



CITY of NOVI CITY COUNCIL

**Agenda Item M
August 26, 2013**

SUBJECT: Approval to award an engineering services agreement to Spalding DeDecker Associates for design engineering services related to the Town Center Drive Rehabilitation Project in the amount of \$43,159.

SUBMITTING DEPARTMENT: Department of Public Services, Engineering Division *BIC*

CITY MANAGER APPROVAL: *[Signature]*

EXPENDITURE REQUIRED	\$ 27,635 Town Center (Grand River to 11 Mile) Engineering \$ 15,524 Town Center (11 Mile to Crescent) Engineering \$ 43,159 TOTAL
AMOUNT BUDGETED	\$ 98,300 Town Center (Grand River to 11 Mile) Engineering \$ 74,300 Town Center (11 Mile to Crescent) Engineering \$172,600 TOTAL
LINE ITEM NUMBER	202-202.00-805.668 Town Center (Grand River to 11 Mile) Engineering 202-202.00-805.669 Town Center (11 Mile to Crescent) Engineering

BACKGROUND INFORMATION:

This project includes improvements to Town Center Drive from Grand River to Crescent Boulevard. The section from Grand River to 11 Mile will likely involve full reconstruction due to the condition of the pavement. This will also provide the opportunity to incorporate some changes to the lane configurations at the intersections of Grand River and 11 Mile to improve the operation of the roadway. The road segment between 11 Mile Road and Crescent Boulevard is proposed to be rehabilitated with discrete joint and panel replacements, since the pavement has not deteriorated to the extent that it requires reconstruction. Improvements to the sidewalks and ramps, as well as other minor improvements, will be completed along the project limits.

The City's Non-Motorized Master Plan 2011 has designated the section of Town Center Drive between Grand River and 11 Mile as an On-Road Neighborhood Connector, and envisions bike lanes for both the northbound and southbound roadways between Grand River and 11 Mile. Therefore, reconstruction of this section will incorporate bike lanes and other non-motorized improvements recommended by the master plan. (Bike lanes would also be incorporated into a future reconstruction project for 11 Mile Road.)

The City does not currently have right-of-way or easements over all the sidewalks along Town Center Drive. Staff will work with the property owners to acquire either the right-of-way or easements as required for the project.

SDA's engineering fees are based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects. The design fees for this project will be \$43,159 (9.30% of the estimated construction cost of \$297,150 for the Grand River to 11 Mile section to be reconstructed, plus 8.50% of the estimated construction cost of \$182,630

for the 11 Mile to Crescent section to be rehabilitated). The construction phase engineering fees will be awarded at the time of construction award and will be based on the contractor's bid price and the fee percentage established in the Agreement for Professional Engineering Services for Public Projects. A draft of the Supplemental Professional Engineering Services Agreement for this project is enclosed and includes the project scope and estimate.

It is anticipated that the project would be ready for construction in summer 2014.

RECOMMENDED ACTION: Approval to award an engineering services agreement to Spalding DeDecker Associates for design engineering services related to the Town Center Drive Rehabilitation Project in the amount of \$43,159.

	1	2	Y	N
Mayor Gatt				
Mayor Pro Tem Staudt				
Council Member Casey				
Council Member Fischer				

	1	2	Y	N
Council Member Margolis				
Council Member Mutch				
Council Member Wrobel				

Town Center Drive Rehabilitation

Location Map

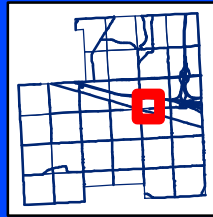


Map Author: M. D. McCreddie Jr
 Date: 8/19/13
 Project: Town Center Drive Rehabilitation
 Version #: 1

Amended By:
 Date:
 Department:

MAP INTERPRETATION NOTICE

Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate and should not be construed as survey measurements performed by a licensed Michigan Surveyor as defined in Michigan Public Act 132 of 1970 as amended. Please contact the City GIS Manager to confirm source and accuracy information related to this map.



