

Resolution 2017 - 02

A RESOLUTION ADOPTING AMENDMENTS TO THE FARR WEST CITY PUBLIC WORKS STANDARDS

WHEREAS Farr West City has adopted by ordinance a set of Public Works Standards as prepared by Jones & Associates dated June 2014 and amended from time to time (Farr West Municipal Code Chapter 15.08); and

WHEREAS the Farr West City Planning Commission recommends the adoption of a new Section 19 of the Farr West City Public Works Standards dealing with residential subsurface drainage as prepared by Jones and Associates;

NOW THEREFORE, BE IT RESOLVED, the Farr West City Council, pursuant to Section 10-3-717, Utah Code Annotated 1953 as amended, does hereby adopt the following Section 19 as part of the Farr West City Public Works Standards:

SECTION 19

Individual Home Subsurface Drainage Systems

19.1 General:

This Section represents the construction standards for individual home subsurface drainage systems. This Section is intended to provide detailed requirements associated with the Farr West City Municipal Code Title 15 – Buildings and Construction 15.04.020, Additional Requirements, paragraph (K). This section of the City Municipal Code is as follows:

All new home building permit applications shall have a restriction that the lowest finish floor elevation in the dwelling shall not be lower than the adjacent top back of curb elevation or if curb is not present, no lower than the existing ground surface.

Exception: New dwellings proposed to have the lowest finish floor elevation below the adjacent top back of curb elevation will be allowed provided that the new dwelling units have a City approved subsurface drainage system consisting of a subsurface ground water collection system as part of the dwelling construction, a sump pump station and discharge piping to an authorized or approved discharge location. The maximum finish floor depth in these dwellings shall not be greater than thirty (30) inches below the adjacent top back of curb elevation. Sump pumps shall not be connected to the sanitary sewer system in any manner. City building permits for these dwelling will not be issued until the proposed sub-surface drainage system design has been reviewed and approved by the City Building Official. Final occupancy shall not be granted to any new home owner until the previously approved subsurface drainage collection system, sump pump and discharge line connections have been inspected and completed and are operational. The ownership, operation and maintenance of the entire subsurface drainage system shall be the total responsibility of the individual property owner.

19.2 Subdivider Responsibilities:

New subdivisions shall be platted with “R” or restricted lots which refer to the requirements of the Farr West City Municipal Code Section 15.04.020 (k) as listed above in Section 19.1. Due to the presence of high ground water conditions throughout the City, the developer shall be required to install

infrastructure to each lot which will accommodate discharge from individual home sump pumps as follows:

Option "A": The Subdivider shall construct a City approval closed joint PVC land drainage system in all subdivision streets. This piping system shall consist of minimum 8-inch diameter PVC SDR 35 sewer pipe (pipe color different than the sanitary sewer pipe color) complete with manholes at maximum spacing of 400 feet. The 8-inch mainline system shall be discharge collected ground water into a City storm drain or open ditch as approved by the City Engineer. Each lot in the subdivision shall be provided with a 4-inch diameter PVC SDR 35 service lateral stubbed into the lot at least 15 feet past the front yard property line. This service lateral shall terminate with a temporary plug and approved location marker and shall be a minimum of 24-inches in depth.

Option "B": The Subdivider shall provide a sump pump discharge line through the back of the concrete curb and gutter fronting each lot. The discharge piping materials shall be 1-1/2 inch HDPE SDR 21 (100 p.s.i.) piping. This sump pump discharge line shall be stubbed at least 15 feet past the front property line and terminate with a temporary plug and approved location marker. The connection to the concrete curb and gutter shall be provided by boring a hole through the back of curb section. All boring shall be by a professional concrete cutting and boring service. The HDPE discharge piping shall be grouted tight into the hole as needed.

19.3 Individual Home Ground Water Collection Systems:

Each home shall be constructed with a City approved ground water collection system.

Option "A" -- Gravel Floor Drainage: This method of ground water collection shall consist of furnishing and installing City approved 1-inch washed drain rock under the lowest elevation concrete floor to a depth of at least 10-inches. This permeable layer of drain rock will allow any ground water under the concrete floor to flow to the perforated sump pump enclosure.

Option "B" -- Perimeter Footing Foundation Drainage: This method of ground water collection shall consist of furnishing and installing a 4-inch diameter perforated PVC or HDPE piping system around the exterior of the concrete footings. The depth of this system shall be at least equal to the bottom footing elevation. The collection piping shall be bedded in 1-inch washed drain rock and shall be wrapped in a City approved geotextile drainage fabric. This perimeter drainage system shall be connected to a perforated sump pump enclosure inside of the dwelling.

19.4 Sump Pumps:

When installation of a sump pump is required by Title 15.04.020 (K) of the City Municipal Code (homes with finished floor elevations below top back of curb) the following shall be required:

All sump pumps shall be installed according to the manufacturer's recommendations and shall be sized to discharge a minimum of 40 g.p.m. at 10 foot of total head. All sump pumps shall be self-priming, have on/off float controls and a check valve on the discharge line. Electric pumps shall be single phase 115 volt and plugged into an approved electrical service box. Pumps shall have a minimum 1/3 horsepower and a minimum discharge size of 1-1/2 inch.

19.5 Sump Pump Enclosures:

All sump pump enclosures shall be constructed of either PVC, HDPE or concrete with a minimum diameter of 18-inches. Perforated "5-gallon plastic buckets" are not allowed as sump pump enclosures. Depth of sump pump enclosures shall be at least 18 inches. All enclosures shall be perforated to allow ground water to enter the enclosure. Perforations shall be 3/4 inch diameter at 6-inch on center or as provide by the enclosure manufacturer. The enclosure shall be provided with a structural type cover sufficient to carry any anticipated floor loads.

19.6 Sump Pump Discharge lines:

All sump pump discharge lines shall be a minimum of 1-1/2 inch diameter HDPE SDR 21 (100 p.s.i) piping. Ground Water Discharge from sump pumps shall discharge locations as follows:

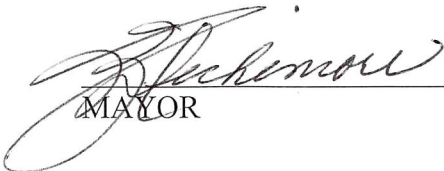
Option "A": Connection to a subdivision land drainage system as outlined in 19.2 – Option "A". Connection to the 4" gravity flow service lateral shall be made by furnishing and installing an 18" diameter water meter box and cover. This box will transition the pressure water flow from the sump pump to the gravity flow service lateral.

Option "B": Connection to the "back of curb" discharge line as outlined in 19.2 – Option "B" which was previously installed during the subdivision improvements construction.

Option "C": With the previous approval of the City Building Official, the sump pump discharge line will be allowed to discharge into an authorized irrigation or drainage ditch.

Effective Date. This Resolution shall take effect upon its passage.

Passed by the Farr West City Council on the 20th day of April, 2017


MAYOR

Attest:


CITY RECORDER

