

### ***Project 16-4 Mansion Hill Transmission Main Relocation***

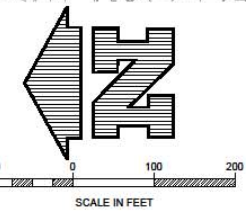
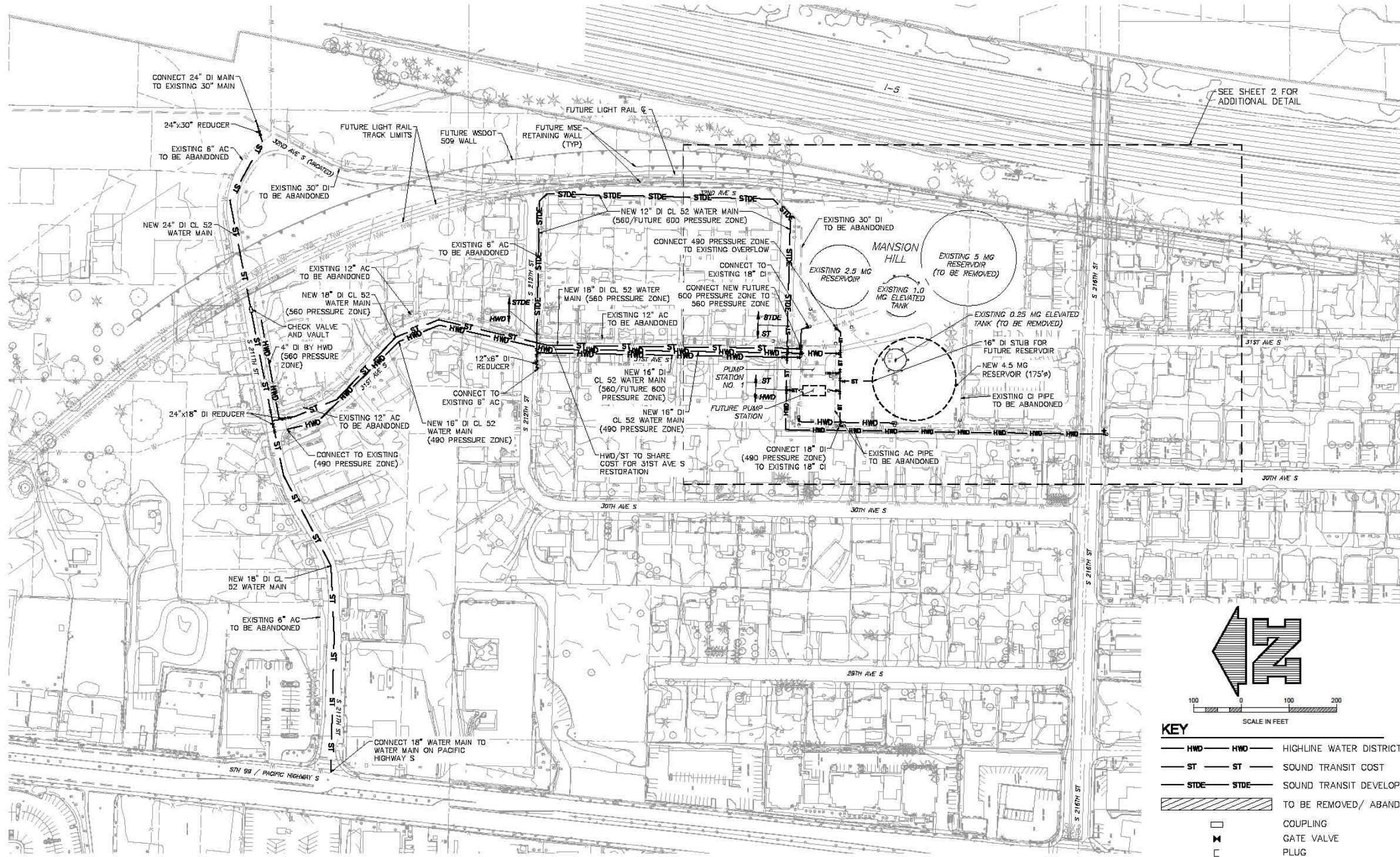
In 2017, the District created Project 16-4 from the preliminary engineering effort of Project 16-3, Mansion Hill Reservoir Relocation. This new project relocates the existing transmission main between the Bow Lake Reservoir to the Mansion Hill Reservoir in conflict with the proposed Sound Transit (ST) Light Rail alignment. The transmission main work predicateds the reservoir relocation work on the Mansion Hill site.

