



Hidden Valley Lake Community Services District

Finance Committee Meeting

AGENDA

Monday June 8, 2020

1:00 p.m.

DUE TO THE EVOLVING SITUATION WITH THE COVID-19 NOVEL CORONAVIRUS AND THE STATE OF CALIFORNIA STAY AT HOME ORDER, EXECUTIVE ORDER N-33-20, THIS MEETING SHALL ONLY BE AVAILABLE TO THE PUBLIC VIA TELECONFERENCE

To join this meeting go to the www.hvlcsd.org select the June 8, 2020 Finance Committee Meeting select **Join Microsoft Teams Meeting** Select **Join on the web instead**.

The general public may not attend this meeting at the district's offices due to social distancing requirements.

Members of the public are encouraged to submit their comments prior to 4 p.m. on June 5, 2020. Submitted comments from the public will be addressed by the Committee Chair as related to the agenda.

Mail comments to the Board Secretary, Hidden Valley Community Services District, 19400 Hartmann Road, Hidden Valley Lake, Ca 95467 or email to pcuadras@hvlcsd.org.

DATE: June 8, 2020

TIME: 1:00 pm

PLACE: Hidden Valley Lake CSD
Administration Office, GM Office
19400 Hartmann Road
Hidden Valley Lake, CA

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE
3. ROLL CALL
4. APPROVAL OF AGENDA
5. REVIEW and DISCUSS: Mt Meadow North Mainline Change Order/Payment

6. REVIEW and DISCUSS: WWTP Access Road Rebuilding Project
7. REVIEW and DISCUSS: Meadow View Easement Sewer Replacement Project
8. REVIEW and DISCUSS: Director Benefits
9. REVIEW and DISCUSS: Amendment to Resolution 2020-03 to include cost of meters
10. REVIEW and DISCUSS: Proposed 20-21 Budget
11. PUBLIC COMMENT
12. COMMITTEE MEMBER COMMENT
13. ITEMS FOR NEXT AGENDA
14. ADJOURN

Public records are available upon request. Board Packets are posted on our website at www.hvlcsd.org/Meetings.

In compliance to the Americans with Disabilities Act, if you need special accommodations to participate in or attend the meeting please contact the District Office at (707)987-9201 at least 48 hours prior to the scheduled meeting.

Public shall be given the opportunity to comment on each agenda item before the Governing Board acts on that item, G.C. 54953.3. All other comments will be taken under Public Comment.

CONTRACT CHANGE ORDER NO. 2

The Mountain Meadow North Water Main Replacement Project

5/18/2020

**Hidden Valley Lake
Community Services District**
19400 Hartmann Road
Hidden Valley Lake, CA 95467
Phone: 707.987.9201

PROJECT No: 99-4274

DATE: 5/18/20

TO: Terracon Constructors, Inc.

You are hereby directed to make the herein described changes from the plans and specifications or do the following described work not included in the plans and specifications of this contract. All new work herein described shall be done in accordance with the applicable provisions of the plans and specifications, except as modified by this contract change order. NOTE: This change order is valid when signed on behalf of the Owner.

DESCRIPTION OF CHANGE: This change order is to address the extra work performed by Terracon Constructors, Inc. Refer to the attached back up information and invoices for further clarification on cost breakdowns.

Item

1. This item includes extra work performed on 4/7 to pothole utilities not shown on the plans. Refer to the attached TerraCon Daily Extra Work Report.

Cost of item: \$2,453.40
2. This item includes extra work performed on 4/8 to remove unexpected asphalt up to 18-inches thick not indicated on the plans. Refer to the attached TerraCon Daily Extra Work Report.

Cost of item: \$298.91
3. This item includes extra work performed on 4/9 to remove additional asphalt up to 18-inches thick to get adequate clearance around conduit not shown on the plans. Refer to the attached TerraCon Daily Extra Work Report.

Cost of item: \$597.81
4. This item includes extra work performed on 4/27 to cold plane asphalt in additional trenching from unforeseen asphalt thickness and utility conflicts. Refer to the attached TerraCon Daily Extra Work Report.

Cost of item: \$1,320.15

TOTAL AMOUNT THIS CHANGE ORDER: NET INCREASE IN THE AMOUNT OF \$4,670.27

Except as amended by this Contract Change Order, the Contract shall remain in full force and effect.

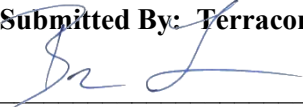
CONTRACT TIME ADJUSTMENT: 0 days

COST OF CHANGE: \$4,670.27


The adjustments to the Contract Price and Contract Time in this Change Order include all costs, including direct, indirect, consequential, and overhead (field and home office) costs, related to the Change described above. By signing this Change Order, Contractor agrees to accept the adjustment to the Contract Price, calculated as provided above, and the adjustment of the Contract Time, as payment in full for all costs, including direct, indirect, consequential, and overhead (field and home office) costs, related to the Changes described above.

Submitted By: Terracon Constructors, Inc.

Approval Recommended by: Coastland Civil Engineering



Brian Lydon
5.18.20
Date



Clark Stauffer
5.18.20
Date

Approved By: Hidden Valley Lake Community Services District

Date

TerraCon Constructors, Inc.

General Engineering Contractor

DAILY EXTRA WORK REPORT

PROJECT: MOUNTAIN MEADOW NORTH WATER MAIN REPLACEMENT PROJECT, HIDDEN VALLEY LAKE

CCO # _____
TERRACON JOB NO. #19-10

PHASE _____

EXTRA WORK CODE# 099-100

DATE: 4/7/2020 DAY

STATION: _____

DESCRIPTION OF WORK: JACK HAMMERED A/C & POTHOLED UTILITIES NOT SHOWN ON PLANS. VERIFIED UTILITY DEPTHS & CLEARANCES FOR NEW WATER MAIN. BACKFILLED & COMPACTED POTHLES.

EQUIPMENT				
Equip. #	Description	Hours	Hourly Rate	Amount
AC5	ATLAS AIR COMPRESSOR	3	20.82	62.46
BH2	JD 410G BACKHOE	2	55.78	111.56
C06	DODGE 5500 CREW TRUCK	4	40.16	160.64
				0.00
				0.00
				0.00
				0.00
(B) TOTAL				334.66

MATERIAL			
Description	No. Unit	Unit Cost	Amount
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
(C) TOTAL			0.00

WORK DONE BY SPECIALIST			
Description	No. Unit	Unit Cost	Amount
			0.00
			0.00
(D) TOTAL			0.00

ACKNOWLEDGED HOURS & MATERIALS
ACCEPTED FOR PROGRESS PAYMENT

LABOR			
Classification and Name	Hours	Hourly Rate	Amount
STEVE GLAZE	4	77.18	308.72
OPERATOR	OT		0.00
ERIK CISNEROS	3	77.18	231.54
OPERATOR	OT		0.00
RAMSY HAMMOUDEH	3	58.43	175.29
LABORER	OT		0.00
TYLER GENTRY	4	58.43	233.72
LABORER	OT		0.00
TED TURBEVILLE	4	60.93	243.72
LABORER	OT		0.00
JOSE CARDENAS SANCHEZ	4	58.43	233.72
LABORER	OT		0.00
JERED CLARK	3	73.91	221.73
FOREMAN	OT		0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
SUB-TOTAL			1,648.44
ADDED PERCENTAGE - (see Special Provisions)		10%	164.84
Subsistence	No. _____ \$ _____		0.00
Travel Expense	No. _____ \$ _____		0.00
Other			0.00
TOTAL COST OF LABOR (A)			1,813.28
TOTAL COST OF EQUIPMENT (B)			334.66
TOTAL COST OF MATERIALS (C)			0.00
TOTAL COST OF WORK DONE BY SPECIALIST (D)			0.00
SUB-TOTAL (A+B+C+D)			2,147.94
% ON LABOR COST	15% (A)		271.99
% EQUIPMENT	10% (B)		33.47
% MATERIAL	15% (C)		0.00
% SPECIALIST	10% (D)		0.00
TOTAL REPORT:			2,453.40

CONTRACTOR'S REPRESENTATIVE _____ RESIDENT ENGINEER _____

DATE _____

TerraCon Constructors, Inc.

CCO # _____
 TERRACON JOB NO. 1910

PROJECT Hidden Valley

DAILY EXTRA WORK REPORT
 PROJECT/CONTRACT NO. _____

DATE 4-7-20

DESCRIPTION OF WORK Jack Hammered AC 9' per noted utilities not shown on plans. Verified utility depths & clearances for new water main. Backfilled & compacted pathways.

STATION: _____ to _____


EQUIPMENT				
Equip. #	Description	Hours	Hourly Rate	Amount
AC-5	Air compressor	3		
BL-2	JD 410 backhoe	2		
C-06	Rain 5500 comp. truck	4		
(B) TOTAL				

LABOR			
Classification and Name	Hours	Hourly Rate	Amount
Steve Galbraith	REG. 4		
Operator	O.T.		
Eric Cisneros	REG. 3		
Operator	O.T.		
Ramsey Hammadden	REG. 3		
Labourer	O.T.		
Tyler Country	REG. 4		
Labourer	O.T.		
Ted Turbeville	REG. 4		
Labourer	O.T.		
Jose Cardenas	REG. 4		
Labourer	O.T.		
Jared Clark	REG. 3		
Foreman	O.T.		
SUB-TOTAL			
ADDED PERCENTAGE - (see Special Provisions)			%
Subsistence	No. _____	\$ _____	
Travel Expense	No. _____	\$ _____	
Other	_____		
TOTAL COST OF LABOR			(A)
TOTAL COST OF EQUIPMENT & MATERIALS			(B)
SUB-TOTAL			(A+B)
+ _____ % ON LABOR COST			(A)
+ _____ % ON EQUIPMENT, MATERIAL			(B)
TOTAL REPORT			


MATERIAL and/or WORK Done By Specialists			
Description/Vendor	No. Unit	Unit Cost	Amount
(B) TOTAL			

ACKNOWLEDGED HOURS & MATERIALS
 ACCEPTED FOR PROGRESS PAYMENT


 CONTRACTOR'S REPRESENTATIVE


 RESIDENT ENGINEER

DATE _____



OFFICE COPY

TerraCon Constructors, Inc.

General Engineering Contractor

DAILY EXTRA WORK REPORT

PROJECT: MOUNTAIN MEADOW NORTH WATER MAIN REPLACEMENT PROJECT, HIDDEN VALLEY LAKE

DESCRIPTION OF WORK:

HAMMERED OUT 15" - 18" OF A/C IN TRENCH ZONE

CCO # _____

TERRACON JOB NO. #19-10

PHASE _____

EXTRA WORK CODE# 099-100

DATE: 4/8/2020 DAY _____

STATION: _____

EQUIPMENT				
Equip. #	Description	Hours	Hourly Rate	Amount
HM2	ATLAS HYDRAULIC HAMMER	2	10.61	21.22
TL2	CASE TV380 SKIDSTEER	2	36.50	73.00
				0.00
				0.00
				0.00
				0.00
				0.00
(B) TOTAL				94.22

MATERIAL			
Description	No. Unit	Unit Cost	Amount
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
			0.00
(C) TOTAL			0.00

WORK DONE BY SPECIALIST			
Description	No. Unit	Unit Cost	Amount
			0.00
			0.00
(D) TOTAL			0.00

ACKNOWLEDGED HOURS & MATERIALS
ACCEPTED FOR PROGRESS PAYMENT

LABOR			
Classification and Name	Hours	Hourly Rate	Amount
ERIK CISNEROS	2	77.18	154.36
OPERATOR OT			0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
			0.00
	OT		0.00
			0.00
SUB-TOTAL			154.36
ADDED PERCENTAGE - (see Special Provisions)		10%	15.44
Subsistence	No. _____ \$ _____		0.00
Travel Expense	No. _____ \$ _____		0.00
Other			0.00
TOTAL COST OF LABOR (A)			169.80
TOTAL COST OF EQUIPMENT (B)			94.22
TOTAL COST OF MATERIALS (C)			0.00
TOTAL COST OF WORK DONE BY SPECIALIST (D)			0.00
SUB-TOTAL (A+B+C+D)			264.02
% ON LABOR COST	15%	(A)	25.47
% EQUIPMENT	10%	(B)	9.42
% MATERIAL	15%	(C)	0.00
% SPECIALIST	10%	(D)	0.00
TOTAL REPORT:			298.91

CONTRACTOR'S REPRESENTATIVE

RESIDENT ENGINEER

DATE

TerraCon Constructors, Inc.

CCO # _____
TERRACON JOB NO. 1910

PROJECT Hidden Valley PROJECT/CONTRACT NO. _____

DATE 4-8-20

DESCRIPTION OF WORK Hammered out 15" - 18" of AC in patch zone

STATION: _____ to _____

EQUIPMENT				
Equip. #	Description	Hours	Hourly Rate	Amount
Htm - 2	Atlas 340 Hammer	2		
Tl - 2	Case TV350 Skid Steer	2		
(B)			TOTAL	

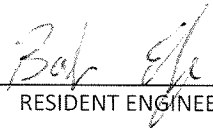
LABOR			
Classification and Name	Hours	Hourly Rate	Amount
EVIK Cismers	REG. 2		
operator	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
SUB-TOTAL			
ADDED PERCENTAGE - (see Special Provisions)			%
Subsistence	No.	\$	
Travel Expense	No.	\$	
Other			
TOTAL COST OF LABOR			(A)
TOTAL COST OF EQUIPMENT & MATERIALS			(B)
SUB-TOTAL			(A+B)
+ _____ % ON LABOR COST			(A)
+ _____ % ON EQUIPMENT, MATERIAL			(B)
TOTAL REPORT			

MATERIAL and/or WORK Done By Specialists			
Description/Vendor	No. Unit	Unit Cost	Amount
(B)			TOTAL

ACKNOWLEDGED HOURS & MATERIALS
ACCEPTED FOR PROGRESS PAYMENT

OFFICE COPY


CONTRACTOR'S REPRESENTATIVE


RESIDENT ENGINEER

DATE _____

1132

TerraCon Constructors, Inc.

PROJECT Hidden Valley PROJECT/CONTRACT NO. _____
 DESCRIPTION OF WORK Grind .35ths for paving

CCO # _____
 TERRACON JOB NO. 1910

DATE 4-27-20

STATION: Hartman to guard shack

*722
122*

EQUIPMENT				
Equip. #	Description	Hours	Hourly Rate	Amount
	CAT 299	8		
	Trench Excavator	8		
(B) TOTAL				

LABOR			
Classification and Name	Hours	Hourly Rate	Amount
ERIC CISNEROS	REG. 8		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
	REG.		
	O.T.		
SUB-TOTAL			
ADDED PERCENTAGE - (see Special Provisions) _____ %			
Subsistence	No. _____	\$ _____	
Travel Expense	No. _____	\$ _____	
Other	_____		
TOTAL COST OF LABOR			(A)
TOTAL COST OF EQUIPMENT & MATERIALS			(B)
SUB-TOTAL			(A+B)
+ _____ % ON LABOR COST			(A)
+ _____ % ON EQUIPMENT, MATERIAL			(B)
TOTAL REPORT			

MATERIAL and/or WORK Done By Specialists			
Description/Vendor	No. Unit	Unit Cost	Amount
(B) TOTAL			

ACKNOWLEDGED HOURS & MATERIALS
 ACCEPTED FOR PROGRESS PAYMENT

OFFICE COPY

 CONTRACTOR'S REPRESENTATIVE

Bob [Signature]
 RESIDENT ENGINEER

 DATE

Handwritten mark

1163

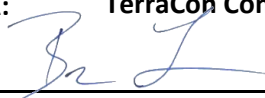
PAYMENT NO:	1	TO OWNER: HVLCS D	FROM CONTRACTOR: TerraCon Constructors, Inc.	VIA CM: Coastland Civil Engineering
PERIOD TO:	5/1/2020	19400 Hartmann Rd.	PO Box 276	1400 Neotomas Avenue
CCE JOB NO.:	99-4274	Hidden Valley Lake, CA 95467	Healdsburg, CA 95448	Santa Rosa, CA 95405

CONTRACTOR'S APPLICATION FOR PAYMENT

Application is made for payment, as shown below, in connection with the contract. Detail Sheet attached.

1. ORIGINAL CONTRACT SUM	<u>\$ 141,808.00</u>
2. Net Change by Change Orders	<u>\$ 4,670.27</u>
3. CONTRACT SUM TO DATE (Line 1 + 2)	<u>\$ 146,478.27</u>
4. TOTAL COMPLETED & STORED TO DATE	<u>\$ 152,824.64</u>
5. RETAINAGE:	
a. <u>5%</u> of completed work	<u>\$ 7,641.23</u>
b. <u>0%</u> of stored material	<u>\$ -</u>
Total Retainage (Line 5a + 5b)	<u>\$ 7,641.23</u>
6. TOTAL EARNED LESS RETAINAGE (Line 4 less Line 5)	<u>\$ 145,183.41</u>
7. LESS PREVIOUS PAYMENTS	<u>\$ -</u>
8. CURRENT PAYMENT DUE	<u>\$ 145,183.41</u>
9. BALANCE TO FINISH, INCLUDING RETAINAGE (Line 4 less Line 6)	<u>\$ 1,294.86</u>

The undersigned Contractor certifies that to the best of the Contractor's knowledge, information and belief, the Work covered by this application for Payment has been completed in accordance with the Contract Documents, that all amounts have been paid by the Contractor for Work for which previous Certificates for Payment were issued and payments received from the Owner, and that current payment shown herein is now due.


CONTRACTOR: TerraCon Constructors, Inc.
 BY:  Date: 5/18/20

OWNER: HVLCS D
 BY: _____ Date: _____

CONSTRUCTION MANAGER'S CERTIFICATE FOR PAYMENT

In accordance with the Contract Documents, based on on-site observations and the data comprising this application, the Construction Manager certifies to the Owner that to the best of the Construction Manager's knowledge, information and belief the Work has progressed as indicated, the quality of the Work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the AMOUNT CERTIFIED.

AMOUNT CERTIFIED **\$ 145,183.41**

CM: Coastland Civil Engineering
 BY:  Date: 5/18/2020
 Clark Stauffer, Assistant Engineer

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.

