

FIRST READING: November 1, 2022

SECOND READING: November 15, 2022

ORDINANCE NO. 6586

**AN ORDINANCE REPEALING AND REENACTING CHAPTER 15.10 OF THE
LOVELAND MUNICIPAL CODE AND ADOPTING BY REFERENCE THE
INTERNATIONAL RESIDENTIAL CODE, 2021 EDITION**

WHEREAS, pursuant to Section 4-12 of the Charter of the City of Loveland, the City Council is authorized to adopt, by ordinance, any code by reference in accordance with the procedures established by state law; and

WHEREAS, the Construction Advisory Board has recommended that City Council adopt the 2021 Edition of the International Residential Code (the “2021 IRC”), and amendments thereto; and

WHEREAS, the City Council has conducted a public hearing pursuant to C.R.S. §31-16-203 concerning the adoption of the 2021 IRC by reference and finds and determines that it is necessary to the health, safety and general welfare of the public that the City regulate conditions hazardous to life and property by the adoption of the 2021 IRC, and certain amendments and modifications thereto.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOVELAND, COLORADO:

Section 1. Chapter 15.10 of the City of Loveland Municipal Code is hereby repealed in its entirety and reenacted to read as follows:

15.10.010 – International Residential Code, 2021 Edition – Adopted.

The International Residential Code, 2021 Edition, issued and published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL 60478-5795, including appendices A, B, C, D, H, J, K, M, O and Q, is hereby adopted by reference as the residential code of the City of Loveland. This code is a complete code covering certain buildings hereafter constructed, erected, enlarged, altered or moved into the City of Loveland and its purpose is to provide minimum standards to safeguard life and limb, health, property and public welfare by regulating and controlling the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one and two family dwellings and multiple single family dwellings (townhouses) not more than three (3) stories in height with separate means of egress and their accessory structures, and providing for issuance of permits and collection of fees therefore. At least one (1) copy of the International Residential

Code, 2021 Edition, which has been certified by the Mayor and City Clerk, shall be on file in the office of the City Clerk and may be inspected during regular business hours.

15.10.020 - Modifications to International Residential Code, 2021 Edition.

The International Residential Code, 2021 Edition, adopted in this chapter, is modified as follows:

A. Section R101.1 – Title - is amended to read as follows:

These provisions shall be known as the Residential Code of the City of Loveland, hereinafter referred to as “this code” or “residential code.”

B. Section R103 – Department of Building Safety - is deleted in its entirety.

C. Section R104 – Duties and powers of the building official – is deleted in its entirety.

D. Section R105.2 – Work exempt from permit - is amended as follows:

1. The following paragraphs shall be added under “Building” to read as follows:

11. Replacement and repair of nonstructural siding or siding which is not part of a required fire rated assembly on buildings classified as Group R-3 and U Occupancies.

12. Gutters, downspouts and storm windows (unless specified through design).

13. Detached pergolas under two hundred (200) square feet.

14. A partial roof replacement/repair that does not exceed one square (100 sq. ft.) can be repaired like for like without a permit. A partial roof replacement/repair that exceeds one square but does not exceed forty-nine percent (49%) of the total roof will require a roof permit constituting a like for like replacement/repair. A roof replacement/repair exceeding forty-nine (49%) of the total roof (a “full tear off”) requires a permit that may not constitute a like for like replacement/repair.

Asphalt shingles are required to be Class 4 impact resistant that meet UL 2218 test 2. Material specifications shall be provided to the City to meet the aforementioned requirement.

2. The following new section is added to R105.2 to read as follows:

R105.2.3. Exemptions. Unless otherwise exempt by this code, separate plumbing, electrical, and mechanical permits will be required for the above exempted items.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for work to be done in a manner in violation of the provisions of this code or any other laws or resolutions of the City of Loveland.

