

To: Mayor and City Council

From: Carl Thomas

Stormwater Utility Manager

Re: Funding Authorization for 5364 Redfield Road Storm Repairs

Date: May 23rd, 2022

Action

Authorize the Mayor, City Manager, or designee to approve \$179,171.72 in funding for Stormwater Pipe Repairs at 5364 Redfield Drive.

Summary/Details

Structural deficiencies to the storm system on Redfield Drive were identified responding to a sinkhole reported by the property owner on 1/6/2022. The pipe system is composed of 42-inch corrugated metal pipe that is approximately 43 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 120 LF of Corrugated Metal Pipe (CMP) with Cured In Place Pipe (CIPP) liner.
- Replace 60 LF of failed Corrugated Metal Pipe (CMP) with Reinforced Concrete Pipe (RCP)
- 2,300 SF of Bermuda Sod
- Replace 40 LF of deformed CMP
- Sinkhole Repairs
- 150 SF Driveway Replacement

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

Recommendation

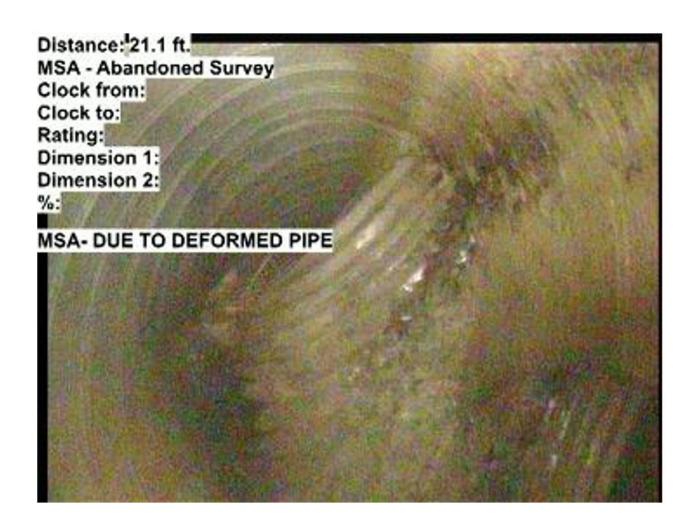
Staff recommends approving \$179,171.72 in funding for Stormwater Pipe Repairs at 5364 Redfield Drive.





Separated and Deformed 42-inch CMP





Severe deformity @ 21.1 feet upstream





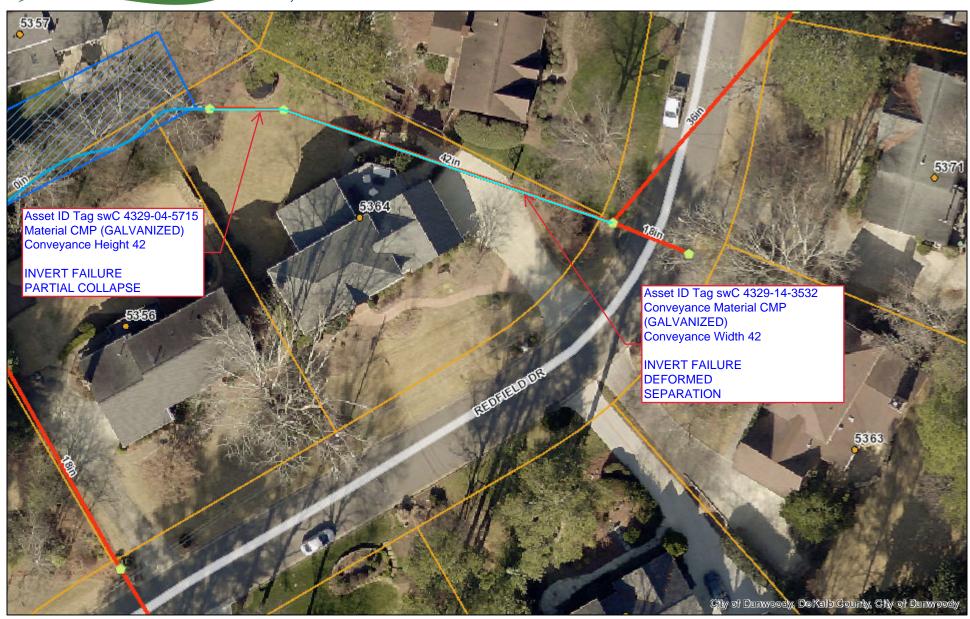
4 x 4 foot Sinkhole



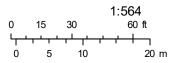
5364 Redfield Drive Site Map

Dunwoody GIS





The City of Dunwoody does not warrant the accuracy or currency of the map provided and does not guarantee the suitability of the map for any purpose, expressed or implied.







