MEMORANDUM

To: Fausto Burruel, P.E., Public Works Director & Town Engineer

From: Alejandro Angel, PhD, PE - Psomas

Date: February 6, 2024

Subject: Amendment to Marana's Streets Facilities Impact Fee Program



The purpose of this memorandum is to support an amendment to the current Streets Facilities Impact Fee program for the Town of Marana. At the time the Infrastructure Improvements Plan (IIP, approved 9/20/22) and Development Fee Report (approved 12/20/22) were developed, the Town and Psomas intended to include the improvements to Adonis Road and Mandarina Boulevard as a project in the Northwest service area. This is reflected in the fact that the end points and project costs correspond to the total identified for those roadways. However, the project was inadvertently labeled only as "Adonis Road" without mentioning Mandarina Blvd.

The proposed amendment revises several tables and appendices to the studies to reflect the correct project name as "Adonis Road / Mandarina Blvd". Since the amendment does not increase the level of service in the service area or cause a change in the development fee, the process can be pursued administratively as provided in ARS 9-463.05(D)(10). The revised tables are listed below and attached (changes are in red text):

- IIP Table 1. Necessary Streets Facilities, Existing and Future
- IIP Table 2. Current and Future Traffic Volumes
- IIP Appendix C Assessed Costs by Project and Service Area
- Development Fee Report Appendix B Assessed Costs by Project and Service Area

	Road Project	Limits			Length	Construct	ion Cost	Non- Construction	Total Capital Cost - New/	Legacy Cost	Cost Attributable to	Source / Notes
					(mi)	Per Lane-Mile	Total	Costs*	Improvements		Development**	
	Marana Main Street	Sandario	Grier	2	0.54	\$2,100,000	\$2,268,000	\$986,580	\$3,255,000		\$3,255,000	Lane mile costs from RTA Bids
	Marana Main Street	Tangerine Farms Rd	Sandario	2	0.35					\$873,000	\$873,000	Town of Marana / Debt Service
	Tangerine Farms Road	I-10 (Tangerine TI)	Clark Farms	4	4.1					\$3,018,397	\$3,018,397	Outstanding Impact Fee Credits
orthwest	Clark Farms	Riccati Dr	Despain Dr	3	0.7					<i>\$3,010,337</i>	\$5,610,357	(built by developer)
	Tangerine Farms Road	Clark Farms	I-10 (Marana TI)	4	1.2	\$2,100,000	\$10,080,000	\$5,896,800	\$15,977,000		\$7,484,400	Lane mile costs from RTA Bids
Northw	Marana Road Interchange, Phase 1	N/A	N/A	N/A	N/A				\$6,753,000		\$6,753,000	Town of Marana / prelim estimate
	Clark Farms	Despain Dr	Lon Adams Rd	3	0.5	\$2,100,000	\$3,150,000	\$1,370,250	\$4,520,000		\$3,365,622	Lane mile costs from RTA Bids
	Clark Farms	Lon Adams Rd	Tangerine Farms Rd	4	2.1	\$2,100,000	\$17,640,000	\$7,673,400	\$25,313,000		\$11,774,700	Lane mile costs from RTA Bids
	Adonis Road/Mandarina Blvd	Grier Rd	Tangerine Rd	2	3.0	\$2,100,000	\$12,600,000	\$8,001,000	\$20,601,000		\$14,465,963	Lane mile costs from RTA Bids
	Tangerine Road Interchange	N/A	N/A	N/A	N/A				\$4,500,000		\$4,500,000	Town of Marana / prelim estimate (Cost split with NE)
	Tangerine Road, Phase 1	Dove Mountain Blvd	Town Limits	4	2.4				\$6,189,000		\$1,896,029	Town of Marana / Shortfall in impact fees at time of construction
t	Tangerine Road, Phase 2	I-10 (Tangerine TI)	Dove Mountain Blvd	4	4.6				\$42,537,000		\$13,936,211	Town of Marana / Calculated cost based on Phase 1 costs, less RTA and State funding
Northeast	Twin Peaks Road	Lambert Ln	Tangerine Rd	4	2.1					\$3,642,259	\$3,642,259	Town of Marana / Debt Service
No	Moore Road	Camino de Oeste	Thornydale Rd	2	1.3					\$291,788	\$291,788	Town of Marana / Outstanding cost
	Cayton Road	Dove Mountain Blvd	Thornydale Rd	2	1.1	\$2,100,000	\$4,620,000	\$2,009,700	\$6,630,000		\$6,630,000	Lane mile costs from RTA Bids
	Tangerine Road Interchange	N/A	N/A		N/A				\$1,500,000		\$1,500,000	Town of Marana / prelim estimate (Cost split with NW)
	Twin Peaks Interchange	N/A	N/A	N/A	N/A					\$3,757,886	\$3,757,886	Town of Marana / Debt Service
	Twin Peaks Road Twin Peaks Road/	I-10	Lambert Ln	4	1.3							
	Rattlesnake Pass	Saguaro Highlands Dr	Silverbell Rd	4	1.5				\$18,001,838		\$7,506,111	Town of Marana / prelim estimate
~	Cortaro Road	I-10	Camino de Oeste	4	1.7				\$8,134,735		\$2,319,081	Town of Marana / Construction Cost
South	Silverbell Road	Ina Rd	Cortaro Rd	4	1.0				\$21,068,682		\$8,023,017	Town of Marana / Construction Cost
	Ina Road	I-10	Silverbell Rd	4	1.1				\$9,000,000		\$3,006,062	Town of Marana / Construction Cost
	Silverbell Road	Sunset Rd	Ina Rd	4	3.2				\$8,013,159		\$2,625,316	Town of Marana / RTA estimates of difference between 3-lane and 4- lane for Marana portion of project
	cludes ROW, environmental mi	tigation, drainage, desig	n, construction				/Improvement		\$201,993,414	¢11 502 222		
	anagement, financing costs See Appendix C for additional d	etail					l (Legacy Facilit AL (ALL FACILIT		\$213,57	\$11,583,330 6, 744		