E. Section R105.3.1.1 – Determination of substantially improved or substantially damaged

- existing buildings in flood hazard areas - is deleted in its entirety.
- F. Section R105.3.2 – Time limitation of application – is deleted in its entirety.
- G. Section 105.4 – Validity of permit – is deleted in its entirety.
- H. Section R105.5 – Expiration - is amended to read as follows:

Every permit issued shall become invalid unless the work on the site authorized by such permit is commenced within one hundred eighty (180) days after its issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of one hundred eighty (180) days after the time the work is commenced. All permits shall become null and void regardless of the provisions of this section within twelve (12) months of issuance. The building official is authorized to grant, in writing, one or more extensions of time, for periods not more than one hundred eighty (180) days each. The extensions shall be requested in writing and justifiable cause demonstrated.

- I. Section R105.6 – Suspension or revocation – is deleted in its entirety.
- J. Section R106.1 – Submittal documents – is amended to read as follows:

Submittal documents consisting of construction documents, and other data shall be submitted electronically with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional.

- K. Section R106.3 - Examination of documents - is amended by the addition of new subsections R106.3.4 and R106.3.5 to read as follows:

R106.3.4 Responsibility for preparation of plans and specifications. In accordance with this section, the building official shall require plans, computations, and specifications to be prepared, designed, and stamped by an engineer licensed by the State of Colorado in certain circumstances, including but not limited to the following:

1. Foundations are constructed on caissons or any other method.
2. Roof framing or wall framing.
3. Confirmation of beam sizes and spans, loading, or any structural element affecting the integrity of the building.

R106.3.5 Deferred submittals. – is deleted in its entirety.

- L. Section R108 – Fees – is deleted in its entirety.
- M. Section R109.1 – Types of inspections – is amended to read as follows:

For onsite construction, from time to time the building official, upon notification from the permit holder or his or her agent, shall make or cause to be made any necessary inspections

and shall either approve that portion of the construction as completed or shall notify the permit holder or his or her agent wherein the same fails to comply with this code. Work requiring a building permit shall not be commenced until the permit holder or his or her agent shall have posted an inspection record card in a conspicuous place on the premises and in a position to allow the building official to make the required entries conveniently thereon regarding inspection of the work. The address of the building site must be posted in a conspicuous place readily visible from the public road. This card shall be maintained in such a position by the permit holder until all inspections have been made and final approvals have been granted by the building official. No permanent electric meters will be released until the card has all the required signatures and verified by the building official.

- N. Section R109.1 – Types of inspections - is amended by the addition of a new subsection R109.1.1.1 to read as follows:

R109.1.1.1 Drilled pier inspection. Drilled pier inspections will be made while the piers are being drilled. The design engineer of record or his or her authorized representative shall be present during the drilling operations and shall be available to the City of Loveland inspector during required inspections.

- O. Section R109.1.3 – Floodplain inspections - is amended by the addition of a new subsection R109.1.3.1 to read as follows:

R109.1.3.1 Lowest floor elevation. The elevation certificate required in Section R109.1.3 shall be submitted when required by the building official or as required by Chapter 15.14 of the City of Loveland Municipal Code.

- P. Section R109.1.5.1 – Fire-resistance-rated construction inspection - is amended by the addition of an exception to read in full as follows:

Lath or gypsum board inspections shall be made after lathing and gypsum board, interior and exterior, is in place, but before any plastering is applied or before gypsum board joints and fasteners are taped and finished.

Exception: Gypsum board that is not part of a fire-resistive assembly or a shear assembly.

- Q. Section R109.1.5 – Other inspections - shall be amended by the addition of new subsections R109.1.5.2, R109.1.5.3 and R109.1.5.4 to read as follows:

R109.1.5.2 Fire-resistant penetrations. Protection of joints and penetrations in fire-resistance-rated assemblies shall not be concealed from view until inspected and approved.

R109.1.5.3. Special inspections. For special inspections, Section 1704 of the building code shall apply. The building official is authorized to accept reports of approved inspection agencies, provided such agencies satisfy the requirements as to qualifications and reliability as set forth in the building code.

R109.1.5.4. Footing and foundation inspections. All new footing and foundation inspections shall be performed by a design professional licensed by the State of Colorado and to include, but not limited to, reinforcing, concrete-encased electrode (UFER ground), and when required damp-proofing and perimeter drain.