City of Novi
 Engineering Division
 Department of Public Services
 26300 Lee BeGole Drive
 Novi, MI 48375
 cityofnovi.org



1 inch = 500 feet

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

TOWN CENTER DRIVE REHABILITATION/RECONSTRUCTION
GRAND RIVER AVE TO CRESCENT BLVD

This Agreement shall be considered as made and entered into as of the date of the last signature hereon, and is between the City of Novi, 45175 W. Ten Mile Road, Novi, MI 48375-3024, hereafter, "City," and Spalding DeDecker Associates, Inc., whose address is 905 South Boulevard East, Rochester Hills, MI 48307, hereafter, "Consultant."

RECITALS:

This Agreement shall be supplemental to, and hereby incorporates the terms and conditions of the AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES FOR PUBLIC PROJECTS, and attached exhibits, entered into between the City and the Consultant on December 17, 2012.

The project includes the design and the preparation of plans and specifications for the rehabilitation/reconstruction of Town Center Drive from Grand River Avenue to Crescent Boulevard. Bike lanes will be added to the north and south bound roadways south of 11 Mile.

NOW, THEREFORE, in consideration of the foregoing, the City and Consultant agree as follows:

Section 1. Professional Engineering Services.

For and in consideration of payment by the City as provided under the "Payment for Engineering Services" section of this Agreement, Consultant shall perform the work described in the manner provided or required by the following Scope of Services, which is attached to and made a part of this Agreement as Exhibit A, all of said services to be done in a competent, efficient, timely, good and workmanlike manner and in compliance with all terms and conditions of this Agreement.

Exhibit A Scope of Services

Section 2. Payment for Professional Engineering Services.

1. Basic Fee.

Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$43,159, as described in the attached proposal.

2. Payment Schedule for Professional Engineering Services Fee.

Consultant shall submit monthly statements for professional engineering services rendered. The statements shall be based on Consultant's estimate of the proportion of the total services actually completed for each task as set forth in Exhibit A at the time of billing. The City shall confirm the correctness of such estimates, and may use the City's own engineer for such purposes. The monthly statements should be accompanied by such properly completed reporting forms and such other evidence of progress as may be required by the City. Upon such confirmation, the City shall pay the amount owed within 30 days.

Final billing under this agreement shall be submitted in a timely manner but not later than three (3) months after completion of the services. Billings for work submitted later than three (3) months after completion of services will not be paid. Final payment will be made upon completion of audit by the City.

3. Payment Schedule for Expenses.

All expenses required to complete the scope of services described herein, including but not limited to costs related to mileage, vehicles, reproduction, computer use, etc., shall be included in the basic fee and shall not be paid separately. However, as compensation for expenses that are not included in the standard scope of services, when incurred in direct connection with the project, and approved by the City, the City shall pay the Consultant its actual cost times a factor of 1.15.

Section 4. Ownership of Plans and Documents; Records.

1. Upon completion or termination of this agreement, all documents prepared by the Consultant, including tracings, drawings, estimates, specifications, field notes, investigations, studies, etc., as instruments of service shall become the property of the City.

2. The City shall make copies, for the use of the Consultant, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Consultant under this Agreement, and also make available any other maps, records, or other materials available to the City from any other public agency or body.

3. The Consultant shall furnish to the City, copies of all maps, records, field notes, and soil tests that were developed in the course of work for the City and for which compensation has been received by the Consultant.

Section 5. Termination.

1. This Agreement may be terminated by either party upon 7- days' prior written notice to the other party in the event of substantial failure by the other party to fulfill its obligations under this agreement through no fault of the terminating party.

2. This Agreement may be terminated by the City for its convenience upon 90 days' prior written notice to the Consultant.

