

MEMORANDUM

To: Mayor and City Council

From: David Elliott

Date: January 8, 2018

Subject: Corners Drive, Vermack Road, Vanderlyn Drive funding

approval for Stormwater Repairs.

ITEM DESCRIPTION

Approval of Funding for Stormwater Repairs and Rehabilitation at Corners Drive, Vermack Road and Vanderlyn Drive. This repair and funding request is further described below in two tasks. Task One would be allocated from the Mount Vernon Road and Vermack Road intersection project and Task Two would be allocated from the 2018 Stormwater Maintenance Budget. The total funding request is \$202,225.93, which includes a 10% contingency.

BACKGROUND

The Mount Vernon Road at Vermack Road Intersection Project involves improvements that will increase impervious area and stormwater flows. To accommodate the intersection project and alleviate impacts from increased flows, staff recommends completing a two phase project. Task One of the project will include the rehabilitation and modification of a detention pond located at 1765 Corners Court. Task Two of the project includes accelerating the schedule of maintenance on 3 sections of existing pipe, located the near the corner of Vermack Road and Vanderlyn Drive.

Task One – Detention Pond Improvements

Task One is the rehabilitation and modification of a detention pond located at 1765 Corners Court. Task One includes the following improvements:

- Installation of 64' new reinforced concrete pipe
- In place abandonment of 69' of corrugated metal pipe (flowable fill)
- Installation of a new 16' deep manhole
- Rehabilitation of existing detention pond wall
- Modification of existing outlet control structure
- Removal of 200+ cubic yards of accumulated sediments
- Tree removal and landscape improvements



- Erosion control measures
- Installation of new protective fence

The Task One activities would normally not be covered under the City of Dunwoody's Stormwater Extent of Service and are being completed to accommodate the intersection project. Therefore, this funding is being allocated from the intersection budget. The estimated cost for Task One is \$90,084.34, which includes a 10% contingency.

Task Two – Maintenance and Rehabilitation of Existing Pipes

Task two of this project includes lining two sections of corrugated metal pipe with cured in place pipe and replacing a third section of pipe. Task Two includes the following Improvements:

- Traffic control
- Replacement of 192' of 24" corrugated metal pipe with 24" reinforced concrete pipe
- Internal point repairs to existing pipes
- Replacement of a catch basin
- Cured in place pipe lining of 362' of 24" corrugated metal pipe
- Cured in place pipe lining of 49' of 30" corrugated metal pipe
- Various improvements to underground stormwater structures
- Landscaping and driveway replacements

