



CITY of NOVI CITY COUNCIL

Agenda Item J
March 22, 2010

SUBJECT: Approval to award a contract for design engineering services for the 2010 Neighborhood Road Program to Spalding DeDecker and Associates (SDA) for a design fee of \$69,170.

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

CITY MANAGER APPROVAL *[Signature]*

| | |
|------------------------|---|
| EXPENDITURE REQUIRED | \$69,170 |
| AMOUNT BUDGETED | \$135,000 (Engineering 2009 Neighborhood Roads) |
| APPROPRIATION REQUIRED | \$30,053 |
| LINE ITEM NUMBER | 203-203.00-805.429 |

BACKGROUND INFORMATION:

Each year, the City of Novi selects residential streets for reconstruction, repaving, repair, and/or rehabilitation based on PASER ratings, staff's field observations and resident concerns. Attached is a list and map of the streets proposed for the 2010 Neighborhood Road Program (see memo from Ben Croy dated March 12, 2010). The final list of roads will be determined once the budget is finalized and further review of each segment is completed. Please note that this list may contain more streets than can be completed this year depending on the extent of the work required at each location and the final budget amount.

Spalding DeDecker and Associates (SDA) will be assisting the Engineering Division with the design and construction engineering services for this project. SDA's design fee is based on the fixed fee schedule established in the Agreement for Professional Engineering Services for Public Projects and an assumed project budget of \$1,500,000 (to be determined in budget process for FY 2010/11) which includes engineering fees and construction costs for the current year and design engineering for the following year. The design fees for the project were calculated using two different fee curves from the Agreement for Professional Services: 6.35% of the estimated construction cost for the portion of the project that involves reconstruction of the road and will require a topographical survey, and 4.85% of the estimated construction cost for the portion of the project that will involve rehabilitation, repaving, or repair and does not require topographical survey. Based on the initial field observations, staff has recommended a mixture of 65% reconstruction and 35% rehabilitation, repaving and repair; therefore the design fee is \$69,170. The construction phase engineering fees will be awarded at the time of construction award using the same mix of construction technique and will be based on the contractor's bid and the fee percentage in the Professional Engineering Services for Public Projects. SDA's proposed scope, estimate and budget and the draft supplementary agreement are enclosed.

SDA has successfully completed the Twelve Mile Road Paving project, Crowe and Ingersol Road Reconstruction project, 2009 Sidewalk Program, and the West Oaks Regional Detention Basin project.

It is anticipated that construction would commence on the concrete and asphalt streets in July 2010 and the work would be substantially complete by September 2010.

RECOMMENDED ACTION: Approval to award a contract for design engineering services for the 2010 Neighborhood Road Program to Spalding DeDecker and Associates (SDA) for a design fee of \$69,170.

| | 1 | 2 | Y | N |
|-------------------------|---|---|---|---|
| Mayor Landry | | | | |
| Mayor Pro Tem Gatt | | | | |
| Council Member Crawford | | | | |
| Council Member Fischer | | | | |

| | 1 | 2 | Y | N |
|-------------------------|---|---|---|---|
| Council Member Margolis | | | | |
| Council Member Mutch | | | | |
| Council Member Staudt | | | | |

MEMORANDUM



TO: BRIAN COBURN, PE; SENIOR CIVIL ENGINEER
FROM: BEN CROY, PE; CIVIL ENGINEER *BC*
SUBJECT: 2010 NEIGHBORHOOD ROAD PROGRAM
DATE: MARCH 12, 2010

The preliminary assessment of the road segments to be included in the 2010 Neighborhood Roads Program has been completed. A list of roads has been assembled which will now be reviewed further for reconstruction, repair, repaving, or rehabilitation this construction season. The consultant selected for this project will assist us with the design and construction management.

