

Westborough Water District Capital Improvement Program Summary 2021

Project Number	Project Name	Quantity			Construction	Planning, Design & CM	Contingency	2021 Dollars
		LF	SRV	MH				
S16-05	Westborough Pump Station Wet Well Improvements				\$ 60,000	\$ -	\$ 5,000	\$ 65,000
S16-06	Rowntree Pump Station Structural Analysis/Repair				\$ 55,000	\$ -	\$ 5,000	\$ 60,000
S17-01	Westborough Sewer Pump Station Improvement				\$ 295,000	\$ -	\$ 20,000	\$ 315,000
S17-02	Avalon Pump Sewer Station Improvement				\$ 150,000	\$ 40,000	\$ 20,000	\$ 210,000
S17-03	Rowntree Sewer Pump Station Improvement				\$ 165,000	\$ -	\$ 20,000	\$ 185,000
								\$ 835,000
	Programed Sewer Main Replacement							
S21-01	Westborough Blvd Phase 1 Sanitary Sewer Improvement	1930	2	8	\$ 897,500	\$ 180,000	\$ 97,500	\$ 1,175,000
S21-02	Westborough Blvd Phase 2 Sanitary Sewer Improvement	1500	-	7	\$ 870,000	\$ 175,000	\$ 105,000	\$ 1,150,000
S21-03	Westborough Blvd Phase 3 Sanitary Sewer Improvement	1920	-	11	\$ 1,178,000	\$ 180,000	\$ 142,000	\$ 1,500,000
S21-04	Shannon Dr Phase 1 Sanitary Sewer Improvements	2100	56	8	\$ 1,115,000	\$ 170,000	\$ 130,000	\$ 1,415,000
S21-05	Shannon Dr Phase 2 Sanitary Sewer Improvements	2260	53	10	\$ 1,177,000	\$ 180,000	\$ 138,000	\$ 1,495,000
S21-06	Shannon Dr Phase 3 Sanitary Sewer Improvements	2180	70	9	\$ 1,203,000	\$ 180,000	\$ 137,000	\$ 1,520,000
S21-07	Oakmont Dr Sanitary Sewer Improvements	1060	34	6	\$ 601,000	\$ 120,000	\$ 74,000	\$ 795,000
S21-08	Bantry Ln Sanitary Sewer Improvements	1200	44	5	\$ 690,000	\$ 140,000	\$ 85,000	\$ 915,000
S21-09	Ardee Ln Phase 3 Sanitary Sewer Improvements	1180	41	5	\$ 668,000	\$ 135,000	\$ 82,000	\$ 885,000
S21-10	Tara Ln Sanitary Sewer Improvements	1060	34	5	\$ 591,000	\$ 120,000	\$ 74,000	\$ 785,000
		16390	334	74				\$ 11,635,000
	Unprogrammed Sewer Main Replacement							
	Various Locations	50000	800	250	\$ 24,000,000	\$ 4,500,000	\$ 2,500,000	\$ 31,000,000
	ASSUMPTIONS						Total:	\$ 43,470,000
	Pipe/LF	\$ 350						
	Laterals	\$ 5,000						
	Manhole Cost	\$ 10,000						

ROWNTREE PUMP STATION STRUCTURAL ANALYSIS / REPAIR

PROJECT BACKGROUND

Rowntree Pump Station is located along the northwest side of Gellert Blvd directly across Rowntree Way. The pump station is a precast concrete structure built into the hillside with a concrete roof, rear and side walls dueling as retaining walls with the front exposed to the parking lot. There is also a wet well located directly behind the pump station between the building and sidewalk along Gellert Blvd. The pump station is accessed from the shopping center parking lot to the south. Over the years, the joint between the concrete roof and back wall has been leaking during rain events or when the wet well is full. It is also not known when the last structural analysis was performed on the building. This project involves performing a structural analysis of the building in addition to repairing the leak.

PROPOSED IMPROVEMENTS

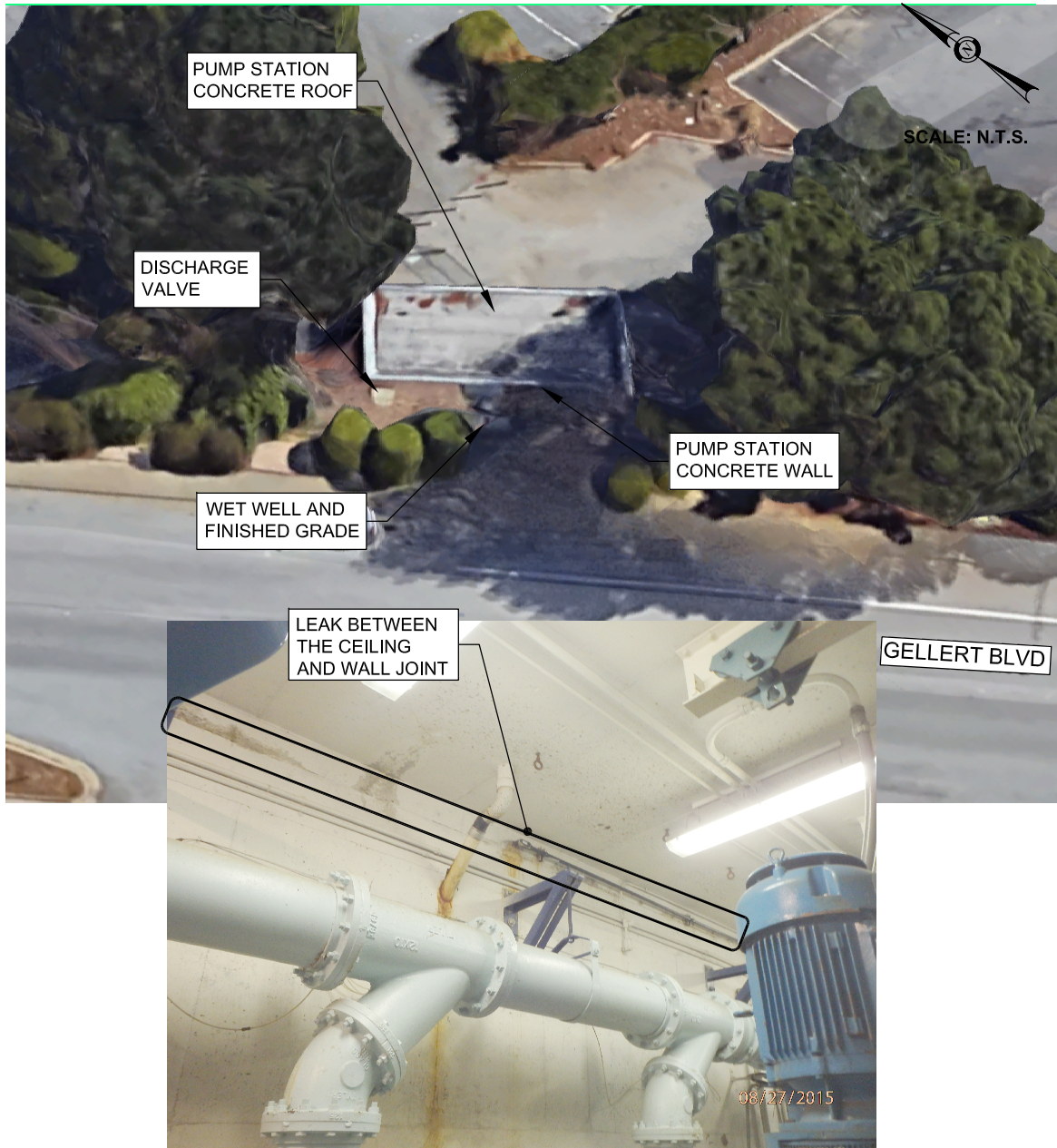
Conduct a structural analysis and repair the joint leak.

PROJECT BENEFITS

The Rowntree Pump Station Structural Analysis / Repair project will repair the joint leak and analyze the condition of the existing structure and indicate any needed repairs beyond the joint leak already identified.

PROJECT BUDGET (2021)

Structural Analysis	\$ 50,000
Leak Repair	\$ 5,000
Subtotal	\$ 55,000
Contingency (±10%)	\$ 5,000
Project Budget	\$ 60,000