Table 1. Necessary Streets Facilities. Existing and Future

	Road Project	Lim	its	Speed Limit (mph)	Existing Volume (veh/day) ¹	Existing Volume Adjusted ²	Existing Capacity (veh/day) ³	Future Volume (veh/day) ⁴	Future Volume Adjusted ⁵	Future Capacity (veh/day) ⁶
	Marana Main Street	Sandario Rd	Grier Rd	25	0	Aujusteu	N/A	1.000	3,000	13,990
	Marana Main Street	Tangerine Farms Rd	Sandario Rd	25	1,000		, 16,730	300	4,300	16,730
	Tangerine Farms Road	I-10 (Tangerine TI)	Clark Farms	45	13,500		37,610	27,500	· · · ·	37,610
est	Clark Farms	Riccati Dr	Despain Dr	40	3,200		17,567	8,700		17,567
ave	Tangerine Farms Road	Clark Farms	I-10 (Marana TI)	45	0		N/A	10,000		30,620
orthwe	Marana Road Interchange, Phase 1	N/A	N/A	N/A	N/A		N/A	N/A		N/A
ž	Clark Farms	Despain Dr	Lon Adams Rd	35	0		N/A	10,000		14,690
	Clark Farms	Lon Adams Rd	Tangerine Farms Rd	35	0		N/A	9,000		30,620
	Adonis Road/Mandarina Blvd	Grier Rd	Tangerine Rd	45	0		N/A	10,000		15,930
	Tangerine Road Interchange	N/A	N/A	N/A	N/A		N/A	N/A		N/A
	Tangerine Road, Phase 1	Dove Mountain Blvd	Town Limits	50	10,000	15,400	37,610	15,000	20,400	37,610
ŗ	Tangerine Road, Phase 2	I-10 (Tangerine TI)	Dove Mountain Blvd	50	8,000		16,730	14,000		37,610
ortheas	Twin Peaks Road	Lambert Ln	Tangerine Rd	45	16,000		37,610	23,500		37,610
ort	Moore Road	Camino De Oeste	Thornydale Rd	30	3,000		13,990	7,000		16,730
z	Cayton Road	Dove Mountain Blvd	Thornydale Rd	30	0		N/A	5,400		13,990
	Tangerine Road Interchange	N/A	N/A	N/A	N/A		N/A	N/A		N/A
	Twin Peaks Interchange	N/A	N/A	N/A	N/A		N/A	N/A		N/A
	Twin Peaks Road	I-10	Lambert Ln	45	18,000	22,000	37,610	29,000	33,000	37,610
ء	Twin Peaks Road/Rattlesnake Pass	Saguaro Highlands Dr	Silverbell Rd	45	12,500		16,730	16,000	22,700	37,610
South	Cortaro Road	I-10	Camino de Oeste	40	25,000		37,610	29,000		37,610
Š	Silverbell Road	Ina Rd	Cortaro Rd	45	22,000	14,000	37,610	22,500		37,610
	Ina Road	I-10	Silverbell Rd	45	26,000		16,730	22,000	32,300	37,610
	Silverbell Road	Ina Rd	Sunset Rd	45	10,000		16,730	16,000		37,610

