***Project 16-2 Pump Station No 8 (Crestview)***

Highline Water District's majority storage component serving the 560 Pressure Zone is the 7.6 MG Crestview Reservoir. Water stored in Crestview or source water from Seattle Public Utilities must pump through Pump Station 6 (PS6) to enter into the 560 zone.

The 2016 Comprehensive Water System Plan identified the need for a second pump station to serve the 560 zone from SPU and Crestview. The project would improve redundancy and resiliency in the overall water system in the event of a failure of PS6. The new pump station (PS8) will use modern equipment and receive electrical service from Puget Sound Energy, a different electric utility than PS6 (Seattle City Light).

The project's first phase was preliminary engineering, feasibility and a station siting evaluation. The District selected RH2 Engineering to perform the preliminary services. RH2 evaluated ten local properties in the general area of S 160th St and 42nd Ave S. The designers narrowed the search based on elevations, proximity to Crestview Reservoir and PS6, cost and impacts to the neighborhood. RH2 completed the preliminary assessment in December 2016.

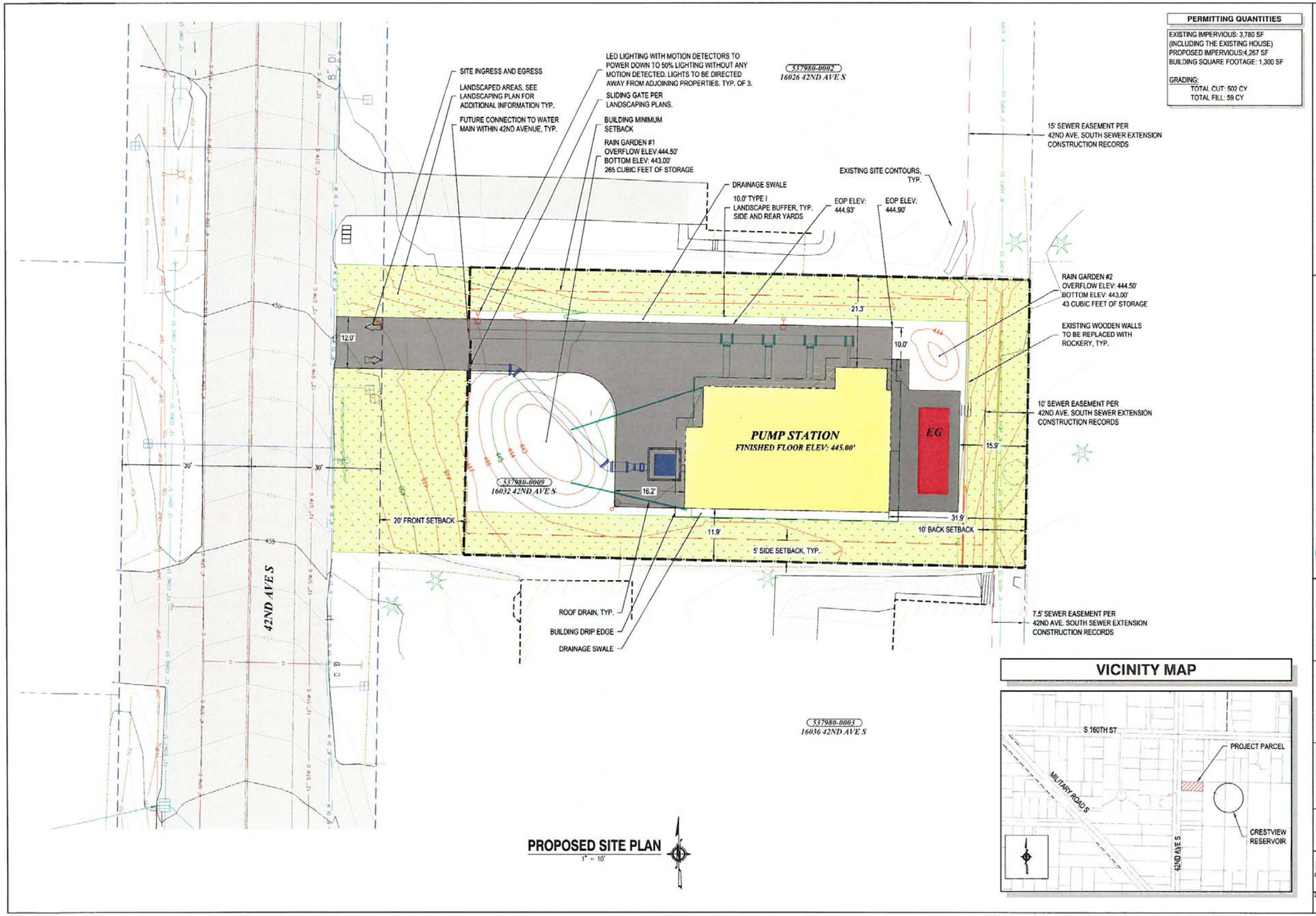
The District selected to site the station at the Harper property located at 16032 42nd Ave S. The property housed an existing derelict structure in foreclosure. The home housed criminal activity and was a nuisance for the surrounding properties. The District closed the sale on November 16, 2016. District staff subsequently demolished the structure in early 2017.

