

Bike and Pedestrian Master Plan

Estimated Costs

Section **Summary**

CORRIDOR	STREET CLASSIFICATION	ESTIMATED COST(nearest 10k)
53rd Place/Sanna Street (Mountain View Rd to Doubletree Ranch) - Ped Trail & Enhanced Intersection	Local	\$170,000
Cheney Drive (Mockingbird Ln to Scottsdale Rd) - Ped Sidewalk	Collector	\$50,000
Doubletree Ranch Road (Shea Blvd to Scottsdale Rd) - Ped Sidewalk and Enhanced Intersection	Minor Arterial	\$300,000
Hummingbird Lane (Mockingbird Ln to Scottsdale Rd) - Ped Sidewalk	Local	\$30,000
Invergordon Road (South of Lincoln Dr) - Ped Sidewalk and Enhanced Intersection	Minor Arterial	\$90,000
Invergordon Road/Mockingbird Lane - Ped Sidewalk and Enhanced Intersection	Minor Arterial	\$400,000
Jackrabbit Road (East of Invergordon Rd) - Ped Sidewalk	Collector	\$400,000
Lincoln Drive (32nd St to Tatum) - Ped Sidewalks	Major Arterial	\$170,000
McDonald Drive (East of Invergordon Rd) - Bike Sharrow Markings	Minor Arterial	\$10,000
Mockingbird Lane/52nd Street - Enhanced Intersection	Collector south of Mtn View Rd; Local north of Mtn View Rd	\$20,000
Monte Vista Drive/68th Street (South of Jackrabbit Rd) - Ped Trail	Collector	\$100,000
Mountain View Road (Tatum Blvd to Invergordon Rd) - Ped Sidewalk and Enhanced Intersections	Collector	\$1,080,000
Northern Avenue (East of Mockingbird Ln to Scottsdale Rd) - Ped and Bike Recreation Trail	Local	\$30,000
Resort Loop - Ped and Bike Recreation Trail and Enhanced Intersection	Major Arterial on Tatum Blvd & Lincoln Dr; Minor Arterial on McDonald Dr; and Collector on 56th St	\$1,830,000
Tatum Boulevard (McDonald Dr to Shea Blvd) - Ped Trails already in other projects	Major Arterial	\$0
Berneil Ditch - Ped Trail	Trail	\$450,000
TOTAL		\$5,130,000

Notes

* Estimated Costs exclude enhanced intersections with other entities and excludes current CIP projects.

* McDonald Drive cost uses McDonald Dr - Option 1

* Costs include a 20% project contingency

* Reduction in cost possible through seeking grant funds and requiring with Intermediate/Major Special Use Permit amendments where possible.

Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **53rd Pl-Sanna St**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 12,120.00	\$ 12,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 20,500.00	\$ 21,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$ _____	\$ -
4	4'x6' Wide Trail (compacted natural surface)	LF	2,325	\$ 20.00	\$ 47,000.00
5	Asphalt Paving	SF	0	\$ _____	\$ -
6	Curb/Gutter	LF	0	\$ _____	\$ -
7	Landscape, DG and Irrigation Restoration	SF	6,975	\$ 3.00	\$ 21,000.00
8	White Traffic Paint Stripe	LF	0	\$ _____	\$ -
9	Bike Lane Marking Symbol	EA	0	\$ _____	\$ -
10	Median	EA	0	\$ _____	\$ -
11	Crosswalk	EA	0	\$ _____	\$ -
12	Enhanced Intersection (at 53rd Pl/Mountain View Rd)	EA	1	\$ 12,000.00	\$ 12,000.00
13	Enhanced Intersection	EA	0	\$ _____	\$ -
14	Enhanced Intersection	EA	0	\$ _____	\$ -
15	Enhanced Intersection	EA	0	\$ _____	\$ -
16	Enhanced Intersection	EA	0	\$ _____	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ -
18	Stucco Wall Retention (6' ht.)	LF	0	\$ _____	\$ -
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ -
20	Other	EA	0	\$ _____	\$ -

Assumptions:

1. Demolition includes relocation of mailboxes and reconstruction of driveways on the 10 lots adjoining the proposed pedestrian facility along the north side of Sanna St and east side of 53rd Pl. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored in 5 driveways and 5 mailboxes.

2. Pedestrian facility cost assumes a compacted natural trail instead of a sidewalk. Neighborhood input is needed at such time the Town pursues hiring for the design and construction of this pedestrian facility.

3. Enhanced intersection (at 53rd Pl/Mountain View Rd) Includes cost to install a crossing to connect the proposed trail on 53rd Pl to the existing west-east sidewalk on the north side of Mountain View Rd. Cost estimate assumes a striped thermoplastic crossing, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing - Local estimated cost subtotal template of \$12,000. If the pedestrian facility along 53rd Pl does not occur, this crosswalk may be eliminated.

4. Landscape cost assumes some level of landscaping along entire 2,325 LF at width of 3'.

5. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.

6. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Subtotal	\$	113,000.00
Project Contingency (20%)	\$	23,000.00
Design Fee (10%)	\$	11,000.00
Construction Admin (14%)	\$	16,000.00
Tax (5.73%)	\$	6,000.00

TOTAL	\$	170,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Cheney Dr**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 3,980.00	\$ -
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 4,100.00	\$ 4,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$ _____	\$ -
4	6' Wide Sidewalk (6" concrete)	LF	650	\$ 36.00	\$ 23,000.00
5	Asphalt Paving	SF	0	\$ _____	\$ -
6	Curb/Gutter	LF	0	\$ _____	\$ -
7	Landscape, DG and Irrigation Restoration	SF	1,950	\$ 3.00	\$ 6,000.00
8	White Traffic Paint Strips	LF	0	\$ _____	\$ -
9	Bike Lane Marking Symbol	EA	0	\$ _____	\$ -
10	Median	EA	0	\$ _____	\$ -
11	Crosswalk	EA	0	\$ _____	\$ -
12	Enhanced Intersection	EA	0	\$ _____	\$ -
13	Enhanced Intersection	EA	0	\$ _____	\$ -
14	Enhanced Intersection	EA	0	\$ _____	\$ -
15	Enhanced Intersection	EA	0	\$ _____	\$ -
16	Enhanced Intersection	EA	0	\$ _____	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ -
18	Stucco Wall Retention (6' ht.)	LF	0	\$ _____	\$ -
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ -
20	Other	EA	0	\$ _____	\$ -

Subtotal \$ 33,000.00

Assumptions:

1. Demolition includes relocation of mailboxes and reconstruction of driveways on the 3 lots adjoining the proposed pedestrian facility along the north side of Cheney Dr. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored in 1 driveway and 1 mailbox.
2. Sidewalk assumes 650 LF. This sidewalk completes a missing gap.
3. Landscape cost assumes some level of landscaping along entire 650 LF at width of 3 LF.
4. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.
5. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%) \$ 7,000.00

Design Fee (10%) \$ 3,000.00

Construction Admin (14%) \$ 5,000.00

Tax (5.73%) \$ 2,000.00

TOTAL \$	50,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Doubletree Ranch Rd**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 21,240.00	\$ 21,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 14,400.00	\$ 14,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$	\$ -
4	6' Wide Sidewalk (8" concrete)	LF	1,900	\$ 36.00	\$ 68,000.00
5	Asphalt Paving	SF	0	\$	\$ -
6	Curb/Gutter	LF	0	\$	\$ -
7	Landscape, DG and Irrigation Restoration	SF	0	\$	\$ -
8	White Traffic Paint Stripes	LF	0	\$	\$ -
9	Bike Lane Marking Symbol	EA	0	\$	\$ -
10	Median	EA	0	\$	\$ -
11	Crosswalk	EA	0	\$	\$ -
12	Enhanced Intersection (at Doubletree Ranch Rd/52nd St)	EA	1	\$ 46,500.00	\$ 47,000.00
13	Enhanced Intersection (at Doubletree Ranch Rd/Sanna St)	EA	1	\$ 23,500.00	\$ 24,000.00
14	Enhanced Intersection (at Doubletree Ranch Rd/67th St)	EA	1	\$ 23,500.00	\$ 24,000.00
15	Enhanced Intersection	EA	0	\$	\$ -
16	Enhanced Intersection	EA	0	\$	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$	\$ -
18	Stucco Wall Retention (6' ht.)	LF	0	\$	\$ -
19	Right-of-Way Acquisition	SF	0	\$	\$ -
20	Other	EA	0	\$	\$ -