The selected roads have a PASER rating between 3 and 5, as this annual road program continues to look at the lower rated roads within the City. The roads will be evaluated further by the selected consultant to determine the appropriate repair method based on the City's asset management approach, designed to extend the life of the City's roads in the most cost-effective manner. The attached map shows the location of the selection roads.

| Road Segment | From | To | Material | PASER | Length (mi) |
|---------------------|---------------|-----------------|----------|--------------|-------------|
| Sutherland | Portsmouth | Amherst | Concrete | 3 | 0.21 |
| Sheffield | Worcester | Daleview | Concrete | 3 | 0.23 |
| Glen Haven East/Cir | Eight Mile | Broquet | Concrete | 3/4 | 0.46 |
| Cumberland | Center St (N) | Center St (S) | Concrete | 5 | 0.39 |
| Mansfield | Yorkshire | Newberry | Asphalt | 4 | 0.08 |
| Cascade | Singh Blvd | Heatherbrae | Asphalt | 4/5 | 0.36 |
| Yorkshire | Huntington | Mansfield | Asphalt | 5 | 0.39 |
| Meridian | Cascade | Heatherbrae Way | Asphalt | 5 | 0.15 |
| | | | | Total | 2.27 |

Attached are a few pictures that are representative of the roads being evaluated for this year's program. A final listing of streets and the recommended repair method will be determined once the project budget is known and we have further evaluated the repair techniques with the consultant.

MAP INTERPRETATION NOTICE

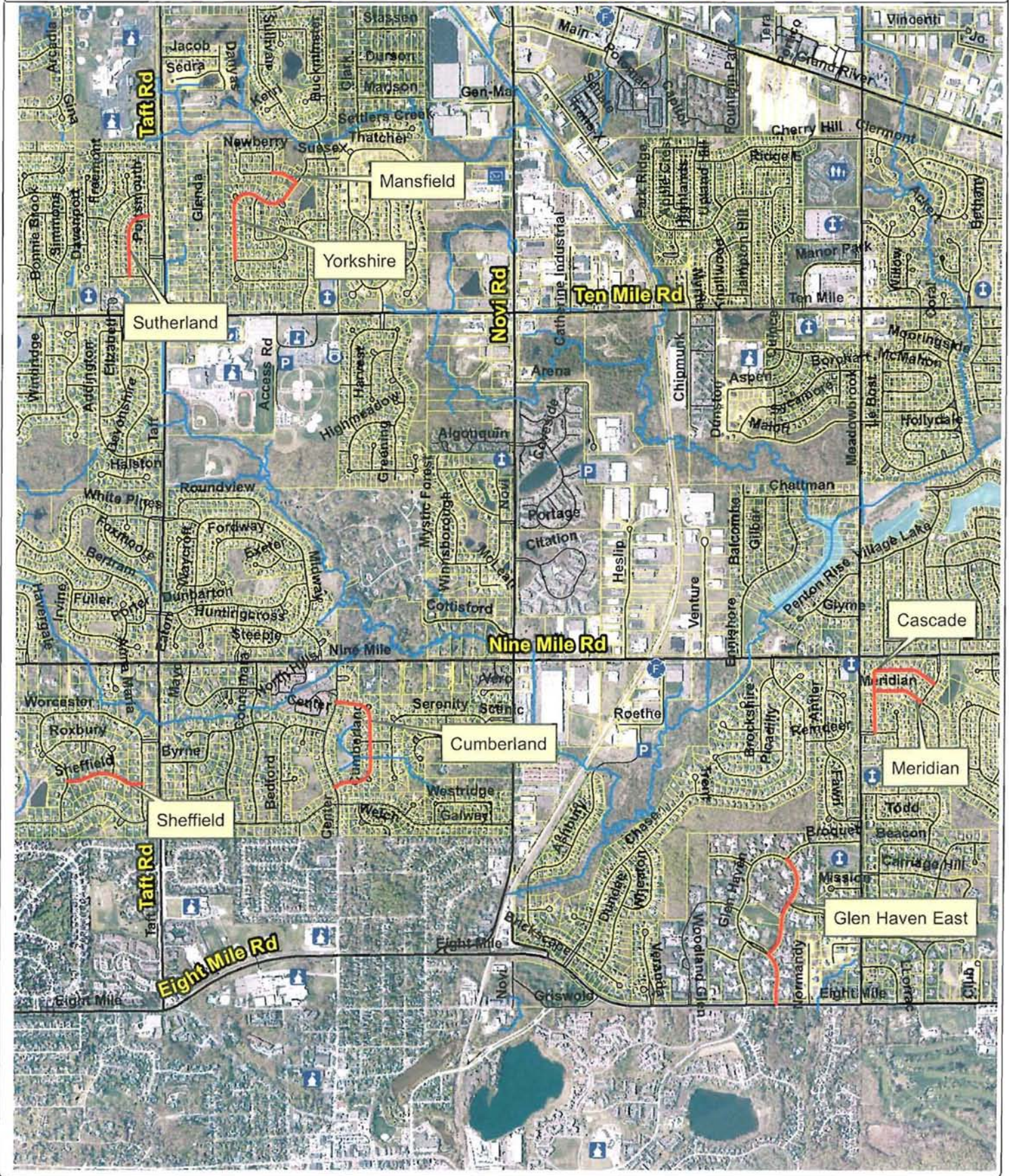
Map information depicted is not intended to replace or substitute for any official or primary source. This map was intended to meet National Map Accuracy Standards and use the most recent, accurate sources available to the people of the City of Novi. Boundary measurements and area calculations are approximate 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