- R. Section R112 – Board of Appeals - is deleted in its entirety.
- S. Section R113 – Violations – is deleted in its entirety.
- T. Section R114 – Stop work order - is deleted in its entirety.
- U. Section R202 – Definitions - is amended by the addition of the following definitions of “Room, Sleeping (Bedroom),” “Utility Space (Room),” “Addition,” “Accessory Dwelling Unit,” “Townhouse,” and “Family Child Care Home” and the deletion and replacement of the definition of “Fire Separation Distance”:

Room, Sleeping (Bedroom). A habitable room within a dwelling unit designated primarily for the purpose of sleeping. Built in features such as closets and similar storage facilities shall not be considered as relevant factors in determining whether or not a room is a sleeping room.

Family Child Care Home is defined at C.R.S. § 26-6-102 (13). Types of family child care homes are further detailed at 12 CCR 2509-8 Section 7.707, “Rules Regulating Family Child Care Homes.”

Utility Space (Room). A room designed or used to house heating, general maintenance equipment.

The definition of an “Addition” is amended by the inclusion of the following:

An extension or increase in floor area, number of stories or height of a building or structure. Additions where new living and cooking quarters are provided, a *communicating opening* is required.

The definition of a “*Communicating Opening*” shall be as follows:

- *Communicating Opening:*

A permanently fixed opening between *habitable spaces* from the main dwelling to the addition. Minimum dimensions must provide a clear opening minimum width of thirty-two inches (32”) and a minimum height of seventy-eight inches (78”).

The definition of an Accessory Dwelling Unit is amended by the addition of:

ADU - Accessory Dwelling Unit means a residential dwelling unit (but not a manufactured home, mobile home, or recreational vehicle) that is subordinate in scale to, a single-family detached dwelling unit (the “Principal Dwelling Unit”). An accessory dwelling unit is located either within the same building as the Principal Dwelling Unit creating a two-family home or in a detached building on the same lot as the Principal Dwelling Unit.

The definition of a Townhouse unit is amended by the addition of:

Townhouse Unit – A single-family *dwelling unit* in a *townhouse* that extends from foundation to roof and that has a *yard* or *public way* on not less than two (2) sides. Townhouse Units (“Townhouses”) shall have individual services, with no through penetrations from townhouse to townhouse, except NFPA fire sprinkler piping.

Fire Separation Distance. The distance measured from the building to the face of one of the following:

1. For newly constructed structures, the closest interior lot line; or
2. To the centerline of a street, an alley or public way; or
3. To an imaginary line between two (2) buildings on the lot; or
4. To the exterior lot line of a property consisting of two (2) or more adjoining lots under a common ownership with an existing structure(s), for which an issuance of a building permit would otherwise require the consolidation of the lots and for which the owner has executed a unity of title in a recordable form approved by the City of Loveland City Attorney.

The distance shall be measured at right angles from the face of the wall.

V. R301.1.3 is amended as follows:

R301.1.3 Engineered Design

Structural design of residential buildings shall be stamped by an engineer.

Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the International Building Code is permitted for buildings and structures, and parts thereof, included in the scope of this code.

W. Table R301.2(1) – Climatic and Geographic Design Criteria – is amended by deleting the table and replacing it with the following table and replacing footnote (d) as stated below:

TABLE R301.2

TOPOGRAPHIC DESIGN CRITERIA

GROUND D SNOW LOAD _o	WIND DESIGN				SEISMIC DESIGN CATEGOR Y _f	SUBJECT TO DAMAGE FROM		
	Speed _d (mph)	Topogra phic effects _k	Special wind region _i	Windbor ne debris zone _m		Weatheri ng _a	Frost line depth _b	Termite _c
30	130	No	Yes	No	B	Severe	30"	Slight to Moderate
MANUAL J DESIGN CRITERIA _n								
Elevation		Altitude correctio n factor _e	Coincide nt wet bulb	Indoor winter design dry-bulb temperat ure	Indoor winter design dry-bulb temperature			
5079		0.848	62	70	70			
Latitude		Daily range	Indoor summer design relative humidity	Indoor summer design relative humidity	Indoor summer design dry- bulb temperature			
40		High	50	50	75			