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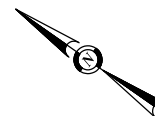
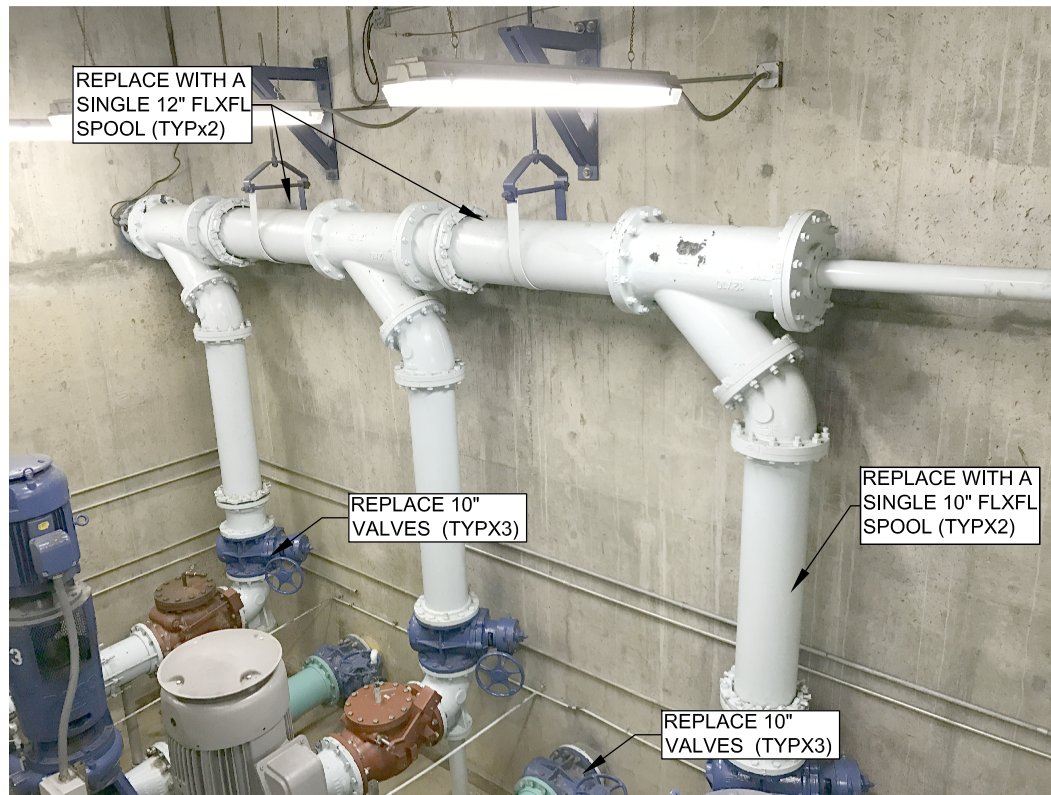
JOB No.	10025.01
DATE	06/2021
SCALE	N.T.S.
DRAWN: BY	FF/BL
CKD	JP



WESTBOROUGH WATER DISTRICT
SAN MATEO COUNTY, CALIFORNIA
2263 WESTBOROUGH BOULEVARD
SOUTH SAN FRANCISCO, CA 94083

CAPITAL IMPROVEMENT PROGRAM
ROWNTREE PS STRUCTURAL ANALYSIS / REPAIR
PROJECT S16-06

Rev 1 - 06/21
Original 2016



SCALE: NTS

WESTBOROUGH SEWER PUMP STATION IMPROVEMENTS

PROJECT BACKGROUND

The North San Mateo County Sanitation District currently maintains the District's sanitary sewer system. They requested the following equipment modifications for the Westborough Pump Station.

The valves are old and operation is becoming difficult and replacement is recommended. Automatic Transfer Switch and Motor Control Center also require replacement.

1. 6 - 10" Valves
2. 2 - 10" Spools
3. 2 - 12" Spools
4. Automatic Transfer Switch (ATS)
5. SJ MCC and Associated Cabinets

PROPOSED IMPROVEMENTS

Replace valves and ATS.

PROJECT BENEFITS

The Westborough Sewer Pump Station Improvements decreases the risk of pump failure and down time.

PROJECT BUDGET (2021)

10" Valves - 6 @ \$15,000/EA	\$ 90,000
10" Spools - 2 @ \$7,500/EA	\$ 15,000
12" Spools - 2 @ \$7,500/EA	\$ 15,000
MCC and Associated Cabinets	\$ 150,000
Automatic Transfer Switch	\$ 25,000
Subtotal	\$ 295,000
Contingency (±10%)	\$ 20,000
Project Budget	\$ 315,000



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CAPITAL IMPROVEMENT PROGRAM
WESTBOROUGH PS IMPROVEMENTS
PROJECT S17-01

Rev 1 - 06/21
Original 2017

AVALON SEWER PUMP STATION IMPROVEMENTS

PROJECT BACKGROUND

The North San Mateo County Sanitation District currently maintains the District's sanitary sewer system. They requested the following equipment modifications for the Avalon Pump Station.

The Motor Control Center (MCC) panel and associated outdoor cabinet should be redesigned and replaced as they are in very poor condition.

1. MCC and associated cabinet

PROPOSED IMPROVEMENTS

Replace the MCC and associated cabinet.

PROJECT BENEFITS

The Avalon Sewer Pump Station Improvements decreases the risk of pump failure and down time.

PROJECT BUDGET (2021)

MCC and Cabinets	\$ 150,000
Subtotal	\$ 150,000
Planning, Design, Construction Support	\$ 40,000
Contingency (±10%)	\$ 20,000
Project Budget	\$ 210,000



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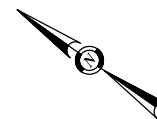
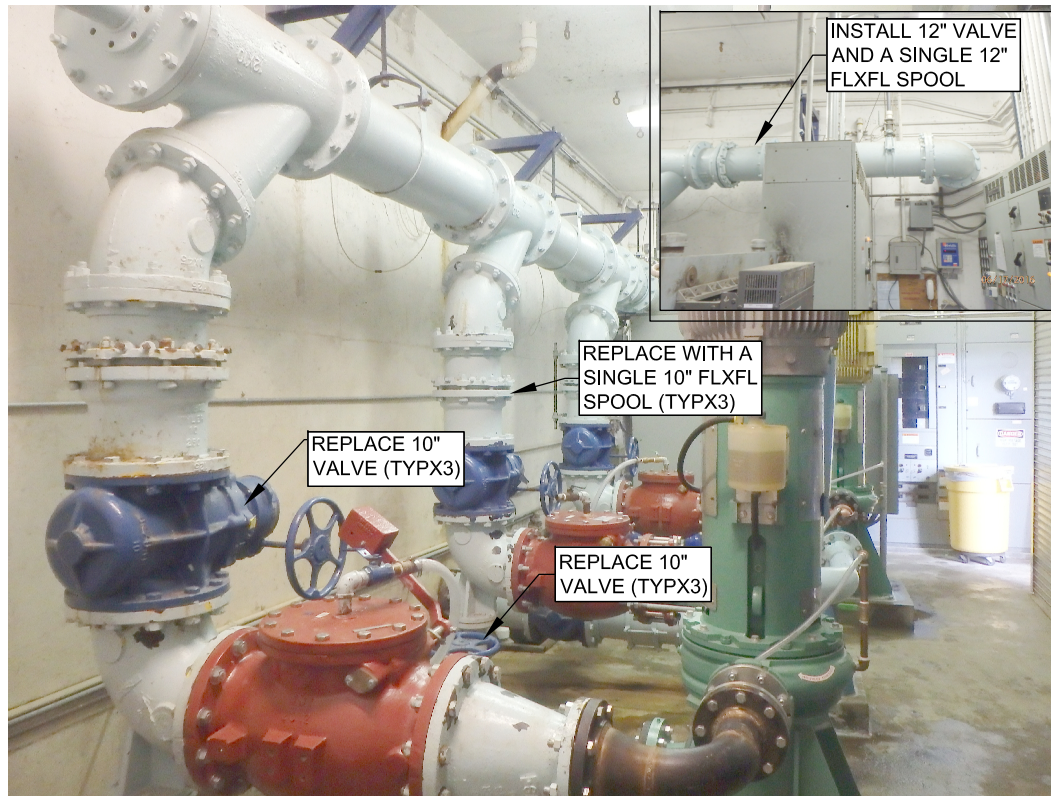
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CAPITAL IMPROVEMENT PROGRAM
AVALON SEWER PS IMPROVEMENTS
PROJECT S17-02

Rev 1 - 06/21
Original 2017



SCALE: NTS

ROWNTREE SEWER PUMP STATION IMPROVEMENTS

PROJECT BACKGROUND

The North San Mateo County Sanitation District currently maintains the District's sanitary sewer system. They requested the following equipment modifications at the Rowntree Pump Station.

The valves are old and operation is becoming difficult and replacement is recommended. The Automatic Transfer Switch also requires replacement.

1. 6 - 10" Valves
2. 1 - 12" Valve
3. 1 - 12" Spool
4. 3 - 10" Spools
5. Automatic Transfer Switch (ATS)

PROPOSED IMPROVEMENTS

Replace valves, spools and ATS.

PROJECT BENEFITS

The Rowntree Sewer Pump Station Improvements decreases the risk of pump failure and down time.