0 280 560 1,120 1,680 2,240
Feet

2010 Neighborhood Road Program Candidates



EXAMPLE CONCRETE ROADS



Glen Haven Circle



Sutherland Dr

EXAMPLE ASPHALT ROADS



Meridian Ln



Yorkshire Dr

SUPPLEMENTAL PROFESSIONAL ENGINEERING SERVICES AGREEMENT

2010 NEIGHBORHOOD ROADS PROGRAM

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 September 24, 2009.

The project includes the design and the preparation of plans and specifications for the 2010 Neighborhood Roads Program. Each of the selected road segments will be designed for rehabilitation or reconstruction following an evaluation of appropriate construction methods. The most cost-effective construction method will be implemented for each road segment, based on the available budget and the City's asset management philosophy.

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.

- a. Design Phase Services: The Consultant shall complete the design phase services as described herein for a lump sum fee of \$69,170, which is calculated as indicated on the design and construction engineering fee curve provided in Exhibit B of the Agreement for Professional Engineering Services for Public Projects and more specifically as follows:

- Segments that require reconstruction (which includes full topographic survey) shall have a design fee calculated at 6.35% of the estimate construction cost. The current construction cost estimate for reconstruction work is \$771,861.
 - Segments that require rehabilitation (which does not require full topographic survey) shall have a design fee calculated at 4.85% of the estimate construction cost. The current construction cost estimate for reconstruction work is \$415,617.
- b. Construction Phase Services will be awarded at the time of construction award, should it occur.

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: James L. Van Tiflin, 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: James L. Van Tiflin, P.E.
Its: Project Manager

The foregoing _____ was acknowledged before me this ____ day of _____,
200__, by _____ on behalf

_____.

Notary Public
_____ County, Michigan
My Commission Expires: _____

WITNESSES

CITY OF NOVI

By:
Its:

The foregoing _____ was acknowledged before me this ____ day of _____,
200__, by _____ on behalf of the City of Novi.

Notary Public
Oakland County, Michigan
My Commission Expires: _____

DRAFT

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.

[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
2010 Neighborhood Road Program
Project Scope**

Spalding DeDecker Associates, Inc. (SDA) is pleased to have been selected to provide design and construction observation services for the 2010 Neighborhood Road Program (NRP). The following information summarizes the agreed-upon scope of services SDA will provide for this project.

Overview

The project will include approximately 6,800' of concrete and 5,200' of hot-mix asphalt (HMA) roadways as summarized in the table below and the attached map.

| Road Segment | From | To | Material | PASER | Length (mi) |
|---------------------|---------------|-----------------|----------|--------------|-------------|
| Sutherland | Portsmouth | Amherst | Concrete | 3 | 0.21 |
| Sheffield | Worcester | Daleview | Concrete | 3 | 0.23 |
| Glen Haven East/Cir | Eight Mile | Broquet | Concrete | 3/4 | 0.46 |
| Cumberland | Center St (N) | Center St (S) | Concrete | 5 | 0.39 |
| Mansfield | Yorkshire | Newberry | HMA | 4 | 0.08 |
| Cascade | Singh Blvd | Heatherbrae | HMA | 4/5 | 0.36 |
| Yorkshire | Huntington | Mansfield | HMA | 5 | 0.39 |
| Meridian | Cascade | Heatherbrae Way | HMA | 5 | 0.15 |
| | | | | Total | 2.27 |

