

# CITY of NOVI CITY COUNCIL

**Agenda Item 1**  
**April 23, 2012**

**SUBJECT:** Consideration of recommendation from Consultant Review Committee to award a contract for Civil Engineering Private Development Field Services to Spalding DeDecker Associates, Inc. (for a two-year term and three one-year renewal options) and adoption of associated fees and charges effective May 1, 2012.

**SUBMITTING DEPARTMENT:** Department of Public Services, Engineering Division <sup>RM</sup> <sub>BTC</sub>  
Community Development Department

**CITY MANAGER APPROVAL:**

**BACKGROUND INFORMATION:**

The contract with the City's current consultant for providing civil engineering field services for private development projects, Spalding DeDecker & Associates, Inc., expires on May 1, 2012. This consultant primarily provides engineering services related to private development through the review of residential plot plans, construction inspection, project close-out paperwork assistance, and the completion of record drawings. Spalding DeDecker is the current engineering field services consultant and was awarded a two-year contract on March 23, 2009 that became effective on May 1, 2009. A one-year renewal of the contract was approved by City Council on April 18, 2011 and expires on April 30, 2012.

The pending expiration of the contract resulted in the City issuing a Request for Qualifications (RFQ) to consulting engineering firms meeting the minimum qualifications detailed in the attached RFQ. Listing minimum qualifications up-front helped to ensure that the responding firms met certain critical criteria, such as distance from the City, number of qualified staff, etc. The RFQ was posted publicly and resulted in responses from five firms.

The five submittals were evaluated by staff from Public Services, Community Development and Finance Departments using the Qualifications Based Selection (QBS) process, with an emphasis on each firm's experience and understanding of the scope. The results of the staff review of qualifications are as follows:

<b>Firm</b>	<b>Staff Review Score</b>	<b>Proposal Rank</b>
<b>Spalding DeDecker &amp; Associates</b>	<b>2280</b>	<b>1</b>
Stantec Consulting Michigan	1755	2
Orchard, Hiltz & McCliment	1435	3
Giffels Webster Engineers	1410	4
Nowak & Fraus Engineers	620	5

Of the five firms that submitted qualifications, Spalding DeDecker & Associates, Inc. (SDA) had the highest staff review score and met all the requirements listed in the RFQ (see attached SDA proposal dated March 13, 2012 and Engineering staff's qualifications scoring summary for reference). The review process consisted of two components: 1) reviewing, commenting on and scoring each of the qualifications; and 2) opening sealed fee proposal forms from the two highest scoring firms.

The fees of the two firms with the highest qualifications scores (SDA and Stantec) were opened and analyzed by staff. The analysis shows that the proposals from each of the firms would represent a reduction in the fees currently paid by the developer in all cases except for one of the soil erosion permit scenarios. The fees for several representative projects were calculated and are presented in the attached March 30, 2012 memo. A fee comparison breakdown of the two highest scoring firms as well as the incumbent firm's 2009 extended contract fee amounts are attached for reference.

The staff review team recommends award of a consulting agreement with SDA based on the review of qualifications and proposed fees. SDA has performed field civil engineering services for private development for Novi since 2005 and staff has been satisfied with SDA's performance. SDA received the highest review score and has proposed fees that are competitive with the other firm and are generally reduced from those awarded in 2009.

The Consultant Review Committee (CRC) convened on this matter on Monday, April 9, 2012 and concurs with staff's recommendation to award a contract to SDA (see attached minutes). CRC recommends a two-year term with three one-year renewal options.

There is one change noted from the SDA fee proposal as submitted based on discussions between SDA and staff. The footing inspection fee has been reduced from \$160 per inspection to \$135 per inspection with the removal of the notation that one re-inspection would be included. All footing re-inspections and inspections that the developer/builder requests but is not present for will be at the additional inspection fee of \$100.

The work completed under this agreement is completely funded by fees charged to developers and builders. Therefore, staff recommends approval of the adoption of fees and charges per the fee proposal provided by SDA dated March 13, 2012 (see Attachment A, attached) with the amended footing inspection fee noted above.

The wording in the attached agreement is exactly the same as was drafted by the City Attorney and executed by SDA in 2009.

**RECOMMENDED ACTION:** Consideration of recommendation from Consultant Review Committee to award a contract for Civil Engineering Private Development Field Services to Spalding DeDecker Associates, Inc. (for a two-year term and three one-year renewal options) and adoption of associated fees and charges effective May 1, 2012.

	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				



# CITY COUNCIL

CITY OF NOVI

Consultant Review Committee Meeting

**Monday, April 9, 2012 at 6:15 p.m.**

Mayor's Conference Room | Novi Civic Center | 45175 W. Ten Mile Road

Member David Staudt called the meeting to order at 6:18 pm.

**MEMBERS PRESENT:** Council Members Casey, Staudt, Wrobel

**STAFF PRESENT:** Victor Cardenas, Assistant City Manager  
Rob Hayes, Director of Public Services/City Engineer  
Kathy Smith-Roy, Finance Director  
Melissa Place, Administrative Assistant

## APPROVAL OF AGENDA

Moved by Casey, supported by Wrobel; **CARRIED UNANIMOUSLY:** To approve the agenda as presented.

## APPROVAL OF MINUTES

Moved by Casey, supported by Wrobel; **CARRIED UNANIMOUSLY:** To approve the March 5, 2012 meeting minutes as presented.

## PURPOSE OF THE MEETING

1. Discuss recommendation to engage Spalding DeDecker Associates to provide Civil Engineering Field Services.

Mr. Victor Cardenas announced the purpose of the meeting is to discuss Civil Engineering Field Services. Mr. Hayes is in attendance to open the discussion and answer any questions. Mr. Rob Hayes began the discussion by explaining the City uses a consulting firm to provide civil engineering field services for private development projects. Some typical tasks for this group include construction inspections, residential plot plans, and close out of documents. The current contractor since 2009, Spading DeDecker Associates (SDA), contract will expire on April 30, 2012. A Request for Qualifications was initiated and the City received five responses. A team of four staff members reviewed the submittals and rated each using the Qualifications Based Selection system. Once the ratings were completed, the top two firms were identified as SDA and Stantec, and their fee schedules were opened. While Stantec had a couple of fees lower the thought was to stay with SDA since the level of service has been good and there is the availability of firms bidding to see current fees posted on the City's website. The direction seems to be to offer a three year contract with two one year options.

Member Staudt asked why the contract is being reviewed after three years. Mr. Hayes' understanding is that a three year term is now typical over the two year term. Member Staudt asked if civil engineering is the largest single fee based consultant for the City. Mr. Hayes said it is the largest for the Department of Public Services followed by three engineering consultants of

URS, SDA and Orchard, Hiltz & McCliment. Member Staudt asked why only one firm for this service? Mr. Hayes commented the firm is more streamlined and has the ability to increase staff if/when needed.

Member Laura Marie Casey asked what the difference is between SDA and Stantec? Mr. Hayes said previous experiences with Stantec which was known earlier as Ayres Lewis was difficult to work with at times. Member Staudt asked why come up with three years and then two one year renewal options? Mr. Hayes said based on the last contract approved with Gallagher. Member Staudt asked if there are any consequences if SDA does not perform because five years is a long time. Member Wayne Wrobel asked if there is a termination clause. Mr. Hayes answered yes. Member Wrobel asked what is the staff time for the evaluation and rating process? Mr. Hayes said about 40 hours and the development of the Request for Qualifications with a Finance staff member. Member Staudt asked if a large group of firms were contacted. Mr. Hayes said yes. It went out to a lot of firms but now there are firms that realize they do not have the resources to perform the amount of work generated by the City. Member Staudt is more comfortable with a shorter front-end term and then judge on the prior year. It does not hurt for the Committee to ask Mr. Hayes what his experience has been for that year.

**Moved by Casey, supported by Wrobel; CARRIED UNANIMOUSLY: To recommend to City Council a contract for Civil Engineering Field Services to Spalding DeDecker Associates for a two-year term with three one-year renewal options.**

Mr. Rob Hayes left the meeting.

## **2. Discuss Professional Auditor proposals and potential meeting dates.**

Mr. Cardenas commented Andrews Hooper & Pavlik has been the contractor since 2010. The contract term was for two-years with two one-year renewals. He explained staff decided to go out for bid again because the Finance Department was monitoring the going rates for new contracts around the area and discovered they were less than the agreed upon rates with the City's current auditor. Mr. Cardenas provided a brief overview of the Request for Proposal process, which is facilitated by the Finance Department. Five firms responded to the advertisement and the City's current and former auditors of Andrews Hooper & Pavli and Plante & Moran, were rated the highest by the evaluation team. Member Staudt commented the previous firm of Plante & Moran missed an item that was a rather major accounting error and then did not take responsibility. Member Casey is not comfortable with them as well. Mr. Cardenas explained that the Finance Departments rate assumptions were correct as proposed fees came in lower than three years ago. The City can realize a maximum savings of about \$10,000. The question before this Committee is whether you want to interview any or all firms.

Member Staudt asked if there is any other reason other than financial to change firms? Why go through this process? Is there an issue? Ms. Kathy Smith-Roy joined the meeting at 6:35 p.m. Ms. Smith-Roy commented there have been no issues with performance. Member Staudt asked again they go through this process? Ms. Smith-Roy commented Plante & Moran is strong with their expertise on GASB. They also deal with larger municipalities. Rehmann Robson did not have enough hours to do the audit as well. The estimation error on the spreadsheet that Member Staudt referred to did not have an impact on the accrual accounting. Member Staudt stated the non-responsibility did not sit well with him or the Council. What are you looking for other than

financial gain? Ms. Smith-Roy said that and technical interpretations. So, as a group Plante & Moran would be better, said Member Staudt. Ms. Smith-Roy said yes. Andrews Hooper & Pavlik lost a significant IT component but we can work with whomever City Council approves.

Member Wrobel asked Member Casey why she is not sold on Plante & Moran. Member Casey explained her experience was with the CRESA group. She got a negative sense with the experience. Member Staudt would like to think about it before making a quick decision. He would like to interview the firms of Plante & Moran and Andrews Hooper & Pavlik. The consensus was to interview the two firms. Mr. Cardenas will contact the Members to get a date for the interviews and then contact the perceptive firms for scheduling.

**AUDIENCE COMMENTS – None**

**Moved by Casey, supported by Wrobel; CARRIED UNANIMOUSLY: To adjourn the meeting at 6:50 p.m.**

DRAFT

Proposed Fees and Charges



cityofnovi.org

## ATTACHMENT A

### FEE DETERMINATION FORM

City of Novi, Michigan

<u>Description</u>	<u>Fee</u>	<u>Unit/Rate</u>
<b>Land Improvement Review</b>		
Residential (Plot Plans)		
Review	\$ 100	Lump sum
Each review for Builder initiated change	\$ 100	Lump sum
Initial inspection and one re-inspection	\$ 160	Lump sum
Footing inspection <del>and one re-inspection</del>	\$ <del>160</del> \$135	Lump sum
Any additional inspections	\$ 100	Lump sum
Additional elevation inspection (after second)	\$ 100	Lump sum
Final grade inspections (certifications)	\$ 135	Lump sum
Sidewalk/Driveway Approach Inspections (Proposed ROW)	\$ 135	Lump sum
Minor Land Improvement		
Review	\$ 75	Lump sum
Inspection	\$ 75	Lump sum
<b>Construction Inspection and Acceptance Document Review</b>		
<b>(Fixed Fee % of Construction Cost to include initial Pre-construction and TCO preparation meetings; ROW, Detention Basin and Site Amenities inspections, reporting and follow-up)</b>		
(1) *Public Utilities/Roads (construction cost < or = \$50,000)	% 11.25	Min. Fee \$ 1250
(2) *Public Utilities/Roads (construction cost \$50,001 to \$100,000)	% 9.25	Min. Fee \$ 5625
(3) *Public Utilities/Roads (construction cost \$100,001 to \$300,000)	% 6.75	Min. Fee \$ 9250
(4) *Public Utilities/Roads (construction cost > \$300,001)	% 4.75	Min. Fee \$ 18750
(5) Private Improvement (spot) Inspection (includes Detention Basin Field Review and Report)	% 2.75	Min. Fee \$ 300
(6) Additional out-of-scope Pre-Construction meetings (e.g., "Special", "Supplementary", "Grading", etc.)	\$ 400	Per Meeting
<b>Record Drawing Preparation (As-built prepared by consultant)</b>		
<b>(Fixed Fee % of Construction Cost to include Maintenance Bond inspections)</b>		
Public Utilities/Roads	% 2.7	Min. Fee \$ 1000
<b>Soil Erosion and Sedimentation Control Inspections</b>		
<b>(As per the "Inspection Fee Escrow Determination" form attached as Appendix A-1)</b>		
(1) Site Plan, if disturbed area is less than 5 acres	\$ 125	Per Inspection
(2) Site Plan, if disturbed area is 5 acres through 15 acres	\$ 150	Per Inspection
(3) Site Plan, if disturbed area is greater than 15 acres	\$ 225	Per Inspection
(4) Review and inspection fees for Residential Land Improvements	\$ 135	Lump sum
(5) Violation work involving inspection, report and follow-up	\$ 80	Hourly
(6) Citation work involving inspection report, follow-up, Ordinance Enforcement office meeting and court appearance	\$ 115	Hourly

\* = fee to be based on sanitary sewer, storm sewer, water main and paving calculated separately. See example fee sheet in Appendix A-2 for clarification.



# MEMORANDUM



**TO:** VICTOR CARDENAS, ASSISTANT CITY MANAGER  
ROB HAYES, P.E.; DIRECTOR OF PUBLIC SERVICES

**FROM:** BRIAN COBURN, P.E.; ENGINEERING MANAGER *BTC*

**SUBJECT:** CIVIL ENGINEERING FIELD SERVICES CONSULTANT

**DATE:** MARCH 30, 2012

The City of Novi utilizes a consulting firm to provide civil engineering field services for private development projects. The consultant primarily provides engineering services related to private development through the review of residential plot plans, construction inspection, project close-out paper work assistance, and the completion of record drawings. The contract with the City's current consultant for providing these services, Spalding DeDecker Associates, Inc., will expire on April 30, 2012 after an initial two-year term and one one-year renewal as approved by City Council on May 23, 2009.

The attached Request for Qualifications (RFQ) was issued to solicit qualifications and proposals from engineering firms to provide these services to the City going forward. The RFQ was posted publicly and resulted in responses from five firms. The five submittals were evaluated by staff from the Department of Public Services, Community Development and Finance using the Qualifications Based Selection (QBS) process, with an emphasis on each firm's experience and understanding of scope. The results of the staff review of qualifications are as follows:

Firm	Staff Review Score	Proposal Rank
Spalding DeDecker Associates	2280	1
Stantec Consulting Michigan, Inc.	1755	2
Orchard, Hiltz & McCliment, Inc.	1435	3
Giffels-Webster Engineers	1410	4
Nowak & Fraus Engineers	620	5

The review process consisted of two components: 1) reviewing and scoring each of the qualification packages submitted, and 2) opening sealed fee proposals from the highest rated firms. A natural break in the scores occurred between the two firms with the highest ratings and the other three firms, therefore the fee proposals from the two firms with the highest qualifications scores (SDA and Stantec) were opened and reviewed. The fee proposals from each firm are attached for review.

The fees provided by both firms are generally the same or reduced from the current fee schedule in the 2009 agreement. The fees for several representative projects were calculated and are presented in the table below to illustrate the resultant fees based on the current fee schedule and those provided by the two highest scoring firms.



Project Description	Existing 2009 Fee Schedule	SDA Proposal 2012	Stantec Proposal 2012
Construction Inspection Fees for a site with construction value of \$263,000	<b>\$15,535</b>	\$15,535	\$15,535
Construction Inspection Fees for a site with construction value of \$1,600,000	<b>\$63,247</b>	\$63,247	\$60,431
Construction Inspection Fees for a site with construction value of \$2,400,000	<b>\$114,917</b>	\$109,533	\$108,875
Soil Erosion Permit for a 2.1 acres site and 32 inspections	<b>\$3,200</b>	\$4,000	\$4,000
Soil Erosion Permit for a 14 acres site with 24 inspections	<b>\$4,200</b>	\$3,600	\$4,200
Soil Erosion Permit for a 65.4 acre site with 32 inspections	<b>\$8,000</b>	\$7,200	\$7,200
Land Improvement Review and inspection for a single family home with one footing inspection and one grading inspection	<b>\$310</b>	\$295	\$275

The analysis shows that the proposals from each of the firms would represent a reduction in the fees currently paid by the developer in all cases except for one of the soil erosion permit scenarios.

The staff review team recommends renewal of the consulting agreement with SDA based on the review of qualifications and proposed fees. SDA has performed field civil engineering services for private development for Novi since 2005 and staff has been satisfied with SDA's performance. SDA received the highest review score and has proposed fees that are competitive with the other firm and are generally reduced from those awarded in 2009.

While the RFQ stated that the contract term would be two years with an optional one-year renewal, staff is requesting that City Council consider an agreement that has a three-year term with two, one-year renewal options. This would be consistent with other recently awarded professional services agreements. The enclosed letters were received from each of the two top scoring firms indicating acceptance of the longer term agreement, if offered.

We understand that the Consultant Review Committee will review the qualifications and proposals for a recommendation to City Council. Therefore, we have provided copies of the qualifications and proposals along with review scores and fee summaries to assist with this review.

Please let me know if you have any questions in this regard.

cc: Charles Boulard, Community Development Director  
Marina Neumaier, Assistant Finance Director  
Aaron Staup, Construction Engineering Coordinator  
Ben Croy, Civil Engineer



<b>CONSULTING PROPOSALS FEE COMPARISON - CIVIL ENGINEERING FIELD SERVICES</b>								
		<b>CONSULTANTS</b>						
		<b>2008</b>	<b>2009</b>	<b>2012</b>				
<b>Serv Description</b>	<b>Unit/Rate</b>	Spalding DeDecker 2008	Spalding DeDecker 2009	Spalding DeDecker	Stantec Consulting Michigan			
						<b>Overall</b>	<b>2012</b>	
						<b>Averages</b>	<b>Averages</b>	
<b>Land Improvement Review</b>								
Residential (Plot Plans)								
Review	Lump sum	\$110.00	\$100.00	\$100.00	\$150.00	\$137.00	\$125.00	
Each review for builder initiated change	Lump sum	\$110.00	\$100.00	\$100.00	\$90.00	\$105.00	\$95.00	
Initial inspection and one re-inspection	Lump sum	\$190.00	\$175.00	\$160.00	\$175.00	\$190.00	\$167.50	
Footing inspection and one re-inspection	Lump sum	\$190.00	\$175.00	\$160.00	\$150.00	\$172.00	\$155.00	
Any additional inspections	Lump sum	\$100.00	\$100.00	\$100.00	\$95.00	\$103.00	\$97.50	
Additional elevation inspection (after second)	Lump sum	\$100.00	\$100.00	\$100.00	\$85.00	\$101.00	\$92.50	
Final grade inspections (certifications)	Lump sum	\$145.00	\$135.00	\$135.00	\$125.00	\$148.00	\$130.00	
Driveway and Sidewalk Inspection(s)	Lump sum	N/A	N/A	\$135.00	\$125.00	\$130.00	\$130.00	
Minor Land Improvement								
Review	Lump sum	\$75.00	\$75.00	\$75.00	\$80.00	\$96.00	\$77.50	
Inspection	Lump sum	\$75.00	\$75.00	\$75.00	\$80.00	\$91.00	\$77.50	
<b>Construction Inspection and Acceptance</b>								
<b>Document Review (Fixed Fee % of Construction</b>								
<b>Cost to include initial Pre-Construction and TCO</b>								
<b>Preparation meetings; ROW, Detention Basin,</b>								
<b>Maintenance Bond and Site Amenities</b>								
<b>inspections, reporting and follow-up</b>								
Public Utilities/Roads (construction cost < or = \$50,000)	Fixed Fee %	11.25%	11.25%	11.25%	11.50%	11.45%	11.38%	
Minimum Fee	Lump sum	\$1,250.00	\$1,250.00	\$1,250.00	\$1,400.00	\$1,330.00	\$1,325.00	
Public Utilities/Roads (construction cost \$50,001 to \$100,000)	Fixed Fee %	9.25%	9.25%	9.25%	9.50%	9.40%	9.38%	
Minimum Fee	Lump sum	\$5,625.00	\$5,625.00	\$5,625.00	\$5,700.00	\$5,715.00	\$5,662.50	
Public Utilities/Roads (construction cost \$100,001 to \$300,000)	Fixed Fee %	7.25%	7.00%	6.75%	6.75%	7.05%	6.75%	
Minimum Fee	Lump sum	\$9,250.00	\$9,250.00	\$9,250.00	\$9,200.00	\$9,290.00	\$9,225.00	
Public Utilities/Roads (construction cost > \$300,001)	Fixed Fee %	5.25%	5.00%	4.75%	4.75%	5.00%	4.75%	
Minimum Fee	Lump sum	\$18,750.00	\$18,750.00	\$18,750.00	\$18,000.00	\$18,600.00	\$18,375.00	
Private Improvement (spot) inspection (includes Detention Basin)	Fixed Fee %	2.75%	2.75%	2.75%	2.50%	2.70%	2.63%	
Minimum Fee	Lump sum	N/A	\$300.00	\$300.00	\$285.00	\$346.25	\$292.50	
Additional out-of-scope Pre-Construction meetings	Per meeting	N/A	\$400.00	\$400.00	\$350.00	\$412.50	\$375.00	
<b>Record Drawing Preparation (Fixed Fee % of Construction Cost)</b>								
Public Utilities/Roads	Fixed Fee %	1.70%	2.70%	2.70%	2.50%	2.28%	2.60%	
Minimum Fee	Lump sum	\$750.00	\$1,000.00	\$1,000.00	\$900.00	\$880.00	\$950.00	
<b>Soil Erosion and Sedimentation Control Inspections</b>								
Disrupted area is less than 5 acres	Per inspection	\$100.00	\$100.00	\$125.00	\$125.00	\$125.00	\$125.00	
Disrupted area is 5 acres through 15 acres	Per inspection	\$200.00	\$175.00	\$150.00	\$175.00	\$180.00	\$162.50	
Disrupted area is greater than 15 acres	Per inspection	\$300.00	\$250.00	\$225.00	\$225.00	\$245.00	\$225.00	
Review and inspection fees for Residential Land Improvements	Lump sum	\$150.00	\$150.00	\$135.00	\$175.00	\$192.00	\$155.00	
Violation work involving inspection, report and follow-up	Hourly	\$85.00	\$85.00	\$80.00	\$85.00	\$84.00	\$82.50	
Citation work involving inspection report, follow-up, Ordinance	Hourly	\$125.00	\$125.00	\$115.00	\$85.00	\$107.00	\$100.00	
Enforcement office meeting and court appearance								
<b>Court Testimony</b>								
Fee to be invoiced monthly for actual time expended	Hourly	\$230.00	\$175.00	\$160.00	\$135.00	\$163.00	\$147.50	
<b>Minor Engineering (Design and Construction Insp)</b>								
Studies and Reviews	Hourly	\$100.00	\$95.00	\$95.00	\$95.00	\$96.00	\$95.00	
Inspection (spot) for non-site planned or linear projects	Hourly	N/A	\$75.00	\$75.00	\$70.00	\$73.00	\$72.50	
<b>Flood Plain Review</b>								
May include 1 inspection for field verification	Hourly	\$100.00	\$95.00	\$95.00	\$95.00	\$96.00	\$95.00	

= Lowest (Best)

**INSPECTION FEE COMPARISONS (CURRENT VS. PROPOSED)**

Spalding DeDecker & Associates, Inc. (SDA) & Stantec Consulting Michigan, Inc. (Stantec)

**Construction Inspection Fees**

<b>Construction Cost</b>		<b>2009 FEES (CURRENT)</b>		<b>2012 FEES (PROPOSED)</b>	
		<b>Current Fee</b>	<b>SDA Fee</b>	<b>Stantec Fee</b>	
Project A	\$263,311	\$15,535	\$15,535	\$15,535	
Project B	\$1,611,614	\$63,247	\$63,247	\$60,431	
Project C	\$2,416,919	\$114,917	\$109,533	\$108,875	

**Soil Erosion and Sedimentation Inspection Fees**

	<b>Acres Disturbed</b>	<b># of Inspections</b>	<b>Current \$/Insp.</b>	<b>Current Fee</b>	<b>SDA \$/Insp. Prop.</b>	<b>SDA Fee</b>	<b>Stantec \$/Insp. Prop.</b>	<b>Stantec Fee</b>
Project D	2.1	32	\$100	\$3,200	\$125	\$4,000	\$125	\$4,000
Project E	14	24	\$175	\$4,200	\$150	\$3,600	\$175	\$4,200
Project F	65.4	32	\$250	\$8,000	\$225	\$7,200	\$225	\$7,200

**Land Improvement Review & Inspection Fees**

Project G	One Footing and One Grading Inspection	\$310	\$295	\$275
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 - Lowest Fee



March 26, 2012

Mr. Aaron Staup  
Construction Engineering Coordinator  
Department of Public Services  
Field Services Complex – Engineering Division  
26300 Lee BeGole Drive  
Novi, MI 48375

Re: **City of Novi, Michigan**  
**Request for Qualifications – Fee Schedule Acceptance**  
**Civil Engineering Private Development Field Services**  
**SDA No.: PR12-064**

Dear Mr. Staup:

Spalding DeDecker Associates, Inc. (SDA) is pleased to accept the proposed revised contract length and guarantees our fee schedule for the proposed three (3) years with two, one year renewal options. We are thankful and grateful to be selected as one of the finalists for the City's Civil Engineering Private Development Field Services contract.

Very Truly Yours,  
**SPALDING DEDECKER ASSOCIATES, INC.**

A handwritten signature in blue ink, appearing to read 'Christopher J. Robbins'.

Christopher J. Robbins, PE  
Manager - Construction Engineering

A handwritten signature in blue ink, appearing to read 'Ted Meadows'.

Ted Meadows  
Construction Contract Administrator

Enclosures:  
One sealed price proposal



Stantec Consulting Michigan Inc.  
3754 Ranchero Drive  
Ann Arbor, MI 48108  
Tel: (734) 761-1010  
Fax: (734) 761-1200

**Stantec**

March 26, 2012

Mr. Aaron Staup  
City of Novi  
Department of Public Services – Field Services Complex  
26300 Lee BeGole Drive  
Novi, Michigan 48375

Dear Mr. Staup:

**Reference: Civil Engineering Private Development Field Services Qualifications**

We are in receipt of your March 23, 2012 email informing our office that Stantec is one of the two remaining finalists for recommendation of award on the above referenced contract. We are submitting this letter as confirmation that we would accept our fee schedule proposal that was submitted as part of our March 13, 2012 Qualifications submittal for a period of three (3) years, with two, one-year renewal options, if our firm is the selected consultant for this contract.

We greatly appreciate your further consideration of our firm for selection on this contract, and look forward to your final recommendation of award.

Sincerely,

**STANTEC CONSULTING MICHIGAN INC.**

  
George Tsakoff  
Project Manager  
Tel: (734) 214-1887  
Fax: (734) 761-1200  
[george.tsakoff@stantec.com](mailto:george.tsakoff@stantec.com)

**STANTEC CONSULTING MICHIGAN INC.**

  
R. Brian Simons  
Principal  
(734) 214-2518  
Fax: (734) 761-1200  
[brian.simons@stantec.com](mailto:brian.simons@stantec.com)

## CONSULTING ENGINEERING AGREEMENT

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, "Engineer."

### RECITALS:

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

#### **Section 1. Work.**

For and in consideration of payment by the City as provided under the "Payment for Engineering Services" section of this Agreement, Engineer shall perform the work described in the manner provided or required by the following Contract Documents, which are attached to and made a part of this Agreement as Exhibits A through C, all of said work to be done in a competent, efficient, timely, good and workmanlike manner, in accordance with the customary standard of care, and in compliance with all terms and conditions of this Agreement.

Exhibit A	Work Description
Exhibit B	City's Request for Proposals dated February 22, 2012.
Exhibit C	Engineer's Proposal, including Fee Proposal dated March 13, 2012.

#### **Section 2. Payment for Engineer Services.**

1. Basic Fee.
2. Payment Schedule for Basic Fee.

Engineer shall submit monthly statements for Basic Services rendered. The statements shall be based on (as required in RFP) for services actually completed for each task as set forth in Exhibit A at the time of billing. The monthly statements shall be accompanied by a written description of the status of project progress for that month. The City shall confirm the correctness of such statements, and may use the City's own

Engineer for such purposes. 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.

As compensation for expenses, when incurred in direct connection with the project, and approved by the City, the City shall pay the Engineer its actual cost.

**Section 4. Ownership of Plans and Documents; Records.**

1. Upon completion or termination of this agreement, all documents prepared by the Engineer, 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 Engineer, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Engineer 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 Engineer 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 Engineer.

**Section 5. Termination.**

1. This Agreement may be terminated by either party upon fourteen (14) 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 three (3) days' prior written notice to the Engineer.

3. In the event of termination, as provided in this Article, the Engineer 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 Engineer'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 Engineer in performing the services included in this Agreement, whether completed or in progress.



**Section 6. Disclosure.**

The Engineer 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 design 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 Engineer shall maintain at its expense during the term of this Agreement, the following insurance:

- a. **Worker's Compensation** insurance with the Michigan statutory limits and Employer's Liability insurance with minimum limits of **not less than that is required by applicable law** for each accident.
- b. **Commercial General Liability Insurance** – The Engineer shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance, Personal Injury, Bodily Injury and Property Damage on an “Occurrence Basis” with limits of liability not less than **\$3,000,000** (Three Million Dollars) per occurrence combined single limit.
- c. **Automobile 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 **\$3,000,000** (Three Million Dollars) each person and **\$3,000,000** (Three Million Dollars) each occurrence and minimum property damage limits of **\$3,000,000** (Three Million Dollars) each occurrence.
- d. The Engineer shall provide proof of **Professional Liability** coverage in the amount of not less than **\$3,000,000** (Three Million Dollars) per occurrence and/or aggregate.

2. The Engineer 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 Engineer will furnish on demand such additional coverage as may reasonably be required under the circumstances. All such insurance shall be effected at the Engineer'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 Engineer 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 date to the City. Commercial General and Automobile Liability 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 City of Novi, Attn: Purchasing Department, 45175 West Ten Mile Road, Novi, Michigan 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 Engineer shall require each sub-consultant to effect and maintain at least the same types and limits of insurance as fixed for the Engineer.