PROJECT BUDGET (2021)

12" Valve - 1 @ \$20,000/EA	\$	20,000
10" Valves - 6 @ \$15,000/EA	\$	90,000
10" Spools - 3 @ \$7,500/EA	\$	22,500
12" Spools - 1 @ \$7,500/EA	\$	7,500
Automatic Transfer Switch	\$	25,000
Subtotal	\$	165,000
Contingency (±10%)	\$	20,000
Project Budget	\$	185,000



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CAPITAL IMPROVEMENT PROGRAM
ROWNTREE SEWER PS IMPROVEMENTS
PROJECT S17-03

Rev 1 - 06/21
Original 2017

ERIN PLACE SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

A 1,060 LF 6" vitrified clay pipe (VCP) sanitary sewer main (SS) exists along Erin Place between Shannon Drive and Dublin Drive serving 37 residences. In 2017, the SS was cleaned and CCTV'd to determine the pipe condition which showed a high frequency of internal defects including circumferential and longitudinal cracks, broken pipe, root intrusion, and minor offset joints. This project replaces the existing 6" SS with new pipe (pipe type to be determined) in addition to replacing 37 sanitary laterals and 5 manholes. For budgeting purposes, this project assumes open-trench construction and replacing with 6" polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,060 LF 6" VCP SS
Replace 37 laterals
Replace/Repair 5 manholes

PROJECT BENEFITS

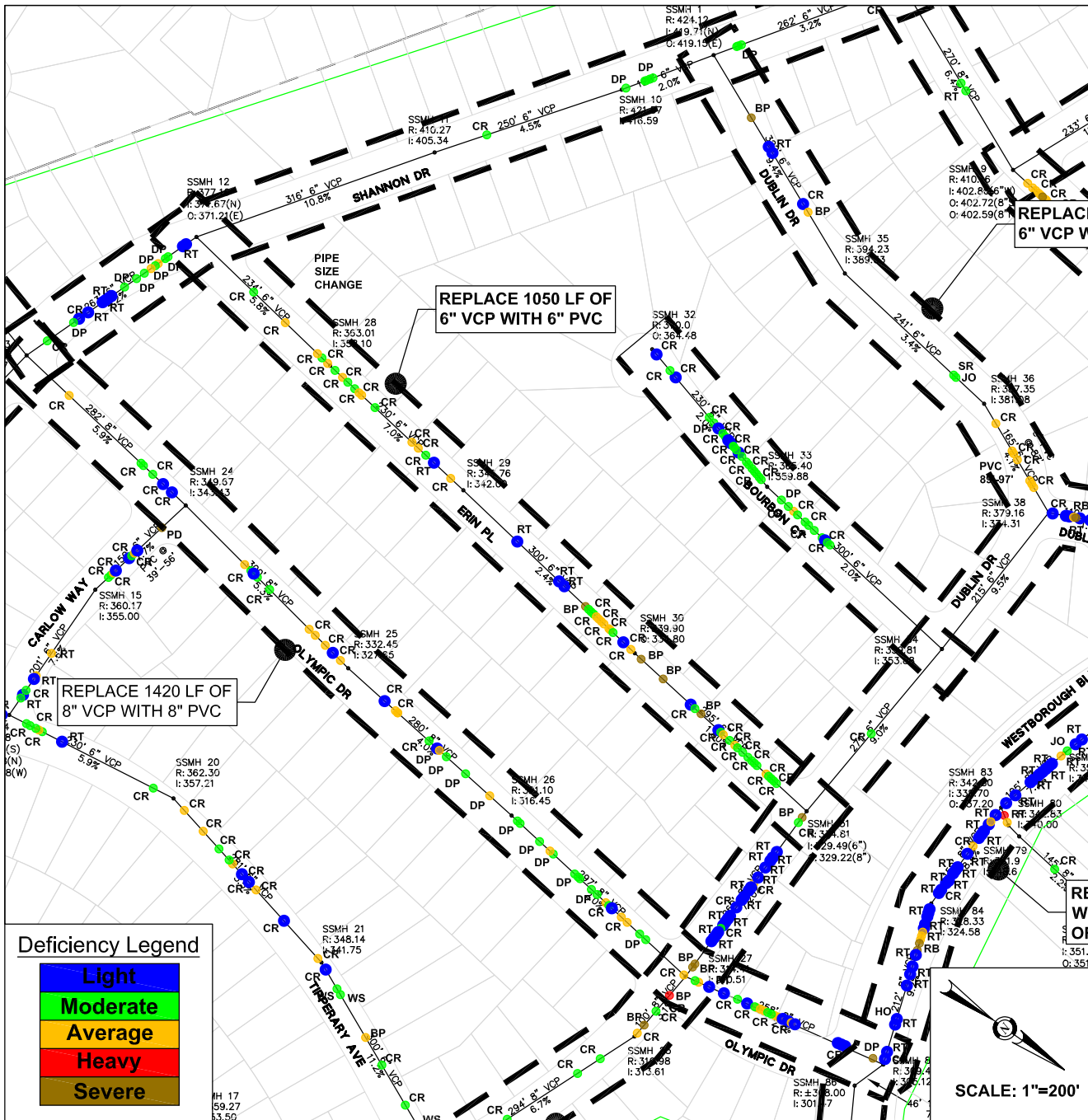
The Erin Place Sanitary Sewer Improvements replaces 1,060 LF of deteriorating sanitary sewer main and will reduce future maintenance.

PROJECT BUDGET (2021)

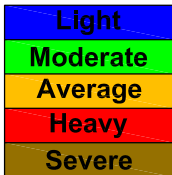
6" Pipe - 1,060 LF @ \$350/LF	\$ 371,000
Manholes - 5 @ \$10,000/EA	\$ 50,000
Laterals - 37 @ \$5,000/EA	\$ 185,000
Subtotal Construction	\$ 606,000
Planning, Design, & Construction Support	\$ 120,000
Contingency (±10%)	\$ 74,000
Project Budget	\$ 800,000

OPTIONAL

Construction Management/Inspection	\$ 60,000
Contingency (±10%)	\$ 5,000
Total	\$ 65,000



Deficiency Legend



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SOUTH SAN FRANCISCO, CA 94083

SCALE: 1"=200'



CAPITAL IMPROVEMENT PROGRAM
ERIN PLACE SANITARY SEWER IMPROVEMENTS
PROJECT S21-01

Original 2021

WESTBOROUGH BLVD PHASE 1 SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

One of the District's primary sanitary sewer (SS) mains, a vitrified clay pipe (VCP) varying between 6" and 10", runs along Westborough Blvd for approximately 4,100 LF between Skyline Blvd and the Westborough Pump Station located adjacent to the District office. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, offset and separated joints - with some very severe. Although some sections of main have minor to no defects, the entire pipe should be replaced holistically. Due to it's length, replacement is recommended over three separate phases. Phase I replaces ±1,640 LF between Skyline Blvd and Callan Blvd in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 970 LF 6" VCP w/ 6" PVC
Replace 670 LF 8" VCP w/ 8" PVC
Replace 2 laterals
Replace/rehabilitate 8 manholes

PROJECT BENEFITS

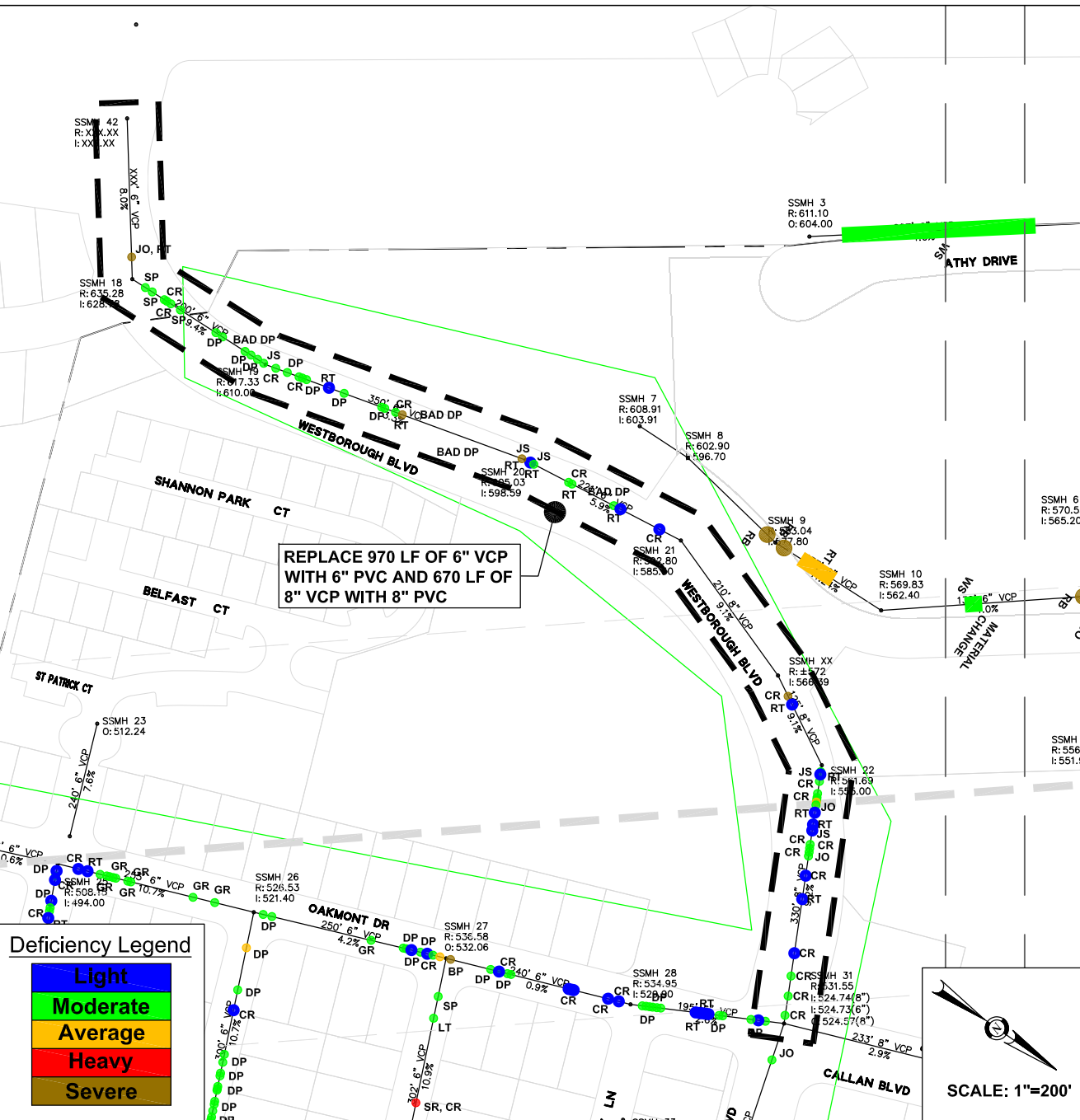
The Westborough Blvd Phase 1 Sanitary Sewer Improvements replaces ±1,640 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