Task Two activities are repairs that fall within the City of Dunwoody's Stormwater Extent of Service and are activities the stormwater utility regularly performs. Task Two would be funded with the 2018 Stormwater Maintenance Budget. The estimated cost for Task Two is \$112,141.59, which includes a 10% contingency.

RECOMMENDED ACTION

Staff recommends approving funding for both Task One and Task Two for a total amount of \$202,225.93, which includes a 10% contingency.

	Estimate Template for CITY OF DU	NWOODY 20:	17					
	SOUTHERN PREMIER CONTRA	CTORS, INC.						
Projec	t Location:		Corners	Wav. I	Dunwoody			
Prepar				hael M				
	stimate Prepared:			2/20/20				
Date E	sumate 11tpareu.		1.	2120120	11/			
	Total Estimate	\$				8	1,894.85	
	10% Contingency	\$					8,189.49	
21157011070110701107	Grand Total of Estimate	\$	anviintonanoviintonovai	waannamaana	enisteristeristeristeristeristeristeris	9	0,084.34	
Scope	of work:							
Detent	ion Pond Expansion Corners Court Dunwoody (plans)							
Item#	Item	Quantity	Unit	Ιτ	nit Price	Total Cost		
	General Conditions							
1D	Mobilization	1	EA	\$	1,500.00	\$	1,500.00	
2D	Out of Scope Work, Foreman	10	HR	\$	55.00	\$	550.00	
3D	Out of Scope Work, Laborer	30	HR	\$	45.00	\$	1,350.00	
	Reinforced Concrete Pipe (RCP) Tp 3							
	Includes excavation, backfill, & compaction							
58D	18" RCP		LF	\$	32.95	\$	-	
59D	24" RCP	920	LF	\$	40.25	\$	*	
60D	30" RCP	64	LF	\$	52.75	\$	3,376.00	
61D	36" RCP		LF	\$	64.95	\$	W/	
62D	42" RCP		LF	\$	93.50	\$		
63D	48" RCP 54" RCP		LF	\$	125.00 135.00	\$	8	
64D	60" RCP		LF LF	\$ \$	150.00	\$	44	
65D 66D	72" RCP		LF	\$	175.00	\$		
עסט	Additional Depth for Pipes		LF	D.	1/3.00	Φ	1 7 2	
	Includes excavation, backfill, & compaction							
77D	Invert >8.1' to 12'	48	LF	\$	50.00	\$	2,400.00	
78D	Invert >12'	16	LF	\$	90.00	\$	1,440.00	
700	Precast Headwalls	10	LA	Ψ	30.00	Ψ	1,440.00	
95D	Precast Headwall for 18" Pipe		EA	\$	475.00	\$	<u> </u>	
96D	Precast Headwall for 24" Pipe		EA	\$	525.00	\$	70	
97D	Precast Headwall for 30" Pipe	1	EA	\$	825.00	\$	825.00	
98D	Precast Headwall for 36" Pipe		EA	\$	1,125.00	\$	-	
99D	Precast Headwall for 42" Pipe		EA	\$	1,314.00	\$	<u>(±</u> 0)	
100D	Precast Headwall for 48" Pipe		EΛ	\$	1,404.00	\$		
	Flowable Paved Pipe Invert							
122D	18" Diameter		LF	\$	25.00	\$	Ħ	
123D	24" Diameter		LF	\$	30.00	\$		
124D	30" Diameter		LF	\$	35.00			
125D	36" Diameter		LF	\$	40.00	\$		
126D	42" Diameter		LF LF	\$	45.00	\$		
127D 128D	48" Diameter 60" Diameter		LF LF	\$ \$	55.00 70.00	\$	44	
128D 129D	72" Diameter		LF LF	\$	85.00		=:	
130D	Flowable Fill	69	LF	\$	99.75	\$	6,882.75	
1501	Round Precast Manholes	09	151	Φ	22.13	Φ	0,002.73	
191D	4' Round Precast Manhole w/ Manhole Ring & Cover	16	VF	\$	275.00	\$	4,400.00	
191D	5' Round Precast Manhole w/ Manhole Ring & Cover	10	VF	\$	300.00	\$	-,400.00	
193D	6' Round Precast Manhole w/ Manhole Ring & Cover		VF	\$	375.00		-	
	Miscellaneous & Special Structures/Components		4045		5,5.50		024	
	INTISCENARIEOUS & Special Structures/Components							

