

Midway City Council
5 April 2022
Work Meeting

Highlands at Soldier Hollow /
Water System

To: Midway City Council
From: Wes Johnson
Date: April 5, 2022
Subject: The Highlands at Soldier Hollow Fire System

Memorandum

Dear Mayor and City Council,

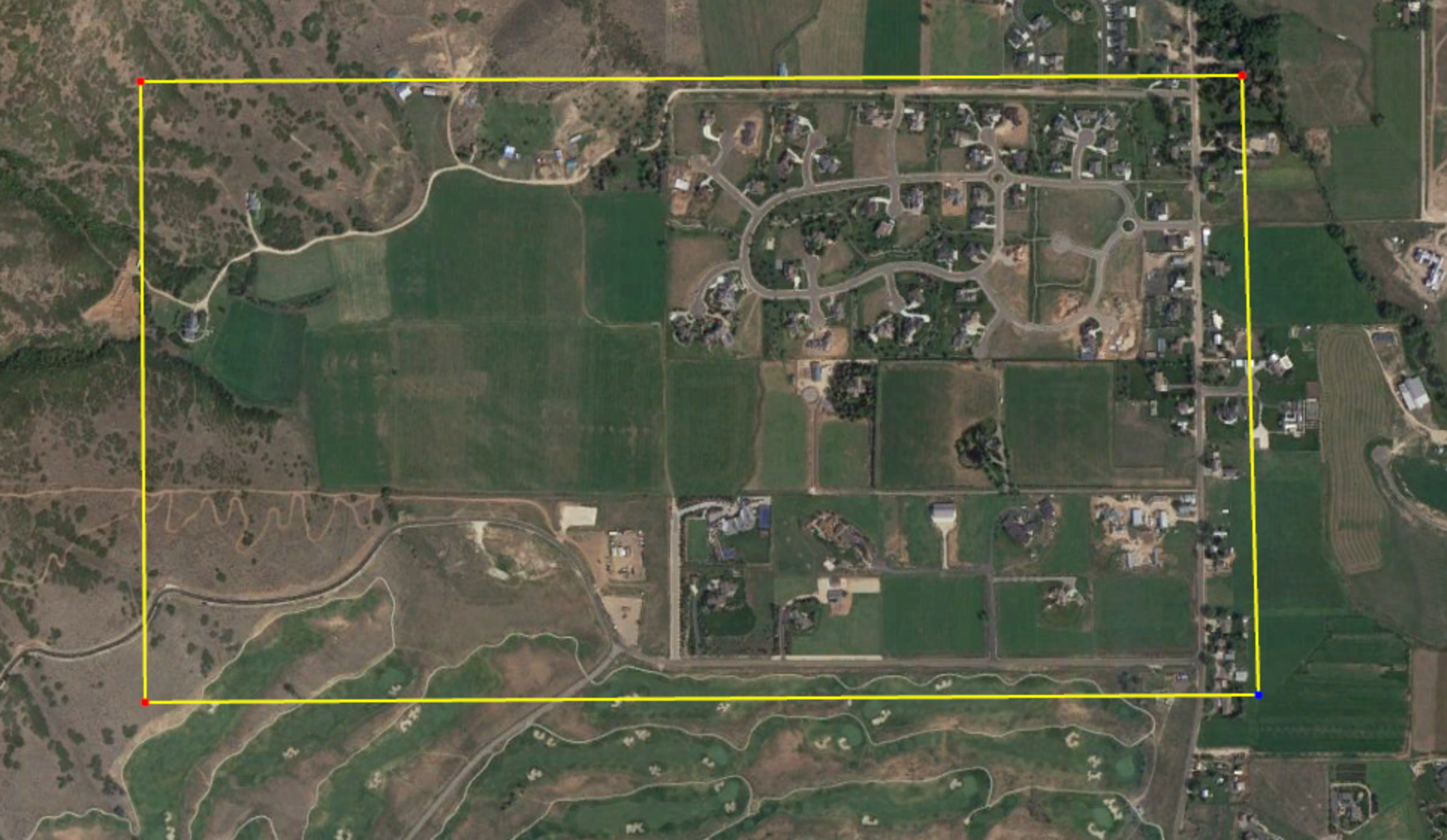
As the Highlands at Solider Hollow development was obtaining development approval from Wasatch County, the Wasatch County Fire District required a public entity to oversee the water system. Midway City met with the developer and indicated we would be interested in teaming with the development to up-size the capacity of their culinary well. The City agreed to take ownership over the water system. In exchange for taking ownership over the water system the developer agreed to contribute \$150,000 towards the Midway City trail funds.