3. In the event of termination, as provided in this Article, the Consultant shall be paid as compensation in full for services performed to the date of that termination, an amount calculated in accordance with Section 2 of this Agreement. Such amount shall be paid by the

City upon the Consultant's delivering or otherwise making available to the City, all data, drawings, specifications, reports, estimates, summaries, and that other information and materials as may have been accumulated by the Consultant in performing the services included in this Agreement, whether completed or in progress.

Section 6. Disclosure.

The Consultant affirms that it has not made or agreed to make any valuable gift whether in the form of service, loan, thing, or promise to any person or any of the person's immediate family, having the duty to recommend, the right to vote upon, or any other direct influence on the selection of consultants to provide professional engineering services to the City within the two years preceding the execution of this Agreement. A campaign contribution, as defined by Michigan law shall not be considered as a valuable gift for the purposes of this Agreement.

Section 7. Insurance Requirements.

1. The Consultant shall maintain at its expense during the term of this Agreement, the following insurance:

- A. Worker's Compensation insurance relative to all Personnel engaged in performing services pursuant to this Agreement, with coverage not less than that required by applicable law.
- B. Comprehensive General Liability insurance with maximum bodily injury limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate and minimum Property Damage limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate.
- C. Automotive Liability insurance covering all owned, hired, and non-owned vehicles with Personal Protection insurance to comply with the provisions of the Michigan No Fault Insurance Law including Residual Liability insurance with minimum bodily injury limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate minimum property damage limits of \$1,000,000 (One Million Dollars) each occurrence and/or aggregate.
- D. The Consultant shall provide proof of Professional Liability coverage in the amount of not less than \$1,000,000 (One Million Dollars) per occurrence and/or aggregate, and Environmental Impairment coverage.

2. The Consultant shall be responsible for payment of all deductibles contained in any insurance required hereunder.

3. If during the term of this Agreement changed conditions or other pertinent factors should in the reasonable judgment of the City render inadequate insurance limits, the Consultant will furnish on demand such additional coverage as may reasonably be required under the circumstances. All such insurance shall be effected at the Consultant's expense, under valid and enforceable policies, issued by the insurers of recognized responsibility which are well-rated by national rating organizations and are acceptable to the City.

4. All policies shall name the Consultant as the insured and shall be accompanied by a commitment from the insurer that such policies shall not be canceled or reduced without at least thirty (30) days prior notice to the City.

With the exception of professional liability, all insurance policies shall name the City of Novi, its officers, agents, and employees as additional insured. Certificates of Insurance evidencing such coverage shall be submitted to Sue Morianti, Purchasing Manager, City of Novi, 45175 West Ten Mile Road, Novi, MI 48375-3024 prior to commencement of performance under this Agreement and at least fifteen (15) days prior to the expiration dates of expiring policies.

5. If any work is sublet in connection with this Agreement, the Consultant shall require each subconsultant to effect and maintain at least the same types and limits of insurance as fixed for the Consultant.

6. The provisions requiring the Consultant to carry said insurance shall not be construed in any manner as waiving or restricting the liability of the Consultant under this Agreement.

Section 8. Indemnity and Hold Harmless.

A. The Consultant agrees to indemnify and hold harmless the City, its elected and appointed officials and employees, from and against any and all claims, demands, suits, losses and settlements, including actual attorney fees incurred and all costs connected therewith, for any damages which may be asserted, claimed or recovered against the City by reason of personal injury, death and/or property damages which arises out of or is in any way connected or associated with the actions or inactions of the Consultant in performing or failing to perform the work.

The Consultant agrees that it is its responsibility and not the responsibility of the City to safeguard the property and materials used in performing this Agreement. Further, this Consultant agrees to hold the City harmless for any loss of such property and materials used pursuant to the Consultant's performance under this Agreement.

Section 9. Nondiscrimination.