Assumptions:

1. Demolition cost assumes possible reconstruction of driveways on 4 lots near 67th St that front Doubletree Ranch Rd. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox.
2. New sidewalk on the south side to connect existing sidewalk on N-S streets south of Doubletree Ranch Rd to a crosswalk/existing sidewalk on the north side: 1,900 LF between Invergordon Rd and 67th St.
3. Enhanced Intersection (at Doubletree Ranch Rd/52nd Pl) to add 2 crossings, one on the north side of the intersection to connect the existing sidewalk on the north side of Doubletree Ranch Rd and the other crosswalk on the west side of the intersection to connect to the existing sidewalk on west side of 52nd St south of Doubletree Ranch Rd. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/2 (\$46,500).
4. Enhanced Intersection (at Doubletree Ranch Rd/Via Los Caballos) to add 1 crosswalk with stripe on the west side of the intersection so persons residing south of Doubletree Ranch Rd have a safe way to cross to the existing sidewalk on the north side of Doubletree Ranch Rd. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/4 (\$23,500).
5. Enhanced Intersection (at Doubletree Ranch Rd/67th St) to add 1 crosswalk to connect persons residing south of Doubletree Ranch Rd via 67th Pl to the existing sidewalk along the north side of Doubletree Ranch Rd. This connection also provides a connection to the existing sidewalk on the west side of 67th St. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/4 (\$23,500).
6. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.
7. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Subtotal	\$	198,000.00
Project Contingency (20%)	\$	40,000.00
Design Fee (10%)	\$	20,000.00
Construction Admin (14%)	\$	28,000.00
Tax (5.73%)	\$	11,000.00

TOTAL \$	300,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Hummingbird Ln**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 2,640.00	\$ -
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 7,700.00	\$ 8,000.00
3	10' Wide Recreation Path (6" concrete)	LF	0	\$ -	\$ -
4	8' Wide Sidewalk (6" concrete)	LF	300	\$ 36.00	\$ 11,000.00
5	Asphalt Paving	SF	0	\$ -	\$ -
6	Curb/Cutter	LF	0	\$ -	\$ -
7	Landscape, DG and Irrigation Restoration	SF	900	\$ 3.00	\$ 3,000.00
8	White Traffic Paint Strips	LF	0	\$ -	\$ -
9	Bike Lane Marking Symbol	EA	0	\$ -	\$ -
10	Median	EA	0	\$ -	\$ -
11	Crosswalk	EA	0	\$ -	\$ -
12	Enhanced Intersection	EA	0	\$ -	\$ -
13	Enhanced Intersection	EA	0	\$ -	\$ -
14	Enhanced Intersection	EA	0	\$ -	\$ -
15	Enhanced Intersection	EA	0	\$ -	\$ -
16	Enhanced Intersection	EA	0	\$ -	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$ -	\$ -
18	Stucco Wall Relocation (6' ht.)	LF	0	\$ -	\$ -
19	Right-of-Way Acquisition	SF	0	\$ -	\$ -
20	Other	EA	0	\$ -	\$ -

Subtotal \$ 22,000.00

Assumptions:

1. Demolition includes relocation of mailboxes and reconstruction of driveways on the 2 lots adjoining the proposed pedestrian facility along the south side of Hummingbird Ln. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored in 2 driveways and 1 mailbox.

2. Sidewalk assumes 300 LF. This sidewalk completes a missing gap.

3. Landscape cost assumes some level of landscaping along entire 300 LF at width of 3'.

4. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.

5. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%) \$ 4,000.00

Design Fee (10%) \$ 2,000.00

Construction Admin (14%) \$ 3,000.00

Tax (5.73%) \$ 1,000.00

TOTAL \$ 30,000.00

Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section

Invergordon Rd - S of Lincoln

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 6,360.00	\$ 6,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 7,700.00	\$ 8,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$	-
4	6' Wide Sidewalk (6" concrete)	LF	576	\$ 36.00	\$ 21,000.00
5	Asphalt Paving	SF	0	\$	-
6	Curb/Gutter	LF	0	\$	-
7	Landscape, DG and Irrigation Restoration	SF	0	\$	-
8	White Traffic Paint Stripe	LF	0	\$	-
9	Bike Lane Marking Symbol	EA	0	\$	-
10	Median	EA	0	\$	-
11	Crosswalk	EA	0	\$	-
12	Enhanced Intersection (at Lincoln Dr/Invergordon Rd)	EA	1	\$ 23,500.00	\$ 24,000.00
13	Enhanced Intersection	EA	0	\$	-
14	Enhanced Intersection	EA	0	\$	-
15	Enhanced Intersection	EA	0	\$	-
16	Enhanced Intersection	EA	0	\$	-
17	Retaining Wall (3' ht.)	LF	0	\$	-
18	Stucco Wall Relocation (6' ht.)	LF	0	\$	-
19	Right-of-Way Acquisition	SF	0	\$	-
20	Other	EA	0	\$	-

Subtotal \$ 59,000.00

Assumptions:

1. Demolition cost includes reconstruction of driveways on 3 lots on Invergordon Rd to extend sidewalk to the Montessori school. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored in 2 driveways and 1 mailbox.

Project Contingency (20%) \$ 12,000.00

2. Sidewalk proposed on the west side of Invergordon Rd north of McDonald to connect to the Montessori school. 576 LF estimated.

Design Fee (10%) \$ 6,000.00

3. Enhanced Intersection (at Lincoln Dr/Invergordon Rd) adding missing crossing at the west side of this intersection and resetting signal for longer crossing times. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals probable cost subtotal template of \$83,000/4 (\$23,500).

Construction Admin (14%) \$ 8,000.00

4. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.

Tax (5.73%) \$ 3,000.00

5. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

TOTAL \$	80,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section

Invergordon Rd - Mockingbird Ln

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 28,650.00	\$ 29,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 22,600.00	\$ 23,000.00
3	10' Wide Recreation Path (6" concrete)	LF	0	\$	-
4	6' Wide Sidewalk (6" concrete)	LF	1,825	\$ 36.00	\$ 66,000.00
5	Asphalt Paving	SF	0	\$	-
6	Curb/Gutter	LF	0	\$	-
7	Landscape, DG and Irrigation Restoration	SF	0	\$	-
8	White Traffic Paint Stripes	LF	0	\$	-
9	Bike Lane Marking Symbol	EA	0	\$	-
10	Median	EA	0	\$	-
11	Crosswalk	EA	0	\$	-
12	Enhanced Intersection (at Invergordon Round-a-bout at Northern Ave)	EA	1	\$ 69,750.00	\$ 69,750.00
13	Enhanced Intersection (at Mockingbird Ln/68th St)	EA	1	\$ 46,500.00	\$ 47,000.00
14	Enhanced Intersection (at Lincoln Dr/Mockingbird Ln)	EA	1	\$ 10,000.00	\$ 10,000.00
15	Enhanced Intersection (at McDonald Dr/Mockingbird Ln)	EA	1	\$ 23,250.00	\$ 23,000.00
16	Enhanced Intersection	EA	0	\$	-
17	Retaining Wall (3'-ht.)	LF	0	\$	-
18	Stucco Wall Relocation (6'-ht.)	LF	0	\$	-
19	Right-of-Way Acquisition	SF	0	\$	-
20	Other	EA	0	\$	-
Subtotal					\$ 288,000.00

Assumptions:

1. Demolition cost includes reconstruction of driveways on 9 lots along the south side of Mockingbird Ln. Estimate is \$2,600 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored 6 driveways and 2 mailboxes.