COASTLAND CIVIL ENGINEERING

PAYMENT DETAIL SHEET

Mountain Meadow North Water Main Replacement Project

OWNER : Hidden Valley Lake Community Services District
 PROJECT TITLE: Mountain Meadow North Water Main Replacement Project

TO OWNER: HVLCSO
 ADDRESS: 19400 Hartmann Rd.
 Hidden Valley Lake, CA 95467

FROM CONTRACTOR: TerraCon Constructors, Inc.
 ADDRESS: PO Box 276
 Healdsburg, CA 95448

APPROVED BY: COSTLAND CIVIL ENGINEERING
 ADDRESS: 1400 Neotomas Avenue
 Santa Rosa, CA 95405

PAYMENT NO.: 1
 PERIOD TO: 5/1/2020
 COASTLAND JOB NO.: 99-4274

PHONE: (707) 987-9201
 FAX: (707) 987-3237

PHONE: (707) 433-0323
 FAX: (707) 433-0322

PHONE: 707-571-8005
 FAX: 707-571-8037

ITEM NO.	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	APPROXIMATE AMOUNT	TOTAL TO DATE		% OF ITEM COMPLETE	PREVIOUS ESTIMATE		THIS ESTIMATE	
						QUANTITY	AMOUNT		QUANTITY	AMOUNT	QUANTITY	AMOUNT
1	Traffic Control System	1	L.S.	\$5,071.00	\$5,071.00	1.000	\$5,071.00	100%	0.000	\$0.00	1.000	\$5,071.00
2	Asphalt Concrete Trench Paving (Permanent)	40	Ton	\$533.00	\$21,320.00	44.890	\$23,926.37	112%	0.000	\$0.00	44.890	\$23,926.37
3	Pavement Markings	66	S.F.	\$39.00	\$2,574.00	66.000	\$2,574.00	100%	0.000	\$0.00	66.000	\$2,574.00
4	Traffic Striping	250	L.F.	\$11.00	\$2,750.00	250.000	\$2,750.00	100%	0.000	\$0.00	250.000	\$2,750.00
5	8-inch Water Main C900 PVC	295	L.F.	\$103.00	\$30,385.00	295.000	\$30,385.00	100%	0.000	\$0.00	295.000	\$30,385.00
6	8-inch Water Main CL50 DIP & CDF Backfill	35	L.F.	\$374.00	\$13,090.00	45.000	\$16,830.00	129%	0.000	\$0.00	45.000	\$16,830.00
7	8-inch Gate Valve	3	Each	\$2,079.00	\$6,237.00	3.000	\$6,237.00	100%	0.000	\$0.00	3.000	\$6,237.00
8	1-inch Single Water Service with 5/8-inch Meter	2	Each	\$4,362.00	\$8,724.00	2.000	\$8,724.00	100%	0.000	\$0.00	2.000	\$8,724.00
9	Temporary Blow Off	3	Each	\$617.00	\$1,851.00	3.000	\$1,851.00	100%	0.000	\$0.00	3.000	\$1,851.00
10	8 x 8 x 8 inch Tee	1	Each	\$1,479.00	\$1,479.00	1.000	\$1,479.00	100%	0.000	\$0.00	1.000	\$1,479.00
11	Water Main Tie-In	3	Each	\$10,176.00	\$30,528.00	3.000	\$30,528.00	100%	0.000	\$0.00	3.000	\$30,528.00
12	Abandon Water Main and Appurtenances	1	L.S.	\$1,158.00	\$1,158.00	1.000	\$1,158.00	100%	0.000	\$0.00	1.000	\$1,158.00
13	Mobilization	1	L.S.	\$16,641.00	\$16,641.00	1.000	\$16,641.00	100%	0.000	\$0.00	1.000	\$16,641.00
TOTAL ITEM WORK					\$141,808.00		\$148,154.37		\$0.00		\$148,154.37	
Materials On Hand												
		0		\$0.00	\$0.00	0.000	\$0.00	0%	0.000	\$0.00	0.000	\$0.00
TOTAL MOH					\$0.00		\$0.00		\$0.00		\$0.00	
Extra Work												
	Change Order #2 - Extra Work	1		\$4,670.27	\$4,670.27	1.000	\$4,670.27	100%	0.000	\$0.00	1.000	\$4,670.27
TOTAL EXTRA WORK					\$4,670.27		\$4,670.27		\$0.00		\$4,670.27	
SUBTOTAL W/O BACK CHRG					\$146,478.27		\$152,824.64		\$0.00		\$152,824.64	
Backcharges and Deductions												
		0		\$0.00	\$0.00	0.000	\$0.00	0%	0.000	\$0.00	0.000	\$0.00
TOTAL BACK CHG/DEDUCT					\$0.00		\$0.00		\$0.00		\$0.00	
A/P GROSS PAYMENT					\$146,478.27		\$152,824.64		\$0.00		\$152,824.64	
NOTES:					TOTAL TO DATE			PREVIOUS AMOUNT		CURRENT AMOUNT		
					ITEM WORK:	\$148,154.37		\$0.00	\$148,154.37			
					EXTRA WORK:	\$4,670.27		\$0.00	\$4,670.27			
					MOH:	\$0.00		\$0.00	\$0.00			
					GROSS AMT FOR RET	\$152,824.64		\$0.00	\$152,824.64			
					RETENTION RATE:	5%		5%				
					RETENTION ON GROSS:	\$7,641.23		\$0.00	\$7,641.23			
					BACKCHG/DEDUCT:	\$0.00		\$0.00	\$0.00			
					\$145,183.41		\$0.00		\$145,183.41			
NET AMOUNT: \$145,183.41												



COASTLAND

CIVIL ENGINEERING - CONSTRUCTION MANAGEMENT - BUILDING DEPARTMENT SERVICES

May 29, 2020

Ms. Alyssa Gordan
Water Resources Specialist
Hidden Valley Lake Community Services District
19400 Hartmann Road
Hidden Valley Lake, CA 95467
Via email: agordon@hvlcsd.org

Subject: **Proposal for Engineering Design Services for the
WWTP Access Road Rebuilding Project**

Dear Alyssa,

In response to your request, we are pleased to provide this proposal to assist Hidden Valley Lake Community Services District (District) with the development of bid documents for the rebuilding of approximately 2,065 feet of road between Grange Road and the District wastewater treatment plant's entry gate.

UNDERSTANDING

The Hidden Valley Lake WWTP is a critical facility that must be accessible during flood events. During the February 2019 floods, the access road to the WWTP sustained considerable damage from saturated soil conditions and heavy truck traffic on the chip-sealed gravel surface. Since that time, the access road has been temporarily regraded and repaired. The District is now interested in making repairs to the access road by grading, recompacting and chip-sealing.

According to construction plans, the access road was constructed in 1994 as part of Phase I of the District's Water Reclamation Project. According to the plans, the access road between Grange Road and the WWTP gate was constructed of 12 inches of aggregate base over geotextile fabric, with a seal coat surface. The plans show the road to be 20 feet wide with a centerline crown and 2% cross slopes, and 2 horizontal feet of shoulder on each side constructed of 12 inches of aggregate base. It is not known if the road was built according to plan. According to District staff, the road requires regrading every spring due to ruts sustained during the winter months.

Drainage facilities in the vicinity consist of ditches and culverts. According to the access road construction plans, a substantial drainage ditch crosses the access road from west to east through dual 18-inch by 28-1/2-inch reinforced concrete arch pipes. There is a smaller 13-1/2-inch by 22-inch reinforced concrete arch pipe closer to Grange Road that

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conveys drainage from a short swale running southward along the west side of the road to a larger ditch continuing southward on the east side. The area is prone to flooding due to the combination of low-gradient land and the fact that the receiving waters, Crazy Creek, backs up water all the way to the access road during flood events, preventing stormwater from flowing offsite.

The road was originally constructed with two depressed sections that were lowered 0.6 feet to convey stormwater across the road. The northerly depressed road section is 150 feet in length and has a centerline elevation only 0.5-1 feet higher than the flowline of the westerly swale. The southerly road depression is adjacent to the dual RCP arches, is 100 feet in length, and has a centerline elevation approximately 2 feet higher than the culverts' upstream invert.

In 2013, the depressed road sections were filled because vehicles accessing the WWTP during high flows were flooded. The District placed a "terra-cell" product involving gravel in cells to fill the depressed road sections under the road section.

According to the plans, there are underground utilities within the road section. There is a joint trench, consisting of 10" sanitary sewer main, and a 12" reclaimed water pipe at an unknown depth on the western edge of the road. There is also a 2" W1 line near the road centerline.

The proposed design will consist of removing the remnants of existing chip-sealing by grinding, shaping and compacting the existing surface and sealing the surface with a chip-seal coating. Per discussions with District personnel, we will also include a bid alternate to use a cape seal for surfacing.

SCOPE OF SERVICES

The following Scope of Work is based on our understanding of the project details following a field visit with the District and review of the road construction documents.

Task 1 – Meetings with District Representatives

This task includes a phone conference meeting to review the draft submittal.

Task 2 – Environmental Clearance and Coordination with Utility Providers

As the project is reconstruction of an existing road, the project is categorically exempt under CEQA. Accordingly, we will include preparing a Notice of Exemption in accordance with CEQA and providing this to the District for adoption and recordation with the County.

Because the WWTP access road is not maintained by the County, an encroachment permit will not be necessary.



We will assemble all the available District information pertaining to the project including as-built drawings, utility information, easement data and additional pertinent information for the project. Additionally, we will contact utility companies that have facilities in the project area to obtain any record maps indicating the type and size of facilities for inclusion on the exhibits.

Task 3 – Prepare Bid Documents

Draft Submittal

Coastland will develop complete construction documents for the road improvements, consisting of specifications, exhibit drawings, and details as needed. The draft submittal will include digital copies of half-size plans, draft specifications, and an engineer's estimate of probable construction costs.

Final Submittal

Following the District's review of the draft submittal, we will prepare the final construction specifications, exhibits, details and estimate, which will be signed by a California registered Civil Engineer. An electronic copy of the construction documents will be provided in both PDF and AutoCAD formats. We will work with the District to determine the number of bid documents to reproduce for bidding purposes.

Task 4 – Bid Support

Coastland will provide the District with the Notice to Bidders for advertisement in local papers. We will also reproduce and distribute the construction documents to local plan rooms and interested contractors. During the bidding process, we will answer any questions that may arise and maintain a phone log of inquiries. We will prepare any addenda that may be necessary. Coastland will also conduct the bid opening at the District office, tabulate results and review the apparent low bidder's bid package.

Once the review of the bid has been completed, we will prepare a bid summary and forward it to the District with our recommendation for bid award. Please note that the time associated with this task does not include any time necessary for bid protests. If a bid protest is issued by any of the other bidders, we can provide this as extra service on a time and materials basis, as the time necessary to process the protest is unknown.

ASSUMPTIONS FOR SCOPE OF SERVICES

Coastland has assumed the following for this scope of work:

- A topographic survey is not included.
- Terra-cells will remain in place in the road depressions.
- This scope does not include environmental studies or permitting of any kind.



PROPOSED FEES & SCHEDULE

Based on our scope of work and our estimated time, we propose that the services associated with the project be completed for a not-to-exceed amount of \$10,660. The amount quoted is assuming that all of the work for this project will fall under the scope of work as previously described. If additional work is necessary that falls outside of this scope of work, we can either re-negotiate a new scope of work or provide these services on a time and materials basis per our adopted schedule of hourly rates.

Coastland proposes the following tentative schedule.

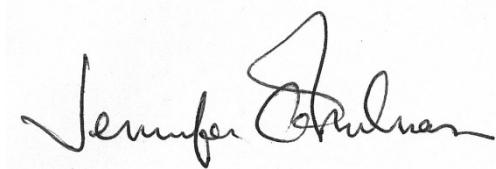
Design Contract Awarded	6/2 - HVL CSD Special Board Mtg
Draft Submittal	6/23
Final Submittal	7/3
Bid Authorization	7/7 – HVL CSD Special Board Mtg
Advertising of Notice to Bidders	7/9
Bid Opening	7/30
Construction Contract Awarded	8/4 - HVL CSD Special Board Mtg
Construction Begins	9/4
Construction Completed	9/30

We greatly appreciate the opportunity to provide this proposal and look forward to continuing to serve Hidden Valley Lake Community Services District. Please feel free to contact Jenny Melman or me at (707) 571-8005 if you have any questions or need any additional information.

Sincerely,



John Wanger, PE
Principal



Jenny Melman, PE
Senior Engineer





WORK ESTIMATE

WWTP Access Road Rebuilding Project

Proposal for Design Services

Hidden Valley Lake CSD

Task #	Task Description	Principal	PM/Senior	Asst	Admin	Total Hours	Total Cost	Notes
		Engineer	Engineer	Engineer	Asst			
		\$200	\$160	\$135	\$90			
1	Meetings with District Representatives							
	Design Review Meeting via Conference Call (1)	1	2			3	\$520	
	Subtotal					3	\$520	
2	Environmental Clearance and Coordination with Utility Providers							
	Prepare Notice of Exemption	1	2			3	\$520	
	Coordinate with Utility Companies		2	4		6	\$860	
	Subtotal					9	\$1,380	
3	Prepare Bid Documents							
	Draft Submittal							
	Specifications	1	10			11	\$1,800	
	Exhibits showing limits of work and typical section	1	8			9	\$1,480	
	Cost Estimate	1	3			4	\$680	
	QC Review/Value Engineering	2	1			3	\$560	
	Draft Submittal Subtotal					27	\$4,520	
	Final Submittal							
	Final Documents	1	4			5	\$840	
	Final Submittal Subtotal					5	\$840	
	Subtotal					32	\$5,360	
4	Bid Support							
	Bid administration	1	6		6	13	\$1,700	
	Bid Opening attendance	3	3			6	\$1,080	
	Bid analysis/recommendation	1	2			3	\$520	
	Subtotal					22	\$3,300	
	Miscellaneous Costs						\$100	Est reproduction
Total Hours		13	43	4	6	66		
Total Cost		\$2,600	\$6,880	\$540	\$540		\$10,660	





COASTLAND

CIVIL ENGINEERING - CONSTRUCTION MANAGEMENT - BUILDING DEPARTMENT SERVICES

Date: May 21, 2020

To: John Wanger, District Engineer
Hidden Valley Lake CSD
19400 Hartmann Rd
Hidden Valley Lake, CA 95467

From: Jenny Melman, PE

Subject: Recommendations for Sewer Repairs
Meadow View Easement, Hidden Valley Lake

At the request of the Hidden Valley Lake Community Services District (District), Coastland Engineering has made sewer repair recommendations based on the review of CCTV inspection video of sewer pipe located between MH 1 and MH 2 in an easement between Meadow View Drive and Deer Hill Road (at the intersection with North Shore Drive). The 6-inch diameter asbestos-cement sewer pipe (ACP), installed in 1968, is over 50 years old. A vicinity map showing the approximate manhole and pipe locations is shown below. From Google Earth, the distance between Meadow View Drive and Deer Hill Road is approximately 380 feet.

Recommendations for sewer repairs were based on the inspection of CCTV video (dated 4/02/20) provided by the District and limited Google Earth review of surface conditions. A field visit was not conducted to inspect manholes or evaluate surface conditions, nor were easements verified.



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CCTV Video

The CCTV inspection video of the Meadow View easement sewer begins at MH 1 and travels downstream for 353.6 feet. The survey is abandoned at this point, approximately 25 feet prior to arriving at MH 2, apparently because the CCTV robot could not continue beyond a severely offset joint that had been repaired by lining the pipe. No CCTV inspection video was provided for the remaining 25 feet of pipe.

CCTV Inspection Observations

Detailed observations made during the video inspection review are attached in the CCTV Observation Report. Distances recorded in the report are measured from MH 1.

Pipe conditions of the ACP were generally observed to be poor, due to numerous pipe defects, including a hole, cracks, moderate or severe offset and separated joints, root intrusion, and minor corrosion observed throughout the pipe as surface roughness and spalling.

Pipe material transitions from ACP to short sections of PVC occurred at 4 of the 5 laterals. Most of these transitions were defective, having offset joints and separated joints, often with broken spigot pipe ends on the ACP. Additionally, there were two previous point repairs using cured in place pipe lining.

There were no observed sags in the pipeline profile or fine deposits, indicating that the pipe backfill and bedding was adequately supporting the pipe.

No significant grease deposits were observed.

A summary table of the observed defects is shown below.

Observations	No. of Occurrences
Sewer lateral connections (tap factory)	5
Hole in pipe; soil visible	1
Joint Separated Large	3
Joint Separated Medium	6
Joint Offset Medium	3
Spot Repair, Liner	2
Infiltration Stain at Joint	2
Crack, circumferential	2
Root Intrusion	2
Surface Spalling, minor	throughout
Damaged Spigot Pipe Ends at Joints	numerous



Google Earth Observations

From Google Earth, MH 1 can be seen in Meadow View Drive, but MH 2 was not observed, possibly due to deep shadow cast over that portion of road. The ground surface elevation difference between the two manholes is estimated as 240 feet (per Google Earth) which indicates a very steep slope of 67%. The width of the sewer easement is not known, but the easement appears to be quite narrow, with the sewer likely to be very close to house foundations.

Sewer Recommendations

The sewer main in the easement between Meadow View Drive and Deer Hill Road is in poor condition with many defects including a hole in the pipe, cracks, moderate and severe offset and separated joints, root intrusion, and surface corrosion. These defects are significant sources of groundwater infiltration and indicate poor structural conditions that will continue to deteriorate over time if unaddressed. The sewer in question has already been repaired twice in the past. Based on these findings, Coastland recommends completing replacing the sewer pipe from manhole to manhole.

Due to the steepness of terrain and the apparent close proximity of structures to the sewer, we recommend replacing the sewer using “trenchless” pipe-bursting technology. Pipe-bursting requires vehicle access to manholes on either end of the project. Following cleaning, a cable is strung through the sewer pipe between manholes, and a bullet-shaped head is pulled through the sewer, which bursts the existing pipe walls, and pulls a seamless high-density polyethylene (HDPE) pipe behind it. This method effectively replaces the sewer main with a new structurally competent pipe without digging a trench along the length of sewer main. The new pipe is connected to the existing manholes with an HDPE ring that is sealed into the manhole walls.

Excavation is required only to reinstate each lateral connection to the new sewer main. There are four lateral connections in this section of sewer. Laterals will be reconnected using HDPE saddles that are fusion-welded to the main. Laterals will not be replaced.

Prior to pipe bursting, spot repairs may be required in the pipe at sites of severe defects that may otherwise obstruct and bind-up the pipe-bursting head. One such site was observed in the CCTV video at a previous repair site approximately 353 feet from MH 1. At this location, the CCTV video was aborted because the camera could not proceed through the reduced cross-sectional area. This site will likely need to be dug up and repaired prior to pipe-bursting.

Rehabilitation of Manholes 1 and 2 may also be advisable if any structural or maintenance defects are observed during inspection.











These recommendations are based upon CCTV video inspection and Google Earth assessments only and should be re-reviewed following a detailed site visit and manhole inspection to verify the construction method.




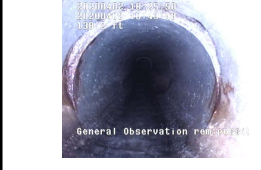




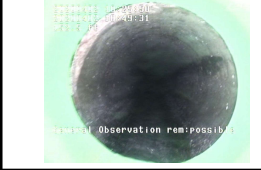






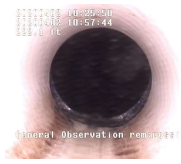






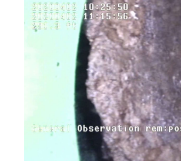

CCTV Observation Report

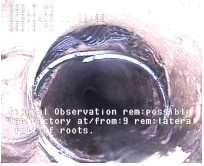

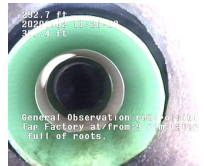
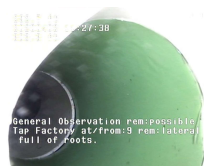
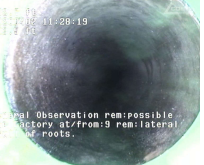
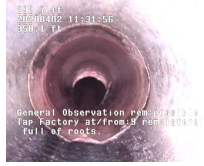
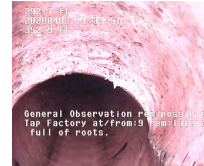

Client: HVL CSD
Project Name: Meadow View Easement

<p>Date of CCTV: 4/2/20 10:17 AM Street: Easement btwn Meadow View and Deer Hill Rd Upstream MH: MH 1 Downstream MH: MH 2</p>	<p>Survey Length: 353.6 feet Pipe Length: approx. 380 feet Material: ACP Pipe Diameter: 6 inch Direction of Video: DS</p>
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Distance (ft)	Code	Clock/Position	Comment	Image
0.5	MSL		Water Level 5%	
20	JSM		Joint Separated Medium	
22.7	SSS	9	Surface spalling	
39.7	SSS		Damaged pipe ends at joint	
43.7	CC	12 to 12	Circumferential crack	
100.8	MMC		Material change from ACP to PVC	
100.8	JOM		Joint Offset Medium	
102.3	TF	11	Tap Factory	

102.5	RP*L		Spot repair, liner	
105	MMC		End spot repair, liner Change to ACP	
126.7	HSV	10	Hole in pipe; soil and roots visible	
138.2	JSM/ISJ		Joint Separated Medium; Damaged pipe ends; Infil stain 2 - 9o'clock	
141.2	JSM		Joint Separated Medium; Damaged pipe ends;	
146.9	MMC		Material change from ACP to PVC	
146.9	JSM		Joint Separated Medium	
150.2	TFA	2	Tap Factory Active	
153.2	MMC		Material change from PVC to ACP	
153.2	JSM		Joint Separated Medium	
198.7	JOM		Joint Offset Medium	

219.6	MMC		Material change from ACP to PVC	
221	JSL		Joint Offset Large; Broken pipe end; Soil and roots visible	
223.2	MMC		Material change from PVC to ACP	
223.2	JSL		Joint Separated Large	
242.5	ISJ	8 to 5	Infil stain at joint	
289	MMC		Material change from ACP to PVC	
289.1	CC	8 to 12	Circumferential crack	
289.1	JSM		Joint separated medium	
290.4	TF	3	Tap Factory	
291.3	MMC		Material change from PVC to ACP; Damaged pipe end	
292.7	TF/RBL	9	Tap Factory: Lateral filled with roots	

293.1	JSL	9 to 3	Broken pipe at joint; Intruding gasket; Roots at joint	
301.4	MMC		Material change from ACP to PVC	
302	JOM		Joint Offset Medium	
303.3	TF	9	Tap Factory	
303.5	MMC		Material change from PVC to ACP	
350.9	MMC		Point repair/lining by MSI	
352.9	RPL		Pipe size reduction	
353.6	MSA		Survey Abandoned 150 feet from MH 2 due to point repair	



COASTLAND

CIVIL ENGINEERING - CONSTRUCTION MANAGEMENT - BUILDING DEPARTMENT SERVICES

May 29, 2020

Ms. Alyssa Gordon
Water Resources Specialist
Hidden Valley Lake Community Services District
19400 Hartmann Road
Hidden Valley Lake, CA 95467
Via email: agordon@hvlcsd.org

Subject: **Proposal for Engineering Design Services for the Meadow View Easement Sewer Replacement Project**

Dear Alyssa,

In response to your request, I am pleased to provide you this letter proposal to assist Hidden Valley Lake Community Services District (District) with the development of bid documents for the replacement of approximately 350 feet of sewer main between MH 1 and MH 2 located in an easement between Meadow View Drive and Deer Hill Road (near the intersection of Deer Hill Road and North Shore Drive).