Footnote d: Except for structures meeting the definition of “manufactured home” pursuant to § 24-32-3302(20)(c), C.R.S., as amended, the Ultimate Design Wind Speed for a project area shall comply with the Colorado Front Range Gust Map – ASCE 7-10 Compatible, published by the Structural Engineers Association of Colorado (dated November 18, 2013 or any subsequently published version). Wind exposure category shall be determined on a site-specific basis in accordance with Section R301.2.1.4.

- X. Section R301.2.1 – Wind design criteria – is amended by adding the following:

Risk Category II:

All areas east of Taft Avenue shall be designed for one hundred thirty mile per hour (130 MPH) Vult, or can be interpolated from the Front Range Gust Map (seven hundred (700) year recurrence), or designed for the next wind contour line located west of the building site.

All areas west of Taft Avenue shall be interpolated from the Front Range Gust Map, or designed for the next wind contour line located west of the building site.

Risk Category I, III & IV:

All areas shall be interpolated from the applicable Front Range Gust Map, or designed for the next wind contour line located west of the building site.

Wind Exposure:

Exposure B is the minimum.

Exposure C as applicable at sites with open terrain, as defined in the I Codes.

Flood Hazards: VARIES based on Chapter 15.14 Floodplain Building Code of City of Loveland Municipal Code.

Y. Section 302.13 is amended by adding the following to exception 1:

R302.13 Fire protection of floors.

Floor assemblies that are not required elsewhere in this code to be fire-resistance rated, shall be provided with a half inch (1/2") (12.7 mm) gypsum wallboard membrane, five eighths of an inch (5/8") (16 mm) *wood structural panel* membrane, or equivalent on the underside of the floor framing member. Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaires, wires, speakers, drainage, piping and similar openings or penetrations shall be permitted.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with NFPA 13D.

Engineered shop drawings for the fire protection system(s) shall be submitted to indicate conformance to this code and the construction documents and shall be approved prior to permit issuance. Shop drawings shall contain all information as required by the referenced installation standards in Chapter 9 of the IBC/IFC.

Z. Section R310.5 is deleted in its entirety.

AA. Section R310.6 is amended by the deletion of exception 3 as follows:

R310.6 Dwelling additions. Where dwelling additions contain sleeping rooms, an emergency escape and rescue opening shall be provided in each new sleeping room. Where dwelling additions have basements, an emergency escape and rescue opening shall be provided in the new basement.

Exceptions:

1. An emergency escape and rescue opening is not required in a new basement that contains a sleeping room with an emergency escape and rescue opening.
2. An emergency escape and rescue opening is not required in a new basement where there is an emergency escape and rescue opening in an existing basement that is accessed from the new basement.

BB. Section R310.7 is amended by the deletion of the exception as follows:

R310.7 Alterations or repairs of existing basements. New sleeping rooms created in an existing basement shall be provided with emergency escape and rescue openings in accordance with Section R310.1. Other than new sleeping rooms, where existing basements undergo alterations or repairs an emergency escape and rescue opening is not required.

CC. Section R310.7.1 is deleted in its entirety.

DD. Section R313 – Automatic fire sprinkler systems - is deleted in its entirety.

EE. Section R314.2.1 is amended by the addition of items 1 and 2.

R314.2.1 New construction.

Smoke alarms shall be provided in *dwelling units*.

1. An approved strobe shall be provided on the exterior of all one- and two-family dwellings and townhomes in a location readily visible from the roadway fronting the structure. This strobe shall alarm upon activation of any smoke or heat detection device.

The code official is authorized to require exterior strobes to be provided on more than one (1) side of the structure.

2. In one- and two-family dwellings a heat detector shall be installed in the garage and tied into the smoke/CO alarms in the residence, so that if one activates, they all activate.

