**Ordinance 2021-02**

**An Ordinance Outlining Culinary and Secondary Water Dedication**

**WHEREAS**, the City Council of Hyde Park City, Cache County, Utah passed and adopted the Hyde Park City code on May 13, 2015; and

**WHEREAS,** The City Council of Hyde Park City determined there is a need to update, repeal, amend and/or modify certain provision contained in the referenced Municipal Code; and

**NOW, THEREFORE**, that City Council of Hyde Park City, Utah hereby adopts, passes and published the following:

**12.150 Culinary and Secondary Water Dedication**

**PART 1 – WATER DEDICATION**

**A. Purpose**

**B. Contribution**

**C. Required Dedication**

**D. Development not in a subdivision**

**PART 2 – FUTURE INFRASTRUCTURE**

**Development outside canal service areas**

**Design Requirements**

**PART 1 – WATER DEDICATION**

A. **Purpose** - The intent of this section is to ensure that adequate culinary and irrigation water accompany property proposed for development. Such water shares or water rights shall be provided in accordance with the provisions of this section, thereby enabling the City to meet additional demands for both culinary and secondary water created by a proposed development without diminishing the quality, quantity, or level of service to existing users.

 B. **Contribution of water stock** - As a condition of project approval, City Council requires each owner/developer of real property that has received preliminary approval of a project to dedicate water stock to the City as required by this section prior to final approval being granted. The owner/developer shall dedicate, on a pro rata basis. The City shall have the right of first refusal to purchase any excess water shares that an owner/developer sells as a result of developing real property.

C. **Options** - The water requirement shall be satisfied through the application of one, or a combination, of the following options:

1. **Dedicate Culinary Water.** Culinary quality water, per State Testing, would qualify for conversion to a municipal use with a point of diversion residing in an existing city diversion point or that may be transferrable to an existing city diversion point.
2. **Dedicate Secondary Water.** Secondary or irrigation quality water from a canal or irrigation company operating within the corporate limits of Hyde Park City. Secondary water shares that are dedicated to the subdivision property as required by the ordinance must remain with the property. It is recommended that appropriate notice be given to the Canal Company for any unused shares to prevent loss of excess water shares. The development agreement will specify the actual number of shares that will be dedicated to the lots within the subdivision. High water or partial season water will not be accepted.
3. **Pay for the City to acquire adequate water.** If the land being developed is above the upper canal, or by any other unique situation is not able to be served by secondary water, the owner/developer may, in lieu of providing water, pay the amount identified in the most current "prevailing fee schedule" as set forth by the City Council. Fees collected by the City shall be earmarked for the purpose of obtaining additional water rights or developing existing water resources. The City may refund any fees received in accordance with this option if the owner/developer provides water in accordance with A or B of this section.
4. **Split Option.** This option may be used in conjunction with 1 -3 above by constructing a secondary distribution system within the development or a portion of the development using these guidelines:
	1. Install a distribution system providing for secondary water to be used for watering on each building lot created. The owner/developer shall create a water entity (HOA or Distribution Coop) whose ownership and management is to be turned over to the subdivision’s residents at the earliest possible point in the development timeline, unless title to the required water share(s) can be transferred directly to each lot owner entitled to and responsible for the same. The entity shall (1) provide management of the business requirements related to the water share(s) (pay bills, make assessments, etc.), (2) hold title to the water shares owned and used by the entity for the benefit of the lot owners and other subdivision property, and (3)maintain the delivery system.
5. The owner/developer shall work with irrigation, drainage or ditch companies to determine:
	1. Methods of covering, realigning or eliminating ditches or canals within or adjoining the subdivision.
	2. Methods of distributing available secondary water to each lot and irrigated open space in the subdivision.
	3. The size of pipe and culverts required.
	4. The responsibility for the periodic inspection, cleaning and maintenance of such ditches, pipes and culverts. In cases where canals or ditches cross public roads or proposed public roads, specifications and grades for pipe or culvert must be approved by the Public Works Director in cooperation with the DRC and/or the City engineer.