UNDERSTANDING

Our understanding of the project is based on review of a CCTV inspection video of the sewer pipe and limited assessment of surface conditions using Google Earth. A field visit has not been conducted.

Coastland prepared a technical memorandum dated May 20, 2020, recommending rehabilitation of the sewer main using pipe-bursting technology. The sewer main is in poor condition with many defects including a hole in the pipe, cracks, moderate and severe offset and separated joints, root intrusion, and surface corrosion. These defects are significant sources of groundwater infiltration and indicate poor structural conditions that will continue to deteriorate over time if unaddressed. The sewer in question has already been repaired twice in the past.

From Google Earth, MH 1 can be seen in Meadow View Drive, but MH 2 was not observed, possibly due to deep shadow cast over that portion of road. The ground surface elevation difference between the two manholes is estimated as 240 feet (per Google Earth) which indicates a very steep slope of 67%. The width of the sewer easement is not known, but the easement appears to be quite narrow, with the sewer likely to be very close to house foundations.

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PROPOSED CONSTRUCTION METHODS

Due to the steepness of terrain and the close proximity to structures to the sewer, we recommend replacing the sewer using “trenchless” pipe-bursting technology. Pipe-bursting requires vehicle access to manholes on either end of the project. Following cleaning, a cable is strung through the sewer pipe between manholes, and a bullet-shaped head is pulled through the sewer, which bursts the existing pipe walls, and pulls a seamless high-density polyethylene (HDPE) pipe behind it. This method effectively replaces the sewer main with a new structural pipe without digging a trench along the length of sewer main. The new pipe is connected to the existing manholes with an HDPE ring that is sealed into the manhole walls.

Excavation is required only to reinstate each lateral connection to the new sewer main. There are four lateral connections in this section of sewer. Laterals will be reconnected using HDPE saddles that are fusion-welded to the main. Laterals will not be replaced.

Prior to pipe bursting, spot repairs may be required in the pipe at sites of severe defects that may otherwise obstruct and bind-up the pipe-bursting head. One such site was observed in the CCTV video at a previous repair site approximately 353 feet from MH 1. At this location, the CCTV video was aborted because the camera could not proceed through the reduced cross-sectional area. This site will likely need to be dug up and repaired prior to pipe-bursting.

This project may also include rehabilitation of manholes to reduce groundwater infiltration, or address any observed structural or maintenance defects, at the District’s request.

SCOPE OF SERVICES

The following Scope of Work is based on our understanding of the project details.

Task 1 – Meetings with District Representatives and Field Review

Immediately after the Notice to Proceed is issued by the District, Coastland will schedule a kick-off meeting with District staff to ensure we are aware of all project goals and constraints, followed by a field review to observe ground conditions, existing improvements, access to construction areas, and easement boundaries. Obstructions to accessing work areas will be identified. MHs 1 and 2 will be inspected and measured for depth. Structural or O&M issues in the manholes will be noted and possibly included in the design, as desired by the District.

Also included in this task will be a design review meeting via phone conference following the draft submittal.



Task 2 – Environmental Clearance and Coordination with Utility Providers

As the project is replacement of an existing sewer line, the project is categorically exempt under CEQA. Accordingly, we will prepare a Notice of Exemption in accordance with CEQA and provide this to the District for adoption and recordation with the County.

Because Meadow View Drive and Deer Hill Road are outside of the County right-of-way, no encroachment permit will be needed for this project.

We will assemble all the available District information pertaining to the project including as-built drawings, utility information, easement data and additional pertinent information for the project. Additionally, we will contact utility companies that have facilities in the project area to obtain any record maps indicating the type and size of facilities for inclusion on the plans.

Task 3 – Prepare Bid Documents

Draft Submittal

Following our field review and utility coordination, we will develop construction documents for the sewer replacement via pipe-bursting and reconnection of laterals.

As a cost-saving measure, Coastland proposes to prepare construction plans on an aerial mapping background provided by the District, thereby avoiding the expense of a topographic survey.

The draft submittal will consist of a complete set of plans consisting of a cover sheet, notes, plan sheet, and detail sheet. Also included in this submittal will be a complete set of specifications, suitable for public works bidding, and an engineer's estimate of construction cost. The draft submittal will be transmitted electronically in PDF format.

Final Submittal

Following the review of the draft submittal, Coastland will incorporate all review comments into the completed construction drawings, specifications and construction cost estimate, all which will be signed by a California registered Civil Engineer. An electronic copy of the drawings, specifications and final cost estimate will be provided in both PDF and AutoCAD formats. We will work with the District to determine the number of bid documents to reproduce for bidding purposes.

Task 4 – Bid Support

Coastland will provide the District with the Notice to Bidders for advertisement in local papers. We will also reproduce and distribute the construction documents to local plan rooms and interested contractors. During the bidding process, we will answer any



questions that may arise and maintain a phone log of inquiries. We will prepare any addenda that may be necessary. Coastland will also conduct the bid opening at the District office, tabulate results and review the apparent low bidder's bid package.

Once the review of the bid has been completed, we will prepare a bid summary and forward it to the District with our recommendation for bid award. Please note that the time associated with this task does not include any time necessary for bid protests. If a bid protest is issued by any of the other bidders, we can provide this as extra service on a time and materials basis, as the time necessary to process the protest is unknown.

ASSUMPTIONS FOR SCOPE OF SERVICES

Coastland has assumed the following for this scope of work:

- Aerial photography will be available from the District of sufficient resolution to be usable at 1"=40' scale.
- Easement information will be provided by the District, including easement width.
- A topographic survey is not included.
- Sewers to be replaced are located in an accessible District-owned easement.
- This scope does not include environmental studies or permitting of any kind.

PROPOSED FEES & SCHEDULE

Based on our scope of work and our estimated time, we propose that the services associated with the project be completed for a not-to-exceed amount of \$13,970. The amount quoted is assuming that all of the work for this project will fall under the scope of work as previously described. If additional work is necessary that falls outside of this scope of work, we can either re-negotiate a new scope of work or provide these services on a time and materials basis per our adopted schedule of hourly rates.

Coastland proposes the following tentative schedule.

Design Contract Awarded	6/2 - HVL CSD Special Board Mtg
Draft Submittal	6/23
Final Submittal	7/3
Bid Authorization	7/7 – HVL CSD Special Board Mtg
Advertising of Notice to Bidders	7/9
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Construction Begins	9/4
Construction Completed	9/30

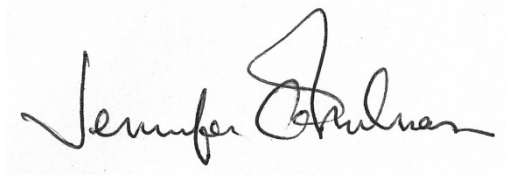


We greatly appreciate the opportunity to provide this proposal and look forward to continuing to serve Hidden Valley Lake Community Services District. Please feel free to contact Jenny Melman or me at (707) 571-8005 if you have any questions or need any additional information.

Sincerely,



John Wanger, PE
Principal



Jenny Melman, PE
Senior Engineer





WORK ESTIMATE

Meadow View Easement Sewer Repair

Proposal for Design Services

Hidden Valley Lake CSD

Task #	Task Description	Principal Engineer	PM/Senior Engineer	Asst Engineer	CAD Designer	Admin Asst	Total Hours	Total Cost	Subconsultant / Notes
		\$200	\$160	\$135	\$140	\$90			
1	Meetings with District Representatives/Site Review								
	Kick Off Meeting and Site Review	4	4				8	\$1,440	
	Design Review Meeting via Conference Call (1)	1	2				3	\$520	
	Subtotal						11	\$1,960	
2	Environmental Clearance and Coordination with Utility Providers								
	Prepare Notice of Exemption	1	2				3	\$520	
	Coordinate with Utility Companies		2	4	4		10	\$1,420	
	Subtotal						13	\$1,940	
3	Prepare Bid Documents								
	Draft Submittal								
	Improvement Plans (4-5 sheet set)	1	8		12		21	\$3,160	
	Specifications	1	8				9	\$1,480	
	Cost Estimate	1	1	2			4	\$630	
	Draft Submittal Subtotal						34	\$5,270	
	Final Submittal								
	Final Documents	1	4		4		9	\$1,400	
	Final Submittal Subtotal						9	\$1,400	
	Subtotal						43	\$6,670	
4	Bid Support								
	Bid administration	1	6			6	13	\$1,700	
	Bid Opening attendance	3	3				6	\$1,080	
	Bid analysis/recommendation	1	2				3	\$520	
	Subtotal						22	\$3,300	
	Miscellaneous Costs							\$100	Est mileage, photos, reproduction
Total Hours		15	42	6	20	6	89		
Total Cost		\$3,000	\$6,720	\$810	\$2,800	\$540		\$13,970	



Today's Date: 6/8/2020
 Rates effective through: 12/31/2020

SDRMA Health Benefits Gold PPO - Per Director

Current - Director Only	SDRMA Monthly Rate	5% Director Monthly Contribution	Monthly Cost to Director	Monthly Cost to District
		\$867.00	\$43.35	\$43.35
Annual Summary				
	SDRMA Annual Rate	5% Director Annual Contribution	Annual Cost to Director	Annual Cost to District
	\$10,404.00	\$520.20	\$520.20	\$9,883.80

Current - Director + Dependent	SDRMA Monthly Rate	5% Director Monthly Contribution	Monthly Cost to Director	Monthly Cost to District
		\$1,736.04	\$86.80	\$86.80
Annual Summary				
	SDRMA Annual Rate	5% Director Annual Contribution	Annual Cost to Director	Annual Cost to District
	\$20,832.48	\$1,041.62	\$1,041.62	\$19,790.86

Proposed - Financial Impact if Director paid for their Dependent	SDRMA Dependent Monthly Rate	5% Director Only Monthly Contribution	Monthly Dependent +5% Cost to Director	Monthly Dependent Savings to District
		\$869.04	\$43.35	\$912.39
Annual Summary				
	SDRMA Dependent Annual Rate	5% Director Only Annual Contribution	Annual Dependent +5% Cost to Director	Annual Dependent Savings to District
	\$10,428.48	\$520.20	\$10,948.68	\$9,907.08

RESOLUTION 2020-03
RESOLUTION OF THE BOARD OF DIRECTORS OF THE HIDDEN VALLEY LAKE
COMMUNITY SERVICES DISTRICT, COUNTY OF LAKE, STATE OF CALIFORNIA,
ADOPTING WATER AND SEWER CONNECTION FEES PURSUANT TO ORDINANCE 57.1

WHEREAS, pursuant to Ordinance 57.1, water, sewer, and recycled water rates are to be established from time-to-time to ensure that revenues cover expenses; and

WHEREAS, AB 3030 went into effect as of January 1, 2009, adding Section 53756 to the Government Code. Pursuant to Government Code Section 53756, the District may adopt a schedule of fees or charges that authorizes automatic adjustments that pass-through increases in wholesale charges for water or sewer adjustments for inflation for a period not to exceed five (5) years; and

WHEREAS, in order to cover actual costs incurred by the District in providing water, sewer and recycled water services to its customers, including funds for capital improvements and an appropriate level of operational reserves, will not produce revenues in excess of the costs of such service; and

WHEREAS, the District retained NBS in October of 2018 to conduct a water and sewer connection charge study to ensure these fees reflect the cost of capital infrastructure needed to serve new connections, or any person requesting additional capacity in the District's water and/or sewer utility. NBS also evaluated water, sewer and recycled water rates, which are addressed in a separate report; and

WHEREAS, said charges provided herein include facility capacity fees, which represent new connections' pro-rata share of the costs of system capacity and capital facilities needed to serve new connections of the utilities system and which are not revenues derived from operation of the system; and

WHEREAS, deferred revenue charges recapture the financing costs associated with the wastewater capacity necessary for new connections; and

WHEREAS, the Board is empowered, pursuant to Ordinance 57.1, to establish, impose and collect capacity fees, on new connections to the utilities system so that such new connections contribute a pro-rata share of the costs of system capacity and facilities needed to provide service for such new connections.

NOW, THEREFORE, the Board of Directors of the Hidden Valley Lake Community Services District (HVLCSO or District) do hereby RESOLVE, DETERMINE, AND ORDER as follows:

1. Water and Wastewater Connection Fees and Charges addressed at this public meeting as set forth in Exhibit "A", attached hereto and incorporated herein, are hereby approved and adopted.
2. The fees as set forth in the schedule attached hereto as Exhibit "A" represent a new connection's pro-rata share of the cost of providing system capacity and facilities to provide service for new connections and will produce revenues not in excess of those required to provide Water and Wastewater System facilities in order to serve the additional demands and needs of the utilities system.
3. The revenue derived from the Water and Wastewater Facilities Connection Fees as imposed and set forth in Exhibit "A" attached hereto, shall be used respectively for the exclusive purpose of providing facilities for water source, treatment and transmission of the Water System and for

Resolution 2020-03

facilities for treatment, transmission, disposal, and storage capacity of the Wastewater System. Such revenues shall not be used to replace existing components of either the Water System or the Wastewater System except to the extent that such replacement provides additional capacity to the Water System or the Wastewater System. Said revenues shall be maintained in separate funds and are not to be considered as or commingled with any other funds of the utilities system including, but not limited to, revenues derived from operation of the utilities system.

- 4. The capacity fees as set forth in Exhibit "A," attached hereto and made a part hereof by reference, are reasonable and are rationally related to the demand for system capacity and facilities generated by new connections.
- 5. Water and Wastewater Facilities Connection Fees as set forth in Exhibit "A" shall become effective immediately upon adoption of this Resolution.
- 6. All other previously approved capacity fees are rescinded upon adoption of this Resolution.

This Resolution shall be effective immediately upon adoption and shall remain in effect until changed by Board resolution.

Section 1: System Capacity Fees and Charges

Water Capacity Charges

Meter Install Fee	\$130
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Meter Size	Meter Cost	Maximum Potable Capacity Fee Per Meter
5/8, 3/4 Inch	\$329	\$9,137
1 Inch	\$448	\$22,842
1 1/2 Inch	\$702	\$45,684
2 Inch	\$944	\$73,095

Sewer Capacity Charge

Sewer Inspection Fee	\$100.00
Sewer Capacity Charges Per HEU*	\$9,537

*HEU: House Equivalent Unit

Section 2: Validity

If any section, subsection, clause, phrases, or portion of this Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of the Resolution.

Resolution 2020-03

Section 3: Effective Date

This Resolution shall be effective beginning July 1, 2020

Section 4: Repeal and Rescind

Upon adoption of this Resolution, all previous Connection Fees shall be repealed and rescinded, effective July 1, 2020.

PASSED AND ADOPTED on June 16, 2020 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

Jim Lieberman,
Vice President of the Board of Directors

ATTEST: _____
Penny Cuadras,
Secretary to the Board of Directors

DRAFT



HIDDEN VALLEY LAKE
COMMUNITY SERVICES DISTRICT

**WATER AND SEWER CONNECTION
FEE ANALYSIS**

ADOPTED MAY 19, 2020

October 2018

OFFICE LOCATIONS:

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October 2018

Mr. Kirk Cloyd
General Manager
Hidden Valley Lake Community Services District
19400 Hartmann Road
Hidden Valley Lake, CA 95467

RE: Water and Sewer Capacity Fee Study

Dear Mr. Cloyd,

Thank you for the opportunity to provide prepare this capacity fee report for the District. This study relied on available data and planning projections from the District, and followed generally accepted industry standards for calculating system capacity fees. While there are various methodologies that can and have been used, NBS' approach is a combined buy-in and incremental cost methodology that we believe most fairly represents the costs that new customers should pay when connecting to the District's water and sewer systems.

Based on this analysis, we are recommending increases to both water and sewer capacity fees, as follows:

- ✓ **Water Capacity Fees** – the District's current water capacity fee is \$3,800 for a typical residential customer. This has increased to \$9,137, and larger meters would be charged proportionally larger fees based on the hydraulic capacity of their meters. More details are provided in both Section 2 of this report and Appendix B.
- ✓ **Sewer Capacity Fees** – the District's current sewer capacity fee is \$7,600 for a typical residential sewer connection. This has increased to \$9,537, and non-residential customers would be charged proportionally larger fees based on the typical sewer effluent generation and the strength of their effluent (measured components of biochemical oxygen demand and total suspended solids). More details are provided in both Section 3 of this report and Appendix C.

The general assumptions and other details of this study are presented in the attached report. Please do not hesitate to call me at 530.297.5856 or via email at gclumpner@nbsgov.com if you have any questions. Thank you again for the opportunity to work with the District.

Sincerely,

A handwritten signature in blue ink that reads "Greg Clumpner".

Greg Clumpner
Director

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SECTION 1. PURPOSE AND INTRODUCTION TO THE STUDY

A. PURPOSE

Hidden Valley Lake Community Services District (District) retained NBS to conduct a water and sewer capacity charge¹ study to ensure these fees reflect the cost of capital infrastructure needed to serve new connections, or any person requesting additional capacity in the District’s water and/or sewer utility (referred to throughout as “future customers”). NBS also evaluated water, sewer and recycled water rates, which are addressed in a separate report.

“System capacity fees are intended to ensure new customers pay their fair share of capital costs.”

In developing the new capacity charges, NBS worked cooperatively with District staff. The capacity charges presented in this study reflect input provided by District staff about financial matters, available capacity in the water and sewer utilities, existing asset values, and planned capital improvements. The purpose of this report is to summarize the results of the study and present the updated capacity charges that may be imposed on new connections.

B. INTRODUCTION

California Government Code Section 66013 authorizes public agencies to impose “connection fees”, which are more appropriately called system capacity charges, on customers connecting to or upsizing their connection, to ensure that they pay their fair share of water and sewer utility assets, plus the costs of new facilities needed to serve them. In its simplest form, capacity charges are the result of dividing the cost (or value) of the Utility’s current system assets plus planned capital improvements, by the expected number of future customers.

Specifically, Section 66013 defines a capacity charge as a one-time “charge for public facilities in existence at the time a charge is imposed or charges for new public facilities to be acquired or constructed in the future that are of proportional benefit to the person or property being charged, including supply or capacity contracts for rights or entitlements, real property interests, and entitlements and other rights of the local agency involving capital expense relating to its use of existing or new public facilities.”

As a result, future customers connecting to the District’s water and/or sewer utilities would enter as equal participants, along with current customers, regarding their financial commitment and obligations to the utilities.

The capacity charges were calculated according to industry standard set by the American Water Works Association (AWWA)², using the methodology is referred to as the “Combination Approach”. Further, it should be noted that this study defines the *maximum* amount that could be charged for new connections, and the District’s Board of Directors retains the option to set a lower charge should they desire.

¹ Otherwise known as system development charges or connection fees.

² Method of calculating Capacity Charges (also known as System Development Charges) are set forth in the American Water Works Association’s Principles of Water Rates, Fees and Charges Seventh Edition (2017) pages 311 to 347.

C. SUMMARY OF UPDATED CAPACITY CHARGES

The recommended water and sewer capacity charges developed in this study are shown in Figure 1 and in Figure 2. Figure 1 represents the meter sizes the District currently serves. Larger meters, should they be needed in the future, are shown later in Section 2 – Water Capacity Charge Study. The methodology used to develop these capacity charges is discussed in the next two sections.

