SASD 2020 SYSTEM CAPACITY PLAN EXPANSION TRUNK SHEDS

BR BOND SHELDON TRUNK SHED

Area Description

The BR Bond Sheldon Trunk Shed is located north and south of Bond Road between Waterman Road and the Urban Services Boundary. This shed encompasses an area of Elk Grove known as the "Triangle Area" where several 1-acre lot residential subdivisions have been constructed. These developments are served by collector sewers connecting to an existing trunk in Bond Road. Included in the BR Bond Sheldon Trunk Shed is the rural residential Sheldon area that, according the City of Elk Grove, is not planned to be served by public sewers.

Trunk System Facilities

A major gravity trunk and a trunk pump station and force main is planned to serve this trunk shed.

A trunk pump station is planned to be located near the intersection of Bradshaw Road and Bond Road and would convey all the upstream shed flows and discharge to Bradshaw Interceptor manhole N38-MH0036A. The existing interim pump station S130 is planned to be abandoned and a new collector sewer would convey the flow to the future trunk pump station. Wastewater upstream of the existing 8-inch main line 274-188-2062 would also be diverted to the new pump station. It should be noted that the new trunk pump station is not planned to serve the area that is designated as *Rural Residential*.

A gravity trunk sewer would serve the upstream portion of the shed, near Elk Grove Boulevard and Grant Line Road, and convey the flow to the future trunk pump station.

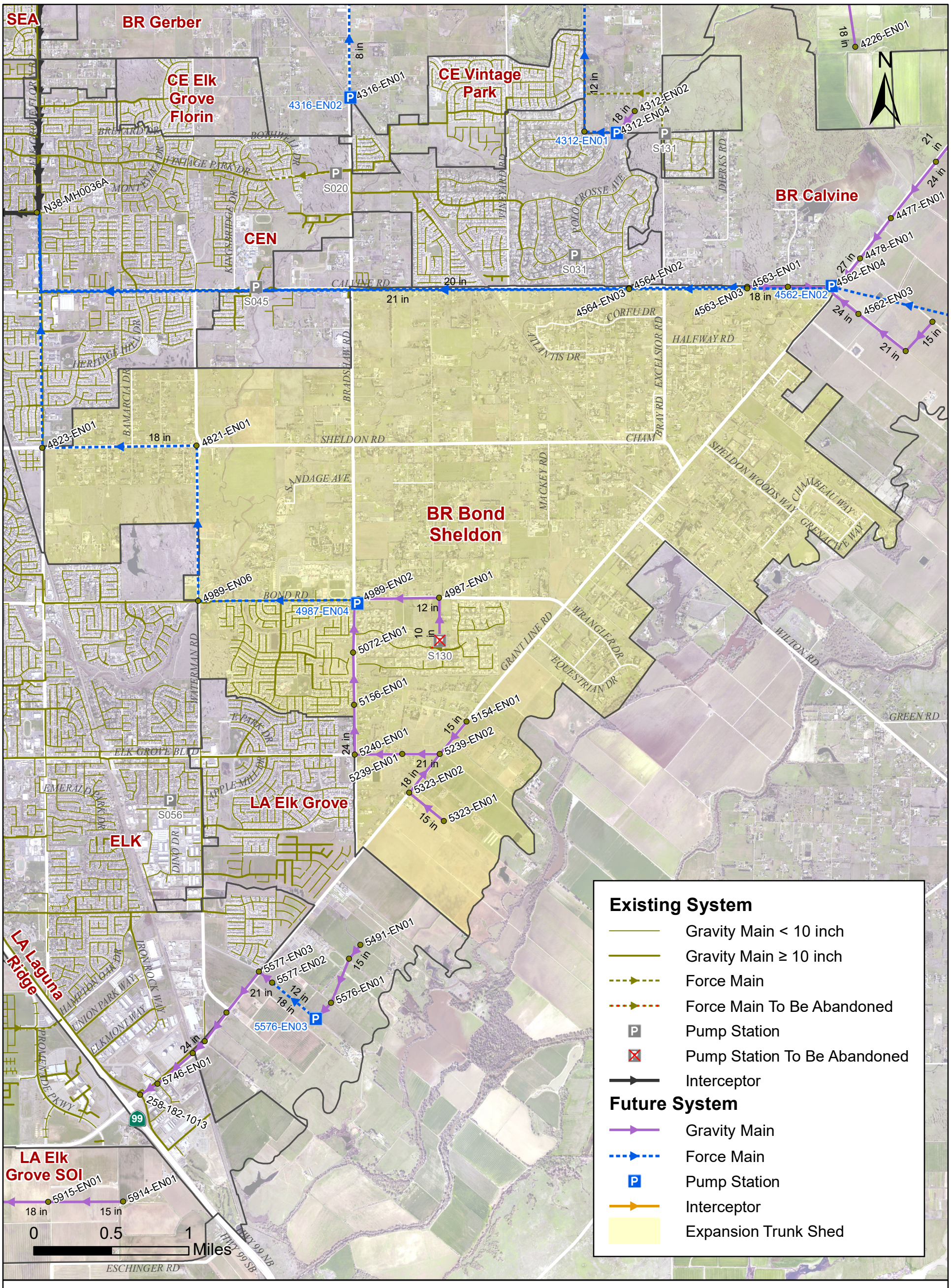
The existing developments located downstream of the trunk pump station will continue to be served by the existing Bond Road gravity sewer, on a permanent basis.