D. **Required Dedication Amounts by Residential Zone.**

|  |  |
| --- | --- |
| **Residential Water Requirements in Acre-feet per year.** |  |
|  | **A** | **B** | **C** | **D** | **E** | **F** |
|  | (See Notes) | (See Notes) | (See Notes) | **(B + C)** | (See Notes) | **(D x E)** |
|   | Landscaped | Outdoor  | Indoor | Total Lot  | Max | Per Acre |
|   | Lot size | Water | Water | Water | # lots | Development |
|   | Factor | 1.87 | 0.45 | Indoor + |   | Requirement |
| Zone |   | acre-ft/lot | acre-ft/lot | Outdoor | per acre |   |
| A1 (agricultural) | 0.92 | 1.72 | 0.45 | 2.17 | 1.00 | 2.17 |
| 43,560 sq.ft |   |   |   |   |   |   |
| A1 - Bonus Density | 0.46 | 0.86 | 0.45 | 1.31 | 2.00 | 2.62 |
| 20,000 sq.ft |   |   |   |   |   |   |
| RE20 (residential) | 0.46 | 0.86 | 0.45 | 1.31 | 2.00 | 2.62 |
| 20,000 sq.ft |   |   |   |   |   |   |
| RE20 - Bonus Density | 0.28 | 0.52 | 0.45 | 0.97 | 2.00 | 1.95 |
| 12,000 Sq.ft |   |   |   |   |   |   |
| R1 - (city core) | 0.30 | 0.56 | 0.45 | 1.01 | 2.00 | 2.02 |
| 13,000 sq.ft |   |   |   |   |   |   |
| PUD outside water computation is lot plus one fifth of open space. (see Note at bottom)  |
| Standard PUD | 0.07 | 0.44 | 0.45 | 0.89 | 5.00 | 4.45 |
| Senior PUD | 0.07 | 0.44 | 0.38 | 0.82 | 5.00 | 4.10 |
|  | **LEGEND** |  |  |  |  |  |
| **Column A:** Landscaped lot size factor per Zone (from random sampling city wide) |  |
|  | A1 = 0.92-acre |  |  |  |  |
|  | A1 Bonus Density and RE20 = 0.46-acre |  |  |
|  | RE20 Bonus Density = 0.28-acre |  |  |  |
|  | R1 = 0.30-acre |  |  |  |  |
|  | PUD = 0.07-acre |  |  |  |  |
| **Columns B and C:** 0.45 per house and 1.87 per acre for landscape numbers are taken from  |
|  Utah Code Title 19, Chapter 4 - Safe Drinking Water Act |  |  |  |
| **Column B**: Column A multiplied by 1.87 |  |  |  |  |
| **Column E:** Number of lots per city ordinance |  |  |  |  |
|  |  |  |  |  |  |  |
| **PUDs** |  |  |  |  |  |  |
| Senior PUD Reduced household use per home from 0.45 to 0.38 ( Reference- Eagle Mountain Multifamily Project.) |
| PUDs are 0.07 acres for the house yard + 0.37-acre for open space = total 0.44 |  |
| (This uses a landscaped area of 3500 sq.ft. of a 6,000 sq.ft lot, plus one fifth of the 30% open space requirement.) |
|  |  |  |  |  |  |  |
| ***Note: If the land use is not maximized, the water requirement will likely be higher to account***  |
|  ***for increased outdoor water usage.*** |  |  |  |  |

Example:

A proposed subdivision zoned RE 20 (using Bonus Density) having 10 acres of gross acreage is allowed up to 20 building lots. Each building lot requires 0.45 acre-feet of water for indoor uses and 0.52 acre-feet of water for outdoor use, or a total of 0.97 acre-feet of water per building lot. Thus, the entire subdivision would require 19.4 (0.97 x 20) acre-feet of water. This could be accomplished by doing one or more of the following:

1. Dedicate 19.4 acre-feet of culinary quality water to the city.
2. Dedicate 19.4 acre-feet (or equivalent shares) of water from a canal or irrigation company operating in Hyde Park.
3. Pay the amount identified in the “fee schedule” for the 19.4-acre feet of water.
4. Install a secondary water system using attached shares to serve the 20 building lots within the subdivision. This would satisfy 10.4 acre-feet (0.52/.097 x 19.4) of water for irrigation. The other 9 acre-feet for culinary water dedication shall be satisfied by one of the above options.
5. **Property not in a Subdivision:**