Figure 1. Updated Water Capacity Charges

Meter Size	Equivalency Factor		Maximum Unit Cost (\$/5/8-inch meter)	Maximum Potable Capacity Fee Per Meter
	Maximum Continuous Flow (GPM) ¹	Equivalency to 5/8 inch meter		
5/8 Inch	20	1.00	\$9,137	\$9,137
1 Inch	50	2.50	\$9,137	\$22,842
1 1/2 Inch	100	5.00	\$9,137	\$45,684
2 Inch	160	8.00	\$9,137	\$73,095

1. Source: *AWWA M1, Table B-1*. Assumes displacement meters for 1" through 2", Compound Class I for 3" through 8" and Turbine Class II for 10" through 12" meters.

Figure 2. Updated Sewer Capacity Charges

Capacity Fee Development	
Proposed Capacity Charge Per HEU	\$ 9,537

SECTION 2. WATER CAPACITY CHARGE STUDY

A. EXISTING CONNECTIONS AND PROJECTED FUTURE GROWTH

The District currently has approximately 2,550 equivalent 5/8-inch water meter connections; Figure 3 shows the current number of meters by size. The maximum flow rate, in gallons per minute (gpm) for each size meter is used to determine the number of equivalent 5/8-inch meter units currently connected, as shown in Figure 3.

Figure 3. Current Water Customers

Meter Size	Existing Potable Water Meters ¹	Meter Equivalence ²		Potable Water Meter Equivalent Units
		Maximum Flow (GPM)	Equivalency to 5/8 inch meter ³	
5/8 Inch	2,453	20	1.00	2,453
1 Inch	4	50	2.50	10
1 1/2 Inch	2	100	5.00	10
2 Inch	10	160	8.00	80
Total	2,469			2,553

1. Per District utility billing data, as of the Jan-Dec 2017 billing period. Recycled water customer is the only 12 inch meter.

2. Maximum flow rates from AWWA M1, Table B-1 (sixth edition), displacement meters.

3. Also known as hydraulic capacity factors.

Figure 4 shows existing and projected service numbers to the water utility. The anticipated future connections are based on the District's existing growth rate of 0.25%. NBS is not using the District's full buildout number of 3,281 connections according to the Water Master Plan, but instead the projected growth over the next 20 years.

Existing capacity in the District's water utility is allocated to current and future customers, as shown in **Error! Reference source not found.** The percentage assigned to current and future customers is based upon their assigned share of 5/8-inch meter equivalent units.

Figure 4. Existing and Projected Service Numbers

Demographic Statistics	Existing Total	Anticipated Future Connections ¹	No. Connections at Buildout ²	Allocation Factors		Cumulative Change	
				Existing Customers	New Customers	Number of Equivalent Units	% Increase
Equivalent 5/8-inch meters	2,553	124	2,677	95.4%	4.6%	124	4.9%

1. Anticipated future connections (equivalent meters) based on the District's existing growth of 0.25%.

2. While the District's 2014 Water Master Plan shows buildout is 3,281 connections, we have used the District's projected growth for the next 20 years.

B. EXISTING AND PLANNED ASSETS

The capital assets addressed in this study include existing assets and planned capital improvements (i.e. the buy-in and incremental assets). An important aspect of this study is how the value of existing utility assets is determined. For example, purchase price does not account for wear and tear, and current book value (purchase price less accumulated depreciation) typically underestimates the "true value" of

facilities, as it does not account for cost increases over time. Therefore, this study uses the replacement-cost-new-less-depreciation (RCNLD) approach shown in Figure 5 to estimate existing asset values, because it provides an up-to-date asset value that reflects estimated cost inflation and depreciation.³

Figure 5. Summary of Existing Asset Values – Water Utility

Asset Category ¹	Original Values ¹			Asset Cost Less Depreciation	System Buy-In Cost Basis ²
	Beginning Cost	Improvements	Depreciation to Date		
Water Fund					
ADMIN OFFICE BUILDING	\$ 322,533	\$ 68,608	\$ 324,949	\$ 66,192	\$ 135,300
BUILDINGS	19,158	3,719	21,380	1,497	2,325
FIELD ADMINISTRATION	-	546,473	236,643	309,830	545,664
FIELD EQUIPMENT	-	85,159	70,330	14,829	8,463
FLOOD CONTROL POND	153,312	246,835	214,622	185,525	194,348
GENERAL PLANT	20,627	-	20,627	-	-
GROUND WATER MONITORING	37,357	22,945	52,726	7,576	10,654
GROUNDWATER MODEL	-	86,458	86,458	-	-
LAND	22,454	-	-	22,454	22,454
OFFICE EQUIPMENT	286	161,330	161,616	-	-
OTHER PHYSICAL PROPERTY	-	5,575	5,575	-	-
RISK MANAGEMENT PLAN	-	17,412	17,412	-	-
ROAD IMPROVEMENT	-	4,766	2,449	2,317	3,288
STORAGE & MAINTENANCE BUILDING	-	49,156	49,156	-	-
TELEMETRY SYSTEM	30,707	-	30,707	-	-
VEHICLES	68,970	145,592	202,170	12,392	12,907
WASTEWATER SYSTEM PLAN	38,349	-	38,349	-	-
WATER BOOSTER STATIONS	9,800	-	9,800	-	-
WATER INTERTIES	155,310	-	90,616	64,694	137,831
WATER LINES	1,785,959	58,478	1,629,607	214,830	542,356
WATER METERS ³	-	-	-	-	-
WATER PUMPS	-	35,431	35,431	-	-
WATER SYSTEM IMPROVEMENT	-	3,098,065	901,895	2,196,169	3,634,847
WATER TANKS	802,404	39,747	509,874	332,277	671,205
WATER WELLS	26,071	409,097	435,168	-	-
Total Capital Facilities & Equipment	\$ 3,493,297	\$ 5,084,845	\$ 5,147,558	\$ 3,430,582	\$ 5,921,642

1. The source of the original asset cost and depreciation to date is the District's fixed asset list (depreciation is as of January 17, 2018).

Fixed asset data was provided in the following source files: #6 - FIXED ASSET Accounting Report.PREP 06.22.18.xlsx

2. Cost basis for consideration is calculated as replication value less accumulated depreciation.

3. As meters and services distributed on a per account basis as new customers connect, NBS assumes there is no additional capacity which they provide for new customers. Thus, asset values associated with meters and services are fully allocated to existing customers.

The Engineering News Record (ENR) Construction Cost Index and Handy-Whitman Index of Public Utility Construction Costs are cost inflation indices that track construction costs; these were used to estimate the replacement value of the existing assets. The RCNLD is calculated by escalating the book value of existing assets to current-day values using the ENR Construction Cost or Handy-Whitman Index. Figure summarizes the System Buy-In Cost Basis by Asset Category for the water utility. For this analysis, assets that have exceeded their useful life (as defined in the District's asset records) were considered to have no remaining value. This approach was used for all assets, except Land, which does not depreciate.

³ The RCNLD approach was used to estimate all existing asset values, except for land.

Most of the RCNLD costs were allocated to current customers based on the 95.4 percent allocation factor previously shown in **Error! Reference source not found.** (and the 4.6 percent allocation factor for future customers). Meters are allocated 100 percent to current customers, as meters do not benefit future customers and are for current connections. Figure shows the allocation of the \$5,641,842 in existing assets to current and future customers. Future customers are allocated \$274,509 of the existing water utility assets.

Figure 6. Existing Asset Values Allocated to Current and Future Customers – Water Utility

Asset Category ¹	System Buy-In Cost Basis ²	Allocation Basis (%) ^{3,4,5}			Distribution of Cost Basis (\$)		
		Exclude from Analysis	Existing Customers	New Customers	Exclude from Analysis	Existing Customers	New Customers
Water Fund							
ADMIN OFFICE BUILDING	\$ 135,300	0.0%	95.4%	4.6%	\$ -	\$ 129,032	\$ 6,269
BUILDINGS	2,325	0.0%	95.4%	4.6%	-	2,217	108
FIELD ADMINISTRATION	545,664	0.0%	95.4%	4.6%	-	520,382	25,282
FIELD EQUIPMENT	8,463	67.3%	31.2%	1.5%	5,696	2,639	128
FLOOD CONTROL POND	194,348	0.0%	95.4%	4.6%	-	185,343	9,005
GENERAL PLANT	-	0.0%	0.0%	0.0%	-	-	-
GROUND WATER MONITORING	10,654	0.0%	95.4%	4.6%	-	10,161	494
GROUNDWATER MODEL	-	0.0%	0.0%	0.0%	-	-	-
LAND	22,454	0.0%	95.4%	4.6%	-	21,414	1,040
OFFICE EQUIPMENT	-	0.0%	0.0%	0.0%	-	-	-
OTHER PHYSICAL PROPERTY	-	0.0%	0.0%	0.0%	-	-	-
RISK MANAGEMENT PLAN	-	0.0%	0.0%	0.0%	-	-	-
ROAD IMPROVEMENT	3,288	0.0%	95.4%	4.6%	-	3,135	152
STORAGE & MAINTENANCE BUILDING	-	0.0%	0.0%	0.0%	-	-	-
TELEMETRY SYSTEM	-	0.0%	0.0%	0.0%	-	-	-
VEHICLES	12,907	0.0%	95.4%	4.6%	-	12,309	598
WASTEWATER SYSTEM PLAN	-	0.0%	0.0%	0.0%	-	-	-
WATER BOOSTER STATIONS	-	0.0%	0.0%	0.0%	-	-	-
WATER INTERTIES	137,831	0.0%	95.4%	4.6%	-	131,445	6,386
WATER LINES	542,356	0.0%	95.4%	4.6%	-	517,227	25,129
WATER METERS ⁵	-	0.0%	0.0%	0.0%	8,355	-	406
WATER PUMPS	-	0.0%	0.0%	0.0%	-	-	-
WATER SYSTEM IMPROVEMENT	3,634,847	0.0%	95.4%	4.6%	-	3,466,433	168,413
WATER TANKS	671,205	0.0%	95.4%	4.6%	-	640,106	31,099
WATER WELLS	-	0.0%	0.0%	0.0%	-	-	-
Total Capital Facilities & Equipment	\$ 5,921,642	0.2%	95.3%	4.6%	\$ 14,051	\$ 5,641,842	\$ 274,509

1. The source of the original asset cost and depreciation to date is the District's fixed asset list (depreciation is as of June 30, 2017). Fixed asset data was provided in the following source files: #6 - FIXED ASSET Accounting Report.PREP 06.22.18.xlsx
2. Cost basis for consideration is calculated as replication value less accumulated depreciation.
3. Assets that have no remaining value have an allocation of 0% to existing and future users.
4. Refer to Exhibit 1. Demographics: proportionate allocation between existing and future users.
5. As meters and services distributed on a per account basis as new customers connect, NBS assumes there is no additional capacity which they provide for new customers. Thus, asset values associated with meters and services are fully allocated to existing customers.

The District's capital improvement plans for the water utility extend to 2022. Some of the cost estimates for planned future improvements used to calculate the system development component of the capacity charge are allocated using the same allocations found in **Error! Reference source not found.**, as these projects benefit both current and future customers. Figure includes a list of future projects; future customers are allocated \$834,990 of planned asset costs.

Figure 7. Planned Assets Allocated to Current and Future Customers – Water Utility

Facility / Equipment	Cost Estimate (2018-22) ¹	% Allocation			Distribution of Costs	
		Exclude from Analysis	Existing Customers	New Customers	Existing Customers	New Customers
General Plant						
Generators	\$ 2,172,000	0.0%	95.4%	4.6%	\$ 2,071,365	\$ 100,635
Office Equipment						
CCTV	\$ 135,000	0.0%	95.4%	4.6%	\$ 128,745	\$ 6,255
IT Upgrades	\$ 60,000	0.0%	95.4%	4.6%	\$ 57,220	\$ 2,780
SCADA Replacement	\$ 150,000	0.0%	95.4%	4.6%	\$ 143,050	\$ 6,950
Vehicles						
Vacc Truck	\$ 335,000	0.0%	95.4%	4.6%	\$ 319,478	\$ 15,522
Construction Truck	\$ 42,500	0.0%	95.4%	4.6%	\$ 40,531	\$ 1,969
Dump Truck	\$ 75,000	0.0%	95.4%	4.6%	\$ 71,525	\$ 3,475
Water Interties						
Water Plant VFDs	\$ 60,000	0.0%	95.4%	4.6%	\$ 57,220	\$ 2,780
Water Lines						
DS Line Replacement	\$ 2,709,000	0.0%	95.4%	4.6%	\$ 2,583,484	\$ 125,516
Water Pumps						
Hydrants	\$ 3,742,000	0.0%	95.4%	4.6%	\$ 3,568,622	\$ 173,378
Water Tanks						
Tanks	\$ 4,899,000	0.0%	95.4%	4.6%	\$ 4,672,015	\$ 226,985
Water Wells						
Well	\$ 3,642,000	0.0%	95.4%	4.6%	\$ 3,473,255	\$ 168,745
Total	\$ 18,021,500	0.0%	95.4%	4.6%	\$ 17,186,510	\$ 834,990

1. CIP from Source File: *Five Year Capital Improvement Plan.xlsx*. NBS assumes CIP will begin in FY 18/19.

2. Project costs are allocated to existing and future services based on projected growth in the system. See Demographics tab for detail.

The District may have additional capital projects that are needed to serve future developments, and the costs of such projects may be recovered through a development agreement. This will be evaluated on a case by case basis as part of the development review process.

C. ADJUSTMENTS TO THE COST BASIS

Before the capacity charges are developed, an adjustment is applied to the cost basis to account for existing cash reserves.

Existing cash reserves are treated as an asset because they were funded by current customers and are available to pay for capital and/or operating costs of the water utility that future customers will benefit from, once connected. The cash reserves are, in a sense, no different than any other water utility asset. The existing cash reserves allocated to current and future customers are summarized in Figure . This calculation also uses the same 4.6 percent allocation factor from **Error! Reference source not found.** Future Customers are allocated \$23,789 of cash reserves as shown in Figure .

Figure 8. Cash Reserves Allocated to Future Customers – Water Utility

Cash Reserves	Beginning Cash ¹	% Allocation		\$ - Allocation			Total
		Existing Customers	New Customers	Exclude from Analysis	Existing Customers	New Customers	
Cash in Existing Reserves ²	\$ 287,620	95.4%	4.6%	\$ -	\$ 274,294	\$ 13,326	\$ 287,620
Cash with Fiscal Agent (Restricted Bond Funds) ³	\$ 225,805	95.4%	4.6%	\$ -	\$ 215,343	\$ 10,462	\$ 225,805
Total Beginning Cash	\$ 513,425	95.4%	4.6%	\$ -	\$ 489,636	\$ 23,789	\$ 513,425

1. Water Operations Cash balance found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, Page 49.

2. Existing District reserve funds are for: Operating and Capital Improvements.

3. Includes Redemption Fund in Debt Reserve. Client needs to confirm this cash allocation.

The water utility is not including the current outstanding debt service towards the capacity charges; therefore, there is no adjustment to the cost basis in the capacity charge calculation to account for it.

D. CALCULATED CAPACITY CHARGES

The sum of the existing and planned asset values (that is, the system buy-in and system development costs), along with the adjustment for cash reserves, defines the total cost basis allocated to future customers. Figure summarizes this calculation.

Figure 9. Summary of Cost Basis Allocated to Future Customers – Water Utility

System Asset Values Allocated to New Customers	
<i>System Asset Values Allocated to New Customers</i>	
Existing System Buy-In ¹	\$ 274,509
Future System Expansion ²	834,990
Total: Existing & Future System Costs	\$ 1,109,499
<i>Adjustments to Cost Basis Allocated to New Customers:</i>	
Cash Reserves	\$ 23,789
Outstanding Long-Term Debt (Principal)	-
Total: Adjustments to Cost Basis	\$ 23,789
Total Adjusted Cost Basis for New Customers	\$ 1,133,288

The total adjusted cost basis is then divided by the number of future customers, measured in 5/8-inch meter equivalents, expected to connect to the water utility (that is, the 124-meter equivalents shown in **Error! Reference source not found.**) in order to determine the base capacity charge, for a 5/8-inch water meter. This calculation is shown in Figure 5.

Figure 5. Summary of New Base Capacity Charges – Water Utility

Summary of Costs Allocated to Water Capacity Fees	Adjusted System Cost Basis	Increase in 5/8-inch meter equivalents ³	Maximum Base Capacity Fee
Maximum Water Capacity Fee Per 5/8-inch meter	\$ 1,133,288	124	\$ 9,137
<i>Existing Capacity Fee Per 5/8-inch meter ⁴</i>			<i>\$ 3,800</i>

1. Refer to Table 4: Using System Buy In Costs and calculated Allocation factors for new customers.

2. Refer to Table 8: Distribution of Cost Basis

3. Refer to Exhibit 1. Demographics: for growth projections.

4. Source File: Fees and Charges.pdf

Based on the combined system buy-in and incremental capacity charge methodology, and the assumptions used in this analysis, NBS has calculated the new capacity charges for various water meter sizes, as shown in Figure 6. Although the District currently only serves meters up to two inches, meter sizes larger than 2-inches are provided for future references, should the District have customers wanting to connect with larger meters than the District currently serves. These updated capacity charges represent the maximum that the District can charge new connections.

Figure 6. Updated Water Capacity Charges

Meter Size	Equivalency Factor		Maximum Unit Cost (\$/5/8-inch meter)	Maximum Potable Capacity Fee Per Meter
	Maximum Continuous Flow (GPM) ¹	Equivalency to 5/8 inch meter		
<i>Displacement Meters</i>				
5/8 Inch	20	1.00	\$9,137	\$9,137
1 Inch	50	2.50	\$9,137	\$22,842
1 1/2 Inch	100	5.00	\$9,137	\$45,684
2 inch	160	8.00	\$9,137	\$73,095
<i>Compound Class I Meters</i>				
3 inch	320	16.00	\$9,137	\$146,189
4 inch	500	25.00	\$9,137	\$228,421
6 inch	1,000	50.00	\$9,137	\$456,842
<i>Turbine Class II Meters</i>				
8 inch	2,800	140.00	\$9,137	\$1,279,157
10 inch	4,200	210.00	\$9,137	\$1,918,735
12 inch	5,300	265.00	\$9,137	\$2,421,261

1. Source: AWWA M22, Table 6-1, page 62. Assumes displacement meters for 1" through 2", Compound Class I for 3" through 8" and Turbine Class II for 10" through 12" meters.

SECTION 3. SEWER CAPACITY CHARGE STUDY

A. EXISTING CONNECTIONS AND PROJECTED FUTURE GROWTH

There are currently 1,532 Housing Equivalent Units (HEUs) connected to the sewer utility. Figure 7 shows the number of current residential and commercial customers, and the estimated sewer flow produced by each. Individual customer impact on the sewer utility is measured in Housing Equivalent Units (HEU). Currently, the District utilizes HEU factors based on tenant types to calculate sewer capacity charges. One HEU is based on a single-family home generating 156 gallons per day of domestic wastewater.

Figure 7. Estimated Existing HEU's – Sewer Utility

Estimated Existing HEU's	
Number of Existing Accounts/HEU's ¹	1,534
Estimated Daily Flow per Account/HEU (gal)	156

1. Number of HEU's from Sewer Rate Model.

Note: SFR is 1 HEU per account, and non-SFR is per District assignment of HEUs (assumed to be 187 gallons per day average per *SEWER ORDINANCE 57.pdf*). For future HEU calculations, we recommend using average SFR winter consumption of 5.08 hcf/account/mo.

The District's sewer utility currently averages an annual effluent flow of 87.4 million gallons (MG). Figure 8 below shows the monthly effluent in the wastewater treatment plant for 2016 and 2017, which is used to determine the daily flow used to calculate number of HEU's that will connect to the sewer utility.

Figure 8. Historical Wastewater Treatment Plant Data

Month	Wastewater Treatment Plant Flow Data	
	Monthly Flow (MG)	
	2016	2017
January	10.01	19.96
February	6.37	14.94
March	11.09	7.29
April	6.18	6.92
May	5.67	5.72
June	5.39	5.22
July	5.39	5.59
August	5.34	5.31
September	5.19	5.21
October	5.97	5.35
November	6.57	5.49
December	8.97	5.69
Total	82.1	92.7
2016-2017 Average	87.4	

Source File: NBS Plant Data.xlsx. The average of 2016 and 2017 "Monthly Effluent" is used as a reasonable representation of customer effluent (flows).

