## 2020-2021 Road Paving Improvements



Prepared by: Rio Communities' Planning and Zoning Commission

City of Rio Communities, New Mexico: Resolution 2020-167- A proposal to participate in the NMDOT Cooperative Agreement Program for the expressed purpose of repairing city roads and intersections.

City of Rio Communities

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3/4/2020



#### **CITY OF RIO COMMUNITIES**

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March 10, 2020

Marguerite Johnson LGRF Liaison NMDOT, District 3 PO Box 91750 Albuquerque, New Mexico 87199-1750

RE: 2020-2021 Cooperative Agreement Program Project Proposal

Dear Ms. Johnson,

The City of Rio Communities is please to present the following application for funding under the Cooperative Agreement Program for 2020-2021. This proposal was prepared by members of our Planning and Zoning Commission who conducted the requisite site inspections, and performed a thorough analysis of road use and conditions.

Following are aerial photographs and street views that depict the specific project locations, many of which are located alone established school bus routes; along with each project's scope of work and corresponding cost estimate. Additionally, Resolution 2020-167 is attached certifying full acceptance of this project by our Governing Body.

As mayor Pro tem, I hereby certify that the enclosed proposed scope of work is necessary for the public good and their convenience, and integral to the economic development of our community.

Should you have further concerns or question, please contact me at 505-264-3412.

Thank-you in advance for your assistance in our efforts to improve our community.

Sincerely,

Peggy Gutjahr Mayor Pro-tem of Rio Communities

CC: Mary Lovato

# State of New Mexico City of Rio Communities Resolution 2020-167 NMDOT Cooperative Agreement Program

Whereas,	to participate in the Coop	perative Agreement P the attached docume	ommunities, State of New Mexico, desires rogram and has approved the scope and ent; listing roads and intersections, along
Whereas,	the scope of work contain vital to the public good ar		eviewed by the City Council as being and;
Whereas,	Highway and Transportat	ion Department, Dist 2021 Cooperative Agr	vitation from the New Mexico rict Three, Albuquerque, New Mexico, to eement Funding Program by submitting
Whereas,	The City of Rio Communifive percent (25%) of the		ovide matching funds at a rate of twenty-ct.
	State of New Mexico, he Mexico State Highway an funding of such projects a	reby authorizes the s d Transportation Dep is specified in the app	
	OVED AND ADOPTED THIS MMUNITIES, NEW MEXIC		2020 BY THE GOVERNING BODY OF THE
	<del></del>	Mark Gwinn, Mayor	
Margaret (Pegg	y) Gutjahr, Mayor Pro-tem		Bill Brown, Councilor
Joshua Ramsell	, Councilor	J	Jim Winters, Councilor
ATTEST:			
Elizabeth (Lisa)	Adair, Municipal Clerk		

#### **Summary of 2020-2021 Road Paving Improvements**

#### **Roadway Conditions**

In the City's on-going effort to repair roadway surface damage, after decades of neglect, surface damage runs the gamut of disrepair, ranging from moderate to severe raveling and cracks, to the complete breakdown of asphalt surfaces and subbase. Based on a thorough assessment, this proposal identifies three types of repairs that we believe will not only extend the functional life of roadway surfaces by an additional four to five years, but are deemed to be the most cost effective methods in achieving this end.

**Chip and Seal:** For full width sections of paved roadways identified as "fair," we propose a chip and seal with fog coat overlay as the most practical method of repair. This method requires the application of a liquid asphalt "overlay" atop compacted 3/8" aggregate, then applying a rejuvenating asphalt emulsion (fog) as a flush coat to reconstitute and seal the road surface.

**Potholes:** In areas with potholes and surface faults, each defect should be squared-off and excavated to a minimum depth of three inches (3") and then over-filled with premixed bituminous material and compacted flush to existing surface.

**Cut and Replace:** A majority of roadway surfaces in this proposal have been identified as being "poor" and thus require a complete cut and replace repair. To accomplish this, whole areas should be marked and saw-cut, removing defective material with a jackhammer. A tack coat should then be applied over compacted base course and hot asphalt applied in two 1.5-inch lifts, compacting after each lift, and then treated with the appropriate sealant material.

