

SASD 2010 SYSTEM CAPACITY PLAN EXPANSION TRUNK SHEDS

BR CALVINE TRUNK SHED

Area Description

The shed area is generally bounded by Calvine Road, Grant Line Road, and the Urban Services Boundary. The portion to the west, near Bradshaw Road and Calvine Road will be served by existing sewer.

Trunk System Facilities

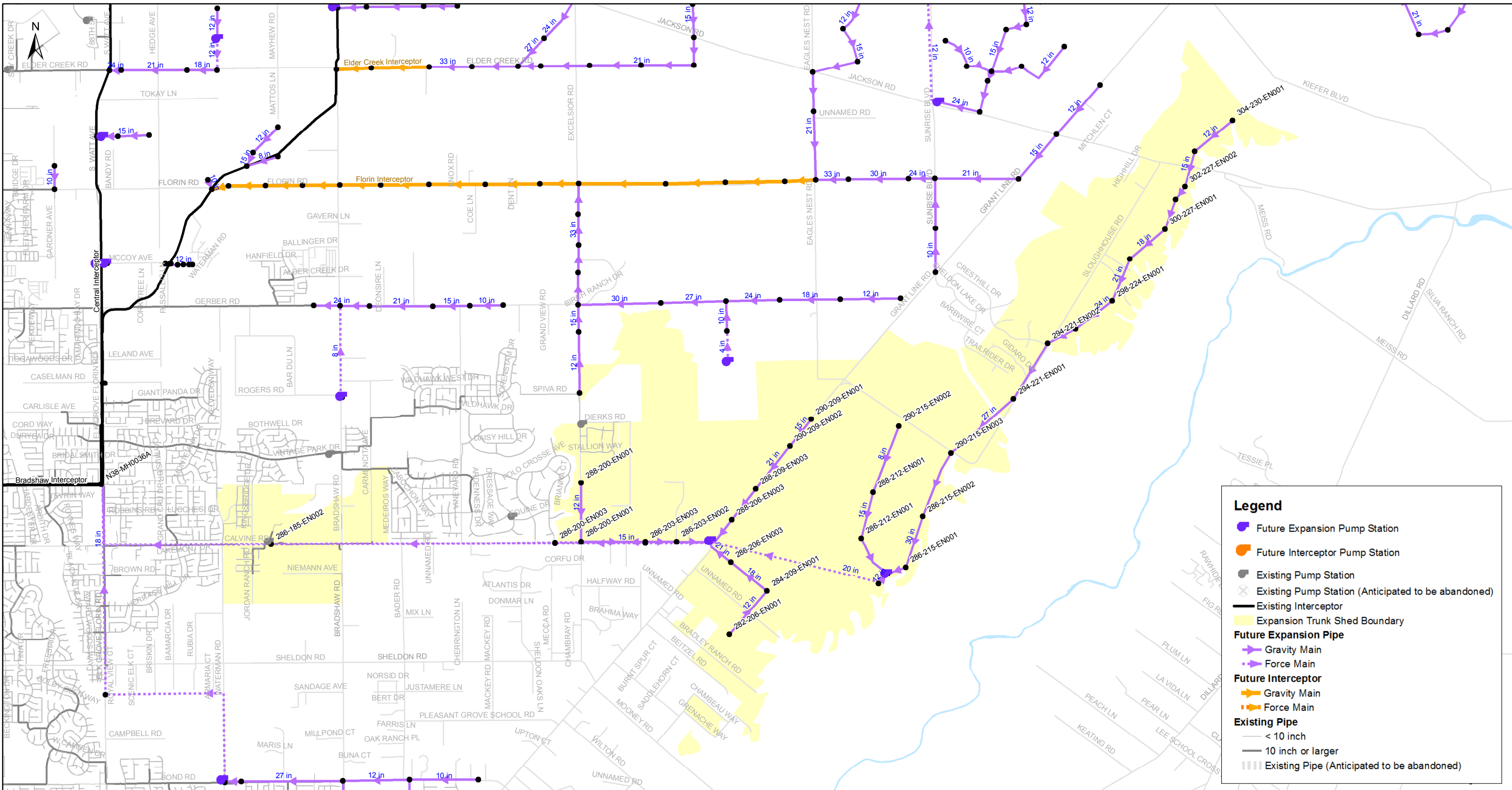
The majority of the shed will be served by two trunk pump stations and their contributing trunk sewers. The forcemains for both of the pump stations will follow Calvine Road west and Elk Grove Florin Road north and discharge to the Bradshaw Interceptor at manhole N38-MH0036A.

