

PAVEMENT MANAGEMENT GROUP

PAVEMENT MANAGEMENT SERVICES

TURN-KEY PAVEMENT MANAGEMENT UPDATE

CITY OF GREEN, OH

JULY 25, 2017



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ATTN: Paul R. Pickett, P.E. City Engineer City of Green 1755 Town Park Blvd. Green, OH 44232

SUBJECT: CITY OF GREEN - PAVEMENT MANAGEMENT PROGRAM UPDATE

Dear Mr. Pickett,

The following proposal outlines the scope of services from the Pavement Management Group (PMG) to provide the City of Green with a complete Pavement Management Program (PMP) update for your street network. Please review at your earliest convenience and feel free to contact me with any questions.

PMG can provide these services in accordance with the breakdown shown below:

TASK	FEE
HD StreetView Video Inventory of Street Network	\$5 <i>,</i> 985.00
Google Earth Condition Layer with Potholes Located	\$3,420.00
PAVER – Inventory, Work History & GIS Update	\$2,565.00
ASTM D6433 Condition Assessment & PCI Update	\$18,810.00
Final Project Report with Recommendation	\$1,250.00
Continued Support with PAVER 2 User License	\$3,500.00
	\$35,530.00

Thank you for the opportunity to continue servicing of your pavement management needs.

Respectfully,

PAVEMENT MANAGEMENT GROUP James Golden III Founder, CEO & Principal in Charge

dant

Accepted By:

City of Green Authorized Representative



COMPLETE PAVEMENT MANAGEMENT SOLUTIONS

July 25, 2017

SCOPE OF SERVICES



Project Description

The City of Green is responsible for the maintenance and repair of 171 centerline miles of maintained streets. PMG will provide HD StreetView video inventory of the Street network, provide a Google Earth pavement management layer complete, with condition assignment and all potholes geo-located, collect all inventory and condition data strictly adhering to industry standards and will update this information into the City's PAVER[®] Pavement Management System (PMS) database. PMG proposes the following scope of work for a complete Pavement Management Program (PMP) update:

HD Video StreetView and Pothole Location with Google Earth Layer

PMG will provide HD geo-located video of the Street Network linked to a Google Earth KMZ/KML file. This will provide a pavement management layer right within Google Earth. All potholes will be marked and geo-located as well as all structural and drainage issues. At any point, the user can click on the Google Earth layer and go straight to the HD video of that specific location to view. This allows for a complete PMG StreetView experience of your entire Street Network. All video will be provided to the agency in flash drive and/or external hard drive format.





Inventory, Work History and GIS Update

With the local street network already defined and in existence, PMG will work with the agency to update or add any necessary branches, sections or section inventory items. All maintenance activity since last inspection (2015) will be updated within the Work History (if not already completed), as well as additional agency specific system table information. PMG will request the latest GIS data set from the agency, complete with a column identifying all agency owned/maintenance streets. The provided GIS information in shapefile format will be the basis for the HD StreetView video log, and PMG will also update the GIS inventory link in PAVER for condition mapping and reporting.

ASTM D6433-11 (PCI) Condition Assessment

PMG will perform inspection following ASTM D6433-11 for each pavement section within the Street network through post processing of the acquired HD Street network video. This constitutes locating sample areas that are representative in condition within each section and identifying all distress types, severity levels and quantities within each sample. PMG will inspect at least 10% of each section per this standard which is an industry accepted sampling frequency.

As each distress type, severity and quantity is entered into the PAVER inspection software for each sample, a section Pavement Condition Index (PCI) number is produced. This number is on a scale of 0 - 100 with 0 considered failed and 100 considered excellent. The result of the ASTM D6433 inspection process will result in a PCI score of 0 - 100 for each pavement section within the network, as well as a network PCI average for the local street network.

Final Project Report

Once the final project has been completed PMG will provide the agency with a full final project report. This report will provide an executive summary of the project and the current condition status of the street network, parking lot network and trail/path network. A variety of charts/graphs and GIS views are provided within the report and a separate Excel based Inventory and PCI report will be provided as well. The Excel Inventory and PCI report will list all inventory items for each local street pavement section as well as the current PCI condition and condition category.

PMG will also recommend a preventive maintenance and pavement preservation strategy as well as provide budget/target and condition scenarios over the next 3 years:

- 1. Do Nothing The condition results each year over a 5 year period when no work or maintenance is applied.
- 2. Current Budget The condition results each year over a 5 year period employing current maintenance strategies and preservation strategies.
- 3. Recommended Budget The recommended annual funding level necessary to achieve an optimum network condition average of 75 within a 5 year period employing current maintenance strategies and preservation strategies.
- 4. Eliminate Backlog The annual cost and network condition result to bring all pavements to a minimum condition of 50 PCI employing current maintenance strategies and preservation strategies.



