

**El Paso County  
Planning & Community Development**  
2880 International Circle, Suite 110  
Colorado Springs, CO 80910-3127  
Attn: Kari Parsons

**July 10, 2020**

**RE: Woodmen Hills Metropolitan District (WHMD)  
West Concrete Water Storage Tanks  
Site Development Plan – Letter of Intent**

Dear Mr. Howser:

As a representative of the Applicant, Woodmen Hills Metropolitan District (WHMD, the District), we are preparing the submittal requirements for the West Water Tank Site Development Plan to construct a concrete water storage tank (with a future concrete tank) near Arroya Lane (East of Vollmer Rd.) in El Paso County (Parcel No. 5200000361). The Consultant and Applicant contact information is as follows:

**Consultant:**

JDS-Hydro Consultants, Inc.  
5540 Tech Center Drive, Suite 100  
Colorado Springs, CO 80919  
Contact: Ryan Mangino, P.E.  
Telephone: (719) 227-0072  
Email: [rmangino@jdshydro.com](mailto:rmangino@jdshydro.com)

**Applicant:**

Woodmen Hills Metropolitan District  
8046 Eastonville Road  
Peyton, CO 80831  
Contact: Jerry Jacobson  
Telephone: (719) 495-2500  
Email: [Jerry@WHMD.org](mailto:Jerry@WHMD.org)

**General Information**

The site for concrete tanks is located on Arroya Lane, approximately 0.6 miles east of Vollmer Road in Colorado Springs, Colorado, in the Northwest 1/4 of Section 27, Township 12 South, Range 65 West of the 6<sup>th</sup> Principle Meridian, El Paso County, Colorado. An address is yet to be determined for the site on which the tanks will be constructed.

The site for the concrete tanks currently takes up a small portion of an overall parcel that is 278-acres, zoned RR-5, and owned by Morley-Bentley Investments LLC. It contains an existing potable water concrete storage tank that currently serves development to the south. The proposed site for the concrete tanks is currently being submitted under the Subdivision Exemption process, and is a 1.47-acre easement on the overall parcel.

Presently, no existing infrastructure is located on the proposed parcel (existing utility easement). The proposed tanks will be roughly 3 million gallons and under 2 million gallons, constructed of concrete in accordance with American Water Works Association (AWWA) standards. Only one tank (the 3 million gallon tank) is currently proposed.

District operations staff will perform weekly checks on the facility, but it will not be a “manned” facility. It will only be accessible to operations staff and not open to the public.

**Landscaping**

Currently, no landscaping exists at the site. It is mainly covered with native grasses.

The intent of the District is to install xeric/low-water landscaping for the new facility to satisfy the requirements for road frontage and interior landscaping.

All landscaping requirements are met as depicted below:

- Net Site Area (less frontage easement): 58,107 SF
- Internal Landscape Area Required/Provided: 5% (2,905 SF) / 5.5% (3,217 SF)
- % Ground Cover Required/Provided: 50 / 50
- Internal Trees Required/Provided (1/500SF): 6 / 8
- Roadway Frontage Width Required/Provided: 15 feet / 15 feet
- Roadway Trees Required/Provided (1/15 LF Frontage): 14 / 14

### **Transportation & Access**

As mentioned above, the facility is not a manned facility, and only weekly checks will be performed by operations staff. No new roads are being proposed, and the existing Arroya Lane is adequate for access. The tanks will not involve any pumps, motors, or any other noise-making equipment.

### **Lighting & Site Security**

No site lighting is proposed for this project. As strictly a utility facility, it is completely unmanned without entrances/exits. The lack of lighting will not have any negative visual impacts (light pollution) on the surrounding neighborhoods.

Any lighting necessary for operations at night will be mobile/emergency lighting since site lighting is not bright enough to perform emergency operations. Due to the nature of these tanks (being concrete vs. steel and not having any moving parts), no emergency operations are anticipated.

The existing fencing and gate along the northern portion of the site deter access from Arroya Lane. The remaining three (3) side of the parcel will have new fencing (included in the drawings of the second submittal).

Although site lighting is not proposed for this project, it will be fenced and the facility itself has multiple features related to safety. There are three (3) openings in the tank – Two (2) “manways” in the sidewall of the tank, and one (1) access hatch on the roof. Both manways and the roof hatch are padlocked. The manways can only open inward, but they are under thousands of pounds of pressure from the water inside the tank. It is nearly impossible to access the tank via the manways unless there is no water behind them. Under normal operating conditions, water in the tank will vary between around 22 to 30 feet deep.

The exterior ladder that allows access to the roof hatch does not start until it is 11 feet above finished grade. It can only be accessed via a portable ladder or boom lift. As mentioned above, the roof hatch is also padlocked as an additional level of security.

### **Drainage**

Runoff from the basin flows via sheet flow to the southwest of the property and eventually discharges into a drainage swale that continues to the southwest and into a stock pond located on the future Retreat at TimberRidge development. This facility serves as a temporary sediment pond. Discharges from the stock pond flow directly towards Sand Creek

This site is not impacted from off-site flows due to the existing drainage ditch system on Arroya Lane and the previous grading of the SRMD water tank site directly east of the site.

Runoff on the site will be conveyed from southern half of the site to the northeast and from the northeast of the site to the southwest to an extended detention basin (EDB) located on the west side of the property before discharging off-site. Overland sheet flow and inverted crown gravel driveways will be used to convey groundwater to the EDB. An EDB providing full spectrum detention will be used to treat the Water Quality Capture Volume (WQCV), Excess Urban Runoff Volume (EURV), and 100-yr flood event before leaving the site.

The proposed EDB provides water quality for runoff produced on the West Water Tank Site. This water quality basin is designed to treat approximately 1.47 acres and provide 6,817 cubic feet of water quality storage (not including 1-ft freeboard). The EDB will be private and maintained by the property owner. Access to be granted to the owner and El Paso County for access and maintenance of the private WQCV facility. A private maintenance agreement accompanies the submittal. The WQCV facility sizing calculations are included as an attachment of this report.

Proposed erosion and sediment control measures include silt fence at the toe of grading operations, concrete washout area, and permanent stabilization of all disturbed areas. Disturbed areas shall be re-seeded with native grasses.

The West Water Tank site is proposing to construct a detention pond that will detain developed flows and release at historic rates. The extended detention basin with rip rap rundown and plunge pool will sufficiently mitigate the developed flows. The development of the proposed site does not significantly impact any downstream facility or property to an extent greater than that which currently exists due to historic conditions.

### **Schedule**

Construction is scheduled to start in July of 2020 and will be complete by June 2021.

### **Utility Information**

A water transmission line owned by WHMD will provide water to the tank as well as draw water from the tank to during demand. There are no water taps or sewer infrastructure related to this project.

Please refer to the drawings and forms enclosed with this submittal as requested to satisfy the Site Development Plan requirements.

Sincerely,  
**JDS-Hydro Consultants, Inc.**



Ryan Mangino, P.E.  
*Enclosures*