FF. Section R322.1.5 - Lowest floor - is amended by adding the following paragraph:

The elevation certificate required by this section shall be submitted when required by the building official or as required by Chapter 15.14 of the City of Loveland Municipal Code.

GG. Section R401.2 – Requirements - is amended to read as follows:

Foundation construction shall be capable of accommodating all loads in accordance with Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice. Investigation of the potential for subsurface water and, if necessary, designs for the control of subsurface water shall be required.

HH. Section R507.3.1 is amended to replace Table R507.3.1 with the table below:

30" DEEP CONC PIER-CHART #3					
		BEAM SPAN			
		6'	8'	10'	12'
JOIST SPAN IN FEET	8'	10" DIAMETER PIER			
	9'	10"	10"	10"	12"
	10'	10"	10"	12"	12"
	11'	10"	10"	12"	16"
	12'	10"	10"	12"	16"
	13'	10"	12"	16"	16"
	14'	10"	12"	16"	18"
	15'	10"	12"	16"	18"
	16'	10"	16"	16"	20"

II. Section R507.4 Deck posts is amended to replace table 507.4 with the table below:

**TABLE R507.4
DECK POST HEIGHT^a**

DECK POST SIZE	MAXIMUM HEIGHT ^{a, b} (feet-inches)
4 × 4	6-9"
4 × 6	8
6 × 6	14
8 × 8	14

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

a. Measured to the underside of the beam.

b. Based on 40 psf live load.

c. The maximum permitted height is 8 feet for one-ply and two-ply beams. The maximum permitted height for three-ply beams on post cap is 6 feet 9 inches.

JJ. Section 905.2.4 is amended by adding the following:

1. Asphalt shingles are required to be Class 4 impact resistant that meet UL 2218 test.

KK. Section 908.3 is amended by the addition of exception 2:

R908.3 Roof replacement.

Roof replacement shall include the removal of existing layers of roof coverings down to the roof deck.

Exception:

1. Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section R905.
2. A partial roof replacement/repair that does not exceed one square (100 sq. ft.) can be repaired like for like without a permit. A partial roof replacement/repair that exceeds one square but does not exceed forty-nine percent (49%) of the total roof will require a like for

like permit. A roof replacement/repair exceeding forty-nine (49%) of the total roof (constituting a “full tear off”) requires a permit. Asphalt shingles are required to be Class 4 impact resistant that meet UL 2218 test 2. Please provide material specifications meeting this requirement

LL. Table N1101.7.2(2) [R301.3] – International Climate Zone Definitions – is amended with the addition of footnote j to read as follows:

The thermal design parameters shall be used for calculations required under this code as listed in Design Value section.

Winter Outdoor, Design Dry-bulb (°F)	= 4
Winter Indoor, Design Dry-bulb (°F)	= 70
Summer, Outdoor Design Dry-bulb (°F)	= 94
Summer, Indoor Design Dry-bulb (°F)	= 75
Summer, Design Wet-bulb (°F)	= 63
Degree days heating	= 6600
Degree days cooling	= 479
Degrees North Latitude	= 40 degrees 35 minutes
Air Freeze Index	= 906

MM. Section M1307.1 – Appliance installation - is amended by the addition of a new subsection M1307.8 to read as follows:

M1307.8 Liquefied Petroleum Appliances. Equipment burning liquefied petroleum gas (LPG) shall not be located in a pit, basement, under floor space, below grade, attic or similar location where vapors or fuel may unsafely collect. Liquefied petroleum gases, including construction and temporary heating, shall only be installed per adopted fire code and per manufacturer’s specifications and listing per appliances.

NN. Section P2603.5 – Freezing - is amended to state as follows:

In localities having a winter design temperature of thirty-two degrees Fahrenheit (32°F) (0°C) or lower as shown in Table R301.2(1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than fifty-four inches (54”) deep.

OO. Section P2603.5.1 – Sewer depth - is amended to state as follows:

Building sewers shall be not less than twenty-four inches (24”) below grade.

PP. Section P2904 – General – is deleted in its entirety.

QQ. Section P2910 – Non-potable water systems - is deleted in its entirety.