The Consultant shall not discriminate against any employee, or applicant for employment because of race, color, sex, age or handicap, religion, ancestry, marital status, national origin, place of birth, or sexual preference. The Consultant further covenants that it will comply with the Civil Rights Act of 1973, as amended; and the Michigan Civil Rights Act of 1976 (78. Stat. 252 and 1976 PA 4563) and will require a similar covenant on the part of any consultant or subconsultant employed in the performance of this Agreement.

Section 10. Applicable Law.

This Agreement is to be governed by the laws of the State of Michigan and the City of Novi Charter and Ordinances.

Section 11. Approval; No Release.

Approval of the City shall not constitute nor be deemed release of the responsibility and liability of Consultant, its employees, associates, agents and subconsultants for the accuracy and competency of their designs, working drawings, and specifications, or other documents and services; nor shall that approval be deemed to be an assumption of that responsibility by the City for any defect in the designs, working drawings and specifications or other documents prepared by Consultant, its employees, subconsultants, and agents.

After acceptance of final plans and special provisions by the City, Consultant agrees, prior to and during the construction of this project, to perform those engineering services as may be required by City to correct errors or omissions on the original plans prepared by Consultant and to change the original design as required.

Section 12. Compliance With Laws.

This Contract and all of Consultants professional services and practices shall be subject to all applicable state, federal and local laws, rules or regulations, including without limitation, those which apply because the City is a public governmental agency or body. Consultant represents that it is in compliance with all such laws and eligible and qualified to enter into this Agreement.

Section 13. Notices.

Written notices under this Agreement shall be given to the parties at their addresses on page one by personal or registered mail delivery to the attention of the following persons:

City: Rob Hayes, P.E., Director of Public Services and Maryanne Cornelius, Clerk, with a copy to Thomas R. Schultz, City Attorney

Consultant: David Eno, P.E., Project Manager

Section 14. Waivers.

No waiver of any term or condition of this Agreement shall be binding and effective unless in writing and signed by all parties, with any such waiver being limited to that circumstance only and not applicable to subsequent actions or events.

Section 15. Inspections, Notices, and Remedies Regarding Work.

During the performance of the professional services by Consultant, City shall have the right to inspect the services and its progress to assure that it complies with this Agreement. If such inspections reveal a defect in the work performed or other default in this Agreement, City shall provide Consultant with written notice to correct the defect or default within a specified number of days of the notice. Upon receiving such a notice, Consultant shall correct the specified defects or defaults within the time specified. Upon a failure to do so, the City may terminate this Agreement by written notice and finish the work through whatever method it deems appropriate, with the cost in doing so being a valid claim and charge against Consultant;

or, the City may preserve the claims of defects or defaults without termination by written notice to Consultant.

All questions which may arise as to the quality and acceptability of work, the manner of performance and rate of progress of the work, and the interpretation of plans and specifications shall be decided by the City. All questions as to the satisfactory and acceptable fulfillment of the terms of this agreement shall be decided by the City.

Section 16. Delays.

No charges or claims for damages shall be made by the Consultant for delays or hindrances from any cause whatsoever during the progress of any portions of the services specified in this agreement, except as hereinafter provided.

In case of a substantial delay on the part of the City in providing to the Consultant either the necessary information or approval to proceed with the work, resulting, through no fault of the Consultant, in delays of such extent as to require the Consultant to perform its work under changed conditions not contemplated by the parties, the City will consider supplemental compensation limited to increased costs incurred as a direct result of such delays. Any claim for supplemental compensation must be in writing and accompanied by substantiating data.

When delays are caused by circumstances or conditions beyond the control of the Consultant as determined by the City, the Consultant shall be granted an extension of time for such reasonable period as may be mutually agreed upon between the parties, it being understood, however, that the permitting of the Consultant to proceed to complete the services, or any part of them, after the date to which the time of completion may have been extended, shall in no way operate as a waiver on the part of the City of any of its rights herein set forth.

Section 17. Assignment.