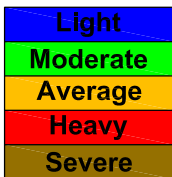
6" Pipe - 970 LF @ \$350/LF	\$ 339,500
8" Pipe - 670 LF @ \$400/LF	\$ 268,000
Manholes - 8 @ \$10,000/EA	\$ 80,000
Laterals - 2 @ \$5,000/EA	\$ 10,000
Traffic Control Premium	\$ 200,000
Subtotal Construction	\$ 897,500
Planning, Design, & Construction Support	\$ 180,000
Contingency (±10%)	\$ 97,500
Project Budget	\$ 1,175,000

OPTIONAL

Construction Management/Inspection	\$ 90,000
Contingency (±10%)	\$ 10,000
Total	\$ 100,000



Deficiency Legend



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CAPITAL IMPROVEMENT PROGRAM
WESTBOROUGH BLVD PHASE 1 SS IMPROVEMENTS
PROJECT S21-01

Original 2021

WESTBOROUGH BLVD PHASE 2 SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

One of the District's primary sanitary sewer (SS) mains, a vitrified clay pipe (VCP) varying between 6" and 10", runs along Westborough Blvd for approximately 4,100 LF between Skyline Blvd and the Westborough Pump Station located adjacent to the District office. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, offset and separated joints - with some very severe. Although some sections of main have minor to no defects, the entire pipe should be replaced holistically. Due to it's length, replacement is recommended over three separate phases. Phase 2 replaces ±1,500 LF between Callan Blvd and Galway Dr in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,500 LF 8" VCP w/ 8" PVC
Replace/rehabilitate 7 manholes

PROJECT BENEFITS

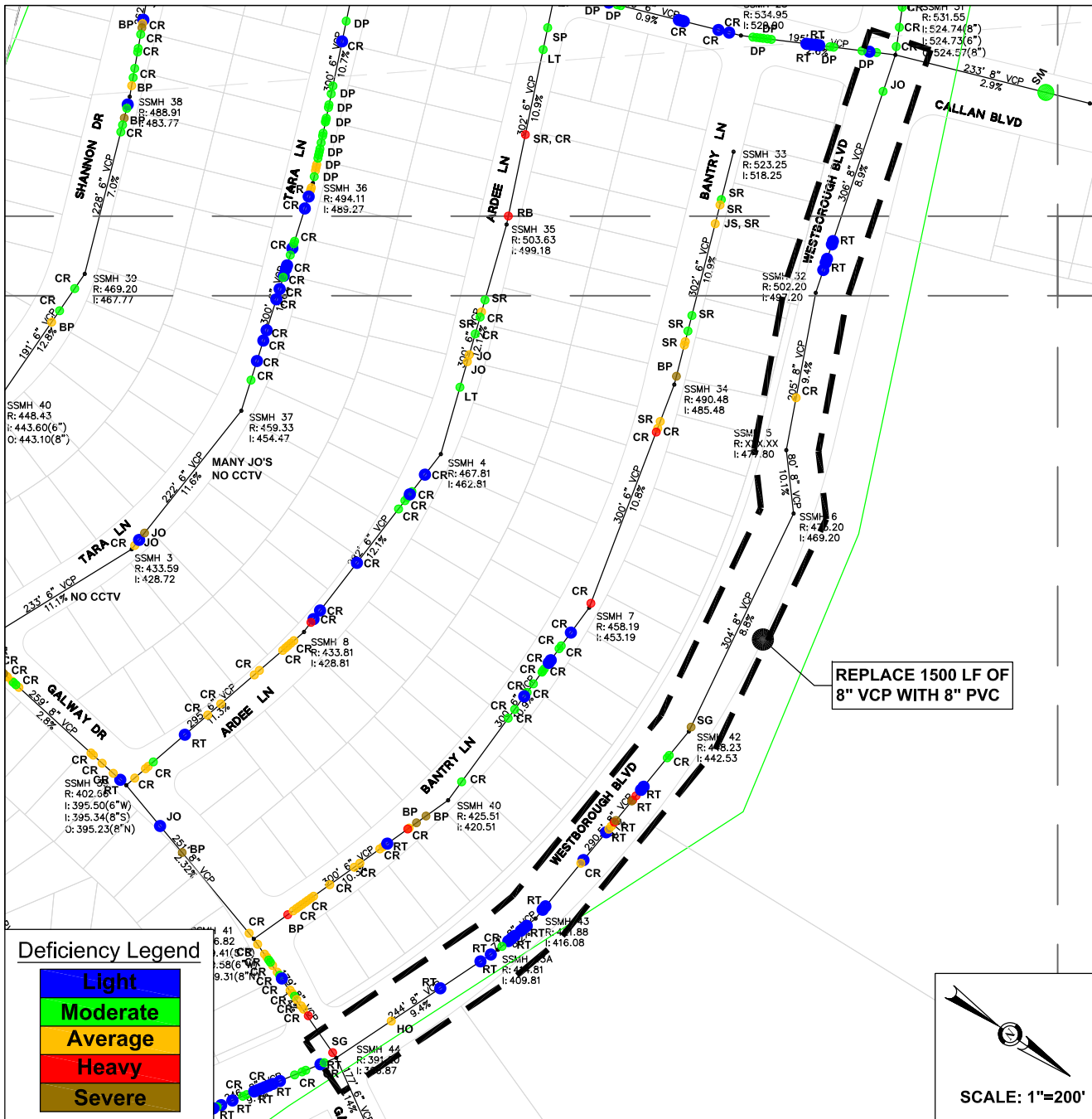
The Westborough Blvd Phase 2 Sanitary Sewer Improvements replaces ±1,500 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

8" Pipe - 1,500 LF @ \$400/LF	\$ 600,000
Manholes - 7 @ \$10,000/EA	\$ 70,000
Traffic Control Premium	\$ 200,000
Subtotal Construction	\$ 870,000
Planning, Design, & Construction Support	\$ 175,000
Contingency (±10%)	\$ 105,000
Project Budget	\$ 1,150,000

OPTIONAL

Construction Management/Inspection	\$ 90,000
Contingency (±10%)	\$ 10,000
Total	\$ 100,000



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CAPITAL IMPROVEMENT PROGRAM
WESTBOROUGH BLVD PHASE 2 SS IMPROVEMENTS
PROJECT S21-02

Original 2021

WESTBOROUGH BLVD PHASE 3 SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

One of the District's primary sanitary sewer (SS) mains, a vitrified clay pipe (VCP) varying between 6" and 10", runs along Westborough Blvd for approximately 4,100 LF between Skyline Blvd and the Westborough Pump Station located adjacent to the District office. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, offset and separated joints - with some very severe. Although some sections of main have minor to no defects, the entire pipe should be replaced holistically. Due to it's length, replacement is recommended over three separate phases. Phase 3 replaces $\pm 1,920$ LF between Galway Dr and Westborough Pump Station in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 920 LF 8" VCP w/ 8" PVC
Replace 1,000 LF of 10" VCP w/ 10" PVC
Replace/rehabilitate 11 manholes

PROJECT BENEFITS

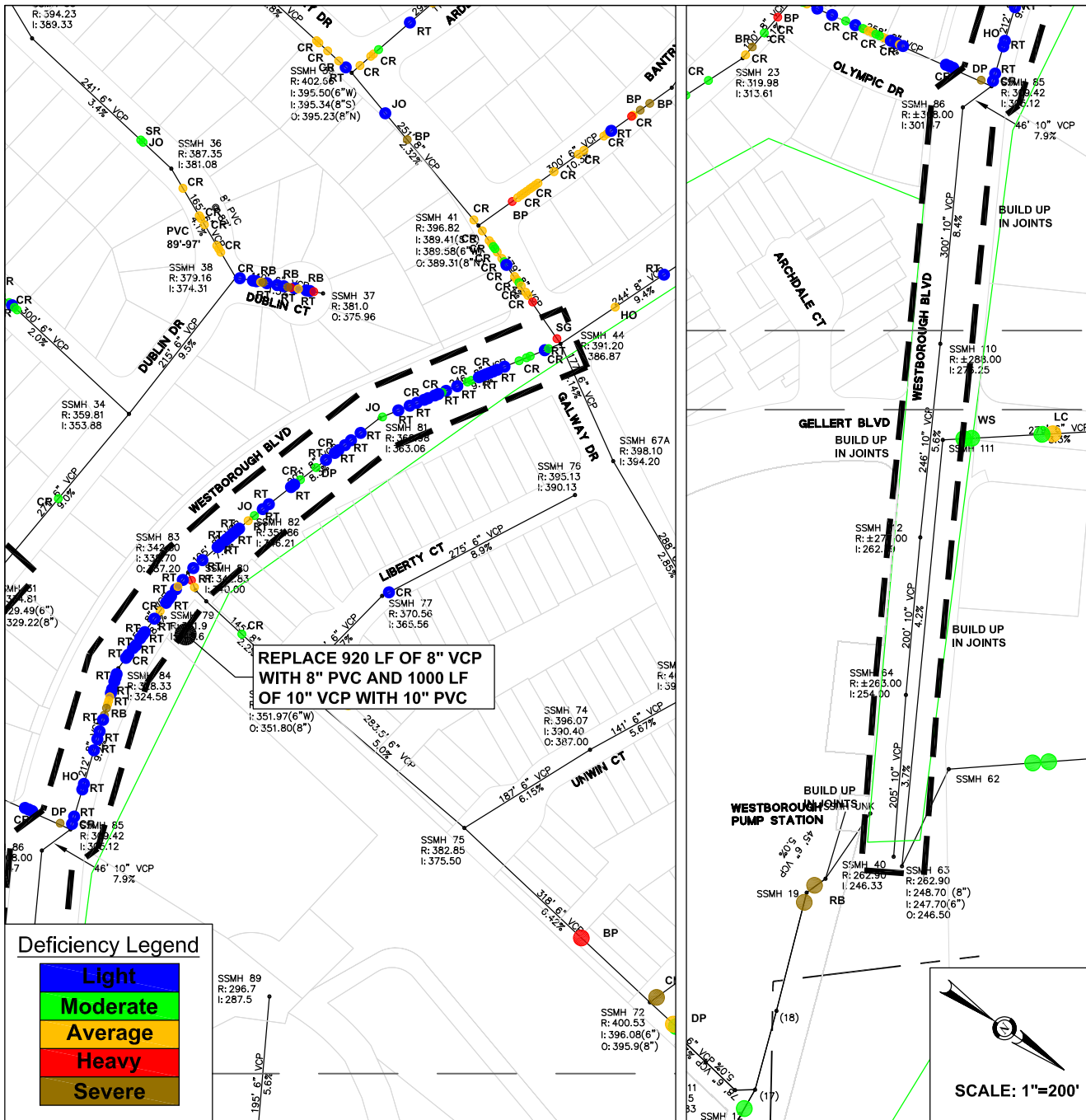
The Westborough Blvd Phase 3 Sanitary Sewer Improvements replaces $\pm 1,920$ LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