Capacity in the District's sewer utility is allocated to current and future customers, as shown in Figure 9. The average daily flow calculated from the 2016-2017 annual effluent average equaled 0.239 MG, when multiplied by the percent increase in future customers equals the adjusted total capacity of the treatment

plant. The percentage of capacity assigned to current and future customers is based upon their assigned share of HEU's.

Figure 9. Allocation of Capacity to Current and Future Customers

Wastewater Treatment Plant Capacity	Used by Existing Customers	Projected Use by Future Customers ²	Adjusted Total Capacity ³
Existing vs. Potential Future Connections (MGD) ^{1,2}	0.239	0.012	0.251
Existing vs. Potential Future Connections (HEUs)	1,532	75	1,607
Capacity Allocation to Existing & Future Customers (%)	95.3%	4.7%	100%

1. Capacity used by existing customers, per average daily flow.
2. Capacity used by new customers is assumed to be based on 75 new connections over the next 20 years (reflects the 15 new connection from 2014 to 2018). The calculated from Peak Flow of 0.894 MGD is from File: *SSMP Final Draft April 2018, Page 5*.
3. This assumes the District will never reach full use of the system capacity and, therefore, the actual WWTP capacity is limited to total HEUs over the next 20 years (a reasonable planning period).

B. EXISTING AND PLANNED ASSETS

The same approach was used to estimate asset value for the sewer utility as was described previously in Section 2B for the water utility, as follows:

- The replacement-cost-new-less-depreciation (RCNLD) value of existing capital assets was used to determine the system buy-in component of the sewer capacity charge, except for land.
- The ENR Construction Cost Index and Handy-Whitman Index of Public Utility Construction Costs were used to estimate the RCNLD value of the existing sewer utility assets.

The resulting System Buy-In Cost Basis of existing sewer utility assets are summarized in Figure 10.

Figure 10. System Buy-in Cost Basis by Asset Category – Sewer Utility

Asset Category ¹	Original Values			Asset Cost Less Depreciation	Replacement Values		System Buy-In Cost Basis ²
	Asset Cost	Improvements	Depreciation to Date		Asset Cost	Depreciation to Date	
Sewer Fund							
ADMIN OFFICE BUILDING	\$ 120,691	\$ 55,262	\$ 144,486	\$ 31,467	\$ 297,915	\$ 240,007	\$ 57,909
DECERTIFICATION SWR PDS	-	247,741	117,227	130,514	377,577	172,670	204,907
FIELD ADMINISTRATION/SHOP BUILDING	-	2,551,732	722,711	1,829,021	3,310,395	926,045	2,384,350
FIELD EQUIPMENT	43,475	590,355	467,589	166,240	466,289	275,714	190,575
LAND	580,596	4,868	4,868	580,596	580,596	-	580,596
OFFICE EQUIPMENT	23,016	151,960	174,976	-	-	-	-
ONSITE HOUSING	-	213,684	213,684	-	-	-	-
OTHER PHYSICAL PROPERTY	2,653	-	2,653	-	-	-	-
PROPERTY RIGHTS	47,600	-	47,600	-	47,600	47,600	-
RECLAIMED WATER DISPOSAL	878,504	125,247	713,602	290,149	1,665,028	1,180,803	484,225
RISK MANAGEMENT PLAN	-	26,993	24,519	2,474	13,103	9,818	3,285
ROAD IMPROVEMENT	-	58,340	42,772	15,568	63,659	46,550	17,109
SEWER LIFT STATIONS	40,100	321,280	135,736	225,645	336,965	100,304	236,661
SEWER LINES-OLD SYSTEM	182,200	25,682	201,791	6,092	22,208	15,282	6,926
SEWER II EXPANSION	34,423	-	22,153	12,270	90,615	58,315	32,300
SHOP BUILDING AT SEWER PLANT	-	48,872	48,872	-	-	-	-
VEHICLES	65,199	162,632	203,454	24,378	43,470	18,079	25,391
WASTEWATER COLLECTION FAC	5,942,089	321,210	4,306,055	1,957,244	10,373,151	7,144,121	3,229,030
WASTEWATER TREATMENT FAC	10,216,536	38,074	7,460,343	2,794,267	15,694,060	10,977,564	4,716,497
Total Capital Facilities & Equipment	\$ 18,177,082	\$ 4,943,934	\$ 15,055,091	\$ 8,065,925	\$ 33,382,632	\$ 21,212,871	\$ 12,169,760

All the RCNLD costs were allocated to current customers based on the 95.3 percent allocation factor shown in Figure 9 (and the 4.7 percent allocation factor for new future customers). Figure 11 shows the allocation of the \$11.6 million in existing sewer utility assets to current and future customers. Future customers are allocated \$567,267 of the existing sewer utility assets as shown in Figure 11.

Figure 11. Existing Asset Values Allocated to Current and Future Customers – Sewer Utility

Asset Category	System Buy-In Cost Basis ²	Allocation Basis (%) ³			Distribution of Cost Basis (\$)	
		Exclude from Analysis	Existing Customers	New Customers	Existing Customers	New Customers
Sewer Fund						
ADMIN OFFICE BUILDING	\$ 57,909	0%	95.3%	4.7%	\$ 55,209	\$ 2,699
DECERTIFICATION SWR PDS	204,907	0%	95.3%	4.7%	195,355	9,551
FIELD ADMINISTRATION/SHOP BUILDING	2,384,350	0%	95.3%	4.7%	2,273,209	111,141
FIELD EQUIPMENT	190,575	0%	95.3%	4.7%	181,692	8,883
LAND	580,596	0%	95.3%	4.7%	553,533	27,063
OFFICE EQUIPMENT	-	0%	0.0%	0.0%	-	-
ONSITE HOUSING	-	0%	0.0%	0.0%	-	-
OTHER PHYSICAL PROPERTY	-	0%	0.0%	0.0%	-	-
PROPERTY RIGHTS	-	0%	0.0%	0.0%	-	-
RECLAIMED WATER DISPOSAL	484,225	0%	95.3%	4.7%	461,654	22,571
RISK MANAGEMENT PLAN	3,285	0%	95.3%	4.7%	3,132	153
ROAD IMPROVEMENT	17,109	0%	95.3%	4.7%	16,312	798
SEWER LIFT STATIONS	236,661	0%	95.3%	4.7%	225,629	11,031
SEWER LINES-OLD SYSTEM	6,926	0%	95.3%	4.7%	6,603	323
SEWER II EXPANSION	32,300	0%	95.3%	4.7%	30,794	1,506
SHOP BUILDING AT SEWER PLANT	-	0%	0.0%	0.0%	-	-
VEHICLES	25,391	0%	95.3%	4.7%	24,207	1,184
WASTEWATER COLLECTION FAC	3,229,030	0%	95.3%	4.7%	3,078,516	150,514
WASTEWATER TREATMENT FAC	4,716,497	0%	95.3%	4.7%	4,496,647	219,849
Total Capital Facilities & Equipment	\$ 12,169,760	0%	95.3%	4.7%	\$ 11,602,494	\$ 567,267

1. Asset Data provided by the staff in source file: #6 - FIXED ASSET Accounting Report.PREP 06.22.18.xlsx, and these assets are included in the analysis.

2. Estimated Replacement Cost is calculated by escalating the remaining values (net of depreciation) from service date to January 2018 values using historical cost inflation factors from the Handy-Whitman Index of Public Utility Construction Costs, for Water Utility Construction in the Pacific Region. Estimated Replacement Cost is used in the capacity fee calculation is known as the "System Buy-in Cost Basis."

3. Allocation to existing and new customers developed in collaboration with City staff. Refer to Table 5: Existing and Future Customers for the detailed calculations.

The District’s capital improvement plans extend to 2022. Some of the estimated cost of planned future improvements used to calculate the system development component of the capacity charge are allocated using the allocations found in Figure 9, as these projects benefit current and future customers. However, there is one project, Tideflex for Stormwater, which will only proceed if Prop 1 Grant and SRF Loans are secured for 50 percent of the funding. Figure 12 shows a list of future capital projects the District is planning for, that will either expand capacity, or extend the useful life assets so that they will be available to serve current and future customers. Future customers are allocated \$71,574 of planned project costs.

Figure 12. Planned Asset Values Allocated to Current and Future Customers – Sewer Utility

Facility / Equipment	Cost Estimate (2018-22) ¹	External Funding	System Development Cost Basis ¹	% Allocation ²		Distrib. of Cost Basis (\$)	
				Existing Customers	New Customers	Existing Customers	New Customers
General Plant							
IT Upgrades	\$ 60,000	\$ -	\$ 60,000	95%	5%	\$ 57,203	\$ 2,797
SCADA Replacement	\$ 150,000	\$ -	\$ 150,000	95%	5%	\$ 143,008	\$ 6,992
Primary Treatment							
Chlorine Tank Auto Shut Off	\$ 32,000	\$ -	\$ 32,000	95%	5%	\$ 30,508	\$ 1,492
Install Security Fencing at Lift Station 1 & 4	\$ 10,000	\$ -	\$ 10,000	95%	5%	\$ 9,534	\$ 466
Prelim. Design - Chlorine Disinfection Facility	\$ 45,000	\$ -	\$ 45,000	95%	5%	\$ 42,902	\$ 2,098
Sample Stations	\$ 10,000	\$ -	\$ 10,000	95%	5%	\$ 9,534	\$ 466
Risk Management Plan							
Manhole Rehab	\$ 250,000	\$ -	\$ 250,000	95%	5%	\$ 238,347	\$ 11,653
Sewer collection lines							
CS Line Replacement	\$ 350,000	\$ -	\$ 350,000	95%	5%	\$ 333,686	\$ 16,314
Pump Replacement/Overhaul	\$ 112,500	\$ -	\$ 112,500	95%	5%	\$ 107,256	\$ 5,244
Repair Sewer Lateral Leaks	\$ 40,000	\$ -	\$ 40,000	95%	5%	\$ 38,135	\$ 1,865
Tidflex - Stormwater (50% grant funded) ³	\$ 658,000	\$ 329,000	\$ 329,000	95%	5%	\$ 313,664	\$ 15,336
Vehicles							
Backhoe	\$ -	\$ -	\$ -	95%	5%	\$ -	\$ -
Construction Truck	\$ 72,000	\$ -	\$ 72,000	95%	5%	\$ 68,644	\$ 3,356
Dump Truck	\$ 75,000	\$ -	\$ 75,000	95%	5%	\$ 71,504	\$ 3,496
Total	\$ 1,864,500	\$ 329,000	\$ 1,535,500	95%	5%	\$1,463,926	\$ 71,574

1. Capital project costs for next 5 years were provided by City Staff in source files: #1 - Approved 2017-2018 budget.pdf and Five Year Capital Improvement Plan.xlsx

2. Project costs are allocated to existing and future services based on projected growth in the system. See Demographics tab for detail.

3. Currently funded with Sewer Revenue and is used to protect Sewer Infrastructure. Although the project will not proceed unless Prop 1 Grant and SRF Loan are approved it is planned at this time. However, only need to finance 50% (for SRF Loan repayment).

As noted previously, the District may have additional capital projects that are needed to serve future development, and the cost of such projects may be recovered through a development agreement. This will be evaluated on a case by case basis as part of the development review process.

C. ADJUSTMENTS TO THE COST BASIS

Before the capacity charges are developed, an adjustment is applied to the cost basis to account for existing cash reserves. Existing cash is treated as an asset, since it was contributed by current customers and is available to pay for capital and/or operating costs of the sewer utility, which future customers will benefit from. The cash is, in a sense, no different from any other asset and therefore, are allocated to current and future customers as summarized in Figure . Cash is allocated according to the percentages in Figure 9. The allocation of cash reserves to future customers is \$76,411.

Figure 18. Cash Allocated to Existing and Future Customers

Cash Reserves	Beginning Cash Balance	% Allocation		\$ - Allocation	
		Existing Customers	New Customers	Existing Customers	New Customers
Sewer Operating Reserve & CIP Reserve ^{1,2}	\$ 930,139	95.3%	4.7%	\$ 886,783	\$ 43,356
Debt Reserve Fund ³	\$ 709,123	95.3%	4.7%	\$ 676,069	\$ 33,054
Total	\$ 1,639,262	95.3%	4.7%	\$ 1,562,851	\$ 76,411

1. Sewer Operations Cash balance found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, Page 44.

2. Sewer Capital R&R Cash balance found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, Page 44. Includes Capital Facility Reserve :

3. Sewer debt service cash balances include debt and bond funds; found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, p 44.

Balance includes: 1995-2 Bond Redemption, USDA Solar Loan, USDA Reserve, All Bond Admin, Assessments and FA Investments.

The sewer utility is not including the current outstanding debt service towards the capacity charges; therefore, there is no adjustment to the cost basis in the capacity charge calculation to account for it.

D. CALCULATED CAPACITY CHARGES

The sum of the existing asset values (that is, the system buy-in and system development components), along with the adjustments for existing cash reserves, defines the total cost basis allocated to future customers as shown in Figure .

Figure 19. Summary of Costs Allocated to Future Customers – Sewer Utility

System Asset Values Allocated to New Customers	
<i>System Asset Values Allocated to New Customers</i>	
Existing System Buy-In ¹	\$ 567,267
Future System Expansion ²	71,574
Total: Existing & Future System Costs	\$ 638,841
<i>Adjustments to Cost Basis Allocated to New Customers:</i>	
Cash Reserves ³	\$ 76,411
Outstanding Long-Term Debt (Principal) Allocated to Future Users	-
Total: Adjustments to Cost Basis	\$ 76,411
Total: Cost Basis for New Customers	\$ 715,251

The Total Adjusted Cost Basis for future customers is divided by the planned customer growth (measured in HEU's) over the next 20 years. This represents the maximum that the District could charge per HEU for future customers as shown in Figure 13.

Figure 13. Summary of New Base Capacity Charges – Sewer Utility

Capacity Fee Development	
Cost Basis for New Customers	\$ 715,251
Projected Customer Growth (in HEU's) ⁴	75
Proposed Capacity Charge Per HEU	\$ 9,537
<i>Existing Capacity Charge Per HEU</i>	<i>\$ 7,600</i>

A connecting single-family residential customer represents one HEU. The HEUs assigned to a given customer is a measure of expected impact on the sewer utility relative to the customer's expected flow and the strength of effluent (BOD and TSS). For example, each single-family home is assigned one HEU, and a customer who puts twice the demand on the sewer system (in terms of collection and treatment) would be assigned two HEUs. The number of HEUs for new connections with non-typical strength factors need to factor in the additional effluent loadings – an example of this calculation is provided in the Appendix B.

SECTION 4. RECOMMENDATIONS AND NEXT STEPS

A. CONSULTANT RECOMMENDATIONS

NBS recommends the District take the following actions:

- **Approve and Accept this Study Report:** NBS recommends the Board of Directors formally approve and adopt this Study and its recommendations and proceed with the steps outlined below to implement the new capacity charges. This will provide documentation of the study and the basis for adopting the new capacity charges.
- **Implement New Water and Sewer Capacity Charges:** Based on the analysis presented in this report, the District's Board of Directors should implement the new capacity charge of ***\$9,137 per 5/8-inch water meter equivalent*** unit and ***\$9,537 per sewer HEU*** recommended in this report.
- **Periodically Review Capacity Fees:** Any time an Agency adopts capacity fees, they should be periodically reviewed to incorporate new capital facility plans and/or significant repair and replacement projects. This will help ensure the fees generate sufficient revenue to cover the cost of capital projects, support the fiscal health of the District, and future customers bear their fair share of infrastructure costs.

B. PRINCIPAL ASSUMPTIONS AND CONSIDERATIONS

In preparing this report and the recommendations included herein, NBS has relied on a number of principal assumptions and considerations with regard to financial matters, number of customer accounts, asset records, planned capital improvements, and other conditions and events that may occur in the future. This information and assumptions were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this Study and its recommendations, some assumptions will invariably not materialize as stated herein or may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

APPENDIX A: ABBREVIATIONS AND ACRONYMS

Abbreviations and Acronyms

AAF	Average Annual Flow
AF	Acre Foot, equal to 435.6 HCF/CCF or 325,851 gallons
Alt.	Alternative
Avg.	Average
AWWA	American Water Works Association
BOD	Biochemical Oxygen Demand
CA	Customer
CAP	Capacity
CCI	Construction Cost Index
COM	Commodity
Comm.	Commercial
COS	Cost of Service
COSA	Cost of Service Analysis
CPI	Consumer Price Index
CIP	Capital Improvement Program
DU	Dwelling Unit
ENR	Engineering News Record
EDU	Equivalent Dwelling Unit
FP	Fire Protection
FY	Fiscal Year (e.g., July 1 st to June 30 th)
GPD	Gallons per Day
GPM	Gallons per Minute
HCF	Hundred Cubic Feet; equal to 748 gallons or 1 CCF
HEU	Housing Equivalent Unit
Ind.	Industrial
Irr.	Irrigation
MFR	Multi-Family Residential
MGD	Million Gallons per Day
MG/L	Milligrams per Liter
Mo.	Month
Muni.	Municipal
NPV	Net Present Value
O&M	Operational & Maintenance Expenses
Prop 218	Proposition 218 – State Constitutional amendment restricting local government revenue collections.
Rev.	Revenue
RTS	Readiness-to-Serve
R&R	Rehabilitation & Replacement
SFR	Single Family Residential
SRF Loan	State Revolving Fund Loan
SWRCB	State Water Resources Control Board
TSS / SS	Total Suspended Solids
WWTP	Waste Water Treatment Plant

APPENDIX B: TABLES FROM THE WATER CAPACITY CHARGE STUDY

METER EQUIVALENT UNITS

Meter Size	Existing Potable Water Meters ¹	Meter Equivalence ²		Potable Water Meter Equivalent Units
		Maximum Flow (GPM)	Equivalency to 5/8 inch meter ³	
5/8 Inch	2,453	20	1.00	2,453
1 Inch	4	50	2.50	10
1 1/2 Inch	2	100	5.00	10
2 Inch	10	160	8.00	80
Total	2,469			2,553

1. Per District utility billing data, as of the Jan-Dec 2017 billing period. Recycled water customer is the only 12 inch meter.
2. Maximum flow rates from *AWWAM1, Table B-1 (sixth edition)*, displacement meters.
3. Also known as hydraulic capacity factors.

EXISTING AND PROJECTED SERVICE NUMBERS

Demographic Statistics	Existing Total	Anticipated Future Connections ¹	No. Connections at Buildout ²	Allocation Factors		Cumulative Change	
				Existing Customers	New Customers	Number of Equivalent Units	% Increase
Equivalent 5/8-inch meters	2,553	124	2,677	95.4%	4.6%	124	4.9%

1. Anticipated future connections (equivalent meters) based on the District's existing growth of 0.25%.
2. While the District's 2014 Water Master Plan shows buildout is 3,281 connections, we have used the District's projected growth for the next 20 years.

