

## **ORDINANCE 2018 - 17**

### **AN ORDINANCE OF NORTH OGDEN CITY AMENDING THE ZONING ORDINANCE OF NORTH OGDEN CITY TITLE 11, AMENDING CHAPTER 10-19 EXCAVATION AND GRADING, TRANSFERRING 11-9-5 TO A NEW CHAPTER 11-24 GRADING AND DRAINAGE STANDARDS, AND 11-9-6 TO A NEW CHAPTER 11-25 DEVELOPMENT CONSTRAINTS**

**WHEREAS;** The City has grading and drainage regulations; and

**WHEREAS;** The City is committed to providing regulations regarding grading and drainage that meet health and safety standards; and

**WHEREAS;** The City desires to protect all residents from geotechnical hazards and apply safety standards to all developments within the City; and

**WHEREAS;** The City General Plan element regarding natural hazards identifies the need for grading and drainage standards; and

**WHEREAS;** The Planning Commission has reviewed these standards and held appropriate public hearing on this amendment and is recommending the adoption of these standards;

**NOW THEREFORE, BE IT ORDAINED** by the North Ogden City Council that the North Ogden City Code 11-9 Hillside Protection Zone and 11-10-19 Excavation and Grading be amended.

**SECTION 1:** Language to be amended

#### **11-9-5: GRADING AND DRAINAGE STANDARDS**

The regulations for Grading and Drainage are found in 11-24.

The existing text is hereby deleted.

#### **11-9-6: DEVELOPMENT CONSTRAINTS**

The regulations for Grading and Drainage are found in 11-25.

The existing text is hereby deleted.

#### **11-10-19: EXCAVATION AND GRADING**

See 11-24: GRADING AND DRAINAGE STANDARDS and 11-25: DEVELOPMENT CONSTRAINTS.

The existing text is hereby deleted.

**NOW THEREFORE, BE IT ORDAINED** by the North Ogden City Council that the North Ogden City Code 11-24 GRADING AND DRAINAGE STANDARDS is established.

#### **11-24: GRADING AND DRAINAGE STANDARDS**

##### **A. PURPOSE AND INTENT**

The purpose of this chapter is to establish minimum standards for grading and drainage to protect the health, safety, and welfare of citizens and property owners. Hillside views are an important feature that is protected by this ordinance.

**B. APPLICABILITY**

These standards shall apply to all zones within North Ogden City.

**C. Procedural Regulations:**

The following table identifies the excavation and grading types, approval requirements, and the approving authority for excavation and grading activities.

EXCAVATION AND GRADING		
<u>Excavation and Grading Types</u>	<u>Approval Requirements</u>	<u>Approving Authority</u>
SWPPP	State Permit Required <sup>1</sup>	PW Inspector
Right of Way	City Right of Way Permit Required <sup>2</sup>	PW Inspector
Parcel	Design Plans Required <sup>3</sup>	City Engineer
Subdivision	Design Plans Required <sup>3</sup>	City Engineer
Building Permit for a Parcel or Subdivision Lot	Grading Plan Required <sup>4</sup>	Building Official
Brush Removal	Brush Removal Permit Required <sup>5</sup>	City Engineer or Building Official

Consistent with the provisions of this chapter, the following standards apply to making application for grading and excavation.

1. SWPPP Permits. SWPPP permits are subject to the North Ogden City Public Works and State of Utah Standards. Approved SWPPP plans are required at the time of preconstruction meeting.

2. Right of Way Permits. Right of Way permits are required to include any excavation within the public right of way or public easements.

3. Parcel and Subdivisions are required to provide a rough grading plan at the time of application; to be reviewed by the City Engineer. A revegetation plan is required as part of preliminary plan review. The rough grading plan and revegetation plan shall be referenced on the final plat Mylar.

4. Building Permits. A fine grading plan is required at the time of building permit application. The final grading plan must be consistent with the approved subdivision rough grading plan and revegetation plan and city drainage standards. (See Subsection B Applicability)

The City Engineer shall have the authority to waive any of these requirements as he / she sees fit for any lot which was in existence prior to June 1, 2018 and

which does not have a rough grading plan already approved by the City. Any provision may be applied to any lot in the City if the City Engineer determines there is a health and safety issue which requires compliance.