RR. Section P2911 – On-site non-potable water reuse systems - is deleted in its entirety.

- SS. Section P2912 – Non-potable rainwater collection and distribution systems - is deleted in its entirety.
- TT. Section P2913 – Reclaimed water systems - is deleted in its entirety.
- UU. Section P3009 – Subsurface landscape irrigation systems - is deleted in its entirety.

15.10.030 – Violations and penalties.

It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the City of Loveland or cause the same to be done contrary to or in violation of any of the provisions of the residential code, as adopted and modified by the City of Loveland. Any person, firm or corporation violating any of the provisions of the residential code, as adopted and modified by the City of Loveland, shall be deemed guilty of a misdemeanor, and subject to penalties as set forth in Section 1.12.010 of the City of Loveland Municipal Code.

Section 2. That if any section, subsection, or portion of this ordinance is, for any reason, held to be unconstitutional or invalid for any reason, such decision shall not affect that validity of the remaining portions of this ordinance. City Council hereby declares that it would have passed this ordinance, and each section, subsection, and portion hereof, regardless of whether any one or more sections, subsections, or portions may be declared unconstitutional or invalid.

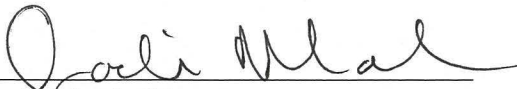
Section 3. That nothing in this ordinance shall be construed to affect any suit or proceeding pending in any court, or any rights acquired, liability incurred, or cause of action acquired or existing under any ordinance hereby repealed, nor shall any legal right or remedy of any character be impaired by this ordinance.

Section 4. That the City Clerk shall cause to be published twice in a newspaper of general circulation within the City, once at least fifteen (15) days preceding the public hearing, and once at least eight (8) days preceding the public hearing, the following notice:

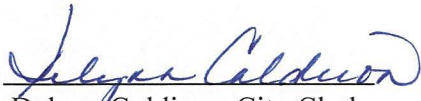
Public notice is hereby given that at 6:00 p.m. on _____ in the City Council Chambers, City Hall, 500 East Third Street, Loveland, Colorado, the Loveland City Council will consider on second reading an Ordinance Repealing and Reenacting Chapter 15.10 and Adopting by Reference the International Residential Code, 2021 Edition. A public hearing shall be held prior to said consideration. Copies of the above-referenced International Residential Code, 2021 Edition and any codes adopted by reference within the code are on file with the Loveland City Clerk and are open to public inspection.

Section 5. That as provided in City Charter Section 4-9(a)(7), this Ordinance shall be published by title only by the City Clerk after adoption on second reading unless the Ordinance has been amended since first reading in which case the Ordinance shall be published in full or the amendments shall be published in full. This Ordinance shall be in full force and effect on June 1, 2023, consistent with City Charter Section 4-8(b).

CITY OF LOVELAND, COLORADO:



Jacki Marsh, Mayor

ATTEST:


Delynn Coldiron, City Clerk



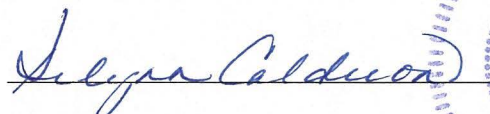
APPROVED AS TO FORM:


Deputy City Attorney

AN ORDINANCE REPEALING AND REENACTING CHAPTER 15.10 OF THE LOVELAND MUNICIPAL CODE AND ADOPTING BY REFERENCE THE INTERNATIONAL RESIDENTIAL CODE, 2021 EDITION

Ordinance 6586

I, Delynn Coldiron, City Clerk of the City of Loveland, Colorado, hereby certify that the above and foregoing Ordinance was introduced at a regular (or special) meeting of the City Council, held on November 1, 2022 and was initially published in the Loveland Daily Reporter-Herald, a newspaper published within the city limits, in full on November 5, 2022 and by title except for parts thereof which were amended after such initial publication which parts were published in full in said newspaper on November 19, 2022.


Delynn Coldiron, City Clerk



Effective Date: June 1, 2023