201D	5' Dia Round to Square		EA	\$	400.00	\$ -
201D 202D	6' Dia Round to Square		EA	\$		\$ -
2021	o Dia Rouliu to square		LA	Ф	323.00	Φ -
202D	Descrit Deale coment Ton Only for Single Wine m/ Ding & Cover of 1 5 4		EA	\$	950.00	\$ -
203D 204D	Precast Replacement Top Only for Single Wing, w/ Ring & Cover, not including throat Precast Replacement Top Only for Double Wing w/Ring & Cover, not including throat		EA	\$	111111111111111111111111111111111111111	2
204D 205D			EA	\$		
	4'x4' Precast Top w/ MH Ring and Cover					
206D	5'x5' Precast Top w/ MH Ring and Cover		EA	\$		\$ -
207D	Cast-in-Place Top Only w/Ring & Cover	1	CY	\$		\$ 1,150.00
208D	Cast-in-Place Throat Only	2	CY	\$	750.00	\$ 1,500.00
		-				
209D	Invert Installation, 4' Diameter	2	EA	\$	DANIEL PLANTAGE	\$ 500.00
210D	Invert Installation, 5' Diameter		EA	\$	***************************************	\$ -
211D	Invert Installation, 6' Diameter		EA	\$		\$ -
212D	Invert Installation, other configurations		SF	\$	12.50	\$ -
	Grout Connection To Structure					
217D	12" Grout Each End to Structure		EA	\$	125.00	\$ -
218D	15" Grout Each End to Structure		EA	\$		\$ -
219D	18" Grout Each End to Structure		EA	\$	150.00	\$ -
220D	21" Grout Each End to Structure		EA	\$	175.00	\$ -
221D	24" Grout Each End to Structure		EA	\$	200.00	\$ -
222D	27" Grout Each End to Structure		EA	\$	200.00	\$ -
223D	30" Grout Each End to Structure	4	EA	\$		\$ 800.00
224D	36" Grout Each End to Structure		EA	\$	225.00	\$ -
225D	42" Grout Each End to Structure		EA	\$	250.00	\$ -
226D	48" Grout Each End to Structure		EA	\$	275.00	\$ -
227D	54" Grout Each End to Structure		EA	\$	350.00	\$ -
228D	60" Grout Each End to Structure		EA	\$	375.00	\$ -
229D	66" Grout Each End to Structure		EA	\$	400.00	\$ -
230D	72" Grout Each End to Structure		EA	\$	D WINDLESS OF THE	\$ -
231D	Grout all joint, cracks & holes, in structures, complete	2	EA	\$		\$ 1,000.00
	Cast in Place Concrete					-,
339D	Paved Ditch/Swale (4" Thick)		SY	\$	35.90	\$ -
340D	Driveway 4" Concrete (Residential w/4" of GAB included)		SY	\$	NUCLEOCHE OF THE PARTY OF THE P	\$ -
341D	Driveway 6" Concrete (Commercial w/6" of GAB included)	Announce and a consequence	SY	\$		\$ -
342D	Driveway 8" Concrete (Commercial w/6" of GAB included)		SY	\$	74.90	\$ -
343D	Regular Duty Sidewalk (4" Thick, 3000 psi) <5' length		SY	\$	63.00	\$ -
344D	Regular Duty Sidewalk (4" Thick, 3000 psi) 5'-10' length		SY	\$	63.00	\$ -
345D	Regular Duty Sidewalk (4" Thick, 3000 psi) 11'-20'		SY	\$	53.00	
346D	Medium Duty Sidewalk (4" Thick, 5000 psi) 11"-20" Medium Duty Sidewalk (5" Thick, Fiber Reinf. 3000 psi) <5' length		SY	\$	73.00	\$ - \$ -
347D	Medium Duty Sidewalk (5" Thick, Fiber Reinf. 3000 psi) 5'-10' length		SY	\$	177 PURITURE	\$ -
347D 348D	Medium Duty Sidewalk (5" Thick, Fiber Reinf. 3000 psi)b 11'-20' length		SY	\$	0.0000000000000000000000000000000000000	
			SY	\$		
349D	Heavy Duty Sidewalk (6" w/Wire Mesh, & 3500 psi) <5' length				78.00	
350D	Heavy Duty Sidewalk (6" w/Wire Mesh, & 3500 psi) 5'-10' length		SY	\$	78.00	\$ -
351D	Heavy Duty Sidewalk (6" w/Wire Mesh, & 3500 psi)11'-20' length	2.4	SY	\$	TOWARD COLORS	\$ -
352D	Curb & Gutter 6"x24"x12" High Back	24	LF	\$		\$ 765.60
353D	Curb & Gutter 6"x30"x12" High Back		LF	\$		\$ -
	Curb and Gutter 6"x24"x10" Roll Back		LF	\$	31.90	
355D	Straight Header Curb		LF	\$	The state of the s	\$ -
356D	Concrete Drainage Structures Poured In Place w/ Steel	8	CY	\$		\$ 5,560.00
357D	High Early Strength (5000 psi)		CY	\$	150.00	\$ -
	Road Restoration		-		□ □ m v N v v	
358D	Graded Aggregate Base		Ton	\$	PARTICIPAL DE LA CONTRACTOR DE LA CONTRA	\$ -
359D	Crusher Run Stone		Ton	\$		\$ -
360D	Asphaltic Concrete Binder Course		Ton	\$		\$ -
361D	Asphaltic Concrete Surface Course		Ton	\$		\$ -
362D	Tack Coat		Gal	\$		\$ -
363D	2" Asph. Con. Hot Mix for Trench Cap		Ton	\$	135.00	\$ -
364D	8" Thick 3000 psi- Concrete Trench Cap		CY	\$	295.00	\$ -
	Earthwork & Grading					
	Tree Removal 6"-12""	6	EA	\$	490.00	\$ 2,940.00
365D			911/2/2017			\$ 1,580.00
365D 366D	Tree Removal 13"-23"	2	EA	\$	790.00	\$ 1,360.00
366D	Tree Removal 13"-23" Tree Removal >23"	2	EA EA	\$		\$ 1,380.00
11-7-X-X-12-X-12-X-1		400			1,490.00	