No portion of the project work, heretofore defined, shall be sublet, assigned, or otherwise disposed of except as herein provided or with the prior written consent of the City. Consent to sublet, assign, or otherwise dispose of any portion of the services shall not be construed to relieve the Consultant of any responsibility for the fulfillment of this agreement.

Section 18. Dispute Resolution.

The parties agree to try to resolve any disputes as to professional engineering services or otherwise in good faith. In the event that the parties cannot resolve any reasonable dispute, the parties agree to seek alternative dispute resolution methods agreeable to both parties and which are legally permissive at the time of the dispute. The parties agree to use their best efforts to resolve any good faith dispute within 90 (ninety) days notice to the other party. In the event the parties cannot resolve that dispute as set forth above, they may seek such remedies as may be permitted by law.

WITNESSES

Spalding DeDecker Associates, Inc.

By:
Its:

The foregoing _____ was acknowledged before me this ____ day of _____,
20____, by _____ on behalf of

_____.

Notary Public
_____ County, Michigan
My Commission Expires: _____

WITNESSES

CITY OF NOVI

By:
Its:

The foregoing _____ was acknowledged before me this ____ day of _____,
20____, by _____ on behalf of the City of Novi.

Notary Public
Oakland County, Michigan
My Commission Expires: _____

EXHIBIT A - SCOPE OF SERVICES

Consultant shall provide the City professional engineering services in all phases of the Project to which this Agreement applies as hereinafter provided. These services will include serving as the City's professional engineering representative for the Project, providing professional engineering consultation and advice and furnishing customary civil, structural, mechanical and electrical engineering services and customary engineering services incidental thereto, as described below.

A. Basic Services.

1. See attached.

B. Performance.

1. The Consultant agrees that, immediately upon the execution of this Agreement, it will enter upon the duties prescribed in this agreement, proceed with the work continuously, and make the various submittals on or before the dates specified in the attached schedule. The City is not liable and will not pay the Consultant for any services rendered before written authorization is received by the Consultant.
2. The Consultant shall submit, and the City shall review and approve a timeline for submission of plans and/or the completion of any other work required pursuant to this Scope of Services. The Consultant shall use its best efforts to comply with the schedule approved by the City.
3. If any delay is caused to the Consultant by order of the City to change the design or plans; or by failure of the city to designate right-of-way, or to supply or cause to be supplied any data not otherwise available to the Consultant that is required in performing the work described; or by other delays due to causes entirely beyond the control of the Consultant; then, in that event, the time schedules will be adjusted equitably in writing, as mutually agreed between the City and the Consultant at the moment a cause for delay occurs.
4. Since the work of the Consultant must be coordinated with the activities of the City (including firms employed by and governmental agencies and subdivisions working with the City), the Consultant shall advise the City in advance, of all meetings and conferences between the Consultant and any party, governmental agency, political subdivision, or third party which is necessary to the performance of the work of the Consultant.



City of Novi
Town Center Drive Rehabilitation
Grand River Ave to Crescent Blvd
Project Scope
August 16, 2013

Spalding DeDecker Associates, Inc. (SDA) is pleased to have been selected to provide design services for the rehabilitation of Town Center Drive from Grand River Avenue to Crescent Boulevard. The following sections summarize our understanding of the project and scope of services SDA will provide.

Overview and Understanding of Requested Services

Town Center Drive was constructed in 1986, with a pavement section of nine-inches of non-reinforced concrete. Based on available old plans, no aggregate base / subbase nor underdrains were placed. In 2012, Grand River Avenue was heavily rehabilitated, and the approaches to Town Center Drive reconstructed.

Grand River to 11 Mile Road – From Grand River Avenue to 11 Mile Road, the roadway is a boulevard section with two- to three-lanes in each direction. The pavement is in generally poor condition, with spalling and cracking of the slabs, and open or cracked joints. A portion of the southbound segment was recently repaired and overlaid with asphalt due to extreme deterioration during the previous winter.