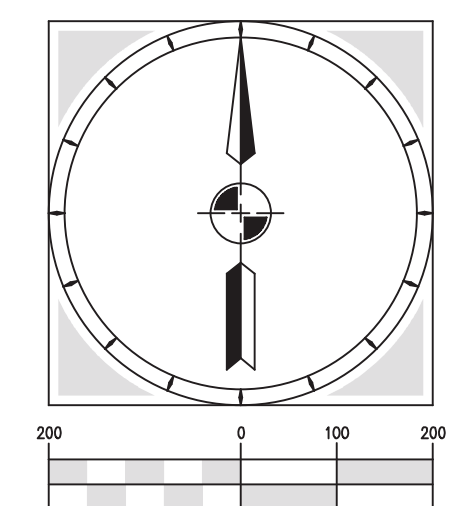
As the well was drilled to approximately 1,000-feet the water quality tests did not meet drinking water standards. To meet the Fire District obligation, the new well will be connected to a 120,000 gallon fire storage tank that will provide water to the fire system and fire hydrants located within the development.

Due to the poor water quality of the well, the fire water system within the development will not be connected to the Midway City water system. To allow the well and tank to be monitored by the City staff, the fire system will be connected to the Midway City SCADA system. This will allow the City Public Works to monitor operation of the well and the capacity of the fire tank.

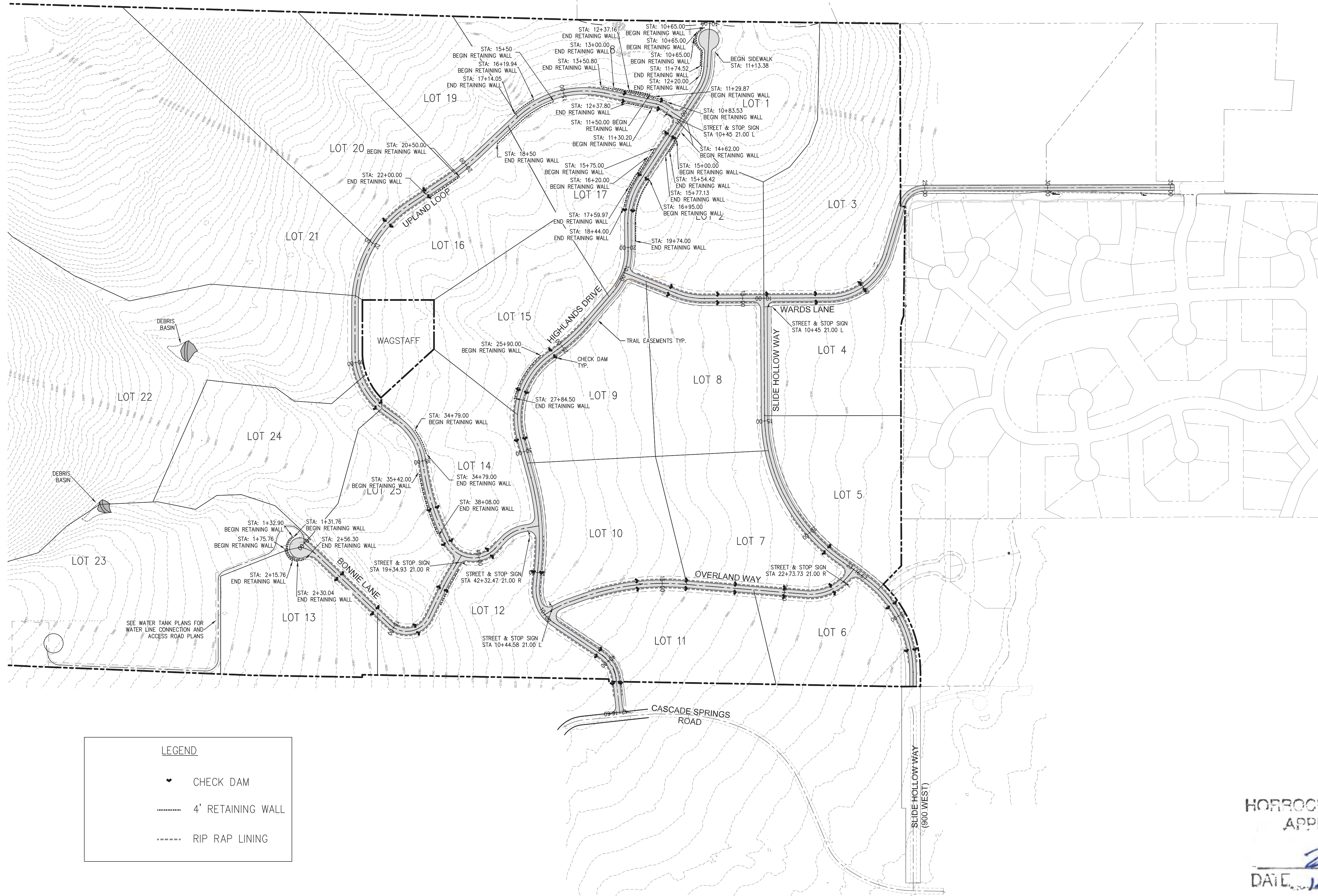
Attached are the following:

- A Vicinity Map showing the location of the development
- A Site Map showing the lot layout of the development
- Cost Estimate to operate the Fire System





HORIZONTAL SCALE:
1" = 40' (22x34)
1" = 80' (11x17)



LEGEND	
	CHECK DAM
	4' RETAINING WALL
	RIP RAP LINING

SEE WATER TANK PLANS FOR WATER LINE CONNECTION AND ACCESS ROAD PLANS

Summit Engineering Group Inc.
STRUCTURAL • CIVIL • LAND SURVEYING
55 WEST CENTER • P.O. BOX 176
HEBER CITY, UTAH 84032
P. 435-654-9229 • F. 435-654-9231

COPYRIGHT ©2021
SUMMIT ENGINEERING GROUP, INC.
DRAWN: ALBERTSON
CHECKED: [Signature]
IN U.S. AND CANADA, THE PROFESSION OF LAND SURVEYING IS REGULATED BY LAW. A LICENSED PROFESSIONAL SURVEYOR MUST SEAL AND SIGN ALL SURVEYING PLANS AND REPORTS IN ACCORDANCE WITH THE STATUTES AND REGULATIONS OF THE JURISDICTION IN WHICH THEY ARE PREPARED.

NO.	DATE	BY	REVISIONS
1			
2			
3			
4			
5			
6			
7			
8			

Brian Balls
2021.12.02
16:34:19
-07'00"
DATE

DESIGN ENGINEER

PROJECT ENGINEER	BMB
PROJECT MANAGER	BMB
DRAWN BY	SFS
ISSUE DATE	12/02/2021

PROJECT: THE HIGHLANDS AT SOLDIER HOLLOW
SHEET TITLE: CHECK DAM-RIP RAP, STREET SIGN AND WALL SITE PLAN

HORROCKS ENGINEERS
APPROVED BY

DATE: 12-3-21

PROJECT	C20-015
SHEET	C204

Z:\SEG Projects\CURRENT PROJECTS\C20-015 - The Highlands Final\Working Files\Engineering\dwg\C20-015 CHECK DAM-RET WALL.DWG

The Highlands at Soldier

Cost to operate the water system:

<u>Culinary Water System</u>		Cost
<u>Labor Cost @ 5 hr per week</u>		<u>Per Year</u>
Hourly Rate:	\$65.00	
Wages, benefits, vehicle, tools, etc..		
Hours per Week:	5	
Weeks per Year	50	
Cost Per Year:		\$16,250

<u>Maintenance Costs:</u>		
15 Year Costs		
Replace the Pump:	\$40,000	
Upgrade the PRV's	\$10,000	
Total Cost:	\$50,000	\$3,333

Total Average Cost /Year: **\$19,583**

Over 15 Years: \$293,750

<u>Labor Cost @ 3 hr per week</u>		Per Year
Hourly Rate:	\$65.00	
Wages, benefits, vehicle, tools, etc..		
Hours per Week:	3	
Weeks per Year	50	
Cost Per Year:		\$9,750

<u>Maintenance Costs:</u>		
15 Year Costs		
Replace the Pump:	\$40,000	
Upgrade the PRV's	\$10,000	
Total Cost:	\$50,000	\$3,333

Total Average Cost /Year: **\$13,083**

Over 15 Years: \$196,250

<u>Fire Water System</u>		Cost
<u>Labor Cost @ 5 hr per week</u>		<u>Per Year</u>
Hourly Rate:	\$65.00	
Wages, benefits, vehicle, tools, etc..		
Hours per Week:	5	
Weeks per Year	50	
Cost Per Year:		\$16,250

<u>Maintenance Costs:</u>		
15 Year Costs		
Replace the Pump:	\$15,000	
Upgrade the PRV's	\$0	
Total Cost:	\$15,000	\$1,000

Total Average Cost /Year: **\$17,250**

Over 15 Years: \$258,750

<u>Labor Cost @ 1 hr per week</u>		Per Year
Hourly Rate:	\$65.00	
Wages, benefits, vehicle, tools, etc..		
Hours per Week:	1	
Weeks per Year	50	
Cost Per Year:		\$3,250

<u>Maintenance Costs:</u>		
15 Year Costs		
Replace the Pump:	\$10,000	
Upgrade the PRV's	\$0	
Total Cost:	\$10,000	\$667

Total Average Cost /Year: **\$3,917**

Over 15 Years: \$58,750

\$150,000 Trail Donation

Break Even Point in Years 38

Hourly Pay Rate:	\$25.00
Benefit Increase	2.5
Rate With Benefits	62.5