5. Brush Removal Permit. A rough grading plan that includes the size of the area to be impacted, the depth of excavation, and the extent of landscape grubbing shall be included with the brush removal permit. (Limited to disturbed areas in excess of 10,000 square feet.)

6. Plan of Development: Prior to the issuance of a zoning clearance, a plan of development or rough grading plan shall be submitted to and approved by the city engineer. Prior to development plan approval, the city engineer may require that reasonable additional requirements as to grading, cut and fill, slope restoration, signs, vehicular ingress and egress, parking, lighting, setbacks of buildings, etc., to the extent that the noted purpose and objectives of this chapter are maintained and ensured.

7. Application Requirements: In addition to the otherwise noted procedural and information requirements of this provision, all applications for a zoning clearance, subdivision approval, or rough grading plan approval shall contain the following materials and information:

- a. Site plan, prepared and stamped by a Utah registered land surveyor or engineer with the following information:
  - (1) A topographic survey at least ten feet (10') beyond the exterior property line of the site.
  - (2) Contour intervals not exceeding two feet (2') within twenty feet (20') of any proposed improvement and five foot (5') intervals for the remainder of the lot or parcel.
  - (3) Scale of the site plan shall be not less than one inch equals twenty feet (1" = 20'). For large scale projects, the planning director may allow a different scale.
  - (4) If structures are proposed, show cross sections through site and building at twenty five foot (25') intervals perpendicular to slope, giving percentage of slope at each, and showing exact heights of structures at each existing contour.
  - (5) If structures are proposed, each floor level shall be shown with different shading with a legend giving grade or elevation of each level.
  - (6) If a garage is proposed, give proposed elevation or grade at garage floor and at existing street level at drive entry. Give percentage of total average slope, and percent and length of single steepest portion of driveway.
  - (7) List the individual square footage of buildings, garages, patios, footprint, disturbance area, buildable areas and, if applicable, pool.
  - (8) Include all disturbed (or graded) areas and show the proposed method of final treatment. Indicate all retaining walls, showing the actual and allowable heights.

- (9) Show how drainage is altered, and if so, how it is redirected to original channel and show that the requirements regarding storm water runoff and drainage have been met.
  - (10) Show location of all proposed utility lines.
  - (11) Give legal description, property dimensions and heading, along with the name, address, and telephone number of applicant.
- b. Elevations, to be submitted if structures are proposed.
- (1) Show all exterior elevations, giving accurate existing and proposed grades lines. (Scale  $\frac{1}{4}'' = 1'$ )

Show total height of buildings and give height and total length of all retaining walls.

#### D. EXCAVATION AND GRADING

1. Parcel Excavation and Grading. Plan Required: Natural vegetation (oak brush, shrubs and small trees) located outside the boundaries of a subdivision, shall be removed only when necessary for authorized construction, driveways, sidewalks, landscaping and like residential purposes. No person shall excavate or grade any site located within or outside the boundaries of a subdivision until and unless an excavation or grading plan has been reviewed by the city engineer and the city engineer has approved and issued a grading permit. All cuts and fills shall be made such that the resulting surface has an angle equal to or less than the natural angle of repose. The excavation or grading plan shall contain a revegetation plan providing for the revegetation of any cuts or slope disturbances and such revegetation shall be completed within one year of the surface disturbance.
2. Subdivision Excavation and Grading. Properties within a subdivision are subject to the final plat conditions. Properties within a subdivision are also subject to the conditions in subsection C(1) at the time of issuance of a building permit.
3. Brush Removal. Brushing (to remove grass, weeds and other undesirable vegetation without the disturbance of soil to a depth greater than 1 foot in depth, which may present a potential fire hazard), requires a brush removal permit. This permit shall be required only for disturbed areas exceeding 10,000 square feet.
4. Site Examination: Concurrent with the submission of an excavation or grading plan to the city engineer, the building official or city engineer may examine the site of the proposed excavation.