2. 1,825 LF of new sidewalk on the south side of Mockingbird Lane from Calle Caballeros to the roundabout at Invergordon Road. New/reconstructed sidewalks on both sides of Mockingbird Ln between Northern Ave and Lincoln Dr in current Capital Improvement Plan. Reconstructed sidewalk on west side of Mockingbird Ln between Lincoln Dr and McDonald Dr in current 2016-2022 Capital Improvement Plan.

3. Enhanced Intersection (at Invergordon round-a-bout at Northern Ave) to add in the 3 crosswalks. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000*0.75 (\$69,750).

4. Enhanced Intersection (at Mockingbird Ln/68th St) to add the 2 missing crossings. Sidewalk continues on both sides of the street south on Mockingbird Ln and along Mockingbird Ln/Northern Ave in the West-East direction. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/2 (\$46,500).

5. Enhanced Intersection at Indian Bend Rd/Mockingbird Ln already in approved Capital Improvement Plan.

6. Enhanced Intersection (at Lincoln Dr/Mockingbird Ln) is along a Visually Significant Corridor. The cost includes resurfacing the 4 existing crosswalks with new thermoplastic striping, resetting signal for longer crossing, and adding bicycle crossing/buoy sensor. Option of pavers for crosswalks is suggested at this significant intersection.

8. Enhanced Intersection (at McDonald Dr/Mockingbird Ln) includes cost to add the missing crossing on the south side of the intersection to complete the gap in the sidewalk connection at this intersection to Temple Solel, Kiva elementary school, and Valley United Presbyterian Church. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/4 (\$23,250).

9. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.

10. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%)	\$ 54,000.00
Design Fee (10%)	\$ 27,000.00
Construction Admin (14%)	\$ 38,000.00

Tax (5.73%) \$ 15,000.00

TOTAL \$ 400,000.00

Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Jackrabbit Rd**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 28,440.00	\$ 28,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 32,800.00	\$ 33,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$	-
4	6' Wide Sidewalk (6" concrete)	LF	4,250	\$ 36.00	\$ 153,000.00
5	Asphalt Paving	SF	0	\$	-
6	Curb/Cutter	LF	0	\$	-
7	Landscape, DG and Irrigation Restoration	SF	17,000	\$ 3.00	\$ 51,000.00
8	White Traffic Paint Stripe	LF	0	\$	-
9	Bike Lane Marking Symbol	EA	0	\$	-
10	Median	EA	0	\$	-
11	Crosswalk	EA	0	\$	-
12	Enhanced Intersection	EA	0	\$	-
13	Enhanced Intersection	EA	0	\$	-
14	Enhanced Intersection	EA	0	\$	-
15	Enhanced Intersection	EA	0	\$	-
16	Enhanced Intersection	EA	0	\$	-
17	Retaining Wall (3' ht.)	LF	0	\$	-
18	Stucco Wall Retention (6' ht.)	LF	0	\$	-
19	Right-of-Way Acquisition	SF	0	\$	-
20	Other	EA	0	\$	-

Assumptions:

- Demolition includes relocation of mailboxes and reconstruction of driveways on the 18 lots adjoining the proposed pedestrian facility along the north side of Jackrabbit Rd. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored in 8 driveways and 8 mailboxes.
- Sidewalk proposed on north side of Jackrabbit Rd from Invergordon Rd to Scottsdale Rd to connect with existing sidewalk east of Scottsdale Rd that leads to the AZ Circle trail. Sidewalk assumes 4,250 LF.
- Landscape cost assumes landscaping along entire 4,250 LF at width of 4'.
- Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.
- Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Subtotal	\$	265,000.00
Project Contingency (20%)	\$	53,000.00
Design Fee (10%)	\$	27,000.00
Construction Admin (14%)	\$	37,000.00
Tax (5.73%)	\$	15,000.00

TOTAL \$	400,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Lincoln Dr**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	0	\$	\$ -
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	0	\$	\$ -
3	10' Wide Recreation Path (6" concrete)	LF	0	\$	\$ -
4	6' Wide Sidewalk (6" concrete)	LF	0	\$	\$ -
5	Asphalt Paving	SF	0	\$	\$ -
6	Curb/Gutter	LF	0	\$	\$ -
7	Landscape, DG and Irrigation Restoration	SF	0	\$	\$ -
8	White Traffic Paint Stripe	LF	0	\$	\$ -
9	Bike Lane Marking Symbol	EA	0	\$	\$ -
10	Median	EA	0	\$	\$ -
11	Crosswalk	EA	0	\$	\$ -
12	Enhanced Intersection (at Lincoln Dr/Hillside Dr)	EA	1	\$ 118,000.00	\$ 118,000.00
13	Enhanced Intersection	EA	0	\$	\$ -
14	Enhanced Intersection	EA	0	\$	\$ -
15	Enhanced Intersection	EA	0	\$	\$ -
16	Enhanced Intersection	EA	0	\$	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$	\$ -
18	Stucco Wall Retention (6' ht.)	LF	0	\$	\$ -
19	Right-of-Way Acquisition	SF	0	\$	\$ -
20	Other	EA	0	\$	\$ -
				Subtotal	\$ 118,000.00

Assumptions:

- Enhanced Intersection (at Lincoln Dr/Hillside Drive) provides a new crossing across Lincoln Dr between Palo Cristi Rd and Tatum Blvd, which presently has no crossing for 1.6 miles. The new crossing will be approximately 0.5 miles east to Tatum Blvd and 1.1 miles west to Palo Cristi. Consideration of pavers or stamped concrete crosswalks are suggested since this crossing is along a Visually Significant Corridor. Cost includes installation of a flashing pedestrian crossing signs only illuminated when activated via crossing buttons. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped probable cost subtotal template of \$118,000.
- Sidewalk gaps on both sides of the street are part of current Capital Improvement Plan.
- Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%)	\$	23,000.00
Design Fee (10%)	\$	12,000.00
Construction Admin (14%)	\$	16,000.00
Tax (5.73%)	\$	7,000.00

TOTAL	\$	170,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **McDonald Dr - Opt 1**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 480.00	\$ -
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	0	\$ _____	\$ _____
3	40' Wide Recreation Path (6" concrete)	LF	0	\$ _____	\$ _____
4	6' Wide Sidewalk (6" concrete)	LF	0	\$ _____	\$ _____
5	Asphalt Paving	SF	0	\$ _____	\$ _____
6	Curb/Gutter	LF	0	\$ _____	\$ _____
7	Landscaping, DG and Irrigation Restoration	EA	0	\$ _____	\$ _____
8	White Traffic Paint Stripe	LF	0	\$ _____	\$ _____
9	Bike Lane Marking Symbol	EA	14	\$ 260.00	\$ 4,000.00
10	Median	EA	0	\$ _____	\$ _____
11	Crosswalk	EA	0	\$ _____	\$ _____
12	Enhanced Intersection	EA	0	\$ _____	\$ _____
13	Enhanced Intersection	EA	0	\$ _____	\$ _____
14	Enhanced Intersection	EA	0	\$ _____	\$ _____
15	Enhanced Intersection	EA	0	\$ _____	\$ _____
16	Enhanced Intersection	EA	0	\$ _____	\$ _____
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ _____
18	Stucco Wall Relocation (6' ht.)	LF	0	\$ _____	\$ _____
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ _____
20	Other	EA	0	\$ _____	\$ _____

Assumptions:

1. McDonald Dr - Option 1 represents the first preferred Planning Commission option for McDonald Dr east of Invergordon Rd. This option proposes to maintain the existing street in its current design and add bike shareway symbols.

