

Agenda Item: 8

MEMORANDUM

TO: Programs, Projects & Operations Subcommittee

FROM: Nicole Gust, Purchasing Agent

DATE: May 1, 2018

RE: FY 2019 Equipment Requirements

Attached is a chart of equipment items identified for purchase/replacement in FY 2019. The process to identify and prioritize equipment items most needed by the District was determined by a staff Equipment Committee comprised of Bill Brush, Martin Cleveland, Zach Nelson, Bill Warren, Terry Schumacher, Mike McNaney and myself. Each department within the NRD identified their equipment requirements and the equipment committee reviewed each item and made recommendations to the General Manager for purchase. The GM then reviewed the Committee's recommendations and made further changes to the request list.

The FY 2018 total equipment budget was \$355,143. The FY 2019 equipment budget request is \$338,066.

Management recommends that the Subcommittee recommend to the Board of Directors to approve the FY 2019 Equipment Requirements subject to the FY 2019 Budget as listed in this memo.

Attachments:

FY 19 Equipment Requirements List

Equipment Budget Comparison

Vehicle Maintenance Comparisons

Envirosight RovverX Name Brand Memo

John Deere Name Brand Memo

F.Y. 2019 Equipment Requirements List Worksheet

Item Description	Cost	Justification/Indicative Data
Account #01-01-000-4802 Machinery & Equipment		
2019 JD 6145-R Cab Tractor *Name Brand Memo	\$74,000 State Contract Pricing	Use on 100 miles of levees, 40 PL-566 Structures in Sarpy, Douglas and Washington Counties. Trade-in 2004 JD 7820 Tractor (4AA13) which will have approx. 6,000 hours at EOY.
Ag Disk – 12ft Max	\$5,000 *used equipment*	Use on Dams and Levees in Burt and Dakota Counties.
2019 84” Angle Snow Blade	\$2,600	Snow blade for skid loader to clear NRC parking lot, outer parking lots and Chalco Rec. trails. Trade-in 2001 – 84” angle snow blade (9BD03)
Compaction Roller for Mini-Excavator	\$1,500	For compacting field dirt at project drainage structures, dams and levees.
30” Backhoe Bucket	\$4,500	For digging narrow trenches such as French drain, tile, rock filled trenches projects etc., for long reach backhoe.
Total FY 19 Machine/Equip	\$87,600	FY 18 Budget \$142,143
Account #01-01-000-4803 Automobiles and Trucks		
1 ¼ Ton Dually Chassis	\$40,000	With Trade-in of 2005 Chevy Colorado with 128,000 EOY miles (2LL13).
Light Duty Extended Cab Pickup Truck	\$25,000	With Trade-in of 2009 Chevy Colorado with 198,798 EOY miles and \$2,994.60 in maintenance in FY17 (2LL19). **Will be paid for by Rural Water**
1 ¼ Ton Dually Chassis Regular Cab and existing Truck bed transfer	\$55,000	With Trade-in of 2004 Ford F-350 Flatbed. Over 10 years old with 127,731 EOY miles (2GA02). District staff is looking for a Diesel truck that can haul larger pieces of equipment.
Full size ¾ ton extended cab 4x4	\$30,000	With Trade-in of 2010 Ford F-250 with 137,272 EOY miles (2LL22).
Total FY 19 Vehicles	\$125,000 Excluding RW	FY 18 Budget \$99,000

Account #01-01-000-4804 Office Equipment

Rovver X Video Inspection Equipment *Name Brand Memo	\$38,466 1 st of three annual payments	NJPA Government Contract Item. Needed for over 500 Drainage Structures. Consultant services option would cost 200K+/Yr. Current Equipment is over 5 years old and totaled 44K in repairs in the past two years and was out of commission for four months between FY17 and FY18 for repairs.
Reconfigure & upgrade network equipment, Omaha & Dakota City	\$21,000	Network gear is past due for replacement, instituting a 5 year replacement cycle.
Replace wireless network units, Dakota City and Blair	\$6,000	Past due for replacement, upgrading will improve performance and capability
Network storage unit for backup system	\$5,000	Current unit is over 6 years old, storage replacement cycle is 5 years
Rewire network and phones, North end NRC	\$5,000	Eliminating Network Hardware to Simplify Network Design.
Additional Wiring in Server Room	\$2,000	See Above.
Survey/Drafting Plotter Replacement	\$13,000	Current Model out of Warranty and is Exhibiting a Number of performance and reliability Issues.
Director Equipment	\$5,000	Equipment for Incoming Directors, and Upgrades for Existing.
Board Room upgrades	\$25,000	Miscellaneous Projects.
Parts	\$5,000	Miscellaneous Parts.
Total FY 19 Office Equip	\$125,466	FY 18 Budget \$114,000
Total FY 19 Equipment Request	\$338,066 Excluding RW	Total FY 18 Budget \$355,143

Thurston/Dakota County
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Survey
IT