370D	Additional Excavation	100	CY	\$ 8.00	\$ 800.00
371D	Haul-In Structural Fill Material		CY	\$ 30.00	\$
372D	Haul-Off Soil Material	201	CY	\$ 25.00	\$ 5,025.00
373D	Finish Grading	400	SY	\$ 3.00	\$ 1,200.00
374D	Trench Rock Excavation		CY	\$ 135.00	\$ 1=11
375D	Debris Removal		CY	\$ 40.00	\$
	Erosion Control				
376D	Stone Rip Rap Type I In Place		SY	\$ 59.00	\$ 120
377D	Stone Rip Rap Type III In Place	36	SY	\$ 49.00	\$ 1,764.00
	Plastic Filter Fabric	110	SY	\$ 4.00	\$ 440.00
	Erosion Control Per Plan	1	LS	\$ 2,000.00	\$ 2,000.00
378D	Stone Grouted Rip Rap 12" Installed	-	SY	\$ 79.00	\$ -
379D	Install & Remove Type A Silt Fence		LF	\$ 3.50	\$.
	Install & Remove Type A Silt Fence		LF	\$ 5.90	\$
	Install & Remove Type C Silt Fence - Alternative	100	LF	\$ 5.90	\$ 590.00
		100	501572-1	 V3.707.70.00	 390.00
382D	Inlet Sediment Traps - Silt Fence Sd2	1.5	EA	\$ 99.00	\$
	Rock Bags for curb inlet/CB sediment Protection	15	EA	\$ 100.00	\$ 1,500.00
384D	Install & Remove Orange Tree Save Fence	250	LF	\$ 2.90	\$ 725.00
385D	Gabion Structures (GDOT Section 626 & 809)		CY	\$ 249.00	\$ (2)
386D	Permanent Soil Reinf Mat Installed	100	SY	\$ 6.90	\$ 690.00
387D	Organic Material Fiber Blanket Installed		SY	\$ 2.90	\$ 190
388D	Seed & Straw (Permanent Grassing)	220	SY	\$ 1.90	\$ 418.00
389D	Seed & Straw (Temporary Grassing)	400	SY	\$ 0.90	\$ 360.00
	Sodding Complete-Fescue		SY	\$ 5.75	\$ # 8
391D	Sodding Complete-Bermuda	57	SY	\$ 5.50	\$ 313.50
State of the second	Sodding Complete-Zoyzia		SY	\$ 8.00	\$ -
393D	Sodding Complete-Centipede		SY	\$ 6.50	\$ (2)
Statement Fer out	Topsoil Compete		CY	\$ 29.00	\$ ·
395D	Pine Straw	320	SY	\$ 1.90	\$ 608.00
396D		320	SY	\$	\$
	Straw Mulch			0.90	\$
	Tree Replacement 2-1/2" Hardwood, Installed		EA	\$ 249.00	 45
	Tree Replacement 2-1/2" Pine, Installed		EA	\$ 249.00	\$ 188
399D	Shrub Replacemnt: 1 gallon, installed		EA	\$ 69.00	\$ ===
400D	Shrub Replacemnt: 3 gallon, installed		EA	\$ 89.00	\$ 7
401D	Shrub Replacemnt: 5 gallon, installed		EA	\$ 129.00	\$ 420
402D	Shrub Replacemnt: 7 gallon, installed		EA	\$ 149.00	\$ 148
403D	Bedding Flower per flat of 18, installed		SY	\$ 79.00	\$ 190
	Miscellaneous Items				
404D	Connect to Existing Structures	1	EA	\$ 750.00	\$ 750.00
405D	Debris Removal, Tandem Dump Truck	4	Per Load	\$ 750.00	\$ 3,000.00
406D	Removal of Existing Non Drainage Structure		EA	\$ 790.00	\$ -
407D	Removal of Existing Drainage Structure	2	EA	\$ 790.00	\$ 1,580.00
Transcription of the second	Remove Existing Pipe all Types and Sizes	4	LF	\$ 59.00	\$ 236.00
409D	Saw Cut Existing Pavements	36	LF	\$ 3.00	\$ 108.00
410D	Stone #57	72	TON	\$ 38.00	\$ 2,736.00
411D	Surge Stone	12	TON	\$ 38.00	\$ 2,730.00
100000000000000000000000000000000000000	ž		1.1.2.2.2.2.2	 	
	No. 3's and 4's Stone		TON	\$ 38.00	4
413D	Roll-Off Dumpster		Per Day	\$ 600.00	\$ 241
414D	Relocate Existing Residential Water Meter, Including Box		EA	\$ 190.00	\$
415D	Install Thermal Barrier to protect water service line or other utilities		SF	\$ 10.90	\$ 5
416D	Bypass pumping setup-equipment and hose placement		EA	\$ 700.00	\$ 92
417D	4" Pumping Operation Time		HR	\$ 50.00	\$ 41
418D	6" Pumping Operation Time		HR	\$ 60.00	\$ E 0
419D	8" Pumping Operation Time		HR	\$ 79.00	\$ -
420D	10" Pumping Operation Time		HR	\$ 230.00	\$ -
421D	12" Pumping Operation Time		HR	\$ 275.00	\$ 44
422D	Temporary 4' Chain Link Fence		LF	\$ 12.50	\$ =0
	Remove and Replace Existing 4' Galvanized Standard Chain Link Fence Residential		LF	\$ 19.90	\$
424D	Remove and Replace Existing 5' Galvanized Standard Chain Link Fence Residential		LF	\$ 19.90	\$ 25)
425D	Remove and Replace Existing 4' Black Vinyl Standard Chain Link Fence Residential	280	LF	\$	\$ 6.072.00
423D 426D		200	LF	\$ 24.90 24.90	\$ 6,972.00
Ly. 16.26036100 1	Remove and Replace Existing 5' Black Vinyl Standard Chain Link Fence Residential			announce of the second	-
427D	Steel Plates (Typ. 5'x8' Size)		EA/Day	\$ 100.00	\$
	Reset Existing Headwall		EA	\$ 149.00	\$ 9 500
429D	Outlet Control Structure Detail	1	LS	\$ 3,500.00	\$ 3,500.00