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

7. The City has the authority to vary from the specified limits as deemed necessary.

#### **Section 8. Indemnity and Hold Harmless.**

1. The Engineer agrees to save harmless and defend the City against and from any or all liability, loss or damages (including without limitations, fees and expenses of attorneys, expert witnesses and other consultants) which the City may suffer as a result of claims, demands, costs, or judgments against it arising from, out of or in consequence of the performance of this Agreement, excepting only such liability, loss or damage as shall have been occasioned by the sole negligence of the City of Novi, its officers, agents or employees.

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

**Section 9. Nondiscrimination.**

The Engineer 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 Engineer 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 subcontractor 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 Engineer, its employees, associates, agents and consultants for the accuracy and competency of their designs, working drawings, and specifications, or other documents and work; 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 Engineer, its employees, subcontractor, agents and consultants.

After acceptance of final plans and special provisions by the City, Engineer 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 Engineer and to change the original design as required.

**Section 12. Compliance With Laws.**

This Agreement and all of Engineer's work 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. Engineer 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., City Engineer and Maryanne Cornelius, Clerk, with a copy to Thomas Schultz at, Johnson, Rosati, Schultz & Joppich, P.C. 34405 W. Twelve Mile Road, Farmington Hills, MI 48331-5627.

Engineer:

**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 work by Engineer, City shall have the right to inspect the work 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 Engineer with written notice to correct the defect or default within a specified number of days of the notice. Upon receiving such a notice, Engineer 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 a valid claim and charge against Engineer, or, preserve the claims of defects or defaults without termination by written notice to Engineer.

**Section 16. Delays.**

No charges or claims for damages shall be made by the Engineer 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 Engineer either the necessary information or approval to proceed with the work, resulting, through no fault of the Engineer, in delays of such extent as to require the Engineer 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 Engineer as determined by the City, the Engineer 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 Engineer 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.

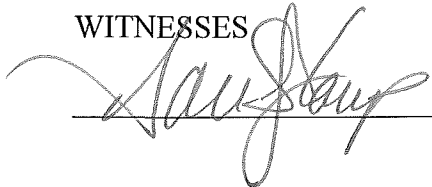
**Section 17. Assignment.**

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 Engineer of any responsibility for the fulfillment of this agreement.

**Section 18. Dispute Resolution.**

The parties agree to try to resolve any disputes as to contract administration 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

  
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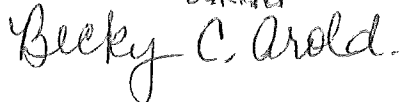
  
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By: CHRISTOPHER J. ROBBINS  
Its: VICE PRESIDENT, SPALDING DEBECKER

The foregoing Contract was acknowledged before me this 11th day of April, 2012, by CHRISTOPHER ROBBINS on behalf of SPALDING DEBECKER & ASSOCIATES.

Michigan

BECKY C. AROLD  
NOTARY PUBLIC, STATE OF MI  
COUNTY OF LIVINGSTON  
MY COMMISSION EXPIRES Oct 12, 2012  
ACTING IN COUNTY OF Oakland



Notary Public

Livingston

County,

My

Commission

Expires: 10/12/2012

WITNESSES

CITY OF NOVI

\_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_

By: Robert J. Gatt  
Its: Mayor

—

\_\_\_\_\_

By: Maryanne Cornelius  
Its: City Clerk

The foregoing \_\_\_\_\_ was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2012, by \_\_\_\_\_ on behalf of the City of Novi.

\_\_\_\_\_

Notary Public  
Oakland County, Michigan  
My Commission Expires:

\_\_\_\_\_

**EXHIBIT A**

## Scope of Services

The following numbered sections correspond to the Request for Qualifications, Section D – Scope of Services.

### 1) Environmental, Full Site, Special, Supplementary, and/or Temporary Certificate of Occupancy Pre-Construction Meeting Coordination

- SDA will perform a pre-construction site walk-through with the approved site plan. This will better familiarize SDA with the actual, current condition of the site and to determine any necessary revisions to the site plan. These conditions and possible revisions can then be discussed in the pre-construction meeting.
- Coordinate and hold Full Site Pre-construction Meetings. SDA prepares the meeting agenda, meeting minutes, and Emergency Contact List and distributes the minutes and other related documents to meeting attendees. All types of Pre-Construction Meetings are held at City of Novi-provided meeting facility. All pre-construction meetings will be audio-recorded.
- Provide and review during the meeting the City's Non-Residential or Residential Requirements for a Site Walkthrough and Project Completion. This document is designed to notify the Developer and Contractor in writing of the City's construction requirements under Chapter 26.5 to receive a TCO and C of O.
- Coordinate and hold the Environmental, Grading and "Special" Pre-Construction Meetings
- Upon completion of the Pre-Construction Meeting, SDA revises the meeting minutes and emails .pdf files of the following to all attendees: Pre-Construction Meeting Minutes, Business Cards, Facade Inspection, Grading Permit, and Requirements for a Site Walkthrough.
- **Deliverables: Pre-Construction Meeting Minutes, Business Cards, Facade Inspection, Grading Permit, and Requirements for a Site Walkthrough.**

### 2) Land Improvement Review and Inspections

- New Residential Land Improvement Reviews.
- Minor Land Improvement Reviews.
- Footing Inspections.
- Grading Inspections.
- Sidewalk/Drive Inspections.
- Minor Land Improvement Inspections.
- **Deliverables: LIP Review Letter, MLIP Review Letter, Footing Inspection Report, Grading Inspection Report, Sidewalk/Drive Inspection Report, and MLIP Inspection Report.**

### 3) Coordination with City Staff and Other Outside Consultants

- SDA will coordinate review services with other disciplines, i.e., other City consultants, attorneys and departments. We will also implement, coordinate, review and amend procedures with each discipline, as necessary.

### 4) Soil Erosion and Sedimentation Control (SESC) Responsibilities

- Inspection for approval of silt fence staking, silt fence installation, and mud mat(s) locations and installation for SESC compliance.
- Inspection for installation of approved inlet protection filters in existing and constructed storm sewer catch basins.
- Observe conditions of adjacent roads to ensure they are swept and maintained regularly.
- Routine inspections according to established procedures to ensure that SESC measures are maintained.
- Inspections after rain events to ensure that SESC measures have not been compromised.
- Verify permit is posted on-site.





- Provide reports on City of Novi standard forms sent to the Ordinance Enforcement Department, as well as the Engineering Division by email and hand delivery.
- Provide written notification of deficiencies to developers' representatives and the City of Novi.
- Attendance of Show-Cause Hearing when necessary.
- Review site for acceptable stabilization and close out of the Soil Erosion Sedimentation permit and submit close-out document.
- **Deliverables: SESC Inspection Reports, SESC Acceptance or Rejection Letter.**

## 5) Construction Inspection Services for Private Developments

### a) Construction Inspection

- Provide full-time field inspection for the installation of water main, sanitary sewer, and storm sewer.
- Witness all water main pressure testing, bacteria testing, and flushing of the constructed water main.
- Schedule and witness the sanitary sewer televising and air testing.
- Provide inspection of the sanitary sewer lead from the Monitoring Manhole to the building in conjunction with the Community Development's Building Department.
- Provide part time milestone paving and grading inspections.
- Produce daily reports using MDOT's FieldBook software with associated pictures.
- Reports are reviewed and signed by Ted Meadows. The reports and pictures from the previous week will be emailed to the City of Novi Construction Engineer Coordinator.
- Construction Technicians will update the approved plan with field measured information gathered and witnessed during construction.
- Provide construction materials review for compliance with City specifications, standards, and details.
- **Deliverables: Technician's Daily Reports and Pictures, Water Main Pressure Test Reports, Water Bacteria Test Results, Sanitary Sewer Air Test and Televising Reports, and Material Certification Review Letters.**

### b) Material Testing

- Coordinate material testing services with the Developer at the Site Pre-Construction Meeting.
- The Developer is responsible for hiring a material testing agency for the testing of any fills, backfill of trenches, and paving on-site. The testing agency generates reports and provides to SDA for review and compliance.
- The testing agency also forwards the test reports within the footprint of the building to the City's Building Department.
- SDA provides QA/QC material testing per the discretion of the Team Leader, Ted Meadows. SDA utilizes the services of Testing Engineers & Consultants, Inc. (TEC) for any confirmation testing.
- **Deliverables: Material Testing Reports.**

### c) Acceptance Document and Easement Review

- SDA reviews public utility easements and warranty deeds for public road rights-of-way, ingress/egress, drainage, grading, and sidewalk easements. We verify that the survey exhibits and legal descriptions match the City's approved development plans.



- SDA also reviews storm water maintenance easement agreements for conformance to the City's Storm water Ordinance. This includes not only a review of the included survey exhibits, but also confirmation of the proposed maintenance items and frequency defined in the maintenance schedule.
- **Deliverables: Acceptance Document Review Letters**

## d) Storm Water Facilities Inspections

- SDA will confirm the proposed volumes of above ground or underground detention systems are met as well as verifying the contours and grades have been met per the approved plan. Once the system is approved, we provide the City with an approved Storm Water Detention System Inspection letter. Following this letter, SDA schedules an additional inspection of the storm system 11 months after the initial approval. Upon this review and approval, we provide the City with the Storm Water Facilities System Inspection letter.
- **Deliverables: Storm Water Detention System Inspection Letter and Storm Water Facilities System Inspection letter.**

## e) Record Drawing Preparation

- CAD Drawing for Black-Line Paper Drawings (Standard Record Drawings)

Field-measurements are performed for underground utilities including water main, storm sewer, and sanitary. Also included is pavement within the public right-of-way only. All measurements are referenced to the City of Novi vertical datum, which is the *North American Vertical Datum of 1988 (NAVD88)*. Measurements include pavement elevations, structure rim elevations, pipe invert elevations, length of pipe between structures, and pipe slope. Information is added to the engineering plans prepared by others, with the design information cross-out and the measured information added with the notation "A.B." to signify an as-built measurement. Plans are plotted in a .pdf or .tiff image format and provided to the City electronically.

For sites with a detention basin, field-measurements are obtained along the top and toe of slope, and detailed information is measured for the inlet and overflow structures. A digital terrain model and contours are produced for the basin. Using the field-measured data, the pond volume is computed and compared with the design criteria.

- CAD Drawing Used to Facilitate Conversion to GIS Data

In addition to the record drawings created from the engineering plans by others, we produce a separate drawing to facilitate transfer of the data directly into the City's GIS.

- **Deliverables: CAD Drawing for Black-Line Paper Drawings (Standard Record Drawings)**
- **CAD Drawing Used to Facilitate Conversion to GIS Data**

## 6) Occupancy Certificate Inspection for Projects with Outstanding Site Items / Occupancy Inspections and Financial Guarantee Adjustments

### a) Occupancy Certificate Inspection for Projects with Outstanding Site Items

- Site evaluation walkthrough to determine scope of outstanding items (Site, ROW, Storm and SESC) and cost estimate to close out project.
- Provide punch list and cost estimate.



- Verification of punch list completion.
- Provide appropriate close out documentation.
- **Deliverables: Site Walkthrough Letter including Punch List, Cost Estimate and Inspection Fee, and Site Work Final Approval Letter.**

## b) Occupancy Inspections and Financial Guarantee Adjustments

- SDA will perform site inspections in the form of preliminary walkthroughs and site walkthroughs to assist the City of Novi when issuing a Temporary Certificate of Occupancy (TCO) and/or Certificate of Occupancy (C of O).
- Once the site utilities have been installed tested, accepted, and the road/parking lot stone base has been installed, a preliminary walkthrough of the project utilities is performed to ensure all of the utility structures up to this point have been installed satisfactorily and have no visible damage. This inspection is focused primarily on the storm sewer structures in the curbs and pavement due to their consistency of being damaged after the stone base has been placed and during paving and curb placement. At this time SDA ensures that these catch basins are located and centered per the approved plan and verifies that they are completely sealed inside and out. This preliminary walkthrough provides the City and SDA with a documented baseline date when all utility structures were in an acceptable state.
- From this preliminary walkthrough a punch list is provided to the Developer for their distribution and coordination of corrections. The Developer contacts SDA when the punch list corrections will commence, and SDA inspects the corrections and documents the date(s).
- Upon completion of the base course of asphalt and once the developer provides a request for a TCO to the City's Community Development Department SDA will perform a preliminary TCO walkthrough without the City. Upon successful completion of punch list from this walkthrough SDA will schedule another walkthrough with the City's Staff, contractor and developer. Once all punch list items are complete and satisfactory, SDA verifies the items and provides the City with an Acceptable-for-Service Declaration. The Acceptable-for-Service Declaration informs the City "that the site utilities and base course pavement for this project have been constructed in accordance with the approved construction plans." This document only recognizes that the site utilities and **base course asphalt** are satisfactory at this time. This follows the protocol for Chapter 26.5 of the Novi Code Ordinances which only allows the top course of asphalt to be bonded for a TCO; all other punch list items must be completed per the ordinance.
- In addition to the notification that the site is currently satisfactory, SDA recommends to the City an applicable adjusted amount for the incomplete financial guarantee. The recommended financial guarantee amount is a current cost estimate for the remaining top course of asphalt to be placed and any possible asphalt road repairs. This amount is generally a reduction and incorporates the City multiplier of 1.5.
- Once the top course of asphalt and landscaping is placed, SDA and the Developer perform the final walkthrough to review the site utilities, grading, and paving for conformance with the plans and City requirements. A punch list is then generated and given to the developer for satisfactory completion.
- SDA to perform the Site Amenities Inspection prior to C of O. This inspection is a review and verification of site plan items.
- SDA to witness that the storm sewer system has been cleaned and vacuumed to remove all sediment and debris. A disposal manifest is also required to ensure the waste is disposed of properly at a certified landfill.
- Once final punch list items are complete, the disposal manifest is provided, and the Site Amenities Inspection is approved, the site is recommended to the Engineering Division for



acceptance. SDA submits a Site Work Final Approval letter to the Engineering Division and recommends the Incomplete Site Work/Utilities Financial Guarantee be released.

- SDA to review and approve the Acceptance Documents for private development projects.
- **Deliverables: Punch Lists, Acceptable-for-Service Declaration, Utility and/or Street Affidavit, and Site Work Final Approval Letter.**

## 7) Right-Of-Way (ROW) Inspections

- Complete ROW inspection via reports, standard City checklists, pictures of the current conditions, and ultimately a recommendation notice to the City and Developer of the rejection or acceptance of the Right-Of-Way.
  - **Deliverables: ROW Inspection Report with Pictures.**

## 8) Site Amenities Inspection

- Provide Site Amenities Inspection and documentation. This inspection is performed as a requirement for projects prior to the issue of a C of O.
- **Deliverables: Site Amenities Inspection Report.**

## 9) Maintenance and Guarantee Bond Inspection Protocol

- SDA will track the two-year Maintenance and Guarantee Bond term and perform an inspection and report(s) to the City approximately 1 year and 9 months, depending on seasonal constraints, prior to the M & G Bond expiration.
- SDA will issue an inspection report detailing conditions of relevant public utilities/roads with recommendations for correction if warranted.
- SDA will schedule a final inspection to verify the work has been completed to the satisfaction of SDA and appropriate City Staff. A final report will be issued documenting corrective action.
- If said corrective actions are not deemed sufficient during the final inspection, SDA will await direction from City personnel on an acceptable way to proceed amenable to the Developer/Contractor team, City staff, and SDA. In addition, SDA may notify the Maintenance Bond Company of deficient item.
- **Deliverables: Punch Lists and Maintenance and Guarantee Bond Inspection Report.**

## 10) Court Testimony for Ordinance Enforcement

- SDA to provide a registered Professional Engineer experienced with court proceedings to provide expert testimony on cases involving ordinance violations or otherwise.

## 11) Attend Public Meetings and Hearings

- SDA professional staff will attend and host/hold necessary Public Informational Meetings and Public Comment Meetings and Hearings. Mr. Robbins and Mr. Meadows will participate and manage construction related meetings, environmental, and plan review-related meetings.
- All public meeting agendas will be drafted and presented to City staff prior to the meetings to assure conformance with City goals. We will prepare meeting minutes and distribute to attendees as requested by the City.
- **Deliverables: Meeting Agendas and Meeting Minutes.**

## 12) Site Plan Review for Compliance with City Codes and Requirements

- SDA understands that Site Plan Review is currently performed by the City of Novi Engineering Division. If SDA is asked to provide support to the City for site plan reviews and soil erosion and sedimentation plan



reviews, we are prepared to respond to the City's needs. We will assist City Staff in confirming compliance of proposed site plans with City ordinances, specifications, standards, and details.

### 13) Floodplain Responsibilities and Qualifications

- SDA understands that floodplain review is currently performed by the City of Novi Community Development Department. If SDA is asked to provide support to the City for floodplain reviews, we are prepared to respond the City's needs. We will assist City Staff in confirming compliance with the National Flood Insurance Program.
- **Deliverables: Floodplain Review Reports**

### 14) Private and Linear Projects without a Site Plan - Spot Inspections

- SDA to provide inspection services and documentation for these new types of projects.
- **Deliverables: Technician Daily Reports and Pictures.**

### 15) Minor Design and Construction Projects, Studies, and Reviews

- SDA when requested by the City will provide major and minor design services to the City for a full range of municipal needs.
- Mr. James Van Tiflin, PE will coordinate these professional services, should the City of Novi request assistance.
- **Deliverables: Minor Design, Construction Projects, Studies Reviews and Reports.**



CITY OF NOVI, MICHIGAN  
REQUEST FOR QUALIFICATIONS (RFQ)

February 22, 2012

**CIVIL ENGINEERING PRIVATE DEVELOPMENT  
FIELD SERVICES**

**A. General.** The City of Novi, Michigan (population 55,224, located in Oakland County) seeks highly qualified firms to provide civil engineering private development field services for private commercial, industrial and residential development sites. The selected consultant will provide professional engineering services in support of the City Council, Planning Commission, and the City's Public Services and Community Development Departments. Details pertaining to the City and its organization are available on the City's website, [www.cityofnovi.org](http://www.cityofnovi.org)

**B. Schedule.** The process for selecting a civil engineering field services consultant will follow this schedule:

City issues RFQ	February 22, 2012
Deadline for written questions	March 2, 2012
Qualifications submittal due	March 13, 2012
Contract award	April 23, 2012
Contract effective date	May 1, 2012

**C. Minimum Qualifications.** Firms interested in submitting qualifications shall meet the following minimum requirements:

- 1) The firm should have an established office, prior to the date of this RFQ, within thirty (30) miles of the City of Novi that is staffed with personnel who provide civil engineering field services.

- 2) With the exception of geotechnical/sub-surface investigation services, the firm shall perform all duties listed below in the Scope of Services section of this RFQ without the use of sub-consultants.
- 3) The firm shall employ a minimum of three (3) licensed professional engineers, all of whom shall be registered in the State of Michigan.
- 4) The firm shall employ at least one (1) licensed professional surveyor who shall be registered in the State of Michigan.
- 5) The firm shall employ a qualified Project Manager, who has a minimum of ten (10) years of experience in construction management and/or inspection related services on commercial, industrial and residential development sites. This individual shall have knowledge of construction standards, specifications and details similar to those used by the City of Novi, Oakland County, Michigan Department of Environmental Quality, and Michigan Department of Transportation.
- 6) The firm shall employ and be capable of providing up to five (5) qualified full-time construction inspectors (other than the project manager) during the term of the contract.
- 7) The firm shall employ at least one person certified in administering Part 91, Soil Erosion and Sedimentation Control, of the Natural Resources and Environmental Protection Act as enforced by the Michigan Department of Environmental Quality – Water Bureau. (Because the City of Novi is a Municipal Enforcing Agency, a firm that only presents a certified Storm Water Operator will not meet this requirement.)
- 8) The firm shall employ at least one person registered as a Certified Floodplain Manager (CFM).
- 9) The firm shall have at a minimum, ESRI® ArcGIS® for Desktop version 10 or better and AutoCad® Land Development Desktop to include AutoCad® Map 3D software packages for record drawing preparation.
- 10) The firm shall demonstrate that it possesses relevant municipal engineering consulting experience.

**D. Scope of Services.** The following describes the duties and responsibilities of the civil engineering field services consultant and constitutes the basis for the firm's qualifications submittal and fee determination.

**Core Services:**

- 1) Coordinate and conduct all pre-construction (environmental, full-site, special, supplementary and/or Temporary Certificate of Occupancy) meetings relating to site plan work, including, the preparation of meeting agenda and minutes, review of shop drawings and material specifications, and handling follow-up questions or responses to private contractors/developers/engineers.
- 2) Conduct Land Improvement (and Minor Land Improvement) plot plan reviews and on-site inspections of grading/drainage, grades of structures brick ledges, footings, sidewalks, driveways within the road right-of-way, etc., with the Community Development and Public Services Departments for individual residential lots and existing structures. The consultant will utilize existing Land Improvement Review checklists and make recommendations for revisions as necessary.
- 3) Implement procedures to coordinate with all other City Staff and outside consultants involved with soil erosion and sedimentation control, wetlands and woodland protections, traffic control and other governmental agencies as needed for a seamless project review and observation team.
- 4) Perform soil erosion and sedimentation control plan reviews, inspections and ordinance violation investigations as per the Michigan Department of Environmental Quality – Natural Resources and Environmental Protection Act – Part 91 program for all commercial, industrial and residential site developments. Time and frequency of reviews and inspections will be determined by the City of Novi (See Appendix A-1 for an example of an SESC Fee Determination). Also, the consultant should be aware that the City of Novi's MEA (Municipal Enforcing Agency) program could be audited by the State of Michigan during the contract period.
- 5) Provide construction inspection, material testing, easement review, storm water facilities inspections, and preparation of record or as-built drawings for paving and utility construction for private developments.
  - a) Construction Inspection – The consultant will provide for full-time and/or part-time inspection services for all site work related infrastructure items. This includes the preparation of a daily inspection report and any report attachments (i.e., photographs, drawings, testing reports, etc.). All said reports are to become the property of the City of Novi. The fee basis of inspection is based on the percentage of construction cost (See Appendix A-2 for an example of a Construction Inspection Fee Schedule).



- b) Material Testing – The consultant shall coordinate and supervise the developer's material testing firm for any and all compacted fills, densities and strengths for proposed utility and/or pavement installations. The consultant shall also be able to provide a third-party geotechnical sub-consultant for any instances where the developer's geotechnical firm is in question. Any and all costs associated with the geotechnical firm shall be solely accepted by the consultant.
  - c) Acceptance Document and Easement Review – The consultant shall provide a review of all public acceptance documents associated with private development projects. Such documentation will include: easement exhibits, warranty deeds, waivers of lien, sworn statements, maintenance bonds and maintenance agreements for detention and/or water quality basins. Review of these documents is to verify that the survey exhibits and legal descriptions match the City's approved development plans.
  - d) Storm Water Facilities Inspections – The consultant shall perform a field review of the constructed storm water detention facility to confirm that grades and volumes conform to the approved construction plans. A separate report must be prepared and submitted to the City indicating substantial conformance or deficiencies.
  - e) Record Drawings – The consultant shall prepare electronic as-builts or record drawings for all private development projects based on the applicants engineer or surveyors established site plan submittal. See Appendix A-3 for a detailed narrative description of the final record drawing submittal to the City.
- 6) Provide occupancy certificate inspection services for projects that have outstanding work items remaining (and financial guarantees posted with the City to ensure completion). The consultant shall provide one initial and two follow-up site visits to generate punch lists or observation to complete punch lists. Perform inspections and make resultant recommendations for financial guarantee adjustments and occupancy permits. Coordinate with the Department of Public Services on a final temporary certificate of occupancy walk-through inspection.
- 7) Conduct separate right-of-way inspections and associated reports as they relate to approved site plans issued by the City of Novi. Timing and specifications regarding the City's right-of-way normally differs from that of the private property which requires special attention.
- 8) Provide a separate inspection of site amenities (i.e., above-ground site plan features, excluding landscaping and building façade) and associated reports prior to the issuance of a full certificate of occupancy to the development.

- 9) Perform maintenance and guarantee bond inspections and provide associated reports (prior to the expiration of the bond) to City Public Services Staff. Maintenance Bonds are held with the City for a period of two-years on all proposed public infrastructure (i.e., water mains, sanitary sewer and street paving).

**As-Needed Services:**

- 10) Provide court testimony for ordinance enforcement, as needed.
- 11) Attend public meetings (i.e., hearings, homeowner association meetings, etc.) as directed by the City of Novi.
- 12) Review site plans for compliance with all City codes and requirements.
- 13) Review FEMA Floodplains, conduct floodplain inspections and prepare/update the City's FEMA Community Rating System (CRS).
- 14) Provide spot inspections for private projects that do not have an associated site plan (i.e., linear projects by franchised utilities).
- 15) Conduct minor engineering studies and reviews (e.g., culvert design), as needed.

Deliverables (approval letters, rejection letters, sign-offs, punch lists, inspection reports, Inspector's Daily Reports or IDR's, etc.) in digital format, shall be submitted to appropriate City staff no later than five (5) working days after the work is performed.

**E. Format Requirements for Qualifications Submittal.**

The qualifications submittal shall contain no more than 15 pages using a 10-point font size, excluding transmittal letter, resumes of key people, Index/Table of Contents, tables, charts, and graphic exhibits. Each qualifications submittal shall adhere to the following order and content of sections. The submittal should be straightforward, concise and provide common explanations of technical terms that are used. Submittals that appear to be unrealistic in the terms of technical commitments, lack of technical competence or are indicative of failure to comprehend the complexity and risk of the requirements spelled-out in the RFQ may be rejected.

The following sections are to be included in the submittal, in the following order:

- 1) Cover letter – A cover letter, not to exceed three pages in length, should summarize key elements of the submittal. An individual authorized to enter into a contract with the City of Novi must sign the letter. The letter must stipulate that the submittal price(s) will be valid until a contract is awarded or for a period of at least 120 days, whichever occurs first; and shall indicate the address and telephone number of the firm's nearest office to the City of Novi and the primary office from which the services described in the RFQ will be provided.

- 2) Background and Project Summary Section – This section should describe the firm’s understanding of the City and its needs relative to the services described in the RFQ; the objectives to be accomplished; and a detailed description of the services to be rendered.
- 3) Methodology Section – Provide a detailed description of the approach to be used to provide the services described in the RFQ, including: a) an Implementation Plan that describes in detail the methods for providing these services, including controls the firm implements to manage similar projects; b) a detailed description of efforts the firm will undertake to achieve client approval and to satisfy the requirements of the RFQ; c) a detailed description of specific tasks the firm will require from City Staff, if any, to successfully complete the services.
- 4) Staffing Section – Provide résumés of individuals who will be performing these services and indicates the functions that each person will carry out. (During the contract period, if the firm chooses to assign different personnel, then the firm must submit their names and qualifications, including information listed above, to the City for advanced approval.)
- 5) Qualifications Section – This section should describe the qualifications of the firm in regard to providing similar scopes of service within the past five (5) years. Information presented in this section shall include:
  - a) A general summary of the firm’s demonstrated capabilities and experience.
  - b) Detailed descriptions of projects similar in nature to the services described in the RFQ.
  - c) Names of key staff who participated in referenced projects and their specific responsibilities with respect to the services described in the RFQ.
  - d) A minimum of three (3) references from entities that received similar services from the firm. The City of Novi reserves the right to contact any of the organizations or individuals listed. Information provided shall include: 1) client name, 2) project description, 3) project start and end dates, and 4) client contact name, telephone number and e-mail address.

**F. Fee for Services.** In a separate sealed envelope, provide a completed fee determination form (Attachment A) for services described in the RFQ. Fees will be effective for the two-year term of the agreement. Fees may be reviewed and negotiated by mutual agreement of the City of Novi and the firm for a renewable additional one-year term.

**G. Qualifications Submittal Evaluation.** The City's consultant evaluation and selection process is based on the Qualifications Based Selection (QBS) process for professional services. The City will evaluate each of the following criteria in its percentage of importance:

- 1) Compliance with the RFQ requirements – 15%.
- 2) Understanding and approach to the Scope of Services – 25%.
- 3) Recent experience and references in conducting similar scopes of work for other public agencies – 40%.
- 4) Staff's educational background, work experience and relevant consulting experience – 20%.

**\*\*The Fee will be evaluated separately for the short-listed candidates only.\*\***

The City may contact and evaluate the firm's references; contact the firm to clarify any response; contact any of the firm's current clients; solicit any information from any available source concerning any aspect of a submittal; and seek and review any other information deemed pertinent to the evaluation process.

The evaluation committee will not be obligated to accept the lowest priced submittal, but shall make an award recommendation based on the best interests of the City. After qualifications submittals have been reviewed, discussions with prospective firms may or may not be required. If scheduled, the oral interview will be a question/answer format for the purpose of clarifying the intent of any portions of the submittal. The firm's primary individual who would be directly responsible for carrying out the contract, if awarded, shall be present at the oral interview.

A Notification of Intent to Award will be sent to the selected firm. Award is contingent on the successful negotiation of final contract terms. Negotiations shall be confidential and not subject to disclosure to competing firms unless an agreement is reached. If contract negotiations cannot be concluded successfully, the City may negotiate a contract with the next highest scoring firm or withdraw the RFQ.

**H. Term of Engagement.** The term of the agreement will be two years, renewable up to one additional year, with a 90-day cancellation clause that may be exercised by either party.

**I. Disclosures.** A firm that responds to this RFQ shall indicate in the qualifications submittal any existing conflicts of interest and potential conflicts of interest that may arise if the firm is awarded a contract, in addition provide a list of current municipal contracts within Oakland, Genesee, Wayne, Washtenaw, Macomb and Livingston Counties. If applicable, provide a list of property and other assets the firm owns that are located within the City of Novi.

