# **Staff Report**

for the Engineering Committee Meeting of December 10, 2019

**TO:** Engineering Committee

**FROM:** Doug Roderick, P.E., Engineering Manager

**DATE:** December 3, 2019

SUBJECT: Project Status Report

ENGINEERING

#### **RECOMMENDATION:**

Review the Engineering Department Project Status Report with the Committee.

#### **BACKGROUND**:

This item is to provide information to the Board members regarding the progress, current status and next action to be taken on the projects in process in the Engineering Department.

#### **BUDGETARY IMPACT:**

No budget impact

DR

#### Attachment:

Engineering Department Project Status Report

## Engineering Department Project Status

<u>Prty</u>	Proj Mgr		Facility Name	WO#	<u>Description</u>	<u>Status</u>	<u>Comments</u>
- E	XTENDED CEQA (\$200,000) 1	0151- 5291	3				
01	ADRIAN SCHNEIDER	2019	Newtown Canal	8371- 01	Extended CEQA	Closeout	Project complete. Will be removed from future project status reports.
02	DOUGLAS RODERICK	2022	Cascade Canal	6593- 02	Banner Cascade Pipeline: Install generator & pipelines from Clipper Creek/generator - Monitoring Canopy Cover and Tree Health Assessment	Post-Constru ction	Consultant (Stantec) working on the 2019 Canopy Cover/Tree Health Assessment.
2 - PI	IPELINE REPLACEMENT (\$1,1	100,000) 10 <sup>2</sup>	151-52907				
01	TONIA TABUCCHI HERRERA	2019	Penn Valley Pipeline Replacement Phase 3	1037	Install approximately 4307 LF of 8" new pipeline to improve flows in Penn Valley.	Closeout	Construction complete, as-builts received. Project will be removed from future reports
02	DOUGLAS RODERICK	2019	CalTrans Hwy 174 Pipeline Relocation	2423	Relocation of 519.12 LF of 10" and 48.53 LF of 8" treated waterlines in the CalTrans right-of-way to accommodate CalTrans storm water work and roadway realignment on Hwy 174	Construction	Bids received on November 7th. Going to APC in December recommending award of construction contract. Work to be completed by April 30, 2020 per Caltrans encroachment permit.
03	DOUGLAS RODERICK	2019	Boreham and Gayle Lane	2070	Replacement of deteriorated water mains and services in this area. 7,582 LF of 8" pipe.	Closeout	Construction complete. Will be removed from future project status reports.
04	ADRIAN SCHNEIDER	2019	Long Ravine Campground	2270	Replacement of existing 50-year old system with approximately 7460 LF of 1 1/2", 3" and 6" pipe. Also replacing failing concrete storage tank and filter system.	Pre-Construc tion	Pipeline Design 100%. Two poly storage tanks and all piping will be delivered in December 2019. Anticipating contracting with Diamond Well Drilling to install new filter system for iron and sediment removal.
05	DOUGLAS RODERICK	2020	Lidster Avenue & Country Club Terrace	2071	Replacement of deteriorated water mains and services in this area. 4,545 LF of 8" pipe.	Construction	Plans to Maintenance for construction in 2020. Design 100%.
06	TONIA TABUCCHI HERRERA	2020	Christian Life Way at Highway 49	6962	Replace approximately 1500 LF of pipeline with 8" pipeline. Existing pipeline is undersized; has reached its useful life, is difficult to access, existing ROW is inadequate, requires new route for accessibility	Design	Design 10%. Survey is complete.
07	DOUGLAS RODERICK	2020	Nevada City Hwy & Narrow Gage Lane	2184	Modification of aged pipeline and adjustments to existing pipeline conflicts.	Planning	
80	DOUGLAS RODERICK	2020	Osborne Hill Inlet Pipe	6966	Osborne Hill Inlet Pipe 1,720' of 18" pipe	Deferred	Currently re-evaluating into future budget years. Will be removed from future project status reports.
3 - PI	RV REPLACEMENT (\$160,000	)) 10151-529	908				
01	TONIA TABUCCHI HERRERA	2019	Cedar Ridge PRV Replacement	2366	Existing PRV station is badly deteriorated with valves in a vault.  Replacement station will be above ground. Additional ROW is required	Design	Design 90%. Routing to all departments for final comment.
02	TONIA TABUCCHI HERRERA	2019	East Ridge PRV Replacement	2318	Existing PRV station is badly deteriorated with valves in a vault. Replacement station will be above ground. Additional ROW is required.	Design	Design 10%. Survey is complete.
5 - R	AW WATER SYSTEM IMPROV	(\$1,200,000	0) 10151-52910				
01	DOUGLAS RODERICK	2019	Doty North Canal (PC)	1031	Doty North canal which will encase approximately 450 feet of canal and replace siphon #1.	Design	Continued AB52 consultation with UAIC. Final draft IS/MND being reviewed by staff. Expect the IS/MND to be released for public review in January/February of 2020. Will apply for CDFW LSA permit once CEQA document is out for public review.
02	DOUGLAS RODERICK	2019	South Yuba Canal Repair & Upgrades Ph 1	2419	Repair/Replace segments of So. Yuba Canal	Planning	Proposals received November 8th. Proposals currently being reviewed by staff. It is anticipated awarding consulting contract in January/February of 2020.
03	ADRIAN SCHNEIDER	2019	Maben Phase III	8099- 3	Rehabilitate and enlarge Maben Phase III with 1,625 LF of 18" pipe	Closeout	Pipeline complete, Will be removed from future project status reports.
05	DOUGLAS RODERICK	2020	Santini Siphon 1	1098	Replacement of undersized Siphon with 4600 LF of 24" pipe.	Design	Evaluation for easement acquisition. Design concept in process. Looking at possible alignment routes. Design 10%
06	DOUGLAS RODERICK	2021	Vernon Canal Siphon(PC)	1093	Rehabilitation of the Vernon Siphon	Planning	