One of the pump stations will be located near Grant Line Road and Calvine Road. Two major trunks contribute to the pump station, one from the west serving the Excelsior Road and Calvine Road area and the other from the northeast serving the Grant Line Road area.

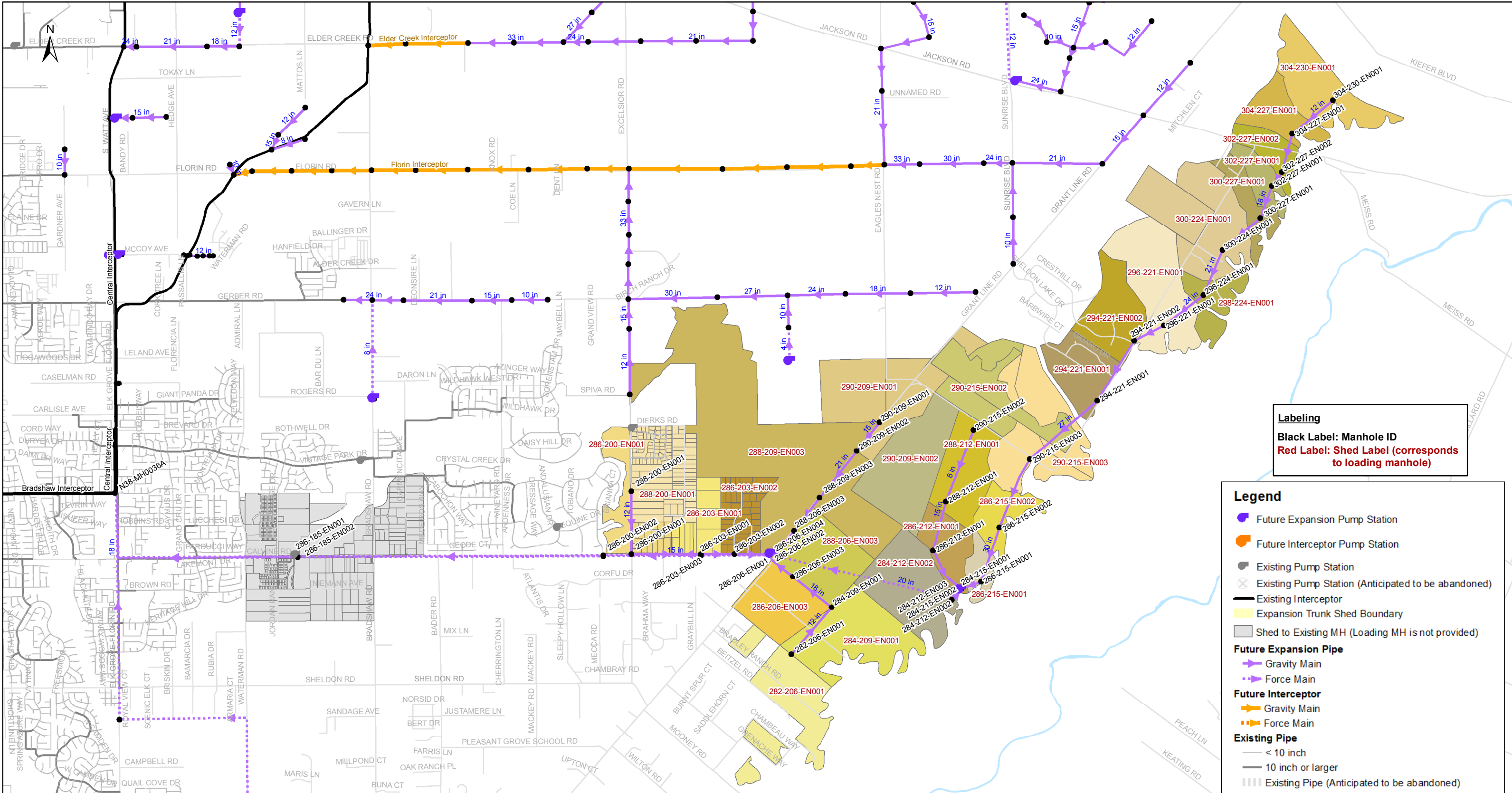
The other pump station will be located south of Grant Line Road, near the Urban Services Boundary. The major contributing trunk serves the areas northeast of the pump station and near the Urban Services Boundary.