Date	Estimate #
4/25/2022	DUN-438a

Name / Address

CITY OF DUNWOODY 4800 ASHFORD DUNWOODY DUNWOODY, GA 30338

Project	
5364 REDFIELD DRIVE	

Item	Qty	Description	Rate	Amount
1ND	1	MOBILIZATION	1,500.00	1,500.00
2ND	10	OUT OF SCOPE WORK, FOREMAN	55.00	550.00
3ND	20	OUT OF SCOPE, LABORER	45.00	900.00
5ND	7	TRAFFIC CONTROL MINOR 2 - INCLUDES CONES	1,000.00	7,000.00
		AND SIGNAGE	,	,
7ND	180	TV STORM LINES (includes DVD & Report)	2.00	360.00
9ND	4	HYDRO-EXCAVATION COMPLETE)onsite hours	349.00	1,396.00
		only)		
34ND	180	42" PIPE - CLEANING 25% FULL OR GREATER	11.75	2,115.00
51ND	20	42" SRCMP	51.72	1,034.40
62ND	60	42" RCP	94.00	5,640.00
77ND	40	INVERT >8.1' to 12'	50.00	2,000.00
99ND	1	PRECAST HEADWALL FOR 42" PIPE	1,314.00	1,314.00
126ND	100	42" DIAMETER	45.00	4,500.00
135ND	10	42" DIAMETER INTERNAL PIPE POINT REPAIR	150.00	1,500.00
180ND	10	5' ROUND PRECAST INLET WITH PEDESTAL TOP	400.00	4,000.00
		& GRATE OR MH RING & COVER		·
210ND	2	INVERT INSTALLATION, 5' DIAMETER	300.00	600.00
214ND	1	UNCOVER BURIED JUNCTION BOX (4'-7.9")	500.00	500.00
228ND	4	42" GROUT EACH END TO STRUCTURE	250.00	1,000.00
235ND	2	GROUT ALL JOINT, CRACKS, & HOLES, IN	900.00	1,800.00
		STRUCTURES, COMPLETE (STRUCTURES		
		GREATER THAN 8' DEEP)		
243ND	130	42" PIPE - 18.0MM (.7087")	240.00	31,200.00
260ND	260	ADDITIONAL COST PER 1.5MM (.0591")	9.00	2,340.00
		THICKNESS - 42" PIPE		
271ND	1	INVERSION SETUP CHARGE 42"- 60" CIPP	4,000.00	4,000.00
337ND	150	DRIVEWAY 6" CONCRETE (RESIDENTIAL w/6" OF	60.00	9,000.00
		GAB INCLUDED)		
348ND	80	CURB & GUTTER 6"x24"x12" HIGH BACK	30.00	2,400.00
366ND	17	CHANNEL EXCAVATION	10.00	170.00
369ND	51	HAUL-OFF SOIL MATERIAL	30.00	1,530.00
370ND	100	FINISH GRADING	3.00	300.00
374ND	20	STONE RIP RAP TYPE III IN PLACE	50.00	1,000.00
382ND	300	INSTALL & REMOVE ORANGE TREE SAVE FENCE	3.00	900.00
389ND	2,280	SODDING COMPLETE - BERMUDA	7.00	15,960.00

Thank you for your business!