In all, this proposal identifies 13 locations in need of immediate repair. Of these, 2 require a full cut and replace repair, 3 require cut and replace of large potholes, one requires a combination of pothole repair with chip and seal, and 9 require chip and seal repairs.

Based on current industry standards, we've estimated the final cost for these repairs to be \$218,253 of which the City's 25% share is \$54,563.

The following charts provide the exact locations of each repair, the size and type of each repair required and the associated estimated costs.

#### City of Rio Communities, New Mexico 2020 – 2021 Road Paving Improvements Project Cost Estimates

Repair #	Location Description	Repair Description	Bus Route	Dimensions	Area SF	Cut/Replace @ \$8.50 per SF	Chip/Seal @ \$.55 per SF	
	Plunkett Ct (End of Cul de Sac)	Repair pothole	N	W 8' x L 8'	64 SF	\$ 850.00	\$	-
1a	Plunket Ct (Cul-de-Sac)	Chip and seal entire length	N	W 27" x L 230' x 40' R	11,237 SF	\$ -	\$	6,180.00
2	Unitas Ct (Cul-de-Sac)	Chip and seal entire length	N	W 27' x L 190' x 40' R	10,157 SF	\$ -	\$	5,586.00
3	Palmer Ln (entire length)	Chip and seal entire length	N	W 28' x L 2,000'	56,000 SF	\$ -	\$	30,800.00
4	Speed Bump at Lee Trevino Blvd & Brown Dr	Repair potholes along length of speed bump	Y	W 38' x L 17'	646 SF	\$ 5,491.00	\$	-
5	Intersection of Damon St & Horner Ave	Cut and replace from intersection to 110' north of intersection	Υ	W 20' x L 110'	2,200 SF	\$ 18,700.00	\$	-
6	Intersection of Baldwin Ave & Riggs St	Cut and replace	N	W 20' x L 110'	2,200 SF	\$ 18,700.00	\$	-
6a	Baldwin Ave	Repair pothole located 180' east of intersection	N	W 12' x L 32'	384 SF	\$ 3,264.00		
7	Suncrest Blvd	Chip and seal entire length	Υ	W 30' x L 2,000'	60,000 SF	\$ -	\$	33,000.00
8	Sombrero Lp (entire length)	Chip and seal entire loop	Υ	W 24' x L 2,000'	48,000 SF	\$ -	\$	26,400.00
9	349 Gorman Ave to end of Pageant Dr	Chip and seal entire length starting from previous repair	Y	W 30' x L 2,000'	60,000 SF	\$ -	\$	33,000.00
10	Perion Dr (Cul de Sac)	Chip and seal entire length	N	W 30' x L 450' x 40' R	18,527 SF	\$ -	\$	10,190.00
11	Perion Ct (Cul de Sac)	Chip and seal entire length	N	W 30' x L 450' x 40' R	18,527 SF		\$	10,190.00
12	Guapo Dr	Chip and seal to Aviso	N	W 23' x L 250'	5,750 SF		\$	3,163.00
13	Clinton Ct (Cul de Sac)	Repair potholes & Chip and Seal	N	W 27' x L 200' x 40' R	10,427	\$ 7,004.00	\$	5,734.85
	Subtotal: Cut and Replace	\$ 54,009.00						
Subtotal: Chip and Seal							\$	164,244
	Total: All Road Surface Repairs					\$		218,253

Note: All estimated costs are rounded to the nearest 10th.

#### **Project Locations: GPS Coordinates**

Repair #	Location Description	GPS Coordinates
1	1701 Plunkett Ct-Pothole Repair	34°38'07.1"N 106°43'45.0"W
1a	Plunket Ct (Cul-de-Sac)	34°38'08.2"N 106°43'41.6"W
2	Unitas Ct Cul-de-Sac)	34°38'05.0"N 106°43'40.0"W
3	Palmer Ln (entire length)	34°38'01.7"N 106°43'41.4"W
4	Speed Bump at Lee Trevino Blvd & Brown Dr	34°37'57.9"N 106°43'51.8"W
5	Intersection of Damon St & Horner Ave	34°38'23.4"N 106°43'27.4"W
6	Intersection of Baldwin Ave & Riggs St	34°38'40.4"N 106°43'31.0"W
6a	Baldwin Ave (pothole 180' east)	34°38'40.8"N 106°43'28.8"W
7	Suncrest Blvd	34°38'30.4"N 106°43'16.7"W
8	Sombrero Lp (entire length)	34°39'02.2"N 106°43'30.3"W
9	349 Gorman Ave to end of Pageant Dr	34°39'25.9"N 106°43'01.6"W
10	Perion Dr	34°38'22.2"N 106°43'16.8"W
11	Perion Ct	34°38'25.9"N 106°43'15.9"W
12	Guapo Dr	34°38'11.0"N 106°43'12.1"W
13	Clinton Ct (Cul de Sac)	34°38'31.1"N 106°43'05.0"W