Equipment Budget Comparisons FY 2013 – FY 2019

Budget	2013	2014	2015	2016	2017	2018	2019
4802-Machinery & Equipment	\$233,694	\$265,445	\$157,698	\$85,662	\$202,021	\$142,143	\$87,600
4803-Autos & Trucks	\$58,500	\$0	\$0	\$77,000	\$85,000	\$99,000	\$125,000
							Excluding RW
4804-Office Equipment	\$89,925	\$72,953	\$124,000	\$135,600	\$62,000	\$114,000	\$125,466
							Excluding RW
Total	\$382,119	\$338,398	\$281,698	\$298,222	\$349,021	\$355,143	\$338,066

Vehicle Maintenance Comparisons

VEHICLE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	TOTAL VM	18 EOY MILES
1CA12 11 CHEVY EQUINOX – FY 20				\$93.93	\$788.16	\$1,565.25	\$127.48	\$237.01	\$510.00	\$893.87	\$4,215.70	108,182
1CA14 16 CHEVY EQUINOX									\$0.00	\$101.90	\$101.90	40,838
1CA15 18 JEEP GRAND CHEROKEE												
1CA16 18 JEEP GRAND CHEROKEE												
2EA07 02 FORD 4X4 DUMP BED	\$0.00	\$0.00	\$0.00	\$0.00	\$3,213.40	\$1,321.42	\$5,472.68	\$385.33	\$633.43	\$1,057.10	\$12,083.36	102,992
2EA08 07 MACK DUMP TRK	\$0.00	\$0.00	\$310.85	\$603.68	\$16,365.02	\$5,256.44	\$12,378.12	\$0.00	\$22,749.10	\$2,618.29	\$60,281.50	239,145
2EA09 2013 MACK DUMP TRK						\$1,943.63	\$329.23	\$829.14	\$382.54	\$399.86	\$3,884.40	120,172
2GA01 2002 FORD LIGHT FLAT BED –FY 20	\$2,377.46	\$714.75	\$5,363.37	\$7,138.77	\$2,370.40	\$727.37	\$3,311.90	\$4,807.25	\$4,972.44	\$835.30	\$32,619.01	110,408
2GA02 2004 FORD F-350 FLTBD TRK- FY19	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$121.00	\$2,762.86	\$0.00	\$76.98	\$2,960.84	127,731
2GA04 2012 FORD F250 FLTBD TRK					\$74.50	\$160.97	\$965.22	\$304.68	\$75.97	\$0.00	\$1,581.34	140,122
2LL13 05 CHEVY COLO 4X4 - FY19	\$50.12	\$0.00	\$0.00	\$0.00	\$2,132.28	\$3,538.95	\$132.90	\$207.81	\$1,121.06	\$1,296.59	\$8,479.71	124,189
2LL18 08 FORD RANGER	\$204.41	\$74.77	\$300.17	\$184.93	\$443.80	\$1,209.83	\$711.36	\$4,923.72	\$1,906.99	\$1,348.86	\$11,308.84	80,828
2LL19 09 CHEVY COLORADO - FY19	\$0.00	\$176.17	\$139.80	\$763.00	\$332.00	\$810.07	\$1,582.02	\$999.57	\$236.19	\$2,994.60	\$8,033.42	198,798
2LL20 09 CHEVY COLORADO		\$665.60	\$285.79	\$570.28	\$938.67	\$486.11	\$305.90	\$749.80	\$842.88	\$661.75	\$5,506.78	84,778
2LL21 10 FORD RANGER EXT CAB			\$32.29	\$48.43	\$0.00	\$42.52	\$493.43	\$107.24	\$1,105.54	\$615.06	\$2,444.51	64,451
2LL22 10 FORD F250 EXT CAB - FY19			\$20.00	\$24.60	\$540.68	\$0.00	\$0.00	\$0.00	\$2,308.84	\$736.46	\$3,630.58	137,272
2LL24 11 FORD F250				\$126.96	\$143.05	\$1,159.68	\$1,238.79	\$214.60	\$1,865.72	\$2,076.85	\$6,825.65	90,664
2LL25 12 CHEVY COLORADO TRUCK					\$149.80	\$72.97	\$705.00	\$0.00	\$973.23	\$658.24	\$2,559.24	82,966
2LL26 12 F-350 SUPER CAB					\$0.00	\$424.15	\$2,203.95	\$338.25	\$1,765.52	\$3,193.78	\$7,925.65	105,555
2LL27 12 CHEVY COLO EXT CAB 4X4						\$87.06	\$49.44	\$120.94	\$246.28	\$997.12	\$1,500.84	73,548
2LL28 13 RAM 1500 QUAD CAB 4X4						\$257.02	\$1,173.16	\$765.09	\$1,210.34	\$352.19	\$3,757.80	125,152
2LL29 13 RAM 1500 QUAD CAB 4X4 -						\$223.21	\$871.77	\$565.00	\$168.79	\$140.37	\$1,969.14	117,693
2LL30 2017 RAM DJ7L91 CREW CAB										\$0.00	\$0.00	114,428
2RA04 06 MACK TRUCK TRACTOR	\$0.00	\$0.00	\$538.47	\$100.00	\$6,914.80	\$508.50	\$508.50	\$318.63	\$0.00	\$0.00	\$8,888.90	69,751
2TA13 10 FORD F350 CC			\$1,429.66	\$1,972.87	\$3,386.29	\$124.20	\$2,502.28	\$2,199.99	\$3,233.82	\$10,854.21	\$25,703.32	119,581
2TA14 17 FORD F450RC 4X4										\$36.11	\$36.11	8,274
2VA03 10 CHRYSLER VAN			\$61.54	\$82.42	\$100.96	\$0.00	\$66.27	100.59	979.66	0	\$311.19	69,989
	\$2,631.99	\$1,631.29	\$8,481.94	\$11,709.87	\$37,893.81	\$19,919.35	\$35,250.40	\$20,937.50	\$49,304.34	\$31,945.49	\$216,609.73	