~ Grace Grace ~

Total



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CITY OF DUNWOODY 4800 ASHFORD DUNWOODY DUNWOODY, GA 30338

> Project 5364 REDFIELD DRIVE

393ND 396ND 399ND	120 2 10	PINE STRAW TREE REPLACEMENT 2-1/2 HARDWOOD	2.00	240.00
	_			
399ND	10		250.00	500.00
399ND	10	INSTALLED		
		SHRUB REPLACEMENT: 1 GALLON, INSTALLED	69.00	690.00
400ND	20	SHRUB REPLACEMENT: 3 GALLON, INSTALLED	89.00	1,780.00
402ND	15	SHRUB REPLACEMENT: 7 GALLON, INSTALLED	149.00	2,235.00
404ND	100	IRRIGATION LINE REPLACEMENT	1.50	150.00
405ND	10	IRRIGATION HEAD REPLACEMENT (BUILDER GRADE)	25.00	250.00
406ND	1	CONNECT TO EXISTING STRUCTURES	750.00	750.00
407ND	4	DEBRIS REMOVAL, TANDEM DUMP TRUCK	750.00	3,000.00
408ND	3	REMOVAL OF EXISTING NON DRAINAGE STRUCTURE	800.00	2,400.00
409ND	3	REMOVAL OF EXISTING DRAINAGE STRUCTURE	800.00	2,400.00
410ND	80	REMOVE EXISTING PIPE ALL TYPES AND SIZES	40.00	3,200.00
411ND	40	SAW CUT EXISTING PAVEMENTS	3.00	120.00
412ND	90	STONE #57	40.00	3,600.00
418ND	2	BYPASS PUMPING SETUP-EQUIPMENT AND HOSE PLACEMENT	750.00	1,500.00
419ND	20	4" PUMPING OPERATION TIME	50.00	1,000.00
430ND	250	REMOVE AND REPLACE EXISTING 6' WOOD FENCE RESIDENTIAL	30.00	7,500.00
10000	1	30% CONTINGENCY	41,347.32	41,347.32

Thank you for your business!

Total ~ Grace Grace ~ \$179,171.72



To: Mayor and City Council

From: Carl Thomas

Stormwater Utility Manager

Funding Authorization for 4734 Layfield Drive Storm Repairs Re:

Date: May 23rd, 2022

Action

Authorize the Mayor, City Manager, or designee to approve \$181,188.60 in funding for Stormwater Pipe Repairs at 4734 Layfield Drive.

Summary/Details

Structural deficiencies to the storm system on Layfield Drive were identified responding to a sinkhole reported by the property owner on 10/4/2021. The pipe system is composed of 24 and 36-inch corrugated metal pipe that is approximately 41 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 532 LF of Corrugated Metal Pipe (CMP) with Cured In Place Pipe (CIPP) liner.
- +/- 500 LF linear feet of invert repairs with flowable fill
- Replace 40 LF of deformed CMP
- Sinkhole Repairs
- Tree Removal and Stump Grinding

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

<u>Recommendation</u>

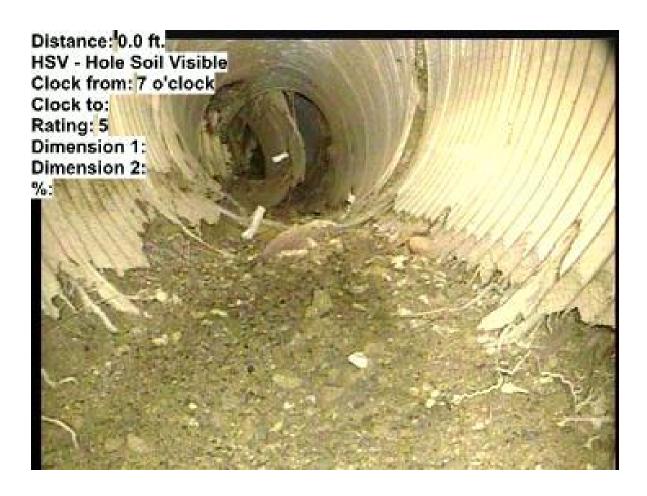
Staff recommends approving \$181,188.60 in funding for Stormwater Pipe Repairs at 4734 Layfield Drive.