8" Pipe - 920 LF @ \$400/LF	\$ 368,000
10" Pipe - 1,000 LF @ \$450/LF	\$ 450,000
Manholes - 11 @ \$10,000/EA	\$ 110,000
Traffic Control Premium	\$ 250,000
Subtotal Construction	\$ 1,178,000
Planning, Design, & Construction Support	\$ 180,000
Contingency ($\pm 10\%$)	\$ 142,000
Project Budget	\$ 1,500,000

OPTIONAL

Construction Management/Inspection	\$ 120,000
Contingency ($\pm 10\%$)	\$ 10,000
Total	\$ 130,000



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CAPITAL IMPROVEMENT PROGRAM
WESTBOROUGH BLVD PHASE 3 SS IMPROVEMENTS
PROJECT S21-03

Original 2021

SHANNON DR & VICINITY PHASE 1 SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Shannon Dr has ±5,400 LF of 6" and 8" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±180 residents. In addition, 6 shorter sewer mains located on Olympic Dr, Wentworth Dr, Turnberry Dr, St. Cloud Dr, Orrey Way and Albright Way, collectively called "Vicinity", all connect to Shannon Dr over a total 1,100 LF of 6" VCP SS and serves XX residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, offset and separated joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. Due to it's length, replacement is recommended over three separate phases. Phase I replaces ±2,100 LF only on Shannon Dr between Oakmont Dr and Dublin Dr in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,900 LF 6" VCP w/ 6" PVC
Replace 200 LF 8" VCP w/ 8" PVC
Replace 56 laterals
Replace/rehabilitate 9 manholes

PROJECT BENEFITS

The Shannon Dr & Vicinity Phase 1 Sanitary Sewer Improvements replaces ±2,100 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

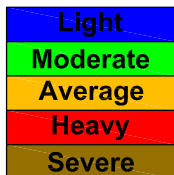
6" Pipe - 1,900 LF @ \$350/LF	\$ 665,000
8" Pipe - 200 LF @ \$400/LF	\$ 80,000
Manholes - 8 @ \$10,000/EA	\$ 90,000
Laterals - 56 @ \$5,000/EA	\$ 280,000
Subtotal Construction	\$ 1,115,000
Planning, Design, & Construction Support	\$ 170,000
Contingency (±10%)	\$ 130,000
Project Budget	\$ 1,415,000

OPTIONAL

Construction Management/Inspection	\$ 110,000
Contingency (±10%)	\$ 10,000
Total	\$ 120,000

REPLACE 1900 LF OF 6" VCP
WITH 6" PVC AND 200 LF OF
8" VCP WITH 8" PVC

Deficiency Legend



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SOUTH SAN FRANCISCO, CA 94083

CAPITAL IMPROVEMENT PROGRAM
SHANNON DR & VICINITY PHASE 1 SS IMPROVEMENTS
PROJECT S21-04

Original 2021

SHANNON DR & VICINITY PHASE 2 SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Shannon Dr has ±5,400 LF of 6" and 8" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±180 residents. In addition, 6 shorter sewer mains located on Olympic Dr, Wentworth Dr, Turnberry Dr, St. Cloud Dr, Orrey Way and Albright Way, collectively called "Vicinity", all connect to Shannon Dr over a total 1,100 LF of 6" VCP SS and serves XX residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, offset and separated joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. Due to it's length, replacement is recommended over three separate phases. Phase 2 replaces ±1,300 LF on Shannon Dr between Dublin Dr and Orrey Way, ±180 LF on Olympic Dr, ±280 LF on Wentworth Dr, ±200 LF on Turnberry Dr, ±130 LF on St. Cloud Dr, and ±170 LF on Orrey way in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,840 LF 6" VCP w/ 6" PVC
Replace 420 LF 8" VCP w/ 8" PVC
Replace 53 laterals
Replace/rehabilitate 10 manholes

PROJECT BENEFITS

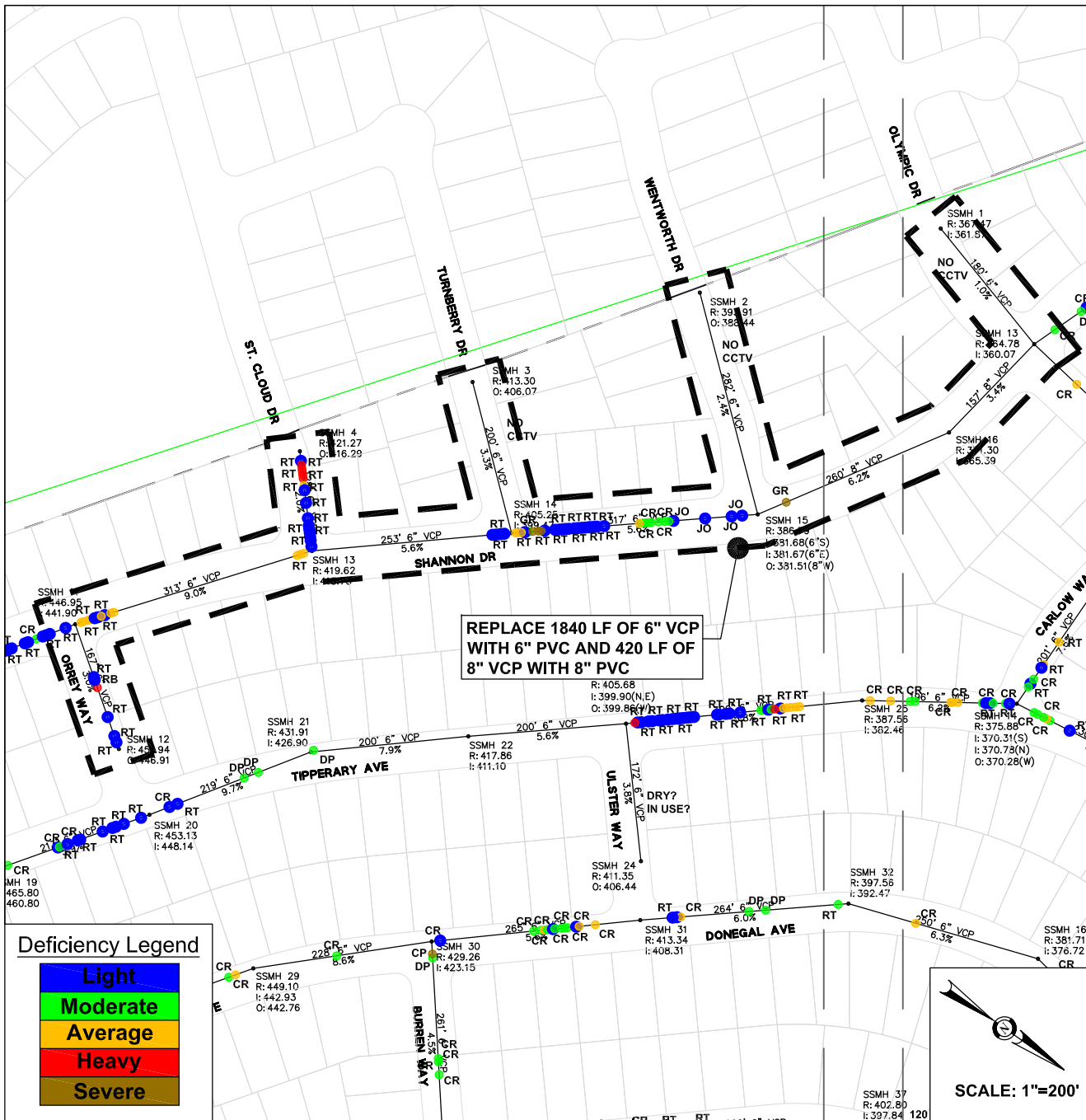
The Shannon Dr & Vicinity Phase 2 Sanitary Sewer Improvements replaces ±2,260 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