#### E. GRADING STANDARDS:

1. Grading Permit Requirement: There shall be no clearing or grading on, or to, any site that is different than the approved grading plan of the subdivision or other parcel of land (other than soil tests that are 100 square feet maximum in size or geological trenching done in conjunction with detailed geological investigations) prior to the issuance of a grading permit.
2. Grading of all Unplatted Land: The extent of disturbance shall be in accordance with the grading limitations of Title 11 and Title 12.
3. Total Disturbance: All grading and/or disturbance performed subsequent to December 1, 1999, or subdivision improvement grading, is considered to be cumulative under this title.

## F. CUT AND FILL STANDARDS;

1. Importation of Fill Material: Except as exempted in the adopted international building code, the importation of fill material to a lot or parcel is prohibited unless a grading permit allowing such fill is first secured.
2. Exportation of Excavated Material: Prior to the exportation of any material from a site, a proper final placement location for such material and an acceptable haul route must be identified in order to secure a grading permit to remove such material.
3. Height of Unretained Cut or Fill: If the natural grade or the subdivision finished grade if the property was platted or replatted after December 1, 1999, is more than a twenty percent (20%) gradient, the maximum amount of unretained fill or cut shall be four feet (4') above/below the natural grade, or subdivision grade if platted after December 1, 1999. Where the natural grade or the subdivision finished grade if the property was platted after December 1, 1999, has a gradient of twenty percent (20%) or less, the maximum amount of unretained fill or cut shall be six feet (6') above/below the natural grade or the subdivision finished grade if the property was platted after December 1, 1999. When fill is placed on existing grades of 20% or more and the depth of the fill exceeds 5 feet, benching shall be provided. Such benching shall include a keyway of at least 10 feet in width and 2 feet in depth. Any fill or cut grading in excess of these amounts must be contained by retaining walls.
4. Limitations on Cut and Fill: The height of any fill or the depth of any cut area, as measured from natural grade, shall not be greater than ten feet (10'), regardless of whether the fill or cut is retained, unretained, or a combination thereof. The total combined height of any fill or the depth of any cut area as a result of subdivision improvement grading and/or any subsequent grading, including, but not limited to, grading approved as a part of building permit approval, shall not total more than ten feet (10'), as measured from natural grade.
5. Maximum Slope of Fill Grading: Any unretained fill slope, if allowed, shall have a maximum three feet (3') horizontal to every one foot (1') vertical fill, unless it is otherwise designed and stamped by an engineer licensed in the state and substantiated by recommendation of a geotechnical report.
6. The slope immediately above or below a retaining wall may not exceed 4(H) to 1(V) unless it is otherwise designed and stamped by an engineer licensed in the state and substantiated by recommendation of a geotechnical report.
7. Permanent cut slopes steeper than 2(H) to 1(V) or fill slopes steeper than 3(H) to 1(V) will require a retaining wall unless otherwise recommended by an engineering analysis and approved by the city engineer. All recommendations must be stamped by an engineer licensed in the state and substantiated by recommendation of a geotechnical report. In no case shall an un-retained slope be left steeper than the natural angle of repose of the soil.
8. Permanent cut or fill slopes cannot exceed a vertical height of 6 feet measured from the toe to the top of the cut or fill unless otherwise recommended by an

engineering analysis and approved by the city engineer. All recommendations must be stamped by an engineer licensed in the state and substantiated by recommendation of a geotechnical report. The toe or top of a cut or fill must be set back at least 15 feet from a structure's foundation.

9. When creating grading plans consideration should be given to provide sufficient space for equipment and personnel to access retaining walls in order to provide the maintenance of the walls and slopes.
10. Restoration of Graded Surfaces: A revegetation process shall be completed as identified in the subdivision final plat requirements or within one and one-half ( $1\frac{1}{2}$ ) years if the grading took place in the front and side yards, and two (2) years if the grading took place in the rear yard of a certificate of occupancy or occupancy of the premises (whichever comes first), unless a specific exemption is granted by the city engineer or designee. However, grading for drainage and erosion control purposes shall be completed prior to final inspection.
11. Stabilization of Slopes: Slope stabilization can be required if necessary as set forth in the edition of the international building code that is adopted at the time the application for grading is made.
12. Preexisting Grading: A grading permit or building permit shall not be conditioned on altering, modifying or not utilizing existing grading, if the existing grading work was completed in conformance with valid permits, and does not present a threat or danger to the proposed development or neighboring properties. This provision does not prevent the city engineer from requiring necessary documentation of site suitability to assure soil stability, compaction and other geotechnical purposes.
13. Dust Control: During all grading, and until revegetation or site restoration is completed, dust should be minimized by application of approved dust control methods as approved by the city public works inspector or building official.

