Pavement Evaluation Report For Midlands Technical College

Prepared For:

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<u>Section 7 – Ranked Recommendation Table</u>

The following table is our priority list of Parking Lots and Roadways for improvements along with budgetary cost estimate information for planning purposes. The areas chosen for this list are chosen because they show the worst conditions with respect to surface wear, pavement cracking, and striping. This list is numbered with 1 being the most severe and in need of priority improvement. These rankings could be adjusted based on use of the parking lots or roadways as considered by MTC. It is recommended that each of these locations identified for improvements are further investigated as part of a project with geotechnical investigation, surveying, and engineering design and permitting to determine the specific extents and method of rehabilitation improvements. Routine maintenance such as pavement cleaning, crack sealing/filling, and seal coating are recommended for all pavement systems as noted in the individual recommendation sections above. Any spot areas for improvements (patching) as noted in the individual recommendations sections above are also recommended to be implemented.

Midlands Technical College Pavement Repair Ranking			
No.	Pavement Facility	Recommended Repair	Cost Estimate
1	Airport Campus - Road #3 (R-3)	Mill & resurface asphalt up to Lot 17	\$560,898.00
2	Airport Campus - Lot 8	Mill & resurface asphalt	\$486,000.00
3	Airport Campus - Lot 9	Mill & resurface asphalt	\$594,000.00
4	Airport Campus - Lot 13	Mill & resurface asphalt and/or remove & replace asphalt	\$216,000.00
5	Airport Campus - Lot 26	Mill & resurface asphalt	\$216,000.00
6	Airport Campus - Lot 27	Mill & resurface asphalt	\$162,000.00
7	Airport Campus - Lot 6	Mill & resurface asphalt	\$49,248.00
8	Airport Campus - Lot 5	Mill & resurface asphalt	\$102,600.00
9	Airport Campus - Lot 7	Mill & resurface asphalt	\$204,282.00
10	Airport Campus - Road #9 (R-9)	Mill & resurface asphalt	\$74,142.00
11	Harbison Campus - Lot 1	Mill & resurface asphalt for parking spaces	\$393,174.00
12	Harbison Campus - Road #1 (R-1)	Mill & resurface asphalt and/or remove & replace asphalt up to Guard Shack	\$71,280.00
		Total:	\$3,129,624.00

^{*}Actual extents and method of replacements to be determined during an engineering design phase

Parking Lot #4

Observations and Assessment: Fair condition. Cracking is in Fair condition, however vegetation is growing in cracks, which over time could cause issues in sub grade. Surface wear is also in Fair condition and the striping is Fair condition. The drop inlet in the lot is slightly raised which creates a ponding situation during rainfall events, this is why there is sediment depositing in the lot.

Recommendations: Seal existing cracks.

Parking Lot #5

Observations and Assessment: Poor Condition. Cracking is in Poor Condition, alligator cracking and pavement is depressed in areas due to cracking with some pot holes. The surface wear is in fair condition and the striping is in good condition.

Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Road #2 (R-2)

Observations and Assessment: Road is in Good condition. Some portions have fair cracking and fair surface wear but overall in Good condition.

Recommendations: Seal existing cracks in back half of roadway.

Parking Lot #6

Observations and Assessment: Poor Condition. Cracking in the lot is in Poor Condition, alligator cracking and deep, wide cracks. Surface wear is in Poor Condition, there is aggregate loose in the lot. Striping is in good condition.

Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Road #3 (R-3)

Observations and Assessment: From the entrance (beside Reed Hall) to R-5 the roadway is in Poor Condition, the road's surface wear is in Poor Condition with heavy amount of loose aggregate, with Fair Condition cracking. The striping condition from the entrance up to lot #17 is fair.

R-3 from lot#17 to the other end of the road (south of traffic circle) is in Fair Condition, the surface cracking is in Fair Condition, and the surface wear and striping is in Fair Condition. **Recommendations:** The road section that is in Poor Condition needs to be milled and resurfaced at a minimum depending on further engineering investigation and design. The road section that is in fair condition needs cracks to be sealed at a minimum. For Cost

Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Parking Lot #7

Observations and Assessment: Poor Condition. Cracking in the lot is in Poor Condition, with alligator cracking and deep, wide cracks. Surface wear is in Poor Condition, there is large amounts of loose aggregate in the lot. Striping is in good condition. Sediment depositing around drop inlet due to grate being too high.

Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Parking Lot #8

Observations and Assessment: Poor Condition. Cracking in the lot is in Poor Condition, with cracking going in all directions for long lengths. Surface wear is in Poor Condition, there is loose aggregate in the lot. Striping is in Fair condition.

Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Parking Lot #9

Observations and Assessment: Poor Condition. Cracking in the lot is in Poor Condition, with deep, wide cracks. Surface wear is in Poor Condition, there is large amounts of loose aggregate in the lot. Striping is in poor condition. The amount of loose aggregate makes it difficult to see striping, and re-striping would be difficult in the current conditions.

Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Road #4 (R-4)

Observations and Assessment: Fair condition. The road's surface wear is in Fair condition, and the cracking is generally good condition. There is a spot near the back end of the road (near the detention pond) that has alligator cracking.

Recommendations: Remove and replace asphalt pavement section in area that is alligator cracking.

Parking Lot #24

Observations and Assessment: 24-A through 24-E is in Good Condition. The surface wear is in Good Condition, the Cracking is in Good condition, with minor cracking. Striping throughout is mostly in Good condition.

Recommendations: None.

Road #10 (R-10)

Observations and Assessment: Good Condition. The road has mostly Good Condition surface wear and little cracking.

Recommendations: None.

Parking Lot #25

Observations and Assessment: Fair Condition overall. Fair Condition for the surface wear and the cracking of the pavement. The striping of the lot is overall in Good Condition. **Recommendations:** Seal cracks as needed.

Road #11 (R-11)

Observations and Assessment: Overall Good Condition. The road has mostly Good Condition surface wear and little cracking. At the entrance of the road off of the main highway, the pavement is in Poor Condition, it is depressed, cracked, with severe wear. **Recommendations:** Remove and replace asphalt pavement section for portion of road at entrance.

Parking Lot #26

Observations and Assessment: Poor Condition overall. The surface cracking is in Poor Condition, heavy cracking, with deep and wide cracking along with some alligator cracking. The surface wear is in Fair Condition and the striping is Fair Condition as well. Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

Parking Lot #27

Observations and Assessment: Poor Condition overall. The surface cracking is in Poor Condition, heavy cracking, with deep and wide cracking along with some alligator cracking. The surface wear is in Fair Condition and the striping is Fair Condition as well. Recommendations: Mill and resurface asphalt pavement or remove and replace asphalt pavement section depending on further engineering investigation and design. For Cost Estimating purposes we have assumed 80% of the pavement surface will be milled and resurfaced and 20% of the pavement surface will be a full depth pavement replacement. This could potentially change during a full engineering design and analysis.