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- R	AW WATER SYSTEM IMPROV (\$	1,200,00	0) 10151-52910				
07	ADRIAN SCHNEIDER	2020	Fruitvale Canal(NC)	8273	Last 2800': Rehabilitate canal, pipes, & structures.	Hold	Project on hold pending budget and project priorities.
_	ACKBONE EXTENSION (\$1.000.	000\4045	-4 50044				
02	TONIA TABUCCHI HERRERA	2025	E. George to LWW Pipeline Project-Phase I	2255	Phase I will replace two existing PRVs and install approximately 8653 of 18" pipeline. Replacement PRVs will be above ground and will require ROW. Construction of the pipeline is within County ROW.	Design	Design 90%. Routing to all departments for final comments. Specification 80%.
- N	ON-PROGRAMMATIC, BUDGET	10151-52	2915				
01	DOUGLAS RODERICK	2021	Combie I Replacement	6746	Combie Phase 1 Pipeline Bypass, 8900 LF of 96" pipe	Construction	Bypass in service, section of canal out of service. Contactor working on installation of 96" RCP. Pipeline to be ready for operation by March 30, 2020
02	DOUGLAS RODERICK	2021	Centennial Water Supply Project	7013	Centennial Water Supply Project	Planning	CEQA: Working on AB52 Consultation and Draft Alternatives Analysis. Ongoing consultations with UAIC, Colfax-Todd's Valley and Nevada City Rancheria, Waiting for Nevada City Rancheria to sign NDA before releasing cultural resource report. Submitted quarterly update to SWRBC and uploaded to website. Property acquisitions on hold. Revenues exceeded expenses by \$39,738 as of September 30, 2019. Quarterly update will be presented at the next Engineering Committee.
03	DOUGLAS RODERICK	2020	Alta Sierra Tank Replacement	6971	Replace existing Alta Sierra Hypalon-covered reservoir with storage tank	Design	Design/build proposals received on November 22nd. Staff have reviewed and have a recommended design/build team to construct an AWWA D110 prestressed concrete tank. Will be taking item to the Board in December with recommendation to award contract.
- C	OMMUNITY INVESTMENT (\$600.	000) 101	51-52912				
01	ADRIAN SCHNEIDER	2019	Iron Horse DFWLE	1019	Construction of 7,206 LF of 8" pipeline along Armstrong Rd., Iron Horse Drive & Brewer Road.	Construction	Approximately 5,000 feet of pipe has been installed (73% of total length) along Armstrong Road and Iron Horse Drive. Remaining pipe to be installed on Brewer Road. Rock excavation has exceeded original contract estimate. Construction slowed due to weather.
02	ADRIAN SCHNEIDER	2019	Table Meadow Ph 2 DFWLE	2180	Assist, Design and Construction of 5770 LF of 8" pipeline for existing neighborhoods approved by Engineering Committee.	Planning	Met with property owners on Sept. 10, 2019. Funding agreements being worked on and will be finalized December 2019. Design at 30% stage and being reviewed by departments. Comments to be incorporated into design.
_1 _	HYDRO NON-PROGRAMMATIC	50112-	52915 (\$1 250 000)				
01	ADRIAN SCHNEIDER	2020	Loma Rica Powerhouse	6947	Design and Build Hydroelectric Facility on the BC Pipeline	Deferred	Re-evaluating into future budget years. Will be removed from future project status reports.
)2	DARYL NOEL	2019	New Hydro Office Property Development	2084	New Hydro Office Property Development	Design	Award contract to WLC on December 11, 2019
-2	HYDRO POWERHOUSE IMPRO	/ 50442	.52020 (\$4.865.000)				
<u>-2 -</u> 01	DARYL NOEL	2019	Combie Reservoir	6943	Combie South Access Road. Develop approx. 3,000 ft. from south abutment.	Planning	ROW working to acquire rights.
02	DARYL NOEL	2019	COMMS Upgrade	20150 2-1	COMMS Upgrade	Planning	Planning phase to identify alternative.
	ADRIAN SCHNEIDER	2019	Chicago Park Fire Suppression System	2164	Upgrade of existing CO2 system (piping, alarms, sensors) to protect Generator. Includes installation of new Clean Agent suppression system for control room and the addition of a fire	Design	90% design plans reviewed by Engineering & Hydro; comments back to Sabah (Consultant) to be incorporated into a 100% design/build plans by end of December 2019. Installation to be started in January 2020 and will include both during plant operation, and scheduled plant outages. Schedule for installation being planned between Sabah and
03					detection system for electrical cable trays.		Hydro and will be finalized in December 2019.
03	DARYL NOEL	2019	Combie South Electrical Upgrades	2168	Combie South Electrical Upgrades	Design	, ,