2. Additional options not included in the cost estimate includes (a) replacing existing vertical curb with rolled curb so bicyclists have an area to move when a vehicle approaches a median and (b) reducing the speed limit to 25 mph.

3. Cost estimate includes adding two 9' x 25' landscaped medians on both sides of the existing crosswalk in front of Kiva elementary school.

4. Demolition cost assumes removal of all hardscape within the entire 4,600 LF at a width of 33 LF.

5. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.

6. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Subtotal	\$	4,000.00
Project Contingency (20%)	\$	1,000.00
Design Fee (10%)	\$	-
Construction Admin (14%)	\$	1,000.00
Tax (5.73%)	\$	200.00

TOTAL	\$	10,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **McDonald Dr - Opt 2**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 21,120.00	\$ 21,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 4,000.00	\$ 4,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$ _____	\$ _____
4	6' Wide Sidewalk (6" concrete)	LF	0	\$ _____	\$ _____
5	Asphalt Paving	SF	151,800	\$ 1.00	\$ 152,000.00
6	Curb/Gutter	LF	0	\$ _____	\$ _____
7	Landscape, DG and Irrigation Restoration	EA	1	\$ 10,000.00	\$ 10,000.00
8	White Traffic Paint Strips	LF	12,000	\$ 0.50	\$ 6,000.00
9	Bike Lane Marking Symbol	EA	14	\$ 250.00	\$ 4,000.00
10	Median	EA	0	\$ _____	\$ _____
11	Crosswalk	EA	0	\$ _____	\$ _____
12	Enhanced Intersection	EA	0	\$ _____	\$ _____
13	Enhanced Intersection	EA	0	\$ _____	\$ _____
14	Enhanced Intersection	EA	0	\$ _____	\$ _____
15	Enhanced Intersection	EA	0	\$ _____	\$ _____
16	Enhanced Intersection	EA	0	\$ _____	\$ _____
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ _____
18	Stucco Wall Retention (6' ht.)	LF	0	\$ _____	\$ _____
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ _____
20	Other	EA	0	\$ _____	\$ _____

Subtotal \$ 197,000.00

Assumptions:

1. McDonald Dr - Option 2 represents the second preferred Planning Commission option for McDonald Dr east of Invergordon Rd. This option removes the existing turn lane to accommodate bike lanes as a means to mitigate reconstruction of the existing street.

2. Additional options not included in the cost estimate includes (a) replacing existing vertical curb with rolled curb so bicyclists have an area to move when a vehicle approaches a median and (b) reducing the speed limit to 25 mph.

3. Demolition cost assumes a limited amount of demolition of existing pavement/curbing will be needed since the aim is not to alter the existing curbs.

4. Asphalt paving cost uses a \$1.00/SF cost to mill/overlay the existing pavement for a clean surface to restripe lanes/add bike lanes. Cost estimate assumes 4,000 LF of street at a street width of 33 LF measured from back of curb.

5. Cost estimate assumes no changes to the existing sidewalks and some minor landscaping improvements on the existing landscaped medians.

6. Cost estimate includes adding two 8' x 26' landscaped medians on both sides of the existing crosswalk in front of Kiva elementary school.

7. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%) \$ 39,000.00

Design Fee (10%) \$ 20,000.00

Construction Admin (14%) \$ 28,000.00

Tax (5.73%) \$ 11,000.00

TOTAL \$	300,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **McDonald Dr - Opt 3**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 165,840.00	\$ 165,840.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 170,000.00	\$ 170,000.00
3	40' Wide Recreation Path (6" concrete)	LF	0	\$	\$
4	6' Wide Sidewalk (6" concrete)	LF	4,500	\$ 36.00	\$ 162,000.00
5	Asphalt Paving	SF	151,800	\$ 3.10	\$ 471,000.00
6	Curb/Gutter	LF	9,000	\$ 18.00	\$ 162,000.00
7	Landscape, DG and Irrigation Restoration	SF	27,600	\$ 3.00	\$ 83,000.00
8	White Traffic Paint Stripe	LF	30,000	\$ 0.50	\$ 15,000.00
9	Bike Lane Marking Symbol	EA	14	\$ 250.00	\$ 4,000.00
10	Median	EA	8	\$ 35,000.00	\$ 315,000.00
11	Crosswalk	EA	0	\$	\$
12	Enhanced Intersection	EA	0	\$	\$
13	Enhanced Intersection	EA	0	\$	\$
14	Enhanced Intersection	EA	0	\$	\$
15	Enhanced Intersection	EA	0	\$	\$
16	Enhanced Intersection	EA	0	\$	\$
17	Retaining Wall (3' ht.)	LF	0	\$	\$
18	Stucco Wall Relocation (6' ht.)	LF	0	\$	\$
19	Right-of-Way Acquisition	SF	0	\$	\$
20	Other	EA	0	\$	\$

Subtotal \$ 1,548,000.00

Assumptions:

1. McDonald Dr - Option 3 represents the third preferred Planning Commission option for McDonald Dr east of Invergordon Rd. This option requires the reconstruction of the street to accommodate the full cross-section of sidewalk on the north side, bike lanes, a travel lane in each direction, and center turn lane/landscaped medians.

2. Additional options not included in the cost estimate includes replacing existing vertical curb with rolled curb so bicyclists have an area to move when a vehicle approaches a median and reducing the speed limit to 25 mph.

3. Demolition cost assumes the removal of all existing pavement/medians along the 4,600 LF at a width of 33 (151,800 SF) at \$0.55 SF at approximately \$84,000 and the removal of the 9,000 LF of curb/gutter at a cost of \$4.00 LF at \$36,000. Also it includes the removal/replacement of driveways and relocation of mailboxes on the 16 residential lots and 3 Special Use Permit properties. Estimate is \$2,500 to remove/replace driveway and \$500 to relocate mailbox. Factored in 16 driveways and 11 mailboxes at a cost of \$50,000. \$170,000

4. Sidewalk cost includes reconstruction of existing 6' wide sidewalks at 4,500 LF.

5. Asphalt paving cost estimate assumes 4,600 LF of street at a street width of 33 LF measured from back of curb.

6. Curb/Gutter assumes 9,000 LF for both sides of the street.

7. Landscape cost assumes some level of landscaping along the 4,600 LF on both sides of the street at a width of 6 LF or 27,600 SF.

8. Median cost assumes reconstruction of the 8 existing landscaped medians and the addition of two 9' x 25' landscaped medians on both sides of the existing crosswalk in front of Kiva elementary school. Cost per median estimated at \$35,000.

9. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%) \$ 310,000.00
Design Fee (10%) \$ 155,000.00
Construction Admin (14%) \$ 217,000.00

Tax (5.73%) \$ 89,000.00

TOTAL \$ 2,320,000.00

Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Mockingbird Ln - 52nd St**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 1,440.00	\$ 1,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	SF	0	\$ _____	\$ -
3	10' Wide Recreation Path (6" concrete)	LF	0	\$ _____	\$ -
4	6' Wide Sidewalk (6" concrete)	LF	0	\$ _____	\$ -
5	Asphalt Paving	SF	0	\$ _____	\$ -
6	Curb/Gutter	LF	0	\$ _____	\$ -
7	Landscape, DG and Irrigation Restoration	SF	0	\$ _____	\$ -
8	White Traffic Paint Stripe	LF	0	\$ _____	\$ -
9	Bike Lane Marking Symbol	EA	0	\$ _____	\$ -
10	Median	EA		\$ _____	\$ -
11	Crosswalk	EA	0	\$ _____	\$ -
12	Enhanced Intersection (at Mockingbird Ln/50th St)	EA	1	\$ 12,000.00	\$ 12,000.00
13	Enhanced Intersection	EA	0	\$ _____	\$ -
14	Enhanced Intersection	EA	0	\$ _____	\$ -
15	Enhanced Intersection	EA	0	\$ _____	\$ -
16	Enhanced Intersection	EA	0	\$ _____	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ -
18	Stucco Wall Relocation (6' ht.)	LF	0	\$ _____	\$ -
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ -
20	Other	EA	0	\$ _____	\$ -

Assumptions:

- Enhanced Intersection (at Mockingbird Ln/50th St) to connect the existing sidewalk on the north side of the street to the existing sidewalk on the south side of the street. Cost estimate assumes a striped thermoplastic crossing, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing - Local estimated cost subtotal template of \$12,000
- Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.
- Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Subtotal	\$	13,000.00
Project Contingency (20%)	\$	3,000.00
Design Fee (10%)	\$	1,000.00
Construction Admin (14%)	\$	2,000.00
Tax (5.73%)	\$	1,000.00

TOTAL	\$	20,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Monte Vista Dr**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 6,960.00	\$ 7,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 31,800.00	\$ 32,000.00
3	10' Wide Recreation Path (6" concrete)	LF	0	\$	\$ -
4	4'-8' Wide Trail (compacted natural surface) or 4'-6' Wide Paved Shoulder	LF	1,950	\$ 10.00	\$ 20,000.00
5	Asphalt Paving	SF	0	\$	\$ -
6	Curb/Gutter	LF	0	\$	\$ -
7	Landscape, DG and Irrigation Restoration	SF	1,950	\$ 3.00	\$ 6,000.00
8	White-Traffic Paint Strips	LF	0	\$	\$ -
9	Bike Lane Marking Symbol	EA	0	\$	\$ -
10	Median	EA	0	\$	\$ -
11	Crosswalk	EA	0	\$	\$ -
12	Enhanced Intersection	EA	0	\$	\$ -
13	Enhanced Intersection	EA	0	\$	\$ -
14	Enhanced Intersection	EA	0	\$	\$ -
15	Enhanced Intersection	EA	0	\$	\$ -
16	Enhanced Intersection	EA	0	\$	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$	\$ -
18	Stucco Wall Relocation (8' ht.)	LF	0	\$	\$ -
19	Right-of-Way Acquisition	SF	0	\$	\$ -
20	Other	EA	0	\$	\$ -

Subtotal \$ 65,000.00

Assumptions:

1. Demolition includes relocation of mailboxes and reconstruction of driveways on the 14 lots adjoining the proposed pedestrian facility along the north side of Cheney Dr. Estimate is \$2,500 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored in 8 driveways and 6 mailboxes.
2. Pedestrian facility cost assumes a compacted natural trail, but existing right-of-way could accommodate an alternative option for a paved shoulder or sidewalk. Neighborhood input is needed at such time the Town pursues hiring for the design and construction of this pedestrian facility. Cost assumes 1,950 LF.
3. Landscape cost assumes some level of landscaping along entire 1,950 LF at width of 3'.
4. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.
5. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Project Contingency (20%) \$ 13,000.00

Design Fee (10%) \$ 7,000.00

Construction Admin (14%) \$ 9,000.00

Tax (5.73%) \$ 4,000.00

TOTAL	\$ 100,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section

Mountain View Rd

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 77,040.00	\$ 77,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	EA	1	\$ 192,550.00	\$ 193,000.00
3	40' Wide Recreation Path (8" concrete)	LF	0	\$ ————	\$ —
4	8' Wide Sidewalk (6" concrete)	LF	6,750	\$ 36.00	\$ 243,000.00
5	Asphalt Paving	SF	0	\$ ————	\$ —
6	Curb/Gutter	LF	6,750	\$ 18.00	\$ 122,000.00
7	Landscape, DG and Irrigation Restoration	SF	20,250	\$ 3.00	\$ 61,000.00
8	White-Traffic Paint Stripe	LF	0	\$ ————	\$ —
9	Bike Lane Marking Symbol	EA	0	\$ ————	\$ —
10	Median	EA	0	\$ ————	\$ —
11	Crosswalk	EA	0	\$ ————	\$ —
12	Enhanced Intersection (at Mountain View Rd/Invergordon Rd)	EA	1	\$ 23,250.00	\$ 23,000.00
13	Enhanced Intersection	EA	0	\$ ————	\$ —
14	Enhanced Intersection	EA	0	\$ ————	\$ —
15	Enhanced Intersection	EA	0	\$ ————	\$ —
16	Enhanced Intersection	EA	0	\$ ————	\$ —
17	Retaining Wall (3' ht.)	LF	0	\$ ————	\$ —
18	Stucco Wall Retention (6' ht.)	LF	0	\$ ————	\$ —
19	Right-of-Way Acquisition	SF	0	\$ ————	\$ —
20	Other	EA	0	\$ ————	\$ —

Subtotal \$ 719,000.00

Project Contingency (20%) \$ 144,000.00

Design Fee (10%) \$ 72,000.00

Construction Admin (14%) \$ 101,000.00

Tax (5.73%) \$ 41,000.00

TOTAL \$ 1,080,000.00**Assumptions:**

1. Demolition cost includes reconstruction of some of the driveways/relocation of mailboxes on the 12 lots between Tatum Blvd and 52nd St and 26 lots between 56th St to Invergordon Rd. Estimate is \$2,600 to remove driveway, \$1,100 to replace driveway, and \$500 to relocate mailbox. Factored 43 driveways and 35 mailboxes. Demolition cost also assumes removal of existing 2,450 LF of curb on the south side of Mountain View Rd west of 52nd St and removal of 4,300 LF of existing curb between 56th St to Invergordon Rd at a cost of \$3/LF.

2. New sidewalk on the south side of the street west of 52nd Street and east of 56th Street. Cost estimate for 6,750 LF.

3. Landscape cost assumes some level of landscaping along the entire 6,750 LF at a width of 3'.

4. Enhanced Intersection (at Mountain View Rd/Invergordon Rd) to add one crosswalk with thermoplastic stripe and ADA ramps on Invergordon Rd at Mountain View Rd to connect the new sidewalk on the south side of Mountain View Rd to the existing sidewalk on the east side of Invergordon Rd. No signal/push buttons. If no sidewalk is installed on the south side of Mountain View Rd, this crosswalk may be eliminated. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/4 (\$23,250)

5. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Northern Ave**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 2,160.00	\$ 2,000.00
2	Demoition (e.g. sidewalk, curb, asphalt, etc.)	SF	0	\$ _____	\$ -
3	6' Wide Trail	LF	400	\$ 20.00	\$ 8,000.00
4	6' Wide Sidewalk (6" concrete)	LF	0	\$ _____	\$ -
5	Asphalt Paving	SF	0	\$ _____	\$ -
6	Curb/Gutter	LF	0	\$ _____	\$ -
7	Landscape, DG and Irrigation Restoration	SF	0	\$ _____	\$ -
8	White Traffic Paint Strips	LF	0	\$ _____	\$ -
9	Bike Lane Marking Symbol	EA	0	\$ _____	\$ -
10	Median	EA	0	\$ _____	\$ -
11	Crosswalk	EA	0	\$ _____	\$ -
12	Enhanced Intersection	EA	0	\$ _____	\$ -
13	Enhanced Intersection	EA	0	\$ _____	\$ -
14	Enhanced Intersection	EA	0	\$ _____	\$ -
15	Enhanced Intersection	EA	0	\$ _____	\$ -
16	Enhanced Intersection	EA	0	\$ _____	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ -
18	Stucco Wall Relocation (6' ht.)	LF	0	\$ _____	\$ -
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ -
20	Other	EA	1	\$ 10,000.00	\$ 10,000.00

Assumptions:

1. A minimum 6' wide trail, with option to 10' wide, from Golf Drive to Scottsdale Rd within the Northern Ave alignment. An alternative to this trail is consideration of securing from Cheney Estates Homeowner Association an easement for public use of the existing sidewalk within the Cheney Estates open space tract. Cost assumes 10' wide compacted natural trail for 400 LF. Cost excludes 876 LF adjoining The Villas at Cheney Estates, which includes a stipulation to add a trail within the Northern Ave alignment.
2. Other cost estimate assumes \$10,000 for relocation of existing utility boxes.
3. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.

