

Memorandum

for the Board of Directors Meeting of January 25, 2017

TO: Board of Directors

FROM: Brian Powell, Maintenance Manager

DATE: January 12, 2017

SUBJECT: **Water Service Rules and Regulations
Schedule 4-A**

MAINTENANCE

RECOMMENDATION:

Adopt the revised costs for water service installation for Schedule 4-A which was recommended by the APC at the January 3rd meeting.

BACKGROUND:

A change to the Schedule 4-A for the cost of water service installation was discussed at the December 6th, 2016 and January 3rd, 2017 APC meetings. At the meetings, District staff explained that the cost for the District crews to install the domestic services is more than the District currently charges for the installation work.

When the costs were presented during the meeting, there was concern from the Board members about the sharp rise in the charges. It was explained that the costs have increased over the years due to changes in materials and labor but the rate schedule has not been updated since 2007. The details for the new costs were presented with the staff report and represent the actual current costs for the installation of a domestic water service.

The new rates were determined by establishing a base rate installation for the service assembly, meter, and mainline tap and a separate cost to install the service line on a per foot basis. The table below represents the cost for a single domestic service installation, a cost for a domestic service and a fire service and the cost for a per foot service line installation.

Estimated cost to install services in a variety of scenarios is the following:

- Base Rate - single service installation: \$4,984
- Base Rate - double service (domestic/fire service) installation: \$5,375
- Cost to install service line beyond Base Rate per foot: \$64

- Separate Cost for Hot Tap and Valve for Contractor Install \$692

The intent for this fee increase is to cover the installation costs for these meter service installations such that existing rate payers are not paying for facilities installed by individual property owners.

The District will allow a property owner to use the services of an outside contractor under certain circumstances. The District will have a pre-authorized list of contractors that have shown their capability on past work and District staff trusts to work in and around the water mains. The contractor would install the meter assembly and service line but District staff would hot tap the main. This hot tap work would be an additional cost above their contractor cost. The contractor would work in conjunction with the Maintenance department for scheduling and would need to file with the Department of Industrial Relations and submit bids using prevailing wage thresholds.

As stated during the meeting, other Irrigation Districts in Northern California do not have a set installation cost but rather charge the customer a time and material contract for the work of installing the meters. This can be implemented at NID but would require extra work for district staff to estimate for each new service and would provide a non-uniform cost for service installations. District staff believes that the changes for the installation costs will reflect the true costs to install the services at any given distance.

BUDGETARY IMPACT:

None at this time.

Attachments: Time and Material Worksheets

COST ESTIMATES FOR SCHEDULE 4-A METER AND SERVICE LINE INSTALLATION

Time and Material to Install Domestic Meter Service - Base Rate

• EMPLOYEE WAGE 6 HRS (includes benefits and overhead)

(1) Sr Utility Worker @ \$ 81.44 x 6 hr =	\$ 488.64
(2) Equipment Operators @ \$ 77.85 x 6 hrs x 2 =	\$ 934.20
(2) Utility Workers @ \$ 69.77 x 6 hrs x 2 =	\$ 837.24
(2) Temps for traffic control @ \$14.00 hr x 6 hrs x 2 =	\$ 168.00

TOTAL FOR EMPLOYEE WAGE 6 HRS/ DAY **\$ 2,428.08**

SERVICE ASSEMBLY COMPONENTS

Single domestic service saddle and brass plumbing parts =	\$ 406.41
Domestic and fire service saddle and brass plumbing parts =	\$ 533.15
5/8 inch water meter=	\$ 150.00
1 inch fire meter =	\$ 233.19
B-16 meter box with traffic lid=	\$ 94.11
B-24 meter box with traffic lid =	\$ 124.54
M.X.U=	\$ 112.73

COMPONENTS TOTAL

Single domestic meter Installation =	\$ 763.25
Domestic and fire service meter Installation =	\$ 1,153.61

• EQUIPMENT AND TRUCKS CALTRANS LABOR SURCHARGES AND EQUIPMENT RATES

(1) Cat 420 backhoe @ \$ 53.91 hr x 6 hrs =	\$ 323.46
(1) 3 axle dump truck @ \$ 71.65 hr x 6 hrs =	\$ 429.90
(1) 2 axle, 4 tire per axel equipment trailer @ \$ 14.11 hr x 6 hrs =	\$ 84.66
(1) F-550 service truck @ \$ 33.06 hr x 6 hrs =	\$ 198.36
(1) one ton dump truck @ \$ 26.95 hr x 6 hrs =	\$ 161.70
(1) light pickup truck "traffic control truck" @ \$ 21.50 hr x 6 hrs =	\$ 129.00
(1) light pickup truck "Sr Utility Worker" @ \$ 21.50 hr x 6 hrs =	\$ 129.00
(1) compacting / tamping wacker @ \$7.36 hr x 6 hrs =	\$ 44.16
(1) Asphalt saw @ \$ 7.60 hr x 6 hrs =	\$ 45.60
(1) Air compressor @ \$ 36.14 hr x 6 hrs =	\$ 216.84
Under 100 traffic cones @ \$14.33 a day =	\$ 14.33
(6) flag/ sign stands @ \$ 2.64 x 6 =	\$ 15.84

