



March 24, 2015

County 25th Street – Avenue E to Avenue D Water Line

The County 25th Street – Avenue E to Avenue D Water Line is a 12-inch diameter water line project currently under construction by the City of San Luis along County 25th Street from Avenue E, just north of the San Luis II Port of Entry, east to Avenue D, a length of approximately one mile. The water line connects to an existing 12" water line in Avenue E and will terminate at Avenue D where in the future it will be extended by future water line projects.

Typically the City of San Luis does not directly fund and construct water line infrastructure as it is instead constructed as a part of various development projects. The 25th Street Water Line, however, is being funded directly by the City. Therefore, as it will benefit the future development of adjacent lands, the City wishes to recover its costs for the Water Line and will do so by assessing fees on the adjacent lands.

Water transmission systems in general are laid out in a looped configuration so that any connection to the water system can be fed from two directions. Such a layout provides for greater reliability in service during times of water line outages or during heavy demands. As the lands in San Luis consists primarily of one mile square sections, the looped water line configuration for each section consists of main water line, typically 12-inch diameter, laid out around the perimeter of the section and smaller, typically 6-inch through 10-inch water lines, throughout the interior of the section.

Thus for each section of land, there are a total of 4 miles of the 12-inch perimeter water lines, or conversely, each mile of water line around the section serves one-quarter of a square mile or about 160 acres. As adjacent sections of land share the perimeter water line where the sections abut each other, a perimeter water line will serve in total one-quarter of a square mile in each of the adjacent sections, or a total of about 320 acres of land.

County 25th Street from Avenue E to Avenue D is located along the section line between Sections 14 and 23 in Township 11 South, Range 24 West. Therefore the County 25th Street Water Line will serve one-quarter of Section 14 and one-quarter of Section 23. This area served, for the purposes of this assessment, will be the area of land one-quarter of mile north of County 25th Street and one-quarter mile south of County 25th Street, as shown on the attached figure. Total acres served are 160.00 acres gross acres north of County 25th Street and 160.01 gross acres south of County 25th Street, or 320.01 total gross acres. Of this 320.01 gross acres, there are two parcels of land – a portion of the U.S.A. parcel (24.50 acres) and the A.D.O.T. parcel (20.01 acres) at the San Luis II Port of Entry – that cannot be assessed and have previously developed significant water infrastructure (the existing water line in Avenue E.) Thus the total assessable gross acreage is 275.50 acres, with 160.01 being in Section 14 and 115.49 being in Section 23.

The costs of the installation of the Water Line include the costs of engineering, permitting, bidding and construction administration, general administration and the cost of construction. These costs are:

Engineering (Vega & Vega Engineering)	\$7,232.68
	\$1 450.00
Permitting -	\$1,500.00
Bidding and Construction Administration (JDA)	\$13,928.00
Construction (Desert Excavating)	<u>\$212,084.90</u>
Total Cost	<u>\$236,195.58</u>

The total cost of \$236,195.58 is to be prorated over the 275.50 gross acres in the assessment area. The cost is calculated to be **\$857.3342 per gross acre**, \$137,182.05 of which will be assessed to the 160.01 acres in Section 14 and \$99,013.53 being assessed to the 115.49 acres in Section 23.

The development of lands within the assessment area may eventually result in the lands being subdivided and the subdivision lots sold on a net acreage basis. Therefore, depending on whether the assessment of fees for the water line is made to an overall parcel at the time of subdivision development or whether it is made to the individual lots at the time of water connection, further calculations may be necessary to calculate the cost of the fees per net acre.

In the case of the Section 14 land, no definite subdivision plans are available at the present time and so only the assessment per gross acre can be calculated at this time.

Section 23, however, is already being subdivided with the Magrino Industrial Park Unit 1 subdivision existing, the Magrino Industrial Park Unit 2 subdivision under development, and the remainder of the property to be developed as the Magrino Industrial Park Unit 3 subdivision. It is noted that about the south 139.78 feet of Unit 2 is greater than one-quarter mile from County 25th Street and lies south of the assessment area.

For Units 1 and 2 of the Magrino Industrial Park, the combined gross acreage in Section 23, including all adjacent right-of-ways, is calculated to be (113.27 total acres – the 7.46 acres outside of the assessment area) = 105.81 acres. This 105.81 gross acres is to be sold as a total of 19 lots which have a total net acreage in the assessment area of (72.09 total net acres – 7.2 acres outside of the assessment area) = 64.89 net acres. Thus the assessment for subdivided lots in Units 1 and 2 will be (105.81/64.89) x \$857.3342 = **\$1397.9738 per net acre**. Note that as lots 13 through 18 of Unit 2 include lands south of the assessment area the net acreage shown on the subdivision plat needs to be reduced by 1.20 acres for each of these lots when calculating the assessment. The remaining Unit 3 future lots have a gross acreage of 9.68 acres in the assessment area and a net assessment per lot will need to be calculated based on the net acreages of the future lots once Unit 3 is developed.

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