such action is not completed within the time limit stated within the notice, the Town may require that reasonable temporary protective measures be provided in the interim.
- B. If materials are washed or deposited upon streets, alleys or other public property as a result of improperly controlled grading of higher or adjacent lands, the Town shall notify the Owner or his authorized agent to remove such materials and restore the streets, alleys or other public property to their original condition. Failure to comply with such an order shall be a violation of this ordinance as provided in Section 20
- C. In addition, if the owner fails to comply with such notice, the Town may authorize the work to be done by town sources or by contract. A report shall be prepared for the Town Council covering the actual cost of doing such work. After notice and an opportunity to be heard, the Town Council may, by resolution, determine the actual cost of doing the work and declare this amount, plus the cost of recording the resolution, to be a personal liability of the owner of the land and a lien on the land, payable within ten days after adoption of the resolution, and thereafter bearing the twelve percent simple annual interest until paid. A copy of the resolution, authenticated by the acknowledgement of the Town clerk shall be filed for record in the office of the County clerk. Notice of the hearing before the Town Council shall be in writing and delivered in person or sent by certified mail with return receipt requested to the owner and to holders of recorded liens on the property. If after reasonably diligent efforts the person to be notified of such hearing cannot be found, notice may be given by one publication in the local newspapers.
- D. Materials from a grading site which are spilled or deposited onto public streets shall be removed by contractor or permittee on the same day. Whenever earthen ramps are required to cross city rights-of-way, approval must be obtained by the Town.

#### 15. RESPONSIBILITIES OF THE LANDOWNER OR HIS AUTHORIZED AGENT.

Under this chapter the landowner or his authorized agent will bear responsibility for:

A. Obtaining a permit if required for any grading. Application for the permit shall be made as provided in Section 7.

- B. Obtaining the services of a profession engineer, authorized to practice in the State of New Mexico;
- C. All of the legal duties, obligations, or liabilities incident to ownership of the property while the work of grading is in progress or after the completion of the work. Neither the issuance of a permit nor the compliance with the provisions of this chapter shall relieve any person or owner from any responsibility for damages to persons or property otherwise imposed by law, nor impose any liability upon the Town or any official of the Town for such damages.
- D. Installing the appropriate devices, structures, landscaping and facilities and executing soil stabilization, erosion control, handling of materials, and other proper measures in conjunction with any proposed grading so as to fulfill the intent and purpose of this chapter.
- E. The continued maintenance and repair of all retaining walls, cribbing, drainage facilities, slopes, landscaping, soil stabilization and erosion control measures and any other protective devices located upon his property and constructed pursuant to the permit.
- F. It shall be the responsibility of the applicant applying for a grading permit to obtain clearance from all utilities with a property interest within the boundaries of the permit. Failure to clear with any such utility may result in an immediate suspension of the grading permit.

## 16. RESPONSIBILITY AND AUTHORITY OF THE TOWN OF EDGEWOOD

The Town, under the authority of this chapter shall be responsible for:

- A. Reviewing all grading permit applications as submitted under the requirements of Section 7 and the issuing or denying of grading permits within 10 calendar days.
- B. Performing or obtaining all the appropriate tests and inspections to assure that the conditions of the permit and intent and purpose of this chapter have been fulfilled. Unforeseen testing requirements shall be the applicant's responsibility at the time of application.
- C. Imposing such conditions and specifications on the issuance and duration of the grading permit as may be reasonably necessary to cause the work to fulfill the intent and purpose of this chapter. These conditions and specifications shall include, but will not be limited to, the following:
  - 1. Interim and permanent soil erosion control and land management requirements including provision for:
    - a. Disturbed soil surface treatments (emulsions, mulches, seeding and the like);
    - b. Protective drainage measures for surface drainage and subsurface water where required;
    - c. Terracing and use of dikes and berms;
    - d. Landscaping measures as per the Landscape Ordinance.
    - e. Paving and other miscellaneous related measures.
  - 2. Compaction requirements in filled areas.
  - 3. Slope stabilization requirements:
    - a. Cut or fill slopes for roads shall not exceed 15 feet in height;
    - b. Unstabilized fill slopes shall be no steeper than 2:1, unless a structural alternative

- such as a retaining wall or some other measures applying professional engineering standards is provided;
- c. On-site cut slopes shall not exceed ten feet in height. In no case shall the height of the cut exceed the height of the building;
- d. On-site fill slopes shall not exceed fifteen feet in height. Retaining walls for fill slopes shall be no greater than 15 feet in height.
- 4. Work procedures and safety requirements:
  - a. Protective fencing;
  - b. Excavation slope limitations, shoring and bracing in accordance with OSHA guidelines and procedures;
  - c. Traffic control requirements concerning transportation of materials on public ways:
  - d. Limitations on the amount of area which may be disturbed by grading operations;
  - e. Work scheduling requirements;
  - f. Stockpiling and reuse of top soils.