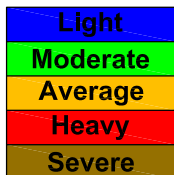
6" Pipe - 1,840 LF @ \$350/LF	\$ 644,000
8" Pipe - 420 LF @ \$400/LF	\$ 168,000
Manholes - 10 @ \$10,000/EA	\$ 100,000
Laterals - 53 @ \$5,000/EA	\$ 265,000
Subtotal Construction	\$ 1,177,000
Planning, Design, & Construction Support	\$ 180,000
Contingency (±10%)	\$ 138,000
Project Budget	\$ 1,495,000

OPTIONAL

Construction Management/Inspection	\$ 120,000
Contingency (±10%)	\$ 10,000
Total	\$ 130,000



Deficiency Legend



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CAPITAL IMPROVEMENT PROGRAM
SHANNON DR & VICINITY PHASE 2 SS IMPROVEMENTS
PROJECT S21-05

Original 2021

SHANNON DR & VICINITY PHASE 3 SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Shannon Dr has ±5,400 LF of 6" and 8" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±180 residents. In addition, 6 shorter sewer mains located on Olympic Dr, Wentworth Dr, Turnberry Dr, St. Cloud Dr, Orrey Way and Albright Way, collectively called "Vicinity", all connect to Shannon Dr over a total 1,100 LF of 6" VCP SS and serves XX residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, offset and separated joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. Due to it's length, replacement is recommended over three separate phases. Phase 3 replaces ±2,050 LF on Shannon Dr between Orrey Way and Gellert Dr, ±130 LF on Albright Way in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 2,180 LF 6" VCP w/ 6" PVC
Replace 70 laterals
Replace/rehabilitate 9 manholes

PROJECT BENEFITS

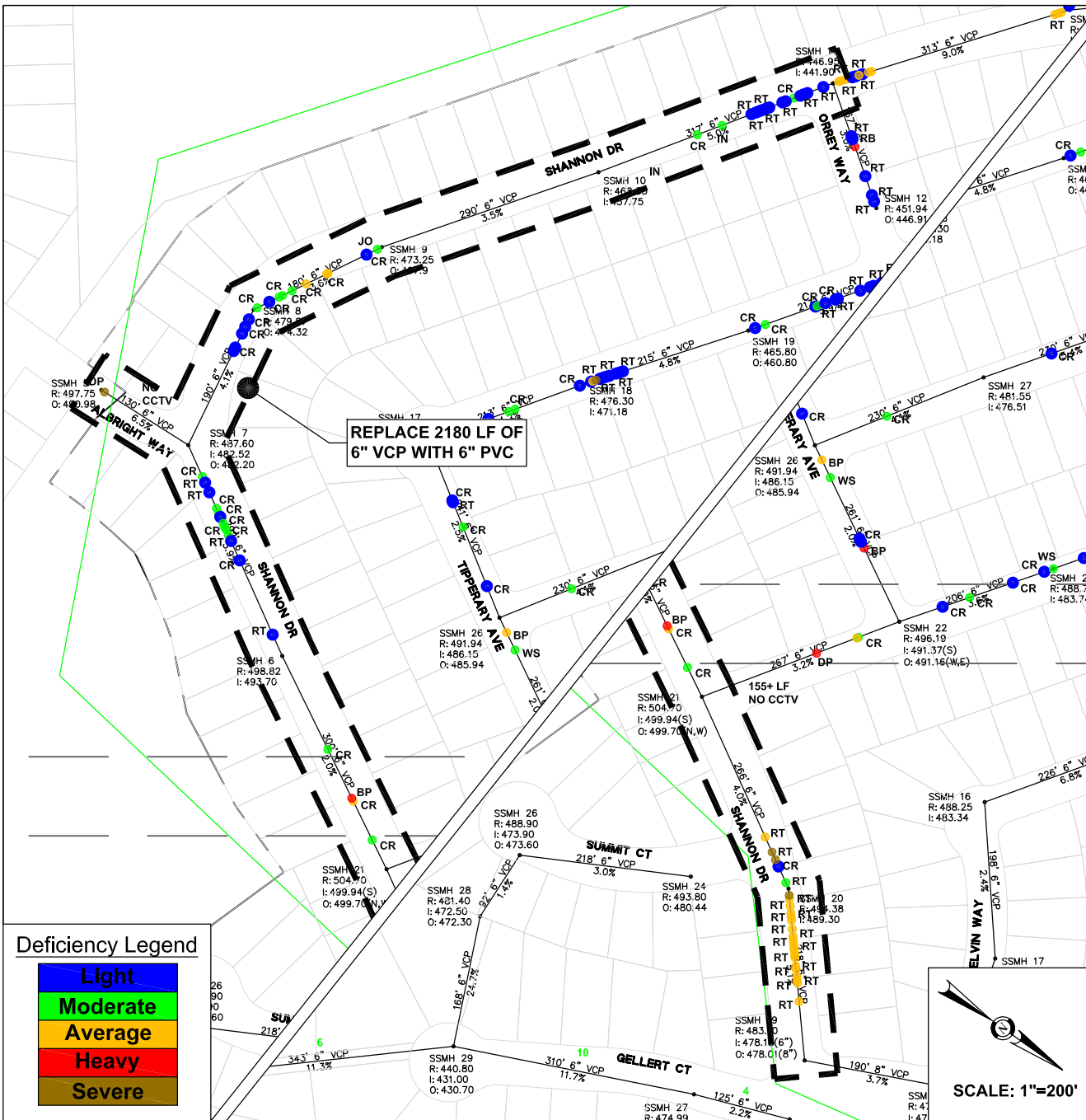
The Shannon Dr & Vicinity Phase 1 Sanitary Sewer Improvements replaces ±2,180 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

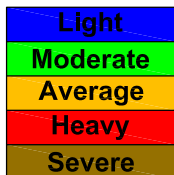
6" Pipe - 2,180 LF @ \$350/LF	\$ 763,000
Manholes - 9 @ \$10,000/EA	\$ 90,000
Laterals - 70 @ \$5,000/EA	\$ 350,000
Subtotal Construction	\$ 1,203,000
Planning, Design, & Construction Support	\$ 180,000
Contingency (±10%)	\$ 137,000
Project Budget	\$ 1,520,000

OPTIONAL

Construction Management/Inspection	\$ 120,000
Contingency (±10%)	\$ 10,000
Total	\$ 130,000



Deficiency Legend



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JOB No. 10025.01
DATE 06/2021
SCALE AS NOTED
DRAWN: BY BL/DL
CKD JP



WESTBOROUGH WATER DISTRICT
SAN MATEO COUNTY, CALIFORNIA
2263 WESTBOROUGH BOULEVARD
SOUTH SAN FRANCISCO, CA 94083

CAPITAL IMPROVEMENT PROGRAM
SHANNON DR & VICINITY PHASE 3 SS IMPROVEMENTS
PROJECT S21-06

Original 2021

OAKMONT DR SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Oakmont Dr has ±1,060 LF of 6" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±34 residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, root intrusion and root balls, deposits, grease, and offset joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. This project replaces the existing sewer main in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,060 LF 6" VCP w/ 6" PVC
Replace 34 laterals
Replace/rehabilitate 6 manholes

PROJECT BENEFITS

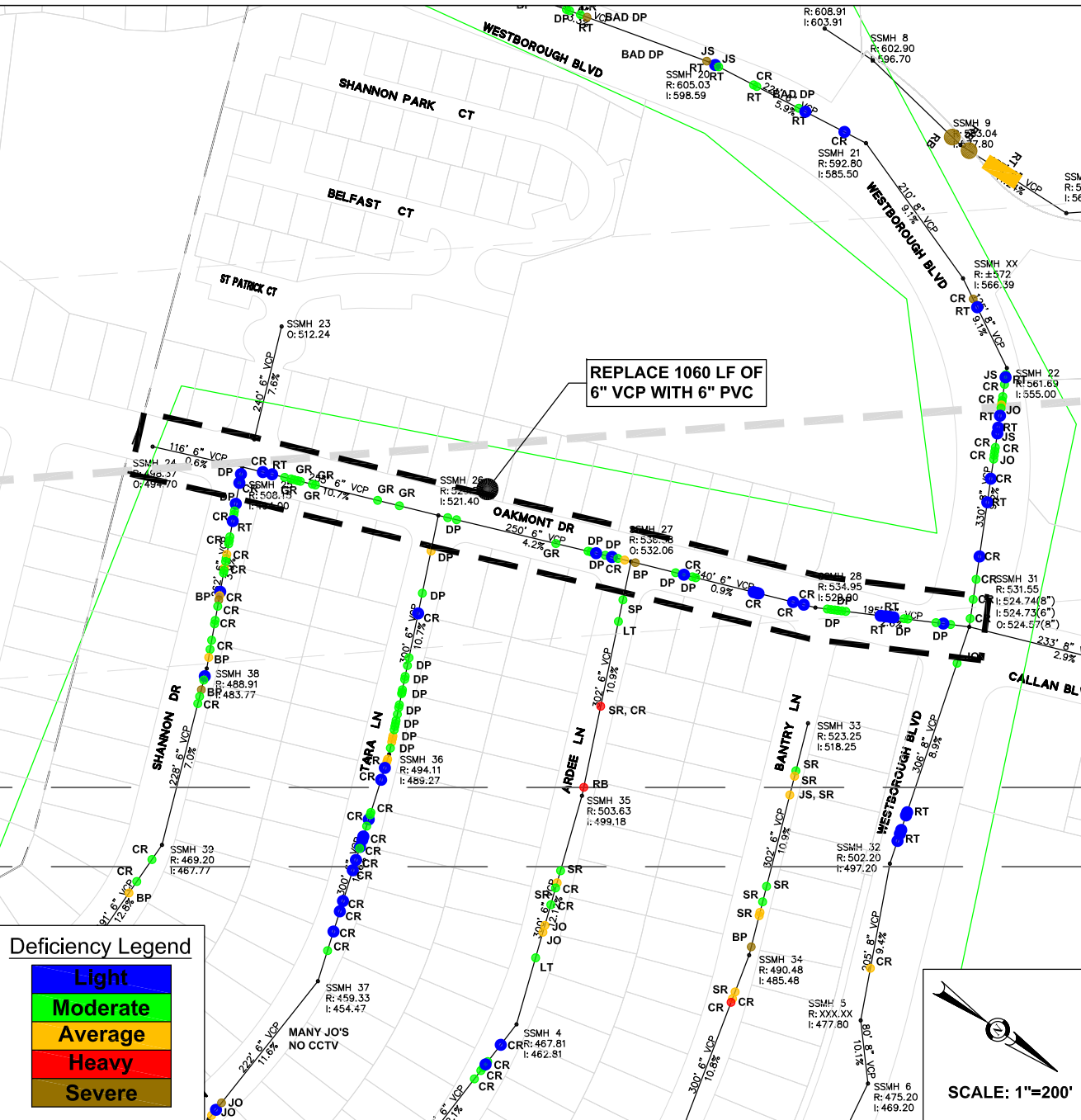
The Oakmont Dr Sanitary Sewer Improvements replaces ±1,060 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