Based on the City's non-motorized master plan, on-road bike lanes are proposed to be added to both north and south bound roadways in this segment. To help facilitate the bike lanes, the lane designations of the north bound roadway at 11 Mile may be altered to combine the through and right-turn lanes.

During scoping field reviews and subsequent discussion it was proposed that a portion of the northbound boulevard pavement may be retained and the pavement patched instead of replaced. The potential for only partial replacement will be examined during the formal design, but for budgeting purposes a full reconstruction has been estimated.

11 Mile Road to Crescent Boulevard – In this portion of the roadway, the pavement is in better overall condition, with good slab alignment, but several of the transverse joints exhibit surface spalling due to thermal expansion and incompressible material in the joints. There are sections with cracked slabs, but overall other than the joints the pavement surface is in fair condition.

It is proposed that the joints in poor condition are removed and replaced full-depth, and cracked slabs replaced with full-depth concrete pavement. Joints and cracks which are tight and are not spalled are proposed to be cleaned and sealed. Several drive approaches are in very poor condition, and will be removed and replaced. There are some segments of the existing sidewalk which have heaved or are broken, which will also be removed and replaced.

Proposed Scope of Services

SDA will provide design phase services to achieve the goals described and summarized above. This section will describe and summarize the services.

Design Phase Services

- Topographic Survey – SDA will perform full topographic survey for the reconstruction portion, and pickup topographic survey for the pavement rehabilitation portion of the project, with the intention of producing full plans for the entire roadway. The survey data will correspond to the State Plane Coordinate System Michigan, South Zone-6401, using NAD83, NAVD88 datum.
- Geotechnical Review – SDA will solicit three quotes from geotechnical service firms and with City input select one to perform pavement cores and soil borings, as well develop the pavement design for the reconstruct portion. The selected geotechnical firm will contract directly with the City and the cost is not included in our design fee.
- Pavement Repair Survey – In the rehabilitation section, specific repair locations will be identified in the field and shown on the plans.
- Drainage structures – The existing catch basins will be reviewed, and repairs detailed and quantified.
- Base Plans – following the topographic survey and initial layout of the project, SDA will submit base plans with preliminary cost estimates to the City to ensure the project goals and budget are being met.
- Preliminary Plans – Design work will proceed following base plan review and acceptance of the general intent of the project. Plans, specifications, and a detailed estimate will be submitted to the City for review.
- Final Plan Preparation – After receiving comments on the preliminary plans, the Final Plans and contract documents will be submitted to the City for final review.
- Project Advertisement and Bidding – The plans and project manual will be made available to Contractors, and SDA will review submitted bids and provide a recommendation for award.

Construction Cost Estimate and Proposed Fees

Based on our pre-qualification status with the City, engineering design fees are based on a percentage of the pre-design construction cost estimate. The fee percentage used depends on the type of services to be provided based on the proposed work. For the fee for this project, the portion of Town Center Drive from Grand River to 11 Mile will follow the “road construction” rates, and from 11 Mile to Crescent Circle will follow the “road rehabilitation” rates.

Please refer to the attached cost estimate for a detailed breakdown of the expected construction costs for each section of Town Center Drive.

<u>Segment</u>	<u>Construction Estimate</u>	<u>Design Fee Rate</u>	<u>Proposed Design Fee</u>
Grand River to 11 Mile	\$297,150	9.30%	\$27,635
11 Mile to Crescent Blvd	\$182,630	8.50%	\$15,524
Totals:	\$479,780		\$43,159

Thank you again for your selection of SDA to perform the design for the improvements on Town Center Drive. Please don't hesitate to contact me if you have any questions or comments regarding this submittal.

Kindest Regards,

SPALDING DEDECKER ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read "David P. Eno". The signature is written in a cursive style with a long horizontal stroke at the end.

David P. Eno, P.E.
Transportation Project Manager



SPALDING DEDECKER ASSOCIATES, INC.