BR Bond Sheldon

Trunk Sewer Data and Model Results

Buildout **10-Year Design** Storm

US Manhole	DS Manhole	Link Type	Diameter (in)	Length (ft)	US Rim Elev. (ft)	US Invert Elev. (ft)	DS Rim Elev. (ft)	DS Invert Elev. (ft)	Slope (%)	Full Capacity (mgd)	Peak Flow (mgd)	% Full Capacity	d/D
5154-EN01	5239-EN02	Gravity Main	15	1436	62.2	37.7	62.0	35.6	0.15	1.6	1.2	75	0.65
5323-EN01	5323-EN02	Gravity Main	15	1521	60.0	32.1	58.0	29.3	0.18	1.8	1.1	64	0.58
5323-EN02	5239-EN02	Gravity Main	18	1683	58.0	29.1	62.0	27.1	0.12	2.4	1.7	72	0.86
5239-EN02	5239-EN01	Gravity Main	21	1271	62.0	26.8	60.0	25.4	0.11	3.4	3.4	99	0.86
5239-EN01	5240-EN01	Gravity Main	21	1620	60.0	25.4	58.3	23.6	0.11	3.4	3.4	99	0.82
5240-EN01	5156-EN01	Gravity Main	24	1701	58.3	23.4	59.2	21.7	0.10	4.6	3.7	79	0.73
5156-EN01	5072-EN01	Gravity Main	24	1775	59.2	21.7	58.0	19.9	0.10	4.6	4.1	89	0.73
5072-EN01	4988-EN01	Gravity Main	24	1664	58.0	19.9	56.9	18.3	0.10	4.6	4.1	89	0.73
4988-EN01	4987-EN03	Gravity Main	24	99	56.9	18.3	54.9	18.1	0.11	4.9	4.5	92	0.58
4987-EN03	4987-EN04	Gravity Main	27	22	54.9	17.9	54.9	17.9	0.10	6.3	5.4	85	0.47
4987-EN04	4987-EN05	Pump									5.4		
4987-EN05	N38-MH0036A	Force Main	18	24109	54.9	44.9	39.7	30.0			5.4		