6" Pipe - 1,060 LF @ \$350/LF	\$ 371,000
Manholes - 6 @ \$10,000/EA	\$ 60,000
Laterals - 34 @ \$5,000/EA	\$ 170,000
Subtotal Construction	\$ 601,000
Planning, Design, & Construction Support	\$ 120,000
Contingency (±10%)	\$ 74,000
Project Budget	\$ 795,000

OPTIONAL

Construction Management/Inspection	\$ 60,000
Contingency (±10%)	\$ 5,000
Total	\$ 65,000



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WESTBOROUGH WATER DISTRICT
SAN MATEO COUNTY, CALIFORNIA
2263 WESTBOROUGH BOULEVARD
SOUTH SAN FRANCISCO, CA 94083

CAPITAL IMPROVEMENT PROGRAM
OAKMONT DR SANITARY SEWER IMPROVEMENTS
PROJECT S21-07

Original 2021

BANTRY LN SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Bantry Ln has ±1,200 LF of 6" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±44 residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, seal ring protrusions, and offset/separated joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. This project replaces the existing sewer main in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,200 LF 6" VCP w/ 6" PVC
Replace 44 laterals
Replace/rehabilitate 5 manholes

PROJECT BENEFITS

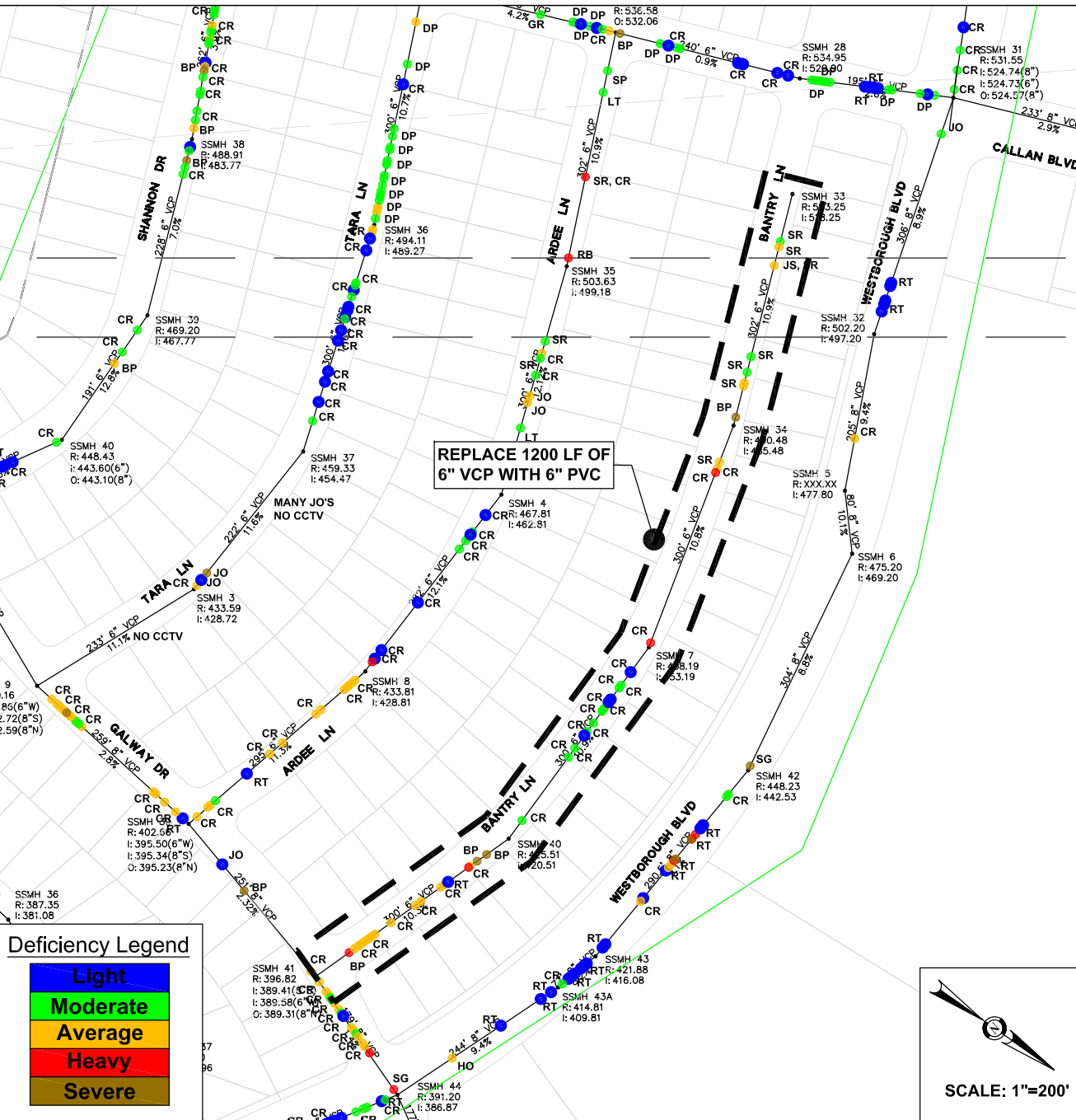
The Bantry Ln Sanitary Sewer Improvements replaces ±1,200 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

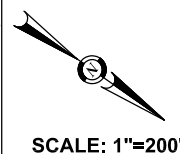
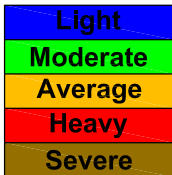
6" Pipe - 1,200 LF @ \$350/LF	\$ 420,000
Manholes - 5 @ \$10,000/EA	\$ 50,000
Laterals - 44 @ \$5,000/EA	\$ 220,000
Subtotal Construction	\$ 690,000
Planning, Design, & Construction Support	\$ 140,000
Contingency (±10%)	\$ 85,000
Project Budget	\$ 915,000

OPTIONAL

Construction Management/Inspection	\$ 70,000
Contingency (±10%)	\$ 5,000
Total	\$ 75,000



Deficiency Legend



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CAPITAL IMPROVEMENT PROGRAM
BANTRY LN SANITARY SEWER IMPROVEMENTS
PROJECT S21-08

Original 2021

ARDEE LN SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Ardee Ln has ±1,180 LF of 6" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±41 residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, seal ring protrusions, and offset/separated joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. This project replaces the existing sewer main in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,180 LF 6" VCP w/ 6" PVC
Replace 41 laterals
Replace/rehabilitate 5 manholes

