

City of Bowie Public Works Infrastructure Plan
8/23/2023

The City of Bowie is experiencing numerous infrastructure issues that have evolved over many years, we can debate the why and how we reached this magnitude of problems, but it will not change the fact that today and for years to come many tough and maybe painful financial decisions will have to be made to insure we can provide the necessary services to the citizens of Bowie.

The list below is based on my opinion and what I believe to be the highest priority the next five years.

1. Construction of Bridge and drainage at intersection of Pillar and Rock
Estimated Cost: Engineering design needed.
 2. Construction of Bridge and drainage at crossing on Cooper Street
Estimated Cost: Engineering design needed.
 3. Construction of Bridge and drainage at crossing on Mill Street
Estimated Cost: Engineering design needed.
 4. Construction of crossover at Green and Wilbarger Street
Estimated Cost: Engineering design needed.
 5. Construction of drainage ditch from Nelson to Patterson
(Needs concrete lined ditch with retaining wall.)
- a. Estimated Cost for line 1 - 4 (\$5,000,000.00.) b. Estimated Cost for line 5 - \$40,000.00

The list created below will address water, sewer, and street infrastructure plans over the next 5 years. (Order will depend on Sewer and Water line replacement needs.)

1. Continue to replace old 2-inch waterlines and upgrade to 6-inch lines. (Projects of this nature will require council approval to use funds from the current infrastructure account. (Balance as of 8-25-2023 \$702,000.00) We will evaluate the old cast iron 6, 8, and 12-inch lines once we have completed upgrading the 2-inch lines to 6-inch lines.
2. Continue to add or replace old fire hydrants in areas of need.
(Hydrant prices are currently around \$3,250.00 each)
3. Continue to assist engineers and contractors with replacement of old sewer lines as outlined in City of Bowie Collection System Rehabilitation Plan.
(Loan of \$9,779,100.00 will fund these projects).
4. Reconstruct roadway from 1400 block of Mason to Lovers 349 feet in length by 37 feet in width. (Estimated Cost \$15,500.00)
5. Reconstruct roadway on Sessions from Roberts to Coffield 869 feet in length by 37 feet in width. (Estimated Cost \$40,433.00). Replace 1738ft of curb and gutter. (Estimated Cost \$78,386.00) Total cost \$118,819.00
6. Reconstruct roadway on Walnut from Hulme to Matthews 332 feet in length by 32 feet in width. (Estimated Cost \$12,125.00)
7. Reconstruct roadway on Lamb from Nelson to Elba 642 feet in length by 32 feet in width. (Estimated Cost \$23,716.00)
8. Reconstruct roadway on Elba from Lamb to Mill 392 feet in length by 26 feet in width. (Estimated Cost \$12,545.00)
9. Reconstruct roadway from Wise to Tarrant 413 feet in length by 40 feet in width. (Estimated Cost \$18,735.00)
Replace 826 feet of curb and gutter and entrances. (Estimated Cost \$33,755.00) Total Cost \$52,490.00
10. Reconstruct road on Fannie, Virgil, and Young 1106 feet in length by 26 feet in width. (Estimated Cost \$37,983.00)
11. Reconstruct roadway on Wichita from Hwy 59 to Cowan 232 feet in length by 44 feet in width. (Estimated Cost \$12,212.00)

12. Reconstruct roadway on Hutchinson from Wichita to Wilbarger 339 feet in length by 39 feet in width. (Estimated Cost \$13,325.00)

13. Reconstruct roadway on W. Wilbarger from Hwy 59 to Jones 136 feet in length by 42 feet in width. (Estimated Cost \$9,952.00)

14. Reconstruct roadway on Wichita from Hwy 59 to Jones 183 feet in length by 42 feet in width. (Estimated Cost \$10,412.00)

15. Reconstruct roadway on Lamb from Hodge to Pillar 257 feet in length by 34 feet in width. (Estimated Cost \$11,200.00)