430D	Construction Pad w/Concrete Wash Out Area	1	LS	\$ 3,000.00	\$ 3,000.00
				 	\$ -
	Total Estimate				\$ 81,894.85
	10% Contingency				\$ 8,189.49
	Grand Total of Estimate				\$ 90,084.34



Existing Detention Pond to be rehabilitated at 1765 Corners Court



Existing Detention Pond Wall to be improved

Estimate Template for CITY OF DUNWOODY 2017								
SOUTHERN PREMIER CONTRACTORS, INC.								
Project Location:	1740 Vanderlyn Drive, Dunwoody							
Prepared By:	Michael Massey							
Date Estimate Prepared:	12/21/2017							
Total Estimate	\$ 101,946.90							
10% Contingency	\$ 10,194.69							
Grand Total of Estimate	\$ 112,141.59							

SCOPE OF WORK:

Clean Pipes (24" - 362' & 30" - 49' for lining purposes)

Internal Point Repairs as Needed

CIPP Lining 24" - 362lf

CIPP Lining 30" - 49lf

Remove & Replace 24"CMP w/24" RCP

Install GADOT 1033/1034 Catch Basin

Install Precast Manhole

Remove & Replace Section of Driveway

Landscape Disturbed Areas

Install Inverts

Grout CIPP Ends to Structure

Item#	Item	Quantity	Unit	U	nit Price	T	otal Cost
	General Conditions						
lD	Mobilization	1	EA	\$	1,500.00	\$	1,500.00
2D	Out of Scope Work, Foreman		HR	\$	55.00	\$	
3D	Out of Scope Work, Laborer		HR	\$	45.00	\$	=
	Traffic Control						
‡D	Traffic Control Major (Detours etc. for road closure complete)		Per Day	\$	1,500.00	\$	(-)
5D	Traffic Control Minor (Two flagman etc.)	4	Per Day	\$	1,000.00	\$	4,000.00
5D	Mobile Electronic Detour Signs		Per Day	\$	125.00	\$	(-)
	TV Inspection and Jet-Vac Cleaning						
7D	TV Storm Lines (includes DVD & Report)		LF	\$	2.00	\$	121
3D	Visual Inspection (Pictures), per Project (During Construction)		EA	\$	150.00	\$	-
)D	Hydro-Excavation (Complete)		Per Hour	\$	349.00	\$	
	Storm Line Cleaning (less than 25% full)						
l0D	12" PIPE - Cleaning less than 25% full		LF	\$	4.00	\$	12.
.1D	15" PIPE - Cleaning less than 25% full		LF	\$	4.25	\$	~
12D	18" PIPE - Cleaning less than 25% full		LF	\$	4.50	\$,
l3D	21" PIPE - Cleaning less than 25% full		LF	\$	4.75	\$	
l4D	24" PIPE - Cleaning less than 25% full	362	LF	\$	5.00	\$	1,810.00
15D	30" PIPE - Cleaning less than 25% full	49	LF	\$	5.75	\$	281.75
16D	36" PIPE - Cleaning less than 25% full		LF	\$	6.50	\$	(-)
l7D	42" PIPE - Cleaning less than 25% full		LF	\$	7.00	\$	-
.8D	48" PIPE - Cleaning less than 25% full		LF	\$	7.50	\$	(5)
9D	54" PIPE - Cleaning less than 25% full		LF	\$	8.50	\$	- 2
20D	60" PIPE - Cleaning less than 25% full		LF	\$	10.50	\$	-
21D	66" PIPE - Cleaning less than 25% full		LF	\$	12.00	\$	(*)
22D	72" PIPE - Cleaning less than 25% full		LF	\$	15.50	\$	
23D	78" PIPE - Cleaning less than 25% full		LF	\$	16.25	\$	
24D	84" PIPE - Cleaning less than 25% full		LF	\$	18.50	\$	3
25D	90" PIPE - Cleaning less than 25% full		LF	\$	19.50	\$	(2)
26D	96" PIPE - Cleaning less than 25% full		LF	\$	21.50	\$	(-)
	Reinforced Concrete Pipe (RCP) Tp 3	1	oci-si-				