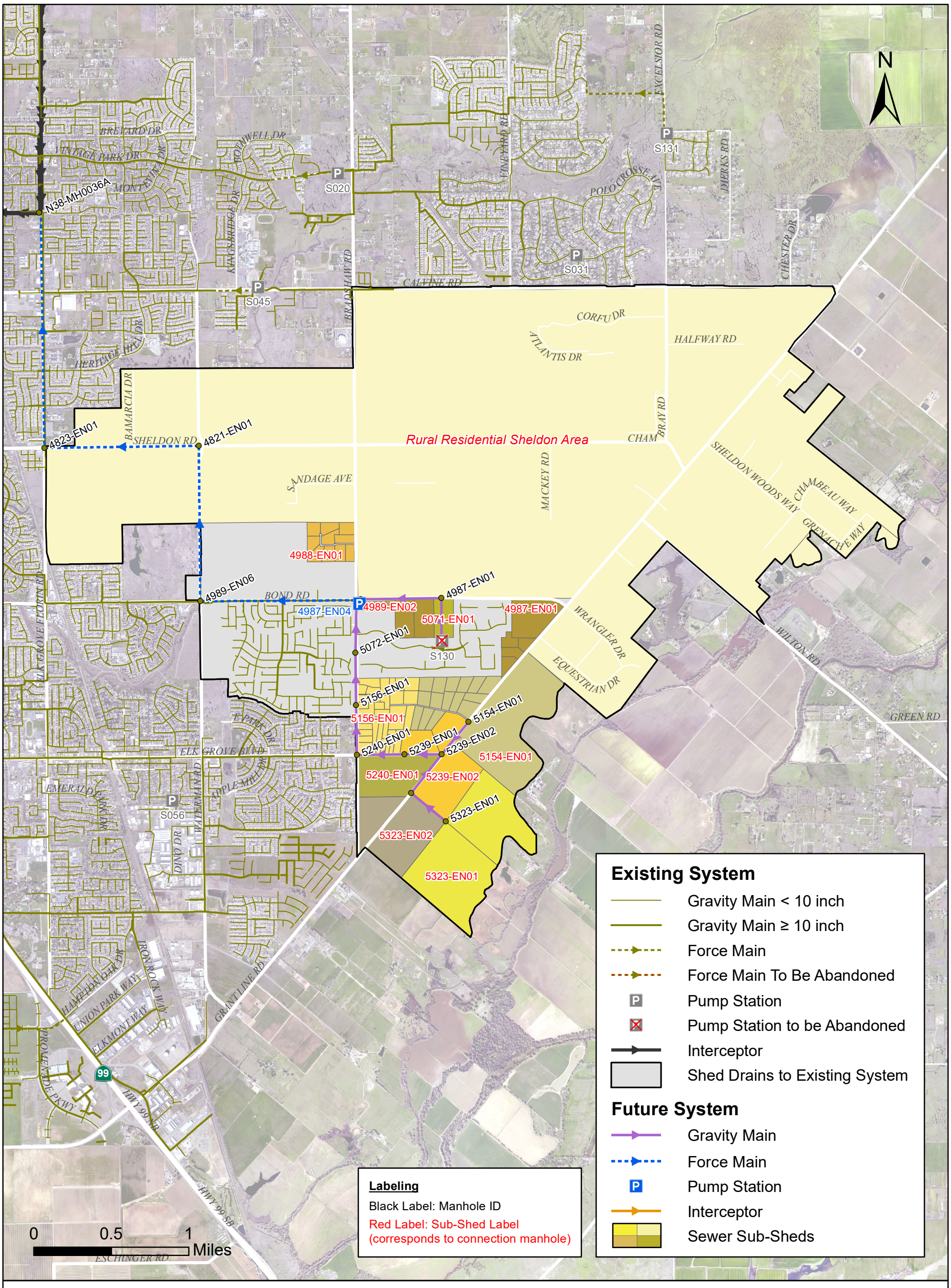


2020 SASD SYSTEM CAPACITY PLAN

SACRAMENTO AREA SEWER DISTRICT

BR Bond Sheldon
Sewer Shed and Facilities
Buildout Expansion Plan
FIGURE A.1-1

Updated: 9/24/2020



2020 SASD SYSTEM CAPACITY PLAN

SACRAMENTO AREA SEWER DISTRICT

BR Bond Sheldon
Sub-Sheds and Connection Manholes
Buildout Expansion Plan
FIGURE A.1-2

Updated: 9/3/2020