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HYDRO POWERHOUSE IMPRO	V 50112	-52920 (\$1,865,000)				
DARYL NOEL	2019	Bowman Governor	2234	Replace and integrate with BoP PLC.	Design	Hydro contracted with Al d'Heurle (dHSI). Working on construction contract.
DARYL NOEL	2023	SFPH Instrument Upgrade	2232	Install a new BOP PLC that will interface with the OSI software and provide for all plant monitoring functions.	Deferred	Project deferred to 2024.
HYDRO DAM & WATER IMPRO	V 50112-5	52921 (\$1,700,000)				
MIN CHEN	2020	Scotts Flat Spillway Repair	2094	Scotts Flat Spillway Repair & Upgrades	Design	Spill crest stability evaluation being performed. Developing spillway alternative. Design 0%
ADRIAN SCHNEIDER	2019	Gaging Station	2007	New Gaging Station Design for French Lake	Deferred	Design 100%. Re-evaluating into future budget years, Will be removed from future project status reports.
DOUGLAS HOBBS	2018	Rollins Low Level Outlet HBV	2076	Design and construct a low-level valve for Rollins Reservoir	Closeout	Project complete. Will be removed from future project status reports.
MIN CHEN	2019	Combie Abutment Scour	20140	Dam stabilization, abutments protection against scouring, and water supply upgrade	Planning	Finalizing contract with Gannet Fleming. Alternative analysis to start in 2020.
MIN CHEN	2019	DF Flume Footing Repairs	2229	Repair undermined footings at two locations.	Closeout	Construction completed. Will be removed from future project status reports.
RANT 10151-52915						
DOUGLAS RODERICK	2019	Meade Canal Encasement	1071	This project will encase approximately 3,000 lf of 18" pipe Meade Canal	Closeout	Complete - Will be removed from future project status reports.
NGINEERING O&M 10151-NA						
GREG JONES	2020	District Wide	1041	Raw Water Master Plan / EIR	Planning	Draft Demand and Supply Technical memos being completed.
TONIA TABUCCHI HERRERA	2019	LWW and N. Auburn Water Age Evaluation	2027	Model the water age in the LWW and N. Auburn Treated Water Systems.	Study	Final comments forwarded to consultant to incorporate in the draft study.
ADMIN CAPITAL 10114-52915						
DOUGLAS RODERICK	2020	Hemphill Diversion	7032	Hemphill Diversion Maintenance Activities to facilitate Fish Passage. Modification of the downstream area of existing Diversion facility with anticipation to improve fish passage.	Design	Consultants working on DEIR for the project. Anticipated release for public review summer of 2020.
EDIMENT REMOVAL PROJECT	S (\$650.0	00) 10151-52914				
GREG JONES	- (+					
CINEO JOINES	2020	Steephollow Sediment Removal	6877	Removal of sediment at Steep Hollow and protection of hydro facilities	Hold	Need funds to get things moving for Channel / Monitoring. ROW has one easement remaining.
ADRIAN SCHNEIDER	2020	Steephollow Sediment Removal  Loma Rica Reservoir	2090	·	Hold	Need funds to get things moving for Channel / Monitoring. ROW has one easement remaining.  Project completed for the year. Approximately 14,400 cubic yards temporarily stockpiled next to reservoir and to be removed in 2020. Sediment removal from the reservoir is completed.
				facilities		remaining.  Project completed for the year. Approximately 14,400 cubic yards temporarily stockpiled next to reservoir and to be removed in 2020. Sediment removal from the reservoir is