#### G. DRAINAGE:

1. Maintenance of Continuity: The entrance and exit points and continuity of all natural drainage channels on a lot or parcel shall be preserved. Ponding of water shall not be permitted immediately above cut or fill slopes. Building sites must be designed to carry surface waters away from buildings and retaining walls. A drainage plan is required for all building permits that is consistent with the subdivision rough grading plan and revegetation plan
2. Erosion Prevention: Erosion controls should be constructed and maintained to prevent erosion of all slopes and graded areas. Surface drainage interceptors may be provided at the top of all cut and fill slopes where surface runoff will create erosion problems. Subsurface drainage facilities may be required for stability and protection of affected areas due to ground water seepage.
3. Swale Grading: The minimum amount of swale grading necessary for drainage purposes is not subject to the restoration procedures of subsection **E10** of this section.

## H. RETAINING WALLS:

Retaining walls in this section refer to walls that retain earth.

1. Measurement of Height: For the following rules, wall heights are measured from the finished grade below the wall or wall system to the finished grade above the wall or wall system. The term "wall system" refers to tiered walls which will be considered collectively for review purposes.
2. A building permit is needed to construct retaining walls that are over 4 feet in height measured from the finished grade below the wall to the finished grade above the wall. The building official may require a permit on shorter walls if they support a surcharge such as sloped earth, footings, vehicles, etc.
3. When submitting for a building permit, a grading plan must be submitted showing retaining walls. This plan will be reviewed and approved by the building official. If the plan includes retaining wall heights that exceed 4 feet then the plan must also include typical section views cut through the walls with dimensioned wall heights and distances from walls to structures, property lines and spacing between walls.
4. Grading should be designed to divert surface water away from wall structures. Wall design should also include a system to collect and drain away any water that may collect behind the wall.
5. Tiered Retaining Walls: Tiered walls must be separated horizontally by a distance that exceeds the largest adjacent wall height. Tiered walls with a horizontal separation less than this are not permitted even though they may be engineered and stable. Walls with a horizontal separation of more than twice the largest adjacent wall height are not considered tiered wall system and may be reviewed as separate structures. Tiered retaining wall systems will require a global slope stability analysis stamped by an engineer licensed in the state. Fencing that does not retain earth is not considered part of a retaining wall or retaining wall system and shall be subject to North Ogden's fencing requirements.
6. Any wall or wall system over 4 feet in height will need to be engineered and stamped by an engineer licensed in the state. The maximum retaining wall height shall be 8 feet.
7. Walls 8 feet in height or less should be designed and constructed according to standard design and construction practices, manufacturer recommendations and published design charts. Regardless of the height of a retaining wall, the building official or city engineer may require stamped engineered plans if it is suspected that the retaining wall needs additional engineering due to design requirements or environmental conditions. This may also be true for areas with a high water table or poor soil conditions. Plans must be stamped by an engineer licensed in the state.

8. Gravity rock walls and gravity block walls cannot exceed 6 feet in height. Gravity rock walls or gravity block walls can be tiered to create additional height (i.e. they must be spaced horizontally by the height of the tallest adjacent retaining wall).
9. Mechanically stabilized earth (MSE) walls such as Keystone with geogrid or other tie-back systems are permitted. Reinforced concrete cantilevered retaining walls are also permitted. These walls may be tiered but any tier cannot exceed 8 feet in height.
10. Rock or other coverings on a steepened slope (rockery) may be considered a retaining wall when the slope exceeds the maximum permanent cut or fill slope recommended by a geotechnical analysis. If a slope requires a rockery to be stable then it is to be treated as a retaining wall.
11. If these requirements are more restrictive than the standards found elsewhere in the ordinance then these standards will apply.

**NOW THEREFORE, BE IT ORDAINED** by the North Ogden City Council that the North Ogden City Code 11-25 DEVELOPMENT CONSTRAINTS is established.