	Includes execution healtfill & compaction						
58D	Includes excavation, backfill, & compaction 18" RCP		LF	\$	32.95	\$	
	24" RCP	192	LF	\$			7 709 00
		192	7.545555		40.25	\$	7,728.00
	30" RCP 36" RCP		LF LF	\$	52.75	\$	121
	42" RCP		LF	\$ \$	64.95 93.50	\$	-
		wane) wanananananananananananana (wan				<u> </u>	
63D	48" RCP		LF	\$	125.00	\$	350
	54" RCP		LF	\$	135.00	\$	
	60" RCP		LF	\$	150.00	\$	221
66D	72" RCP		LF	\$	175.00	\$	-
121D	Internal Pipe Point Repairs (Including cutting, trimming, jacking, etc.)		7.15	Φ.	250.00	•	
	18" Diameter 24" Diameter	10	LF LF	\$	350.00	\$	4 500 00
	30" Diameter	18	LF LF	\$ \$	250.00 199.00	\$ \$	4,500.00 597.00
0.000.000.000.000	36" Diameter	3	LF	\$	150.00	\$	397.00
	42" Diameter		LF	\$	150.00	\$	
	48" Diameter		LF	\$	150.00	\$	
77-770-0-170			LF	\$		\$	#
	60" Diameter 72" Diameter		LF	\$	150.00 150.00	\$	-
200000000000000000000000000000000000000	96" Diameter		LF	\$	150.00	\$	-
139D	90 Diameter		LF	1 D	130.00	D	-
1/3D	4'-Dia. Precast Catch Basin GADOT 1033/1034	8	VF	\$	399.00	\$	3,192.00
	5'-Dia. Precast Catch Basin GADOT 1033/1034	+ 8	VF	\$	375.00	\$	3,192.00
	6'-Dia, Precast Catch Basin GADOT 1033/1034		VF	\$	599.00	\$	
143D	Round Precast Manholes		VГ	2	399.00	Þ	-
101D	4' Round Precast Manhole w/ Manhole Ring & Cover	4	VF	\$	275.00	\$	1,100.00
		4	VF	\$	300.00	\$	
	5' Round Precast Manhole w/ Manhole Ring & Cover 6' Round Precast Manhole w/ Manhole Ring & Cover	_	VF VF	\$	375.00	\$	2
193D	6 Round Precast Maintole w/ Maintole Ring & Cover		VF	D.	3/3.00	D	-
209D	Invert Installation, 4' Diameter	4	EA	\$	250.00	\$	1,000.00
	Invert Installation, 5' Diameter	4	EA	\$	300.00	\$	1,000.00
	Invert Installation, 6' Diameter		EA	\$	350.00	\$	8
	Invert Installation, of Diameter Invert Installation, other configurations		SF	\$	12.50	\$	
2121	Grout Connection To Structure		SI.	Φ	12.50	Φ	·-
217D	12" Grout Each End to Structure		EA	\$	125.00	\$	-
	15" Grout Each End to Structure	wante wante and the second	EA	\$	150.00	\$	
	18" Grout Each End to Structure		EA	\$	150.00	\$	-
13.700	21" Grout Each End to Structure		EA	\$	175.00	\$	<u>121</u>
	24" Grout Each End to Structure	4	EA	\$	200.00	\$	800.00
	27" Grout Each End to Structure		EA	\$	200.00	\$	-
	30" Grout Each End to Structure	2	EA	\$	200.00	\$	400.00
	36" Grout Each End to Structure	1	EA	\$	225.00	\$	225.00
	42" Grout Each End to Structure		EA	\$	250.00	\$	-
1077.000.000.00	48" Grout Each End to Structure		EA	\$	275.00	\$	**
	54" Grout Each End to Structure		EA	\$	350.00	\$	-
	60" Grout Each End to Structure		EA	\$	375.00	\$	·
	66" Grout Each End to Structure		EA	\$	400.00	1.75.5	
	72" Grout Each End to Structure	1	EA	\$		\$	-
	Grout all joint, cracks & holes, in structures, complete	4	EA	\$	500.00	\$	2,000.00
	LINING REQUIREMENTS						,
	Cured In Place Pipe Liner (CIPP) - (12' or less in depth)						
	Includes Pre and Post Television Inspections during lining						
232D	12" PIPE - 7.5mm (.2953")	1	LF	S	65.00	\$	-
	15" PIPE - 7.5mm (.2953")		LF	\$	100000000000000000000000000000000000000	\$	=
	18" PIPE - 8.0mm (.315")		LF	\$	63.00	\$	
	21" PIPE - 10.0mm (.3937")	wasia wasiani wa	LF	\$	92.00	\$	
	24" PIPE - 10.0mm (.3937")	362	LF	\$	127		34,390.00
	30" PIPE - 12.5mm (.4921")	49	LF	\$	131.00	\$	6,419.00
	36" PIPE - 12.5mm (.4921) 36" PIPE - 16.0mm (.6299")	49	LF	\$	131.00	\$	0,712.00
	42" PIPE - 18.0mm (.7087")		LF	\$	240.00	\$	
	42 FIFE - 18.0mm (.7067) 48" PIPE - 21.0mm (.8268")		LF	\$	250.00		= =
	54" PIPE - 24.0mm (.9449")		LF	\$.=0.200	\$	2
	60" PIPE - 28.5mm (1.122")	+	LF	\$		\$	-
2,22			-11	Ψ.	152.00	Ψ	