ADRIAN SCHNEIDER	2019	Loma Rica Reservoir	2090	facilities  Cleaning of the Loma Rica Reservoir to increase capacity.  Removal accumulated sediment from the Greenhorn Creek arm	Closeout	remaining.  Project completed for the year. Approximately 14,400 cubic yards temporarily stockpiled next to reservoir and to be removed in 2020. Sediment removal from the reservoir is completed.  Obtaining permits to conduct soil tests in order to provide information for future contractor for soil disposal/sales options. Tests to be done by NV5 during dry conditions. Sediment
ADRIAN SCHNEIDER  ADRIAN SCHNEIDER	2019	Loma Rica Reservoir  Greenhorn Sediment Removal	2090 8515	facilities  Cleaning of the Loma Rica Reservoir to increase capacity.  Removal accumulated sediment from the Greenhorn Creek arm of Rollins Reservoir.	Closeout	remaining.  Project completed for the year. Approximately 14,400 cubic yards temporarily stockpiled next to reservoir and to be removed in 2020. Sediment removal from the reservoir is completed.  Obtaining permits to conduct soil tests in order to provide information for future contractor for soil disposal/sales options. Tests to be done by NV5 during dry conditions. Sediment removal request for quotes to be sent out in 2020.
ADRIAN SCHNEIDER  ADRIAN SCHNEIDER  ADRIAN SCHNEIDER	2019 2020 2020	Loma Rica Reservoir  Greenhorn Sediment Removal  Orr Creek Reservoir	2090 8515 6963	facilities  Cleaning of the Loma Rica Reservoir to increase capacity.  Removal accumulated sediment from the Greenhorn Creek arm of Rollins Reservoir.  Cleaning of Orr Creek Reservoir to increase capacity  Install permanent bypass pipe & remove accumulated sediment	Closeout  Planning  Design  Post-Constru	remaining.  Project completed for the year. Approximately 14,400 cubic yards temporarily stockpiled next to reservoir and to be removed in 2020. Sediment removal from the reservoir is completed.  Obtaining permits to conduct soil tests in order to provide information for future contractor for soil disposal/sales options. Tests to be done by NV5 during dry conditions. Sediment removal request for quotes to be sent out in 2020.  Permits are being finalized. Design at 60%. Anticipate project to start 2020-2021  Bypass pipe installed and complete. Sediment removal from reservoir in the future or
	HYDRO POWERHOUSE IMPRODARYL NOEL  DARYL NOEL  HYDRO DAM & WATER IMPROMIN CHEN  ADRIAN SCHNEIDER  DOUGLAS HOBBS  MIN CHEN  MIN CHEN  RANT 10151-52915  DOUGLAS RODERICK  NGINEERING O&M 10151-NA  GREG JONES  TONIA TABUCCHI HERRERA  ADMIN CAPITAL 10114-52915  DOUGLAS RODERICK	HYDRO POWERHOUSE IMPROV   50112	HYDRO POWERHOUSE IMPROV 50112-52920 (\$1,865,000)  DARYL NOEL 2019 Bowman Governor  DARYL NOEL 2023 SFPH Instrument Upgrade  HYDRO DAM & WATER IMPROV 50112-52921 (\$1,700,000)  MIN CHEN 2020 Scotts Flat Spillway Repair  ADRIAN SCHNEIDER 2019 Gaging Station  DOUGLAS HOBBS 2018 Rollins Low Level Outlet HBV  MIN CHEN 2019 Combie Abutment Scour  MIN CHEN 2019 DF Flume Footing Repairs  RANT 10151-52915  DOUGLAS RODERICK 2019 Meade Canal Encasement  NGINEERING O&M 10151-NA  GREG JONES 2020 District Wide  TONIA TABUCCHI HERRERA 2019 LWW and N. Auburn Water Age Evaluation	HYDRO POWERHOUSE IMPROV   50112-52920 (\$1,865,000)     DARYL NOEL   2019   Bowman Governor   2234     DARYL NOEL   2023   SFPH Instrument Upgrade   2232     HYDRO DAM & WATER IMPROV 50112-52921 (\$1,700,000)     MIN CHEN   2020   Scotts Flat Spillway Repair   2094     ADRIAN SCHNEIDER   2019   Gaging Station   2007     DOUGLAS HOBBS   2018   Rollins Low Level Outlet HBV   2076     MIN CHEN   2019   Combie Abutment Scour   20140   2     MIN CHEN   2019   DF Flume Footing Repairs   2229     RANT 10151-52915     DOUGLAS RODERICK   2019   Meade Canal Encasement   1071     NGINEERING O&M   10151-NA   GREG JONES   2020   District Wide   1041     TONIA TABUCCHI HERRERA   2019   LWW and N. Auburn Water Age   Evaluation   2027     ADMIN CAPITAL   10114-52915   DOUGLAS RODERICK   2020   Hemphill Diversion   7032	HYDRO POWERHOUSE IMPROV 50112-52920 (\$1,865,000)  DARYL NOEL 2019 Bowman Governor 2234 Replace and integrate with BoP PLC.  