EXISTING ASSETS, ORIGINAL AND REPLACEMENT COST

Asset Category ¹	Original Values ¹			Asset Cost Less Depreciation	Replacement Values ⁴		System Buy-In Cost Basis ²
	Beginning Cost	Improvements	Depreciation to Date		Beginning Cost	Depreciation to Date	
Water Fund							
ADMIN OFFICE BUILDING	\$ 322,533	\$ 68,608	\$ 324,949	\$ 66,192	\$ 731,367	\$ 596,066	\$ 135,300
BUILDINGS	19,158	3,719	21,380	1,497	6,230	3,905	2,325
FIELD ADMINISTRATION	-	546,473	236,643	309,830	913,046	367,382	545,664
FIELD EQUIPMENT	-	85,159	70,330	14,829	38,667	17,248	8,463
FLOOD CONTROL POND	153,312	246,835	214,622	185,525	258,978	64,630	194,348
GENERAL PLANT	20,627	-	20,627	-	-	-	-
GROUND WATER MONITORING	37,357	22,945	52,726	7,576	35,369	24,715	10,654
GROUNDWATER MODEL	-	86,458	86,458	-	-	-	-
LAND	22,454	-	-	22,454	22,454	-	22,454
OFFICE EQUIPMENT	286	161,330	161,616	-	-	-	-
OTHER PHYSICAL PROPERTY	-	5,575	5,575	-	-	-	-
RISK MANAGEMENT PLAN	-	17,412	17,412	-	-	-	-
ROAD IMPROVEMENT	-	4,766	2,449	2,317	6,762	3,475	3,288
STORAGE & MAINTENANCE BUILDING	-	49,156	49,156	-	-	-	-
TELEMETRY SYSTEM	30,707	-	30,707	-	-	-	-
VEHICLES	68,970	145,592	202,170	12,392	22,089	9,182	12,907
WASTEWATER SYSTEM PLAN	38,349	-	38,349	-	-	-	-
WATER BOOSTER STATIONS	9,800	-	9,800	-	-	-	-
WATER INTERTIES	155,310	-	90,616	64,694	336,348	198,517	137,831
WATER LINES	1,785,959	58,478	1,629,607	214,830	1,172,576	630,220	542,356
WATER METERS ³	-	-	-	-	-	-	-
WATER PUMPS	-	35,431	35,431	-	-	-	-
WATER SYSTEM IMPROVEMENT	-	3,098,065	901,895	2,196,169	5,049,394	1,414,547	3,634,847
WATER TANKS	802,404	39,747	509,874	332,277	1,450,211	779,007	671,205
WATER WELLS	26,071	409,097	435,168	-	-	-	-
Total Capital Facilities & Equipment	\$ 3,493,297	\$ 5,084,845	\$ 5,147,558	\$ 3,430,582	\$ 10,043,491	\$ 4,108,893	\$ 5,921,642

1. The source of the original asset cost and depreciation to date is the District's fixed asset list (depreciation is as of January 17, 2018). Fixed asset data was provided in the following source files: #6 - FIXED ASSET Accounting Report.PREP 06.22.18.xlsx
2. Cost basis for consideration is calculated as replication value less accumulated depreciation.
3. As meters and services distributed on a per account basis as new customers connect, NBS assumes there is no additional capacity which they provide for new customers. Thus, asset values associated with meters and services are fully allocated to existing customers.
4. Replacement values are calculated by escalating the original values (from District's fixed asset report) from service date to 2018 using historical inflation factors from the Handy-Whitman Index of Public Utility Construction Costs, for Water Utility Construction - Pacific Region.

ALLOCATION OF DEBT TO EXISTING AND FUTURE USERS

Bond Issue	Outstanding Principal	% Allocation		\$ - Allocation			Total
		Existing Customers	New Customers	Exclude from Analysis	Existing Customers	New Customers	
CIEDB 2002 Agreement - \$3,000,000 ¹	\$1,814,480	95.4%	4.6%	\$ -	\$ 1,730,410	\$ 84,070	\$ 1,814,480
Grand Total	\$1,814,480	95.4%	4.6%	\$ -	\$ 1,730,410	\$ 84,070	\$ 1,814,480

1. Outstanding bond principal is allocated to existing and future services based on projected growth in the system. See Demographics tab for detail.

ALLOCATION OF CASH RESERVES TO EXISTING AND FUTURE USERS

Cash Reserves	Beginning Cash ¹	% Allocation		\$ - Allocation			Total
		Existing Customers	New Customers	Exclude from Analysis	Existing Customers	New Customers	
Cash in Existing Reserves ²	\$ 287,620	95.4%	4.6%	\$ -	\$ 274,294	\$ 13,326	\$ 287,620
Cash with Fiscal Agent (Restricted Bond Funds) ³	\$ 225,805	95.4%	4.6%	\$ -	\$ 215,343	\$ 10,462	\$ 225,805
Total Beginning Cash	\$ 513,425	95.4%	4.6%	\$ -	\$ 489,636	\$ 23,789	\$ 513,425

1. Water Operations Cash balance found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, Page 49.

2. Existing District reserve funds are for: Operating and Capital Improvements.

3. Includes Redemption Fund in Debt Reserve. **Client needs to confirm this cash allocation.**

OUTSTANDING DEBT SERVICE FOR WATER SYSTEM INFRASTRUCTURE & ASSETS:

CIEDB 2002 Agreement - \$3,000,000 ¹

Fiscal Year	Principal	Interest	Annual Fee	NPV of Interest Payments ²
2013/14	\$ 86,627	79,304	6,836	\$ 81,683
2014/15	\$ 89,642	76,288	6,577	\$ 76,288
2015/16	\$ 92,761	73,170	6,308	\$ 73,170
2016/17	\$ 95,989	69,942	6,029	\$ 69,942
2017/18	\$ 99,330	66,601	5,741	\$ 64,661
2018/19	\$ 102,787	63,144	5,443	\$ 59,519
2019/20	\$ 106,363	59,567	5,135	\$ 54,512
2020/21	\$ 110,065	55,865	4,816	\$ 49,635
2021/22	\$ 113,895	52,035	4,486	\$ 44,886
2022/23	\$ 117,859	48,072	4,144	\$ 40,260
2023/24	\$ 121,960	43,970	3,791	\$ 35,752
2024/25	\$ 126,204	39,726	3,425	\$ 31,360
2025/26	\$ 130,596	35,334	3,046	\$ 27,081
2026/27	\$ 135,141	30,790	2,654	\$ 22,911
2027/28	\$ 139,844	26,086	2,249	\$ 18,845
2028/29	\$ 144,711	21,220	1,829	\$ 14,883
2029/30	\$ 149,747	16,184	1,395	\$ 11,021
2030/31	\$ 154,958	10,972	946	\$ 7,254
2031/32	\$ 160,350	5,580	481	\$ 3,582
2032/33				\$ -
Total	\$ 2,009,799	\$ 645,088	\$ 55,610	\$ 705,561

1. CIEDB-02 - Official Statement describes the loan was used primarily to fund the HVL Water System Improvements.

Source file: #9 - Loan Docs Fund 218 - CIEDB 2002.pdf.

2. **The Net Present Value of interest payments discounted at 3% per year.**

PLANNED CAPITAL PROJECTS

Facility / Equipment	Cost Estimate (2018-22) ¹	% Allocation			Distribution of Costs	
		Exclude from Analysis	Existing Customers	New Customers	Existing Customers	New Customers
General Plant						
Generators	\$ 2,172,000	0.0%	95.4%	4.6%	\$ 2,071,365	\$ 100,635
Office Equipment						
CCTV	\$ 135,000	0.0%	95.4%	4.6%	\$ 128,745	\$ 6,255
IT Upgrades	\$ 60,000	0.0%	95.4%	4.6%	\$ 57,220	\$ 2,780
SCADA Replacement	\$ 150,000	0.0%	95.4%	4.6%	\$ 143,050	\$ 6,950
Vehicles						
Vacc Truck	\$ 335,000	0.0%	95.4%	4.6%	\$ 319,478	\$ 15,522
Construction Truck	\$ 42,500	0.0%	95.4%	4.6%	\$ 40,531	\$ 1,969
Dump Truck	\$ 75,000	0.0%	95.4%	4.6%	\$ 71,525	\$ 3,475
Water Interties						
Water Plant VFDs	\$ 60,000	0.0%	95.4%	4.6%	\$ 57,220	\$ 2,780
Water Lines						
DS Line Replacement	\$ 2,709,000	0.0%	95.4%	4.6%	\$ 2,583,484	\$ 125,516
Water Pumps						
Hydrants	\$ 3,742,000	0.0%	95.4%	4.6%	\$ 3,568,622	\$ 173,378
Water Tanks						
Tanks	\$ 4,899,000	0.0%	95.4%	4.6%	\$ 4,672,015	\$ 226,985
Water Wells						
Well	\$ 3,642,000	0.0%	95.4%	4.6%	\$ 3,473,255	\$ 168,745
Total	\$ 18,021,500	0.0%	95.4%	4.6%	\$ 17,186,510	\$ 834,990

1. CIP from Source File: *Five Year Capital Improvement Plan.xlsx*. NBS assumes CIP will begin in FY 18/19.

2. Project costs are allocated to existing and future services based on projected growth in the system. See Demographics tab for detail.

DEVELOPMENT OF THE MAXIMUM CAPACITY FEE FOR A 5/8-INCH METER EQUIVALENT

System Asset Values Allocated to New Customers	
<i>System Asset Values Allocated to New Customers</i>	
Existing System Buy-In ¹	\$ 274,509
Future System Expansion ²	834,990
Total: Existing & Future System Costs	\$ 1,109,499
<i>Adjustments to Cost Basis Allocated to New Customers:</i>	
Cash Reserves	\$ 23,789
Outstanding Long-Term Debt (Principal)	-
Total: Adjustments to Cost Basis	\$ 23,789
Total Adjusted Cost Basis for New Customers	\$ 1,133,288

Summary of Costs Allocated to Water Capacity Fees	Adjusted System Cost Basis	Increase in 5/8-inch meter equivalents ³	Maximum Base Capacity Fee
Maximum Water Capacity Fee Per 5/8-inch meter	\$ 1,133,288	124	\$ 9,137
<i>Existing Capacity Fee Per 5/8-inch meter ⁴</i>			\$ 3,800

1. Refer to Table 4: Using System Buy In Costs and calculated Allocation factors for new customers.

2. Refer to Table 8: Distribution of Cost Basis

3. Refer to Exhibit 1. Demographics: for growth projections.

4. Source File: Fees and Charges.pdf

WATER CAPACITY FEES BASED ON METER SIZE

Meter Size	Equivalency Factor		Maximum Unit Cost (\$/5/8-inch meter)	Maximum Potable Capacity Fee Per Meter
	Maximum Continuous Flow (GPM) ¹	Equivalency to 5/8 inch meter		
<i>Displacement Meters</i>				
5/8 Inch	20	1.00	\$9,137	\$9,137
1 Inch	50	2.50	\$9,137	\$22,842
1 1/2 Inch	100	5.00	\$9,137	\$45,684
2 inch	160	8.00	\$9,137	\$73,095
<i>Compound Class I Meters</i>				
3 inch	320	16.00	\$9,137	\$146,189
4 inch	500	25.00	\$9,137	\$228,421
6 inch	1,000	50.00	\$9,137	\$456,842
<i>Turbine Class II Meters</i>				
8 inch	2,800	140.00	\$9,137	\$1,279,157
10 inch	4,200	210.00	\$9,137	\$1,918,735
12 inch	5,300	265.00	\$9,137	\$2,421,261

1. Source: AWWA M22, Table 6-1, page 62. Assumes displacement meters for 1" through 2", Compound Class I for 3" through 8" and Turbine Class II for 10" through 12" meters.

APPENDIX C: TABLES FROM THE SEWER CAPACITY CHARGE STUDY

HISTORICAL WASTEWATER TREATMENT PLANT DATA

Month	Wastewater Treatment Plant Flow Data	
	Monthly Flow (MG)	
	2016	2017
January	10.01	19.96
February	6.37	14.94
March	11.09	7.29
April	6.18	6.92
May	5.67	5.72
June	5.39	5.22
July	5.39	5.59
August	5.34	5.31
September	5.19	5.21
October	5.97	5.35
November	6.57	5.49
December	8.97	5.69
Total	82.1	92.7
2016-2017 Average	87.4	

Effluent⁴ is used as a reasonable representation of customer effluent (flows).

SUMMARY OF WASTEWATER TREATMENT PLANT FLOW DATA

2016-2017 Average Total Annual Flow (MG)	87.4
2016-2017 Average Daily Flow (MGD)	0.239
2016-2017 Average Total Annual Flow (mil. gal.)	87,403,500

ESTIMATED EXISTING HEU'S IN THE SEWER UTILITY

Estimated Existing HEU's	
Number of Existing Accounts/HEU's ¹	1,534
Estimated Daily Flow per Account/HEU (gal)	156

1. Number of HEU's from Sewer Rate Model.

Note: SFR is 1 HEU per account, and non-SFR is per District assignment of HEUs (assumed to be 187 gallons per day average per *SEWER ORDINANCE 57.pdf*). For future HEU calculations, we recommend using average SFR winter consumption of 5.08 hcf/account/mo.

ESTIMATED WASTEWATER TREATMENT PLANT CAPACITY

Wastewater Treatment Plant Capacity	Used by Existing Customers	Projected Use by New Customers ²	Adjusted Total Capacity ³
Existing vs. Potential Future Connections (MGD) ^{1,2}	0.239	0.011	0.251
Existing vs. Potential Future Connections (HEUs)	1,534	75	1,609
Capacity Allocation to Existing & New Customers (%)	96%	4%	100%

1. Capacity used by existing customers, per Table 2.

2. Capacity used by new customers is assumed to be based on 75 new connections over the next 20 years (reflects the 15 new connection from 2014 to 2018). The calculated from Peak Flow of 0.894 MGD is from File: *SSMP Final Draft April 2018, Page 5*.

3. This assumes the District will never reach full use of the system capacity and, therefore, the actual WWTP capacity is limited to total HEUs over the next 20 years (a reasonable planning period).

EXISTING AND FUTURE CUSTOMERS

Demographic Statistics	Existing vs. Future Connections			Existing vs. Future Connections (%)		
	Existing Customers ¹	Potential Future Customers ²	Total	Existing Customers ¹	Future Customers ²	Total
Connections in Housing Equivalent Units (HEU's)	1,534	75	1,609	95%	5%	100%

1. Number of HEU's from source file: *NBS 2018 - #17_Manipulated Sewer Billing Data.xlsx*

2. Based on calculation in Table 4 for new customers and estimated daily flow per account in Table 3. This assumes 75 new connections over the next 20 years, based on 15 new connection from 2014 to 2018.

EXISTING ASSETS, ORIGINAL AND REPLACEMENT COST ¹

Asset Category ¹	Original Values			Asset Cost Less Depreciation	Replacement Value	System Buy-In Cost Basis ²
	Asset Cost	Improvements	Depreciation to Date		Depreciation to Date	
Sewer Fund						
ADMIN OFFICE BUILDING	\$ 120,691	\$ 55,262	\$ 144,486	\$ 31,467	\$ 240,007	\$ 57,909
DECERTIFICATION SWR PDS	-	247,741	117,227	130,514	172,670	204,907
FIELD ADMINISTRATION/SHOP BUILDING	-	2,551,732	722,711	1,829,021	926,045	2,384,350
FIELD EQUIPMENT	43,475	590,355	467,589	166,240	275,714	190,575
LAND	580,596	4,868	4,868	580,596	-	580,596
OFFICE EQUIPMENT	23,016	151,960	174,976	-	-	-
ONSITE HOUSING	-	213,684	213,684	-	-	-
OTHER PHYSICAL PROPERTY	2,653	-	2,653	-	-	-
PROPERTY RIGHTS	47,600	-	47,600	-	47,600	-
RECLAIMED WATER DISPOSAL	878,504	125,247	713,602	290,149	1,180,803	484,225
RISK MANAGEMENT PLAN	-	26,993	24,519	2,474	9,818	3,285
ROAD IMPROVEMENT	-	58,340	42,772	15,568	46,550	17,109
SEWER LIFT STATIONS	40,100	321,280	135,736	225,645	100,304	236,661
SEWER LINES-OLD SYSTEM	182,200	25,682	201,791	6,092	15,282	6,926
SEWER II EXPANSION	34,423	-	22,153	12,270	58,315	32,300
SHOP BUILDING AT SEWER PLANT	-	48,872	48,872	-	-	-
VEHICLES	65,199	162,632	203,454	24,378	18,079	25,391
WASTEWATER COLLECTION FAC	5,942,089	321,210	4,306,055	1,957,244	7,144,121	3,229,030
WASTEWATER TREATMENT FAC	10,216,536	38,074	7,460,343	2,794,267	10,977,564	4,716,497
Total Capital Facilities & Equipment	\$ 18,177,082	\$ 4,943,934	\$ 15,055,091	\$ 8,065,925	\$ 21,212,871	\$ 12,169,760

Asset Category	System Buy-In Cost Basis ²	Allocation Basis (%) ³			Distribution of Cost Basis (\$)	
		Exclude from Analysis	Existing Customers	New Customers	Existing Customers	New Customers
Sewer Fund						
ADMIN OFFICE BUILDING	\$ 57,909	0%	95.3%	4.7%	\$ 55,209	\$ 2,699
DECERTIFICATION SWR PDS	204,907	0%	95.3%	4.7%	195,355	9,551
FIELD ADMINISTRATION/SHOP BUILDING	2,384,350	0%	95.3%	4.7%	2,273,209	111,141
FIELD EQUIPMENT	190,575	0%	95.3%	4.7%	181,692	8,883
LAND	580,596	0%	95.3%	4.7%	553,533	27,063
OFFICE EQUIPMENT	-	0%	0.0%	0.0%	-	-
ONSITE HOUSING	-	0%	0.0%	0.0%	-	-
OTHER PHYSICAL PROPERTY	-	0%	0.0%	0.0%	-	-
PROPERTY RIGHTS	-	0%	0.0%	0.0%	-	-
RECLAIMED WATER DISPOSAL	484,225	0%	95.3%	4.7%	461,654	22,571
RISK MANAGEMENT PLAN	3,285	0%	95.3%	4.7%	3,132	153
ROAD IMPROVEMENT	17,109	0%	95.3%	4.7%	16,312	798
SEWER LIFT STATIONS	236,661	0%	95.3%	4.7%	225,629	11,031
SEWER LINES-OLD SYSTEM	6,926	0%	95.3%	4.7%	6,603	323
SEWER II EXPANSION	32,300	0%	95.3%	4.7%	30,794	1,506
SHOP BUILDING AT SEWER PLANT	-	0%	0.0%	0.0%	-	-
VEHICLES	25,391	0%	95.3%	4.7%	24,207	1,184
WASTEWATER COLLECTION FAC	3,229,030	0%	95.3%	4.7%	3,078,516	150,514
WASTEWATER TREATMENT FAC	4,716,497	0%	95.3%	4.7%	4,496,647	219,849
Total Capital Facilities & Equipment	\$ 12,169,760	0%	95.3%	4.7%	\$ 11,602,494	\$ 567,267

1. Asset Data provided by the staff in source file: #6 - FIXED ASSET Accounting Report.PREP 06.22.18.xlsx, and these assets are included in the analysis.

2. Estimated Replacement Cost is calculated by escalating the remaining values (net of depreciation) from service date to January 2018 values using historical cost inflation factors from the Handy-Whitman Index of Public Utility Construction Costs, for Water Utility Construction in the Pacific Region. Estimated Replacement Cost is used in the capacity fee calculation is known as the "System Buy-in Cost Basis."

3. Allocation to existing and new customers developed in collaboration with City staff. Refer to Table 5: Existing and Future Customers for the detailed calculations.

Cash Reserves	Beginning Cash Balance	% Allocation		\$ - Allocation	
		Existing Customers	New Customers	Existing Customers	New Customers
Sewer Operating Reserve & CIP Reserve ^{1,2}	\$ 930,139	95.3%	4.7%	\$ 886,783	\$ 43,356
Debt Reserve Fund ³	\$ 709,123	95.3%	4.7%	\$ 676,069	\$ 33,054
Total	\$ 1,639,262	95.3%	4.7%	\$ 1,562,851	\$ 76,411

1. Sewer Operations Cash balance found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, Page 44.
2. Sewer Capital R&R Cash balance found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, Page 44. Includes Capital Facility Reserve
3. Sewer debt service cash balances include debt and bond funds; found in Source File: #3 - FY End 2017 Hidden Valley Lake Audit.pdf, p 44. Balance includes: 1995-2 Bond Redemption, USDA Solar Loan, USDA Reserve, All Bond Admin, Assessments and FA Investments.