0.42D	CC!! DIDE: (20.0 (1.1011!!)	I IP	I e	550.00	•	
	66" PIPE - 30.0mm (1.1811") 72" PIPE - 32.5mm (1.2795")	LF LF	\$ \$	550.00 603.00		(=)
	72 FIFE - 32.5mm (1.2793) 78" PIPE - 33.0mm (1.2992")	LF	\$	675.00	-	- 2
	84" PIPE - 35.5mm (1.2972')	LF	\$	776.00		
	90" PIPE - 38.0mm (1.4961")	LF	\$	850.00		-
	96" PIPE - 40.5mm (1.5945")	LF	\$	990.00	1020	.=:
	Additional Cost Per 1.5mm (.0591") Thickness - 12" PIPE	LF	\$	2.00		**************************************
	Additional Cost Per 1.5mm (.0591") Thickness - 15" PIPE	LF	\$	2.00	_	121
	Additional Cost Per 1.5mm (.0591") Thickness - 18" PIPE	LF	\$	3.50		12
	Additional Cost Per 1.5mm (.0591") Thickness - 21" PIPE	LF	\$	3.50		V=:
253D	Additional Cost Per 1.5mm (.0591") Thickness - 24" PIPE 3	52 LF	\$	3.75	\$	1,357.50
254D	Additional Cost Per 1.5mm (.0591") Thickness - 30" PIPE	49 LF	\$	5.25	\$	257.25
255D	Additional Cost Per 1.5mm (.0591") Thickness - 36" PIPE	LF	\$	5.50	\$	787
256D	Additional Cost Per 1.5mm (.0591") Thickness - 42" PIPE	LF	\$	7.25	\$	(-)
257D	Additional Cost Per 1.5mm (.0591") Thickness - 48" PIPE	LF	\$	8.25	\$	
	Additional Cost Per 1.5mm (.0591") Thickness - 54" PIPE	LF	\$	10.00		-
	Additional Cost Per 1.5mm (.0591") Thickness - 60" PIPE	LF	\$	10.50		3
	Additional Cost Per 1.5mm (.0591") Thickness - 66" PIPE	LF	\$	10.50		
	Additional Cost Per 1.5mm (.0591") Thickness - 72" PIPE	LF	\$	16.00		(-)
	Additional Cost Per 1.5mm (.0591") Thickness - 78" PIPE	LF	\$	15.00	3100000000	
	Additional Cost Per 1.5mm (.0591") Thickness - 84" PIPE	LF	\$	25.50		-
	Additional Cost Per 1.5mm (.0591") Thickness - 90" PIPE	LF	\$	25.50		8
265D	Additional Cost Per 1.5mm (.0591") Thickness - 96" PIPE	LF	\$	26.00	\$	2
266D	Inversion Setup	a FAGU		000.00	•	1 600 00
	Inversion Setup Charge 15"- 36" CIPP	2 EACH	\$	800.00	in the second	1,600.00
	Inversion Setup Charge 42"- 60" CIPP	EACH	\$	2,500.00	100000000000000000000000000000000000000	-
268D	Inversion Setup Charge 66"- 96" CIPP Cast in Place Concrete	EACH	\$	6,000.00	2	-
339D	Paved Ditch/Swale (4" Thick)	SY	\$	35.90	•	-
	22 CO 25 CO 1 CO 1 CO 25	32 SY	\$	49.90	\$	1,596.80
	Driveway 6" Concrete (Commercial w/6" of GAB included)	SY	\$	59.90	-	1,390.60
	Driveway 8" Concrete (Commercial w/6" of GAB included)	SY	\$	74.90	_	12
	Regular Duty Sidewalk (4" Thick, 3000 psi) <5' length	SY	\$	63.00		
	Regular Duty Sidewalk (4" Thick, 3000 psi) 5'-10' length	SY	\$	63.00		-
SCORE CONT.	Regular Duty Sidewalk (4" Thick, 3000 psi) 11'-20'	SY	\$	53.00	10.00	(#)
-	Medium Duty Sidewalk (5" Thick, Fiber Reinf. 3000 psi) <5' length	SY	\$	73.00	-	
	Medium Duty Sidewalk (5" Thick, Fiber Reinf. 3000 psi) 5'-10' length	SY	\$	73.00	_	
	Medium Duty Sidewalk (5" Thick, Fiber Reinf. 3000 psi)b 11'-20' length	SY	\$	63.00	\$	(**)
349D	Heavy Duty Sidewalk (6" w/Wire Mesh, & 3500 psi) <5' length	SY	\$	78.00	\$	Ξ.
350D	Heavy Duty Sidewalk (6" w/Wire Mesh, & 3500 psi) 5'-10' length	SY	\$	78.00	\$	(5)
351D	Heavy Duty Sidewalk (6" w/Wire Mesh, & 3500 psi)11'-20' length	SY	\$	68.00	\$	
352D	Curb & Gutter 6"x24"x12" High Back	24 LF	\$	31.90	\$	765.60
353D	Curb & Gutter 6"x30"x12" High Back	LF	\$	34.90	\$	(*)
354D	Curb and Gutter 6"x24"x10" Roll Back	LF	\$	31.90	\$	
355D	Straight Header Curb	LF	\$	19.90		(5)
	Concrete Drainage Structures Poured In Place w/ Steel	CY	\$	695.00		2
357D	High Early Strength (5000 psi)	CY	\$	150.00	\$	
	Earthwork & Grading				ļ.,	
	Tree Removal 6"-12""	EA	\$	490.00		-
	Tree Removal 13"-23"	EA	\$	790.00		
	Tree Removal >23"	EA	\$	1,490.00		- 3
	Clear & Grubbing	SY	\$	8.90		121
	Channel Excavation	CY	\$	8.00		\ \
	Additional Excavation	CY CY	\$	8.00		- 510.00
		17 CY	\$	30.00		510.00
		51 CY 50 SY	\$ \$	25.00 3.00		1,275.00 1,350.00
	Trench Rock Excavation	CY CY	\$	135.00		
	Debris Removal	CY	\$	40.00		(¥)
ענונ	Erosion Control	1 01	D.	40.00	Φ	-
376D	Stone Rip Rap Type I In Place	SY	\$	59.00	\$	=
	Stone Rip Rap Type III In Place	SY	\$	49.00		- 5
	Stone Grouted Rip Rap 12" Installed	SY	\$	79.00		-
	Install & Remove Type A Silt Fence	LF	\$	3.50	10.00	
Constant						tanwaniwaniwaniwaniwa