Continued Support

PMG will provide up to 40 hours (32 hours of web based, email, conference call and 8 hours of on-site) consulting, representation, reporting services and support, for a two-year period. In addition, PMG will provide annual work history and/or inventory updates to the PMS, fulfill any additional report requests and analysis, as well as provide an annual "State of the Network" condition report. Our continued support solution is designed to assist in maintaining a complete inventory and up to date condition analysis of your pavement network in between your re-inspection cycles.

A two (2) user license of the latest PAVER[®] pavement management system software is included through the PMG Continued Support Services. PMG will install the software on up to two (2) PC's as deemed necessary by the client

PROJECT SCHEDULE

PMG has immediate project schedule availability and could begin as soon as a notice to proceed is issued. The timeframe to complete all items in the scope of service will be 90 days from the notice to proceed. Once complete, PMG will provide on-site meeting to review the project and final report in full at the convenience of the client.

PROJECT COST TABLE

ITEM DESCRIPTION	COST	QTY	UNIT	TOTAL
StreetView HD Quality Video of the Street Network	\$35.00	171	CL MI	\$5,985.00
Google Earth Layer with Condition and Pothole				
Geo-Location	\$20.00	171	CL MI	\$3,420.00
PAVER Inventory, Work History, System and GIS				
Updates	\$15.00	171	CL MI	\$2,565.00
ASTM D6433-11 (PCI) Condition Assessment	\$110.00	171	CL MI	\$18,810.00
Final Project Report with Recommendations and				
Budget/Target Driven Scenarios	\$1,250.00	1	LS	\$1,250.00
Continued Support (Includes PAVER 2 User License)	\$3,500.00	1	LS	\$3,500.00
Project Total Cost - Not to Exceed		\$35,530.00		
Continued support is valid for the period of one year from data/software implementation date				
	StreetView HD Quality Video of the Street Network Google Earth Layer with Condition and Pothole Geo-Location PAVER Inventory, Work History, System and GIS Updates ASTM D6433-11 (PCI) Condition Assessment Final Project Report with Recommendations and Budget/Target Driven Scenarios Continued Support (Includes PAVER 2 User License) Total Cost - Not to Exceed	StreetView HD Quality Video of the Street Network\$35.00Google Earth Layer with Condition and Pothole Geo-Location\$20.00PAVER Inventory, Work History, System and GIS Updates\$15.00ASTM D6433-11 (PCI) Condition Assessment\$110.00Final Project Report with Recommendations and Budget/Target Driven Scenarios\$1,250.00Continued Support (Includes PAVER 2 User License)\$3,500.00Total Cost - Not to Exceed\$20,00	StreetView HD Quality Video of the Street Network \$35.00 171 Google Earth Layer with Condition and Pothole \$20.00 171 Geo-Location \$20.00 171 PAVER Inventory, Work History, System and GIS \$15.00 171 Updates \$15.00 171 ASTM D6433-11 (PCI) Condition Assessment \$110.00 171 Final Project Report with Recommendations and \$1,250.00 1 Continued Support (Includes PAVER 2 User License) \$3,500.00 1 Total Cost - Not to Exceed \$35,53	StreetView HD Quality Video of the Street Network\$35.00171CL MIGoogle Earth Layer with Condition and Pothole Geo-Location\$20.00171CL MIPAVER Inventory, Work History, System and GIS Updates\$15.00171CL MIASTM D6433-11 (PCI) Condition Assessment\$110.00171CL MIFinal Project Report with Recommendations and Budget/Target Driven Scenarios\$1,250.001LSContinued Support (Includes PAVER 2 User License)\$3,500.001LS



PROPOSAL ACCEPTANCE

PMG proposes to furnish materials and labor, complete in accordance with the above scope of work, and subject to conditions stated herein, for a complete Pavement Management Program Update.

The above price, specifications and conditions are satisfactory and are hereby accepted. PMG is authorized to perform the services specified, and payment will be made as shown above. PMG will provide detailed invoices with associated data to support upon completion of Itemized Tasks within the Project Cost Table. All invoices are to be paid NET 30 from the invoice date.

All work is guaranteed to be as specified and will be completed in a professional manner per standard practices. All PMG employees are covered by Workers' Compensation Insurance. PMG is insured through a Commercial General Liability Policy and a Professional Liability Policy. Certificates are available upon request.

CITY OF GREEN:	
P.O. Number:	
Authorized Name:	
Authorized Signature:	
Date:	
PAVEMENT MANAGEMENT GROUP	
Authorized Name:	James Golden III
Authorized Signature:	Holden II-
Date:	07/25/2017

PAVEMENT MANAGEMENT GROUP FEIN NO: 81-4068010