Subtotal	\$	20,000.00
Project Contingency (20%)	\$	4,000.00
Design Fee (10%)	\$	2,000.00
Construction Admin (14%)	\$	3,000.00
Tax (5.73%)	\$	1,000.00

TOTAL	\$	30,000.00
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Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Resort Loop**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 131,160.00	\$ 131,000.00
2	Demolition (e.g. sidewalk, curb, asphalt, etc.)	SF	46,350	\$ 3.00	\$ 139,000.00
3	10' Wide Recreation Path (6" concrete)	LF	7,725	\$ 60.00	\$ 464,000.00
4	6' Wide Sidewalk (6" concrete)	LF	0	\$ _____	\$ -
5	Asphalt Paving	SF	0	\$ _____	\$ -
6	Curb/Gutter	LF	0	\$ _____	\$ -
7	Landscape, DG and Irrigation Restoration	SF	115,000	\$ 3.00	\$ 345,000.00
8	White Traffic Paint Strips	LF	0	\$ _____	\$ -
9	Bike Lane Marking Symbol	EA	0	\$ _____	\$ -
10	Median	EA	0	\$ _____	\$ -
11	Crosswalk (at Echo Canyon Round-About)	EA	1	\$ 46,500.00	\$ 47,000.00
12	Enhanced Intersection (at McDonald Dr/Tatum Blvd)	EA	1	\$ 29,000.00	\$ 29,000.00
13	Enhanced Intersection (at Lincoln Dr/Tatum Blvd)	EA	1	\$ 10,000.00	\$ 10,000.00
14	Enhanced Intersection (at Lincoln Dr/Desert Fairways Dr)	EA	1	\$ 10,000.00	\$ 10,000.00
15	Enhanced Intersection (at Lincoln Dr/56th St)	EA	1	\$ 46,500.00	\$ 47,000.00
16	Enhanced Intersection	EA	0	\$ _____	\$ -
17	Retaining Wall (3' ht.)	LF	0	\$ _____	\$ -
18	Stucco Wall Relocation (6' ht.)	LF	0	\$ _____	\$ -
19	Right-of-Way Acquisition	SF	0	\$ _____	\$ -
20	Other (Resort Loop custom-designed pavement markers)	EA	20	\$ 100.00	\$ 2,000.00

Subtotal \$ 1,224,000.00

Project Contingency (20%) \$ 245,000.00

Design Fee (10%) \$ 122,000.00

Construction Admin (14%) \$ 171,000.00

Tax (5.73%) \$ 70,000.00

TOTAL \$ 1,830,000.00

Assumptions:

1. Demolition assumes 7,725 LF of 6' wide sidewalk to remove, includes 3,750 LF along Min Shadows Resort and 1,875 LF along Montelucia Resort.

2. 10' wide recreation path assumed along Montelucia Resort, Min Shadows Resort, McDonald Dr from 51st St to 54th St, Tatum Blvd from McDonald Dr to Rovey Ave and 150' south of Arroyo Verde Dr to Lincoln Dr

3. Landscape cost assumes some level of landscaping along entire 11,500 LF (minus 56th St) at width of 10'.

4. Crosswalk/Median at Echo Canyon includes adding a crosswalk/median to the east of round-about that is similar in design to the crosswalk/median west of the round-about and adding "watch for pedestrian crossing signs." Consideration for coordination with Phoenix on creating a dedicated drop off/pick up space for taxi/ride-share is suggested. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/2 (\$46,500).

5. Enhanced Intersection (at McDonald Dr/Tatum Blvd) adding missing striped crosswalk at this 3-way intersection and resetting signal for longer crossing times. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped estimated cost subtotal template of \$116,000/4 (\$29,000).

6. Enhanced Intersection (at Lincoln Dr/Tatum Blvd) is along a Visually-Significant Corridor. The cost estimate only includes resurfacing the existing crosswalks with thermoplastic and resetting signal for longer crossing times. Paver or stamped concrete crossings recommended.

7. Enhanced Intersection (at Lincoln Dr/Desert Fairways Dr) is along a Visually-Significant Corridor. The cost estimate only includes resurfacing the existing crosswalks with thermoplastic, resetting signal for longer crossing times, and adding signage or curb modification to discourage bicycle traffic down Camelback Manor Dr. Paver or stamped concrete crossings recommended.

8. Enhanced Intersection (at Lincoln Dr/56th St) is along a Visually-Significant Corridor. The cost estimate includes adding missing striped crosswalk at this 3-way intersection, resetting signal for longer crossing times, and adding bicycle crossing button/sensor. Cost estimate assumes a thermoplastic stripe crosswalk, with related ADA curb improvements, landscaping in the immediate area, and related demolition of existing curb/pavement. Cost estimate uses the Crossing Striped - No Signals estimated cost subtotal template of \$93,000/2 (\$46,500).

9. Costs do not include existing pavement maintenance, mill/overlay, micro-seal, etc.

Bike and Pedestrian Master Plan

Opinion of Estimated Costs

Section **Tatum Blvd**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	0	\$	\$
2	Demolition (e.g., sidewalk, curb, asphalt, etc.)	EA	0	\$	\$
3	10' Wide Recreation Path (6" concrete)	LF	0	\$	\$
4	6' Wide Sidewalk (6" concrete)	LF	0	\$	\$
5	Asphalt Paving	SF	0	\$	\$
6	Curb/Gutter	LF	0	\$	\$
7	Landscape, DG and Irrigation Restoration	SF	0	\$	\$
8	White Traffic Paint Stripe	LF	0	\$	\$
9	Bike Lane Marking Symbol	EA	0	\$	\$
10	Median	EA	0	\$	\$
11	Crosswalk	EA	0	\$	\$
12	Enhanced Intersection	EA	0	\$	\$
13	Enhanced Intersection	EA	0	\$	\$
14	Enhanced Intersection	EA	0	\$	\$
15	Enhanced Intersection	EA	0	\$	\$
16	Enhanced Intersection	EA	0	\$	\$
17	Retaining Wall (3' ht.)	LF	0	\$	\$
18	Stucco Wall Relocation (6' ht.)	LF	0	\$	\$
19	Right-of-Way Acquisition	SF	0	\$	\$
20	Other	EA	0	\$	\$

Subtotal \$ -

Assumptions:

1. Tatum Blvd is a designated Visually Significant Corridor.
2. Sidewalk on the east side of Tatum Blvd between Doubletree Ranch Rd and Mountain View Rd part of 2018-2022 Capital Improvement Plan.
3. Intersection improvements at Tatum Blvd/Lincoln Dr and Tatum Blvd/McDonald Dr part of the Resort Loop cost estimate or future cost estimates per the Town's Visually Significant Corridor Plan.
4. Enhancements for bicycle and/or pedestrian facilities may be warranted at the intersections of Tatum Blvd/Shea Blvd, Tatum Blvd/Mountain View Rd, Tatum Blvd/Doubletree Ranch Rd, and Tatum Blvd/Calle Del Sol. These intersections are within the City of Phoenix and require coordination with the City of Phoenix. Potential improvements may include, and are not limited to, improved/new crosswalks, resetting crossing times, and crossing buttons/sensors