TOTAL FOR EQUIPMENT AND TRUCKS **\$ 1,792.85**

BASE RATE FOR DOMESTIC METER SERVICE INSTALLATION

Single meter installation	\$ 4,984.18
Domestic and fire service meter installation	\$ 5,374.54

Time and Material to install 1.5" Service Line at 40 feet (to determine cost per foot)

• EMPLOYEE WAGE 2 HRS (includes benefits and overhead)

(1) Sr Utility Worker @ \$ 81.44 x 2 hr =	\$ 162.88
(2) Equipment Operators @ \$ 77.85 x 2 hrs x 2 =	\$ 311.40
(2) Utility Workers @ \$ 69.77 x 2 hrs x 2 =	\$ 279.08
(2) Temps for traffic control @ \$14.00 hr x 2 hrs x 2 =	\$ 56.00

TOTAL FOR EMPLOYEE WAGE 2 HRS/ DAY

\$809.36

• TRENCH BACKFILL

Sand = \$ 19.92 per yard \$ 81.15

Trench size 1 ft x 2 Ft x 40 Ft divide by 27 = 2.96 yards x \$ 19.92 = \$ 59.02

Main line excavation 5 Ft x 6 Ft X 1 Ft divide by 27 = 1.11 yards x \$ 19.92 = \$ 22.13

3/4 inch A.B = \$ 26.12 per yard \$ 159.61

Trench size 1.5 Ft x 2 Ft x 40 Ft divide by 27 = 4.44 yards x \$26.12 = \$116.08

Main line excavation 1.5 Ft x 5 Ft x 6 Ft divide by 27 = 1.66 yards x \$ 26.12 = \$ 43.53

Cutback = \$ 117.00 per yard \$ 156.39

Trench Size .33 Ft x 5 Ft x 6 Ft divide by 27 = 0.36 yards x \$117.00 = \$ 42.90

Trench size .33 Ft x 2 Ft x 40 Ft divide 27 = 0.97 yards x \$ 117.00 = \$ 113.49

TOTAL FOR BACKFILL ON A 40 FOOT RUN

\$ 397.15

• EQUIPMENT AND TRUCKS CALTRANS LABOR SURCHARGES AND EQUIPMENT RATES

(1) Cat 420 backhoe @ \$ 53.91 hr x 2 hrs =	\$ 107.82
(1) 3 axle dump truck @ \$ 71.65 hr x 2 hrs =	\$ 143.30
(1) 2 axle, 4 tire per axel equipment trailer @ \$ 14.11 hr x 2 hrs =	\$ 28.22
(1) F-550 service truck @ \$ 33.06 hr x 2 hrs =	\$ 66.12
(1) one ton dump truck @ \$ 26.95 hr x 2 hrs =	\$ 53.90
(1) light pickup truck "traffic control truck" @ \$ 21.50 hr x 2 hrs =	\$ 43.00
(1) light pickup truck "Sr Utility Worker" @ \$ 21.50 hr x 2 hrs =	\$ 43.00
(1) compacting / tamping wacker @ \$7.36 hr x 2 hrs =	\$ 14.72
(1) Asphalt saw @ \$ 7.60 hr x 2 hrs =	\$ 15.20
(1) Air compressor @ \$ 36.14 hr x 2 hrs =	\$ 72.28
Under 100 traffic cones @ \$14.33 a day =	\$ 3.58
(6) flag/ sign stands @ \$ 2.64 x 6 =	\$ 15.84

TOTAL FOR EQUIPMENT AND TRUCKS

\$ 606.98

ASPHALT RESTORATION

\$6.50 sq/ ft, 5 guys included in the price

Trench Size 5 Ft x 6 Ft x 4 inch= 30 sq/ ft x \$ 6.50 = \$ 195.00

Trench size 2 Ft x 38 Ft x 4 inch = 76 sq/ ft x \$6.50 = \$ 494.00

(2) Temps for traffic control @ \$14.00 hr x 2 x 1.5 hrs = \$ 42.00 \$ 42.00

Under 100 traffic cones @ \$ 14.33 a day divide by 1.5 hrs = \$ 2.68 \$ 2.68

TOTAL ASPHALT RESTORATION

\$ 733.68

TOTAL TIME AND MATERIAL COSTS FOR 40 ft Service Line Installation

Meter Service line Installation - 40 foot run \$ 2,547.17

Cost per Foot of Service line \$ 63.68

COST TO HOT TAP MAINLINE AND SET SERVICE SADDLE AND VALVE

(Contractor will have the excavation pit open and pipeline exposed, cleaned and ready for hot tap)

• **EMPLOYEE WAGE 2 HRS (includes benefits and overhead)**

(1) Sr Utility Worker @ \$ 81.44 x 2 hr = \$ 162.88

(2) Utility Workers @ \$ 69.77 x 2 hrs x 2 = \$ 279.08

TOTAL FOR EMPLOYEE WAGE 2 HRS/ DAY \$ 441.96

SERVICE SADDLE COMPONENTS

1 1/2" Service saddle = \$ 140.00

1 1/2" valve = \$ 110.00

TOTAL ASPHALT RESTORATION \$ 250.00

TOTAL FOR MAINLINE HOT TAP \$ 691.96