### City of Rio Communities Index of Repair Site Locations (2020-2021)

1	Plunkett Ct- Pothole Repair	7
1a	Plunket Ct (Cul-de-Sac) - Chip and Seal	7
2	Unitas Ct (Cul-de-Sac) - Chip and Seal	8
3	Palmer Ln (entire length) - Chip and Seal	9
4	Speed Bump at Lee Trevino Blvd & Brown Dr- Pothole Repair	10
5	Intersection of Damon St & Horner Ave- Cut and Replace	11
6	Intersection of Baldwin Ave & Riggs St- Cut and Replace	12
6a	Baldwin Ave (pothole 180' east) - Pothole Repair	13
7	Suncrest Blvd- Chip and Seal	14
8	Sombrero Lp (entire length) - Chip and Seal	15
9	349 Gorman Ave to end of Pageant Dr- Chip and Seal	16
10	Perion Dr- Chip and Seal	17
11	Perion Ct- Chip and Seal	18
12	Guapo Dr- Chip and Seal	19
13	Clinton Ct (Cul de Sac)- Pothole Repair & Chip and Seal	20

Repair #1: 1701 Plunket Ct- Pothole Repair



Assessment: Complete breakdown of asphalt and sub-base

Repair: Full service repair (cut and replace)

Area: 64 SF (W 8' x L 8')

#### Repair #1a: Plunket Ct (Cul de Sac)



Surface Condition: Fair

Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 11,237 SF (W 27' x L 230' x 40' R)

#### Repair #2: Unitas Ct (Cul de Sac)





Surface Condition: Fair

Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 10,157 SF (W 27' x L 190' x 40' R)

Repair #3: Palmer Ln



Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 56,000 SF (W 28' x L 2,000')

Repair #4: Potholes Along Speed Bump at Lee Trevino Blvd & Brown Dr





Assessment: Complete breakdown of asphalt and sub-base

Repair: Cut and Replace Area: 646 SF (W 38' x L 17')

Repair #5: Intersection of Damon St and Horner Ave





Assessment: Complete breakdown of asphalt and sub-base

Repair: Cut and Replace

Area: 2,200 SF (W 20' x L 110')

Repair #6: Intersection of Baldwin Ave & Riggs St





Assessment: Complete breakdown of asphalt and sub-base

Repair: Cut and Replace

Area: 2,200 SF (W 20' x L 110')

Repair #6a: Pothole Repair 180' East of Intersection at Baldwin Ave & Riggs St





Assessment: Complete breakdown of asphalt and sub-base

Repair: Cut and Replace Area: 384 SF (W 12' x L 32')

#### Repair #7: Suncrest Dr







Surface Condition: Fair

Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 60,000 SF (W 30' x L 2,000')

Repair #8: Sombrero Lp (entire length)







Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 48,000 SF (W 24' x L 2,000')

Repair #9: 349 Gorman Ave to end of Pageant Dr



Assessment: Irregular cracking and

breakdown of asphalt Repair: Chip and Seal

Area: 60,000 SF (W 30' x L 2,000')



#### Repair #10: Perion Dr (Cul de Sac)





Surface Condition: Fair

Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 18,527 SF (W 30' x L 450' x 40' R)

Repair #11: Perion Ct (Cul de Sac)





Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 18,527 SF (W 30' x L 450' x 40' R)

Repair #12: Guapo Dr to Aviso St





Assessment: Irregular cracking and breakdown of asphalt

Repair: Chip and Seal

Area: 5,750 SF (W 23' x L 250')

Repair #13: Clinton Ct (Cul de Sac)







Assessment: Irregular cracking and breakdown of asphalt

Repair: Repair potholes and Chip and Seal Area: 10,427 SF (W 27' x L 200' x 40' R)