RH2 Engineering evaluated several design concepts. The preliminary design includes a 5,000 GPM split-level pump station; pumps and piping are below ground and electrical and equipment storage in an above ground building. RH2 retained Page and Beard Architects to design the above ground building to blend in with the surrounding properties.

Staff coordinated with the City of Tukwila to determine the preliminary requirements for the project. The District must obtain an Unspecified Use Permit (UUP), which requires approval by the City Council (Permit package deemed complete Nov. 1, 2017). Public comment will close in December 2017. The intake and outlet piping is within existing right-of-way within the City of SeaTac requiring additional permitting.

The District will negotiate for an easement with the property owner of Scott Plaza, located at 16256 Military Rd S. The easement will assist the District by making way for a less complex connection of the discharge piping to the existing pipeline on Military Road S.

The District allocated $1.4 million and $2.1 million in the 2018 and 2019 budgets, respectively. Construction will begin third quarter 2018. The total anticipated project cost is $4.1 million and funded by existing water rates and capital reserves.




**PERMITTING QUANTITIES**

EXISTING IMPERVIOUS: 3,780 SF
(INCLUDING THE EXISTING HOUSE)
PROPOSED IMPERVIOUS:4,267 SF
BUILDING SQUARE FOOTAGE: 1,300 SF

GRADING:
TOTAL CUT: 502 CY
TOTAL FILL: 59 CY

**VICINITY MAP**




SIGNED 09/26/17

STAMP 09/26/17

RH2 ENGINEERING, INC.
www.RH2.com
BOTHELL, WA
1.800.720.8052
22525 SE 64th Place, Suite 210

HIGHLINE WATER DISTRICT
PUMP STATION NO. 8

PUMP STATION 8 SITE PLAN

REVISIONS

| NO. | DESCRIPTION | DATE | BY |
|---|---|---|---|
| | | | |

ENGINEER: ####
REVIEWED: ####
SURV DATE: Sep 26, 2017
AUDIT DATE: Sep 26, 2017
CLIENT: ####
CLEANING: PS8-F-COVER.DWG
JOB NO: ####

SCALE: ####

DRAWING IS FULL SCALE WHEN BAR MEASURES 2"

DWG NO. ####
SHEET NO. ####

**16-2 PUMP STATION No. 8**
**ESTIMATED PROJECT COSTS**

| CATEGORY | Prior Years | 2017 | 2018 | 2019 | TOTAL |
|---|---|---|---|---|---|
| Capitalized Interest | $ 1,035 | | | | $ 1,035 |
| Engineering - Design | $ 57,682 | $ 234,779 | $ 178,877 | $ - | $ 471,338 |
| Construction | | | $ 1,111,000 | $ 1,870,000 | $ 2,981,000 |
| Construction Administration | $ - | | $ 122,210 | $ 205,700 | $ 327,910 |
| Staff Labor and Benefits | $ 5,365 | $ 14,000 | $ 15,000 | $ 10,000 | $ 44,365 |
| Permitting | | $ 14,500 | $ 5,000 | | $ 19,500 |
| Property Acquisition | $ 198,215 | $ 30,000 | | | $ 228,215 |
| Miscellaneous / Other | $ 1,661 | $ 10,000 | $ 5,000 | $ 5,000 | $ 21,661 |
| Legal | $ 16,990 | $ 2,500 | $ 2,500 | | $ 21,990 |
| TOTAL | $ 280,947 | $ 305,779 | $ 1,439,587 | $ 2,090,700 | $ 4,117,013 |

| **FUNDING FOR PROJECT** | | | | | |
|---|---|---|---|---|---|
| **CATEGORY** | **Prior Years** | **2017** | **2018** | **2019** | **TOTAL** |
| Rates/Reserves | $ 280,947 | $ 305,779 | $ 1,439,587 | $ 2,090,700 | $ 4,117,013 |
| | | | | | |
| **TOTAL** | **$ 280,947** | **$ 305,779** | **$ 1,439,587** | **$ 2,090,700** | **$ 4,117,013** |

| **ESTIMATED SCHEDULE FOR PROJECT COMPLETION** | |
|---|---|
| **Description** | **Date** |
| Design Engineering (Complete) | April 2018 |
| Award Construction Contract | July 2018 |
| Begin Construction | September 2018 |
| Project Final Completion | June 2019 |