ORDINANCE NO. 007, 2025 OF THE COUNCIL OF THE CITY OF FORT COLLINS AMENDING CHAPTER 12 OF THE CODE OF THE CITY OF FORT COLLINS TO REVISE SOIL LOOSENING AND AMENDMENT REQUIREMENTS

- A. The City has historically imposed certain requirements related to the loosening of soil areas and incorporation of appropriate soil amendments in areas to be planted in order to, among other things, enhance soil water storage capacity, improve conditions for plant growth, increase water infiltration, and reduce water runoff.
 - B. Such requirements are located in Chapter 12, Division 2 of City Code.
- C. Pursuant to City Council priority 14 (Effective soil amendment policies and compliance (water usage)) of the 2021-23 Council Priorities and direction from City Council at a January 10, 2023, work session, City staff completed a review of such existing requirements.
 - D. City staff have proposed revisions to such requirements as set forth below.

In light of the foregoing recitals, which the Council hereby makes and adopts as determinations and findings, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS that Chapter 12, Article VII., Division 2 of the Code of the City of Fort Collins is hereby deleted in its entirety and replaced with the following:

Division 2 Soil Amendment

Sec. 12-130. Purpose.

The provisions of this Section are intended to enhance soil water storage capacity, improve conditions for plant growth and reduce water runoff.

Sec. 12-131. Definitions.

The following words, terms and phrases, when used in this Section, shall have the meanings ascribed to them in this Section:

Certificate of occupancy shall mean a certificate of occupancy as described in the building code of the City as adopted in Chapter 5, Article II, Division 2, or any other document issued by the City to authorize occupation of new improvements constructed pursuant to a building permit.

Soil amendments shall mean compost, peat, aged manure or such other organic or inorganic material as may be approved by the Utilities Executive Director as appropriate to meet the objectives of this Section.

Top soil shall mean a friable mixture of sand, silt and clay particles, each within the following limits:

Sand (0.05- 2.00 mm	Maximum 75	5% Minimum 20%

Silt (0.002-0.05 mm)	Maximum 60%	Minimum 5%
Clay (less than 0.002 mm)	Maximum 30%	Minimum 5%

Top soil shall have an organic matter content of greater than five (5) percent and a pH between 6.0 and 8.0, and shall be free from noxious weeds and roots, salts, clay lumps, any nonsoil materials such as rock, concrete, brick chips, or building materials, foreign matter, and any chemical, biological or radiological contaminants.

Sec. 12-132. Regulations.

- (a) Except as otherwise provided below, the holder of any building permit shall, as a condition of the issuance of a certificate of occupancy, prepare any area in which any plant materials, including but not limited to grass, seed, flowers, shrubs or trees, are expected or intended to be installed, prior to installation of any plant materials in that area, as follows:
 - (1) The soil in such areas shall be thoroughly loosened to a depth of not less than eight (8) inches; and
 - (2) Soil amendments shall be thoroughly incorporated into the soil of such areas to a depth of at least six (6) inches by tilling, discing or other suitable method, at a rate of at least three (3) cubic yards of soil amendment per one thousand (1,000) square feet of area to be planted, unless at least four (4) inches of loose top soil has been placed on the area after completion of construction activity on top of not less than four (4) inches of loosened subgrade soils. Documentation of the content and quantity of the soil amendments and top soil placed in an area, prepared by the commercial source of the material or a qualified soils testing laboratory, shall be submitted in connection with the certification required in Subsection 12-132(b) below.
- (b) Prior to the issuance of any certificate of occupancy, the prospective recipient of such certificate of occupancy shall submit written certification to the Utilities Executive Director that all planted areas, or areas to be planted, have been thoroughly loosened and the soil amended, consistent with the requirements set forth in this Section.
- (c) In the event that the Utilities Executive Director determines that compliance with this Section is rendered unreasonably difficult by weather or seasonal conditions, the Utilities Executive Director may temporarily suspend the application of this requirement, contingent upon the provision by the prospective recipient of such arrangements, guaranties or assurances as the Utilities Executive Director determines to be adequate to ensure compliance.
- (d) In the event that the Utilities Executive Director determines that compliance with this Section in a specific area is unreasonably difficult as a result of site conditions such as, for example, an excessively steep gradient or a very narrow side lot, the Utilities Executive Director may waive the application of this requirement for such area.
- (e) The Utilities Executive Director or City Manager may inspect any property in order to determine compliance with the requirements of this Section as a condition of issuance of any certificate of occupancy.