## **J. Standard Terms and Conditions.**

- 1) Addenda – The City reserves the right to amend this RFQ prior to the submittal due date.
- 2) Cost for Preparing Submittal – The cost for developing the submittal is the sole responsibility of the firm. All submittals become the property of the City.
- 3) Contract Discussions – Prior to award, the apparent successful firm may be required to enter into discussion with the City to resolve any contractual differences. These discussions are to be finalized and all exceptions resolved within one (1) week from notification. If no resolution is reached, the submittal may be rejected and discussions will be initiated with the second highest scoring firm.
- 4) Confidentiality Requirements – Submittals are subject to the Freedom of Information Act, and as such the City cannot protect proprietary data that may be contained in the firm's submittal.
- 5) Financial Information – The City reserves the right to request a submitting firm to provide sufficient data to allow for an evaluation of the firm's financial status.
- 6) Insurance Requirements – Within ten (10) consecutive calendar days of award of contract, the successful firm must furnish the City with the Certificates of Insurance proving coverage as specified in Appendix A-4. Also, these certificate(s) shall name the City of Novi, its officers and agents, as additionally insured by endorsement. Failure to furnish the required certificates within the time allowed may result in disqualifying the firm for contract award.

***The City strongly encourages all submitting firms to review the Sample Agreement (Appendix A-5) and Insurance Requirements before responding to the Request for Qualifications, and to notify the City of any exceptions to the requirements prior to making a submittal.***

## **K. Process for Making a Qualifications Submittal.**

- Content of Submittal – The submittal must use the format indicated in the Format Requirements for Qualifications Submittal section of this RFQ.
- Preparation of Submittal – Each submittal must be prepared simply and economically, sufficient to provide a complete, accurate and reliable presentation. Avoid the use of elaborate promotional materials.

- Number of Submittals – Submit one (1) bound original and five (5) CD's, each containing one (1) complete copy of your submittal in sufficient detail to allow for a thorough evaluation and comparative analysis.
- Submittal Due Date – Completed qualifications submittals along with proposed fee determination forms must be submitted by **3:00 pm (EST), March 13<sup>th</sup>, 2012**, in separate sealed envelopes marked "Civil Engineering Private Development Field Services - Qualifications" and "Civil Engineering Private Development Field Services - Fee Determination", respectively, to:

*City of Novi  
Clerk's Office  
45175 W. Ten Mile Road  
Novi, Michigan 48375-3024*

- Inquiries – Questions about this RFQ must be directed in writing, via e-mail to:

Aaron Staup, Construction Engineer  
[astaup@cityofnovi.org](mailto:astaup@cityofnovi.org)

From the date that this RFQ is issued until a firm is selected and the selection is announced, firms are not allowed to communicate for any reason with any City employee other than the two individuals listed above in regard to this RFQ. The City reserves the right to reject any submittal for violation of this provision. Only written questions will be accepted, and only written responses to questions will be binding upon the City.

**APPENDIX A-1**

**SOIL EROSION AND SEDIMENTATION CONTROL INSPECTION  
FEE ESCROW DETERMINATION**

**APPENDIX A-1 – SOIL EROSION AND SEDIMENTATION CONTROL  
INSPECTION FEE ESCROW DETERMINATION**

SITE PLAN:

1. **Number of inspections:** Escrow amount is based on Soil Erosion Risk Classification and Inspection Frequency Schedule, (see table below) **PLUS** one inspection after six estimated storm events per year (+6). Any amount that is not used for inspection will be returned to the applicant at the time the permit is closed.

Risk Classification from Table Below:

+ Total Estimated Time of Earth Disruption (weeks) from Item 19:	52	weeks
+ Frequency of Inspection (see table below based on class):	1 inspection /	weeks
+ 6 estimated inspection following storm events:	6	
= TOTAL NUMBER OF INSPECTIONS (round up)	<b>#VALUE!</b>	

2. **Inspection Fee:** To determine inspection fee, please use the table listed below:

Disrupted area from Item No. 9:

If disrupted area (item no. 9) is <u>less than 5 acres</u> =	\$	-	/inspection
If disrupted area (item no. 9) is <u>5 acres through 15 acres</u> =	\$	-	/inspection
If disrupted area (item no. 9) is <u>greater than 15 acres</u> =	\$	-	/inspection

3. **Inspection Fee Escrow: (\$700 minimum)**

Number of inspections:	#VALUE!	x Fee per inspection:	\$ -	
	<b>SUBTOTAL:</b>		<b>#VALUE!</b>	
	+15% City Administration Fee:		<b>#VALUE!</b>	
	<b>TOTAL FEE ESCROW:</b>		<b>#VALUE!</b>	=

**INSPECTION FREQUENCY TABLE**

Risk Classification	Site Description	Regular Minimum Inspection Frequency *
High – Class I	<ul style="list-style-type: none"> <li>• Project adjacent to a lake, stream, or wetland with direct storm water discharge towards these waters.</li> <li>• Any part of a project located within 500' of a body of water.</li> <li>• Any project in which the same applicant has received a stop work order within the previous 24 months from the City of Novi or any other Michigan Building Official after proper hearing before the Building Official.</li> </ul>	2 weeks
Medium – Class II	<ul style="list-style-type: none"> <li>• Project collecting and discharging storm water runoff to a temporary sedimentation or a detention control basin with an outlet structure, <u>not</u> located within 500' of a body of water.</li> </ul>	3 weeks
Low – Class III	<ul style="list-style-type: none"> <li>• Minor land improvements: additions, decks, etc. and/or no direct discharge towards open waters.</li> </ul>	4 weeks

\* Significant rainfall events will trigger additional site inspections, on an as-needed basis. As part of the application process, the applicant is to provide an estimate of the number of weeks the project is expected to remain unstable and needing soil erosion and sedimentation control inspections. Regular minimum inspections are apart from enforcement follow-up and billed separately.



**APPENDIX A-2**

**CONSTRUCTION INSPECTION FEE SCHEDULE**

**APPENDIX A-2**

**(A 10% administrative charge will be assessed on all construction inspection fees)**



<b>CITY OF NOVI</b> <b>Engineering</b> <b>CONSTRUCTION INSPECTION FEE SCHEDULE</b>
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**CONSTRUCTION INSPECTION FEES**

Inspection Category	Total Estimated Cost of Improvement Category	Fee Basis	Total Estimated Cost of Improvement Category	Fee Basis	Total Estimated Cost of Improvement Category	Fee Basis	Total Estimated Cost of Improvement Category	Fee Basis
A. Sanitary Sewer	\$0 - \$50,000		\$50,001 - \$100,000		\$100,001 - \$300,000		\$300,001 +	
B. Storm Sewer (excluding detention basin)	\$0 - \$50,000	% of estimated cost of improvements as reviewed by Engineering	\$50,001 - \$100,000	% of estimated cost of improvements as reviewed by Engineering	\$100,001 - \$300,000	% of estimated cost of improvements as reviewed by Engineering	\$300,001 +	% of estimated cost of improvements as reviewed by Engineering
C. Water Main	\$0 - \$50,000	(minimum fee \$)	\$50,001 - \$100,000	(minimum fee \$)	\$100,001 - \$300,000	(minimum fee \$)	\$300,001 +	(minimum fee \$)
D. Paving & Curbing in Public R.O.W.	\$0 - \$50,000		\$50,001 - \$100,000		\$100,001 - \$300,000		\$300,001 +	

**APPENDIX A-3**

**REQUIREMENTS FOR RECORD DRAWING SUBMITTALS**

## Appendix A-3

### CITY OF NOVI, MICHIGAN Requirements for Record Drawing (As-Built) Submittals

Revision Date: August 14, 2009

Version: 1.08

The City of Novi has adopted the following requirements for the development of record drawings as adopted through ordinance number 07-124.17 amending the City's Code of Ordinances effective June 1, 2007. These requirements represent the written guidelines and procedures provided by the City as provided in Chapter 11, Design and Construction Standards, Article XIII, Section 11-301 entitled, "Preparation of Record Drawings". The ordinance states, "The City's consultants shall complete the "record" drawings in accordance with the written guidelines and procedures provided by the City". (Section 11-301 subsection (3)). These written guidelines can be revised and adapted to best meet the operational requirements of the City as revisions become necessary.

#### Purpose

Identifying the location of public utilities and roadways and their components is extremely critical to several key City departments, especially Public Works, Fire, and Engineering. Once a project is completed, construction information is transmitted to the Engineering Department, Water Department, and to the City's Geographic Information System (GIS) Manager for mapping. In order to facilitate the efficient transfer of this data to GIS, the following data model standards must be met. This document sets forth those requirements of what information must be incorporated on these record documents before any public utility, roadway, or other improvement shall be accepted by the City. The term record drawing shall mean engineering drawings prepared after installation of utility, roadway, or other improvement which shall contain a statement by a registered engineer/surveyor certifying it to be a drawing of record.

The submission of record drawing information will be provided in paper and digital versions. These submission standards are intended to improve the process of reviewing plans and will promote a more reliable, accurate reference source available for City staff responsible for maintaining critical infrastructure. Requests for data and standards should be made through the City's GIS Manager.

The City will work cooperatively with its consultants to discuss any problems or provide clarification to promote meaningful communications. It is important that the consultant understand this document to be used as a reference as questions arise. As a result of this process, the City anticipates a shorter time period between the initial submittal of a project and its final approval. In addition, savings will result in the form of data input time, costs, and manpower, providing more efficient services for its citizens.

#### Paper "Black Line" Submittal Requirements

This as built drawing checklist provides the minimum content needed on the record drawings for each utility to be accepted as complete.

##### A. Title Sheet Requirements for Record Drawing Sets

- (1) Title sheet should name the project and include an explicit reference to "Record Drawing". (e.g. Record Drawing of Oak Pointe Church).
- (2) Proprietor
- (3) Proprietor's engineer
- (4) Proprietor's architect
- (5) Final record drawing submission date to City of Novi
- (6) Survey section(s) where project is located and location map (including a north arrow)

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- (7) Index to drawing sheets with corresponding page number/letter to sheet name in the final record drawing set
- (8) Sub-title block for record drawing preparation detailing:  
Name of Drafter (Date) – Name of Reviewer (date) – Project Manager – Department Manager

### B. Requirements for all Pages in a Drawing Set

- (1) Name of sheet and corresponding page number/letter
- (2) Sub-title block for record drawing preparation detailing:  
Name of Drafter (Date) – Name of Reviewer (date) – Project Manager – Department Manager
- (3) Lot and block numbers must match the recorded plat.
- (4) Provide street names and indicate whether 'public' or 'private'.
- (5) Provide right-of-way designation and dimensions, if applicable.
- (6) Provide recorded easement designations and dimensions, if applicable.
- (7) Utility (water, storm water, and sanitary) and road systems depicted on the drawings must be at a sufficiently large scale so each separate system can be easily discerned on each drawing.
- (8) State on all drawings if the infrastructure is PUBLIC or PRIVATE
- (9) A legend must be provided so linetypes and symbols are presented at the output scale of the drawing.
- (10) If using abbreviations, they must be described within the legend.
- (11) Paper record drawings are requested for the initial review(s) so City staff may make notations on these drawings. Staff will document needed changes in writing and provide that information to the City's consulting engineer.
- (12) Once the drawing has received approval, a certified, paper record drawing will be provided in addition to the "Digital Submittal Requirements – Parts I and II".

### C. Water Utility Systems

- (1) Provide the length, size, and type of material between major appurtenances and fittings.
- (2) Provide an arrow indicating the reach of the pipe length when space is limited.
- (3) Draw and notate all fittings such as valves, tees, crosses, reducers, bends and hydrants.
- (4) Provide offset dimension from the main to a right-of-way line or its distance from the edge of the utility easement.
- (5) Indicate the size and type of valves and fittings used. Example: 8"GV, or 8"x 8"x 6" tee.
- (6) Note bends as horizontal and/or vertical.
- (7) Identify all utilities crossing the water utility system.
- (8) Draw fittings and text large enough to be seen easily.
- (9) Indicate location and manner of attachment to existing utility features.
- (10) Provide a detailed enlargement if a utility connection and/or crossing is congested to uphold the legibility of the details.

### D. Sanitary Sewer Utility Systems

- (1) Provide the length, size and composite material of sanitary pipe. This includes the point of connection to existing utilities, valves, bends, and lift stations, if applicable
- (2) Provide slope (percent grade) of gravity sewer mains along with flow direction arrows between each pair of manholes. All laterals shall have invert elevations shown.
- (3) For all sewer mains (gravity or force), provide offset dimensioning from edge of easement or right-of-way.
- (4) Each sewer service lead marker point will be shown at the right of way line or easement line.
- (5) Provide the top (rim) manhole elevation and locations of cleanouts.

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- (6) Indicate location and manner of attachment to existing utility features.
- (7) Indicate the size and type of valves (plug, gate, air release etc.) and fittings used.
- (8) Bends should be noted as horizontal, vertical or obtuse given the best information available given any observed deviations on the construction plans.
- (9) Provide detailed lift station information.
- (10) Draw manholes, cleanouts and lift stations large enough to be seen easily on drawing.

### E. Storm Water Utility Systems

- (1) Provide the length, size, and type of material between structures.
- (2) Note the size and type of all structures.
- (3) Provide pipe invert elevations on all structures.
- (4) Provide the top of weir elevations on all structures, if applicable.
- (5) Draw flow direction arrows.
- (6) Provide finished side slope information and the top and bottom elevation of ponds.
- (7) Provide direction of flow on pavement.
- (8) Indicate location and manner of attachment to existing utility features.
- (9) Provide detailed information on outlet control structures.
- (10) Show dimensions and locations of roads and easements which access all outlet control structures.
- (11) Provide stage-storage volume calculations for each pond.

### F. Road & Street Transportation Systems

Each roadway plan sheet should contain the following construction and record drawing information:

- (1) Right-of-Way limits
- (2) Width of pavement and median
- (3) Back of curb or edge of pavement
- (4) Final grade elevations at 50' intervals for pavement centerline and edge of pavement for all public streets and roadways
- (5) Final grade elevations for cul-de-sacs at 50' intervals which should include high points, edge of pavement and top of curb
- (6) Final grade elevations for all PVC's, PVT's, and PVI's, and PC's, PT's, PI's for vertical and horizontal curves at intersections
- (7) Radii of all intersections (edge of pavement or back of curb, with note indicating which is referenced)
- (8) Name of each roadway and adjoining roads, clearly depicted as "Public" or "Private"
- (9) All culverts and endwalls, with length, size and material type clearly labeled.

### G. Each profile view shall show the following construction and record drawing information

- (1) Utility stationing at all 50' intervals. Provide final centerline grades at all PC's, PT's, PVI's, and POC's at PVI's for horizontal and vertical curves.
- (2) Provide the slope of the roadway between each grade break.
- (3) Sizes and inverts for all existing utilities and culverts

## Appendix A-3

### DIGITAL SUBMITTAL REQUIREMENTS

**Part I – CAD Drawing Files Used to Produce Black Line Paper Drawings:** AutoCAD drawings representing the source(s) used in producing the paper submission documents including plan/profile sheets cross-sections, details, title sheet, etc. These drawings are not subject to the requirements set forth in Part II. They will only be checked for their ability to be opened, read, interpreted for their ability to re-render the drawing at a later time, and for their completeness/consistency with the black line drawing. The City must be able to reproducing the record drawing submission set from the source record CAD files.

1. The submittal must include an index of CAD drawings including the sheet name and page number with its corresponding CAD file.
2. The submittal must include TIF or PDF formatted image scans representing each black line drawing sheet with the filename of each image corresponding with the sheet name found on the index as detailed the title sheet.
3. Only drawings relevant to the project's phase of submittal shall be included. For example, do not include "Construction" or "Stamped Plan" drawings in a record drawing submittal. Also, do not include drawings or documents that would normally be excluded in the set of printed drawings, except for base drawings or drawings to be externally referenced or X-referenced.
4. In CAD drawings, the City would prefer you do not use symbols or linetypes from third-party software, unless they are public domain property, as some of these will not be visible when opening the drawings. This will allow the City to reproduce all of the drawing details as they were intended.
5. Include a label on the delivery media (CD, DVD, or other similar format) indicating project name and number, company name, statement indicating a record drawing submittal, date of submittal, and notation the data is provided in AutoCAD 2000 DWG or later file format.
6. Each individual drawing sheet should be provided in a separate AutoCAD drawing layout. The name of the layout tab shall correspond to the sheet number within the set of drawings.

**Part II – CAD Drawing Used to Facilitate Conversion of GIS Data:** This CAD file will provide an overall plan view of the entire construction/project area. The drawing will show the new construction, deletion, and/or alteration of utility related infrastructure and a selected set of its related properties (typically shown as details on the Plan drawings). This drawing is subject to the requirements of the Digital Data Model Standards, and will be used by the Novi GIS office to convert the data into the City's GIS system. The requirements are used to facilitate the process of creating the proposed or altered features depicted in the overall plan view of the drawing.

1. All features in the drawing shall be in Michigan State Plane Coordinate System, NAD 1983 (1986 adjustment year) Horizontal Datum, South Zone, and in linear units of International Feet. A reference to at least one remonumented US Public Land Survey Section Corner shall be identified on the drawing in the aforementioned coordinate system. All known City benchmark locations should also be referenced within the affected construction area. Remonumented US Public Land Survey Section Corner, all known City benchmark locations shall accompany the City's benchmark locations with the identified state plane coordinate (x, y, and z value) on the drawing. All vertical elevations identified must be referenced to the National Geodetic Vertical Datum of 1988.

## Appendix A-3

2. All new utility infrastructure features, such as manholes, inlets, or runs of sewer pipe must have unique identifiers shown on the drawing. A system of unique utility feature/pipe numbers will be used by the City of Novi to code each utility feature/pipe with a unique value. The utility identification values will be managed by the City of Novi. For each project, the City will provide a range of values for the features/pipes within the given project area. Each identification value will become a Facility ID within the City's Computerized Maintenance Management System. Each feature will be referenced by this number in the CAD file and on the utility Attribute Tables (see Appendix B). The identifying numbers should be visible on the CAD drawing in a standard font. The labels are to be on any layer corresponding with the Record Drawing CAD Layering Requirements noted in Appendix A.
3. Sanitary and storm lines are to be drawn as a single line between the structures, as opposed to double lines, or a continuous polyline running between two structures. Each sanitary / storm line segment between structures must be a separate single-line entity. Do not use CAD line feature known as a "Polyline", except where turns in the line do not have structures (i.e., along force mains).
4. Sanitary, storm, and drainage lines must be drawn in the direction of their physical flow. Therefore, the starting point of all line segments within these layers should be the upstream point and the downstream point shall be the endpoint of that segment.
5. The Digital Data Model Layering Standards includes a list of specific layer names as provided in **Appendix A**. Features must be placed on their appropriate layers. Record drawing features shall be in a color separate from features which were abandoned or removed.
6. The end points of sanitary, storm, or open channel lines must be snapped to the end points of connecting lines, with a structure node being snapped to the end points also. A point feature may be used to represent a structure, such as a manhole or inlet. In all cases, its unique identifier number must be shown as a label on a separate layer.
7. Miscellaneous features and text should be placed on separate layers, apart from those specified.
8. The City discourages the use symbols or linetypes from third-party software, unless they are considered public domain property and can be provided to the City without additional cost and in accordance with prevailing licensing rights. The main goal is to allow the City to reproduce all of the drawing details as they were intended to be rendered.
9. All drawings for Part II of the submittal should be in a subdirectory on the delivery media called "Part II".
10. Include a label on the delivery media (CD, DVD, or other similar format) indicating project name and number, company name, statement indicating a record drawing submittal, date of submittal, and notation the data is provided in AutoCAD 2000 DWG or later file format.



## Appendix A-3

### Attribute Tables (See Appendix B)

The Attribute Tables define the utility feature types and their associated attribute information required for the City to properly code this information per the requirements of its GIS Utility Data Model. This model provides a means to guide the consistent and accurate collection of information supporting the City's GIS System. The City requests its consultants to use of the attribute tables provided in Appendix B to provide a more efficient means of depicting elevations, material types, and placement methods, along with other related feature information without having to display all this information on a single CAD drawing. A set of unique feature identification numbers must be cited on the overall plan for any given project. The number associates the graphic (mapped) features to its corresponding attribute data found within the table. The City of Novi will provide a Microsoft Excel spreadsheet template to facilitate the entry of the attribute data into the database.

As an alternative to the development of an attribute table, the submission of a GIS data layer may be substituted for the attribute table. The GIS data layer will be provided in an ESRI compatible format (Shapefile, Personal Geodatabase, etc) which will allow each utility feature to be linked to its corresponding attribute fields summarized in Appendix B.

## Appendix A-3

### APPENDIX A: RECORD DRAWING CAD LAYERING REQUIREMENTS

Suffixes: AB = As-Built - ABD = Abandoned - AR = As-Removed - PROP = Proposed

LAYER	DATA
EX = Existing	
<b>BOUNDARY</b>	
BND-PARCEL	Tax Parcel Boundary
BND-TEXT	Boundary Text
BND-LOTLINE	Condominium or Subdivision Lot Boundary
BND-EX-EASEMENT	Existing Easement
BND-EX-FLOODPLAIN	Existing Floodplain
BND-MONUMENT	Existing Monument, Benchmark, Section Corner
BND-SECTIONLINE	US Public Land Survey Section Line
BND-CONTROLPOINT	Survey Control Point (Survey Iron, RR Spike)
<b>SANITARY UTILITY</b>	
SAN-GRAVITYMAIN	Sanitary Main Pipe
SAN-FORCEMAIN	Sanitary Force Main
SAN-MH	Sanitary Manhole
SAN-PUMP	Sanitary Pump Station
SAN-CLEANOUT	Sanitary Cleanout
SAN-LATERAL	Sanitary Lateral
SAN-TEXT	Sanitary Text
SAN-VALVE	Sanitary Control Valve
SAN-STRUCTURE	Sanitary Building Structure (e.g. Lift Station)
SAN-GRINDERPUMP	Sanitary Grinder Pump
SAN-SERVLEAD	Sanitary Service Lead
SAN-FITTING	Sanitary Fitting
<b>WATER UTILITY</b>	
WTR-MAIN	Water Main Pipe
WTR-HYDRANT	Water Hydrant
WTR-VALVE	Water Valve
WTR-FITTING	Water Fitting (Bend, Cap, Cross, etc)
WTR-STRUCTURE	Water Building Structure (e.g. Meter Pit, Pump Station)
WTR-SERVLEAD	Water Service Lead
WTR-TEXT	Water Text
<b>STORM WATER UTILITY</b>	
STM-INLET	Storm Drain Inlet (Curb inlet, catch basin, etc)
STM-MH	Storm Manhole
STM-OUTLET	Storm Drain Outfall (e.g. Culvert Pipe)
STM-BASIN	Storm Water Detention/Retention Basin
STM-MAIN	Storm Water Main Pipe
STM-TEXT	Storm Water Text
STM-CULVERT	Storm Water Culvert
<b>NATURAL FEATURES</b>	
NAT-WATERWAY	Natural Watercourse (e.g. Drain, Stream)
NAT-WATERBODY	Water Body (Permanent)
NAT-WETLAND	Delineated Wetland
NAT-WOODLANDS	Delineated Woodland
NAT-TEXT	Natural Features Text
<b>PLAN FEATURES</b>	
PLN-BUILDING	Building/Structure Footprint
PLN-PAVEMENT	Paved Area (e.g. Road, Parking Lot, Drive)
PLN-SIDEWALK	Paved Sidewalk/Pathway
PLN-PAVEMENTEDGE	Edge of Pavement
PLN-MISCSTRUCTURE	Miscellaneous Plan Structure (e.g. Tower, Fence)
PLN-ELECTRICUTILITY	Electric Utility Feature
PLN-GASUTILITY	Gas Utility Feature
PLN-PHONEUTILITY	Phone Utility Feature
PLN-CABLEUTILITY	Cable Utility Feature
PLN-STATION	Station Markings
PLN-CONTOUR	Existing Contours

**APPENDIX A-4**

**CONSULTING ENGINEERING SERVICES  
INSURANCE REQUIREMENTS**

## Appendix A-4

### CONSULTING ENGINEERING SERVICES INSURANCE REQUIREMENTS

A. The limits of liability for the insurance required shall provide coverage for not less than the following amounts or greater required by Laws or Regulations:

1. Workers' Compensation and related coverage:
  - a. State: Statutory
  - b. Employer's Liability: \$100,000 Each accident  
\$500,000 Disease – Policy
  - Limit  
Employee \$100,000 Disease – Each
2. Consultant's General Liability shall include completed operations and product liability coverages and eliminate any exclusion with respect to property under the care, custody and control of the Consultant:
  - a. General Aggregate \$3,000,000
  - b. Each Occurrence (Bodily Injury and Property Damage) \$3,000,000
  - c. Property Damage liability insurance shall provide Explosion, Collapse and Underground coverage's where applicable.
  - d. Contractual liability coverage shall be included in accordance with paragraph 5.04.B.4 of the General Conditions.
3. Automobile Liability (including hired and non-owned vehicles):
  - a. Bodily Injury:  
Each Person \$3,000,000  
Each Accident \$3,000,000
  - b. Property Damage:  
Each Accident \$3,000,000
  - c. Combined Single Limit:  
Each Accident \$3,000,000
4. Provide Umbrella Liability coverage under the following conditions, providing coverage for not less than the indicated amounts:
  - a. The carrier shall agree to the underlying policies
  - b. Coverage shall be at least as broad as that in the covered policies
  - c. Shall cover Consultant's Liability Insurance and Automobile Liability Insurance
  - d. Coverage Limit:  
Each Occurrence: \$3,000,000

**APPENDIX A-5**

**SAMPLE  
CONSULTING ENGINEERING AGREEMENT**

## Appendix A-5

### CONSULTING ENGINEERING AGREEMENT

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 \_\_\_\_\_, whose address is \_\_\_\_\_, hereafter, "Engineer."

#### RECITALS:

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

#### **Section 1. Work.**

For and in consideration of payment by the City as provided under the "Payment for Engineering Services" section of this Agreement, Engineer shall perform the work described in the manner provided or required by the following Contract Documents, which are attached to and made a part of this Agreement as Exhibits \_\_ through \_\_, all of said work to be done in a competent, efficient, timely, good and workmanlike manner, in accordance with the customary standard of care, and in compliance with all terms and conditions of this Agreement.

Exhibit A	Work Description
Exhibit B	City's Request for Proposals dated _____.
Exhibit C	Engineer's Proposal, including Fee Proposal dated _____.

#### **Section 2. Payment for Engineer Services.**

1. Basic Fee.
2. Payment Schedule for Basic Fee.

Engineer shall submit monthly statements for Basic Services rendered. The statements shall be based on (as required in RFP) for services actually completed for each task as set forth in Exhibit A at the time of billing. The monthly statements shall be accompanied by a written description of the status of project progress for that month. The City shall confirm the correctness of such statements, and may use the City's own

Engineer for such purposes. 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.

As compensation for expenses, when incurred in direct connection with the project, and approved by the City, the City shall pay the Engineer its actual cost.

**Section 4. Ownership of Plans and Documents; Records.**

1. Upon completion or termination of this agreement, all documents prepared by the Engineer, 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 Engineer, of all of its maps, records, laboratory tests, or other data pertinent to the work to be performed by the Engineer 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 Engineer 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 Engineer.

**Section 5. Termination.**

1. This Agreement may be terminated by either party upon fourteen (14) 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 three (3) days' prior written notice to the Engineer.

3. In the event of termination, as provided in this Article, the Engineer 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 Engineer'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 Engineer in performing the services included in this Agreement, whether completed or in progress.

**Section 6. Disclosure.**

The Engineer 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 design 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 Engineer shall maintain at its expense during the term of this Agreement, the following insurance:

- a. **Worker's Compensation** insurance with the Michigan statutory limits and Employer's Liability insurance with minimum limits of **not less than that is required by applicable law** for each accident.
- b. **Commercial General Liability Insurance** – The Engineer shall procure and maintain during the life of this Agreement, Commercial General Liability Insurance, Personal Injury, Bodily Injury and Property Damage on an “Occurrence Basis” with limits of liability not less than **\$3,000,000** (Three Million Dollars) per occurrence combined single limit.
- c. **Automobile 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 **\$3,000,000** (Three Million Dollars) each person and **\$3,000,000** (Three Million Dollars) each occurrence and minimum property damage limits of **\$3,000,000** (Three Million Dollars) each occurrence.
- d. The Engineer shall provide proof of **Professional Liability** coverage in the amount of not less than **\$3,000,000** (Three Million Dollars) per occurrence and/or aggregate.

2. The Engineer 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 Engineer will furnish on demand such additional coverage as may reasonably be required under the circumstances. All such insurance shall be effected at the Engineer'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 Engineer 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 date to the City. Commercial General and Automobile Liability 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 City of Novi, Attn: Purchasing Department, 45175 West Ten Mile Road, Novi, Michigan 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 Engineer shall require each sub-consultant to effect and maintain at least the same types and limits of insurance as fixed for the Engineer.

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

7. The City has the authority to vary from the specified limits as deemed necessary.

#### **Section 8. Indemnity and Hold Harmless.**

1. The Engineer agrees to save harmless and defend the City against and from any or all liability, loss or damages (including without limitations, fees and expenses of attorneys, expert witnesses and other consultants) which the City may suffer as a result of claims, demands, costs, or judgments against it arising from, out of or in consequence of the performance of this Agreement, excepting only such liability, loss or damage as shall have been occasioned by the sole negligence of the City of Novi, its officers, agents or employees.

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

**Section 9. Nondiscrimination.**

The Engineer 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 Engineer 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 subcontractor 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 Engineer, its employees, associates, agents and consultants for the accuracy and competency of their designs, working drawings, and specifications, or other documents and work; 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 Engineer, its employees, subcontractor, agents and consultants.

After acceptance of final plans and special provisions by the City, Engineer 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 Engineer and to change the original design as required.

**Section 12. Compliance With Laws.**

This Agreement and all of Engineer's work 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. Engineer 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., City Engineer and Maryanne Cornelius, Clerk, with a copy to Gerald A. Fisher, Secrest, Wardle, Lynch, Hampton, Truex & Morley, 30903 Northwestern Highway, Farmington Hills, MI 48334.

Engineer:

**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 work by Engineer, City shall have the right to inspect the work 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 Engineer with written notice to correct the defect or default within a specified number of days of the notice. Upon receiving such a notice, Engineer 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 a valid claim and charge against Engineer, or, preserve the claims of defects or defaults without termination by written notice to Engineer.

**Section 16. Delays.**

No charges or claims for damages shall be made by the Engineer 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 Engineer either the necessary information or approval to proceed with the work, resulting, through no fault of the Engineer, in delays of such extent as to require the Engineer 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 Engineer as determined by the City, the Engineer 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 Engineer 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 Engineer of any responsibility for the fulfillment of this agreement.