Table 2. Current and Future Traffic Volumes

¹ From PAG 2021 Travel Demand Model using Marana Land Use Assumptions

² Used recent traffic count if significant differences between 2021 PAG Model and recent traffic counts

³ Based on current road section and FDOT Capacity Tables

⁴ From PAG Travel Demand Model using Marana 2031 Land Use Assumptions and regional growth factor

⁵ Adjusted to better reflect anticipated volumes based on existing and planned developments

⁶ Based on 2032 road section and FDOT Capacity Tables

Appendix C

Assessed Costs by Project and Service Area

	Road Project	Lin	iits	Project Type	# of Lanes	Classification	Volume Before Improvements	Existing Volume (veh/day)	Existing Capacity (veh/day)	Future Volume (veh/day)	Future Capacity (veh/day)	Traffic from Development	% of Capacity used by development	Total Improvement Costs	Cost of New Two-Lane Roadway	Outstanding Impact Fee Credits / Debt Service	Cost of Vehicular Improv (80%)	Cost of bike/ped improv (20%)	Cost Attributable to Develoment = (Vehiculi Cost * % Capacity used) 100% of ped/bike improvements	
	Marana Main Street	Sandario Rd	Grier Rd	New	2	Collector	0	0	N/A	3,000	13,990	3,000	21%	\$ 3,255,000					\$	3,255,000
	Marana Main Street	Tangerine Farms Rd	Sandario Rd	Legacy	2	Collector	0	1,000	16,730	4,300	16,730	3,300	20%			\$ 873,000			\$	873,000
	Tangerine Farms Road	I-10 (Tangerine TI)	Clark Farms	Legacy	4	Arterial	0	13,500	37,610	27,500	37,610	14,000	37%			\$ 3,018,397			\$ 3	3,018,397
	Clark Farms	Riccati Dr	Despain Dr	Legacy	3	Collector	0	3,200	17,567	8,700	17,567	5,500	31%							
west	Tangerine Farms Road	Clark Farms	I-10 (Marana TI)	New	4	Arterial	0	0	N/A	10,000	30,620	10,000	33%	\$ 15,977,000	\$ 7,484,400				\$ 7	7,484,400
North	Marana Road Interchange, Phase 1	N/A	N/A	Interchange Reconstruct	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	\$ 6,753,000					\$ 6	6,753,000
	Clark Farms	Despain Dr	Lon Adams Rd	New	3	Collector	0	0	N/A	10,000	14,690	10,000	68%	\$ 4,520,000			\$ 3,616,000	\$ 904,000	\$ 3	3,365,622
	Clark Farms	Lon Adams Rd	Tangerine Farms Rd	New	4	Collector	0	0	N/A	9,000	30,620	9,000	29%	\$ 25,313,000	\$ 11,774,700				\$ 11	1,774,700
	Adonis Rd/Mandarina Blvd	Grier Rd	Tangerine Rd	New	2	Collector	0	0	N/A	10,000	15,930	10,000	63%	\$ 20,601,000			\$ 16,480,800	\$ 4,120,200	\$ 14	4,465,963
