CITY OF WEST DES MOINES
CITY COUNCIL MEETING COMMUNICATION

Date: February 17, 2020

ITEM: Amendment to City Code – Amend Title 7 (Public Ways and Property), Chapter 9 (Water Supply Protection) to modify the procedures and requirements for shallow and deep wells.

Ordinance: Approval of First Reading

FINANCIAL IMPACT: Undetermined.

BACKGROUND: The City of West Des Moines requests an amendment to the noted chapter and sections of Title 7 (Public Ways and Property) to amend regulations pertaining to shallow and deep wells.

- Title 7 (Public Ways and Property)
  - Chapter 9 (Water Supply Protection), Section 2 (Definitions), Section 3 (Protection for Publicly-owned Shallow Wells) and Section 4 (Protection for Publicly-owned Deep Wells)

OUTSTANDING ISSUES: There are no outstanding issues.

RECOMMENDATION: City Staff recommends the City Council approve the first reading to amend City Code, Title 7 (Public Ways and Property), Chapter 9 (Water Supply Protection).

Lead Staff Member: Christina Murphy, West Des Moines Water Works

STAFF REVIEWS:

Department Director	Christina Murphy, West Des Moines Water Works
Appropriations/Finance	Tim Stiles, Finance Director
Legal	Richard Scieszinski, City Attorney JDS
Agenda Acceptance	(X)

PUBLICATION(S) (if applicable)

Published In	Des Moines Register
Date(s) Published	
Letter sent to surrounding property owners	

SUBCOMMITTEE REVIEW (if applicable)

Committee			
Date Reviewed			
Recommendation	Yes ☐	No ☐	Split ☐

ATTACHMENTS:

Exhibit I Proposed Ordinance

ORDINANCE NO. _____

AN ORDINANCE AMENDING THE CITY CODE OF THE CITY OF WEST DES MOINES, IOWA, 2020, BY AMENDING TITLE 7, (PUBLIC WAYS AND PROPERTY), CHAPTER 9, (WATER SUPPLY PROTECTION).

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF WEST DES MOINES, IOWA:

SECTION 1. AMENDMENT. Title 7 (Public Ways and Property), Chapter 9 (Water Supply Protection), Section 2 (Definitions) is hereby amended by adding the test in bold lettering and deleting the text in strikethrough and shaded text;

The definitions of words used herein shall be those found in textbooks of Civil Engineering, except ~~that a shallow well has a total depth of one hundred feet (100') or less and a deep well has a total depth of one hundred one feet (101') or more. (Ord. 944, 3-4-91)~~ **a shallow well is a well located and constructed in such a manner that there is not a continuous layer of low permeability soil or rock (or equivalent retarding mechanism acceptable to the department) at least 5 feet thick, the top of which is located at least 25 feet below the normal ground surface and above the aquifer from which water is to be drawn.**

SECTION 2. AMENDMENT. Title 7 (Public Ways and Property), Chapter 9 (Water Supply Protection), Section 3 (Protection for Publicly-owned Shallow Wells) is hereby amended by adding the test in bold lettering and deleting the text in strikethrough and shaded text;

A. No structure or facility ~~of any of the following types~~ shall be located within the distances **as outlined in the Iowa Administrative Code 567 Chapter 43** ~~hereinafter set forth~~, from a publicly-owned shallow well within the City.~~:~~

~~1. Well pump house floor drain openings: 5 feet.~~

~~2. Basements, pits or sumps: 10 feet.~~

~~3. Flowing streams or other surface water bodies: 50 feet.~~

~~4. Well pump house floor drain piping, if discharged to the ground surface:~~

~~a. None permitted if located less than 5 feet from the well.~~

~~b. If located between 5 feet and 10 feet from well, the drain piping shall be constructed of one of the materials permitted for water mains in West Des Moines and shall be encased in a minimum of 8 inches of Portland cement concrete.~~

c. If located between 11 feet and 25 feet from the well, the drain piping shall be constructed of one of the materials permitted for water mains in West Des Moines.

d. If located between 26 feet and 75 feet from the well, the drain piping shall be constructed of one of the materials permitted for watertight sanitary sewers in West Des Moines.

5. Well pump house floor drain piping, if discharged to a water treatment plant waste handling system or a sanitary or storm sewer or drain:

a. None permitted if located less than 25 feet from the well.

b. If located between 25 feet and 75 feet from the well, the drain piping shall be constructed of one of the materials permitted for water main in West Des Moines.

c. If located between 76 feet and 200 feet from the well, the drain piping shall be constructed of one of the materials permitted for watertight sanitary sewers in West Des Moines.

6. Sanitary or storm sewage force mains:

a. None permitted if located less than 75 feet from the well.

b. If located between 75 feet and 200 feet from the well, the force main piping shall be constructed of one of the materials permitted for water mains in West Des Moines.

7. Cisterns: 100 feet.

8. Irrigation systems using nonpotable water; concrete vaults and septic tanks; cesspools and earth pit privies; soil absorption fields; sewage lagoons; storage of chemicals, whether under, on or above the ground surface; storage tanks, basins, lagoons or stockpiles of animal wastes; earthen silage storage trenches or pits; animal enclosures; cemeteries; privately-owned wells; solid waste disposal sites; mechanical wastewater treatment plants: 200 feet.