380D	Install & Remove Type C Silt Fence		LF	\$ 5.90	\$.=.
	Install & Remove Type C Silt Fence - Alternative	100	LF	\$ 5.90	\$	590.00
	Inlet Sediment Traps - Silt Fence Sd2	100	EA	\$ 99.00		-
	Rock Bags for curb inlet/CB sediment Protection		EA	\$ 100.00		12
	Install & Remove Orange Tree Save Fence	300	LF	\$ 2.90	\$	870.00
1000 to 1000 t	Gabion Structures (GDOT Section 626 & 809)	500	CY	\$ 249.00	\$	-
	Permanent Soil Reinf Mat Installed		SY	\$ 6.90	\$	
	Organic Material Fiber Blanket Installed		SY	\$ 2.90	\$	-
	Seed & Straw (Permanent Grassing)		SY	\$ 1.90	\$	
	Seed & Straw (Temporary Grassing)		SY	\$ 0.90	\$	-
	Sodding Complete-Fescue		SY	\$ 5.75	\$:=:
391D	Sodding Complete-Bermuda		SY	\$ 5.50	\$	
	Sodding Complete-Zoyzia		SY	\$ 8.00	\$	
	Sodding Complete-Centipede	450	SY	\$ 6.50	_	2,925.00
	Topsoil Compete	30 300	CY	\$ 29.00	\$	-
	Pine Straw	50	SY	\$ 1.90	\$	95.00
396D	Straw Mulch		SY	\$ 0.90	\$	8
397D	Tree Replacement 2-1/2" Hardwood, Installed		EA	\$ 249.00	\$	=
	Tree Replacement 2-1/2" Pine, Installed		EA	\$ 249.00	\$	1-1
399D	Shrub Replacemnt: 1 gallon, installed		EA	\$ 69.00	\$	
400D	Shrub Replacemnt: 3 gallon, installed		EA	\$ 89.00	\$	-
401D	Shrub Replacemnt: 5 gallon, installed		EA	\$ 129.00	\$	E
	Shrub Replacemnt: 7 gallon, installed		EA	\$ 149.00	\$	120
	Bedding Flower per flat of 18, installed		SY	\$ 79.00	\$	1-1
	Miscellaneous Items					
404D	Connect to Existing Structures	1	EA	\$ 750.00	\$	750.00
405D	Debris Removal, Tandem Dump Truck	2	Per Load	\$ 750.00	\$	1,500.00
406D	Removal of Existing Non Drainage Structure		EA	\$ 790.00	\$	121
407D	Removal of Existing Drainage Structure	3	EA	\$ 790.00	\$	2,370.00
408D	Remove Existing Pipe all Types and Sizes	200	LF	\$ 59.00	\$	11,800.00
409D	Saw Cut Existing Pavements	50	LF	\$ 3.00	\$	150.00
410D	Stone #57	54	TON	\$ 38.00	\$	2,052.00
411D	Surge Stone		TON	\$ 38.00	\$	(4)
412D	No. 3's and 4's Stone		TON	\$ 38.00	\$	1-1
413D	Roll-Off Dumpster	Carlot Carlot	Per Day	\$ 600.00	\$	(4)
	Relocate Existing Residential Water Meter, Including Box		EA	\$ 190.00	\$	190.00
415D	Install Thermal Barrier to protect water service line or other utilities		SF	\$ 10.90	\$	Ē
	Bypass pumping setup-equipment and hose placement		EA	\$ 700.00	\$	(2)
	4" Pumping Operation Time		HR	\$ 50.00	\$	-
	6" Pumping Operation Time		HR	\$ 60.00	\$	(=)
	8" Pumping Operation Time		HR	\$ 79.00	\$.=
	10" Pumping Operation Time		HR	\$ 230.00	\$	
	12" Pumping Operation Time		HR	\$ 275.00	\$	(4)
	Temporary 4' Chain Link Fence		LF	\$ 12.50	\$	-
	Remove and Replace Existing 4' Galvanized Standard Chain Link Fence Residential		LF	\$ 19.90	\$:=:
54927520004	Remove and Replace Existing 5' Galvanized Standard Chain Link Fence Residential		LF	\$ 19.90	\$	(n
	Remove and Replace Existing 4' Black Vinyl Standard Chain Link Fence Residential		LF	\$ 24.90		-
	Remove and Replace Existing 5' Black Vinyl Standard Chain Link Fence Residential		LF EA/D	\$ 24.90	25	7-3
	Steel Plates (Typ. 5'x8' Size)		EA/Day	\$ 100.00	ır.	
428D	Reset Existing Headwall		EA	\$ 149.00	\$	=
	Total Estimate) In the providence and a second and annotation arrows a recommendation of the second and the se	 wa wa kata wa	Ŷ.	101,946.90
	10% Contingency		8			101,340.90
\vdash	Grand Total of Estimate					112,141.59
	Grand Total Of Estimate				Ψ	114,171.00