	Tangerine Road Interchange	N/A	N/A	Interchange Reconstruct	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	\$ 4,500,000					\$ 4	4,500,000
	Tangerine Road, Phase 1	Dove Mountain Blvd	Town Limits	Completed Capacity	4	Arterial	14,444	15,400	37,610	20,400	37,610	5,000	13%	\$ 6,189,000			\$ 4,951,200	\$ 1,237,800	\$ 1	1,896,029
	Tangerine Road, Phase 2	I-10 (Tangerine TI)	Dove Mountain Blvd	Improvement	4	Arterial	N/A	8,000	16,730	14,000	37,610	6,000	16%	\$ 42,537,000			\$ 34,029,600	\$ 8,507,400	\$ 13	3,936,211
least	Twin Peaks Road	Lambert Ln	Tangerine Rd	Completed Capacity	4	Arterial	0	16,000	37,610	23,500	37,610	23,500	62%			\$ 3,642,259			\$ 3	3,642,259
North	Moore Road	Camino De Oeste	Thornydale Rd	Completed Capacity	2	Collector	0	3,000	13,990	7,000	16,730	7,000	42%			\$ 291,788			\$	291,788
	Cayton Road	Dove Mountain Blvd	Thornydale Rd	New	2	Collector	0	0	N/A	5,400	13,990	5,400	39%	\$ 6,630,000					\$ 6	6,630,000
	Tangerine Road Interchange	N/A	N/A	Interchange Reconstruct	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	\$ 1,500,000					\$:	1,500,000
	Twin Peaks Interchange	N/A	N/A	Legacy	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%			\$ 3,757,886			\$	3,757,886
1	Twin Peaks Road	I-10	Lambert Ln	Legacy	4	Arterial	0	22,000	37,610	33,000	37,610	11,000	29%			800,101,000 د د			ې د	3,131,000
	Twin Peaks Road/ Rattlesnake Pass	Saguaro Highlands Dr	Silverbell Rd	Expansion	4	Collector	N/A	12,500	16,730	22,700	37,610	10,200	27%	\$ 18,001,838			\$ 14,401,470	\$ 3,600,368	\$	7,506,111
outh	Cortaro Road	I-10	Camino de Oeste	Completed Capacity	4	Arterial	23,000	25,000	37,610	29,000	37,610	4,000	11%	\$ 8,134,735			\$ 6,507,788	\$ 1,626,947	\$ 2	2,319,081
Š	Silverbell Road	Ina Rd	Cortaro Rd	Completed Capacity	4	Arterial	9,800	14,000	37,610	22,500	37,610	8,500	23%	\$ 21,068,682			\$ 16,854,946	\$ 4,213,736	\$ 8	8,023,017
1	Ina Road	I-10	Silverbell Rd	Completed Capacity	4	Arterial	12,848	26,000	16,730	32,300	37,610	6,300	17%	\$ 9,000,000			\$ 7,200,000	\$ 1,800,000	\$ 3	3,006,062
1	Silverbell Road	Ina Rd	Sunset Rd	Expansion	4	Arterial	N/A	10,000	16,730	16,000	37,610	6,000	16%	\$ 8,013,159			\$ 6,410,527	\$ 1,602,632	\$ 2	2,625,316