**BR Calvine
Trunk Sewer Data and Model Results
Buildout 10-Year Design Storm**

US Manhole	DS Manhole	Link Suffix	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
304-227-EN001	302-227-EN002	1	Gravity Main	15	1620	118.0	96.9	117.2	94.0	0.180	1.77	1.33	75	0.7
302-227-EN002	302-227-EN001	1	Gravity Main	18	705	117.2	93.8	112.6	92.8	0.140	2.54	1.66	65	0.7
302-227-EN001	300-227-EN001	1	Gravity Main	18	1412	112.6	92.8	110.0	90.8	0.140	2.54	1.93	76	0.8
300-227-EN001	300-224-EN001	1	Gravity Main	18	2039	110.0	90.8	105.7	87.9	0.140	2.54	2.28	90	0.7
300-224-EN001	298-224-EN001	1	Gravity Main	21	2037	105.7	87.7	118.0	85.2	0.120	3.55	3.19	90	0.7
298-224-EN001	296-221-EN001	1	Gravity Main	24	2057	118.0	85.0	110.6	82.7	0.110	4.85	3.59	74	0.8
296-221-EN001	294-221-EN002	1	Gravity Main	24	1385	110.6	82.7	99.9	81.2	0.110	4.85	4.73	98	0.8
294-221-EN002	294-221-EN001	1	Gravity Main	27	2899	99.9	80.7	96.8	77.8	0.100	6.34	5.41	85	0.8
294-221-EN001	290-215-EN003	1	Gravity Main	27	3696	96.8	77.8	93.3	74.1	0.100	6.34	5.95	94	0.8
290-215-EN003	286-215-EN002	1	Gravity Main	30	3081	93.3	73.8	89.9	70.7	0.100	8.39	6.96	83	0.7
286-215-EN002	286-215-EN001	2	Gravity Main	30	2380	89.9	70.7	80.1	68.3	0.100	8.39	7.29	87	0.7
286-215-EN001	284-212-EN003	1	Gravity Main	30	852	80.1	68.3	101.5	67.3	0.120	9.12	7.48	82	0.7
288-212-EN001	286-212-EN001	1	Gravity Main	15	2095	87.7	66.7	80.0	61.5	0.250	2.08	1.21	58	0.8
286-212-EN001	284-212-EN003	1	Gravity Main	15	2021	80.0	61.5	101.5	57.8	0.180	1.77	1.67	94	0.8
284-212-EN002	284-212-EN003	1	Gravity Main	12	610	91.4	59.7	101.5	58.2	0.240	1.13	1.05	93	0.8
284-212-EN003	284-215-EN001	1	Gravity Main	30	52	101.5	53.9	98.1	53.5	0.840	24.26	9.94	41	0.5
284-215-EN001	284-215-EN002	1	Pump									9.93		0.0
284-215-EN002	286-203-EN003	1	Force Main	20	11076	98.0	53.5	88.0	70.0	-0.150		9.93		1.0
286-203-EN003	286-200-EN003	1	Force Main	20	4023	88.0	70.0	68.0	55.0	0.370	5.50	9.93	100	1.0
286-200-EN003	286-185-EN002	1	Force Main	20	12618	68.0	55.0	59.1	45.0	0.080	2.53	9.93	100	1.0
286-185-EN002	N38-MH0036A	1	Force Main	20	10180	59.1	45.0	39.4	19.5	0.250	4.50	9.93	100	1.0