#### 17. AUTHORITY TO ISSUE CITATIONS.

- A. The following public officials are authorized to enforce the provisions of this chapter and shall have the power to issue Class C misdemeanor citations to any persons violating the provisions of this chapter:
  - a. Town Clerk or Clerk's designee
  - b. Zoning Administrator
- B. The public officials designated in the above subparagraph are authorized, effective as soon as administratively possible, to make inspections of any property necessary to enforce the provisions of this chapter. If the owner or person in possession of any property refuses to allow the public officials permission to enter the property, at any reasonable time, those officials shall have recourse to every remedy provided by law to secure entry including obtaining the proper judicial warrants.

#### 18. ENGINEERING CONTROLS FOR GRADING

- A. Statement of Purpose. Earthmoving machinery and methods may be applied to most clearing, grubbing, excavating, filling and land grading operations. The requirement for grading permits may differ due to local conditions of land use, proposed site development, drainage patterns, topography, soil conditions and other items.
  - The principal burden of designing a proper plan for grading must fall upon the landowner, developer, contractor, engineer or architect concerned with the project. In view of this circumstance, the following requirements have been developed as an aid for operations covered by the grading ordinance. Under no circumstances, should these, conditions be construed to replace the basic requirements of judgment, experience or competence that are a part of good engineering and land development practice.
  - The Town, in order to assure that correct grading practices are followed as directed by this Grading & Drainage Ordinance August 2002 8
  - statement of purpose may impose any of the following requirements as part of the issuance of a grading permit.
- B. Soil erosion control guidelines. The requirements for soil erosion control measures depend largely upon the extent of the destructive and nuisance potentials due to erosion that may develop from the work to be performed. Thus, the need for erosion control measures is

- largely determined by prevailing winds, drainage patterns, soils characteristics and the proximity and hazard to downwind and downstream developments residences, businesses, thoroughfares and other facilities.
- C. General principles of effective erosion control. The following general principles indicate the general measures of erosion control that when properly applied reflect compliance with the grading ordinance:
  - 1. Development plans for any project site should be as effectively fitted to existing topography and soils as practical so as to create the least erosion potential possible.
  - 2. All grading shall be performed in a manner which has no adverse effect on adjacent properties; clearing shall be kept to a minimum, and stabilization of bared surfaces shall begin promptly upon completion of construction activity.
  - 3. Portions of a site to be graded shall be clearly marked on the site prior to any grading or clearing. Construction equipment shall be permitted to grade only within marked areas. No grading is permitted within one (1) foot of a property line, except for streets, roads driveways and utilities.
  - 4. Grading for building sites is limited to 15 horizontal feet beyond the outer edge of the building foundation, patio, wall, driveway, road, parking area, or other constructed facility except:
    - a. As necessary for the construction of stormwater runoff management measures in compliance with this section; or
    - b. As necessary to accommodate required horizontal to vertical measurements for cut and fill slopes.
  - 5. Where possible, final structures, paving, facilities and effective drainage control measures should be completed in each project area as soon as possible.
- D. Specific erosion control measures. Erosion control methods for physically disturbed critical project areas:
  - 1. Wind erosion. The following methods of wind erosion control may be required:
    - a. Watering. During and after completion of site grading the project area shall be completely watered as required to control wind erosion.
    - b. Wind fencing. Reusable wind fencing may be employed to reduce the effects of wind erosion. This fencing should be located immediately adjacent to critical project areas.
    - c. Disturbed surface treatments. Other measures that may be employed for control in critical areas are the use of materials such as straw, mulch nettings, emulsion, mulch and seed mixture, rip-rap, paving landscaping, etc.
  - 2. Water erosion. Where drainage patterns, soil characteristics and proximity to downstream development suggest that water erosion may cause hazards or damage to public or private property, the following control measures may be required:
    - a. Permanent storm drainage facilities, paving, and other related, facilities should be constructed as soon as practicable to reduce water erosion problems.
    - b. Where clearing and grubbing, excavating, stockpiling or filling or grading operations will result in long term exposure to rainfall and runoff, the following temporary control measures may be required:
      - (1) Temporary diversions and interceptor ditches to intercept runoff and divert it to a safe outfall before destructive erosion can occur on the project area.
      - (2) Temporary bermed rainfall storage cells or bench terraces to capture and retain rainfall to allow for disposal by percolation into