Each roadway material type (concrete and HMA) will be designed, bid, and constructed as a separate project. At this time, the exact work for each roadway segment is not known. Based upon discussions with City staff, PASER ratings, previous NRP projects, it is assumed that approximately 65% of all roadways will require reconstruction, with the remainder being rehabilitated. Rehabilitation of concrete roads includes joint and concrete panel repairs, and for HMA roadways includes milling and overlay.

Following award, SDA and City staff will visit each roadway together and jointly discuss the planned fix for each.

Concrete Roadways – Design Phase

Following the project kick-off meeting with the City, the following design tasks will be performed for the concrete roadways portion of the project:

- Field Review – driving and walking the roadways (initially with City staff) to review the potential fix for each roadway (reconstruction or patching), identifying areas of concern, and taking photos to log typical and atypical conditions.
- Geotechnical Investigation – SDA will solicit quotes from three geotechnical firms to obtain pavement cores and shallow borings for the subject roadways (scope will include HMA roads as well). The firm presenting the best combination of fee and schedule will be recommended, and the City will contract directly with the firm.

- Topographic Survey – SDA will perform complete topographic survey for the portions of the selected concrete streets which will be reconstructed. The survey data will correspond to the State Plane Coordinate System Michigan, South Zone-6401, using NAD83, NAVD88 datum.
- Preliminary Plans – Plans will be prepared showing existing and proposed typical cross sections and profiles for roads to be reconstructed; plan view of areas to be patched with summary tables; and supporting details and notes (ADA, irrigation and tree protection, maintaining traffic, etc.)
- Permit Application – a permit will be required from the Wayne County Department of Public Services (WCDPS) to work and place construction signing within the right-of-way of Eight Mile Road at Glen Haven East.
- Plan Review – Plans will be submitted to the City at approximately 75% completion, for review and comments to be received at a review meeting.
- Final Plan Preparation – Plans and specifications / contract documents will be finalized and prepared for advertising.
- Bidding Phase – The City will place an advertisement, and plans will be made available by SDA for potential bidders. SDA will respond to contractor inquiries and issue required addendum.
- Bid Opening and Award – SDA will review submitted bids, prepare bid tabulations, review references, and recommend award.

HMA Roadways – Design Phase

Following the project kick-off meeting with the City, the following design tasks will be performed for the HMA roadways portion of the project:

- Field Review – driving and walking the roadways (initially with City staff) to review the potential fix for each roadway (mill and overlay or reconstruction), identifying areas of concern, and taking photos to log typical and atypical conditions.
- Topographic Survey – If an extensive portion of a road or roads is determined to require full reconstruction, SDA will perform complete topographic survey for the portions of the selected HMA street which will be reconstructed. The survey data will correspond to the State Plane Coordinate System Michigan, South Zone-6401, using NAD83, NAVD88 datum.
- Review Old Plans – SDA will review as-built plans provided by the City of the subject roadways to evaluate previously specified materials.
- Geotechnical Investigation – SDA will solicit quotes from three geotechnical firms to obtain pavement cores and shallow borings for the subject roadways (scope will include concrete roads as well). The firm presenting the best combination of fee and schedule will be recommended, and the City will contract directly with the firm.
- Preliminary Recommendations – Based on review of the available plans and field investigation, recommendations will be developed for each roadway which is expected to cover areas to mill and overlay or reconstruct, and areas for drainage improvements.
- Final Recommendations – After receiving the geotechnical report, final recommendations and quantity tables will be prepared in log format.
- Plan Review – Log plans will be submitted to the City at approximately 75% completion, for review and comments to be received at a review meeting.
- Final Log Preparation – Final log plans and specifications / contract documents will be finalized and prepared for advertising.