The building of a home in an area not included in a platted subdivision shall contribute the equivalent shares or rights on a prorated basis for the entire acreage of the proposed building lot (see chart above). If the proposed development anticipates a remainder parcel or agricultural property in excess of the residential use and that land or remainder parcel meets the requirements for future developable land, the city shall only require those shares associated with the residential development consistent with the lot size of the zone in which the property is located; for instance, if one house is being built on a ten (10) acre parcel in the A-1 zone the builder would convey only one acre right. Water shares/rights on remaining land will be subject to review at the time that future development occurs. The city council may approve exceptions in cases where the property owner certifies that it is their intent to irrigate their lot using irrigation water. A partial conveyance to account for indoor water usage and outside watering adjacent to the residence shall be the minimum requirement.

**PART 2 – FUTURE INFRASTRUCTURE**

**Development outside canal service areas**

1. Dry secondary water lines shall be installed in new development as stated in section 7.2 of the Hyde Park City Master Water Plan.
2. The owner/developer’s engineer will work in concert with the City Engineer to design a secondary water system for the project as outlined below:

**DESIGN REQUIREMENTS**

This section outlines the required design criteria. All submitted plans shall, at a minimum, meet the criteria provided and use the highest engineering practices. The owner/developer’s engineer shall use these design criteria unless otherwise specified by the City Engineer.

**Secondary Water System**

This section provides general guidance for the City’s secondary water system. Items may be added, replaced or eliminated as deemed necessary by the City. Additional information may also be required.