ALLOCATION OF DEBT TO EXISTING AND FUTURE USERS

Bond Issue	Outstanding Principal	% Allocation		\$ - Allocation			Total
		Existing Customers	New Customers	Exclude from Analysis	Existing Customers	New Customers	
1995-2 Bond Redemption: Fund 215 ⁴	\$ 3,334,000	100.0%	0.0%	\$ -	\$ 3,334,000	\$ -	\$ 3,334,000
USDA Solar Loan - Fund 219 ⁵	\$ 549,500	100.0%	0.0%	\$ -	\$ 549,500	\$ -	\$ 549,500
Grand Total	\$ 3,883,500	100.0%	0.0%	\$ -	\$ 3,883,500	\$ -	\$ 3,883,500

4. Info for Fund 215 Loan in source file: #8 - Repayment Fund 215 - Bond Debt Schedule.pdf
5. Info for Fund 219 Loan in source file: #9 - Loan Docs Fund 219 - Solar 2011.pdf

1995-2 BOND REDEMPTION: FUND 215 ⁴

USDA SOLAR LOAN: FUND 219 ⁵

Fiscal Year	Principal	Total Annual Debt Service	NPV of Interest Payments ¹	Fiscal Year	Principal	Interest	Total Annual Debt Service	NPV of Interest Payments ¹
2013/14	\$ -	\$ -	\$ -	2013/14	\$ 14,000	18,465	\$ 32,465	\$ 18,465
2014/15	\$ -	\$ -	\$ -	2014/15	\$ 14,000	18,045	\$ 32,045	\$ 18,045
2015/16	\$ -	\$ -	\$ -	2015/16	\$ 14,500	17,618	\$ 32,118	\$ 17,618
2016/17	\$ 150,000	\$ 264,398	\$ 114,398	2016/17	\$ 15,000	17,175	\$ 32,175	\$ 17,175
2017/18	\$ 166,000	\$ 282,501	\$ 113,108	2017/18	\$ 15,500	16,718	\$ 32,218	\$ 16,718
2018/19	\$ 173,000	\$ 283,992	\$ 104,621	2018/19	\$ 16,000	16,245	\$ 32,245	\$ 16,245
2019/20	\$ 179,000	\$ 284,272	\$ 96,339	2019/20	\$ 16,500	15,758	\$ 32,258	\$ 15,758
2020/21	\$ 185,000	\$ 284,357	\$ 88,278	2020/21	\$ 17,000	15,255	\$ 32,255	\$ 15,255
2021/22	\$ 192,000	\$ 285,231	\$ 80,422	2021/22	\$ 17,500	14,738	\$ 32,238	\$ 14,738
2022/23	\$ 199,000	\$ 285,728	\$ 72,633	2022/23	\$ 18,000	14,205	\$ 32,205	\$ 14,205
2023/24	\$ 206,000	\$ 285,843	\$ 64,920	2023/24	\$ 18,500	13,658	\$ 32,158	\$ 13,658
2024/25	\$ 213,000	\$ 285,720	\$ 57,406	2024/25	\$ 19,000	13,095	\$ 32,095	\$ 13,095
2025/26	\$ 219,000	\$ 284,376	\$ 50,105	2025/26	\$ 19,500	12,518	\$ 32,018	\$ 12,518
2026/27	\$ 227,000	\$ 284,794	\$ 43,004	2026/27	\$ 20,000	11,925	\$ 31,925	\$ 11,925
2027/28	\$ 235,000	\$ 284,823	\$ 35,993	2027/28	\$ 21,000	11,310	\$ 32,310	\$ 11,310
2028/29	\$ 243,000	\$ 284,458	\$ 29,077	2028/29	\$ 21,500	10,673	\$ 32,173	\$ 10,673
2029/30	\$ 252,000	\$ 284,795	\$ 22,332	2029/30	\$ 22,000	10,020	\$ 32,020	\$ 10,020
2030/31	\$ 261,000	\$ 284,818	\$ 15,746	2030/31	\$ 23,000	9,345	\$ 32,345	\$ 9,345
2031/32	\$ 270,000	\$ 284,525	\$ 9,323	2031/32	\$ 23,500	8,648	\$ 32,148	\$ 8,648
2032/33	\$ 280,000	\$ 284,900	\$ 3,054	2032/33	\$ 24,000	7,935	\$ 31,935	\$ 7,935
2033/34	\$ -	\$ -	\$ -	2033/34	\$ 25,000	7,200	\$ 32,200	\$ 7,200
2034/35	\$ -	\$ -	\$ -	2034/35	\$ 25,500	6,743	\$ 32,243	\$ 6,743
2035/36	\$ -	\$ -	\$ -	2035/36	\$ 26,500	5,663	\$ 32,163	\$ 5,663
2036/37	\$ -	\$ -	\$ -	2036/37	\$ 27,000	4,860	\$ 31,860	\$ 4,860
2037/38	\$ -	\$ -	\$ -	2037/38	\$ 28,000	4,035	\$ 32,035	\$ 4,035
2038/39	\$ -	\$ -	\$ -	2038/39	\$ 29,000	3,180	\$ 32,180	\$ 3,180
2039/40	\$ -	\$ -	\$ -	2039/40	\$ 29,500	2,303	\$ 31,803	\$ 2,303
2040/41	\$ -	\$ -	\$ -	2040/41	\$ 30,500	1,403	\$ 31,903	\$ 1,403
2041/42	\$ -	\$ -	\$ -	2041/42	\$ 31,500	473	\$ 31,973	\$ 473
2042/43	\$ -	\$ -	\$ -	2042/43	\$ -	-	\$ -	\$ -
Total	\$ 3,650,000	\$ 4,819,531	\$ 1,000,759	Total	\$ 622,500	\$ 309,203	\$ 931,703	\$ 309,203

4. Info for Fund 215 Loan in source file: #8 - Repayment Fund 215 - Bond
 5. Info for Fund 219 Loan in source file: #9 - Loan Docs Fund 219 - Solar 2011.pdf
- The Net Present Value of interest payments discounted at 3% per ye The Net Present Value of interest payments discounted at 3% per year.

Facility / Equipment	Cost Estimate (2018-22) ¹	External Funding	System Development Cost Basis ¹	% Allocation ²		Distrib. of Cost Basis (\$)	
				Existing Customers	New Customers	Existing Customers	New Customers
General Plant							
IT Upgrades	\$ 60,000	\$ -	\$ 60,000	95%	5%	\$ 57,203	\$ 2,797
SCADA Replacement	\$ 150,000	\$ -	\$ 150,000	95%	5%	\$ 143,008	\$ 6,992
Primary Treatment							
Chlorine Tank Auto Shut Off	\$ 32,000	\$ -	\$ 32,000	95%	5%	\$ 30,508	\$ 1,492
Install Security Fencing at Lift Station 1 & 4	\$ 10,000	\$ -	\$ 10,000	95%	5%	\$ 9,534	\$ 466
Prelim. Design - Chlorine Disinfection Facility	\$ 45,000	\$ -	\$ 45,000	95%	5%	\$ 42,902	\$ 2,098
Sample Stations	\$ 10,000	\$ -	\$ 10,000	95%	5%	\$ 9,534	\$ 466
Risk Management Plan							
Manhole Rehab	\$ 250,000	\$ -	\$ 250,000	95%	5%	\$ 238,347	\$ 11,653
Sewer collection lines							
CS Line Replacement	\$ 350,000	\$ -	\$ 350,000	95%	5%	\$ 333,686	\$ 16,314
Pump Replacement/Overhaul	\$ 112,500	\$ -	\$ 112,500	95%	5%	\$ 107,256	\$ 5,244
Repair Sewer Lateral Leaks	\$ 40,000	\$ -	\$ 40,000	95%	5%	\$ 38,135	\$ 1,865
Tideflex - Stormwater (50% grant funded) ³	\$ 658,000	\$ 329,000	\$ 329,000	95%	5%	\$ 313,664	\$ 15,336
Vehicles							
Backhoe	\$ -	\$ -	\$ -	95%	5%	\$ -	\$ -
Construction Truck	\$ 72,000	\$ -	\$ 72,000	95%	5%	\$ 68,644	\$ 3,356
Dump Truck	\$ 75,000	\$ -	\$ 75,000	95%	5%	\$ 71,504	\$ 3,496
Total	\$ 1,864,500	\$ 329,000	\$ 1,535,500	95%	5%	\$1,463,926	\$ 71,574

1. Capital project costs for next 5 years were provided by City Staff in source files: #1 - Approved 2017-2018 budget.pdf and Five Year Capital Improvement Plan.xlsx
2. Project costs are allocated to existing and future services based on projected growth in the system. See Demographics tab for detail.
3. Currently funded with Sewer Revenue and is used to protect Sewer Infrastructure. Although the project will not proceed unless Prop 1 Grant and SRF Loan are approved it is planned at this time. However, only need to finance 50% (for SRF Loan repayment).

DEVELOPMENT OF COST BASIS FOR NEW CUSTOMERS

System Asset Values Allocated to New Customers	
<i>System Asset Values Allocated to New Customers</i>	
Existing System Buy-In ¹	\$ 567,267
Future System Expansion ²	71,574
Total: Existing & Future System Costs	\$ 638,841
<i>Adjustments to Cost Basis Allocated to New Customers:</i>	
Cash Reserves ³	\$ 76,411
Outstanding Long-Term Debt (Principal) Allocated to Future Users	-
Total: Adjustments to Cost Basis	\$ 76,411
Total: Cost Basis for New Customers	\$ 715,251

DEVELOPMENT OF SEWER CAPACITY FEE PER HEU

Capacity Fee Development	
Cost Basis for New Customers	\$ 715,251
Projected Customer Growth (in HEU's) ⁴	75
Proposed Capacity Charge Per HEU	\$ 9,537
<i>Existing Capacity Charge Per HEU</i>	<i>\$ 7,600</i>

1. Refer to Table 7: Using System Buy In Costs and calculated Allocation factors for new customers.
2. Refer to Table 10: Distribution of Cost Basis for New Users
3. Refer to Table 8: Allocation of Cash Reserves to New Users
4. Refer to Exhibit 1, Table 5 for customer growth projections.

Calculating HEUs for Non-SFR Connections:

Classification of Expenses Continued ¹						
Budget Categories	Total Revenue Requirements	Flow	Strength		Customer	Recycled Water
	FY 2018/19	(VOL) hcf	(BOD) mg/L	(TSS) mg/L	(CA) Accts.	(RW)
NET REVENUE REQUIREMENTS	\$ 1,341,254	\$ 530,849	\$ 272,584	\$ 272,584	\$ 141,518	\$ 123,720
<i>Allocation of Revenue Requirements</i>	100.0%	39.6%	20.3%	20.3%	10.6%	9.2%
(1) Alloc. % Adjusted to exclude RW:		43.6%	22.4%	22.4%	11.6%	

1. From sewer rate model.

Example of Restaurant:	HEU Based on Meter Size ¹	(VOL) hcf	(BOD) mg/L ²	(TSS) mg/L ²	(CA) Accts.	Total HEUs, Non-SFR
<i>New Connection's Characteristics</i>	1.00	8.7	1000	600	1	
SFR (Typical)		8.67	200	200	1	
(2) Strength Factor (BOD or TSS)			5.0	3.0		
(3) HEU Factor (VOL and CA)		1.0			1.0	
Estimated HEUs (by component) =		0.44	1.12	0.67	0.12	2.34

2. From SWRCB Appendix G. (Restaurant in this case).

(1) Alloc. % (Adjusted)
x (3) "HEU Factor" (CA/Accts.)

(1) Alloc. % (Adjusted)
x (3) "HEU Factor" (Vol./hcf)

(1) Alloc. % (Adjusted)
x (2) "Factor" (BOD or TSS)
x (3) "HEU Factor" (Vol./hcf)

Example of Market w/ Garbage Grinder	HEU Based on Meter Size ¹	(VOL) hcf	(BOD) mg/L ²	(TSS) mg/L ²	(CA) Accts.	Total HEUs, Non-SFR
<i>New Connection's Characteristics</i>	8.00	69.4	800	800	1	
SFR (Typical)		8.67	200	200	1	
(2) Strength Factor (BOD or TSS)			4.0	4.0		
(3) HEU Factor (VOL and CA)		8.0			1.0	
Estimated HEUs (by component) =		3.49	7.16	7.16	0.12	17.93

1. Determined by hydraulic capacity factor (see accompanying table)

2. From SWRCB Appendix G. (Market w/ grinders in this case).

Position		A	B	C	D	E	Current Annual "E"	Median Annual "E"	5% Lag Annual "E"	7% Lag Annual "E"	Percent Change
Admin Assistant <i>Admin Services Mgr</i>	CSD current	\$ 27.05	\$ 28.40	\$ 29.82	\$ 31.31	\$ 33.00	\$ 68,640				
	Median	\$ 31.73	\$ 33.39	\$ 35.15	\$ 37.00	\$ 38.95		\$ 81,016			15%
	5% Lag	\$ 30.14	\$ 31.73	\$ 33.39	\$ 35.15	\$ 37.00			\$ 76,965		11%
	7% Lag	\$ 29.51	\$ 31.05	\$ 32.69	\$ 34.41	\$ 36.22				\$ 75,345	9%
Full Charge Bookkeeper <i>Accounting Supervisor</i>	CSD current	\$ 31.48	\$ 33.06	\$ 34.71	\$ 36.45	\$ 38.41	\$ 79,893				
	Median	\$ 39.59	\$ 41.68	\$ 43.87	\$ 46.18	\$ 48.61		\$ 101,109			21%
	5% Lag	\$ 37.61	\$ 39.59	\$ 41.68	\$ 43.87	\$ 46.18			\$ 96,053		17%
	7% Lag	\$ 36.82	\$ 38.76	\$ 40.80	\$ 42.95	\$ 45.21				\$ 94,031	15%
Water Reources	CSD current	\$ 34.28	\$ 36.00	\$ 37.80	\$ 39.69	\$ 41.67	\$ 86,674				
	Median	\$ 37.20	\$ 39.16	\$ 41.22	\$ 43.39	\$ 45.67		\$ 94,994			9%
	5% Lag	\$ 35.34	\$ 37.20	\$ 39.16	\$ 41.22	\$ 43.39			\$ 90,244		4%
	7% Lag	\$ 34.59	\$ 36.42	\$ 38.33	\$ 40.35	\$ 42.47				\$ 88,344	2%
Senior Account Rep	CSD current	\$ 23.98	\$ 25.18	\$ 26.44	\$ 27.79	\$ 29.15	\$ 60,632				
	Median	\$ 27.37	\$ 28.81	\$ 30.32	\$ 31.92	\$ 33.60		\$ 69,888			13%
	5% Lag	\$ 26.00	\$ 27.37	\$ 28.80	\$ 30.32	\$ 31.92			\$ 66,394		9%
	7% Lag	\$ 25.45	\$ 26.79	\$ 28.20	\$ 29.69	\$ 31.25				\$ 64,996	7%
Accounts Rep <i>(Accounts Rep D & E more than Senior Rep A & B)</i>	CSD current	\$ 18.25	\$ 19.16	\$ 20.12	\$ 21.13	\$ 22.19	\$ 46,155				
	Median	\$ 23.70	\$ 24.95	\$ 26.26	\$ 27.65	\$ 29.10		\$ 60,528			24%
	5% Lag	\$ 22.52	\$ 23.70	\$ 24.95	\$ 26.26	\$ 27.65			\$ 57,502		20%
	7% Lag	\$ 22.04	\$ 23.20	\$ 24.42	\$ 25.71	\$ 27.06				\$ 56,291	18%
Utility Supervisor <i>Operations Mgr</i>	CSD current	\$ 36.85	\$ 38.70	\$ 40.63	\$ 42.66	\$ 44.96	\$ 93,517				
	Median	\$ 42.57	\$ 44.81	\$ 47.17	\$ 49.66	\$ 52.57		\$ 109,346			14%
	5% Lag	\$ 40.68	\$ 42.82	\$ 45.07	\$ 47.44	\$ 49.94			\$ 103,878		10%
	7% Lag	\$ 39.59	\$ 41.67	\$ 43.87	\$ 46.18	\$ 48.89				\$ 101,691	8%
Water Op Lead	CSD current	\$ 36.85	\$ 38.70	\$ 40.63	\$ 42.66	\$ 44.96	\$ 93,517	\$ 93,517	\$ 93,517	\$ 93,517	
	Median										
Sewer Op Lead	CSD current	\$ 36.85	\$ 38.70	\$ 40.63	\$ 42.66	\$ 44.96	\$ 93,517	\$ 93,517	\$ 93,517	\$ 93,517	
	Median							\$ -			
Operator II <i>UNFUNDED</i>	CSD current	\$ 28.43	\$ 29.93	\$ 31.51	\$ 33.16	\$ 34.91	\$ 72,613				
	Median	\$ 30.33	\$ 31.93	\$ 33.61	\$ 35.38	\$ 37.24		\$ 77,459			6%
	5% Lag	\$ 28.82	\$ 30.33	\$ 31.93	\$ 33.61	\$ 35.38			\$ 73,586		1%
	7% Lag - n/a									\$ 73,586	

Position		A	B	C	D	E	Current Annual "E"	Median Annual "E"	5% Lag Annual "E"	7% Lag Annual "E"	Percent Change
Operator I <i>(OP I D & E more than OP II A & B)</i>	CSD current	\$ 22.90	\$ 24.10	\$ 25.37	\$ 26.70	\$ 28.11	\$ 58,469				
	Median	\$ 27.00	\$ 28.42	\$ 29.92	\$ 31.49	\$ 33.15		\$ 68,952			15%
	5% Lag	\$ 25.65	\$ 27.00	\$ 28.42	\$ 29.92	\$ 31.49			\$ 65,504		11%
	7% Lag	\$ 25.11	\$ 26.43	\$ 27.83	\$ 29.29	\$ 30.83				\$ 64,125	9%
Utility Tech x3 <i>(Utility Tech C, D & E more than OP 1 A & B)</i> <i>(Utility Tech E more than OP II A)</i>	CSD current	\$ 17.87	\$ 18.81	\$ 19.80	\$ 20.84	\$ 21.94	\$ 45,635				
	Median	\$ 25.29	\$ 26.62	\$ 28.02	\$ 29.50	\$ 31.05		\$ 64,584			29%
	5% Lag	\$ 24.03	\$ 25.29	\$ 26.62	\$ 28.02	\$ 29.50			\$ 61,355		26%
	7% Lag	\$ 23.52	\$ 24.76	\$ 26.06	\$ 27.44	\$ 28.88				\$ 60,063	24%

		Current Step "E"	Median Step "E"	5% Lag Step "E"	7% Lag Step "E"
Previous Leads Omitted/3 Techs	Fiscal Salary Expense - Previous	\$ 826,110	\$ 987,502	\$ 937,777	\$ 922,185
New Proposed Leads/3 Techs/OPII Omitted	Fiscal Salary Expense - Proposed	\$ 817,918	\$ 966,618	\$ 927,638	\$ 912,047
	Percent Change of Salary Expense	0%	15.38%	11.83%	10.32%
	Fiscal CalPERS Expense (10%)	\$ 81,792	\$ 96,662	\$ 92,764	\$ 91,205
	Fiscal Change CalPERS Expense	\$ -	\$ 14,870	\$ 10,972	\$ 9,413
	Fiscal Salary & CalPERS Expense	\$ 899,710	\$ 1,063,279	\$ 1,020,402	\$ 1,003,251
	Fiscal Difference	\$ -	\$ 163,569	\$ 120,692	\$ 103,541
	Difference between Previous and Proposed	\$ 8,192	\$ 17,884	\$ 10,139	\$ 10,138

* OT NOT included

**General Manager Salary Omitted

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT

6/4/2020

2020-2021 PROPOSED BUDGET:

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WATER ENTERPRISE FUND

	2018-2019	2018-2019	2019-2020	2019-2020	2020-2021
	BUDGET	ACTUAL	BUDGET	TO DATE	PROPOSED
EXPENSES					
130-5-10-5010 ADMIN SALARY & WAGES	244,904	252,798	281,602	215,843	252,875
130-5-30-5010 FIELD SALARY & WAGES	212,658	232,967	215,150	206,617	225,455
130-5-40-5010 DIRECTORS SALARY & WAGES	3,000	2,002	3,000	2,858	3,000
130-5-10-5020 ADMIN EMPLOYEE BENEFITS (HEALTH)	88,289	71,838	93,979	59,905	91,726
130-5-30-5020 FIELD EMPLOYEE BENEFITS (HEALTH)	44,600	62,562	68,254	54,193	91,301
130-5-40-5020 DIRECTOR BENEFITS (TAXES)	100	55	90	123	120
130-5-10-5021 ADMIN RETIREMENT BENEFITS (Pers)	47,170	50,929	57,507	50,880	47,189
130-5-30-5021 FIELD RETIREMENT BENEFITS (Pers)	41,830	49,533	46,724	46,426	46,661
130-5-30-5022 FIELD CLOTHING ALLOWANCE	1,800	1,278	1,800	1,349	1,800
130-5-00-5024 WORKERS' COMP INSURANCE	8,100	8,435	11,770	13,926	15,000
130-5-00-5025 RETIREE HEALTH BENEFITS	21,472	10,284	22,840	7,751	14,000
130-5-40-5030 DIRECTOR HEALTH BENEFITS	40,116	39,734	41,340	29,188	42,000
130-5-00-5040 ELECTION EXPENSE	4,500	-	-	-	12,000
130-5-00-5060 GASOLINE, OIL & FUEL	6,500	10,413	11,000	14,602	20,000
130-5-00-5061 VEHICLE MAINT	12,500	8,905	24,292	7,089	12,500
130-5-00-5062 TAXES & LICENSE	1,200	564	1,200	25	1,200
130-5-10-5063 ADMIN CERTIFICATIONS	-	33	-	-	-
130-5-30-5063 FIELD CERTIFICATIONS	600	550	600	190	600
130-5-00-5074 PROPETY/LIABILITY INSURANCE	25,000	26,373	27,000	35,055	54,055
130-5-00-5075 BANK FEES	13,500	16,962	21,000	17,305	21,000
130-5-00-5080 MEMBERSHIP & SUBSCRIPTIONS	24,000	19,304	24,000	24,694	24,600
130-5-10-5090 ADMIN OFFICE SUPPLIES	3,000	4,079	4,000	2,731	4,000
130-5-30-5090 FIELD OFFICE SUPPLIES	1,000	313	1,000	457	1,000
130-5-00-5092 POSTAGE & SHIPPING	6,000	6,397	6,000	5,924	6,500
130-5-00-5110 CONTRACTUAL SERVICES	-	-	-	-	-
130-5-00-5121 LEGAL SERVICES	10,000	2,427	10,000	15,663	20,000
130-5-00-5122 ENGINEERING SERVICES	60,000	54,068	60,000	290	60,000
130-5-00-5123 OTHER PROFESSIONAL SERVICE	35,000	24,334	40,000	63,501	50,000
130-5-00-5124 WATER RIGHTS	70,000	49,308	70,000	13,722	50,000
130-5-00-5126 AUDIT SERVICES	7,500	6,200	4,000	5,950	7,500
130-5-00-5130 PRINTING & PUBLICATION	7,500	3,530	7,500	3,376	7,500
130-5-00-5135 NEWSLETTER	500	-	500	-	500
130-5-00-5140 RENT & LEASES	-	-	-	-	-
130-5-00-5145 EQUIPMENT RENTAL	50,533	41,045	35,000	39,767	45,000
130-5-00-5148 OPERATING SUPPLIES	1,500	8,737	5,000	6,696	5,000
130-5-00-5150 REPAIR & REPLACE	185,000	124,994	185,000	121,287	125,000
130-5-00-5155 MAINT BLDG & GROUNDS	12,000	12,471	12,000	8,148	12,000
130-5-00-5156 CUSTODIAL SERVICES	3,750	4,950	4,200	3,048	4,200
130-5-00-5157 SECURITY	5,000	1,196	5,000	443	500

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
2020-2021 PROPOSED BUDGET:
WATER ENTERPRISE FUND

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	2018-2019 BUDGET	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 TO DATE	2020-2021 PROPOSED
130-5-10-5170 ADMIN TRAVEL MILEAGE	2,000	1,985	2,000	1,689	2,000
130-5-30-5170 FIELD TRAVEL MILEAGE	1,800	211	2,000	28	2,000
130-5-40-5170 DIRECTORS TRAVEL MILEAGE	200	77	200	-	200
130-5-10-5175 ADMIN EDUCATION/SEMINARS	4,000	1,896	4,000	2,360	4,000
130-5-30-5175 FIELD EDUCATION/SEMINARS	4,000	9,039	4,000	200	4,000
130-5-40-5175 DIRECTORS EDUCATION/SEMINARS	-	-	1,500	-	1,500
130-5-40-5176 DIRECTOR TRAINING	1,500	2,986	8,400	327	5,000
130-5-10-5179 ADM MISC EXPENSE	350	179	350	50	350
130-5-00-5191 TELEPHONE	10,000	10,624	9,500	9,126	11,000
130-5-00-5192 ELECTRICITY	115,000	137,757	150,000	123,541	150,000
130-5-00-5193 OTHER UTILITIES	2,200	2,598	2,200	2,418	2,500
130-5-00-5194 IT SERVICES	35,000	39,943	40,000	39,074	36,500
130-5-00-5195 ENV/MONITORING	15,000	22,768	20,000	14,031	17,000
130-5-00-5196 RISK MANAGEMENT	-	-	-	-	-
130-5-00-5198 ANNUAL OPERATING FEES	30,000	26,834	30,000	30,103	32,000
130-5-00-5310 EQUIPMENT - FIELD	2,000	808	1,000	-	1,000
130-5-00-5311 EQUIPMENT - OFFICE	1,000	832	1,000	268	1,000
130-5-00-5312 TOOLS - FIELD	2,000	7,793	1,000	1,552	1,500
130-5-00-5315 SAFETY EQUIPMENT	2,500	2,170	2,500	2,885	1,500
130-5-00-5505 WATER CONSERVATION	9,000	8,156	9,000	3,550	9,000
130-5-00-5545 RECORDING FEES	250	57	100	186	250
130-5-00-5580 TRANSFER OUT	-	-	-	213,410	354,800
130-5-00-5600 CONTINGENCY	40,000	-	20,000	-	-
130-5-70-7101 VAC TRUCK				133,417	-
130-5-70-7202 GENERATORS	23,840	40,929		16,953	-
130-5-70-7204 TANK 9				1,860	-
130-5-70-7205 MMN WATER MAIN (FUND 320)		506		12,677	-
218 CIEDB INTEREST LONG TERM DEBT	63,144	63,144	59,567	59,567	55,865
218 CIEDB LOAN ANNUAL FEE	5,443	5,443	5,135	5,135	4,816
218 CIEDB PRINCIPAL PMT	102,787	102,787	106,363	106,363	110,065
TOTAL EXPENDITURES	1,312,574	1,211,323	1,882,163	1,859,793	2,183,627

**HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
2020-2021 PROPOSED BUDGET:
WATER ENTERPRISE FUND**

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	2018-2019 BUDGET	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 TO DATE 5/29/2020	2020-2021 PROPOSED
REVENUE					
130-1051 A/R RETIREE HEALTH	10,736	11,499	11,420	7,751	7,500
130-4035 RECONNECT FEES	13,000	12,785	12,000	11,795	12,000
130-4038 COMM WATER METER INSTALL	-	-	-	-	-
130-4039 WATER METER INSTALLATION	1,000	680	1,000	510	-
130-4040 LIEN RECORDING FEES	500	530	500	1,595	1,200
130-4045 AVAILABILITY FEES	25,000	30,148	25,000	21,797	22,000
130-4060 CC TRANSACTION FEE	-	-	18,000	-	-
130-4110 COMMERCIAL WATER USE	85,000	90,457	104,000	82,245	95,295
130-4112 GOVERNMENT WATER USE	6,000	5,065	6,000	4,553	6,000
130-4115 WATER USE CHARGES	1,750,000	1,728,360	1,940,435	1,559,805	1,968,074
130-4210 LATE FEE 10%	25,000	29,907	25,000	32,884	32,000
130 4215 RETURNED CHECK FEE	1,000	650	1,000	950	1,000
130-4300 MISC INCOME	2,000	8,046	2,000	3,686	2,000
130-4310 OTHER INCOME	-	1,891	100	1,696	1,500
130-4320 FEMA/CalOES GRANTS	-	-		17,230	30,000
130-4550 INTEREST INCOME	700	2,959	2,000	3,495	3,500
130-4580 TRANSFER IN		77,827	-	136,987	-
TOTAL REVENUE	1,919,936	2,000,804	2,148,455	1,886,978	2,182,069

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
2020-2021 PROPOSED BUDGET:
SEWER ENTERPRISE FUND

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	2018-2019 BUDGET	2018-2019 ACTUAL	2019-2020 BUDGET	2019-2020 TO DATE	2020-2021 PROPOSED
EXPENSES			-		
120-5-10-5010 ADMIN SALARY & WAGES	244,904	252,934	281,602	273,339	252,875
120-5-30-5010 FIELD SALARY & WAGES	212,658	190,572	215,150	166,061	225,455
120-5-40-5010 DIRECTORS SALARY & WAGES	3,000	1,873	3,000	2,632	3,000
120-5-10-5020 ADMIN EMPLOYEE BENEFITS (HEALTH)	82,142	71,842	93,979	55,042	91,726
120-5-30-5020 FIELD EMPLOYEE BENEFITS (HEALTH)	44,600	62,363	68,254	60,212	91,301
120-5-40-5020 DIRECTOR BENEFITS (TAXES)	100	52	90	114	230
120-5-10-5021 ADMIN RETIREMENT BENEFITS (Pers)	47,170	50,939	57,507	48,388	47,189
120-5-30-5021 FIELD RETIREMENT BENEFITS (Pers)	41,830	44,916	46,724	45,142	46,661
120-5-30-5022 FIELD CLOTHING ALLOWANCE	1,800	1,278	1,800	1,350	1,800
120-5-00-5024 WORKERS' COMP INSURANCE	8,100	8,084	11,770	13,926	15,000
120-5-00-5025 RETIREE HEALTH BENEFITS	21,472	9,960	22,840	7,751	14,000
120-5-00-5026 COBRA	-	-	-	-	
120-5-40-5030 DIRECTOR HEALTH BENEFITS	40,116	39,734	41,340	26,188	36,000
120-5-00-5040 ELECTION EXPENSE	4,500	-	-	-	12,000
120-5-00-5060 GASOLINE, OIL & FUEL	8,000	8,065	12,000	16,323	20,000
120-5-00-5061 VEHICLE MAINT	12,500	20,868	15,000	18,585	18,000
120-5-00-5062 TAXES & LICENSE	800	564	800	25	800
120-5-10-5063 ADMIN CERTIFICATIONS	-	212	500	-	500
120-5-30-5063 FIELD CERTIFICATIONS	1,500	420	1,500	200	1,500
120-5-00-5074 PROPERTY/LIABILITY INSURANCE	22,000	26,373	27,000	35,056	54,066
120-5-00-5075 BANK FEES	13,400	14,470	21,000	17,627	21,000
120-5-00-5080 MEMBERSHIP & SUBSCRIPTIONS	6,400	5,697	7,500	7,530	7,500
120-5-10-5090 ADMIN OFFICE SUPPLIES	4,000	4,079	4,000	2,731	4,000
120-5-30-5090 FIELD OFFICE SUPPLIES	2,000	689	1,000	457	1,000
120-5-00-5092 POSTAGE & SHIPPING	5,000	5,040	7,000	5,924	7,000
120-5-00-5110 CONTRACTUAL SERVICES	-	-	-	-	-
120-5-00-5121 LEGAL SERVICES	5,000	1,962	5,000	16,090	20,000
120-5-00-5122 ENGINEERING SERVICES	27,000	30,712	27,000	28,710	50,000
120-5-00-5123 OTHER PROFESSIONAL SERVICE	50,000	24,071	30,000	104,774	50,000
120-5-00-5126 AUDIT SERVICES	7,500	6,200	4,000	5,950	7,500
120-5-00-5130 PRINTING & PUBLICATION	5,000	2,416	5,000	3,376	5,000
120-5-00-5135 NEWSLETTER	500	-	500	-	500
120-5-00-5145 EQUIPMENT RENTAL	14,000	20,942	5,000	3,312	5,000
120-5-00-5148 OPERATING SUPPLIES	22,000	42,161	40,000	52,153	48,000
120-5-00-5150 REPAIR & REPLACE	145,000	99,103	142,000	162,882	145,000
120-5-00-5155 MAINT BLDG & GROUNDS	5,500	3,923	5,500	9,909	8,000
120-5-00-5156 CUSTODIAL SERVICES	15,150	10,375	16,500	12,631	16,500
120-5-00-5157 SECURITY	5,000	720	5,000	779	500
120-5-00-5160 SLUDGE DISPOSAL	28,500	29,192	45,000	36,222	45,000

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT

6/4/2020

2020-2021 PROPOSED BUDGET:

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SEWER ENTERPRISE FUND

	2018-2019	2018-2019	2019-2020	2019-2020	2020-2021
	BUDGET	ACTUAL	BUDGET	TO DATE	PROPOSED
120-5-10-5170 ADMIN TRAVEL MILEAGE	1,200	2,014	1,200	1,243	1,500
120-5-30-5170 FIELD TRAVEL MILEAGE	500	182	500	31	500
120-5-40-5170 DIRECTORS TRAVEL MILEAGE	200	77	200	-	200
120-5-10-5175 ADMIN EDUCATION/SEMINARS	4,000	1,682	4,000	2,295	4,000
120-5-30-5175 FIELD EDUCATION/SEMINARS	4,000	895	4,000	-	4,000
120-5-40-5175 DIRECTORS EDUCATION/SEMINARS	-	-	1,500	-	1,500
120-5-40-5176 DIRECTOR TRAINING	1,500	2,986	3,600	327	3,600
120-5-10-5179 ADM MISC EXPENSE	350	179	350	50	350
120-5-00-5165 TERTIARY PONT MAINTENANCE			35,000	35,000	50,000
120-5-00-5191 TELEPHONE	9,500	8,029	9,500	9,105	11,000
120-5-00-5192 ELECTRICITY	45,000	36,674	60,000	48,584	65,000
120-5-00-5193 OTHER UTILITIES	2,600	1,929	2,600	2,418	2,600
120-5-00-5194 IT SERVICES	35,000	28,907	45,000	32,338	36,500
120-5-00-5195 ENV/MONITORING	32,000	26,984	32,000	32,074	35,000
120-5-00-5196 RISK MANAGEMENT	-	-	-	-	-
120-5-00-5198 ANNUAL OPERATING FEES	2,000	1,830	2,000	1,822	2,000
120-5-00-5310 EQUIPMENT - FIELD	1,500	-	1,500	-	1,000
120-5-00-5311 EQUIPMENT - OFFICE	1,300	-	1,300	536	1,000
120-5-00-5312 TOOLS - FIELD	1,000	1,338	1,500	1,552	1,500
120-5-00-5315 SAFETY EQUIPMENT	3,500	2,492	3,500	2,316	1,500
120-5-00-5545 RECORDING FEES	250	49	250	186	250
120-5-00-5580 TRANSFER OUT	-	401,454	-	67,716	-
120-5-00-5590 NON-OPERATING OTHER	-	-	-	-	-
120-5-00-5600 CONTINGENCY	5,000	-	5,000	-	-
120-5-60-6006 PW LKKVF83	245,888	297,041	-	-	-
120-5-60-6007 RAINS 2019	275,523	410,496	-	657,757	-
120-5-60-6008 LHMP			-	-	-
120-5-60-6009 ACCESS RD					178,782
120-5-70-7101 VAC TRUCK			-	200,126	-
120-5-70-7201 I & I	55,000	61,006	-	4,714	-
120-5-70-7203 HEADWORKS RAKE	62,000	60,646	-	-	-
219 USDA SOLAR PRINCIPAL				16,500	17,000
219 USDA SOLAR INTEREST	25,000	-	31,739	15,757	15,255
TOTAL EXPENDITURES	1,971,952	2,439,689	1,518,095	2,373,835	1,807,639

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
2020-2021 PROPOSED BUDGET:
SEWER ENTERPRISE FUND

6/4/2020
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	2018-2019	2018-2019	2019-2020	2019-2020	2020-2021
	BUDGET	ACTUAL	BUDGET	TO DATE	PROPOSED
REVENUE				5/29/2020	
120- A/R Retiree Health	10,736	11,512	11,420	7,163	7,500
120-4020 PERMIT & INSPECTION FEES	700	300	500	300	500
120-4036 DEVELOPER SEWER FEES	-	34,421	15,200	34,421	-
120-4040 LIEN RECORDING FEES	-	-	-	-	-
120-4045 AVAILABILITY FEES	5,000	7,440	5,000	5,569	5,500
120-4050 SALES OF RECLAIMED WATER	125,000	109,140	118,000	96,562	110,000
130-4060 CC TRANSACTION FEE			18,000	-	-
120-4111 COMMERCIAL SEWER USE	22,000	30,871	36,959	29,848	43,113
120-4112 GOVERNMENT SEWER USE	700	731	855	712	900
120-4116 SEWER USE CHARGES	1,137,649	1,136,422	1,167,934	984,552	1,217,940
120-4210 LATE FEE 10%	25,000	20,595	20,000	21,069	20,000
120 4300 MISC INCOME	1,500	639	1,500	5,596	2,500
120-4310 OTHER INCOME	-	1,891	200	-	-
120-4320 FEMA/CalOES Grants	295,000	402,065	135,000	1,038,783	366,000
120-4550 INTEREST INCOME	600	1,948	1,500	1,865	1,700
120-4580 TRANSFER IN		873,934	54,821	332,808	-
TOTAL REVENUE	1,623,885	2,631,909	1,586,889	2,559,249	1,775,653

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT
2020 - 2021 CAPITAL IMPROVEMENT PLAN
PROPOSED BUDGET

WASTEWATER FUNDS	DESCRIPTION	Beginning Fund Balance	Revenue	Expense	Ending Fund Balance
314 WASTEWATER CAPITOL IMPROVEMENT	Beginning Fund Balance 07/01/2020	\$ 120,641			
	Regulatory Compliance/I&I Mitigation			\$ 100,000	\$ 20,641
	Disaster Mitigation/SCADA Upgrade			\$ 30,000	\$ (9,359)
	Diaster Recovery/WWTP Access Road Repair			\$ 50,000	\$ (59,359)
	Reliable Water Supply/Leak Repair/Mini-Excavator			\$ 50,000	\$ (109,359)
	Risk Management Plan/Chlorine Tank Auto Shut-Off FY 21-22			\$ -	\$ (109,359)
	Regulatory Compliance/Dump Truck			\$ 75,000	\$ (184,359)
	Stormwater Master Planning/Mitigation			\$ 10,000	\$ (194,359)
Transfer In from Fund 120			\$ -		
	Ending Fund Balance FYE 06/30/2021				\$ (194,359)
313 WASTEWATER OPERATING RESERVE	Beginning Fund Balance 07/01/2020	\$ 96,652			
	Transfer In from Fund 120		\$ -		
	Ending Fund Balance FYE 06/30/2021				\$ 96,652
WATER FUNDS	DESCRIPTION	Beginning Fund Balance	Revenue	Expense	Ending Fund Balance
320 WATER CAPITOL IMPROVEMENT	Beginning Fund Balance 07/01/2020	\$ 111,505			\$ 111,505
	Wildfire Resilience/Reliable Water Supply/Replace Wooden Tanks			\$ 360,000	\$ (248,495)
	Diaster Mitigation/SCADA Upgrade			\$ 30,000	\$ (278,495)
	Reliable Water Supply/Automatic Metering Infrastructure			\$ 200,000	\$ (478,495)
	Wildfire Resilience/Reliable Water Supply/PSPS Backup Power Supply			\$ 50,000	\$ (528,495)
	Reliable Water Supply/Leak Repair Mini-Excavator			\$ 50,000	\$ (578,495)
	Regulatory Compliance/Dump Truck			\$ 75,000	\$ (653,495)
	Transfer In from Fund 130 (\$48,750 per Qtr)			\$ 177,400	\$ (476,095)
	Ending Fund Balance 06/30/2021				\$ (476,095)
325 WATER OPERATING RESERVE	Beginning Fund Balance 07/01/2020	\$ 123,870			
	Transfer In from Fund 130 (\$48,750 per Qtr)		\$ 177,400		
	Ending Fund Balance FYE 06/30/2021				\$ 301,270

HIDDEN VALLEY LAKE COMMUNITY SERVICES DISTRICT

2020 - 2021 DEBT SERVICE

PROPOSED BUDGET

	DEBT SERVICE REVENUE	FUND	AMOUNT
1)	1995-2 BOND - TAX ASSESSMENT	215	\$ 300,224
2)	CIEDB LOAN - WATER INFRASTRUCTURE	130	170,746
3)	USDA LOAN - SOLAR PROJECT WWTP	120	32,255
	TOTAL DEBT SERVICE REVENUE		<u>\$ 503,225</u>

	DEBT SERVICE EXPENSE	FUND	AMOUNT
1)	1995-2 BOND REDEMPTION (PRINCIPAL)	215	\$ 185,000
	1995-2 BOND REDEMPTION (INTEREST)	215	99,994
	BOND ADMINISTRATION (ANNUAL FEE)	215	7,460
	COUNTY COLLECTION FEES	215	3,500
	CSD ADMIN COSTS	215	4,270
			<u>\$ 300,224</u>
2)	CIEDB (PRINCIPAL)	218	\$ 110,065
	CIEDB (INTEREST)	218	55,865
	CIEDB (ANNUAL FEE)	218	4,816
			<u>\$ 170,746</u>
3)	USDA RUS LOAN (PRINCIPAL)	219	\$ 17,000
	USDA RUS LOAN (INTEREST)	219	15,255
			<u>\$ 32,255</u>
	TOTAL DEBT SERVICE EXPENSE		<u>\$ 503,225</u>