

The background of the entire page is a close-up photograph of grass blades covered in dew. The lighting is soft and warm, creating a bokeh effect with the out-of-focus background. The dew drops are clearly visible on the sharp edges of the grass blades.

# Chapter Seven

## SEWER SYSTEM

The Villages  
Master Planned Development

## OVERVIEW

The Villages MPD will result in the addition of approximately 5,280 equivalent residential units (ERUs) (4,400 residential/mixed use and 880 for commercial/office and school sites) to the existing base served by the City of Black Diamond's water and wastewater systems. On-site and off-site improvements to the City's systems are proposed to serve the proposed MPD and are described below. With the proposed improvements, there will be sufficient capacity in both systems to serve the proposed development.

## PROPOSED SEWER SYSTEM

### THE VILLAGES MAIN PROPERTY

The Villages main property is proposed to be served by a collection system, force mains and up to three new pump stations that will pump wastewater to a connection with the King County METRO sewer trunk that connects to the Soos Creek Water and Sewer District's Covington Pump Station 11. This proposed connection to the King County METRO sewer trunk would by-pass the main Black Diamond Pump Station. The main sewer mains on the site will be located within the spine road, except on Parcel F where they will follow topography. The site may be served initially by one pump station in the vicinity of Parcel D that is moved south as development progresses south across the site, or that pump station may remain and a second pump station may be constructed to serve the south half of the site. A pump station will be necessary to serve the eastern most portion of Parcel F, if developed. These may be interim pump stations used until the City's planned off-site pump stations are built.

### STORAGE FACILITY

In addition to pump stations, mains and collection lines, the King County/Black Diamond storage facility is proposed to be located on Parcel C or on the King County owned property to the north of Parcel C. Potential storage locations are shown on the Phasing Plan in Chapter 9. All proposed pump stations will ultimately pump to the storage facility. Effluent will be released via gravity flow from the storage facility to the King County METRO sewer trunk in Lake Sawyer Road at controlled release rates. Approximate locations are shown on the attached figure entitled "Conceptual Sewer Plan", final locations will be based on City siting criteria.

### THE VILLAGES PARCEL B

There are two alternatives for sewer service to The Villages Parcel B. One option is to construct an interim pump station that would pump effluent to a force main in SR 169 that would deliver the wastewater to the city gravity main located in SR 169 south of the Diamond Glen development. The second alternative would be for an off-site gravity main extension south along the old railroad grade to the Black Diamond Pump Station.

