

To: Mayor and City Council

From: Carl Thomas

Stormwater Utility Manager

Re: Funding Authorization for 2531 Cherry Hill Lane Storm Repairs

September 6th, 2022 Date:

<u>Action</u>

Authorize the Mayor, City Manager, or designee to approve \$94,056.00 in funding for Stormwater Pipe Repairs at 2531 Cherry Hill Lane.

Summary/Details

Structural deficiencies to the storm system on Layfield Drive were identified responding to a sinkhole reported by the property owner on 8/7/2020. The pipe system is composed of 105 linear feet of 24-inch corrugated metal pipe that is approximately 55 years old and in poor condition. Closed-Caption Television (CCTV) footage discovered corrosion, visible holes, joint separations, and deformities in the pipe. Recommended repairs include:

- Repair 110 LF of Corrugated Metal Pipe (CMP) with Cured In Place Pipe (CIPP) liner.
- +/- 100 LF linear feet of invert repairs with flowable fill
- Replace 20 LF of deformed CMP
- Tree Removal and Stump Grinding

This project will be funded from the FY2022 Stormwater Repairs and Maintenance Budget if approved by Council.

Recommendation

Staff recommends approving \$94,056.00 in funding for Stormwater Pipe Repairs at 2531 Cherry Hill Lane.





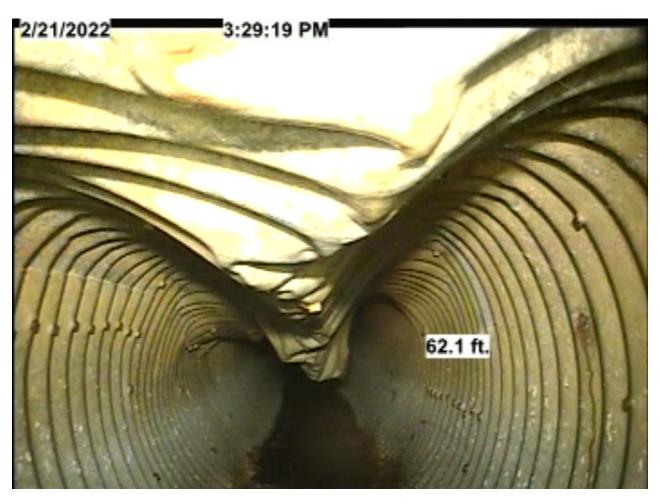
Damaged Outlet Headwall



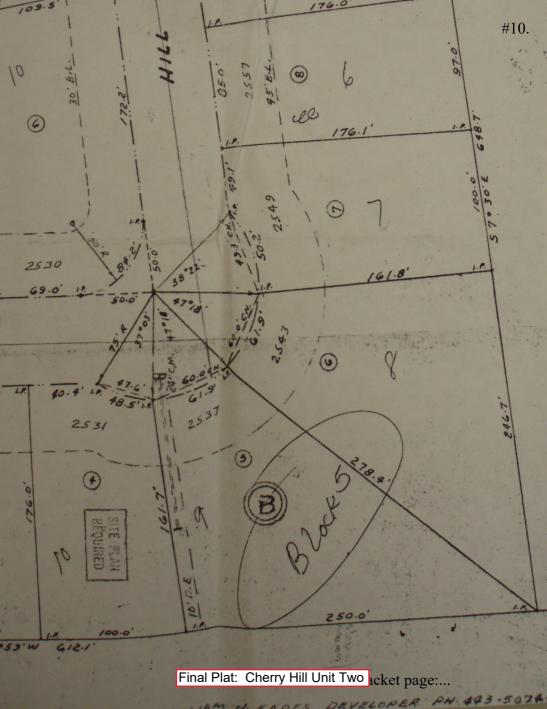


Severe Corrosion with Visible Holes





Deformed Pipe Crown



UNIT PRICE SCHEDULE				
Item	Unit	Price	Est. Qty	Total
Mobilization	EA	\$ 1,525.00	1	\$ 1,525.00
Traffic Control Minor 2 - Includes Cones and Signage	Per Day	\$ 2,200.00	6	\$ 13,200.00
TV Storm Lines (includes DVD & Report)	LF	\$ 5.00	105	\$ 525.00
Visual Inspection (Pictures), per Project (During	EA	\$ 250.00	1	\$ 250.00
24" PIPE - Cleaning less than 25% full	LF	\$ 7.00	105	\$ 735.00
12" to 36" PIPE	LF	\$ 45.00	20	\$ 900.00
24"SRCMP	LF	\$ 109.00	10	\$ 1,090.00
Precast Headwall for 24" Pipe	EA	\$ 1,125.00	1	\$ 1,125.00
24" Diameter	LF	\$ 475.00	10	\$ 4,750.00
Pressure Grouting (Pumping included if needed)	CY	\$ 2,250.00	2	\$ 4,500.00
24" Grout Each End to Structure	EA	\$ 200.00	3	\$ 600.00
Grout all joint, cracks & holes, in structures, complete	EA	\$ 625.00	1	\$ 625.00
24" PIPE - 11.0mm (.433")	LF	\$ 144.00	105	\$ 15,120.00
Inversion Setup Charge 15"- 36" CIPP	EACH	\$ 1,500.00	1	\$ 1,500.00
Tree Removal 6"-12""	EA	\$ 1,100.00	1	\$ 1,100.00
Tree Removal 13"-23"	EA	\$ 1,800.00	1	\$ 1,800.00
Tree Removal >23"	EA	\$ 2,500.00	1	\$ 2,500.00
Clear & Grubbing	SY	\$ 7.50	100	\$ 750.00
Channel Excavation	CY	\$ 23.00	10	\$ 230.00
Haul-In Structural Fill Material	CY	\$ 60.00	18	\$ 1,080.00
Haul-Off Soil Material	CY	\$ 55.00	28	\$ 1,540.00
Finish Grading	SY	\$ 9.00	200	\$ 1,800.00
Debris Removal	CY	\$ 60.00	10	\$ 600.00
Stone Rip Rap Type III In Place	TON	\$ 85.00	40	\$ 3,400.00
Install & Remove Type C Silt Fence	LF	\$ 7.00	50	\$ 350.00
Install & Remove Orange Tree Save Fence	LF	\$ 6.00	100	\$ 600.00
Seed & Straw (Permanent Grassing)	SY	\$ 4.00	30	\$ 120.00
Sodding Complete-Fescue	SY	\$ 26.00	30	\$ 780.00
Topsoil Compete	CY	\$ 75.00	20	\$ 1,500.00
Pine Straw	EA	\$ 12.00	50	\$ 600.00
Shrub Replacement: 5 gallon, installed	EA	\$ 145.00	3	\$ 435.00
Connect to Existing Structures	EA	\$ 450.00	1	\$ 450.00
Debris Removal, Tandem Dump Truck	Per Load	\$ 750.00	2	\$ 1,500.00
Removal of Existing Non Drainage Structure	EA	\$ 2,500.00	1	\$ 2,500.00
Removal of Existing Drainage Structure	EA	\$ 2,250.00	1	\$ 2,250.00
Remove Existing Pipe all Types and Sizes	LF	\$ 50.00	10	\$ 500.00
Bypass pumping setup-equipment and hose placement	EA	\$ 750.00	1	\$ 750.00
4" Pumping Operation Time	HR	\$ 120.00	40	\$ 4,800.00
Total				\$ 78,380.00
Contingency 20%				\$ 15,676.00
			total	\$ 94,056.00