1. **Policies.**
2. The distribution system shall be designed to maintain a minimum of 40 psi at all points of connection, under all conditions of flow, but especially during peak instantaneous flow conditions.
3. There shall be no physical connections, public or private, which would result in cross connections to any potable water main from secondary water mains. No connections shall be made to any sewer, storm drain, or appurtenances thereto, which could permit the passage of any wastewater or polluted water into the secondary supply.
4. **Secondary Water Design**
5. Minimum Line Size. The minimum line size serving cul-de-sacs or linear looped streets shall be 4-inch, when serving less than eight lots. The minimum line size serving cul-de-sacs or linear looped streets shall be 6-inch, when not more than 12 homes/units are connected to the main. The minimum line size in all other conditions shall be 8-inch. Actual flows must be modeled to ensure that minimum sizes are adequate for normal flow requirements as well as when some looping lines are out of service. Sizes are subject to engineering review.
6. Water Line Placement.
	1. All secondary water distribution mains within residential subdivisions shall be placed in the park strip area.
	2. Secondary water mains shall be laid at least ten feet horizontally from any existing or proposed sewer line.
	3. Secondary water mains shall not be installed at side or rear property lines. All lines will be installed within a Public Right-of-Way.
	4. Magnetic Locator Tape Required. All pipes shall include a 3-inch wide magnetic locator tape installed in the pipeline trench approximately 12 inches above the pipe.
	5. Service laterals shall typically be run one for every two lots, and shall be 1½-inch diameter IPS polyethylene pipe. Where single service lines run under the street (long side), the services shall be 1½-inch diameter IPS polyethylene pipe. Short side services shall be 1”-diameter IPS polyethylene pipe.
7. Cover Requirements. All water lines and appurtenances shall have a minimum cover of 36 inches.
8. Pipe Material.
	1. Polyvinyl Chloride Pipe (PVC) C900 may be used for buried sizes 8-inches and smaller. Ductile iron pipe PC – 350 or CL-52 shall be used for all pipe 10 inches and larger. All fittings and valves 4 inches and larger shall be ductile iron and must meet the requirements of NSF 61 and ANSI/AWWA C-153.
	2. All PVC pipe shall be Purple and all ductile iron shall have AWWA C105 purple polyethylene wrap.
9. Slope water pipe and position drains at low points.
10. Locate air release stations at the end of cul-de-sacs, on all dead-end pipes, high points within the system and as directed by the City Engineer.
11. Connection to existing pipeline shall be made as such times and within the time limits as directed by the city.
12. **Valves.**
13. Valves. Manufacturer’s name and pressure rating marked on valve body. Valves 8” and smaller shall be gate valves, valves 10” and larger shall be butterfly valves.
14. Gate Valves Up To 3 Inches.
	1. Brass or Bronze body, non-rising stem, inside screw, single wedge or disc, IPS ends, and hand wheel.
	2. Product: Powell U.S. Bronze Gate Valves or accepted equal.
	3. Substitutions: See Section 01600 – Product Requirements
15. Gate Valves 3 Inches and Over
	1. AWWA C500, iron body, bronze trim, non-rising stem with square nut, single wedge, mechanical joint or flanged ends as indicated, and cast iron valve box.
	2. AWWA C509, iron body, bronze trim, non-rising stem with square nut, single wedge, resilient seat, mechanical joint or flanged ends as indicated, and cast iron valve box.
	3. Product: Mueller Gate Valve or Resilient Seat Gate Valve with appropriate type Tyler 564A Cast Iron Valve Box, or accepted equal.
16. Ball Valves Up To 2 Inches.
	1. PVC body, PTFF seat seal, PVC ball and ABS handle.
	2. Product: To be approved by Hyde Park City.
17. Swing Check Valves from 2 inches to 24 inches.
	1. AWWA C508, iron body, bronze trim, 45 degree swing disc, renewable disc and seat, flanged ends.
	2. Product: Mueller Swing-Type Check Valve, or accepted equal.
18. Butterfly Valves from 2 Inches to 24 Inches.
	1. AWWA C504, iron body, bronze disc, resilient replacement seat, mechanical joint or flanged ends as indicated, manual worm gear operator, and cast iron valve ox where required.
	2. Underground manual operators shall be totally enclosed, factory grease packed and sealed, bronze worm gear operators with self-locking gearing; stops shall be provided to prevent over travel of valve disc.
	3. Valve operator shall be geared to close valves slowly. Number of turns to close valve from full open position shall be: 32 for 10-inch and smaller valves, 52 for 12-inch thru 16 inch valves, and 76 for 18-inch through 24-inch valves. Closing times for larger valves shall be accepted by the Engineer.
	4. Product: Mueller “Linesal III” Butterfly Valve with appropriate type Tyler 564A Cast Iron Valve Box, or accepted equal.
19. Corporation Stops shall be type for connecting to copper or polyethylene pipe; Mueller No. H-15000, or accepted equal, for up to 2-inch service line.
20. Air Release Valves shall be combination air release valves; APCO Combination Air Release Valves, or acceptable equal, of size indicated on the drawings.
21. Stop & Waste. Mueller-MUH 10288-010 or Ford b11-4445 SWM . (see drawing SW-01)
22. Valve Box lid shall be triangular and marked irrigation - Product: Olympic VBU-8500 D&L M-9009
23. **Location of Isolation Valves.**
24. Placed at the entrance to a cul-de-sac.
25. Placed at intervals not to exceed 800 feet in residential areas and 500 feet in commercial areas.
26. Placed at intersections on all branches of the system.
27. Placed within 10 feet of the upstream and downstream ends of an augured or trenched casing.
28. If valves are located in an undeveloped area, a vertical valve marker will be required.
29. Valves shall be placed in clusters where possible, and at property lines and point of curves.
30. **Accessories.**
31. Service Clamps: shall be bronze, double-strap type; Mueller No. H-16000, or acceptable equal, for up to 2-inch service lines.
32. Meter Nut: All brass conforms to AWWA standard C800 and shall be able to connect directly to the PVC ball valve and the Neptune T-10 positive displacement meter. Product: Straight Meter Coupling
33. **Preparation.**
34. Cut pipe ends square, ream pipe ends to full pipe diameter, remove burrs.
35. Remove scale and dirt on inside and outside before assembly.
36. Prepare pipe connections to equipment with flanges or mechanical joints.
37. **Service Connections.**
38. Service lines shall be installed at uniform grades and alignments; and shall be free of low spots or adverse grades.
39. Service lines shall be cleaned, flushed and tested in accordance with applicable requirements of these specifications.
40. **Field Quality Control**

Refer to Hyde Park City’s Development Standards Section 5-1 Commissioning of Water Pipelines.

See “Secondary Water Details” as part of the Hyde Park City Construction Standards

(hydepark.utahlinks.org under Departments\Public Works\Construction Standards)

ADOPTED and PASSED by the Hyde Park City Council this 13th day of January 2021.

# HYDE PARK CITY CORPORATION

Sharidean Flint, Mayor

# ATTEST:

Donja Wright, City Recorder