(f) Payment of any administrative fee established by the City Manager for the purpose of recovering the costs of administering and enforcing the requirements of this Section shall be required as a condition of issuance of any building permit, excluding any building permit where it can be shown that no areas within the project limits will be disturbed by construction activities and planted with vegetation.

Division 2 - Soil Loosening and Amendment

Sec. 12-130. - Purpose.

The provisions of this Section are intended to enhance soil water storage capacity, improve conditions for plant growth, increase water infiltration, reduce water runoff, and improve stormwater quality.

Sec. 12-131. - Definitions.

The following words, terms and phrases, when used in this Section, shall have the meanings ascribed to them in this Section:

Certificate of occupancy shall mean a certificate of occupancy as described in the building code of the City as adopted in Chapter 5, Article II, Division 2, or any other document issued by the City to authorize occupation of new improvements constructed pursuant to a building permit.

Plant materials shall mean living vegetation.

Soil amendments shall mean materials added to soil to improve soil properties for the purpose of optimal plant growth. Soil amendments may include the following: gypsum, limestone, sulfur, aluminum sulfates, humates, organic matter, mulches, compost, soil conditioners, mycorrhizal inoculum or bio-stimulants or such other as appropriate to meet the objectives of this Division.

Soil testing shall mean technical analysis by a professional soil testing lab to determine composition and characteristics of soil.

Topsoil shall mean soil that is: a friable mixture of sand, silt, clay, and organic particles; free from building, construction, or other foreign materials; free of any chemical, biological or radiological contaminants; and within the following limits:

Sand (0.05- 2.00 mm)	Maximum 75%	Minimum 20%
Silt (0.002-0.05 mm)	Maximum 60%	Minimum 5%
Clay (less than 0.002 mm)	Maximum 30%	Minimum 5%
Organic Material	Minimum 3%	Maximum 10%
(Organic Material /		
Sample)		
<mark>pH</mark>	<mark>6</mark>	8
Electrical Conductivity	0	2.0

(millimhos / cm	<mark>)</mark>	

Topsoil Stockpiling Practices shall mean those practices to preserve the quality of topsoil comprising of the top four (4)-six (6) inches of existing soils, stored in piles from two (2)-four (4) feet high and for a duration of less than twelve (12) months.

Sec. 12-132 Soil Loosening and Amendment Requirements.

- (a) Applicability. The requirements of this Division shall apply to any property outside of a Natural Habitat Buffer Zone defined in the Land Use Code that:
 - (1) is included any development review process under the Land Use Code and has over one thousand (1,000) square feet of area where plant materials will be installed; or
 - (2) requires a building permit that is associated with a certificate of occupancy and has over one thousand (1,000) square feet of area where plant materials will be installed.
- (b) Soil Loosening Standards. Except as provided in this subsection (b) or pursuant to § 12-134, in any location where plant materials are expected or intended to be installed, soils shall be thoroughly loosened to a depth of at least eight inches, except as follows:
 - (1) In areas where new tree plantings are expected or intended to occur, the soil shall be loosened to the extent of, roughly two (2) to three (3) times the diameter of the planted root ball and minimum of six (6) feet extending radially from the tree trunk and loosened to a depth equivalent to the root ball;
 - (2) Soil shall not be loosened within a certain distance from the face of existing trees based on the tree trunk's diameter at breast height as set forth in the following table; and

Tree	Trunk	0"	to	10" to 14"	15" to 19"	Over 19"
Diameter at	Breast	<mark>9"</mark>				
Height (Inch	nes)					
Area From	Face of	<mark>5</mark> '		<mark>10'</mark>	<mark>12'</mark>	<mark>15</mark> '
Tree with I	No Soil					
Loosening (feet)					

- (3) In any areas where existing vegetation remains and was not compacted or disturbed from construction or related activities, the soil shall only be loosened with an aeration or no-till method.
- (c) Soil Amendment Standards.