- the soil. These cells can be constructed on flat or mild slopes by blading an intersecting network of low berm which can be made in a manner consistent with the rough grading plan for the site.
- (3) Contour ripping may be employed on medium to mild slopes to retard runoff and to better induce disposal of rainfall by percolation.
- (4) Other measures for disturbed surface treatments as indicated in paragraph D.1.c. may also be required where desired.
- c. Special care will be taken to ensure that the slope faces of cut, fill or natural slopes are completely protected from runoff. This may be accomplished by:
  - (1) Construction of berms and swales on the brow or top of the slope to provide protection from runoff. Swale inverts maybe required to be paved.
  - (2) Grading of areas adjacent to slopes shall drain away from the slope face.
  - (3) Construction of bench terraces in slopes of thirty (30) or more feet in height. A bench terrace should be at the mid-height of a thirty (30) foot high slope and should be no more than twenty (20) feet vertically apart on slopes in excess of thirty (30) feet in height. The bench should be constructed in such a way as to collect rainfall and conduct it to a point of safe discharge. The invert of the bench terrace may be required to be paved to prevent the percolation of water into the slope.
  - (4) No storm water storage should be allowed at or adjacent to the top of a slope.
  - (5) Cut and fills should be set back a minimum of five (5) feet from property lines and fences. Walls, buildings or structures should be set back from cut or fill slopes sufficiently to allow access to the top of the slope for maintenance purposes and to assure the stability of the slope and the security of the foundations of the buildings and structures
  - (6) Drainage facilities should be provided to protect slope faces from erosion. Subsurface drainage facilities should be provided where needed to intercept seepage that would affect slope stability, building and structure foundations or create undesirable wetness.
- 3. Exposure for extended periods of time. Where any project area is to be exposed to the effects of wind or water for extended periods of time, erosion control measures should be continued and/or maintained until natural growth comparable to that removed by the work has been reestablished or until a stable, final development project has been wholly completed.
- E. Earthwork requirements. The requirements for earthwork are generally fulfilled through application of the requirements of good engineering practice. Thus, significant earthwork shall be designed by a registered professional engineer. An approved grading plan signed by a registered engineer will generally govern as determining the specific requirements of significant earthwork. Significant earthwork may be considered the grading of large tracts of land and the construction of fills, excavations and slopes.
  - 1. General.
    - a. Fill materials will be free of materials detrimental to the construction of stable fills.
    - b. Excavations will not be made close to property lines as to endanger

- adjoining property without providing support and protection to prevent damage due to erosion, sliding or settlement.
- c. Fills will not be placed where they can slide or wash onto the property of others; nor will they be placed where they can cause encroachment upon arroyos or other natural drainage ways without provision of facilities to assure the capacity of the drainage way as approved by the Town.
- d. Fills placed above the top of an existing or proposed surface with a slope steeper than three feet horizontal to one-foot vertical shall be set back from the top of the slope face at least five feet.
- e. Prior to placing fills on natural surfaces, all organic materials will be removed, and the natural surface will be scarified to a depth of three inches
- f. Temporary drainage facilities will be provided to protect the earthwork from erosion, overflow, or ponding as generally indicated in paragraph D.2.

#### 2. Compaction.

- a. Load bearing fills upon which streets, alleys or public facilities are to be located will fully meet the requirements of the Town as to the quality of fill materials, placement and compaction. The plasticity index (P.I.) of structural fills shall not exceed a value of 12 without specific recommendations from a Geotechnical Engineer.
- b. Fills should be compacted to a minimum density of ninety percent (90%) as per the American Society for Testing and Materials (ASTM D-1557). Fills will be placed and compacted to minimize erosion and to produce a stable surface.
- F. Other conditions. The following conditions may be imposed by the Town:
  - 1. Flagmen may be required as part of the grading permit.
  - 2. Any use of vibratory rollers must be approved by the Town.
  - 3. The Town must be notified twenty-four (24) hours in advance of any work; such as placing curb, pavement and storm sewer in Town right-of-way.
  - 4. The Town may impose hours of operation and truck routes to be utilized based on individual site locations and shall be indicated on the permit.