**Section 18. Dispute Resolution.**

The parties agree to try to resolve any disputes as to contract administration 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

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By:  
Its:

The foregoing \_\_\_\_\_ was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 2006, by \_\_\_\_\_ on behalf

\_\_\_\_\_.

\_\_\_\_\_  
Notary Public  
\_\_\_\_\_  
County,  
Michigan  
My Commission Expires:  
\_\_\_\_\_

WITNESSES

CITY OF NOVI

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

By: Robert J. Gatt  
Its: Mayor

\_\_\_\_\_

\_\_\_\_\_

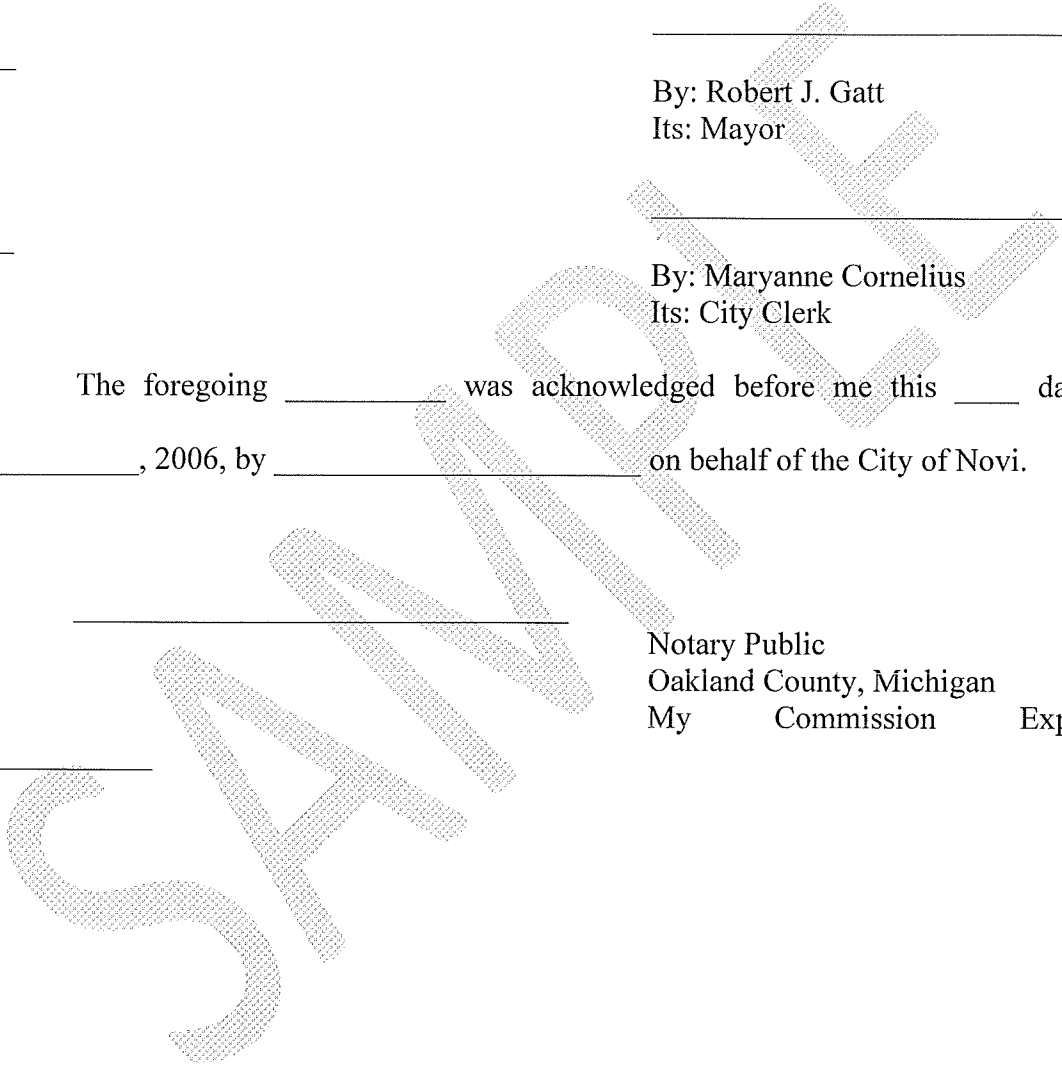
By: Maryanne Cornelius  
Its: City Clerk

The foregoing \_\_\_\_\_ was acknowledged before me this \_\_\_\_ day of  
\_\_\_\_\_, 2006, by \_\_\_\_\_ on behalf of the City of Novi.

\_\_\_\_\_

Notary Public  
Oakland County, Michigan  
My Commission Expires:

\_\_\_\_\_



## City of Novi Civil Engineering Private Development Field Services - Qualifications



Engineering Service Proposal  
Due: March 13, 2012  
SDA PR12-064

**Detroit**

1435 Randolph St., Suite 404  
Detroit, Michigan 48226  
(313) 967-4700  
Fax (313) 967-4707

**Rochester Hills**

905 South Blvd. East  
Rochester Hills, Michigan 48307  
(248) 844-5400  
Fax (248) 844-5404

**San Antonio**

9120 Old Dietz Elkhorn Rd.  
Fair Oaks Ranch, Texas 78015  
(830) 755-8434  
Fax (830) 755-8435

**Livonia Field Office**

39293 Plymouth Rd., Suite 102  
Livonia, Michigan 48150  
(734) 293-5200  
Fax (734) 293-5202

**Monroe Field Office**

25 South Monroe St., Suite 305  
Monroe, Michigan 48161  
(734) 242-6816  
Fax (734) 242-6817

**Cleveland Field Office**

5555 Canal Rd.  
Cleveland, Ohio 44125  
(216) 789-0748

# Table of Contents

**City of Novi**  
**Civil Engineering Field Services**  
**PR12-064**  
**Due: March 13, 2012**

## Section

- 1 Cover Letter
- 2 Background and Project Summary
- 3 A Methodology  
B Exhibits
- 4 Staffing
  - Organization Chart
  - Staffing Summary
  - Resumes
- 5 Qualifications



March 13, 2012

City of Novi  
Clerk's Office  
45175 W. Ten Mile Road  
Novi, MI 48375-3024

Re: **City of Novi, Michigan  
Request for Qualifications  
Civil Engineering Private Development Field Services  
SDA No. PR12-064**

To Whom It May Concern:

Spalding DeDecker Associates, Inc. (SDA) is pleased to provide the following qualifications proposal for Civil Engineering Private Development Field Services to the City of Novi. On behalf of SDA, we would like to express our gratitude for the opportunity to serve the City of Novi throughout the past six years with the hope and confidence that our partnership shall continue.

Continuity is of paramount importance when it pertains to providing consistent, high quality, effective field engineering services to our municipal clients. SDA is proud of our team, led by Mr. Ted Meadows, that currently serves the City of Novi providing Civil Engineering Field Services. Ted will continue as the single point-of-contact with the City and shall be responsible for managing the Civil Engineering Field Services described in the enclosed qualifications proposal. Ted has established outstanding working relationships with City of Novi staff and possesses an intimate understanding of the City's ordinances and engineering standards and procedures. He is supported by a qualified, experienced, and diverse team of licensed civil engineers, surveyors, and certified field technicians, offering the complete range of services including Construction Engineering, Municipal Engineering, Survey and Mapping, Transportation, and Storm Water Management.

Our firm is excited to continue to meet or exceed the expectations and requirements for the City of Novi's Civil Engineering Private Development Field Services contract. Recently, we have received letters of recommendation for our services from the communities of Livonia and Troy. The City of Livonia Engineer remarked, "We are pleased with the excellent performance that SDA has provided... SDA construction personnel are able to add valuable cost solutions and suggestions to incorporate into a project... The SDA personnel are very responsive to meeting the needs of their clients. They are able to complete the projects in a timely fashion..." In addition, the City of Troy Engineer wrote, "I would highly recommend them (SDA) to anyone considering using their Professional Engineering Services." We are proud of our project management and construction services and look forward to continuing and improving our construction field services for the City of Novi. We present these excerpts as witnesses to SDA's quality of service and commitment to excellence. Each letter in its entirety can be found in Section 3b of this proposal as Exhibits N and O.

The SDA team recently became deeper and broader with the acquisition of Coyle Engineering, Inc. Coyle is headquartered in the City of San Antonio, Texas and has been in business for more than 17 years providing Civil Engineering, Land Planning, and Municipal Engineering to many clients in

**The City of Livonia Engineer stated, "We are pleased with the excellent performance that SDA has provided... SDA construction personnel are able to add valuable cost solutions and suggestions to incorporate into a project... The SDA personnel are very responsive to meeting the needs of their clients. They are able to complete the projects in a timely fashion..."**

**The City of Troy Engineer wrote, "I would highly recommend them (SDA) to anyone considering using their Professional Engineering Services."**





southwestern Texas. While Coyle Engineering will retain its identity and existing client base out of San Antonio, it provides SDA with additional expertise and bench depth in all aspects of Municipal Engineering.

Many changes have occurred throughout the past six years since SDA began serving the City. The economic and development climate has changed dramatically with residential construction ebbing while commercial and industrial projects continue to sprout up. We are proud of our partnership with the City of Novi and our ability to adapt our approach to meet and exceed what the City currently requires. Many examples of value added field engineering services abound, but two examples stand out regarding SDA's attention to detail and desire to provide excellent professional service to the City:

The first example involves the Maple Manor project. Specifically, prior to the Pre-Construction Meeting, SDA reviewed the plans and noted that the City required a Fire Protection Gate Valve. The well had not been proposed on the plans, nor had a gate well been proposed for the 4-inch domestic water service. Upon further review of the plans in preparation for the Pre-Construction Meeting, SDA also noted these lines and future gate wells were too close to one another for construction and would also be covered by the air conditioning cooling towers for the building. The required gate wells and future gate well location were discussed at the Pre-Construction Meeting and were resolved prior to construction. This is the type of quality service, cost savings, and added value SDA brings to the City of Novi at a competitive fee.

A second example involved the Haggerty Corporate Corridor Phase II development. Our well educated and experienced construction inspection staff is always looking for improvements to the construction phase of a project. While working on the Haggerty Corporate Corridor Phase II development, Don Pashby noted the water main was proposed to be constructed 12 feet deep for a length of more than 300 feet. Don brought this to the attention of the City's Engineering Division and SDA staff, and recommended the water main be raised to the appropriate bury depth. The water main construction was revised and constructed per City standards.

These are just a couple instances where SDA has shown we are not only here to manage or observe and report construction in the City of Novi, but we also inspect construction and look for optimal alternatives and solutions. We strive to be active partners in the successful development and growth of the community while maintaining the integrity that makes the City of Novi a great place to live.

This proposal will remain valid until a contract is awarded or for a period of 180 days, whichever occurs first. The services herein described shall be provided from our Livonia office located at 39293 Plymouth Road, Suite 102, Livonia, Michigan.

We stand ready to deliver.

Very Truly Yours,  
**SPALDING DEDECKER ASSOCIATES, INC.**

Handwritten signature of Christopher J. Robbins in black ink.

Christopher J. Robbins, PE  
Manager - Construction Engineering

Handwritten signature of Ted Meadows in blue ink.

Ted Meadows  
Construction Contract Administrator

Enclosures:

- One bound qualifications proposal and five copies of qualifications proposal on CDs
- One sealed price proposal and five copies of price proposal on CDs

# Background and Project Summary

## Understanding of the City of Novi's Field Service Minimum Qualifications

Spalding DeDecker Associates, Inc. (SDA) understands the City of Novi seeks to contract a qualified Consulting Civil Engineering firm to provide a variety of civil engineering private development field services for private commercial, industrial, and residential development sites. SDA will utilize a team of professionals and trained technicians to provide the required services to the City of Novi. We understand the City of Novi has multiple departments, each providing its own specific service to the residents and business community. With that said, SDA's goal is to continue to clearly communicate and promptly coordinate with the various City Departments, enabling the City to provide quality services to the community of Novi. As the City of Novi's Consulting Engineer, SDA offers the following current qualifications:



1. SDA has one office within 30 miles of the City of Novi. SDA's Livonia office is located at 39293 Plymouth Road, Suite 102, Livonia, Michigan 48150. The City of Novi Field Engineering services are currently provided from our Livonia office.
2. SDA currently performs all the services listed in the Scope of Services section without the use of any sub-consultants.
3. Our firm has 17 Professional Engineers on-call for any needs that the City of Novi may require. All are licensed in the State of Michigan. We also have Professional Engineers registered in 38 additional states.
4. SDA employs four Professional Surveyors licensed in the State of Michigan. Survey services for the City will be led by Mike DeDecker, PS.
5. SDA's Construction Project Manager for the City of Novi is Ted Meadows. Ted has more than 13 years of experience and has been with SDA for the past four years. Through his nearly 10 years serving the City of Novi, Ted has developed strong relationships with staff and has a detailed understanding of the City's construction standards, specifications, and details. Also, Ted has assisted multiple City staff in developing and implementing construction practices and procedures for improved infrastructure development. Mr. Meadows is familiar with multiple software packages for recording daily reports and pictures. At SDA, we use FieldBook and FieldManager; both packages are required by MDOT for their recording of reports.
6. SDA employs 12 field technicians. Specifically, Don Pashby, John Becht, Ashvin Saraiya, Kim Danowski, Diane Zobl, Michael Badamo, Ray Galihugh, and Bill Jawlik will continue the inspection of the construction operations in the City of Novi. All SDA Construction Engineering Department staff is proficient in preparing daily reports with FieldBook software and creating captioned photos with Xnview. Throughout the past six years Don, Ashvin, Kim, John, and Diane all have developed working relationships with City staff that have resulted in a better understanding of the City's procedures and construction details and standards. Also, this improved communication results in higher efficiency and an improved final product and service to the City departments, residents, and business developments.
7. SDA's Construction Engineering Department has seven technicians certified in Part 91, Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act as enforced by the Michigan Department of Environmental Quality (MDEQ) – Water Bureau. SDA also employs seven Certified Storm Operators.
8. We employ three Certified Floodplain Managers (CFMs). Brian McKissen, PE, CFM has been the lead CFM and has served this role throughout the past six years for the City of Novi.
9. SDA has available the following list of software packages that are used to prepare and complete record drawings for the City of Novi: ESRI ArcGIS Desktop (ArcView, ArcInfo & ArcToolbox), version 10.0 or better, and AutoCAD Civil 3D



# Background and Project Summary

2011, which includes AutoCAD Land Development Desktop AutoCAD Map 3D. SDA also incorporates Trimble Business Center for processing GPS measurements.

**SDA's valued experience with the City over the past six years, qualifications, and commitment, provide SDA with the necessary tools to continue to serve the City with the edge it needs to assist the citizens and businesses to achieve success and prosperity.**

SDA not only recognizes there are specific qualifications to be met as the Civil Engineering Field Services consultant but will also continue to provide the following required field engineering services to assist the departments at the City of Novi:

- Coordinate and conduct all Pre-Construction Meetings relating to all site work. This includes Environmental, Site, Full-site, Special, Supplementary, and/or Temporary Certificate of Occupancy Preparation Meetings.
- Conduct Land Improvement Reviews and inspections for individual residential lots (e.g., grading / drainage, grades of structures brick ledges, and footings).
- Coordinate with all other relevant City Consultants and City Departments: Wetland and Woodland Consultants, City Attorneys, Traffic Consultant, Engineering Department, Department of Public Works, Community Development Department, Treasurer's Office, Accounting and Finance, Ordinance Enforcement, Mayor's Office, and City Council.
- Perform soil erosion and sedimentation control plan reviews, inspections, and ordinance violation investigations.
- Provide construction inspection, material testing, acceptance, document and easement review, storm water facilities inspection, and preparation of record as-builts drawings for paving and utility construction for private developments.
- Provide occupancy certificate inspection services for projects that have outstanding work items and financial guarantees posted with the City to ensure completion. Perform inspections and make resultant recommendations for financial guarantee adjustments and occupancy permits.
- Complete right-of-way inspections and associated reports as they relate to approved site plans issued by the City.
- Provide inspection of site amenities and provide associated reports (e.g., above-ground site plan features, excluding landscaping and building facade).
- Perform maintenance and guarantee bond inspections and provide associated reports (prior to expiration of the bond) to City Engineering and DPW Staff.
- Provide court testimony for ordinance enforcement, as needed.
- Attend Public Meetings (e.g., hearings, homeowner association meetings, etc.), as directed by the City.
- Review site plans for compliance with all City codes and requirements.
- Review FEMA Floodplain, conduct floodplain inspections, and prepare/update the City's FEMA Community Rating System (CRS).
- Provide spot inspections for private projects that do not have an associated site plan but include linear projects by franchised utilities.
- Conduct minor engineering studies and reviews (e.g., culvert design), as needed.



# Background and Project Summary

- Provide approval letters, rejection letters, sign-offs, punch lists, inspection reports, and Inspector's Daily Reports (IDR's). All documents will be submitted to appropriate City staff no later than five working days after the work is performed.

SDA will work with the City of Novi's staff and administration with respect to any of the aforementioned services and will complete assignments in a timely fashion.

SDA would like to point out that on many construction projects issues arise that were not anticipated during the design, review, or construction phase of a project. These issues usually require quick action to minimize inconvenience to the public and reduce the potential for additional costs incurred by the municipality or developer. SDA has extensive experience reacting to these issues as they occur and has responded very quickly to the needs of the City of Novi. One example of this proactive approach is from the Maple Manor plan review performed by Mr. Meadows prior to the Pre-Construction Meeting. Mr. Meadows noted the necessity for the addition of gate wells on the fire protection line and domestic water service, as well as revised locations of the gate wells due to the constructability and close proximity to each water main. In addition, on the HCCP II project Don Pashby noted water main unnecessarily proposed to be buried over 13 feet deep but had it revised and approved through the City Engineering Division for it to be raised and installed at the approved 6 foot of bury depth.

These are a couple instances in which SDA has shown that we are not only here to manage or observe and report construction in the City of Novi, but we inspect construction and look for better alternatives and solutions. We strive to be active partners in the successful development and growth of the community while maintaining the integrity which makes the City of Novi a great place to live.

Furthermore, as the Municipal Engineers for several large communities in the Metro Detroit area, SDA has the professional staff and office locations that enable us to be proactive in this regard on a daily basis. The close proximity of SDA's Livonia office to the City of Novi will sustain our ability to respond to urgent issues as they arise. In addition to the close proximity of our office location, SDA's on-site presence will continue with a full-time construction technician. SDA will coordinate and schedule testing services as needed and will work with neighboring municipalities, private developers, other consulting engineers, builders, contractors, and property owners, while minimizing inconveniences and delays.

**Our goal is to serve the City of Novi with clear and concise communication, professional, experienced, and well-trained staff to provide timely response during day-to-day operations, as well as address issues that arise throughout the life of a project. We feel that when we are serving a community, we are active participants of the community, thus motivating us to perform at a high level. This commitment to quality of service for the City of Novi is what we believe distinguishes SDA from other Municipal Engineering firms.**



## Scope of Services

The following numbered sections correspond to the Request for Qualifications, Section D – Scope of Services.

### 1) Environmental, Full-Site, Special, Supplementary, and/or Temporary Certificate of Occupancy Pre-Construction Meeting Coordination

SDA plans to continue the same quality approach and methods to perform Pre-Construction Meetings as we have throughout the past six years. We feel this is a solid proven system of documented communication, coordination, and establishment of requirements for projects within the City of Novi. SDA will coordinate and lead Environmental, Special, Supplementary, and Full-Site Pre-Construction Meetings. SDA will coordinate with appropriate City staff to schedule the requested meeting. These meetings will continue to be held at City Hall as well as being digitally recorded and saved. Once a date and time have been established, SDA will provide the development's prime contact an invitation for the Pre-Construction Meeting.

In preparation for the meeting SDA will provide the meeting agenda, sign-in sheet, business cards tablet, City-required Façade Inspection Checklist (if applicable), and Requirements for a Site Walkthrough & Project Completion Checklist (which ever is merited, Non-residential or Residential). In addition, SDA will continue to prepare for the meetings by obtaining the approved construction plans from the Community Development Department, receiving all applicable permits and City documents including the City's Grading permit, Soil Erosion Permit, Pre-Construction Meeting Checklist, Treasurer's Checklist, and Site Plan Review Letter. At this time, a site visit is conducted, and a detailed review of the approved construction plans and City documents is completed before creating the Pre-Construction Meeting agenda. This is when we conduct an additional detailed review of the plans to ensure any errors or omissions are noted prior to moving forward with construction. We conduct this additional review as a proactive measure to ensure all City construction standards and details are followed by the development.

At the meeting SDA will introduce all parties. Contact information is exchanged and documented on the sign-in sheet and business cards tablet. We will provide a brief description of the project explaining the scope of the public utilities, paving, and storm drainage. Primary and secondary contacts will be established from the Developer, and permits, fees, and bonds will be reviewed. Environmental Site issues such as soil erosion and woodland and wetland requirements will be discussed at the meeting. The City of Novi Woodland and Wetland Consultant, at this time ECT, will review the applicable woodland or wetland permits and requirements.

Prior to reviewing the Public Utility requirements, SDA notifies the Developer to coordinate with the necessary consultants and City Engineering Division if environmental impacts or City ROW impacts are associated with extending private utility services. We also inform them that it is the Developer's responsibility to verify all utility locations prior to the start of new underground utility construction; neither the City of Novi nor its agents are to be held responsible for exact location of said utilities. At this time, we also request a certificate of insurance from the underground contractor naming the City of Novi, Spalding DeDecker, and any additional City agents as additionally insured. The certificate of insurance must be provided to SDA before any construction may begin on the project.

Following the aforementioned notifications, SDA presents City requirements and procedures for installation of the public utilities and paving. We review approved materials to be used, installation requirements, and testing procedures for the water main, sanitary sewer, and storm sewer. Paving cross-sections, materials, and location of specific cross-sections are communicated at the Pre-Construction Meeting, as well as material testing procedures. Most importantly, Fire and Safety issues, phone numbers, and procedures are identified at the meeting. Project completion procedures, acceptance document requirements, and general Building Department issues are also reviewed, such as the Façade Inspection and Requirements for a Site Walkthrough.



Before the meeting is adjourned, any attendees' additional issues are addressed, and any questions from the development representatives are discussed. The questions are either answered at the meeting, or SDA notes the question in the meeting minutes and following the meeting will research the question and provide an answer to the representative in writing within the notes portion of the Pre-Construction Meeting Minutes. Finally, a schedule is estimated, and the meeting is adjourned.

Upon completion of the Pre-Construction Meeting, SDA revises the meeting minutes and emails .pdf files of the following to all attendees: Pre-Construction Meeting Minutes, Business Cards, Façade Inspection, Grading Permit, and Requirements for a Site Walkthrough. **See Exhibit A for a sample of Full Site Pre-Construction Meeting Minutes.**

Construction materials submittals will be reviewed by SDA for compliance with City of Novi specifications, standards, and details. Contractors will submit material certifications to SDA for review and approval. We will provide a review letter approving or rejecting each submittal. Any materials not submitted but required by the project will be addressed in the review letter as well. SDA provides this service as a proactive measure to avoid deficient material being delivered to a project, which would result in delays and budget loss. The construction materials submittals must be approved before construction may begin on any underground utility for a project. **See Exhibit B for a sample of a Material Certifications Review Letter.**

## 2) Land Improvement Review and Inspections

SDA will continue to provide Land Improvement Reviews and Inspections in coordination with the Novi Community Development Department. Land Improvement Review letters will be provided to the City, as well as to the builder and City Architect. SDA understands this service includes both new residential construction and improvements to existing structures (Minor Land Improvement Reviews). SDA reviews the proposed Land Improvement to assure conformance with existing standards and ordinances. Review elements include, but are not limited to, legal description review, grading, and drainage conformance with development master grading plans, pavement and sidewalks, structure locations, and elevations. SDA utilizes existing review checklists, if determined appropriate, and makes recommendations for revisions to checklists as needed. SDA currently coordinates with the City's Community Development Department and with Woodlands and Wetlands staff or consultant (ECT) to assure consistent communication and on-time reviews. **See Exhibit C for a sample of a Land Improvement Review Letter.**

SDA has developed Footing and Grading Inspection procedures with the City of Novi through our Construction Engineering Department. These procedures include receiving a written request from the City at our Livonia office the day before the Footing or Grading Inspection is to be performed, which initiates the inspection. We then pull the requested approved plot plan. The following day we perform the requested Footing or Grading Inspection on the requested date and time.

- **Footing Inspections**

Footing Inspections are completed the following day. Once the Footing Inspection is complete, we provide the City with an original signed document of whether the inspection was approved or rejected, the field measured top of footing elevation, and the amount it differed from the proposed elevation. SDA keeps a copy of the document for our records.

- **Grading Inspections**

Grading Inspections are allowed two days to perform the inspection per the City Building Department standard. When a request is made for a Grading Inspection, SDA performs the inspection by verifying field measured spot elevations, slopes, lot drainage, structure locations and elevations, sidewalk slopes, and drive slopes against a reviewed and approved plot plan meeting City of Novi standards and ordinances. Once the inspection is complete, we provide the City with an original

signed document stating whether the inspection was approved or rejected. If the Grading Inspection is rejected, we provide an explanation of the deficient items and the plot plan with field measured elevations and slopes. We keep a copy of this document for our records.

### 3) Coordination with City Staff and Other Outside Consultants

SDA understands that the coordination of review services with other disciplines is critical and is considered a major point of accountability by the City of Novi. SDA has a thorough understanding of current City staff members and current outside City consultants as they relate to responsibilities in the management of private development. On a daily basis SDA communicates in one form or another with one, if not many, of the following entities: Community Development Department, Engineering Division, Code Enforcement Division, Finance Department, Planning Division, Treasurer Department, Water and Sewer Department, City Attorney Johnson, Rosati, Schultz & Joppich, and City Wetland and Woodland Consultant, ECT. We realize the importance of communication and coordination between these City departments and consultants is vital in the successful management of private development projects.

### 4) Soil Erosion and Sedimentation Control (SESC) Responsibilities

SDA currently employs seven personnel licensed in Part 91, Soil Erosion and Sedimentation Control of the Natural Resources and Environmental Protection Act per the Michigan Department of Environmental Quality (MDEQ). Kim Danowski has been and will continue to be our lead inspector for soil erosion inspections. Kim and our other SESC professionals are familiar with MDEQ techniques of reducing and controlling erosion on construction sites, as well as Novi's staff, ordinances, procedures, and documentation processes. Many have been trained during previous work assignments with state and local agencies or have been recently certified by the MDEQ as a Soil Erosion and Sedimentation Control Operator.

SDA will provide the Community Development Director with enforcement support through involvement with the Code Enforcement Division. We will provide the Code Enforcement Division and Engineering Division with inspection reports generated from our site visits. SDA understands that SESC site inspection is a critical function of this service. Upon receiving the SESC permits, Appendix A - Inspection Fee Escrow Determination, and an approved Soil Erosion plan, SDA will provide the following on-site inspection services:

- Inspection for approval of silt fence and mud mat(s) locations and installation for SESC compliance.
- Inspection for installation of approved inlet protection filters in existing and constructed storm sewer catch basins.
- Observe conditions of adjacent roads to ensure they are swept and maintained regularly.
- Routine inspections according to established procedures to ensure that SESC measures are maintained.
- Inspections after rain events to ensure that SESC measures have not been compromised.
- Verify permit is posted on-site.
- Provide reports on City of Novi standard forms to the Code Enforcement Department, as well as the Engineering Division by email and hand delivery. **See Exhibit D for sample Soil Erosion Sedimentation Report.**
- Provide written notification of deficiencies to developers' representatives and the City of Novi.
- Attend Show of Cause Hearing when necessary.
- Review site for acceptable stabilization and close out of the Soil Erosion Sedimentation permit and submit close-out document. **See Exhibit E for sample Soil Erosion Sedimentation Report Close-Out Letter.**



A typical project has the following procedures and documents in place to provide maintenance, enforcement, and acceptance of soil erosion measures:

1. Periodic inspections are performed throughout the project as outlined in the City Ordinance, by the MDEQ, and per the approved soil erosion permit and Appendix A. Reports will be generated and forwarded to the Code Enforcement Division, Engineering Division, and Developer's Representative.
2. We will review the issues to be corrected with the Developer over the phone, as well as in writing. If documented deficiencies are not completed in a timely manner, an official Notice of Deficiency will be forwarded to the Developer's Representative and City outlining any corrective actions that must be taken to bring the site into conformance, as well as the date for the corrections to be completed.
3. Failure to correct items in the Notice of Deficiency on the site will result in a recommendation to the City to schedule a Show Cause Hearing which may result in a stop work order and fines for the applicant.
4. Once the site is completely stabilized with thick mowable grass, the Developer may request a Soil Erosion Completion Inspection. SDA will visit the site, make a determination of whether the stabilization is acceptable, and provide the City with appropriate rejection or acceptance letter.

## 5) Construction Inspection Services for Private Developments

### a) Construction Inspection

SDA will continue to provide full-time and/or part-time Construction Technicians to perform inspection of private development infrastructure. Mr. Don Pashby will continue to be the lead Construction Technician for SDA's contract with the City. SDA's Civil Engineering Field Services include inspection of Contractor's work to comply with City of Novi standards and details, communication and coordination City Engineering Division before, during, and after construction, the preparation of Inspector's Daily Reports, captioned construction progress pictures, and updating field measured plans for completion of Record Set Drawings. SDA



will provide **full-time** field observation for the installation of water main, sanitary sewer, storm sewer, and pavement in the ROW. The number of construction technicians will be based upon the number of projects installing the aforementioned utilities or pavement, as well as the daily workload for each project. SDA will schedule and witness all water main pressure testing, bacteria testing, and flushing of the constructed water main. We will also continue to schedule and witness the sanitary sewer televising and air testing for approval with City Standards and Details. SDA will continue to provide supplemental inspection of the sanitary sewer lead from the Monitoring Manhole to the building. This assists the Community and Development Department to ensure the sanitary lead was constructed properly. SDA's personnel assure that each element of the project is constructed in compliance with the plans and specifications approved by the City of Novi.

