TOWN OF MALABAR

COUNCIL MEETING

AGENDA ITEM NO: 13.b Meeting Date: April 3, 2023

Prepared By: Matthew Stinnett, Town Manager

SUBJECT: Roadway Asphalt Pavement Surface Evaluation Report

BACKGROUND/HISTORY:

The Town contracted Engineering Design & Construction Inc. (EDC) to conduct a town wide asphalt pavement surface evaluation to assist with developing a maintenance and resurfacing plan. David Baggett (EDC) will present the results of the study to the Town Council.

Steve Rivet was appointed by the Town Council to work with me to review the study and develop a recommendation for prioritizing the roads for resurfacing.

ATTACHMENTS:

None

FINANCIAL IMPACT:

None

ACTION OPTIONS:

Presentation and discussion.



Considerations for Prioritization

- EDC Inc. Roadway Asphalt Pavement Surface Evaluation Report Results/Recommendations
- Distress Score vs Adjusted Score Ranking
- Other Considerations:
 - Timeline
 - Financial resources
 - Community impact
 - Interlocal partnership opportunities

Briar Creek Boulevard

Collector Road

Estimated Service Life: 0-5 years

Recommended Treatment

Mill and structural overlay

Distress Score/Rank: 22/2

Adjusted Score: 22/1

Sole ingress/egress for Brook Hollow Subdivision

Significant local community impact and access to recreation facilities

Potential to piggyback on City of Palm Bay contract, maintain consistent service level if resurfaced at the same time.

Weber Road

Collector Road

Estimated Service Life: 0-5 years

Recommended Treatment

Subsurface/Structural Investigation

Mill and structural overlay or FDR/reconstruction

Distress Score/Rank: 13/10

Adjusted Score/Rank: 19.5/2

Primary connector for other Town collector roads and Malabar Road

Significant broad community impact and access to recreation facilities

Rocky Point Road

Collector Road

Estimated Service Life: 0-5 years

Recommended Treatment

Subsurface/Structural Investigation

Mill and thin or structural overlay

Distress Score/Rank: 15/6

Adjusted Score/Rank: 15/3

Storm damage requiring partial reconstruction, FEMA funding

Significant local community impact

Corey Road

Collector Road

Estimated Service Life: 5-10 years

Recommended Treatment

Continued monitoring for structural issues (minor rutting)

Crack sealing

Rejuvenation

Distress Score/Rank: 9/14

Adjusted Score/Rank: 13.5/4

Significant broad community impact

Service life can be extended with lower cost treatment options

Benjamin Road

Local Road

Estimated Service Life: 5-10 years

Recommended Treatment

Full depth reclamation (FDR)

Shoulder stabilization

Distress Score: 7/20

Adjusted Score: 1.75/23

Significant Local impact, connects several dirt roads in Malabar and Grant-Valkaria to Corey Road

Inconsistent original construction, significant edge cracking on narrow lane width

Potential to cost share with Grant-Valkaria

Coral Way

Local Road

Estimated Service Life: 0-5 years

Recommended Treatment

Subsurface/Structural investigation

Mill and structural overlay or FDR/Reconstruction

Distress Score/Rank: 23/1

Adjusted Score/Rank: 5.75/9

Significant local community impact connects Rocky Point Road and US1 (by Huggins)

Reef Place: cul-de-sac repaved recently, remainder should be repaved w/Coral Way

Huggins Drive

Local Road

Estimated Service Life: 0-5 years

Recommended Treatment

Subsurface/Structural investigation

Mill and structural overlay or FDR/Reconstruction

Distress Score/Rank: 21/4

Adjusted Score/Rank: 5.25/11

Significant local community impact connects Rocky Point Road and US1 (by Coral Way)

Should be repaved w/Coral Way and Reef Place to maintain consistent service level

Coquina Terrace

Local Road

Estimated Service Life: 0-5 years

Recommended Treatment

Subsurface/Structural investigation

Mill and structural overlay or FDR/Reconstruction

Distress Score/Rank: 15/5

Adjusted Score/Rank: 3.75/12

Minor local community impact, dead end road no other connections

Hollow Brook Lane

Local Road

Estimated Service Life: 0-5 years

Recommended Treatment

Subsurface/Structural investigation

Mill and structural overlay or FDR/Reconstruction

Distress Score/Rank: 14/7

Adjusted Score/Rank: 3.5/13

Significant local community impact connects Brookshire Circle to Briar Creek BLVD

Brookshire Circle (short road) is in need of chip seal and rejuvenation with some minor alligator cracking that could be cut out and restored at the same time

Booth Road

Local Road

Estimated Service Life: 0-5 years

Recommended Treatment

Reconstruction required

Distress Score: 21/3

Adjusted Score: 5.25/10

Significant Local impact, serves residential and commercial zoning

Connects Lett Ln and other undeveloped rights-of-way to Babcock

Poor materials used (large aggregate and weak binder), no maintenance options recommended

Conclusion

- Results include 4 collectors and 6 local roads(plus 2 additional short local roads)
- 8/10 roads in the top 10 priorities are estimated to have 0-5 years of service life remaining. Reaching the end of service life indicates reconstruction is the most likely treatment needed for restoration.
- The top 10 priorities should act as a guide to focus efforts and resources for the near future. Available funding may dictate the order in which certain roads are paved. (Example: In year 1 there is insufficient funding to complete Road A but there is enough to do Road D and Road E and set aside some funding to complete Road A in year 2)

Next Steps

- Define funding sources
 - ARP funds, general fund, resident assessments
- Create five-year improvement plan
- Get firm estimates for first year of plan
- Integrate lane paving plans