B. No practices of any of the following types shall be located within the distances hereinafter set forth, from a publicly-owned shallow well within the City:

1. Animal pasturage, water treatment plant wastes or waste discharges: 50 feet.

2. Land application of animal wastes, whether in the form of solids, liquids or slurries; sanitary sewage or industrial waste discharges; land application of

~~solid waste; application of chemicals to the ground surface: 200 feet. (Ord. 944, 3-4-91)~~

SECTION 3. <u>AMENDMENT</u>. Title 7 (Public Ways and Property), Chapter 9 (Water Supply Protection), Section 4 (Protection for Publicly-owned Deep Wells) is hereby amended by adding the test in bold lettering and deleting the text in strikethrough and shaded text;

A. No structure or facility ~~of any of the following types~~ shall be located within the distances **as outlined in the Iowa Administrative Code 567 Chapter 43** ~~hereinafter set forth~~, from a publicly-owned deep well within the City.

~~1. Well pump house floor drain openings: 5 feet.~~

~~2. Basements, pits or sumps: 10 feet.~~

~~3. Cisterns, flowing streams or other surface water bodies: 50 feet.~~

~~4. Well pump house floor drain piping, if discharged to the ground surface:~~

~~a. None permitted if located less than 5 feet from the well.~~

~~b. If located between 5 feet and 10 feet from well, the drain piping shall be constructed of one of the materials permitted for water mains in West Des Moines and shall be encased in a minimum of 8 inches of Portland cement concrete.~~

~~c. If located between 11 feet and 25 feet from the well, the drain piping shall be constructed of one of the materials permitted for water mains in West Des Moines.~~

~~d. If located between 26 feet and 75 feet from the well, the drain piping shall be constructed of one of the materials permitted for watertight sanitary sewers in West Des Moines.~~

~~5. Well pump house floor drain piping, if discharged to a water treatment plant waste handling system or a sanitary or storm sewer or drain:~~

~~a. None permitted if located less than 25 feet from the well.~~

~~b. If located between 25 feet and 75 feet from the well, the drain piping shall be constructed of one of the materials permitted for water mains in West Des Moines.~~

~~c. If located between 76 feet and 200 feet from the well, the drain piping shall be constructed of one of the materials permitted for watertight sanitary sewers in West Des Moines.~~

~~6. Sanitary or storm sewage force mains:~~

~~a. None permitted if located less than 75 feet from the well.~~

~~b. If located between 76 feet and 200 feet from the well, the force main piping shall be constructed of one of the materials permitted for water mains in West Des Moines.~~

~~7. Aboveground storage of chemicals, storage tanks for animal wastes; earthen silage storage trenches or pits, animal enclosures, irrigation systems using nonpotable water: 100 feet.~~

~~8. Concrete vaults and septic tanks; cesspools and earth pit privies; soil absorption fields; sewage lagoons; on ground or underground storage of chemicals; basins, lagoons or stockpiles of animal wastes; cemeteries; privately-owned wells; solid waste disposal sites; mechanical wastewater treatment plants: 200 feet.~~

~~B. No practices of any of the following types shall be located within the distances hereinafter set forth, from a publicly-owned deep well within the City:~~

~~1. Animal pasturage, water treatment plant wastes or waste discharges: 50 feet.~~

~~2. Land application of animal wastes, whether in the form of solids, liquids or slurries, land application of solid waste, application of chemicals to the ground surface: 100 feet.~~

~~3. Sanitary sewage or industrial waste discharges: 200 feet. (Ord. 944, 3-4-91)~~

SECTION 4. <u>REPEALER</u>. All ordinances or parts of ordinances in conflict with the provision of this ordinance are hereby repealed.

SECTION 5. <u>SAVINGS CLAUSE.</u> If any section, provision, sentence, clause, phrase or part of this Ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the Ordinance as a whole or any provision, section, subsection, sentence, clause, phrase or part hereof not adjudged invalid or unconstitutional.

SECTION 6. <u>VIOLATIONS AND PENALTIES.</u> Any person who violates the provisions of this Ordinance upon conviction shall be punished as set forth in Title 1, Chapter 4, Sections 1 and 2 of the City Code of the City of West Des Moines, Iowa.

SECTION 7. <u>OTHER REMEDIES.</u> In addition to the provisions set out in the Violations and Penalties Section herein, the City may proceed in law or equity against any person, firm or corporation for violation of any section or subsection of this Ordinance.

SECTION 8. <u>EFFECTIVE DATE.</u> This Ordinance shall be in full force and effect from and after its passage, approval and publication as provided by law.

Passed by the City Council on the _____ day of _____, 2020, and approved this _____ day of _____, 2020.

_____
Steven K. Gaer, Mayor

ATTEST:

_____
Ryan T. Jacobson , City Clerk

The foregoing Ordinance No. _____ was adopted by the Council for the City of West Des Moines, Iowa, on _____, 2020, and was published in the Des Moines Register on __ _____, 2020.

_____
Ryan T. Jacobson, City Clerk