#### 11-25 DEVELOPMENT CONSTRAINTS

##### A. PURPOSE AND INTENT:

The purpose of this chapter is to establish minimum standards for grading and drainage to protect the health, safety, and welfare of citizens and property owners.

##### B. APPLICABILITY:

These standards shall apply to zones within North Ogden City.

C. Studies Required: Prior to any development or any grading activity within this zoning district, the developer or landowner shall provide site specific studies addressing the geomorphology, geology, faults, hydrology, slopes, soils, recharge, vegetation and wildlife, fire, and utility and parks constraints of the site. No development shall take place in any area where development hazards are identified, without mitigating measures, as proposed, designed and certified by the developer's engineer, taking place that will overcome or protect the area from the identified hazards. These measures must be acceptable to the city council. The city council shall not approve any development proposals until it receives a recommendation of the planning commission and city staff. However, if the city believes it is appropriate, the city may still conduct an independent review of the property. By submitting plans and specifications to the city, the developer agrees to allow the city's engineer, surveyor, or other agents onto the property to conduct further reviews.

1. Determinations: The studies shall make the following determinations:
  - a. Whether the site has constraints to development that are too hazardous to be developed and therefore should not be developed.
  - b. What areas of the site can be developed if mitigating measures are taken and the identification of the mitigation measures.
  - c. What areas of the site have no hazards to development.



C. Sensitive Areas: Development in the sensitive areas shall take place only after the developer's engineer certifies and the city accepts the developer's engineer's conclusion, that development in such areas is safe. However, if the city believes it is appropriate, the city may still conduct an independent review of the property. By submitting plans and specifications to the city, the developer agrees to allow the city engineer, surveyor or other agents onto the property to conduct further reviews.

D. Minimum Building Area Without Development Constraints:

1. There shall be a minimum of ten thousand (10,000) square feet of buildable area on each lot or parcel.
2. The entire building area shall be free of any development constraints. None of the development building area shall be located in an area where development hazards are identified, without mitigating measures, as proposed, designed and certified by the developer's engineer, taking place that will overcome or protect the area from the identified hazards.
3. Each development area or buildable area must be a contiguous area not less than eighty feet (80') continuously in width and one hundred feet (100') continuously in depth.
4. If the development area is not adjacent to the public street, it shall be accessible to the public street with an access way that is a minimum of thirty feet (30') wide from the public street to the development area. The access way shall be developed in conformance with the grading standards specified in this chapter.

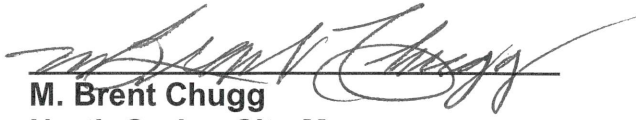
E. Development on natural slopes steeper than 20% shall be prohibited without a request for and approval of a variance submitted to the City including engineering recommendations from a certified and licensed engineer and subject to approval of the City Engineer. Any such approved variance, including any additional engineering to accommodate slope development, shall become an enforceable requirement for any development, construction, excavation or other activity on any such slope.

1. Natural slope is considered to be existing undisturbed terrain.
2. These sloped areas shall remain undisturbed even though they may be part of a subdivision lot except as authorized by any approved variance permitting development or other construction activities on any natural slope in excess of 20%.
3. Any area of a lot in excess of 20% natural slope shall not be included when the minimum lot area is calculated for the zone in which the subdivision is to be developed if no variance to this slope restriction has been granted.
4. Conditional Use Permit shall be required to cross these areas with street improvements.

**SECTION 2:** This ordinance shall take effect upon adoption.

**PASSED and ADOPTED this 21<sup>st</sup> day of August, 2018.**

North Ogden City:



M. Brent Chugg  
North Ogden City Mayor

CITY COUNCIL VOTE AS RECORDED:

	Aye	Nay
Council Member Cevering:	<u>X</u>	___
Council Member Barker:	<u>X</u>	___
Council Member Stoker:	<u>X</u>	___
Council Member Swanson:	<u>X</u>	___
Council Member Turner:	<u>X</u>	___
(In event of a tie vote of the Council):		
Mayor Chugg	___	___



ATTEST:

  
S. Annette Spendlove, MMC  
City Recorder