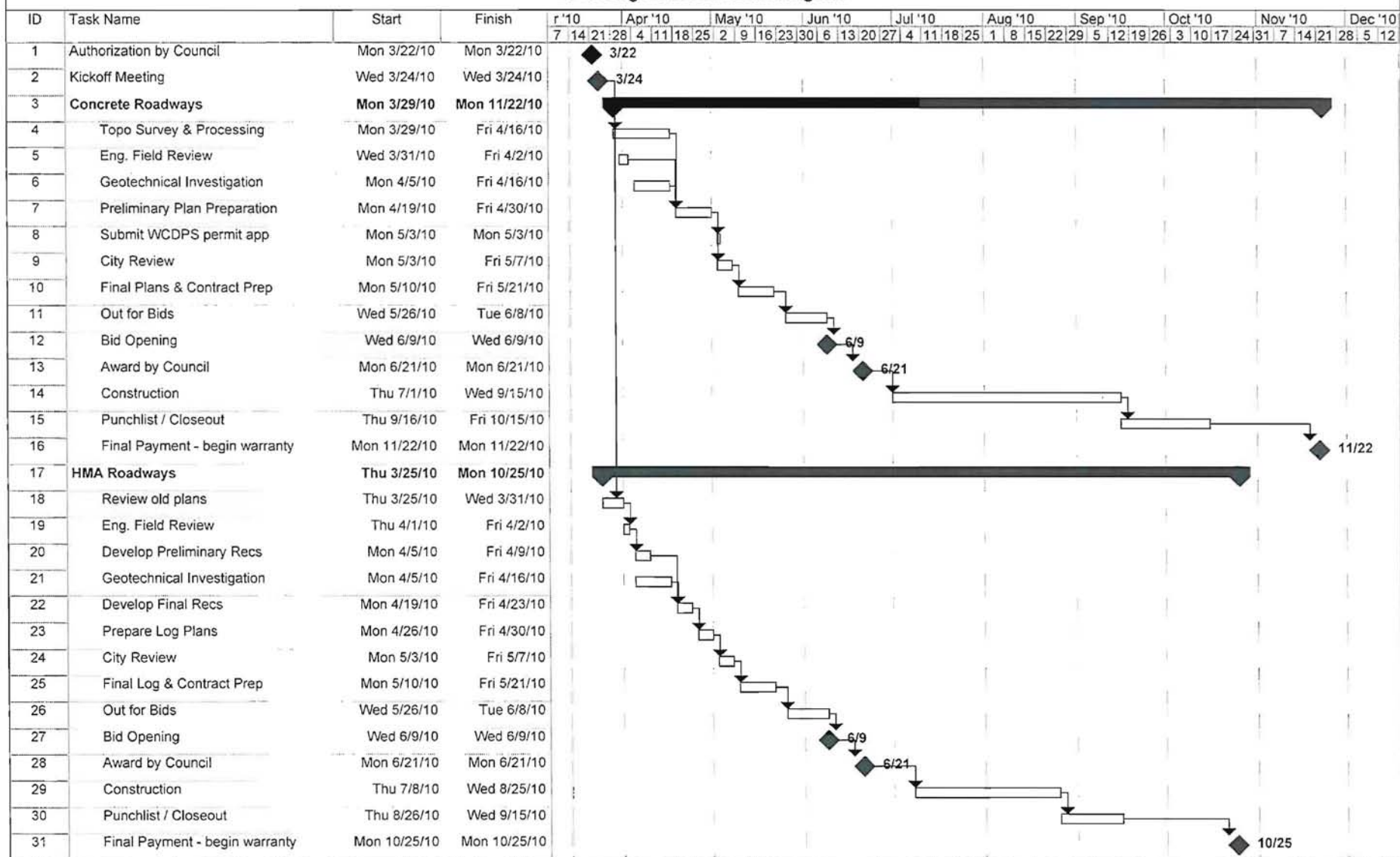
- Bidding Phase – The City will place an advertisement, and log plans will be made available by SDA for potential bidders. SDA will respond to contractor inquiries and issue required addendum.
- Bid Opening and Award – SDA will review submitted bids, prepare bid tabulations, review references, and recommend award.