905 South Boulevard East • Rochester Hills • Michigan 48307 • Tel 248 844 5400 • Fax 248 844 5404

TOWN CENTER DRIVE

Pre-Construction Engineer's Estimate

Project: Town Center Drive Rehabilitation Date: 8/16/2013
 Location: Grand River to Crescent Boulevard Project No. NV13-008
 Work: Concrete Roadway Rehabilitation - reconstruct from Grand By: DPE
River to 11 Mile; patching and joint repairs to Crescent Reviewed: EMK

Total Existing Roadway Length (FT): 2160

Reconstruct - Grand River to 11 Mile portion

Area to be Reconstructed (SYD): 4500

Item No.	Item Description	Est. Quantity	Unit	Unit Price (\$)	Total Cost (\$)
	<u>General Items</u>				
	Mobilization (5% max.)	1	LS	14,200.00	14,200.00
	Pre-Construction Video Review	1	LS	2,500.00	2,500.00
	Soil Erosion & Sedimentation Control	1	LS	1,500.00	1,500.00
	Maintaining Traffic	1	LS	6,500.00	6,500.00
	Pavt, Rem	4500	SYD	4.00	18,000.00
	Excavation, Earth	1750	CYD	5.00	8,750.00
	Subbase, CIP	3000	CYD	10.00	30,000.00
	Aggregate Base, 6 inch	4500	SYD	6.00	27,000.00
	Geogrid	4500	SYD	4.00	18,000.00
	Underdrain, Pipe, Open-Graded, 6 inch	1900	FT	6.00	11,400.00
	Curb and Gutter, Conc, Det F4	1970	FT	15.00	29,550.00
	HMA, 3E3 (3 inch)	740	TON	70.00	51,800.00
	HMA, 4E3 (2 inch)	500	TON	80.00	40,000.00
	HMA, 5E3 (1.5 inch)	370	TON	85.00	31,450.00
	Permanent Pavement Markings	1	LS	5,000.00	5,000.00
	Permit Allowance (RCOC)	1500	DLR	1.00	1,500.00
	Total Segment Construction Cost Estimate:				\$ 297,150.00

Rehabilitate - 11 Mile to Crescent Blvd Portion

Length of Roadway (FT): 1600

Item No.	Item Description	Est. Quantity	Unit	Unit Price (\$)	Total Cost (\$)
	<u>General Items</u>				
	Mobilization (5% max.)	1	LS	8,700.00	8,700.00
	Pre-Construction Video Review	1	LS	3,000.00	3,000.00
	Soil Erosion & Sedimentation Control	1	LS	1,500.00	1,500.00
	Maintaining Traffic	1	LS	4,000.00	4,000.00
	Catch Basin Repairs	6	EA	800.00	4,800.00
	Pavt, Rem	500	SYD	4.00	2,000.00
	Sidewalk, Rem	85	SYD	8.00	680.00
	Driveway, Nonreinf Conc, 8 inch	500	SYD	40.00	20,000.00
	Sidewalk, Conc, 4 inch	750	SFT	3.00	2,250.00
	Saw and Seal Joints in Good Condition	4000	FT	1.50	6,000.00
	Pavt Repr, Rem, Modified	1540	SYD	25.00	38,500.00
	Pavt Repr, Nonreinf Conc, 10 Inch, Modified	960	SYD	50.00	48,000.00
	Pavt Repr, Nonreinf Conc, Longit Joint, 10 inch	180	SYD	65.00	11,700.00
	Pavt Repr, Nonreinf Conc, Transv Joint, 10 inch	400	SYD	65.00	26,000.00
	Permanent Pavement Markings	1	LS	4,500.00	4,500.00
	Permit Allowance (RCOC)	1000	DLR	1.00	1,000.00
Total Segment Construction Cost Estimate:					\$ 182,630.00

Total Project Construction Cost Estimate:	\$ 479,780.00
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