## 19. ENGINEER CONTROLS FOR STORMWATER AND DRAINAGE RUNOFF

A. Stormwater and Drainage and Runoff

- 1. Flood control studies shall be performed by a qualified design engineer licensed with the State of New Mexico and a complete drainage report shall be submitted to the Town for approval. The Town will approve or require additions or modifications to the report. Stormwater Drainage and Runoff reports and designs shall be approved by the Town before construction may begin.
- 2. Analysis of any and all watershed areas affecting the proposal site development shall be incorporated into the report and design of flood control/drainage structures.
- 3. Total surface runoff from the proposed improved site into existing or future developments shall not exceed the runoff from that area of land prior to development. The Engineer may utilize retention/detention ponds, underground storm drain, drainage channels, pumping facilities, or any other means to restrict or divert runoff to accomplish this task.
- 4. Surface and underground drainage shall not be altered or diverted in any way that creates damage or flooding to other existing developments or areas.

#### B. Stormwater Hydrology

1. For purposes of hydrological studies and design, the design engineer shall utilize methods and procedures as outlined by the New Mexico State Highway and Transportation Department Manual, Volume 1, Hydrology, latest edition.

#### C. Stormwater Drainage Improvements

- 1. Construction plans and details for drainage structures shall be included in the basic improvement plans for the proposed site development. All drainage structures shall be designed to carry the 50-year storm runoff. All drainage ponds shall be designed to hold the 100-year storm runoff. All plans and details for drainage structures shall be subject to review and approval by the Town of Edgewood.
- 2. The design engineer shall be responsible for showing all necessary supporting data and criteria on plans, specifications, or in the drainage report with respect to flow capacities, structural soundness, public safety, etc.
- 3. All drainage structures and construction methods shall conform to the New Mexico Standard Specifications for Public Works Construction, latest edition. Drainage structures and construction methods shall be clearly indicated on the construction plans. The design engineer shall be responsible for selecting a design that is structurally sound, functional, and reasonably maintenance free.
- 4. Ponding areas used in drainage facilities shall be landscaped. At a minimum the landscaping shall consist of sod or other vegetation for the slopes, and of a gravel lined bottom. A landscaping and maintenance plan for ponding areas shall be submitted as part of the storm drainage plan.
- 5. All water containment structures, which have water open to the air, shall empty within 24 hours either through percolation into the soil or through outlet structures designed to ensure a controlled release of water that will not cause flooding or erosion.

#### 20. VARIANCES

The Planning Commission may grant variances to the requirements of the terrain management regulations if the proposed alternative complies with the intent of the terrain management regulations as set forth in the Zoning Ordinance Section 23, and if the material, method, or work offered meets equivalent standards prescribed in the terrain management regulations for aesthetic and mechanical quality, effectiveness, durability and safety.

#### 21. PENALTY: SEVERABILITY.

Any person violating this chapter shall be deemed guilty to a misdemeanor and shall be punished by a fine not to exceed one thousand dollars (\$1,000.00). In the case of a continuing violation, each day's violation shall be deemed a separate offense.

#### 22. DEFINITIONS.

For the purpose of this chapter, the following words have the meaning set forth in this section:

- A. "Cut" means the removal of materials such as sand, soil, gravel, and rock from the area of land being graded with earthmoving or other heavy equipment.
- B. "Fill" means the addition of materials such as soil, sand, and gravel to land being graded
- C. "Grading" means any disturbance of the surface of the land with earth-moving or other heavy equipment.
- D. "Site drainage" is the means of controlling storm runoff across a piece of property by altering site topography or by the use of drainage structures such a piping or channels. The purpose of site drainage is to protect lives and property from damage caused by flooding.
- E. "Minor Development" Any small-scale land development that is less than three legal lots, disturbs less than 5,000 square feet of land per lot, disturbs no slope greater than 10% and no more than 3500 square feet of new impervious surface is created per lot.
- F. "Processed material" means naturally occurring materials such as sand, soil, gravel and rock which have been subjected to any process other than initial excavation such as, but notlimited to, screening, crushing, washing and segregating.

#### PASSED AND APPROVED THE 6TH DAY OF FEBRUARY 2019.

John Bassett, Mayor

ATTEST:

Juan Torres, Clerk-Treasurer