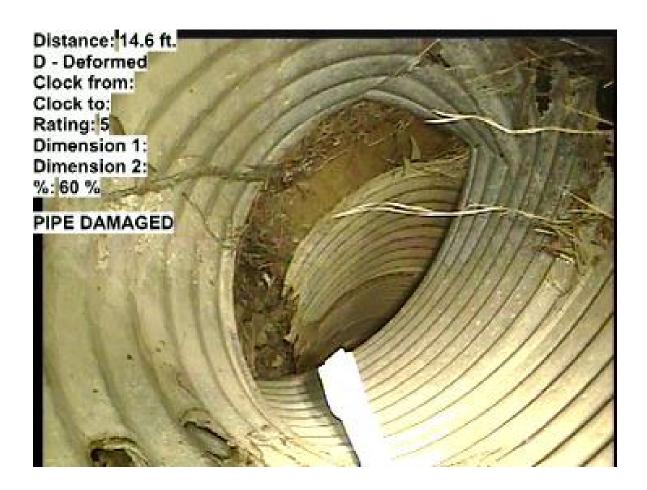
3 x 5 foot Sinkhole





Severe Corrosion with Visible Holes





Separated and Deformed Pipe



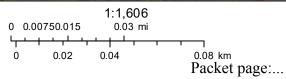
4734 Layfield Drive - Site Map

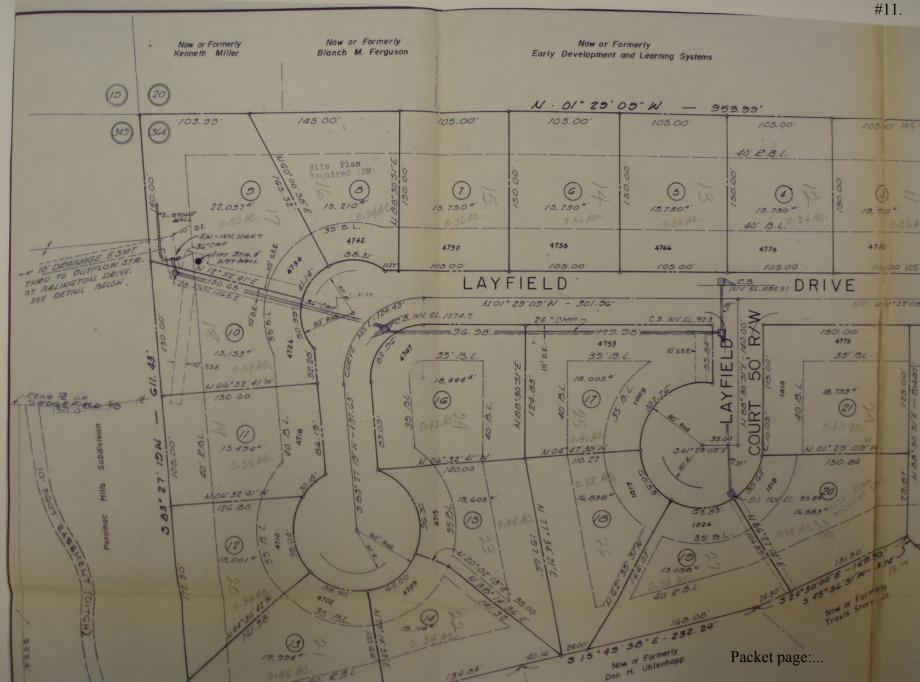
Dunwoody GIS





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Date	Estimate #
4/25/2022	DUN-437