DARYL NOEL 2023 SFPH Instrument Upgrade 2232 Install a new BOP PLC that will interface with the OSI software and provide for all plant monitoring functions.  HYDRO DAM & WATER IMPROV 50112-52921 (\$1,700,000)  MIN CHEN 2020 Scotts Flat Spillway Repair 2094 Scotts Flat Spillway Repair & Upgrades  ADRIAN SCHNEIDER 2019 Gaging Station 2007 New Gaging Station Design for French Lake  DOUGLAS HOBBS 2018 Rollins Low Level Outlet HBV 2076 Design and construct a low-level valve for Rollins Reservoir  MIN CHEN 2019 Combie Abutment Scour 20140 Dam stabilization, abutments protection against scouring, and water supply upgrade  MIN CHEN 2019 DF Flume Footing Repairs 2229 Repair undermined footings at two locations.  RANT 10151-52915  DOUGLAS RODERICK 2019 Meade Canal Encasement 1071 This project will encase approximately 3,000 if of 18" pipe Meade Canal  NGINEERING O&M 10151-NA  GREG JONES 2020 District Wide 1041 Raw Water Master Plan / EIR  TONIA TABUCCHI HERRERA 2019 LWW and N. Auburn Water Age Evaluation 5 systems.  ADMIN CAPITAL 10114-52915  DOUGLAS RODERICK 2020 Hemphill Diversion 7032 Hemphill Diversion Maintenance Activities to facilitate Fish Passage. Modification of the downstream area of existing Diversion facility with anticipation to improve fish passage.	HYDRO POWERHOUSE IMPROV 50112-52920 (\$1,865,000)  DARYL NOEL 2019 Bowman Governor 2234 Replace and integrate with BoP PLC. Design  DARYL NOEL 2023 SFPH Instrument Upgrade 2232 Install a new BOP PLC that will interface with the OSI software and provide for all plant monitoring functions.  HYDRO DAM & WATER IMPROV 50112-52921 (\$1,700,000)  MIN CHEN 2020 Scotts Flat Spillway Repair 2094 Scotts Flat Spillway Repair & Upgrades Design  ADRIAN SCHNEIDER 2019 Gaging Station 2007 New Gaging Station Design for French Lake Deferred  DOUGLAS HOBBS 2018 Rollins Low Level Outlet HBV 2076 Design and construct a low-level valve for Rollins Reservoir Closeout  MIN CHEN 2019 Combie Abutment Scour 20140 Dam stabilization, abutments protection against scouring, and Planning  MIN CHEN 2019 DF Flume Footing Repairs 2229 Repair undermined footings at two locations. Closeout  RANT 10151-52915  DOUGLAS RODERICK 2019 Meade Canal Encasement 1071 This project will encase approximately 3,000 if of 18° pipe Closeout Meade Canal  NGINEERING O&M 10151-NA  GREG JONES 2020 District Wide 1041 Raw Water Master Plan / EIR Planning  TONIA TABUCCHI HERRERA 2019 LIWW and N. Auburn Water Age Evaluation  ADMIN CAPITAL 10114-52915  DOUGLAS RODERICK 2020 Hemphill Diversion 7032 Hemphill Diversion Maintenance Activities to facilitate Fish Passage. Modification of the downstream area of existing Diversion facility with anticipation to improve fish passage.

18 - RECREATION (30250-52915)

Created: 12/4/2019

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Prty Proj Mgr		Facility Name	WO#	<u>Description</u>	<u>Status</u>	Comments			
18 - RECREATION (30250-52915)									
01 DOUGLAS RODERICK	2020	Ditch Tender House Scotts Flat	2102	Remodel of Ditch Tender House at Scotts Flat Lake	Construction	Doors being installed. Staff are reviewing what items need to be finished. Final work to be completed in early 2020.			