- (1) Except as provided in this subsection (c) or pursuant to § 12-134, in any location where plant materials are expected or intended to be installed, the soil shall be amended at a rate of at least three (3) cubic yards of soil amendment over one thousand (1,000) square feet, which shall be well mixed into the top four (4) inches of the soil.
- (2) Soils amendments shall not be required for the following:
 - a. In areas where new or existing trees are located, and no other vegetation will be under the tree canopy;
 - b. In areas where Low Impact Development stormwater quality infrastructure is located; or
 - c. Existing soils that are topsoil, as proven by soil testing. Such topsoil may be stripped and stored using Topsoil Stockpiling Practices for reapplication to the site. When reapplied, at least four inches of reclaimed topsoil shall be applied.

Sec. 12-133 Compliance.

- (a) The requirements of this Division shall be met prior to the issuance of any certificate of occupancy. Except as provided in § 12-134, no certificate of occupancy shall be issued until compliance is established pursuant to this Subsection.
- (b) Proof of compliance shall be submitted to the Utilities Executive Director, and shall include documentation of the completion of the soil loosening and amendment requirements of this Division and any soil testing results and related documentation, if applicable. The Utilities Executive Director may establish forms for this purpose.
- (c) The Utilities Executive Director may enter any property subject to this Division for the purpose of evaluating whether the property is in compliance.
- (d) The Utilities Executive Director shall review the proof of compliance and, in writing, approve, approve with conditions or deny that the soil loosening and amendment requirements of this Division have been met.

Sec. 12-134 Variance Procedure for Soil Loosening and Amendment Requirements.

- (a) Notwithstanding the provisions of this Division, pursuant to this section, the Utilities Executive Director may grant variance requests to modify: the soil loosening standards of § 12-132(b); the soil amendment standards of § 12-132(c); and the compliance deadline of § 12-133(a).
 - (1) An applicant seeking such a variance shall complete and file with the Utilities Executive Director an application accompanied by any required filing fee

as determined by the Utilities Executive Director. The Utilities Executive Director shall prepare a form of such application identifying for the applicant all of the necessary information for the Utilities Executive Director to evaluate the variance request, which shall include, at minimum, an analysis of the requested variance.

- (2) The Utilities Executive Director may perform any appropriate investigations regarding the application, including requests for additional information from the applicant. If the Utilities Executive Director finds that all of the following conditions are met, the Utilities Executive Director may grant a variance request, subject to terms and conditions, to modify the soil loosening standards of § 12-132(b), the soil amendment standards of § 12-132(c) or the compliance deadline of § 12-133(a) as applied to a particular property:
 - a. The variance is appropriate based on all known facts, will substantially further the purposes of this Division, and is in the best interests of the City;
 - b. Where the variance request is to modify the soil loosening standards of § 12-132(b) or the soil amendment standards of § 12-132(c) for the particular property, the modification is needed to address unique soil, hydrological, or topographical conditions of the property; or to facilitate native plants; and
 - c. Where the variance request is to modify the compliance deadline of § 12-133(a), the modification is needed due to weather or seasonal conditions, labor shortages, or needs of the plant materials to be installed.
- (3) If the variance request is granted, the variance shall be set forth in the writing and shall include any terms and conditions the Utilities Executive Director deems appropriate to further the purposes of this Division. If the variance includes a modification of the soil loosening standards of § 12-132(b) or the soil amendment standards of § 12-132(c), the modified standards shall be stated. If the variance includes a modification of the compliance deadline of § 12-133(a), a new deadline shall be stated and terms and conditions may include the City's right to withhold other permits sought by the applicant until the particular property is in compliance with the variance. Failure of the applicant to comply with a granted variance shall be deemed a violation of City Code pursuant to § 1-15.
- (4) In the event the variance request is denied, the Utilities Executive Director shall notify the applicant in writing of the denial and state the reasons therefor.

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Effective Date: February 14, 2025 Approving Attorney: Eric Potyondy