During construction of private developments, communication will be of the utmost importance. Inspectors from SDA will contact Ted Meadows first with any issues or questions that may arise. If Mr. Meadows has any additional questions or feels the issue requires notification to the City, he will contact the City of Novi Engineering Division. We feel one point of contact with the City provides less confusion and a more consistent line of communication.

The project Daily Reports are prepared using the current version of MDOT's FieldBook software, using laptops in the field. All field construction photographs will be taken and archived in digital format. Daily Reports and



photographs are then downloaded to our Office Technician's computer to manage the information and report with MDOT's FieldManager. The reports are then reviewed and signed by Mr. Meadows. These reports, testing reports, and photographs are submitted to the City of Novi digitally for review and archiving. **See Exhibit F for sample Technician's Daily Report.**

Construction technicians will update the approved plan with field measured information gathered and witnessed during construction. The following is a list of field measured information to be updated on the approved plans: sanitary and storm invert elevations, sanitary and storm sewer slopes, water main top of pipe elevations, hydrant finish grade elevations, horizontal locations for any type of public utility structure if constructed in different location than proposed, and any conflicts or crossings of public and private utilities.

## b) Material Testing

SDA coordinates material testing services with the Developer at the Site Pre-Construction Meeting. The Developer is responsible for hiring a material testing agency for the testing of any fills, backfill of trenches, and paving on-site. SDA's inspection staff witnesses proof rolls of sub-base material for stability with the testing agency to determine if any undercuts are necessary and the limits of the undercuts. We also verify if minimum density requirements are being met by contractors during compaction of backfill, base aggregate, and/or pavements. The testing agency generates reports and provides them to SDA for review and compliance. The testing agency also forwards the test reports within the footprint of the building to the City's Building Department. SDA provides QA/QC material testing if any inadequate testing procedures are observed of the Developer's testing agency. SDA utilizes the services of Testing Engineers & Consultants, Inc. (TEC) for any testing.

## c) Acceptance Document and Easement Review

### • Acceptance Document Review

SDA and the City Attorney review and approve the Acceptance Documents for private development projects. Acceptance document packages are reviewed upon completion of the Pre-Construction Meeting. During our initial review, we thoroughly verify easement exhibits and descriptions. If there are any discrepancies to the City-approved construction plans, we work directly with the applicant to revise these documents prior to execution. Crystal Sapp will make communication a priority and is in frequent contact with the applicant via e-mail and phone in order to expedite our review process and request necessary revisions. As part of our initial review letter, SDA also advises the applicant of the timing and requirements for the final acceptance document approval required prior to obtaining the Temporary Certificate of Occupancy (TCO).

Upon compilation of the as-built information for utilities, we review the executed final acceptance documents. Incorporating any field changes noted in our detailed inspection records, or verified by our as-built survey, we advise the applicant whether the constructed utilities lay within the preliminarily-described easement descriptions, requesting changes as necessary. We also confirm the receipt of the required Waivers of Lien, Bill of Sale, Contractor's Sworn Statements, and Maintenance Bonds for Utilities. Working closely with the applicant until all documents are satisfied, we strive to provide the City with an approval package prior to the urgent TCO request. As there is often a tight window between the completion of the acceptance documents and the granting of a TCO, we take a "drop everything" approach to finalize these documents. **See Exhibit G for sample Acceptance Document Review.**

- **Easement Review**

SDA will continue to review public utility easements and warranty deeds for public road rights-of-way. We verify that the survey exhibits and legal descriptions match the City's approved development plans. SDA will also review storm water maintenance easement agreements for conformance to the City's Storm Water Ordinance. This includes not only a review of the included survey exhibits, but also confirmation of the proposed maintenance items and frequency defined in the maintenance schedule. As SDA understands that easement document submittal timing is a critical component to reaching site milestones, we maintain constant communication with the City and City's Attorney in developing our final reviews and approval letters for these items.

**d) Storm Water Facilities Inspections**

One of the items necessary for a private development to complete prior to the issuance of a TCO is the acceptance of the storm water facilities. SDA will continue to perform inspections to ensure private developments are meeting requirements for storm water facilities.

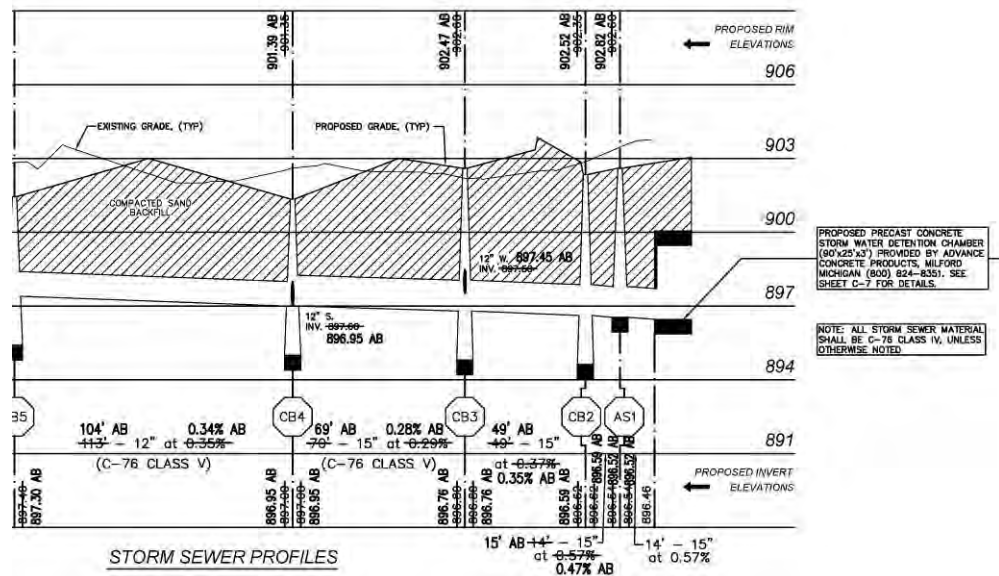
SDA will confirm the proposed volumes of above ground or underground detention systems are met as well as verifying the contours and grades have been met per the approved plan. For above ground detention systems our survey department verifies the volume and grades by performing spot elevations and cross-sections of the completed basin. Calculations are then performed to determine the as-built volume. In the case of an underground detention system, we document dimensions and sizes of the underground system then perform additional calculations to verify whether the volume was maintained for the system. In addition, SDA inspects and performs a walkthrough of the constructed storm system for debris and any damage. If either is noted during the inspection, then the development is responsible for the correction. At this time, SDA provides the City with a Storm Water Detention System Inspection letter detailing whether the system is approved or not accepted. We copy the applicant on this letter and describe what needs to be corrected so they may take the appropriate action to resolve the issue. Once the system is either initially approved or the corrections are made, we provide the City with an approved Storm Water Detention System Inspection letter. Following this letter, SDA schedules an additional inspection of the storm system 11 months after the initial approval. This is to review the system prior to expiration of the storm water facilities bond set for one year. Upon this approval, we provide the City with the Storm Water Facilities System Inspection letter. **See Exhibit H for sample Storm Water Facilities Inspection.**

**e) Record Drawing Preparation**

SDA has worked closely with the City to provide record drawings meeting the needs of their Engineering Division and GIS staff. Our work is based upon the City's document, *Requirements for Record Drawing Submittals (Version 1.07 last revised November 26, 2008)*. Our work flow includes a two-stage process as follows:

## CAD Drawing for Black-Line Paper Drawings (Standard Record Drawings)

Field-measurements are performed for underground utilities including water main, storm sewer, sanitary sewer and pavement within the public right-of-way. All measurements are referenced to the City of Novi vertical datum, which is the *North American Vertical Datum of 1988 (NAVD88)*. Measurements include pavement elevations, structure rim elevations, pipe invert elevations, length of pipe between structures, and pipe slope. Information is added to the engineering plans prepared by others, with the design information crossed-out and the measured information added with the notation "AB" to signify an as-built measurement. Detention basin volume is computed for the as-constructed basin, and the storm sewer and volume calculations are updated on the plans accordingly. Plans are plotted to a portable document format (.pdf) file and provided to the City electronically.



## CAD Drawing Used to Facilitate Conversion to GIS Data

In addition to the record drawings created from the engineering plans by others, we produce a separate drawing to facilitate transfer of the data directly into the City's GIS. We have worked closely with the GIS Manager, Chris Blough, to format our data to avoid re-work and manual data entry performed by the City. **The process has saved the City hours of time and thousands of dollars of expense and perhaps lessened the need for the City to add personnel to manually enter the data.**

This step in the task requires that we locate all structures in relation to the Michigan State Plane Coordinate System, South Zone, in reference to the NAD 1983 (1986 adjustment) datum. All structures and pipe are drawn in a CAD drawing, and object data is attached to all symbols and lines. Each object has a facility ID, indicating data such as rim elevation, pipe invert elevations and direction, and pipe type for structures, and pipe length, slope, and size for pipes. When the drawing is complete, it is exported to **shape files** for direct input into the City's GIS.

For sites with a detention basin, field-measurements are obtained along the top and toe of slope, and detailed information is measured for the inlet and overflow structures. A digital terrain model and contours are produced for the basin. Using the field-measured data, the pond volume is computed and compared with the design criteria. This information appears in the drawing provided to the City, along with detention basin computations.

## 6) Occupancy Certificate Inspection for Projects with Outstanding Site Items and Occupancy Inspections and Financial Guarantee Adjustments

SDA will perform site inspections in the form of preliminary walkthroughs and site walkthroughs to assist the City of Novi when issuing a TCO and/or Certificate of Occupancy (C of O). The City of Novi Engineering Division and SDA have developed a detailed process for these occupancy inspections. This process is presented at all Pre-Construction Meetings and other meetings as a proactive measure to avoid delays of a TCO or C of O.

Once the site utilities have been installed tested, approved, and the road/parking lot stone base has been installed, a preliminary walkthrough of the project utilities is performed to ensure all of the utility structures up to this point have been installed satisfactorily and have no visible damage. This inspection is focused primarily on the storm sewer structures in the curbs and pavement due to their consistency of being damaged after the stone base has been placed and during paving and curb placement. At this time, SDA ensures that these catch basins are located and centered per the approved plan and verifies that they are completely sealed inside and out. This specific detail has been identified as an important item for the life of the surrounding pavement. This preliminary walkthrough provides the City and SDA with a documented baseline date when all utility structures were in an acceptable state.

From this preliminary walkthrough a punch list is provided to the Developer for their distribution and coordination of corrections. The Developer contacts SDA when the utility corrections have been completed, and SDA verifies the corrections are completed properly and documents the date.

- **Temporary Certificate (TCO) or Occupancy Procedures**

Our second documented walkthrough is performed after the base course of asphalt has been placed. A Request for Private Development Inspection is provided to the City from the Developer, and then the request is then forwarded to SDA. SDA coordinates with the City's Engineering Department and the Developer to review the site utilities, grading, and paving. The site utilities and paving are reviewed again for compliance with City standards and details, and a punch list is formulated if necessary and presented to the Developer for corrections.

SDA will be present while all punch list items are corrected. In addition, the development's representative must provide a signed, notarized Affidavit for the utilities and/or public streets associated with the project. Once the items are complete, SDA provides the City with an Acceptable-for-Service Declaration. The Acceptable-for-Service Declaration informs the City "that the site utilities and base course pavement for this project have been constructed in accordance with the approved construction plans." This document only recognizes that the site utilities and **base course asphalt** are satisfactory at this time. This follows the protocol for Chapter 26.5 of the Novi Code Ordinances which only allows the top course of asphalt to be bonded for a TCO; all other punch list items must be completed per the ordinance.

In addition to the notification that the site is currently satisfactory, SDA recommends to the City an applicable adjusted amount for the incomplete financial guarantee. The recommended financial guarantee amount is a current cost estimate for the remaining top course of asphalt to be placed and any possible asphalt road repairs. This amount is generally a reduction and incorporates the City multiplier of 1.5. **See Exhibit I for sample Acceptable-for-Service Declaration.**

- **Certificate of Occupancy (C of O) Procedures**

The final paving and landscaping must be completed in order for C of O inspection to take place. The Developer submits another Request for Private Development Inspection form to the City which is forwarded to SDA. SDA and the Developer review the site utilities, grading, and paving for conformance with the plans and City requirements. A punch list is then generated and given to the Developer for satisfactory completion.

The Site Amenities Inspection is performed during the C of O walkthrough as well. This inspection is a verification of completed site plan items. A more detailed description of the Site Amenities Inspection is found in Section 8 of this Methodology.

In addition to the punch list, the storm sewer system must be cleaned and vacuumed to remove all sediment and debris. SDA witnesses the storm sewer cleaning. A disposal manifest is also required to ensure the waste is disposed of properly at a certified landfill.

If no punch list is generated or the final punch list items are complete, the disposal manifest is provided, and the Site Amenities Inspection is approved, then the site is recommended to the Engineering Department for acceptance. SDA submits a Site Work Final Approval letter to the Engineering Department and recommends the Incomplete Site Work/Utilities Financial Guarantee be released. **See Exhibit J for sample Site Work Final Approval Letter.**

- **Occupancy Certificate Inspection or Site Close-Out Inspection for Projects with Outstanding Site Items**

At various times throughout our past six years of experience with the City of Novi we have been requested to provide inspection for the close-out of existing projects originally managed by previous consulting firms. SDA will continue to provide both the construction inspection staff and coordination required for projects with outstanding work items. We will also process the posting and/or reduction of private development financial guarantees in accordance with City of Novi Ordinance requirements.

For example, the City of Novi requested SDA to coordinate the close-out of the residential development Island Lake Phase 5B previously managed by another consulting firm. An organizational meeting was held with the Community Development Department and Engineering Division to delineate remaining items to be completed and/or verified. SDA then received the written Request for Private Development Inspection for the project's completion and acceptance via email from the Developer through the City's Community Development Department.

SDA coordinated a walkthrough with the Developer and the City Engineering Division, reviewing the outstanding items and permits/financial guarantees to be released. SDA performed the walkthrough with the City Engineering Division, Developer's representative, and Contractor. During the walkthrough the previously defined scope was reviewed on site for compliance with City of Novi standards and details. Upon review of the site, we submitted an updated punch list to the City and Developer with our fee (as requested by the City) for the time incurred to coordinate the project's review and our cost estimate to observe and report the remaining corrections to the updated punch list. Once the fee was then posted by the Developer, SDA was contacted to witness completion of the corrections. Once all punch list items were complete and satisfactory, SDA provided the City of Novi with a Site Work Final Approval letter. The Site Work Final Approval letter informed the City "that the public site utilities, grading, and paving for the above referenced project have been completed in accordance with the approved construction plans. At this time, we recommend that the Incomplete Site Work/Utilities Financial Guarantee can be released."

This is a typical example of close-out procedures and coordination efforts developed by SDA and the City of Novi Engineering Division. In this instance, the Developer cooperated and completed the punch list. In other cases where the Developer does not comply, SDA provides a letter to the City Engineering Division listing the outstanding items and a cost estimate to complete each item. This total is then multiplied by the City's 2.0 factor (per City Ordinance), which is what SDA recommends to the City to be posted until the Developer complies by completing the outstanding punch list or a Completion Agreement is reached between the City and Developer.

## 7) Right-Of-Way (ROW) Inspections

SDA currently provides ROW inspections and is familiar with the procedures and protocols for completion of these inspections. When performing a ROW inspection SDA will visit the site and review drives, sidewalks, pavements, utility structures, and grades for damage and conformance with the plan and City standards and details. SDA completes ROW inspection via reports, standard City checklists, pictures of the current conditions, and ultimately a recommendation notice to the City and Developer of the acceptance or rejection of the ROW. **See Exhibit K for sample Right-of-Way Report.**

## 8) Site Amenities Inspection

SDA will continue to perform Site Amenities Inspections as part of our engineering field services for the City of Novi. SDA will review the following list of items that must be reviewed and completed prior to the recommendation of a C of O:

### Sidewalks, Bike Paths, and Wood Chip Paths

- Required bike racks
- ADA facilities (warning plates, ramp locations)
- Correctly positioned on site

### Dumpster Enclosure

- Correctly positioned on site
- Correct height of walls and door
- Correct materials for walls, door (visual inspection)

### Accessory Structures (<1,000 s.f. footprint)

- Correct positioning on site
- Matches plan detail (visual inspection)

### Flag Poles

- Correct positioning on site

### Outdoor Lighting

- Correct number provided and positioning on site

### Streetscape / Open Space Amenities (Decorative Pavers)

- Correct positioning on site

### Streetscape / Open Space Amenities (benches, plaza parks, gazebos, recreational equipment, climbing walls, fountains, decorative water features)

- Correct positioning on site
- Comments provided related to general deficiencies, if observed

### Screening, Decorative and Retaining Walls

- Correct positioning on site
- Correct height

**See Exhibit L for sample Site Amenities Checklist.**



## 9) Maintenance and Guarantee Bond Inspection Protocol

Upon notification from the City that a project maintenance bond is close to expiration, Ted Meadows will schedule a preliminary site inspection to review the condition of all public utilities and public ROW pavement. SDA will issue an inspection report detailing conditions of relevant public utilities/roads with recommendations for correction if warranted.

The second component is a follow-up inspection after the Developer/Contractor team has taken corrective action where required. At that point, Ted will schedule a final inspection to verify the work has been completed to the satisfaction of SDA and appropriate City Staff. A final report will be issued documenting corrective action.

If said corrective actions are not deemed sufficient during the final inspection, SDA will await direction from City personnel on an acceptable way to proceed amenable to the Developer/Contractor team, City staff, and SDA.

## 10) Court Testimony for Ordinance Enforcement

SDA will provide a registered Professional Engineer experienced with court proceedings to provide expert testimony on cases involving ordinance violations or otherwise. SDA understands the formal procedures for notification, citation, and violations and is prepared to assist City staff and attorneys with enforcement actions.

Our Municipal Project Manager, Jim Van Tiflin, PE, has experience in testimony in a court of law as an expert witness regarding design and construction issues. He will be available to represent the City of Novi if needed for court testimony on behalf of the City for ordinance enforcement procedures and other litigation matters.

## 11) Attend Public Meetings and Hearings

The SDA professional staff committed to the City of Novi has extensive experience in both preparing and hosting all forms of municipal Public Informational Meetings and SAD Public Comment Meetings and Hearings. Mr. Chris Robbins and Mr. Meadows will participate and manage construction related meetings, environmental, and plan review-related meetings.

All public meeting agendas will be drafted and presented to City staff prior to the meetings to assure conformance with City goals. We will prepare meeting minutes and distribute to attendees as requested by the City.

## 12) Site Plan Review for Compliance with City Codes and Requirements

SDA understands that Site Plan Review is currently performed by the City of Novi Engineering Department. If SDA is requested to provide support to the City for site plan reviews and soil erosion and sedimentation plan reviews, we are prepared to respond the City's needs. We will assist City Staff in confirming compliance of proposed site plans with City ordinances, specifications, standards, and details.

SDA's Lead Review Engineer, Jim Van Tiflin, PE, has extensive knowledge with plan review procedures. This experience includes familiarity with ordinances, infrastructure, policies, and procedures, as well as a thorough understanding of the City's administrative organization. This experience provides the City of Novi with a distinct value. SDA staff knowledge of the community, knowledge of City department operations, and municipal experience create this value.

SDA's Municipal Engineering Department is comprised of Professional Engineers, Design and Construction Engineers, and CAD Technicians who have developed centers of excellence: review, design, and studies. Each center of excellence has



written procedures and checklists to aid them in ensuring that their clients' ordinances and standards are met. This regimen of procedures, checklists, and mentoring allows the Department to meet their goal: to provide the highest level of engineering expertise and service to municipal clients and their communities.

### 13) Floodplain Responsibilities and Qualifications

SDA provides floodplain use reviews for many of our client communities who participate in the National Flood Insurance Program, including the City of Novi. With three Certified Floodplain Managers (CFMs), we have a strong understanding of the process requirements established by the City, as well as the Michigan Building Code, Michigan Department of Environmental Quality (MDEQ), and Federal Emergency Management Agency (FEMA). Also, Brian McKissen, PE, CFM, of SDA serves on the Michigan Stormwater Floodplain Association Board along with other MDEQ Floodplain officials. We are prepared to provide review services consistent with those requirements. SDA routinely provides reviews of Letters of Map Change, such as Letters of Map Revision (LOMR) and Letters of Map Amendment (LOMA) for submittal to the Federal Emergency Management Agency and uses current hydrology/hydraulic software to design and/or review storm water management systems involving regulated floodplains. Our staff routinely works with the MDEQ and FEMA staff to address floodplain regulatory compliance issues. **See Exhibit M for sample Preliminary Floodplain Use Permit Review.**

SDA's Certified Floodplain Managers are also familiar with FEMA's Community Rating System (CRS). Our staff can assist the City of Novi to maintain or improve their current CRS class. We have a strong understanding of the individual activities that are assessed in the CRS program and can provide further guidance and recommendations on those activities. SDA will assist your Floodplain Coordinator in the documentation and record keeping as necessary to maintain your flood insurance status.

### 14) Private Projects with out a Site Plan Spot Inspections

SDA will continue to provide this service to the City of Novi. Our aforementioned experienced and well trained staff will accommodate the City on any project on which our assistance is requested. Our previous experience, knowledge, and relationships with City staff and various departments position us well to provide any spot inspections the City may require.

### 15) Minor Design and Construction Projects, Studies, and Reviews

SDA currently serves several large and small municipalities in the Southeast Michigan. We are extremely capable and experienced in providing major and minor design services to our clients for a full range of municipal needs. We find that once a working relationship is established with one of our municipal clients, the staff engineer serving the City Engineering or Planning staff is more than capable of meeting the City's needs in regards to minor project design, studies, and miscellaneous reviews. Mr. Jim Van Tiflin, PE will coordinate these professional services, should the City of Novi request assistance.

- **Deliverables**

All deliverables explained in this document; Inspector's Daily Reports, Pre-Construction Meeting Minutes, SESC Reports, Material Certification letters, LIP Review letters, approval and rejection letters, etc. will be submitted by SDA to the City within five working days of the work being completed.



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Civil Engineering Field Services  
PR12-064  
March 13, 2012

## Exhibits

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<b>B</b>	<b>Material Certifications Review Letter</b>
<b>C</b>	<b>Land Improvement Review Letter</b>
<b>D</b>	<b>Soil Erosion and Sedimentation Inspection Report and Photographs</b>
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<b>N</b>	<b>City of Livonia SDA Recommendation Letter</b>
<b>O</b>	<b>City of Troy SDA Recommendation Letter</b>



**EXHIBIT A**

**CITY OF NOVI**  
**WALMART SUPERCENTER**  
**FULL SITE PRE-CONSTRUCTION MEETING MINUTES**  
**August 24, 2011**  
**10:00 AM**  
**SDA Job No.: NV11-204**

A pre-construction meeting was held on August 24, 2011 at the City of Novi offices for the above referenced project. The meeting started at 10:00 AM. The attendees signed the sign-in sheet and provided cards for the card wallet. The following people were in attendance:

<b>NAME</b>	<b>REPRESENTING</b>	<b>PHONE</b>
Ted Meadows	Spalding DeDecker Associates, Inc. (Construction) <a href="mailto:tmeadows@sda-eng.com">tmeadows@sda-eng.com</a>	(248) 762-5116
Aaron Staup	City of Novi (Engineering) <a href="mailto:astaup@cityofnovi.org">astaup@cityofnovi.org</a>	(248) 347-3270
Sarah Marchioni	City of Novi (Community Development) <a href="mailto:smarchioni@cityofnovi.org">smarchioni@cityofnovi.org</a>	(248) 347-0430
Andy Gerecke	City of Novi (Building Official) <a href="mailto:agerecke@cityofnovi.org">agerecke@cityofnovi.org</a>	(248) 347-0417
Charles Boulard	City of Novi (Community Development Director) <a href="mailto:cboulard@cityofnovi.org">cboulard@cityofnovi.org</a>	(248) 347-0423
CJ Killebrew	City of Novi (Code Compliance) <a href="mailto:ckillebrew@cityofnovi.org">ckillebrew@cityofnovi.org</a>	(248) 735-5671
Scott Roselle	City of Novi W & S <a href="mailto:sroselle@cityofnovi.org">sroselle@cityofnovi.org</a>	(248) 735-5644
Michael Marks	Giffels-Webster <a href="mailto:mmarks@giffelswebster.com">mmarks@giffelswebster.com</a>	(313) 962-4442
James H. Clear	Novi Town Center <a href="mailto:jclear@simon.com">jclear@simon.com</a>	(248) 345-9087
Ray Melvin	A.R. Brouwer <a href="mailto:raymelvin@arbrouwer.com">raymelvin@arbrouwer.com</a>	(734) 368-2501
Murray Blake	Burn Co. Inc. <a href="mailto:mblake@theburnscompanies.com">mblake@theburnscompanies.com</a>	(781) 502-8911
Jon Novak	Capital Contracting Co. <a href="mailto:jonnovak@wideopenwest.com">jonnovak@wideopenwest.com</a>	(586) 276-0222

**EXHIBIT A**

<b>NAME</b>	<b>REPRESENTING</b>	<b>PHONE</b>
Don Sines	D & R Earthmoving, LLC <a href="mailto:dsines@drearthmoving.org">dsines@drearthmoving.org</a>	(517) 586-4033
Brian Dodds	D & R Earthmoving, LLC <a href="mailto:bdodds@drearthmoving.org">bdodds@drearthmoving.org</a>	(517) 586-4033
Steve Scales	Howard Immel Inc. <a href="mailto:stevesc@imm-el-builds.com">stevesc@imm-el-builds.com</a>	(920) 609-5619
Dean Dequaine	Howard Immel Inc. <a href="mailto:deande@imm-el-builds.com">deande@imm-el-builds.com</a>	(920) 609-7741
David Green	Walmart Stores <a href="mailto:david.green@wal-mart.com">david.green@wal-mart.com</a>	(479) 531-5774
Robert Matko	CESO, Inc. <a href="mailto:matko@cesoinc.com">matko@cesoinc.com</a>	(517) 622-3000
Steven Schmidt	TesTech Inc. <a href="mailto:schmidt@testechinc.com">schmidt@testechinc.com</a>	(937) 603-1875
Mandy Gauss	CESO, Inc. <a href="mailto:gauss@cesoinc.com">gauss@cesoinc.com</a>	(517) 622-3000
Rogerio Morozowski	TesTech Inc. <a href="mailto:morozowski@testechinc.com">morozowski@testechinc.com</a>	(937) 414-6908

**PROJECT OVERVIEW:**

- Construction of a 149,854 square-foot commercial building and associated parking. Site access would be provided by multiple drive approaches on Eleven Mile Road, Ingersol Drive and Town Center Drive, as well as an internal connection to Novi Town Center.
- Water service to serve the building would be provided by a 3-inch domestic lead and an 8-inch fire lead, along with additional and relocated hydrants. An 8-inch main is being installed between Eleven Mile and an existing extension off of Ingersol Drive.
- Sanitary sewer service would be provided by extending the existing 8-inch sewer from the north side of the site. There are two 6-inch leads proposed on the north side of the new building.
- Storm water would be collected by two interconnected storm sewer collection systems that will be routed to the existing storm sewer within the Novi Town Center development. Storm water will pass through one of four pre-treatment structures. A bank full storm water volume will be detained on-site prior to discharging into Bishop Creek and later detained at the Bishop Regional Detention Basin for the 100-year storm.

**PROJECT LOCATION:**

The project is located at the northwest corner of Town Center Drive and Eleven Mile Road in Section 14 of the City of Novi.

**APPROVED PLAN SET:** Latest Revision Date in Title Block: **July 11, 2011, Ben Croy, PE approval stamp dated August 5, 2011.**

**DEVELOPER'S REPRESENTATIVES:**

**Primary:**

**Project Manager**

**Dean Dequaine**

IMMEL General Contrator  
1820 Radison Street  
Green Bay, WI 54302  
Telephone: (920) 468-8208  
Fax: (920) 468-7160  
Cellular Phone: (920) 609-7741  
E-Mail: [deande@imm-el-builds.com](mailto:deande@imm-el-builds.com)

**Secondary:**

**Site Superintendent**

**Steve Scales**

IMMEL General Contrator  
1820 Radison Street  
Green Bay, WI 54302  
Telephone: (920) 468-8208  
Fax: (920) 468-7160  
Cellular Phone: (920) 609-5619  
E-Mail: [stevesc@imm-el-builds.com](mailto:stevesc@imm-el-builds.com)

**David Green**

Walmart

2498 Futura Parkway  
Plainfield, IN 46168  
Telephone: (479) 531-5774  
Fax: (479) 273-6503  
Cellular Phone: (479) 531-5774  
E-Mail: [david.green@wal-mart.com](mailto:david.green@wal-mart.com)

**Mandy Gauss**

CESO

8164 Executive Court  
Lansing, MI 48917  
Telephone: (517) 622-3000  
Fax: (517) 622-3009  
Cellular Phone: (586) 855-8130  
E-Mail: [gauss@ceso-inc.com](mailto:gauss@ceso-inc.com)

- **It was requested by the City of Novi that a site superintendent contact be provided so that anyone visiting the site will have contact information for the person managing the project on a day to day basis.**

The above named person(s) shall be responsible for all communications with the City and its Consultants during the duration of the entire project. It is the responsibility of the Developer's Representative to notify Sarah Marchioni and all Consultants if the representative will change

**EXHIBIT A**

from the person stated above during the course of the project. The City and its Consultants will continue to direct all correspondence and notices to the original representative unless otherwise directed and will not be responsible for information that is not received by the Developer due to a change in the contact person.

**PERMITS**

The following permits are necessary for this portion of the project:

<b>PERMIT</b>	<b>ISSUING AGENCY</b>	<b>Issue Date</b>	<b>PERMIT NUMBER</b>
Soil Erosion and Sedimentation Control	City of Novi	8/15/11	SE11-0003
Grading Permit	City of Novi	8/24/11	GR11-0006
Right-of-Way Permit	City of Novi	8/24/11	ROW11-0070
Right-of-Way Permit	RCOC		Not Required
Water Main	MDNRE	5/10/11	W114061
Sanitary Sewer	MDNRE		1006505
Sanitary Sewer Tapping Permit	WRC	Pending	Required
NPDES	MDNRE	9/1/11	MIR111862
Woodlands	City of Novi		Not Required
Wetlands	City of Novi		Not Required
Wetlands	MDEQ		Not Required
Flood Plain Permit	City of Novi		Not Required

- **SDA must have a copy of the contractor’s Certificate of Insurance naming the City of Novi, Spalding DeDecker and any of the city’s agents as additional insured prior to any utility construction.**
- **SDA must have a digital copy of the civil engineering plans prior to any utility construction.**

**FEES AND BONDS**

All Inspection Fees and Financial Guarantees for the project that are necessary prior to starting clearing and grubbing have been paid. A Stormwater Detention Facilities Fee will be required at Temporary Certificate of Occupancy of the site once it has been determined that the detention system has been completed consistent with the approved plans by SDA. Other financial guarantees may be required prior to the site pre-con meeting and temporary certificate of occupancy. Refer to the City Treasurer’s Office Checklist for more detail in regards to fees and financial guarantees.