~Before vehicle was purchased

UPDATED 5.1.2018

MEMORANDUM

TO: Programs, Projects and Operations Subcommittee

FROM: Mike McNaney, Survey Coordinator

DATE: April 26, 2018

RE: Purchase of an Envirosight RovverX Crawler Video Camera System

The US Army Corps of Engineers (USACE) requires the District to inspect all Flood Risk Reduction Project (channels and levees) pipes (culverts) currently in the USACE PL 84-99 Assistance Program by video Camera. Under this program, the District is required to inspect 500+ pipes every five years, with approximately 100 pipes per year. The District also maintains additional Channel/Levee pipes outside of the PL 84-99 program, along with more than 100 dams.

In July of 2007, the District purchased an Envirosight Zoom Pole Camera for \$15,700 to inspect pipes. Using this camera, the District could complete approximately 70% of the required inspections. However, in order to meet the revised USACE inspection requirements and the wide variety of pipe conditions throughout the District, the District determined a Rover type system was necessary to meet the District's needs. In 2012, the District purchased the Envirosight Rovver 225, which has been used to conduct approximately 1000 pipe inspections to date.

In FY 2017-2018, Rovver 225 repairs and maintenance amounted to \$44,159 and required the Rovver 225 to be out of service approximately 4 months over the 2-year period. Repairs were needed for regular maintenance such as cleaning and new seals for the crawler, camera head, and cable reel. Other repairs were needed for normal wear and tear from 1000 inspections, as well as damage caused in the inspection of pipes that were in very rough condition. The District Survey Staff believe that it would be more cost-effective to replace the District's Rovver 225 system rather than losing more time and money in further repairs. Therefore, District Staff is requesting name-brand replacement with the new Envirosight RovverX system for the following reasons:

- Included software package is compatible with the District's current Envirosight pole camera equipment.
- Weight of approximately 50lbs. Other comparable video systems are 80-90lbs and need mechanical options to insert the camera into many of the District's pipes. Accessibility and conditions of many the District's pipes require the camera to be inserted manually.
- Other comparable systems have a longer base, which could increase difficulty in turning some tighter bends in the pipes.

- Other video systems would need additional tractors to inspect the District's range of pipes (15"-90"). The RovverX system is designed to inspect various sizes of pipe by connecting to a detachable larger carriage for larger pipes.
- The District has 11 years of experience working with the Envirosight equipment.

Another option researched in the past, was to hire a contractor to complete the inspections. The District received one quote from a contractor in 2012 with an estimate of \$100,000 for a one-time inspection of 100 pipes.

It is recommended that \$38,466 be budgeted in FY 19 for the first of three annual payments for the purchase of an Envirosight RovverX Crawler Video Camera, compatible with the District's existing video inspection equipment.

MEMORANDUM

TO: Fiscal Year 2019 Equipment Committee
FROM: Bill Warren, Operations, Maintenance and Park Superintendent
DATE: April 16, 2018
RE: Name Brand Request "John Deere" Mowing Tractor

I am requesting a name brand State Contract John Deere 6145R Cab Tractor to replace the District's 2004 John Deere tractor. Staff and management believe it is in the best interest of the District to purchase the brand of John Deere tractor for the following reasons:

1. The District currently owns six (6) John Deere tractors and have owned John Deere tractors since 1972. This equipment has performed outstandingly with minimal maintenance.
2. All components of said equipment are John Deere parts, which is essential for sound operation and performance.
3. The John Deere tractors seems to perform very well with the terrain in which they are used, 2 to 1 and 3 to 1 slopes when mowing our levees and dams, 100 miles of levees and 40 PL-566 miles of structures. The levees and twelve high maintenance dams are each mowed two times per year.
4. Our nearest John Deere dealer is ten miles from the O&M headquarters which is very handy for service and repair.

I recommend a name brand purchase of a John Deere tractor to replace our current 2004 John Deere 7820 which will be traded in.