Project Contingency (20%) \$ -

Design Fee (10%) \$ -

Construction Admin (14%) \$ -

Tax (5.73%) \$ -

TOTAL \$	-
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Bike and Pedestrian Master Plan

Template of Estimated Costs Per Mile

Section **Berneil Ditch**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 30,000.00	\$ 30,000.00
2	Landscape, DG and Irrigation Restoration	SF	63,000	\$ 3.00	\$ 189,000.00
3	Stabilized Decomposed Granite	SF	63,000	\$ 1.25	\$ 79,000.00
4	Site Furnishings (benches, trash receptacles, doggie-litter stations)	LS	0	\$ —	\$ —
Assumptions:					Subtotal \$ 298,000.00
1. Existing Town-maintained trail. Landscaping cost assumes 8,300 LF of trail and landscaping at a width of 10 LF.					Project Contingency (20%) \$ 60,000.00
2. Stabilized Granite trail at 8,300 LF, 10 LF wide.					Design Fee (10%) \$ 30,000.00
3. No additional site furnishings included.					Construction Admin (14%) \$ 42,000.00
4. Costs rounded to nearest \$1,000. Total rounded to nearest \$10,000.					Tax (5.73%) \$ 17,000.00
					TOTAL \$ 450,000.00

Bike and Pedestrian Master Plan

Template of Estimated Costs

Section **Crossing - Local**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 1,300.00	\$ 1,300.00
2	Saw Cut and Remove Asphalt Paving	SF	150	\$ 0.55	\$ 100.00
3	Asphalt Paving	SF	150	\$ 3.10	\$ 500.00
4	Remove Curb and Gutter	LF	40	\$ 4.00	\$ 200.00
5	Curb/Gutter	LF	40	\$ 18.00	\$ 700.00
6	Remove Sidewalk	SF	150	\$ 3.00	\$ 500.00
7	6" Sidewalk (6" concrete)	LF	150	\$ 36.00	\$ 5,400.00
8	Remove Sidewalk Ramp	EA	0	\$ 1,000.00	\$ -
9	Sidewalk ADA Ramp	EA	1	\$ 2,500.00	\$ 2,500.00
10	Landscape, DG and Irrigation Restoration	SF	200	\$ 3.00	\$ 600.00
11	White Traffic Paint Stripe	LF	100	\$ 0.50	\$ 50.00
12	Bike Lane Marking Symbol	EA	0	\$ 250.00	\$ -
13	Crossing with Concrete Unit Pavers	SF	0	\$ 16.00	\$ -
14	Ribbon Curb at Pavers	LF	0	\$ 16.00	\$ -
15	Stamped and Colored Asphalt Coating	SF		\$ 10.00	\$ -
16	Ped Push Button on Pole	EA	0	\$ 1,800.00	\$ -
17	Bike Push Button on Pole	EA	0	\$ 1,800.00	\$ -
18	Ped Signal	EA	0	\$ 1,600.00	\$ -
Subtotal					\$ 12,000.00
Project Contingency (20%)					\$ 2,400.00
Design Fee (10%)					\$ 1,200.00
Construction Admin (14%)					\$ 1,700.00
Tax (5.73%)					\$ 1,000.00
TOTAL					\$ 18,000.00

Assumptions:

1. Costs rounded to nearest \$100. Total rounded to nearest \$10,000.
2. Does not include any necessary retaining wall or buffer wall costs.
3. Does not include any necessary right-of-way acquisition.
4. Does not include existing pavement maintenance, mill/overlay, micro-seal, etc.

Bike and Pedestrian Master Plan

Template of Estimated Costs Per Mile

Section **Crossing - Striped**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 12,500.00	\$ 12,600.00
2	Saw Cut and Remove Asphalt Paving	SF	600	\$ 0.55	\$ 300.00
3	Asphalt Paving	SF	600	\$ 3.10	\$ 1,900.00
4	Remove Curb and Gutter	LF	320	\$ 4.00	\$ 1,300.00
5	Curb/Gutter	LF	320	\$ 18.00	\$ 5,800.00
6	Remove Sidewalk	SF	2,000	\$ 3.00	\$ 6,000.00
7	6' Sidewalk (8" concrete)	LF	1,200	\$ 36.00	\$ 43,200.00
8	Remove Sidewalk Ramp	EA	4	\$ 1,000.00	\$ 4,000.00
9	Sidewalk ADA Ramp	EA	4	\$ 2,500.00	\$ 10,000.00
10	Landscape, DG and Irrigation Restoration	SF	3,200	\$ 3.00	\$ 9,600.00
11	White Traffic Paint Stripe	LF	1,800	\$ 0.50	\$ 900.00
12	Bike Lane Marking Symbol	EA	0	\$ 250.00	\$ -
13	Crossing with Concrete Unit Pavers	SF		\$ 16.00	\$ -
14	Ribbon Curb at Pavers	LF		\$ 16.00	\$ -
15	Stamped and Colored Asphalt Coating	SF		\$ 10.00	\$ -
16	Ped Push Button on Pole	EA	4	\$ 1,800.00	\$ 7,200.00
17	Bike Push Button on Pole	EA	4	\$ 1,800.00	\$ 7,200.00
18	Ped Signal	EA	4	\$ 1,600.00	\$ 6,400.00

Assumptions:

1. Costs rounded to nearest \$100. Total rounded to nearest \$10,000.
2. Does not include any necessary retaining wall or buffer wall costs.
3. Does not include any necessary right-of-way acquisition.
4. Does not include existing pavement maintenance, mill/overlay, micro-seal, etc.

Subtotal	\$ 116,000.00
Project Contingency (20%)	\$ 23,000.00
Design Fee (10%)	\$ 12,000.00
Construction Admin (14%)	\$ 16,000.00
Tax (5.73%)	\$ 7,000.00

TOTAL	\$ 170,000.00
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Bike and Pedestrian Master Plan

Template of Estimated Costs Per Mile

Section **Crossing Striped -No Signals**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 10,000.00	\$ 10,000.00
2	Saw Cut and Remove Asphalt Paving	SF	600	\$ 0.55	\$ 300.00
3	Asphalt Paving	SF	600	\$ 3.10	\$ 1,900.00
4	Remove Curb and Gutter	LF	320	\$ 4.00	\$ 1,300.00
5	Curb/Gutter	LF	320	\$ 18.00	\$ 5,800.00
6	Remove Sidewalk	SF	2,000	\$ 3.00	\$ 6,000.00
7	6' Sidewalk (6" concrete)	LF	1,200	\$ 36.00	\$ 43,200.00
8	Remove Sidewalk Ramp	EA	4	\$ 1,000.00	\$ 4,000.00
9	Sidewalk ADA Ramp	EA	4	\$ 2,500.00	\$ 10,000.00
10	Landscape, DG and Irrigation Restoration	SF	3,200	\$ 3.00	\$ 9,600.00
11	White Traffic Paint Stripe	LF	1,800	\$ 0.50	\$ 900.00
12	Bike Lane Marking Symbol	EA	0	\$ 250.00	\$ -
13	Crossing with Concrete Unit Pavers	SF		\$ 16.00	\$ -
14	Ribbon Curb at Pavers	LF		\$ 16.00	\$ -
15	Stamped and Colored Asphalt Coating	SF		\$ 10.00	\$ -
16	Ped Push Button on Pole	EA	0	\$ 1,800.00	\$ -
17	Bike Push Button on Pole	EA	0	\$ 1,800.00	\$ -
18	Ped Signal	EA	0	\$ 1,600.00	\$ -

Assumptions:

1. Costs rounded to nearest \$100. Total rounded to nearest \$10,000.
2. Does not include any necessary retaining wall or buffer wall costs.
3. Does not include any necessary right-of-way acquisition.
4. Does not include existing pavement maintenance, mill/overlay, micro-seal, etc.