## **BUILDING DEPARTMENT**

- Call in for inspection when façade materials arrive to site.
- Final sign off of all 3<sup>rd</sup> party special inspections – concrete and rebar.
- Copies of all 3<sup>rd</sup> party special inspections.
- Rated wall adjacent to Novi Town Center Building X.1.
- FS & FA Plans – Separate plans, deferral submittal letters, 3<sup>rd</sup> party review by Fire Safety.
- Call in for inspections by 3:30 PM the day before.
- Plans and plan review letters need to be available for all inspections
- Building Precon – Meet City inspectors.
- Elevation details still required for brick façade changes.
- Stocking approvals prior to TCO.
- 60 days prior to TCO, schedule TCO preparation meeting with Sarah Marchioni.
- Project is looking for a June 28, 2012 TCO. TCO preparation meeting to be scheduled accordingly.

## **CERTIFIED STORM WATER OPERATOR**

The project was notified that a certified storm water operator will be required for the project and one must be in place prior to any grading or construction.

The designated certified storm water operator for the project is as follows:

**Name: Steve Scales**  
**Certification No.: C- 15350 Expires: July 1, 2016**  
IMMEL General Contractor  
1820 Radison Street  
Green Bay, WI 54302  
Telephone: (920) 468-8208  
Fax: (920) 468-7160  
Cellular Phone: (920) 609-5619  
E-Mail: [stevesc@immel-builds.com](mailto:stevesc@immel-builds.com)

The provided certified storm water operator shall be responsible for maintaining site information relative to the NPDES Permit. This information should be kept on site and may be checked periodically by the Consulting City Engineer **(SDA, Kim Danowski (248.762.7957))** for conformance with the requirements of the permit.

## **ENVIRONMENTAL SITE ISSUES**

This site contains soil erosion control requirements that must be maintained during construction operations. The following is a summary of each consultant's requirements.

### **Soil Erosion and Sedimentation**

Periodic inspections will be performed throughout the project as outlined in the City Ordinance, by the MDEQ and as per the approved soil erosion plans for the site. **Kim Danowski (248-762-7957) of SDA** is the SESC contact for the site. The Developer's representative will be contacted by SDA to correct any deficiencies that are noted during regular inspections of the site. If these

## EXHIBIT A

items are not completed in a timely manner, an official Notice of Deficiency will be forwarded to the Developer's Representative and City outlining any corrective actions that must be taken to bring the site into conformance. Failure to correct deficiencies on the site will result in a recommendation to the City to schedule a Show Cause Hearing and may result in a stop work order and fines for the applicant. Minimum requirements for soil erosion and sedimentation control are as follows:

1. Mud mat(s) off of 11 Mile Road and Town Center Drive must be installed at the same time the silt fence is installed, prior to mass grading operations. Ensure to place the stone on a geotextile fabric. Mud mat must be 125 feet by 30 feet. Maintain the mud mat. This may require the mat to have new stone replaced once a week.
2. Eel soil erosion measures must be installed with the mud mats.
3. Silt fence stakes should be placed six (6) feet on center. The silt fence must also be trenched into the ground approximately 4 to 6 inches and completely backfilled. Verify location with SDA (Kim Danowski) representatives.
3. Silt fencing shall be repaired and/or reinstalled as necessary throughout the construction process due to damage that occurs during construction operations. This issue shall be monitored and repaired on a daily basis by the Contractor.
4. Additional soil erosion measures may be required at any time when it is determined that the weather conditions (early spring/late fall) may cause extreme erosion to the work site. Additional stone check dams may be necessary to filter water leaving the site.
5. Inlet protection filters (silt sacks or catch-alls) shall be installed on all existing catch basins in the street that front the proposed project per the approved soil erosion plans and at the discretion of SDA.
  - Silt Sacks or Catch-Alls to be installed in on-site catch basins as well.
6. 11 Mile Road and Town Center Drive must be swept regularly and as often as necessary to keep the roads clean. This is a highly visible and well traveled road, be prepared to **sweep** the road more than once a day.
7. A copy of the SESC permit shall be posted on the site. This will be kept in the job site trailer.
8. If dust becomes an issue on the site, watering trucks will be required.
9. A final SESC inspection should be requested through Sarah Marchioni of the City Community Development Department once final landscaping is in place and SESC measures have been removed. Do not remove SESC measures until final landscaping has occurred for the entire site.
10. Perimeter site construction fence has will remain in place.
11. At this time the original soil erosion permit for both the Novi Town Center X.1 site and Walmart site will be separated as two individual soil erosion permits.
12. Andy Burns, Murray Blake and Jim Clear requested at the meeting to be copied on all soil erosion daily reports and Notice of Deficiencies.

## Recap of Environmental Contacts/Procedures

Capital will install the soil erosion fence for the site. Once all fencing and mud mats are installed, SDA must be contacted for a follow up inspection and approval of the silt fence prior to any construction.

## FRANCHISED UTILITIES

**The Developer was reminded to coordinate with the necessary consultants and City Engineering Division if environmental impacts or City Right of way impacts are associated with extending these services.**

## PUBLIC UTILITIES

Full time field observation for the installation of water main, storm sewer and the sanitary sewer to the monitoring manhole on the project shall be scheduled a minimum of 48 hours in advance with Ted Meadows of the Consulting City Engineer (SDA). All construction materials and methods shall be per the City of Novi Construction Details and Notes, City of Novi Design and Construction standards, and SDA review and approval. A list of minimum requirements for these utilities is as follows.

- **Note: It is the Developer's responsibility to verify all utility locations prior to the start of new underground utility construction. Neither the City of Novi, nor its agents are to be held responsible for exact location of said utilities.**
- **Material Certifications: Shop drawing submittals for all utility materials must be forwarded to SDA for review. A total of 5 sets of shop drawings will be submitted to SDA. SDA will keep two sets of the drawings and return the other sets to the Contractor. Average turn-around time for shop drawing review is 7-10 days. All shop drawings must be approved prior to construction.**

## Water Main

1. Thrust blocks are not allowed as a method of pipe restraint. Restrained joints for piping shall be per the shop drawing checklist and approval process. Thrust restraint design shall be per the Ductile Iron Pipe Research Association (DIPRA) Manual.
2. All piping shall be installed with two (2) brass wedges per pipe joint.
3. A licensed land surveyor in the State of Michigan is required for any construction staking on the project. Nednrveld Surveying will be providing the staking for the project. Contact Jay Bennett at (248) 841-6352 regarding any questions for the staking.
  - **2 cut sheets will be needed**
  - **Stakes were requested to have the stationing and to be provided with 10ft centerline offsets and at structures 10ft and 15ft offsets.**
4. Water main staking with cut sheets are required before installation of the water main can



## EXHIBIT A

- take place. Stakes should be placed at 50-foot intervals with cuts to the top of pipe at an elevation per the approved construction plans. This cut must provide a minimum cover of 6 feet to the top of pipe from the proposed grade at the location.
5. The Contractor is required to clean all 8-inch water main pipes or larger with a poly-pig prior to testing operations.
  6. Capital was notified for filling the water main a meter with a backflow preventor must be rented from the city. The fee can be paid at the Treasurer's Office and the meter can be picked up at the DPS on 11 Mile Road and Delwal Road.
  7. A pressure test shall be scheduled with Ted Meadows of SDA 48 hours in advance.
  8. The contractor must contact SDA directly to schedule bacteriological sampling of the water. Written approval from the Oakland County Laboratory or an approved equal laboratory must be in the possession of SDA (Ted Meadows) prior to scheduling the final connection.
  9. Final connection of the water main shall be scheduled with Ted Meadows of SDA and Scott Roselle (248) 735-5647 (Novi Water) 48 hours in advance.
  10. All Water mains and fire hydrants are to be installed and be in service prior to construction above the footings per the Novi Fire Department.
  11. The City of Novi will perform the 2-inch diameter or less water service tap for the development. Installation of copper water service leads that are under 2-inch diameter or less from a location 5 feet outside the building to inside the building should be scheduled with the City Plumbing Inspector. A permit will be required.
  12. The project calls for a 3" water service, Mandy and Robert of CESO will confirm if this can be down graded or up graded to a 2" or 4" water service. A 4" water service will require a gate well and live tap with pipe to be CL 54 Double Cement Lined Ductile Iron Pipe.
  13. The hydrant at the north end of the site must be in service and operational prior to the TCO for Novi Town Center's X.1.

### Sanitary and Storm Sewer

1. Sanitary and storm sewer staking shall be performed at 50-foot intervals. The contractor/surveyor shall provide cut sheets with rim and invert elevations to SDA.
2. The Contractor must contact the City of Novi Community Development Department (248-347-0415) for inspection of the proposed lead from the monitoring manhole to the building. This inspection will require a permit to be requested by a certified plumber.
3. The contractor must attain a WRC tap permit. The contractor must contact the WRC office (248) 858-1110 48 hours prior to making the sanitary sewer tap.
4. The contractor shall complete preliminary air testing upon completion of sanitary sewer construction. The contractor shall notify Ted Meadows of the date and time of these

**EXHIBIT A**

- preliminary tests. 30 days after completion of the sanitary sewer and upon the successful completion of the preliminary air tests SDA will schedule the final air tests with the WRC and notify the contractor of the date and time for this testing. Both SDA and WRC will witness these final air tests.
5. All site tubes shall be installed in sanitary manholes at the time of the air tests to check for hydrostatic pressure over the sewer lines.
  6. Television testing is required for types of main line sanitary sewer. Mandrel testing may be required if PVC SDR 26 is used for the sanitary sewer.
  7. Sanitary sewer lead shall be 6-inch PVC SDR 23.5.
  8. Storm sewer that is 12-inch and greater shall be Class IV or V RCP per the approved plan.
  9. Storm sewer roof leads 8-inch in diameter shall be PVC SDR 26.
  10. Installation of storm sewer leads from a location 5 feet outside of the building to inside the building shall be scheduled with the City Plumbing Inspector prior to installation. A permit will be required.
  11. The catch basins should have a minimum of 10' finger drains or edge drain out of each structure in opposite directions. (Shown on plan and highly recommended)
  12. SDA must be contacted 48 hours prior to placement of the concrete curbs. At this time SDA will review the location of the casting for each catch basin. Each catch basin must be centered over the storm structure and match the proposed back of curb. If the structure does not meet either of these requirements the structure will need to be relocated to the approved plan location. In addition, each storm structure must be completely sealed with brick/block and mortar. Any cracks will result in the casting being reset in a fresh bed of mortar. Pointing and tucking of the adjustment is prohibited. SDA will perform a preliminary walkthrough of all the remaining on site utilities at this time as well.
  13. A walkthrough of the on site utilities, paving and grading will be performed after the base course pavement has been placed. Finally, prior to TCO recommendation, the city will perform a walkthrough upon completion of all proceeding punchlists.
  14. This project will be responsible for updating any structures to the city's standards and details where the on site grading has resulted in the addition of adjustment to any structure.
  15. Use EJIW 1040 frames with type M1 grates or type B covers for the storm sewer catch basins on site per the approved schedule in the plan.
  16. The sanitary sewer lead must be installed and approved prior to the TCO for Novi Town Center X.1, which is anticipated to be November 20,11.

## EXHIBIT A

### Paving

1. CESO representatives noted at the preconstruction meeting that all pavement on the site identified as standard duty asphalt cross section has been revised to be the standard duty concrete cross section. In addition, all pavement on the site identified as heavy duty asphalt cross section has been revised to be the heavy duty concrete cross section. Lastly, the City of Novi ROW approaches have been revised to be the heavy duty concrete cross section.
2. On site Flexible Pavement Standard Duty asphalt pavement shall meet the following cross-section per the approved plan: Compacted subgrade, BX 1200 Tensar Geogrid, 8" of 21AA aggregate base, 2.5" of 3C leveling and 1.5" of 4C wearing course.
3. On site Flexible Pavement Heavy Duty asphalt pavement shall meet the following cross-section per the approved plan: Compacted subgrade, BX 1200 Tensar Geogrid, 8" of 21AA aggregate base, 3" of 3C leveling and 2" of 4C wearing course.
4. On site Rigid Pavement Standard Duty concrete pavement shall meet the following cross-section per the approved plan: Compacted subgrade, BX 1200 Tensar Geogrid, 8" of 21AA aggregate base, 5" of 3500 PSI Concrete.
5. On site Rigid Pavement Heavy Duty concrete pavement shall meet the following cross-section per the approved plan: Compacted subgrade, BX 1200 Tensar Geogrid, 8" of 21AA aggregate base, 6" of 4000 PSI Concrete.
6. The ROW drive approaches shall meet the following cross-section per the City of Novi standards: 12" of MDOT 21AA crushed limestone and 3" of 3C leveling and 2" of 4C wearing course.
7. Proof-rolls must be conducted prior to base stone placement for both curb and gutter and pavement area. SDA inspector must witness as well as the project's material testing company.
8. SDA must be contacted 48 hours prior to placement of the concrete curbs. At this time SDA will review the location of the casting for each catch basin. Each catch basin must be centered over the storm structure and match the proposed back of curb. If the structure does not meet either of these requirements the structure will need to be relocated to the approved plan location. In addition, each storm structure must be completely sealed with brick/block and mortar. Any cracks will result in the casting being reset in a fresh bed of mortar. Pointing and tucking of the adjustment is prohibited. SDA will perform a preliminary walkthrough of all the remaining on site utilities at this time as well.

### MATERIAL TESTING

#### On-site

The Developer is responsible for hiring a materials testing agency for any fills and paving on the site. Test reports that are generated by the testing agency within the footprint of the building shall be forwarded to the project's appointed City of Novi Building Inspector. Any test reports generated for the site utilities and pavement cross section shall be forwarded to Ted Meadows of SDA.

Testing Agency: **TesTech**

SDA will provide QA/QC materials testing per the discretion of the Construction Manager. SDA will utilize the services of TEC.

## **FIRE AND SAFETY**

The contact at the City Fire Department is Mike Evans. He can be reached at (248) 735-5674 for any non-emergency situations. In the case of an on-site injury or damage to gas and electric lines that may threaten life, the Contractor should call 911 and subsequently halt all operations on site. The City Fire Department will then contact all relevant jurisdictions and make a final determination of when the site operations may continue.

## **FINAL INSPECTIONS**

All inspections of the site that pertain to reduction or release of a financial guarantee shall be performed upon request by the Developer to the City of Novi. Final Inspections or intermediate inspections for a reduction in a financial guarantee will not be performed unless they are specifically requested through Sarah Marchioni of the City Community Development Department at 248-347-0430. The initial silt staking inspection, fence installation inspection and the continuing soil erosion inspections do not fall under these criteria and should be coordinated directly with the Consultants.

## **PROJECT CLOSE-OUT**

### **Procedures**

The developer will be required to read and sign the "REQUIREMENTS FOR A SITE WALKTHROUGH & PROJECT COMPLETION" document for non-residential developments prior to construction. This document outlines all of the procedures for the project from the time of the pre-construction meeting to final acceptance by the city. This document will be presented to the Developer at the meeting and should be signed and returned to SDA as soon as possible.

### **Summary of Items to be completed prior to Temp Certificate of Occupancy (TCO)**

The following minimum items must be completed prior to plot plan approval from our office.

1. The amount of the incomplete site work performance guarantee for this development at this time is \$1,419,921.00 (equal to 1.5 times the amount required to complete the site improvements, excluding the storm water facilities) as specified in the Performance Guarantee Ordinance. This guarantee will be posted prior to TCO, at which time it may be reduced based on percentage of construction completed.
2. All easements and agreements referenced in the May 4, 2011 City of Novi Plan Review Center Report, must be executed, notarized and approved by the City Attorney and City Engineer. These should be submitted to Juanita Freeman in the Community Development Department. (248-347-0477)

## EXHIBIT A

3. A Bill of Sale for each utility conveying the improvements to the City of Novi must be submitted to Juanita Freeman in the Community Development Department. This document is available on our website.
4. Spalding DeDecker will prepare the record drawings for this development. The record drawings will be prepared in accordance with Article XII, Design and Construction Standards, Chapter 11 of the Novi Code of Ordinances.
5. Submit to Juanita Freeman in the Community Development Department Waivers of Lien from any parties involved with the installation of each utility as well as a Sworn Statement listing those parties and stating that all labor and material expenses incurred in connection with the subject construction improvements have been paid.
6. A letter of credit or cash in an amount of \$33,250 (*10% of the cost of storm water facilities for projects of less than \$100,000, or 5% for the cost of projects over \$100,000*) must be posted for the storm water facilities. This deposit will be held for one year after the date of completion of construction and final inspection of the storm water facilities.
7. Submit to Juanita Freeman in the Community Development Department a Maintenance Bond in the amount of \$26,369.00 (equal to 25 percent of the cost of the construction of the utilities to be accepted). This bond must be for a period of two years from the date of formal acceptance by City Council. This document is available on our website.
8. Submit to Juanita Freeman in the Community Development Department an up-to-date Title Policy (dated within 90 days of City Council consideration of acceptance) for the purpose of verifying that the parties signing the Easement and Bill of Sale documents have the legal authority to do so. Please be sure that all parties of interest shown on the title policy (including mortgage holders) either sign the easement documents themselves or a Subordination Agreement. Please be aware that the title policy may indicate that additional documentation is necessary to complete the acceptance process.

## GENERAL

1. Working Hours are Monday through Saturday from 7:00 am to 7:00 pm per the Construction Work Hour Noise Ordinance. No Sunday or Holiday work will be permitted. Violation of these work hours may result in the issuance of a ticket by the City Police Department.
2. Any issues regarding oversize and overweight should be addressed with GeryLynn Garris from public safety. GeryLynn can be contacted at permits 248-347-0515.
3. Contact the City Community Development Department to inquire about permanent entrance walls or signs. A permit is required.
4. Temporary signs that are installed on the site for marketing purposes require a permit. Contact **Jeannie Niland** in Code Compliance for information regarding a permit. The

## EXHIBIT A

phone number is **248-347-0438**. If a sign will not be installed in the near future that identifies the site, a temporary sign that identifies the site by name for emergency purposes must be installed at the entrance to the site (no permit required for this type of sign).

5. Temporary construction trailers that are to be kept on site require Temporary Use permit. Contact **Angie Pawlowski** in Community Development at **248-347-0459** for the permit.
6. Loading and unloading of construction material must be performed within the construction site. This activity is not permitted within the Public Road Right-of-Way.
7. Staging of equipment, parking for the Contractor's employees and deliveries to the site shall be performed in a designated area on the construction site. These activities will not be allowed within the Public Road of Novi Right-of-Way.

## SCHEDULE & ADDITIONAL QUESTIONS

Utility work will commence once all shop drawings have been approved. Utility construction is anticipated to begin September 12, 2011 and continue for approximately 3-4 weeks with 1 crew. Finish grading and parking lot construction is anticipated to begin Spring of 2012 and continue for approximately 3 - 4 weeks.

- The project representatives were notified that possible curb and road repairs may be necessary to 11 Mile Road and if damage occurs during construction of the Walmart Superstore. It was recommended a video be made of the current conditions of the ROW.
- Community and Development Department inquired about revised building plans, looking for resubmittal.
- If non-union subcontractors are employed for the project Walmart and Immel are responsible for maintaining a separate entrance.

## Meeting adjourned at 11:38 AM

*Ted Meadows prepared meeting minutes. Any omissions, corrections, or deletions to these minutes should be brought to the attention of SDA within seven (7) days of receipt.*

cc: Attendees  
Sarah Marchioni, City of Novi (e-mail)  
Mike Evans, City of Novi (e-mail)



**EXHIBIT B**

July 14, 2011

Ken Carnwath  
Carnwath Excavating Company  
8457 Andersonville Road  
Clarkston, MI 48346

**Re: City of Novi – Tognum America**  
Material Certifications  
SDA Job No.: NV11-216

Dear Mr. Carnwath,

We have reviewed the Material Certifications that you submitted on July 6, 2011. Please note that the Owner or Owner's Representative bears the sole responsibility to conform to the approved plans. We offer the following comments:

Item	Structure No.	Rim to Invert ht.	Approved Y/N	Comments
Mack Industries Typical 48" Sanitary Manhole	None	None	Yes	No exception taken
M.A. Industries PS1-PF Manhole Step	None	None	Yes	No exception taken
Mack Industries Adjustment Ring	None	None	Yes	No exception taken
Kor-N-Seal pipe-to-manhole connector	None	None	Yes	No exception taken
Mack Industries 48" Sanitary Manhole	San-1	6.21'	Yes	No exception taken
Mack Industries 48" Sanitary Manhole	San-2	8.84'	Yes	No exception taken
Mack Industries 48" Sanitary Mon-Manhole	Insp. MH	5.62'	No	Structure Eliminated
Mack Industries Typical 48" Storm Manhole	None	None	Yes	No exception taken
M.A. Industries PS1-PF Manhole Step	None	None	Yes	No exception taken
Mack Industries 48" Storm Structure	CB4	8.94'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB5	6.72'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB6	6.72'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB7	5.13'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB12	5.10'	Yes	No exception taken



Mack Industries 48" Storm Structure	CB7A	5.60'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB8	6.72'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB13	4.20'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB9	6.93'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB10	6.55'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB11	6.15'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB3	4.00'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB1	4.07'	Yes	No exception taken
Mack Industries 48" Storm Structure	CB2	4.00'	Yes	No exception taken
Mack Industries 84" Tapping Well	CB6	8.50'	Yes	No exception taken
Premarc C-76 CL 4 Storm Sewer Cert	None	None	Yes	No exception taken
Contech PVC Truss Sanitary Sewer Pipe	None	None	Yes	<b>See Note 1</b>
Contech 6" SDR 23.5 pipe and fittings	None	None	Yes	No exception taken
EJIW 1040APT/ZPT Manhole Assembly "Novi Sanitary"	None	None	Yes	No exception taken
CLOW 8" CL 54 Ductile Iron Pipe	None	None	Yes	<b>See Note 2</b>
Cerro Type 'K' copper tube	None	None	Yes	No exception taken
Tyler/Union Mechanical Joint Fittings	None	None	Yes	No exception taken
Megalug 1100 series Joint Restraint	None	None	Yes	No exception taken
EJIW 6" Resilient Wedge Valve	None	None	Yes	No exception taken
EJIW 8" Resilient Wedge Tapping Valve	None	None	Yes	<b>See Note 3</b>
EJIW 1040 Z Manhole Frame	None	None	Yes	No exception taken
EJIW 5BR 250 WaterMaster Hydrant	None	None	Yes	<b>See Note 4</b>
EJIW 1040A Manhole Cover "Novi Water"	None	None	Yes	No exception taken





Tyler/Union 6860 Series Valve Box with No. 6 Base	None	None	Yes	No exception taken
Smith-Blair Stainless Steel Tapping Sleeve	None	None	<b>No</b>	<b>See Note 5</b>
Charlotte 8" PVC Schedule 40 Pipe	None	None	<b>No</b>	<b>See Note 6</b>
Edge Drain 6" ADS Sock Tubing	None	None	Yes	No exception taken
EJIW 7045 – M1 Catch Basin Grate	None	None	Yes	No exception taken
EJIW 7045 Catch Basin Assembly	None	None	Yes	No exception taken
EJIW 1040 – M1 Catch Basin Grate	None	None	Yes	No exception taken

**Notes:**

1. Must provide PVC Truss pipe for 8" sanitary sewer.
2. Must provide Class 54 Double Cement Lined DIP.
3. Provide valves that "Must open left".
4. Hydrant must meet City of Novi specifications.
5. Provide stainless steel sleeve with stainless steel flange.
6. Provide PVC SDR 26 Pipe for 8" roof drains.

**Please submit the following Material Certification Drawings per City of Novi Standards:**

1. Provide stainless steel sleeve with stainless steel flange.
2. Provide PVC SDR 26 Pipe certification letter for 8" roof drains.
3. Provide poly pig shop drawing.
4. Provide 60" typical gate well shop drawing for 4" Fire Suppression line.
5. Provide 1" corporation shop drawing.

Any work not constructed in accordance with the approved plans will not be accepted by the City of Novi. We are returning three (3) sets of material certification drawings to you for your files.

If you have any questions, please do not hesitate to contact us at our office.

Sincerely,

**SPALDING DEDECKER ASSOCIATES, INC.**

Ted Meadows  
Contract Administrator

TMM

Cc: Aaron Staup, City of Novi – Engineering Department, CE Coordinator (e-mail)  
Matt Sosin, Northern Equities (e-mail)  
SDA CE Job File



**EXHIBIT C**

**MEMORANDUM**

**DATE:** February 28, 2012

**TO:** Angela Pawlowski, City of Novi

**FROM:** Ted Meadows

**CC:** Toll MI II Limited Partnership  
Doug Necci, DRN Architects

**RE:** Lot 231 (FKA: 457) Island Lake Phase 4B2  
24329 Saybrook Court  
B12-00093  
NV12-101

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We have completed our review of the plot plan dated February 16, 2012 for the above referenced project. This plan is in general conformance with the City Ordinance and is **APPROVED**.

**If wetland or woodland reviews are required, please see attached approval letter/s.**

Please note the following:

A **RIGHT-OF-WAY PERMIT** from the City of Novi Engineering Department must be issued prior to issuance of Building Permit.

If future revisions affect the plot plan, the applicant should resubmit seven copies of the revised plot plan to the City of Novi Building Department for distribution. The specific revisions on the revised plot plan from the previously approved plan should be clearly noted by the applicant. If you have any questions, please do not hesitate to contact us.

# 13 Mile and M5 Grading NV09-402 EXHIBIT D



Gullies are forming on the sloped area.  
Silt fence has been undermined in a few places.



**November 29, 2011**



M.E.A. (MUNICIPAL ENFORCING AGENCY)  
SOIL EROSION AND SEDIMENTATION INSPECTION REPORT

PROJECT NAME: M5 / 13 Mile Grading  
NV09-402

SESC PERMIT NUMBER: SE04-0077 DATE: 11-29-11

PROJECT CONTRACTOR: Northern Equities NPDES # MIR110460

STORMWATER OPERATOR: Keith Swan, C-04381 PART 91 INSPECTOR: Kim Danowski

REASON FOR INSPECTION:  Routine Inspection  Post-Rain Event Inspection  
 Weekly Inspection  Pre-Construction Inspection  
 Complaint Inspection  Compliance Follow-up

CURRENT WEATHER CONDITIONS:  Sunny  Cloudy  Partly Cloudy  Windy  
 Rain  Snow  Sleet  Hail Temp.35-40

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OBSERVATIONS/CORRECTIVE ACTIONS:

The topsoil operation appears to be suspended for the season.  
There are a couple of trouble spots where erosion is occurring.

1. Near the entrance onto Cabot Rd, muddy water is flowing over the small stone check dam. This water must be filtered better before leaving the site. This water is flowing into the gutters and basins.
2. Gullies are forming on the large sloped area that was recently re-graded and seeded. The growth is not enough to prevent this from happening. Add check dams and silt fences.
3. The main line of silt fence has been breached in a couple of places where it drains to the settling area with the stone drain pipe.
4. Clean up the stones and mud from the road near the mud mat that was added recently.

I spoke with Keith Swan on the phone about these corrections. This needs to be corrected right away since winter erosion needs to be prevented.  
Issue NOD

---

CITY OF NOVI – CODE COMPLIANCE FOLLOW-UP (Office Use Only): \_\_\_\_\_

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Scheduled Follow-up Visit: Yes Attachments  Yes  No

Inspector's Signature: \_\_\_\_\_ Date: 11-29-11



**EXHIBIT E**

November 21, 2011

Ms. Sarah Marchioni  
Building Permit Coordinator  
City of Novi Community Development Department  
45175 West Ten Mile Road  
Novi, MI 48375

**Re: Kistler Automotive**  
Novi SESC Permit No.: SE10-0004  
Novi SP No.: 10-0044  
SDA Job No.: NV11-401

Dear Ms. Marchioni:

Please be advised the SESC permit for the Kistler Automotive project may be released. I performed a final site inspection on November 18, 2011 and have no objection to the release of the SESC permit.

Should you have any further questions, please do not hesitate to contact us at our office.

Sincerely,

**SPALDING DeDECKER ASSOCIATES, INC.**

Kim Danowski  
Construction Technician

cc: Aaron Staup, City of Novi – Engineering Department, CE Coordinator (e-mail)  
C.J. Killibrew, City of Novi – Ordinance Enforcement (e-mail)  
Sheila Weber, City of Novi – Bond Coordinator (e-mail)  
Oleg Amcheslavsky, Amson Dembs (e-mail)  
Ted Meadows, SDA (e-mail)  
SDA CE Job File





LAYING ROOF CONDUCTOR LEADS FOR THE CANOPY



CATCH BASIN #19 ASSEMBLED



LAYING 12" RCP FROM CATCH BASIN #19 TOWARD CATCH BASIN #18





**EXHIBIT G**

February 3, 2012

Matthew S. Sosin  
MacKenzie South Technology Centre, LLC  
39000 Country Club Drive  
Farming Hills, MI 48331

Re: Tognum America Headquarters - Acceptance Documents Review  
Acceptance Documents Review  
Novi # SP11-22 (& 11-22A)  
SDA Job No. NV11-216  
**APPROVED**

Dear Mr. Sosin:

We have reviewed the Acceptance Document Package received by our office on June 22, 2011 against approved Final Site Plan (Stamping Set) dated June 17, 2011. We offer the following comments:

**Initial Acceptance Documents:**

1. **Water Main Easement** – (executed: exhibit dated 6/7/2011) Legal Description Approved.
2. **Sanitary Sewer Easement** – (executed: exhibit dated 6/7/2011) Legal Description Approved.
3. **Storm Water and Surface Drainage Easement** – (executed: exhibit dated 6/7/2011) Legal Description Approved.
4. **Storm Drainage Facility / Maintenance Easement Agreement** – Exhibits A, B, C, & D Approved.
5. **Bills of Sale: Sanitary Sewer System and Water Supply System** - (executed: dated 6/7/2011) – **APPROVED.**
6. **Full Unconditional Waivers of Lien from contractors installing public utilities** – (multiple) – **APPROVED.**
7. **Maintenance and Guarantee Bond** – (in the amount of \$5,226.00) -- (executed: dated 1/20/12) - **APPROVED.**
8. **Contractor's Sworn Statement** - (executed: dated 12/2/2011) – **APPROVED**
9. **As-Built Engineering Plans** – are being prepared by Spalding DeDecker Associates, Inc.