Name / Address

CITY OF DUNWOODY 4800 ASHFORD DUNWOODY DUNWOODY, GA 30338

Project	
4734 LAYFIELD DRIVE	

Item	Qty	Description	Rate	Amount
1ND	1	MOBILIZATION	1,500.00	1,500.00
2ND	10	OUT OF SCOPE WORK, FOREMAN	55.00	550.00
3ND	20	OUT OF SCOPE, LABORER	45.00	900.00
5ND	7	TRAFFIC CONTROL MINOR 2 - INCLUDES CONES	1,000.00	7,000.00
		AND SIGNAGE		
7ND	532	TV STORM LINES (includes DVD & Report)	2.00	1,064.00
14ND	313	24" PIPE - CLEANING LESS THAN 25% FULL	5.25	1,643.25
16ND	219	36" PIPE - CLEANING LESS THAN 25% FULL	6.75	1,478.25
44ND	10	12" to 36" PIPE SPECIALTY CLEANING	30.00	300.00
50ND	40	36" SRCMP	47.35	1,894.00
77ND	40	INVERT >8.1' to 12'	50.00	2,000.00
123ND	300	24" DIAMETER FLOWABLE PAVED PIPE INVERT	30.00	9,000.00
125ND	200	36" DIAMETER FLOWABLE PAVED PIPE INVERT	40.00	8,000.00
132ND	15	24" DIAMETER INTERNAL PIPE POINT REPAIR	250.00	3,750.00
134ND	11	36" DIAMETER INTERNAL PIPE POINT REPAIR	150.00	1,650.00
180ND	6	5' ROUND PRECAST INLET WITH PEDESTAL TOP	400.00	2,400.00
		& GRATE OR MH RING & COVER		
194ND	1	4' DIA. PEDESTAL TOP with INLET FRAME and	950.00	950.00
		GRATE		
209ND	3	INVERT INSTALLATION 4' DIAMETER	250.00	750.00
224ND	2	24"GROUT EACH END TO STRUCTURE	200.00	400.00
227ND	4	36" GROUT EACH END TO STRUCTURE	225.00	900.00
234ND	3	GROUT ALL JOINTS, CRACKS & HOLES IN	500.00	1,500.00
		STRUCTURES, COMPLETE (STRUCTURES 8' DEEP		
		OR LESS)		
240ND	314	24" PIPE - 10.0mm (.3937)	98.00	30,772.00
242ND	224	36" PIPE - 16.0mm (.6299)	150.00	33,600.00
257ND	314	ADDITIONAL COST DED 1 5 (0501")	5.00	1,570.00
23/ND	314	ADDITIONAL COST PER 1.5mm (.0591") THICKNESS - 24" PIPE	5.00	1,5/0.00
259ND	224	ADDITIONAL COST PER 1.5mm (.0591")	7.00	1,568.00
237111	227	THICKNESS - 36" PIPE	7.00	1,500.00
270ND	2	INVERSION SETUP CHARGE 15" - 36" CIPP	1,500.00	3,000.00
337ND	125	DRIVEWAY 6" CONCRETE (RESIDENTIAL w/6" OF	60.00	7,500.00
		GAB INCLUDED)		, , ,
365ND	50	CLEAR & GRUBBING	8.00	400.00

Thank you for your business!

~ Grace Grace ~

Total



Date	Estimate #
4/25/2022	DUN-437

Name / Address

CITY OF DUNWOODY 4800 ASHFORD DUNWOODY DUNWOODY, GA 30338

Project
4734 LAYFIELD DRIVE

Item	Qty	Description	Rate	Amount
368ND	17	HAUL-IN STRUCTURAL FILL MATERIAL	25.00	425.00
369ND	51	HAUL-OFF SOIL MATERIAL	30.00	1,530.00
370ND	100	FINISH GRADING	3.00	300.00
388ND	1,140	SODDING COMPLETE - FESCUE	8.00	9,120.00
389ND	114	SODDING COMPLETE - BERMUDA	7.00	798.00
392ND	17	TOPSOIL COMPLETE	29.00	493.00
393ND	100	PINE STRAW	2.00	200.00
404ND	100	IRRIGATION LINE REPLACEMENT	1.50	150.00
405ND	3	IRRIGATION HEAD REPLACEMENT (BUILDER GRADE)	25.00	75.00
406ND	1	CONNECT TO EXISTING STRUCTURES	750.00	750.00
407ND	3	DEBRIS REMOVAL, TANDEM DUMP TRUCK	750.00	2,250.00
408ND	1	REMOVAL OF EXISTING NON DRAINAGE	800.00	800.00
		STRUCTURE		
409ND	2	REMOVAL OF EXISTING DRAINAGE STRUCTURE	800.00	1,600.00
410ND	40	REMOVE EXISTING PIPE ALL TYPES AND SIZES	40.00	1,600.00
411ND	40	SAW CUT EXISTING PAVEMENTS	3.00	120.00
412ND	36	STONE #57	40.00	1,440.00
425ND	40	REMOVE AND REPLACE EXISTING 4'	20.00	800.00
		GALVANIZED STANDARD CHAIN LINK FENCE RESIDENTIAL		
		RESIDENTIAL		
429ND	100	REMOVE AND REPLACE EXISTING 4' WOOD FENCE RESIDENTIAL	25.00	2,500.00
10000	1	20% CONTINGENCY	30,198.10	30,198.10
Thank you for your b	uisiness!			

Thank you for your business!

~ Grace Grace ~

Total

\$181,188.60