Concrete and HMA Roadways – Construction Phase Services

After the contracts have been awarded by Council, SDA will begin construction phase services which will include:

- Compile contract books for execution – includes obtaining bonds, insurance information, and warranty documents.
- Pre-construction meeting – each contract will have a separate pre-con meeting.
- Construction Observation – SDA will provide full-time construction observation for each project.
- Materials Testing – prior to project award, SDA will solicit quotes from three materials testing firms. The firm offering the best value to the City will be recommended for award and contracted directly with the City. SDA will direct the materials testing firm on behalf of the City.
- Construction Administration – SDA will provide office administration of the project, reviewing shop drawings, material testing reports, mix designs, etc. as well as reviewing payment requests.
- Project Closeout – Following the major contractor operations, SDA will prepare a preliminary punch-list, lead a final walk-through with the City and final punch-list, and recommend final payment and contract close-out when all work is completed.
- As-constructed drawings – SDA will prepare as-constructed drawings and submit the files electronically to the City in PDF as well as Auto-Cad format for the concrete roadways, and updated log sheets in PDF format for the HMA roadways.

**City of Novi
2010 Neighborhood Road Program**



Project: 2010 NRP
Date: March 15, 2010

| | | | | | |
|----------|-------|-----------------|---|--------------------|-----|
| Task | [] | Milestone | ◆ | External Tasks | [] |
| Split | | Summary | ▬ | External Milestone | ◆ |
| Progress | ▬ | Project Summary | ▬ | Deadline | ↓ |



SPALDING DEDECKER ASSOCIATES, INC.

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

3/15/2010

Pre-Design Summary of Estimated Construction Costs

(see attached estimates)

| | | |
|--|-----------|---------------------|
| Concrete Roadways Construction Estimate: | \$ | 751,566.00 |
| HMA Roadways Construction Estimate: | \$ | 435,763.00 |
| Total 2010 NRP Construction Estimate: | \$ | 1,187,329.00 |

\$ 771,861.00 estimated to be reconstructed

\$ 415,617.00 estimated to be rehabilitated

Professional Services - Design

| | | |
|---|----------------------------|------------------|
| Survey, Design, & Plan Preparation - Reconstruct: | 6.35% of construction est. | 49,012.50 |
| Design & Plan Preparation - Rehabilitation: | 4.85% of construction est. | 20,157.50 |
| Total Design Fee Estimate: | | 69,170.00 |

Professional Services - Construction (estimated)

| | | |
|--|---------------------------|-------------------|
| Pavement Cores & Soil Borings (TBD): | | 5,200.00 |
| Construction Observation (SDA): | 90 days (\$615/day) | 55,350.00 |
| Construction Administration (SDA): | 4.32% of construction bid | 51,300.00 |
| Materials Testing (TBD): | | 30,000.00 |
| Total Construction Fees Estimate: | \$ | 141,850.00 |

Total Pre-Design Project Cost Estimate: \$ 1,398,349.00

SDA = services to be performed by Spalding DeDecker Associates, Inc.

TBD = firm to be solicited by SDA and selected by the City

Note - Design and Construction Administration fees as a percent of construction are estimates based upon pre-design assumptions for reconstruction and rehabilitation. The actual rates used may require adjustment if the final design varies significantly from the assumed design.



SPALDING DEDECKER ASSOCIATES, INC.

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

Project: 2010 NRP - Concrete Roads pre-design estimate Date: 3/15/2010
 Location: Various (see map) Project No. NV10
 Work: Neighborhood Streets - concrete roadway reconstruction By: D. Eno
or patching / repairs Reviewed: J. Van Tiflin

