



# WOODMOOR

Water & Sanitation District No. 1

P. O. Box 1407 • Monument, Colorado 80132  
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July 10, 2020

NES

c/o Andrea Barlow

## **RE: Cloverleaf Subdivision – Preliminary Plan Set**

The Woodmoor Water and Sanitation District No. 1 (the District) has received plans and documents related to the development applications referenced above. The District has the following concerns and/or recommendations:

### **General Comments**

1. This review is a general overview of the drawing set received June, 2020.
2. This review is to be used in accordance with the District's written comments on the plan set.
3. All utility plans must show profiles for water and sanitary sewer pipelines. Please see Woodmoor Water & Sanitation System Specifications, Chapters 3 & 4. These may be found online at <https://woodmoorwater.com/services/engineering-services/system-specifications.html>
4. Remove "with under drain" from all sanitary sewer callouts. Sanitary sewer does not have under drain.
5. Please add the District's signature box to all utility drawings. This was specifically noticed on sheets 2, 6, 7, and 8 of 10.

*Woodmoor Water and Sanitation District No. 1  
APPROVED FOR CONSTRUCTION*

*Date: \_\_\_\_\_ By: \_\_\_\_\_*

*These plans have been reviewed only for general conformance with District Rules and Regulations and System Specifications. Review and construction approval by the District does not relieve the Developer/Owner and/or Contractor from responsibility for compliance with any rules, regulations or specifications required by the District.*

6. Please change all utility easement labels to read "public utility easement".
7. Please add the following Standard Details, attached:
  - a. G-2
  - b. G-3
  - c. G-5
  - d. G-6
  - e. G-8
  - f. G-10
  - g. W-1
  - h. W-3

- |        |         |
|--------|---------|
| i. W-4 | o. S-5  |
| j. W-6 | p. S-6  |
| k. W-8 | q. S-9  |
| l. W11 | r. S-10 |
| m. S-1 | s. S-11 |
| n. S-2 |         |

8. Please add the following note to the Utility Plan Notes on pages 6 through 8:
  - a. "All water pipelines must have a minimum of 6 foot bury depth from top of pipe to finished grade."
  - b. "For all water and sewer utilities, reference Woodmoor Water and Sanitation District No. 1 Rules & Regulations."

**Sheet 2 of 10**

1. Please change utility easement descriptions to read "public utility easement".

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9. All easements must be 10 ft from center of pipe to edge of easement for water, and 15 ft from center of pipe to edge of easement for sanitary sewer. There are a few locations on the plans where this would need to be shown, specifically around fire hydrants. Please reference the marked plans for more details.
10. Within the existing easement to the west of the project location, two water pipelines are shown and labeled as existing water lines. One line is a raw water line, and another is a transmission line. To prevent confusion during construction, please label each line accordingly. Suggest changing linetype label from -W- to -RW- or -TW-. Reference the marked plans for more details.
11. Please ensure that minimum separations are met between sewer and water lines.
12. Move text labels to ensure all appurtenances are visible.
13. The water pipelines cannot be "dead end" lines. Please attach the end of the proposed water pipeline to an existing distribution pipeline, located either in Caribou Drive or Bowstring Road. Add three (3) isolation valves at tie-in point. Add easement, 10 feet from center of pipe, as required.
14. Please mark northernmost sanitary sewer line more clearly as to which section is to be abandoned. The northern portion is shown with demolition hatching.
15. Which utilities are in the 16' utility easement book 5437 page 646, to be vacated? Please show any and all existing utilities.
16. Were the utilities potholed prior to these plans, or will they be potholed in the coming weeks to verify depths and locations?
17. On Crimson Clover Drive, there is an abundance of manholes around the curve. By straightening the pipeline in sections such that the pipeline does not align with the curvature of the road, it will be possible to decrease the number of bends, and therefore the number of manholes. Is this possible, while maintaining clearances from other utilities and remaining within the right-of-way?
18. On the northern end of Alsike Clover Court, there is a dead-end manhole and a re-routed sanitary sewer pipeline. How will services be connected to these pipelines?

**Sheet 7 of 10**

1. At the intersections of Leggins Way and White Clover Drive, where the new water pipeline connects to the existing pipeline, please add three (3) gate valves for isolation and associated labels.
2. Please label the raw water pipeline as raw water to avoid confusion on construction plans. Is the raw water line to be re-routed? Please change line type from –W— to –RW— and label from “proposed water main” to “proposed realignment of raw water transmission pipeline”. Additionally, please label easement.
3. Location of the label stating “Ex 16.00’ utility and drainage easement rec. no. 863562” is confusing – suggest moving to location closer to easement and arrows.
4. Move text labels to ensure all appurtenances are visible.

**Sheet 8 of 10**

1. On Crimson Clover Drive, there is an abundance of manholes around the curve. By straightening the pipeline in sections such that the pipeline does not align with the curvature of the road, it will be possible to decrease the number of bends, and therefore the number of manholes. Is this possible, while maintaining clearances from other utilities and remaining within the right-of-way?
2. Move text labels to ensure all appurtenances are visible.
3. The water pipelines cannot be “dead end” lines. Please attach the end of the proposed water pipeline to an existing distribution pipeline, located either in Caribou Drive or Walters point. Add three (3) isolation valves at tie-in point. Add easement, 10 feet from center of pipe, as required.
4. In Walters Point, the sanitary sewer pipeline cannot bend or curve. Please add a manhole at each necessary bend between tie-in point and manhole in front of lot 147.

If you should have any questions, please contact me.

Sincerely,

Ariel Hacker  
District Engineer  
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arielh@woodmoorwater.com

Cc: Jessie J. Shaffer  
Gary Potter