Subtotal	\$ 93,000.00
Project Contingency (20%)	\$ 18,600.00
Design Fee (10%)	\$ 9,300.00
Construction Admin (14%)	\$ 13,000.00
Tax (5.73%)	\$ 5,000.00
TOTAL	\$ 140,000.00

Bike and Pedestrian Master Plan

Template of Estimated Costs Per Mile

Section **Crossing Striped (Other)**

Item	Description	Unit	QTY.	Unit Cost	Extended Amount
1	General Conditions (Mobilization, Traffic Control, SWPPP, Staking) (12%)	LS	1	\$ 1,100.00	\$ 1,100.00
2	Saw Cut and Remove Asphalt Paving	SF	0	\$ 0.55	\$ -
3	Asphalt Paving	SF	0	\$ 3.10	\$ -
4	Remove Curb and Gutter	LF	0	\$ 4.00	\$ -
5	Curb/Gutter	LF	0	\$ 18.00	\$ -
6	Remove Sidewalk	SF	0	\$ 3.00	\$ -
7	6' Sidewalk (6" concrete)	LF	0	\$ 36.00	\$ -
8	Remove Sidewalk Ramp	EA	0	\$ 1,000.00	\$ -
9	Sidewalk ADA Ramp	EA	0	\$ 2,500.00	\$ -
10	Landscape, DG and Irrigation Restoration	SF	0	\$ 3.00	\$ -
11	White Traffic Paint Stripe	LF	1,800	\$ 0.50	\$ 900.00
12	Bike Lane Marking Symbol	EA	4	\$ 250.00	\$ 1,000.00
13	Crossing with Concrete Unit Pavers	SF		\$ 16.00	\$ -
14	Ribbon Curb at Pavers	LF		\$ 16.00	\$ -
15	Stamped and Colored Asphalt Coating	SF		\$ 10.00	\$ -
16	Ped Push Button on Pole	EA	0	\$ 1,800.00	\$ -
17	Bike Push Button on Pole	EA	4	\$ 1,800.00	\$ 7,200.00
18	Ped Signal	EA	0	\$ 1,600.00	\$ -
Subtotal					\$ 10,000.00
Assumptions:					
1. Cost per mile. Costs rounded to nearest \$100. Total rounded to nearest \$10,000					Project Contingency (20%) \$ 2,000.00
2. Does not include retaining wall or buffer wall costs. \$120 LF assumed at 3' high					Design Fee (10%) \$ 1,000.00
3. Does not include additional ROW costs. ROW acquisition cost varies. \$20 sf assumed					Construction Admin (14%) \$ 1,400.00
4. Cost assumes existing lights and traffic signals remain in place.					Tax (5.73%) \$ 1,000.00
5. Does not include existing pavement maintenance, mill/overlay, micro-seal, etc.					TOTAL \$ 15,000.00

Town of Paradise Valley, Arizona
Capital Improvement Plan
 2018 thru 2022

PROJECTS BY DEPARTMENT

Department	Project #	2018	2019	2020	2021	2022	Total
Facility Improvement							
Town Hall Remodel	2017-01	210,000	775,000	775,000			1,760,000
Police and PW Dept Backup Power	2017-02	300,000					300,000
Town Hall Chiller Replacement	2019-02			100,000			100,000
Police Department Remodel	2019-10	110,000	300,000	590,000			1,000,000
Public Works Remodel	2020-08	50,000	400,000				450,000
Town Hall Backup Power	2021-04				200,000		200,000
Facility Improvement Total		670,000	1,475,000	1,465,000	200,000		3,810,000
Master Plans/Studies							
Watershed Studies	2016-06		450,000				450,000
Iconic Visually Significant Corridors, etc.	2016-08	43,000					43,000
Master Plans/Studies Total		43,000	450,000				493,000
Sidewalks							
Lincoln Drive Sidewalks	2017-05	440,000	75,000	120,000			635,000
56th St. Sidewalks (Mockingbird to Doubletree)	2018-06	100,000					100,000
N. Tatum Rd. Sidewalks (Doubletree-Mountain View)	2020-06			150,000			150,000
32nd St. Sidewalks (Stanford to Lincoln)	2021-02				300,000	2,850,000	3,150,000
Sidewalks Total		540,000	75,000	270,000	300,000	2,850,000	4,035,000
SRP Undergrounding							
SRP 44th Street & Keim Conversion	2016-01	1,224,385					1,224,385
SRP Denton Lane Conversion	2020-01			50,000	527,100		577,100
SRP 40th Street & Lincoln Drive Conversion	2022-01					300,000	300,000
SRP Undergrounding Total		1,224,385		50,000	527,100	300,000	2,101,485
Stormwater							
Regional Stormwater Projects	2018-20	305,000	1,200,000	3,000,000	650,000	2,600,000	7,755,000
Stormwater Total		305,000	1,200,000	3,000,000	650,000	2,600,000	7,755,000
Streets							
Lincoln Dr. (Limits to Mockingbird) - Ritz Related	2016-14.1	2,941,750					2,941,750
Indian Bend (Limits to Mockingbird) - Ritz Related	2016-14.2	1,700,000					1,700,000
Mockingbird Lane Medians - Ritz Related	2016-14.3	5,320,000					5,320,000
Mockingbird Lane Improvements (S. of Lincoln Rd.)	2018-03	200,000					200,000
Doubletree (64th St. to Scottsdale)	2018-04	300,000	3,000,000				3,300,000
Pedestrian / Bicycle Improvements	2018-07	100,000	100,000	100,000	100,000	100,000	500,000
Lincoln@64th St. (Invergordon) Intersect. Realign	2019-03		150,000				150,000
64th St. Medians (McDonald to Chaparral Rd.)	2019-04			270,000	2,430,000		2,700,000
Denton Lane Cul De Sac	2019-05			150,000			150,000
Highlands Drive Cul De Sac	2019-06		250,000				250,000

Department	Project #	2018	2019	2020	2021	2022	Total
45th Street Curbs (McDonald to Valley Vista)	2020-02			100,000			100,000
Tatum Boulevard Retaining Walls	2020-03			400,000			400,000
Mockingbird Lane (56th St. to Invergordon Rd.)	2020-04				300,000	3,000,000	3,300,000
Mountain View Road Improvements (Tatum - 52nd St.)	2020-05			100,000	1,000,000		1,100,000
Mini Multi-Modal Transportation Site	2021-01				500,000		500,000
Streets Total		10,561,750	3,500,000	1,120,000	4,330,000	3,100,000	22,611,750
Technology							
Public Safety Communications Tower	2013-02	850,000					850,000
Network Switch Upgrade	2016-10	12,000					12,000
Implement Town-Wide Geographic Info. System (GIS)	2017-04	125,000					125,000
Telecommunications System Update	2018-01		320,000				320,000
CAD Enterprise Upgrade	2018-08	221,000					221,000
Town Hall Complex Fiber Connections	2022-05	150,000					150,000
Technology Total		1,358,000	320,000				1,678,000
Traffic Signals							
Traffic Signal (Video Detection) Upgrades	2018-05	250,000					250,000
Traffic Signals Total		250,000					250,000
Wastewater							
Sewer System Assosment	2017-06	234,200	234,200	234,200	234,200		936,800
Wastewater Total		234,200	234,200	234,200	234,200		936,800
GRAND TOTAL		15,186,335	7,254,200	6,139,200	6,241,300	8,850,000	43,671,035