16. Reconstruct roadway on Coffield from Sessions to Garlington 380 feet in length by 36 in width. (Estimated Cost \$11,780.00) Replace 280 feet of curb and gutter. (Estimated Cost \$13,600.00) Total Cost \$25,380.00

17. Reconstruct roadway on W. Pecan from Matthews to Central 904 feet in length by 44 feet in width. (Estimated Cost \$36,000.00) Replace 150 feet of curb and gutter (Estimated Cost \$6,470.00) Total Cost \$42,470.00

18. Reconstruct roadway on Nelson from Lamb to Rock 460 feet in length by 36 feet in width. (Estimated Cost \$19,504.00)

19. Reconstruct roadway on N. Sanders from W. Pecan to Live Oak 300 feet in length by 34 feet in width. (Estimated Cost \$12,100.00)

20. Reconstruct roadway on N. Matthews from Wise to W. Montague 409 feet in length by 28 feet in width. (Estimated Cost \$12,925.00)

21. Remove and replace concrete in areas of need on Patterson drainage road from Nelson to Lee. (Estimated Cost \$70,434.00) This will cover approximately 75% of the area needing repair.

Total Street Repair Cost Over 5-year period (\$513,092.00)

Note: These estimates are calculated on today's market prices and will fluctuate over the years.

**Projected Cost for Contracting out the following Streets with Asphalt
These estimates are calculated on today's market prices and will fluctuate over the years.**

1. South Mill from State Marker to Decatur dimensions 2,977 x 28
(Estimated Cost \$451,623.00)

2. N. Mill from Wise to Nelson Dimensions 1,656 x 30 (Estimated Cost \$269,166.00)

3. N. Mill from Nelson to Hwy 59 Dimensions 4,308 x 30 (Estimated Cost \$700,223.00)

4. Nelson from Pelham to N. Lamb Dimensions 3,062 x 33 (Estimated Cost \$591,669.00)

5. Roach from Patterson to Mill Dimensions 2,637 x 22 x 2 (Estimated Cost \$628,640.00)

6. Tarrant from Mill to Hwy 59 Dimensions 1,791 x 56.25 (Estimated Cost \$545,830.00)

7. Lovers from Hwy 59 to Matthews Dimensions 2,204 x 46 (Estimated Cost \$549,299.00)

8. Lindsay from Wise to Hwy 59 Dimensions 1,725 x 52 (Estimated Cost \$485,995.00)

9. Wilbarger from Mill to Hwy 59 Dimensions 1,917 x 47.5 (Estimated Cost \$493,350.00)

10. Wilbarger from Mill to 1125 Dimensions 2,637 X 32.5 (Estimated Cost \$464,336.00)

11. Nelson from Mill to Hwy 59 Dimensions 1,548 x 25 (Estimated Cost \$209,677.00)

- 12. Nelson from Hwy 59 to 1816 Dimensions 1,867 x 26.25 (Estimated Cost \$265,530.00)
- 13. Zahara from Nelson to Eldorado Dimensions 1,758 x 23 x 2 (Estimated Cost \$219,072.00)
- 14. Houston from Hwy 59 1,556 x 40.5 Dimensions 1,556 x 40.5 (Estimated Cost \$371,143.00)

Total (\$6,245,553.00)

Airport Capital Improvement Plans are as listed below.

- A. Install approximately 9,000 feet of game fence and gates.
(Estimated Cost \$720,000.00) TX dot Aviation Grant will cover 90% with a city match of 10%, City share \$72,000.00).
- B. Replace Mirl and signage runway 17 – 35 (Estimated cost \$710,000.00). Tx dot Aviation will cover 90% with a city match of 10%, City share \$71,000.00).
- C. Install Electrical Vault Building. (Estimated Cost \$65,000.00) Tx dot Aviation will cover 90% with a city match of 10%, City share \$6,500.00).
- D. Replace Beacon Tower. (Estimated Cost \$75,000.00). Tx dot Aviation will cover 90% with a city match of 10%, City share \$7,500.00).

Total City Match \$157,000.00