The project includes the installation of approximately 3,000 LF of 24" and 18" water mains connecting the existing transmission main to the reservoir site and the distribution system at International Blvd and S 211<sup>th</sup> St. The new downsized main connected at two discharge locations will improve overall redundancy while maintaining capacity in the 560 Zone near Mansion Hill.

Because the project will disturb the road along 31<sup>st</sup> Ave S, the District will replace two existing AC water mains within the project limits. The work includes installing approximately 3,300 LF of new 18-inch and smaller sized pipe to serve the 490 pressure zone and future 600 pressure zone. (See Project 18-3 for additional information).

The District executed a contract with Stantec for final design on September 20, 2017. Staff is negotiating the final agreement for reimbursement with ST for approval by the Board by the end of the year. Staff anticipates completing the design and permitting in 2017 and advertise for construction in early 2018. Work will be complete by summer 2018.

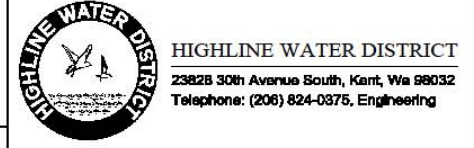
The District will fund the project by a combination of existing rates/capital reserves and ST reimbursement. ST anticipated costs are \$2.53 million distributed over 2017 and 2018. HWD anticipated costs for the same years are \$1.74 million, respectively.



**KEY**

	HWD	HIGHLINE WATER DISTRICT COST
	ST	SOUND TRANSIT COST
	STDE	SOUND TRANSIT DEVELOPER EXTENSION
		TO BE REMOVED/ ABANDONED
		COUPLING
		GATE VALVE
		PLUG

NO.	DATE	BY	APPR.	REVISION



**HIGHLINE WATER DISTRICT**  
**MANSION HILL**  
**RESERVOIR RELOCATION**  
**HWD/ST COST BREAKDOWN**

SHEET NO:  
**1**  
 1 2

DATE:      SCALE: AS NOTED      JOB # 2002005061

**16-4 MANSION HILL TRANSMISSION MAIN RELOCATION AND PIPING UPGRADES  
ESTIMATED PROJECT COSTS**

<b>CATEGORY</b>	<b>2017</b>	<b>2018</b>	<b>TOTAL</b>
Capitalized Interest	\$ 1,000	\$ 3,500	\$ 4,500
Engineering - Design	\$ 220,296	\$ 67,000	\$ 287,296
Construction	\$ -	\$ 3,810,000	\$ 3,810,000
Construction Administration	\$ -	\$ 114,300	\$ 114,300
Staff Labor and Benefits	\$ 7,500	\$ 25,000	\$ 32,500
Permitting	\$ 10,000	\$ 3,500	\$ 13,500
Miscellaneous / Other	\$ 2,500	\$ 5,000	\$ 7,500
Legal	\$ 2,500	\$ -	\$ 2,500
<b>TOTAL</b>	<b>\$ 243,796</b>	<b>\$ 4,028,300</b>	<b>\$ 4,272,096</b>

<b>FUNDING FOR PROJECT</b>			
<b>CATEGORY</b>	<b>2017</b>	<b>2018</b>	<b>TOTAL</b>
Rates/Reserves	\$ 100,000	\$ 1,635,466	\$ 1,735,466
Sound Transit Reimbursement	\$ 143,796	\$ 2,392,834	\$ 2,536,630
<b>TOTAL</b>	<b>\$ 243,796</b>	<b>\$ 4,028,300</b>	<b>\$ 4,272,096</b>

<b>ESTIMATED SCHEDULE FOR PROJECT COMPLETION</b>	
<b>Description</b>	<b>Date</b>
Design Engineering (Complete)	December 2017
Award Construction Contract	March 2018
Begin Construction	April 2018
Project Final Completion	August 2018