Engineer's Estimate of Probable Construction Cost

| Item No. | Item Description | Est. Quantity | Unit | Unit Price (\$) | Total Cost (\$) |
|---|--|---------------|------|-----------------|----------------------|
| Total roadway length = 6,800' | | | | | - |
| Assuming 65% requires reconstruction, remainder repaired (15% of surface) | | | | | - |
| | Mobilization (5% max.) | 1 | LS | 35,600.00 | 35,600.00 |
| | Pre-Construction Video Review | 1 | LS | 1,500.00 | 1,500.00 |
| | Pavt, Rem | 13800 | SYD | 5.50 | 75,900.00 |
| | Sidewalk, Rem | 120 | SYD | 5.00 | 600.00 |
| | Driveway, Rem | 700 | SYD | 5.00 | 3,500.00 |
| | Subgrade Undercut | 300 | CYD | 15.00 | 4,500.00 |
| | Aggregate Base, 8 inch | 15000 | SYD | 7.25 | 108,750.00 |
| | Underdrain, Subgrade, Open-Graded, 4 inch | 8840 | LFT | 5.00 | 44,200.00 |
| | Dr Structure, Tap, 4 inch | 20 | EA | 200.00 | 4,000.00 |
| | Conc Pavt w/ Integral Curb, Nonreinf, 7 inch | 13800 | SYD | 27.00 | 372,600.00 |
| | Driveway, Nonreinf Conc, 6 inch | 700 | SYD | 24.00 | 16,800.00 |
| | Pavt Repr, Rem | 1200 | SYD | 10.00 | 12,000.00 |
| | Pavt Repr, Nonreinf Conc, 8 inch | 1200 | SYD | 30.00 | 36,000.00 |
| | Sidewalk, Conc, 4 inch | 864 | SFT | 3.50 | 3,024.00 |
| | Sidewalk Ramp, ADA | 216 | SFT | 12.00 | 2,592.00 |
| | Restoration | 6000 | SYD | 4.00 | 24,000.00 |
| | Maintenance of Traffic | 1 | LS | 2,000.00 | 2,000.00 |
| | Soil Erosion & Sedimentation Control | 1 | LS | 4,000.00 | 4,000.00 |
| TOTAL CONSTRUCTION ESTIMATE (Concrete): | | | | | \$ 751,566.00 |



SPALDING DEDECKER ASSOCIATES, INC.

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

Project: 2010 NRP - HMA Roads pre-design estimate Date: 3/15/2010
 Location: Various (see map) Project No. NV10
 Work: Neighborhood Streets - HMA roadway construction By: D. Eno
milling and overlay with partial full-depth replacement Reviewed: J. Van Tiflin

Engineer's Estimate of Probable Construction Cost

| Item No. | Item Description | Est. Quantity | Unit | Unit Price (\$) | Total Cost (\$) |
|--|---|---------------|------|-----------------|----------------------|
| Total roadway length = 5,200' | | | | | - |
| Assuming 65% requires full-depth replacement; remainder mill and overlay | | | | | - |
| | Mobilization (5% max.) | 1 | LS | 20,700.00 | 20,700.00 |
| | Pre-Construction Video Review | 1 | LS | 1,200.00 | 1,200.00 |
| | Pavt, Rem | 8100 | SYD | 5.50 | 44,550.00 |
| | Cold Milling HMA Surface | 2600 | SYD | 1.50 | 3,900.00 |
| | Curb and Gutter, Rem | 5200 | LFT | 5.00 | 26,000.00 |
| | Sidewalk, Rem | 160 | SYD | 5.00 | 800.00 |
| | Subgrade Undercut | 240 | CYD | 15.00 | 3,600.00 |
| | Aggregate Base, 8 inch | 8100 | SYD | 7.25 | 58,725.00 |
| | Underdrain, Subgrade, Open-Graded, 4 inch | 5200 | LFT | 5.00 | 26,000.00 |
| | Dr Structure, Tap, 4 inch | 24 | EA | 200.00 | 4,800.00 |
| | Curb and Gutter, Conc, Det D2 | 5200 | LFT | 18.00 | 93,600.00 |
| | HMA in milled areas (2.5" avg) | 358 | TON | 60.00 | 21,480.00 |
| | HMA in recon areas (4" avg) | 1782 | TON | 60.00 | 106,920.00 |
| | Sidewalk, Conc, 4 inch | 1152 | SFT | 3.50 | 4,032.00 |
| | Sidewalk Ramp, ADA | 288 | SFT | 12.00 | 3,456.00 |
| | Restoration | 3000 | SYD | 4.00 | 12,000.00 |
| | Maintenance of Traffic | 1 | LS | 2,000.00 | 2,000.00 |
| | Soil Erosion & Sedimentation Control | 1 | LS | 2,000.00 | 2,000.00 |
| TOTAL CONSTRUCTION ESTIMATE (Concrete): | | | | | \$ 435,763.00 |