PROJECT BENEFITS

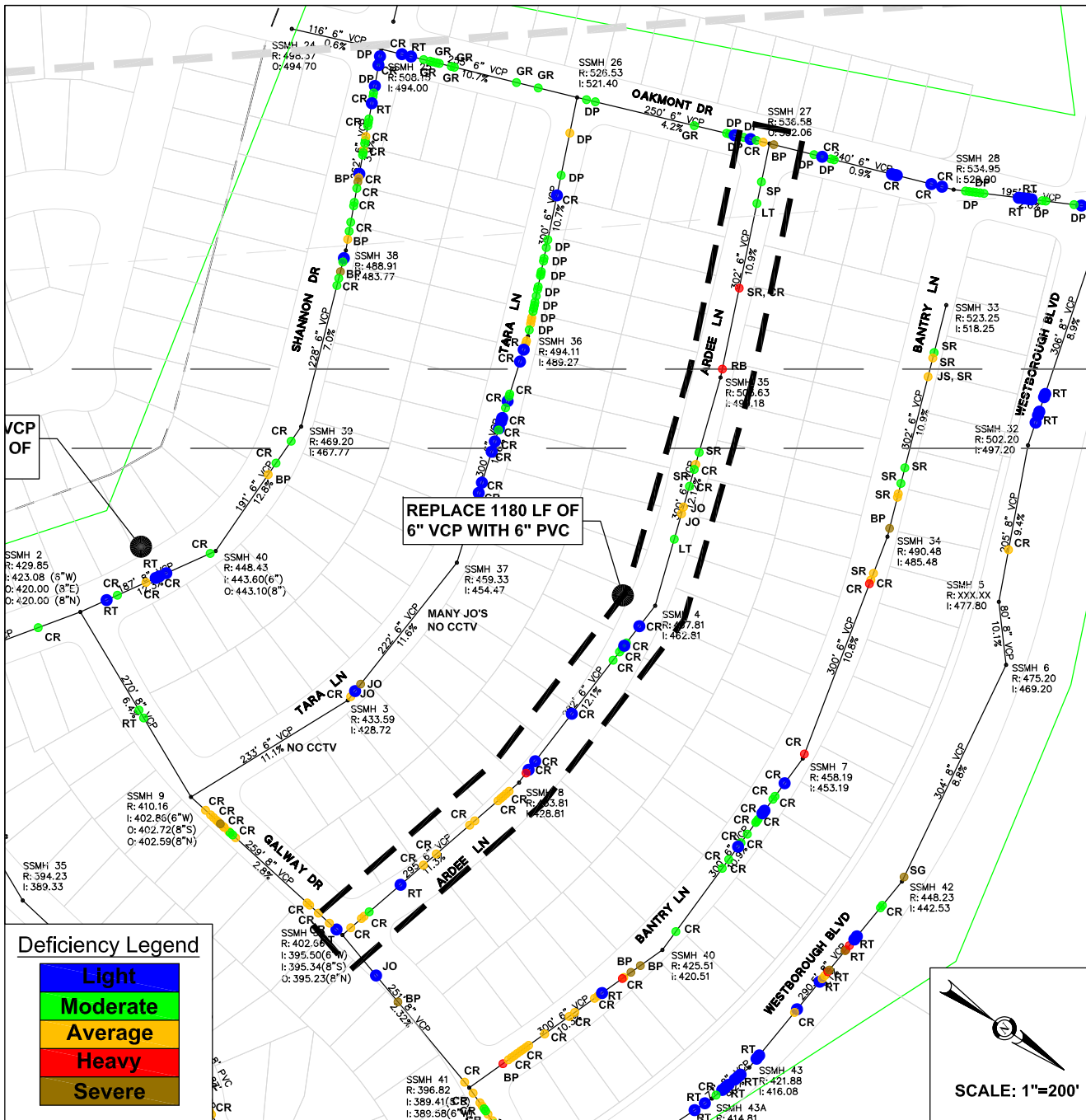
The Ardee Ln Sanitary Sewer Improvements replaces ±1,180 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

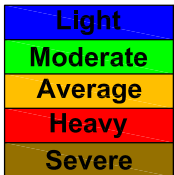
6" Pipe - 1,180 LF @ \$350/LF	\$ 413,000
Manholes - 5 @ \$10,000/EA	\$ 50,000
Laterals - 41 @ \$5,000/EA	\$ 205,000
Subtotal Construction	\$ 668,000
Planning, Design, & Construction Support	\$ 135,000
Contingency (±10%)	\$ 82,000
Project Budget	\$ 885,000

OPTIONAL

Construction Management/Inspection	\$ 70,000
Contingency (±10%)	\$ 5,000
Total	\$ 75,000



Deficiency Legend



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SOUTH SAN FRANCISCO, CA 94083

CAPITAL IMPROVEMENT PROGRAM
ARDEE LN SANITARY SEWER IMPROVEMENTS
PROJECT S21-09

Original 2021

TARA LN SANITARY SEWER IMPROVEMENTS

PROJECT BACKGROUND

Tara Ln has ±1,060 LF of 6" vitrified clay pipe (VCP) sanitary sewers (SS) serving ±34 residents. In 2017, CCTV video determined the pipe showed a high frequency of internal defects including circumferential and longitudinal cracks, fractures, broken pipe, deposits, and offset/separated joints - with some very severe. Although some sections of main have minor to no defects, all pipe should be replaced holistically. This project replaces the existing sewer main in addition to replacing/rehabilitating laterals and manholes. For budgeting purposes, this project assumes open-trench construction and replacement with polyvinyl chloride (PVC).

PROPOSED IMPROVEMENTS

Replace 1,060 LF 6" VCP w/ 6" PVC
Replace 34 laterals
Replace/rehabilitate 5 manholes

PROJECT BENEFITS

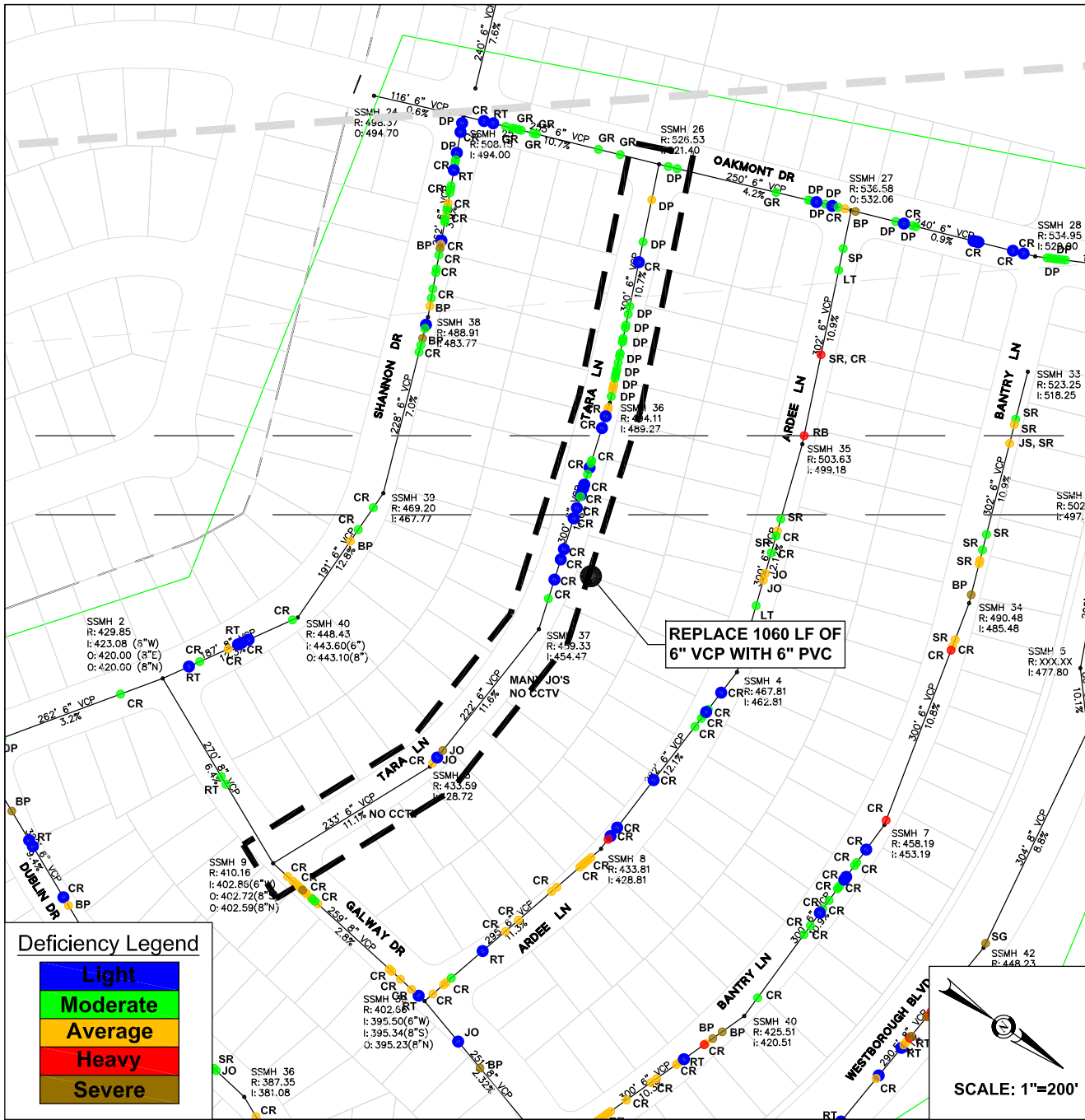
The Tara Ln Sanitary Sewer Improvements replaces ±1,060 LF of deteriorating sanitary sewer main greatly reducing future maintenance and extending overall system life.

PROJECT BUDGET (2021)

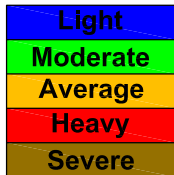
6" Pipe - 1,060 LF @ \$350/LF	\$ 371,000
Manholes - 5 @ \$10,000/EA	\$ 50,000
Laterals - 34 @ \$5,000/EA	\$ 170,000
Subtotal Construction	\$ 591,000
Planning, Design, & Construction Support	\$ 120,000
Contingency (±10%)	\$ 74,000
Project Budget	\$ 785,000

OPTIONAL

Construction Management/Inspection	\$ 60,000
Contingency (±10%)	\$ 5,000
Total	\$ 65,000



Deficiency Legend



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CAPITAL IMPROVEMENT PROGRAM
TARA LN SANITARY SEWER IMPROVEMENTS
PROJECT S21-10

Original 2021