Unless otherwise stated above, the documents as submitted were found to be acceptable by our office pending review by the City Attorney.

Mr. Aaron Staup  
City of Novi Engineering Division  
Page 2

**EXHIBIT G**

The City Attorney's Office will retain the original documents in their files until such time as they are approved and ready (notarized and executed properly) for the Mayor's signature.

**It should be noted** that the Plan Review Center Report dated June 27, 2011 contains all documentation requirements necessary prior to construction and occupancy of the facility.

If you have any questions regarding this matter, please contact this office at your convenience.

Sincerely,

**SPALDING DeDECKER ASSOCIATES, INC.**

Crystal Sapp, PE  
Project Engineer

cc: Maryanne Cornelius, City Clerk (via E-mail)  
Marina Neumaier, Assistant Finance Director (via E-mail)  
Aaron Staup, Construction Engineering Coordinator (via E-mail)  
Sheila Weber, Treasurer's Office (via E-mail)  
Barb McBeth, City Planning Director (via E-mail)  
Juanita Freeman, Planning Department (via E-mail)  
Brian Coburn, Plan Review Center (via E-mail)  
Sarah Marchioni, Building Department (via E-mail)  
Beth Kudla, Secret Wardle (via E-mail)  
Ted Meadows, SDA Construction Engineering (via E-mail)  
Jason D. Sutton, AR Decker and Associates Inc.



**EXHIBIT H**

May 2, 2011

Ms. Sarah Marchioni  
Building Permit Coordinator  
City of Novi  
45175 West Ten Mile Road  
Novi, MI 48375

**Re: Damas Grand River Office  
Storm Water Facilities System Inspection**  
Novi SP No.: 07-0021  
SDA Job No.: NV08-216

Dear Ms. Marchioni:

This letter serves to officially notify you that we have reviewed the status of the storm water facilities system including storm sewer piping, detention basin(s) and outlet control structure(s) for the above mentioned project. As a result of this review, we have determined the storm water facilities system to be in general conformance with the approved construction plans and recommend a full release of this financial guarantee.

If you have any questions, please do not hesitate to contact us at our office.

Sincerely,

**SPALDING DeDECKER ASSOCIATES, INC.**

Ted Meadows  
Contract Administrator

cc: Aaron Staup, City of Novi – Engineering Department, CE Coordinator (e-mail)  
Marina Neumaier, City of Novi – Assistant Finance Director (e-mail)  
Sheila Weber, City of Novi – Bond Coordinator (e-mail)  
Tim Sikma, City of Novi – Water & Sewer Manager (e-mail)  
Christopher Robbins, PE, SDA (e-mail)  
Dino Damas, Dial Construction (e-mail)  
SDA CE Job File



**EXHIBIT I**

June 22, 2009

Mr. Aaron Staup  
City of Novi Engineering Division  
45175 West Ten Mile Road  
Novi, MI 48375

**Re: Contemporary Imaging  
Acceptable-for-Service Declaration**  
Novi SP No.: 08-0028  
SDA Job No.: NV08-227

Dear Mr. Staup:

Please be advised that the site utilities and base course pavement for this project have been constructed in accordance with the approved construction plans.

SDA provided inspection services for all water service, storm sewer, sanitary sewer and base course paving on the site and produced punch-lists (generated by both SDA and City personnel on the walk-through conducted on June 12, 2009) that were satisfied in a timely fashion by the responsible parties (Stante Excavating and Siwek Construction) with the exception of the items noted below. In light of the facts delineated above, our firm considers the site utilities and base course pavement "Acceptable-for-Service".

**Incomplete Site Work Bond Status**

As a response to the aforementioned walk-through, there are some items that have yet to be addressed and are delineated below with corresponding dollar amounts:

1.	Place Asphalt Wearing Course (1.5" of 1100T)	\$22,350
2.	Projected Pavement Repairs (1.5" of 1100L on 8" of 21AA)	\$4,000
	Total (Subtotal*1.5)	\$39,525

As a consequence, SDA recommends the City withhold an amount of **\$39,525** for the incomplete site work.

The "Acceptable-for-Service" designation does not warrant any approvals toward issuance of a Temporary Certificate of Occupancy. This letter serves only as a notice to the applicant and the City of Novi that the respective utilities were tested and approved by the appropriate regulating agencies.

Please note that items related to the permits issued for this project are not addressed with this Acceptable for Service approval. The appropriate City staff or consultants will need to address these issues with the City of Novi.

Mr. Aaron Staup  
City of Novi Engineering Division  
Page 2

**EXHIBIT I**

If you have any questions, please do not hesitate to contact us at our office.  
Sincerely,

**SPALDING DeDECKER ASSOCIATES, INC.**

Ted Meadows  
Construction Manager

cc: Sarah Marchioni, City of Novi – Building Department Clerk (e-mail)  
Marina Neumaier, City of Novi – Assistant Finance Director (e-mail)  
Sheila Weber, City of Novi – Bond Coordinator (e-mail)  
Tim Sikma, City of Novi – Water & Sewer Manager (e-mail)  
Mike Evans, City of Novi – Fire Marshall (e-mail)  
Tina Glenn, City of Novi – Water and Sewer Financial Services Manager (e-mail)  
Christopher Robbins, PE, SDA (e-mail)  
Taylor Reynolds, PE, SDA (e-mail)  
Tom Siwek, Siwek Construction Co. (e-mail)  
SDA CE Job File



**EXHIBIT J**

December 2, 2011

Mr. Aaron Staup  
Construction Engineering Coordinator  
Department of Public Services  
Field Services Complex – Engineering Division  
26300 Delwal Drive  
Novi, MI 48375

**Re: Wrencher's Garage  
Site Work Final Approval**  
Novi SP No.: 09-0025  
SDA Job No.: NV11-209

Dear Mr. Staup:

Please be advised that the public site utilities, grading, and paving for the above referenced project have been completed in accordance with the approved construction plans under the observation of SDA. At this time, we recommend that the Incomplete Site Work/Utilities Financial Guarantee can be released.

Please note that we have not addressed any items related to landscaping, woodlands or wetlands because the appropriate City staff or consultants will need to address these issues.

If you have any questions, please do not hesitate to contact us at our office.

Sincerely,

**SPALDING DeDECKER ASSOCIATES, INC.**

Ted Meadows  
Contract Administrator

cc: Sarah Marchioni, City of Novi – Building Department Clerk (e-mail)  
Marina Neumaier, City of Novi – Assistant Finance Director (e-mail)  
Sheila Weber, City of Novi – Bond Coordinator (e-mail)  
Robert West, City of Novi – Water & Sewer Manager (e-mail)  
Mike Evans, City of Novi – Fire Marshall (e-mail)  
Christopher Robbins, PE, SDA (e-mail)  
Ed Williams, Wrencher's Garage (e-mail)  
SDA CE Job File



# RIGHT-OF-WAY INSPECTION REPORT

Inspection Date: 12/12/11 Permit No.: ROW11-0050

Project: Tognum America

Requestor: Steven Jacobs

**INSPECTION CHECKLIST:**

*(mark boxes below with an "X" if item is satisfactorily completed, or "NA" if not applicable)*

X	Lawn is established, green and mowable and matches adjacent areas for density. If sodded, sod is established and rooted.	X	All hydrants, manholes, catch basins have been inspected, are free from damage and do not require adjustment.
X	All debris has been removed from the ROW including silt fence, tree fence, construction materials, etc.	X	There are no non-standard objects in the right-of-way (brick mailboxes, brick pavers, stamped concrete, etc)
X	All sidewalks, pathways, curbs, driveways, etc have been inspected and are free from damage.	N/A	Culverts are installed per plan and standards and have end sections and ditches are properly stabilized.
N/A	In the case of bores or directional drilling under the road, there is no visible physical damage to the road	X	If connections are made to the public utilities, the structures have been inspected for damage
X	Other more site-specific design specific items have been completed per the plan or permit conditions.	<p>***** <b>Photos must be attached to depict the ROW conditions at the time of inspection.</b></p> <p>*****</p>	

**INSPECTION RECOMMENDATION:**

- APPROVED**  
 **REJECTED** (attach list of deficiencies)

If rejected, attach a list of deficiencies that need to be addressed prior to reinspection. The consultant must contact the applicant to inform them of the specific deficiencies. Forward this form, photos and deficiency list to the City for the file.

If approved, please forward to the City for release of financial guarantee.

City Consultant: Spalding DeDecker Associates

Name of Inspector: Ted Meadows

Forward this report along with photos and list of deficiencies (if applicable) to the Engineering Division, [bcoburn@cityofnovi.org](mailto:bcoburn@cityofnovi.org), when completed.



**EXHIBIT L**

**CITY OF NOVI  
Site Amenities Punchlist Inspection**

Project Name: Chuck E. Cheese

SP #: 11-0009

SDA Project No.: NV11-222

**Sidewalks, Bike Paths and Wood Chip Paths**

N/A required bike racks

N/A ADA facilities (warning plates, ramp locations)

N/A correctly positioned on site

Comments:

**Dumpster Enclosure**

YES correctly positioned on site.

YES correct height of walls and door.

YES correct materials for walls, door (visual inspection).

Comments:

**Accessory Structures (<1,000 s.f. footprint)**

N/A correct positioning on site.

N/A matches plan detail (visual inspection).

Comments:

**Flag Poles**

N/A correct positioning on site.

Comments:





**EXHIBIT L**

**Outdoor Lighting**

YES correct number provided and positioning on site.

Comments:

**Streetscape / Open Space Amenities (Decorative Pavers)**

N/A correct positioning on site.

Comments:

**Streetscape / Open Space Amenities (benches, plaza parks, gazebos, recreational equipment, climbing walls, fountains, decorative water features)**

N/A correct positioning on site.

N/A comments provided related to general deficiencies, if observed.

Comments:

**Screening, Decorative and Retaining Walls**

N/A correct positioning on site.

N/A correct height.

Comments:

Prepared By: Ted Meadows

Date: 12/2/11



**EXHIBIT M**

March 22, 2011

Mr. Andy Gerecke, Building Official  
City of Novi  
45175 W. Ten Mile Road  
Novi, MI 48375

Re: Medilodge of Novi  
Preliminary Floodplain Use Permit Review  
Job No.: NV11-306

Dear Mr. Gerecke:

We have completed our review of the plans and Conditional Letter of Map Revision based on Fill (CLOMR-F) prepared by Livingston Engineering with regard to modifications to the Novi-Lyon Drain Tributary C regulated floodplain north of 11 Mile Road in Section 17 of the City of Novi. This review is being performed pursuant to the Floodplain Use Permit application filed March 11, 2011 and for conformance with the City of Novi Code of Ordinances; Chapter 12 – Drainage and Flood Damage Prevention We offer the following comments:

- The engineering plans should be submitted on 24" x 36" plan sheets. Oversized sheets have been submitted.
- The 100-yr floodplain elevation listed on the engineering plans and CLOMR-F application is 960.10 NAVD88. The Flood Insurance Study flood profile indicates that the floodplain elevation is approximately 960.4. The plans and application should be revised accordingly including cut and fill calculations.
- The limits of the proposed floodplain should clearly be shown on all engineering plan sheets.
- The approximate limits of the FEMA mapped floodplain should be shown on the engineering plans. The existing floodplain note indicates that the floodplain limits shown are per the FEMA map. This note should be revised to indicate that the limits shown are per survey elevations.
- It should be noted that this site is a proposed medical facility and deemed a Type III or IV structure. Therefore, the lowest finished floor must be elevated 1 foot above the 500 year flood elevation. The engineering plans indicate that the facility will meet this requirement. Therefore, the 500 year floodplain must be shown on the engineering plans.
- The CLOMR-F application indicates that the structure will be slab on grade and will not have a basement. The developer should confirm that the structure will be slab on grade. If a basement is proposed the developer must provide further certification to address hydrostatic forces per FEMA's technical bulletin 10-01.
- The CLOMR-F application must be dated on MT-1 Form 1 Page 2 of 2.



Mr. Andy Gerecke, Building Official  
Page 2  
March 22, 2011

**EXHIBIT M**

Recommendations

We cannot recommend approval of a Floodplain Use Permit for this project at this time. The items listed above will need to be addressed prior to any construction activities within the currently regulated floodplain limits of the Novi-Lyon Drain Tributary C.

Once the above-noted items are addressed, the applicant is advised to re-submit this information to the City of Novi Community Development Department for further review and to forward the CLOMR-F application to FEMA. Two sets of engineering plans and CLOMR-F applications should be submitted.

It should be noted that once the above items have been provided and are determined acceptable, the use permit approval will be conditioned upon the following:

- Securing a Part 31 Permit for work in the 100 year floodplain
- Securing a FEMA – CLOMR-F.

Upon construction of the development a LOMR-F will be required prior to issuance of a final certificate-of-occupancy.

If you have any questions regarding these comments, please contact our office at your convenience.

Sincerely,

**SPALDING DEDECKER ASSOCIATES, INC.**

Brian McKissen, PE, CFM  
Project Engineer

cc: Mr. Benjamin Croy, PE, City of Novi, Engineering  
Mr. Timm Appleton, PE, Livingston Engineering, 3300 Old US 23, Brighton, MI 48116

**DEPARTMENT OF PUBLIC WORKS**  
ENGINEERING DIVISION

**TODD J. ZILINCIK, P.E.**  
City Engineer

**KEVIN G. RONEY, P.E.**  
Assistant City Engineer



**JACK E. KIRKSEY**  
MAYOR

**KEVIN L. MAILLARD, P.E.**  
Director of Public Works

33000 CIVIC CENTER DRIVE  
LIVONIA, MICHIGAN 48154-3097  
(734) 466-2571  
FAX: (734) 466-2195

February 15, 2012

The City of Livonia Engineering Department continues to utilize the professional services of Spalding DeDecker Associates, Inc. (SDA) to assist in improvements to our aging infrastructure.

SDA was approved in 2010 for Qualification Based Selection (QBS) Consulting Services that expires in November 30, 2013. They also have been approved since 2009 to provide on-call testing and inspection services.

We are pleased with the excellent performance that SDA has provided from larger projects that included road construction such as Schoolcraft Road following the Michigan Department of Transportation (MDOT) Local Agency Program (LAP) guidelines to more complex projects such as the rehabilitation of existing deteriorated structural columns from several carports behind the Livonia Police Station. The survey personnel has provided construction staking on short notice to keep projects moving forward and also provided documentation for dedication of right-of-way and obtaining temporary easements that were time sensitive for the safety improvement projects.

SDA construction personnel are able to add valuable cost solutions and suggestions to incorporate into a project that was not considered or directed at the time of design. For instance, the existing dumpster location for the Police Parking Lot Improvements was relocated for increased safety to avoid conflict with potential damage to the newly rehabilitated car ports and avoid conflict with patrol cars exiting the facility.

The SDA personnel are very responsive to meeting the needs of their clients. They are able to complete the projects in a timely fashion coordinating with other governmental agencies such as MDOT, Wayne County, and MDEQ so that proper permits are obtained for compliance.

We are very pleased with the customer service at SDA, allowing City personnel to attend workshops about new products or provide solutions using their expertise that are beneficial to improve the quality of life for our citizens.

Below is a summary of the most recent projects over the past 3 years they have been involved assisting the City of Livonia with improvements and their respective contract amounts:

Intersection Safety Improvement Projects (Traffic Signal Modernization) – Design

- Six Mile Road and Haggerty - \$35,950 (for both locations)
- Farmington Road at Six Mile and Seven Mile Roads

City Hall Campus Improvements - Design

- Civic Center/Library Drive Road Improvements - \$31,600.00
- Police and Fire Dept. Campus Improvements, including the Police Front Entrance Reconstruction Improvements - \$40,100.00

Testing / Inspection Services

- City Hall Campus Improvements – \$44,095.00
- Police and Fire Parking Lot Improvements - \$60,430.17
- Bicentennial Park North Parking Lot Improvements - \$10,000.00
- Idyl Wyld / One Under East Parking Lot Reconstruction - \$14,900.00

Road Construction Projects -Design

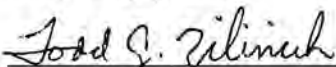
- Schoolcraft Road, I-96 Bridge to Scone Court Reconstruction - \$30,600.00

Construction Engineering

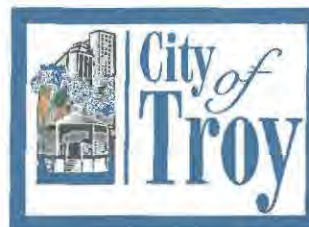
- Schoolcraft Road, I-96 Bridge to Scone Court Reconstruction - \$80,900.00

I may be reached at (734) 466-2561 to share my experiences about the SDA staff and their professionalism to seek solutions for the City of Livonia. We look forward to the continued relationship with SDA to assist the City in meeting the challenges to improve future infrastructure projects.

Very truly yours,



Todd J. Zilincik, P.E.  
City Engineer



February 3, 2012

To Whom It May Concern:

Spalding DeDecker Associates (SDA) has been one of our Consulting Engineers since 2002. SDA has served the City of Troy in several engineering capacities for nearly ten years. They started by providing Consulting Engineering Services for Soil Erosion and Sedimentation Control Services, as well as Construction Engineering Services.

Currently SDA and other selected consultants serve the City of Troy with most of our engineering needs, working closely with all Department personnel. With professional capabilities including plan reviews to trunk-line utility designs, utility master planning, floodplain management, contract administration and construction observation services, SDA has the professional capabilities to provide the engineering resources and expertise required for each assigned project.

As we reviewed our infrastructure needs, SDA was also called upon to provide key municipal utility design services. In particular, SDA has played a critical role in the planning, design and construction engineering for several projects, including:

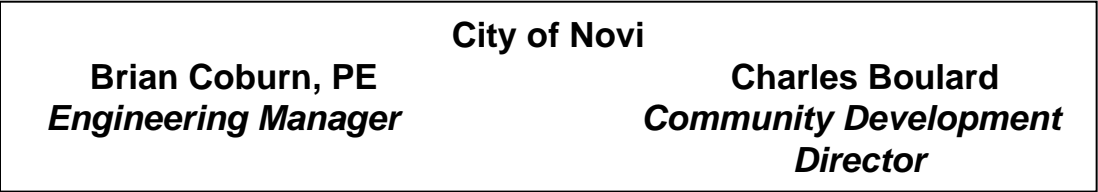
- \$1.7M water main replacement project on Heidi/Thunderbird/Oliver. The project consisted of 5,600 linear feet of 16" water main and 1 mile of pavement rehabilitation based on pavement repair alternatives developed by SDA. SDA provided the design services and construction inspection/administration services.
- \$700,000 intersection improvement projects at Livernois/Wattles, Livernois/Big Beaver and Coolidge/Golfview. SDA was responsible for the preliminary engineering and full construction engineering services in accordance with MDOT requirements.
- \$4M rehabilitation project on Stephenson Highway, from 14 Mile to I-75. SDA was responsible for the preliminary engineering and full construction engineering services in accordance with MDOT requirements.

Our contract with SDA was recently extended for an additional three-year term, until 2014. I would highly recommend them to anyone considering using their Professional Engineering Services.

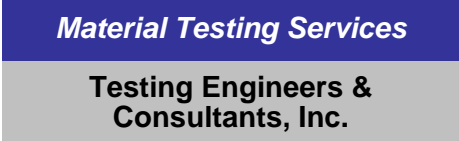
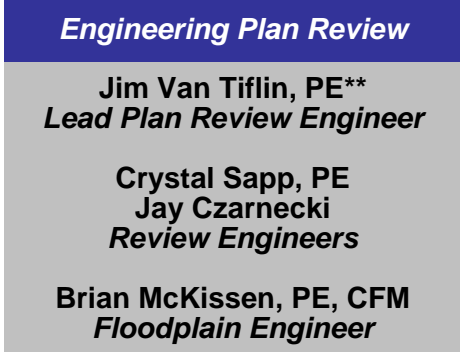
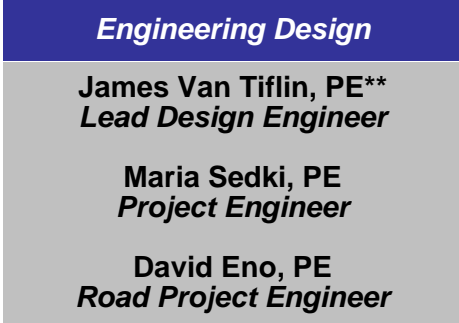
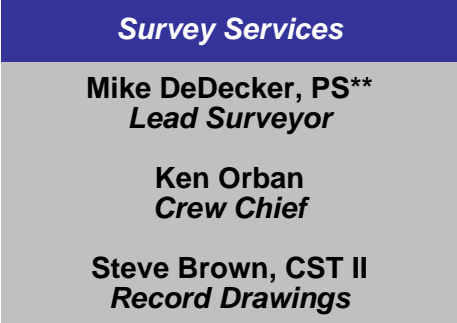
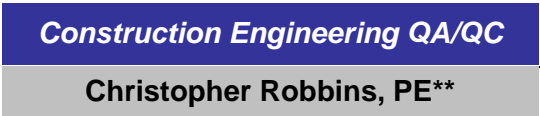
Sincerely,  
City of Troy

William J. Huotari, PE  
Deputy City Engineer/Traffic Engineer

# Organization Chart



\*\* Resumes included for Key Personnel



SDA has assembled a well qualified team of Professional Engineers, Contract Administrators, and Technicians with strong leadership and familiarity with the City of Novi. The team also includes a QA/QC staff knowledgeable of the history of the City of Novi with an understanding of the City's goals. The project team was formed to cover all of the requirements the City may have for the Civil Engineering Field Services. The SDA team's goal is to assist the City of Novi in remaining one of America's Top 100 Places to Live. Ted Meadows will be the primary point of contact with the City of Novi.

The SDA team consists of the following Key Personnel:

## Team Leader

**Ted Meadows** has more than nine years of experience with the City of Novi and 13 years in municipal construction engineering. Ted provides field and office expertise for the successful support and continuous improvement of Construction Engineering (CE) projects to provide quality in workmanship and value for projects within the City. Currently, Mr. Meadows is the Construction Operations Supervisor for projects within the City of Novi. Ted will be responsible for the daily construction activities for all projects including staff scheduling, construction observation procedures, staff training, as-built plan review, walkthroughs, punch lists, and project close-out.

## Construction Engineering QA/QC

**Christopher Robbins, PE** has 12 years with SDA and with more than 19 years of experience in the industry. Mr. Robbins manages and directs the CE Department. He is familiar with the variety of engineering concepts, practices, and procedures needed to meet today's client's expectations. As the CE Department Manager, Chris plans and directs all aspects of CE services within SDA. Mr. Robbins will oversee Mr. Meadows to ensure that all aspects of the Civil Engineering Field Services exceed the expectations of the City.

## Engineering Design QA/QC

**Phil Westmoreland, PE** has 17 years of experience in the industry. Mr. Westmoreland manages and directs the Municipal Engineering Department. He is familiar with a multitude of engineering concepts, practices, and procedures needed to meet today's permitting requirements and client's expectations. As the Department Manager, he plans and directs all aspects of municipal engineering consulting services within SDA. Phil ensures responsive project planning, design, and execution. Phil also ensures that design initiatives and processes are in conformance with SDA's established policies and procedures.

## Engineering Design and Engineering Plan Review

**James Van Tiflin, PE** has 19 years of experience in the industry. Jim has spent his entire career with SDA. Mr. Van Tiflin's engineering experience includes the design of sanitary sewers, pump stations, water mains, storm sewers, and local county roads, as well as review of the development plans for compliance with Township Ordinances / Master Plans and sound engineering practices. He works closely with all County and State agencies having jurisdiction to ensure that all requirements are met. He also has experience in writing contract specifications and construction contract administration.

## Survey Services

**Michael DeDecker, PS** has 18 years of experience in the industry. In his role as Lead Surveyor, Mike will be responsible for surveying, mapping, and organizing the development of Record Drawings. Mr. DeDecker provides surveying expertise for the support and continuous improvement of SDA's survey for completion of the Record Drawings. He will direct all project surveyors, survey draftsmen, and field crews and will perform project quality control, project research, boundary calculations, survey computations, and field data analysis.





## **Construction & Soil Erosion Sedimentation Control Technicians**

**Don Pashby, Ashvin Saraiya, John Becht, Michael Badamo, Bill Jawlik, and Ray Gallihugh** have more than 200 collective years of experience in the civil construction engineering industry. They have multi-faceted experience in all phases of construction from Land Balance to Final Punch List. They have extensive experience in the monitoring of activities at construction sites in the City of Novi. Their experience and training ensures construction progresses as scheduled and contract specifications are adhered to. As the Construction Inspectors, they will inspect construction sites daily and work with contractors to schedule deliveries.

Specific tasks on private and public development projects they have performed from 2006 to present in the City of Novi are as follows: Attend Pre-Construction Meetings; review plans for possible utility conflicts; review of project survey cut sheets; material certifications review; inspection of installation for sanitary sewers, storm sewers, water main, and bituminous and concrete pavement; enforcement of City's standards and details; water main pressure and bacteria testing; flushing of poly pigs for cleaning of water main; coordination and inspection of water main tie-ins; sanitary sewer air testing; sanitary sewer televising; proof rolls of sub-base for pavement; inspection of concrete and bituminous grade preparation and paving operations; and site walkthroughs and punch list distribution. Additional inspections performed for the City include footing and grading certifications.

## **Soil Erosion Sedimentation Control Technician**

**Kim Danowski** has five years of experience with SDA and 19 years in the construction Industry. Ms. Danowski is SDA's point person with the City of Novi Ordinance Enforcement Department and Lead Soil Erosion Sedimentation Inspector. Kim has numerous responsibilities within various levels of engineering for SDA's City of Novi Services. Kim has performed construction inspection, processed material certifications, shop drawings, pay estimates, and contract modifications, and has reviewed construction plans and specifications. She also performs Land Improvement reviews with the Municipal Department. Kim has field experience as a Construction Engineering Inspector including the inspection of construction operations with water main, sanitary, and storm drain installation.



# Ted Meadows

## Team Leader / Contract Administrator

Ted has 13 years of quality experience in municipal construction engineering. In his role as Contract Administrator, Ted is responsible for managing public and private construction engineering projects. Construction Engineering (CE) management involves the coordination of all aspects of a project including client relations and working with a project team to meet the requirements of the scope of work. Ted provides field and office expertise for the successful support and continuous improvement of CE projects to provide quality in workmanship and value for projects.

Currently Mr. Meadows is the construction operations supervisor for projects primarily within the City of Novi but for other municipal clients as well. Ted has worked in the construction phase of numerous public works and private development projects on behalf of our municipal clients. As the supervisor of the construction staff, Ted is responsible for the daily construction activities for all projects including staff scheduling, construction observation procedures, staff training, as-built plan review, walkthroughs, punch lists, and project close out.

### RELEVANT EXPERIENCE

#### General Services

**General Engineering and Construction Services, City of Novi, MI** – Currently the Contract Administrator, supervising field and office construction technicians. Performs project quality control, construction contract administration, soil erosion and sedimentation control procedures, surveying, and observation of public utility construction, tunneling and paving operations. Oversees work done in multifamily, single family, commercial, retail and industrial developments throughout Oakland, Wayne and Washtenaw County.

**General Engineering and Construction Services, Northville Township, MI** - Senior Construction Technician that supervised field and office construction technicians. Performed project quality control, construction contract administration, soil erosion and sedimentation control procedures, surveying, and observation of utility construction, paving and tunneling operations. Oversaw work done in many multifamily and single family developments throughout Wayne County.

#### Wastewater

**2010 Sanitary Pump Station Upgrades, City of Novi, MI** – Contract Administrator for construction improvements to aging pump stations. The project consisted of site, structural, electrical, and mechanical upgrades to the Drakes Bay Sanitary Pump Station and to the Park Place Sanitary Pump Station. Coordinated and managed with the City of Novi and the contractor during the construction of the pump station improvements. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

### EDUCATION

BS, Environmental Science,  
University of Kansas, 1997

### SPECIALIZED TRAINING /

### CERTIFICATIONS

MDOT Certified Density  
Technician  
MDOT Certified Aggregate  
Technician  
MDOT Concrete Paving  
Inspector  
MDOT Bituminous Paving  
Concrete Technician &  
Concrete Construction  
Inspector, Level I  
Concrete Field Testing  
Technician,  
Level I  
Project Management Boot  
Camp I

MDEQ Certificate of Training  
for Part 91 Soil Erosion and  
Sedimentation Control, Cert.  
No. C-10-0089, Exp. 3/5/15

MDEQ Stormwater  
Management, Construction  
Site A-1j, No. C-15125, Exp.  
7/1/15

USDOT HAZMAT Certified,  
Exp. 1/17/10  
Radiation Safety Officer  
HDPE Pipe Fusion Academy  
Compliance Solutions –  
Certificate No. 754792956  
HAZWOPER 4/6/10

# Ted Meadows

## Team Leader / Contract Administrator

**SAD 170 Phase 1B and 2B, City of Novi, MI** – Senior Construction Technician responsible for the supervision of installation of over 10,000 feet of new trunk line sanitary sewer. Responsible for over seeing inspection, pavement and site restoration, contract documentation, and processing pay certifications.

### **Sanitary Manhole Rehabilitation**

**West Bloomfield Sanitary Manhole Rehabilitation, West Bloomfield Township, MI** - Senior Construction Technician responsible for rehabilitation of over 20 sanitary manholes within an existing subdivision. The manhole rehabilitation consisted of removal and replacement of leaking sanitary manhole adjustments and castings as well pressure grouting section joints and later cement lining the interior walls of the structures.