Appendix B

Assessed Costs by Project and Service Area

	Road Project	Lim	its	Project Type	# of Lanes	Classification	Volume Before Improvement S	Existing Volume (veh/day)	Existing Capacity (veh/day)	Future Volume (veh/day)	Future Capacity (veh/day)	Traffic from Development	% of Capacity used by development	Total Improvement Costs	Cost of New Two-Lane Roadway	Outstanding Impact Fee Credits / Debt Service	Cost of Vehicular Improv (80%)	Cost of bike/ped improv (20%)	Cost Attributable to Develoment = (Vehicular Cost * % Capacity used) + 100% of ped/bike improvements
	Marana Main Street	Sandario Rd	Grier Rd	New	2	Collector	0	0	N/A	3,000	13,990	3,000	21%	\$ 3,255,000					\$ 3,255,000
	Marana Main Street	Tangerine Farms Rd	Sandario Rd	Legacy	2	Collector	0	1,000	16,730	4,300	16,730	3,300	20%			\$ 873,000			\$ 873,000
	Tangerine Farms Road	I-10 (Tangerine TI)	Clark Farms	Legacy	4	Arterial	0	13,500	37,610	27,500	37,610	14,000	37%			\$ 3,018,397			\$ 3,018,397
	Clark Farms	Riccati Dr	Despain Dr	Legacy	3	Collector	0	3,200	17,567	8,700	17,567	5,500	31%						
nwest	Tangerine Farms Road	Clark Farms	I-10 (Marana TI)	New	4	Arterial	0	0	N/A	10,000	30,620	10,000	33%	\$ 15,977,000	\$ 7,484,400				\$ 7,484,400
Nort	Marana Road Interchange, Phase 1	N/A	N/A	Interchange Reconstruct	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	\$ 6,753,000					\$ 6,753,000
	Clark Farms	Despain Dr	Lon Adams Rd	New	3	Collector	0	0	N/A	10,000	14,690	10,000	68%	\$ 4,520,000			\$ 3,616,000	\$ 904,000	\$ 3,365,622
	Clark Farms	Lon Adams Rd	Tangerine Farms Rd	New	4	Collector	0	0	N/A	9,000	30,620	9,000	29%	\$ 25,313,000	\$11,774,700				\$ 11,774,700
	Adonis Road/Mandarina Blvd	Grier Rd	Tangerine Rd	New	2	Collector	0	0	N/A	10,000	15,930	10,000	63%	\$ 20,601,000			\$ 16,480,800	\$4,120,200	\$ 14,465,963
	Tangerine Road Interchange	N/A	N/A	Interchange Reconstruct	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	\$ 4,500,000					\$ 4,500,000
	Tangerine Road, Phase 1	Dove Mountain Blvd	Town Limits	Completed Capacity	4	Arterial	14,444	15,400	37,610	20,400	37,610	5,000	13%	\$ 6,189,000			\$ 4,951,200	\$1,237,800	\$ 1,896,029
	Tangerine Road, Phase 2	I-10 (Tangerine TI)	Dove Mountain Blvd	Improvement	4	Arterial	N/A	8,000	16,730	14,000	37,610	6,000	16%	\$ 42,537,000			\$ 34,029,600	\$8,507,400	\$ 13,936,211
heast	Twin Peaks Road	Lambert Ln	Tangerine Rd	Completed Capacity	4	Arterial	0	16,000	37,610	23,500	37,610	23,500	62%			\$ 3,642,259			\$ 3,642,259
Nort	Moore Road	Camino De Oeste	Thornydale Rd	Completed Capacity	2	Collector	0	3,000	13,990	7,000	16,730	7,000	42%			\$ 291,788			\$ 291,788
	Cayton Road	Dove Mountain Blvd	Thornydale Rd	New	2	Collector	0	0	N/A	5,400	13,990	5,400	39%	\$ 6,630,000					\$ 6,630,000
	Tangerine Road Interchange	N/A	N/A	Interchange Reconstruct	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	\$ 1,500,000					\$ 1,500,000
	Twin Peaks Interchange	N/A	N/A	Legacy	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%			\$ 3,757,886			\$ 3,757,886
	Twin Peaks Road	I-10	Lambert Ln	Legacy	4	Arterial	0	22,000	37,610	33,000	37,610	11,000	29%			÷ 3,737,880			- 3,737,000
	Twin Peaks Road/Rattlesnake Pass	Saguaro Highlands Dr	Silverbell Rd	Expansion	4	Collector	N/A	12,500	16,730	22,700	37,610	10,200	27%	\$ 18,001,838			\$ 14,401,470	\$3,600,368	\$ 7,506,111
South	Cortaro Road	I-10	Camino de Oeste	Completed Capacity	4	Arterial	23,000	25,000	37,610	29,000	37,610	4,000	11%	\$ 8,134,735			\$ 6,507,788	\$1,626,947	\$ 2,319,081
Ō	Silverbell Road	Ina Rd	Cortaro Rd	Completed Capacity	4	Arterial	9,800	14,000	37,610	22,500	37,610	8,500	23%	\$ 21,068,682			\$ 16,854,946	\$4,213,736	\$ 8,023,017
	Ina Road	I-10	Silverbell Rd	Completed Capacity	4	Arterial	12,848	26,000	16,730	32,300	37,610	6,300	17%	\$ 9,000,000			\$ 7,200,000	\$1,800,000	\$ 3,006,062
	Silverbell Road	Ina Rd	Sunset Rd	Expansion	4	Arterial	N/A	10,000	16,730	16,000	37,610	6,000	16%	\$ 8,013,159			\$ 6,410,527	\$1,602,632	\$ 2,625,316