290-209-EN001	290-209-EN002	1	Gravity Main	15	1516	96.4	69.4	97.6	66.6	0.180	1.77	1.37	77	0.7
290-209-EN002	288-209-EN003	1	Gravity Main	21	2455	97.6	56.9	88.0	53.9	0.120	3.55	2.54	72	0.7
288-209-EN003	288-206-EN003	1	Gravity Main	21	1727	88.0	53.9	90.0	51.9	0.120	3.55	3.17	89	0.8
288-206-EN003	286-206-EN001	1	Gravity Main	24	1447	90.0	51.9	88.0	50.3	0.110	4.85	3.99	82	0.7
282-206-EN001	284-209-EN001	1	Gravity Main	12	2557	88.0	60.6	87.9	54.4	0.240	1.13	1.01	89	0.7
284-209-EN001	286-206-EN003	2	Gravity Main	18	2052	87.9	53.9	86.3	51.1	0.140	2.54	2.11	83	0.7
286-206-EN003	286-206-EN001	2	Gravity Main	21	1338	86.3	50.8	88.0	49.2	0.120	3.55	2.79	79	0.7
286-200-EN001	286-203-EN001	1	Gravity Main	15	2868	75.0	57.2	87.3	52.0	0.180	1.77	1.40	79	0.7
286-203-EN001	286-203-EN002	1	Gravity Main	18	1381	87.3	51.8	90.0	49.9	0.140	2.54	1.82	72	0.8
286-203-EN002	286-206-EN001	2	Gravity Main	18	1489	90.0	49.9	88.0	47.8	0.140	2.54	2.31	91	0.8
286-206-EN001	286-206-EN002	1	Gravity Main	30	57	88.0	46.8	88.7	46.5	0.460	18.08	9.08	50	0.5
286-206-EN002	286-206-EN004	1	Pump									9.08		0.0
286-206-EN004	286-200-EN002	1	Force Main	18	7059	88.7	46.5	68.0	55.0	-0.120		9.08		1.0
286-200-EN002	286-185-EN001	1	Force Main	18	12617	68.0	55.0	59.1	45.0	0.080	1.91	9.08	100	1.0
286-185-EN001	N38-MH0036A	1	Force Main	18	10157	59.1	45.0	39.4	19.5	0.250	3.40	9.08	100	1.0




2010 SASD SYSTEM CAPACITY PLAN
BR Calvin
Buildout Expansion Plan
FIGURE A.2-1



Labeling
Black Label: Manhole ID
Red Label: Shed Label (corresponds to loading manhole)

Legend

- Future Expansion Pump Station
- Future Interceptor Pump Station
- Existing Pump Station
- Existing Pump Station (Anticipated to be abandoned)
- Existing Interceptor
- Expansion Trunk Shed Boundary
- Shed to Existing MH (Loading MH is not provided)
- Future Expansion Pipe**
 - Gravity Main
 - Force Main
- Future Interceptor**
 - Gravity Main
 - Force Main
- Existing Pipe**
 - < 10 inch
 - 10 inch or larger
 - Existing Pipe (Anticipated to be abandoned)


SACRAMENTO AREA SEWER DISTRICT
2010 SASD SYSTEM CAPACITY PLAN
BR Calvin
Sewer Shed Map
Buildout Expansion Plan
FIGURE A.2-2