### **Watermain**

**Aberdeen, Arlington, Oakview, and Brookline Roads Water Main Replacement, Canton Township, MI** – Construction Manager for replacement of 8-inch ductile iron water main for a total of 1 mile by pipe bursting methods with a pre-chlorinated HDPE water main. This project replaced high maintenance existing water mains on each street for the Township of Canton. Coordinated and managed with Canton Township and the contractor during the construction of the water main. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**11 Mile Road / Delwal Drive Watermain, Novi, MI** – Construction Manager for installation of 0.5 mile of new watermain including a 170 LF directional drill of HDPE pipe under a stream. This project completed a watermain loop for the City of Novi's Department of Public Works office. Coordinated and managed with the City of Novi and the contractor during the construction of the watermain. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**2006 Northville Township Watermain Improvements, Northville Township, MI** – Senior Construction Technician responsible for the replacement of one mile of existing watermain in existing subdivisions and related pavement and site restoration. Responsible for over seeing inspection, contract documentation, and processing pay certifications.

**Bradner and Franklin Road Watermain Replacement, Northville Township, MI** - Senior Construction Technician responsible for the replacement of two miles of existing watermain in an existing subdivision and related pavement and site restoration. Responsible for over seeing inspection, contract documentation, and processing pay certifications.

**Northville Road Watermain Replacement, Northville Township, MI** - Senior Construction Technician responsible for the replacement of one mile of existing

# Ted Meadows

## Team Leader / Contract Administrator

watermain with directionally drilled HDPE watermain through the Middle Rouge Watershed site. Responsible for over seeing inspection, site restoration, contract documentation, and processing pay certifications.

**Five Mile Road Watermain Replacement, Phase I, Northville Township, MI** - Senior Construction Technician responsible for the replacement of one mile of existing watermain with directionally drilled ductile iron lock joint pipe in existing subdivisions. Responsible for over seeing inspection, pavement and site restoration, contract documentation, and processing pay certifications.

### **Stormwater Management**

**2011 Civic Center and Power Park Basin Rehabilitation, City of Novi, MI** - Contract Administrator for construction improvements to poor access and aging infrastructure which included construction of grass paver and gravel drive, replacing inlet to the basin, and modifying the outlet control structure's bar grate to prevent clogging under high flow conditions. Coordinated and managed with the City of Novi and the contractor during the construction of the basin improvements. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**2009 West Oaks Regional Detention Basin Improvements, City of Novi, MI** - Contract Administrator for construction improvements to aging infrastructure which included replacing two inlets to the basin, repairing eroded areas along the banks, repairing inlet structures, and modifying the outlet control structure's bar grate to prevent clogging under high flow conditions. Coordinated and managed with the City of Novi and the contractor during the construction of the basin improvements. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**Detention Pond Retrofit, Fish Habitat and Streambank Erosion Assessment, and Water Quality Monitoring and Assessment Project, Northville Township, MI** - Senior Construction Technician

**Stormwater GIS and GPS Projects, Northville Township, MI** - Senior Construction Technician responsible for assisting Township in meeting requirements of NPDES Voluntary General Stormwater Permit. Assisted in obtaining grant funding to map approximately 150 Johnson Creek Outfalls using handheld GPS. Canoeed along Johnson Creek, using the GPS to obtain the location and attributes of the outfalls along the creek. Attribute information included outfall shape, diameter, width, material, condition, and photographs. Possible illicit discharges were tracked by rating, color, clarity, floatables, odor, and flow source, among others. The resultant GIS provided Township staff with the capability of "visiting" the site by hotlinking the respective photographs with inventory results.

# Ted Meadows

## Team Leader / Contract Administrator

### Pavement

**2011 Neighborhood Road Program – Concrete, City of Novi, MI** – Contract Administrator for demolition and reconstruction of multiple concrete roads within the City of Novi. The project consisted of concrete pavement repairs, joint repairs, and drainage structure rehabilitation. Coordinated and managed with the City of Novi and the contractor during the construction of the roads. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**2011 Beck Road Rehabilitation, City of Novi, MI** – Contract Administrator for demolition and reconstruction of a portion of Beck Road. This project consisted of 900' of full HMA pavement reconstruction, 1,100' of HMA mill and two-course overlay, culvert installation and grading. Coordinated and managed with the City of Novi and the contractor during the construction of the roads. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.


**2011 Neighborhood Road Program – Asphalt, City of Novi, MI** – Contract Administrator for demolition and reconstruction of multiple asphalt roads within the City of Novi. This project consisted of asphalt pavement cold-milling and overlay, sections of full HMA reconstruction, ADA ramp upgrades, and drainage structure rehabilitation. Coordinated and managed with the City of Novi and the contractor during the construction of the roads. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**12 Mile Road Reconstruction, City of Novi, MI** – Contract Administrator for demolition and reconstruction of 12 Mile Road east of Napier Road. The project consisted of milling and repaving an existing portion of 12 Mile Road as well as a complete reconstruction of a gravel portion. The project included a new bituminous asphalt road cross-section, installation of associated storm sewer improvements and ADA standard sidewalks. Mr. Meadows coordinated and managed with the City of Novi and the contractor during the construction of the road. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**Crowe / Ingersol Roads Reconstruction, City of Novi, MI** – Contract Administrator for demolition and reconstruction of Crowe Drive and a portion of Ingersol Drive. The project consisted of removing and replacing existing concrete roads with a new bituminous asphalt road cross-section, installation of associated storm sewer improvements and updating sidewalks to current ADA standards. Coordinated and managed with the City of Novi and the contractor during the construction of the roads. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

# Ted Meadows

## Team Leader / Contract Administrator



**2009 Pathway Construction, Novi, MI** – Contract Administrator for the pathways along Eleven Mile Road, Ten Mile Road, and Haggerty Road. Over 2,800 linear feet of pathway was installed with the addition of pedestrian signal upgrades as well storm sewers to improve drainage. The pathway projects filled in gaps along existing pedestrian pathways to provide continuous pedestrian access within these popular corridors. Coordinated and managed with the City of Novi and the contractor during the construction of the pathways. Responsible for over seeing inspection, contract documentation, and processing change orders and pay certifications.

**Livingston/Mill Street Repairs, Village of Pinckney, MI** – Senior Construction Technician responsible for removal and replacement of four blocks of bituminous road with associated storm sewer. Responsible for over seeing inspection of pavement and storm sewer, construction documentation, coordinating site testing, and quality control.

**Northville Community Park Paving Improvements, Northville Township , MI** - Senior Construction Technician responsible for observing construction of new bituminous parking lot and associated storm sewer and drainage. Responsible for observing construction of pavement and storm sewer, construction documentation, material testing, and quality control.

# Christopher J. Robbins, PE

## QA/QC / Construction Engineering Department Manager

Christopher J. Robbins, PE, has 12 years with SDA with more than 19 years of experience in the industry. Mr. Robbins manages and directs the Construction Engineering (CE) Department. He is familiar with the variety of the engineering concepts, practices, and procedures needed to meet today's client's expectations. As the CE Department Manager, Chris plans and directs all aspects of construction engineering activities within the organization. Mr. Robbins ensures all engineering projects, initiatives, and processes are in conformance with SDA's established ISO 9001 policies and objectives, which ensures efficient coordination and completion of projects. Chris provides a unique blend of hands-on construction experience and front-end design experience.

Mr. Robbins supervises SDA's Construction Contract Administrators, whose work responsibilities include supervising on-site construction technicians, reviewing construction daily reports, responding to resident complaints, hosting construction progress meetings, reviewing project pay applications and quantities with the contractors, negotiating contractor construction claims, and assisting in project close-out and acceptance reports.

### RELEVANT EXPERIENCE

**Sanitary Pump Station No. 2 Replacement, Macomb Township, MI** – Contract Administrator for a 6,000 gpm pump station. Pump Station included a 14 ft diameter, 45 ft deep wet well with three submersible pumps, valve chamber, isolation chamber, meter chamber, control building, an onsite standby generator, and forcemain river crossing. Project also includes the abandonment of the existing pump station and forcemain. In addition to handling construction contract administration duties, survey lay-out and material testing was managed and coordinated such that the project was completed on time and under budget.

**Middlebelt/13 Mile Emergency Sinkhole Repair, Farmington Hills, MI** – Overall Contract Administrator providing construction administration and observation services along with construction cost tracking and mitigation of the emergency sinkhole repair. Supervised construction and office technicians who utilized FieldManager software to record all construction activity of site, track material usage, labor and overall site supervision. Administration efforts yielded significant project cost savings. Project repair involved open cut sewer construction, major by-pass pumping, sewer lining and major grouting operations to repair the collapsed 36" sanitary sewer.

**CSO Outfall L49 Sewer Separation Project, Inkster, MI** – Construction Contract Administrator for the installation of 8100 LF of storm sewer ranging in size from 12" diameter to 36" diameter concrete reinforced pipe. Project also included the replacement of 14,000 Square Yards of concrete pavement. Technician Daily field reports were reviewed and e-mailed to the Owner and Contractor on a daily basis. Project was completed on time and under budget.

### EDUCATION

Bachelor of Science  
Chemical Engineering, 1991,  
University of Michigan

### REGISTRATION

Professional Engineer,  
Michigan, 6201051609, 2004

### PROFESSIONAL

#### AFFILIATIONS

Engineering Society of  
Detroit, Member since 2002

#### SPECIALIZED TRAINING

MDOT:

Concrete Inspection  
Bituminous Inspection  
Office Technician  
Office Management  
Procedures for Local Public  
Works Projects  
FieldManager

Michigan State University:  
Introduction to Highway  
Construction/Work Zones  
Practical Applications for  
Highway Construction/Work  
Zones

#### CERTIFICATIONS

MDEQ Certificate No. 08-  
0534 for Part 91, Soil Erosion  
and Sedimentation Control.  
Expires 9/24/2013

MDEQ Waterworks System  
Operation S-3, No. 11852  
issued 2/27/2007, expires  
7/15/2013

# Christopher J. Robbins, PE

QA/QC / Construction Engineering Department Manager

**Romeo Plank Water Main Replacement, Macomb Township, MI** – Contract Administrator for installation of 8000 LF of 16" CL 54 D.I. water main. Project involved special coordination challenges with the Macomb County Road Commission. New water main had to be in service and the old water main abandoned prior to the start of the RCMC widening of Romeo Plank Road. Project was completed on time and under budget.

**Sanitary Pump Station No. 7 Replacement, Macomb Township, MI** – Contract Administrator for an 11,000 gpm pump station. Pump Station includes an 18 ft diameter, 50 ft deep wet well with four submersible pumps, valve chamber, isolation chamber, meter chamber, control building, an onsite standby generator, and forcemain river crossing. Project also includes the abandonment of the existing pump station and forcemain.

**21 Mile Road & Fairchild Road Meter/PRV, Macomb Township, MI** – Contract Administrator - Hot tapping the existing DWSD 42" water transmission main with a proposed 16" water main, installation of a packaged Master Meter Station and a packaged PRV Station and connecting the outgoing 16" watermain to the existing Macomb Township water distribution system.

**23 Mile Road Sanitary Sewer (North Branch to North Avenue), Macomb Township, MI** – Contract Administrator – Contract administration for 1.5 mile long trunkline sanitary sewer extension along 23 Mile Road east of Card Road to the eastern Township boundary. The sewer was designed to serve the entire northeast corner of the Township. The project consisted of approximately 8,000 linear feet of 10-36-inch gravity sewer, 1,300 linear feet of 20-inch force main, and a 7 cfs submersible pump station.

**North Gratiot/New Haven Sanitary Sewer, Macomb County, MI** – Contract Administrator – Contract administration for construction of approximately 31,600 feet of 15-36 inch sanitary sewer. The sewer construction was performed in a high traffic area along Gratiot Avenue through the Village of New Haven and through Lenox Township. The project featured open-cut excavation (approximately 25,300'), tunneling construction (approximately 6,300') at depths of 30' or more below the existing surface, through various soil types, consisting of loose to very dense hard pan.

**23 Mile Road Water Main Replacement, Macomb Township, MI** – Project entailed the construction of approximately 1.1 miles of 16" ductile iron water main within the 23 Mile Road right-of-way. SDA performed construction lay-out and provided construction contract administration throughout the project. We worked hand-in-glove with Macomb Township Water & Sewer (MTWS) inspection personnel and the prime contractor, Pamar Enterprises, Inc. to complete the project on time and within budget. The project was expedited to accommodate the Macomb County Road Commission (RCMC). It was critical for MTWS to have the water mains re-located

**CERTIFICATIONS, Cont'd.**  
MDEQ Storm Water  
Management Construction  
Site A-1J, No. C02795

MDOT Materials Acceptance  
Process Training, 2005



# Christopher J. Robbins, PE

## QA/QC / Construction Engineering Department Manager

ahead of the proposed widening of 23 Mile Road between Romeo Plank Road and Hayes Road.

**Chapaton Dry Weather Standby Power, Macomb County Public Works Commissioner, MI** – Contract Administrator - standby power system that would provide a third level of standby power to the 28 million gallon retention treatment basin and the 690,000 gpm pump station. The project included providing a 255 kW natural gas generator, coring through a 24" reinforced concrete exterior wall, a 36" reinforced concrete interior wall, and the connection of the generator to the existing SCADA system.

**Stephenson Highway Rehabilitation, Troy, MI** - Project Manager and Contract Administrator responsible for quality assurance for full construction engineering on Stephenson Highway from 14 Mile to I-75. Project included 1.85 miles of pavement rehabilitation, HMA overlay, minor drainage improvements, signal upgrades, A.D.A. sidewalk ramps, and other safety improvements. Project required close coordination with RCOC personnel particularly concerning signal improvements at the Maple Road and Rankin St. intersections.

**M-29 Resurfacing, Clay and Ira Townships, MI** - Manager and Technician for project involving oversight of reconstruction of M-29 including drainage structures, the road will be profiled, 2 1/2 in. milling, asphalt resurfacing, guardrail placement, soil erosion control procedures, and Traffic control and maintenance issues. This project will be completed in coordination with MDOT utilizing FieldManager and FieldBook. QA/QC for the construction engineering services for 4.36 km (2.71 miles) of cold milling and hot mix asphalt resurfacing and minor drainage improvements on M-29 from Flamingo Road northerly to Palms Road, a \$1.5 million dollar project. The project was completed while maintaining traffic under flag control and a single-lane closure. Due to the environmental concern with adjacent regulated wetlands, this project also requires close supervision of soil erosion control procedures with St. John's Marsh on both sides of the road.

# Philip A. Westmoreland, PE

## QA/QC / Municipal Engineering Department Manager

Mr. Westmoreland has more than 17 years of experience in the industry. Phil has served as the primary client contact for all levels of municipal government and has worked extensively with cities, villages, and townships as well as road agencies and drain commissioners. He represents the municipality at all manners of public functions, including council, board, and planning commission meetings, social, and business gatherings.

Mr. Westmoreland currently manages the Municipal Engineering Department, which includes business development and project management. He oversees projects including design projects, studies, reports, proposals, construction administration, and site plan reviews. His design experience includes preparing bid documents and estimates for various types of projects including water distribution systems, sanitary sewage collection systems, stormwater drainage systems, recreation facilities, and road reconstruction and maintenance, as well as extensive experience reviewing site plans.

### RELEVANT EXPERIENCE

**The Summit Condominiums, City of Rochester Hills, MI** – Account manager responsible for the plan review for a 42-unit condominium development on 27 acres with site grading, public water and sanitary sewer, storm sewer and detention, traffic and a private roadway system.

**Northbrooke Meadows, City of Rochester Hills, MI** – Account manager responsible for the plan review for a 58-unit condominium development on 21 acres with site grading, public water and sanitary sewer, storm sewer and detention, traffic and a public roadway system.

**Dutton Technology Park** – Dutton Tech Park is a mixed-use development in a reclaimed landfill. The project involved Brownfield funding along with coordination with many governing agencies.

**Auburn Grove Condominiums, City of Auburn Hills, MI** – Account manager responsible for the plan review for a 124-unit condominium development on 53 acres with site grading, public water and sanitary sewer, storm sewer and detention, traffic and a private roadway system. The plan will preserve 23 acres of woodlands and wetlands.

**Arcadia Park, City of Rochester Hills, MI** – Account manager responsible for the plan review for a 181-unit residential subdivision development on 90 acres with site grading, public water and sanitary sewer, storm sewer and detention and a public roadway system.

### EDUCATION

BSCE, Michigan Technological University, 1995

### REGISTRATION

PE, Michigan, 2000

### PROFESSIONAL AFFILIATIONS

Michigan Water Environment Association, Active Member

Water Environment Federation, Private Property Programs, Presenter, 2007

Water Environment Federation, CS 2006; Infrastructure Stewardship, Presenter, 2006

ACEC National Conference, Boston, 2003

ACEC Michigan Winter Conference

### SPECIALIZED TRAINING

ACEC/LTU Management Training Program, 2002

Project Manager's Bootcamp, PSMJ, 2002

LeaderEase Program, 2001

Facilitation Skills Training, 2000

U.S. Army Corps of Engineers Wetland Training course,

# Philip A. Westmoreland, PE

## QA/QC / Municipal Engineering Department Manager

**Forester Square PUD, Auburn Hills, MI** – Plan review manager for this 50-acre 800 unit combined multi-family and single-family housing development. In this project all existing houses were demolished and all public utilities were removed to redevelop the site. The review included grading, all municipal utilities, paving, and drainage for project.

**Auburn Park Condominiums, City of Auburn Hills, MI** – Account Manager responsible for the plan review for an 82-unit condominium development on 49 acres. The project includes site grading, public water and sanitary sewer, storm sewer and detention, and a private roadway system.

**Home Depot, City of Auburn Hills, MI** – Plan review manager for this 17-acre site to be developed for a Home Depot store and future plans for a Sam’s Club on the site. This complex site involved the use of 30-foot retaining walls to match into adjacent sites and RCOC right-of-way, large underground detention systems, jack and bore of a culvert under a county road to improve drainage on the site, and improvements in the MDOT, I-75 right-of-way for lane tapers and drainage.

**Glen Arbors (Arbor Cove) Condominiums, City of Auburn Hills, MI** – Plan review manager for a 94-unit condominium development on 35 acres with site grading, public water and sanitary sewer, storm sewer and detention and a private roadway system.

**Pierburg Instruments Water Main Relocation, City of Auburn Hills, MI** – Plan review manager for relocation of 1,400 lineal feet of 20-inch water main in an effort to increase the developable area of an industrial site.

**Auburn Hills GIS, City of Auburn Hills, MI** – Client Representative for the City of Auburn Hills conducting general GIS work. The project included GPS location of all sanitary sewer pipes and manholes, all aspects of the water distribution system, and all City owned storm sewer pipes and structures.

**Plymouth Township Park Footbridge, Plymouth Township, MI** – To complete a jogging/walking loop around a pond within the park, a 25’ pedestrian footbridge was required to span the small stream feeding the pond. An aluminum structure was chosen for durability and aesthetics. The bridge and a portion of the pathway approaches were located within a floodplain, requiring analysis of the backwater effect of the earthen dam which creates the pond to determine the bridge would have no impact on the floodplain. The bridge and associated pathways were designed to meet ADA standards.

**Water System Improvements, City of Auburn Hills, MI** – Responsible for the design of multiple new water main appurtenances. The project included the installation of two PRV pits, two butterfly valves, and retrofitting two existing PRV pits with larger access doors. The project included telemetry for controlling the operations of all new

1999

Pavement Design Seminar-  
Michigan State University,  
1998

Softdesk Civil/Hydrology  
Training, 1998

# Philip A. Westmoreland, PE

## QA/QC / Municipal Engineering Department Manager

equipment and many existing pieces from the Department of Public Works. The placement and design of the new equipment required utilizing the water model which was created for City's existing water main.

**McCue Road Drainage Improvements, Delhi Township, MI** – Project Manager responsible for the design of a road reconstruction and drain enclosure in order to facilitate replacement of a major Township sanitary sewer. To meet current and future sewer capacity needs, the Township needed to replace an existing sanitary sewer that was located in the center of the roadway. This necessitated the complete replacement and upgrade of the road along with enclosure of the drain, which was dangerously close to the roadway and considered a significant safety hazard. The pipe size for the drain enclosure ranged from 48" to 96" diameter reinforced concrete pipe. A HEC-RAS study was prepared on the drain to determine the extent of floodplain impact and to determine the necessary mitigation measures.

**Auburn Hills Storage Tank & Pressure Redistricting, City of Auburn Hills, MI** – The storage tank is required to improve the water distribution system and its reliability, especially during summer months. The tank increases the pressure in the northern sections of the city and provides storage capacity within the system in case of emergency. In addition to designing the structure, the project also includes the analysis of the existing pressure districts and recommendations to better serve the utility customers supply needs.

**Opdyke Streetscape Improvements, City of Auburn Hills, MI** – Project Manager responsible for aesthetic improvements along this major corridor in the City of Auburn Hills. The project includes new non-motorized pathway with ADA accessibility upgrades at three major intersections, brick pavers, landscaping, pedestrian lighting, traffic signal improvements, and irrigation. Opdyke Road is under the jurisdiction of the Road Commission for Oakland County and the project required significant permitting efforts. Ultimately the project provides an appealing entryway into the City.

**Municipal Parking Lot - Auburn Lanes, City of Auburn Hills, MI** – Account manager responsible for the construction of a municipal parking lot in the downtown area. The project included concrete curb and gutter, irrigation, landscaping, and ornamental lighting. The project was constructed within the tight confines of the Village Center and maximized the usage of the available City owned parcel.

# Michael F. H. DeDecker, PS

## Lead Surveyor

Michael F. H. DeDecker, PS has 18 years of experience in the industry. In his role as a Survey Project Manager, Mike is responsible for organizing the highly complex activities for the development and implementation of surveying and mapping projects. Project management involves the coordination of all aspects of a project including client relations and working with a project team to meet the requirements of the scope of work. DeDecker provides surveying expertise for the successful support and continuous improvement of survey and mapping projects to provide quality in workmanship and value for project budgets.

As Project Manager, DeDecker supervises project surveyors, survey draftsmen, and field crews. He performs project quality control, project research, boundary calculations, survey computations and field data analysis. Mike is experienced in various aspects of surveying including providing boundary and topographical surveys and overseeing large construction layout projects. He is proficient in preparing ALTA/ACSM Land Title Surveys and has particular experience in surveying for municipal infrastructure projects and industrial surveying applications.

### RELEVANT EXPERIENCE

**Meadowbrook Commons Senior Center – Detention Basin Rehabilitation, City of Novi, MI** – Survey Project Manager – Responsible for the topographic survey used for the design of improvements.

**Civic Center and Ella Mae Power Park Detention Basin Rehabilitation, City of Novi, MI** – Survey Project Manager – Responsible for the topographic survey used for the design of the rehabilitation and upgrade of two City owned detention basins. Improvements to Civic Center Basin include a hydrologic/hydraulic evaluation of the outlet control structure to identify potential retrofits to better control bank full flows. Rehabilitation of the basins includes repair and replacement of associated storm drainage systems and outlet control structure overflow modifications. Project also includes 350' of grass pavers access drive and 640' of gravel access drive for maintenance.

**West Oaks Regional Detention Basin Improvements, City of Novi, MI** – Survey Project Manager – Responsible for the topographic survey used for the design of the rehabilitation and upgrade of the storm water detention basin. Improvements included routing the overland drainage through a water quality swale prior to discharging into the basin, sediment diversion baffles, outlet control structure modifications, a structural storm water BMP chamber, and the incorporation of stump islands within the wet basin to further enhance the basin as suitable habitat for wildlife.

**Oakland County Water Resources Commissioner As-needed Surveying Services, Oakland County, MI** - Survey Project Manager – Provided as-needed staking and general surveying services on a variety of projects.

### EDUCATION

BS, Surveying Engineering,  
1994, Ferris State University

### REGISTRATION

Professional Surveyor,  
Michigan, 44282, 1998

Professional Surveyor,  
Alabama, 30341-S, 2009

Michigan Residential Builder  
License

### PROFESSIONAL AFFILIATIONS

Michigan Society of  
Professional Surveyors,  
Southeast Chapter  
(President, 2005; Chapter  
Representative to State  
Board 2006)  
American Congress on  
Surveying and Mapping  
(ACSM)

### SPECIALIZED TRAINING

Federal Aviation  
Administration (FAA)  
Integrated Distance  
Learning Environment (FAA  
IDLE) Level 3 Training for  
FAA Advisory Circulars:  
AC 150/5300-16A  
AC 150/5300-17B  
AC 150/5300-18B  
Certificate No.  
FAAIDLE20120224-220  
Courses Civil Engineering,  
1995, Wayne State  
University  
Courses, 1992, Michigan  
State University  
CAiCE Visual Survey  
Confined Space Entry

# Michael F. H. DeDecker, PS

## Lead Surveyor

**Donohue Drain, Oakland County, MI** - Survey Project Manager – Provided as-needed staking for the Oakland County Water Resources Commissioner for culvert replacements and stream-bank stabilization.

**Alterman Residence Stream Bank Stabilization, Farmington Hills, MI** - Survey Project Manager – Provided as-needed staking for the Oakland County Water Resources Commissioner for stream bank stabilization, including installation of weirs and retaining walls.

**Jamian Drain Stream Improvement, West Bloomfield Twp., MI** - Survey Project Manager – Performed topographical survey for stream bank stabilization, restoration of sediment basins, and reshaping of an existing meandering drain through a residential area.

**Oakland Macomb Interceptor Drain Survey, Macomb County, MI** - Survey Project Manager – Portions of the sewer exceed 100 ft in depth, with the only above-ground evidence of the improvement consisting of access manholes spaced over 2,000 ft apart. Based upon field-locating the access manholes and mathematically computing the tunnel locations according to the as-built plans, SDA was able to plot the location of the tunnel and overlay it on a digital orthophoto. Areas of detailed topographical surveying were needed to complete engineering design for proposed access shafts and stop-gates. The project also involved retracing the existing easements. Obtaining pipe invert elevations required confined space procedures utilizing supplied air due to high hydrogen sulfide readings.

**Upper Straits Beach and Upper Long Lake Woods Low Pressure Sanitary Sewer SAD's, Charter Township of West Bloomfield, MI** - Survey Project Manager for topographical survey and construction staking for the Upper Straits Beach and Upper Long Lake Woods Low Pressure sanitary sewer system extensions. These projects were constructed as Special Assessment Districts to bring sanitary sewers to lake areas where septic field leachate had become a concern for the residents. These projects involved the design and construction of over 8,000 linear feet of 2" and 3" and 6" HDPE low-pressure sewer directionally drilled to minimize disruption to the existing residents

**Pontiac Lake Sanitary Sewer Extension, Charter Township of White Lake, MI** – Survey Project Manager for a \$4.9 million sanitary sewer extension in the residential communities surrounding Pontiac Lake. This project included the directionally drilled installation of 29,000 feet of low-pressure sewer and associated grinder pump systems. The project required the abandonment of septic tanks and connection of grinder pumps for over 400 residences on lake property to improve lake quality.

**Teggerdine Road Low Pressure Sanitary Sewer, Charter Township of White Lake, MI** – Survey Project Manager for the topographical survey and construction staking for 3,000 feet of low pressure sewer to serve an existing subdivision and adjacent

trained

### PUBLICATIONS

DeDecker, Michael F.H., "Industrial Pursuits," POB Magazine, December 2011, Cover Story, p. 12.

DeDecker, Michael F.H., "The Need for Speed, Surveyors play a key role in the APBA Gold Cup races in Detroit," POB Magazine, October 2009, p. 30.

DeDecker, Michael F.H., "In Review: VisionPlus by Geo-Plus," POB Magazine, February, 2010, p. 40.

# Michael F. H. DeDecker, PS

## Lead Surveyor



commercial properties.

**Cedar Island Road Sanitary Sewer SAD, Charter Township of White Lake, MI** – Survey Project Manager for the topographical survey and construction staking of 1,200 feet of low pressure sewer to serve an existing subdivision.

**Gloede Drain Crossing, Macomb Township, MI** – Survey Project Manager – Hydrographic survey including cross-sections of the drain and the existing structures.

**Gratiot Avenue Water Main Replacement Clinton Township, MI** - Township Engineers for the Charter Township of Clinton serving as Project Surveyor for the design of the Gratiot Avenue water main replacement project to replace a 40-year-old water main system. The project involved water main design and contract document preparation, estimates of construction cost, permit/approval acquisition, project scheduling, bidding, construction layout, and construction contract administration.

**South Boulevard Water Main and Sanitary Sewer Extension, Rochester Hills, MI** - Project Manager overseeing topographical and ROW survey along South Boulevard and along M-59. Provided information to the City for the design of improvements. Project included mapping, right-of-way determination and control for almost one mile of roadway.

**Various Townships Surveys** - Project Manager for Macomb Twp., Clinton Twp., White Lake Twp. Managed a multitude of engineering topo surveys. Included quality control for mapping and control, updating benchmark system and computing right-of-way alignments.

**Municipal Design Projects, Various Municipalities, MI** - Project Manager in charge of providing topographical and right of way surveys to SDA design staff for numerous projects in the Townships of Clinton, Macomb, White Lake, Lenox, Van Buren, and West Bloomfield, and the Cities of Novi, Troy, Rochester Hills, Detroit, Trenton, Orchard Lake Village, Wyandotte and Livonia. Projects included water main, sanitary sewer, storm sewer, and pavement design. Included updating benchmark records for the communities as part of each project. Subsequently oversaw the surveying layout for the individual projects.

**Macomb County Remonumentation, MI** - Survey Crew Chief responsible for GPS Geodetic Control observations for Remonumentation program.

**52<sup>nd</sup> - 3<sup>rd</sup> District Courthouse, Rochester Hills, MI** - Project Manager for Construction Layout.

# James L. Van Tiflin, PE

## Lead Design / Plan Review Engineer

Mr. Van Tiflin has 19 years of experience in the industry. Jim has spent his entire career with Spalding DeDecker Associates, Inc. (SDA). Jim's engineering experience includes the design of sanitary sewers, water mains, storm sewers, and local county roads, as well as review of the development plans for compliance with Township Ordinances, Master Plans, and sound engineering practices. He works closely with all county and state agencies having jurisdiction to ensure that all requirements are met. He also has experience in writing contract specifications and construction contract administration. In addition, Jim has helped many communities through the SAD process.

Jim is currently serving as the main client contact for the City of Novi, Macomb Township, City of Mt. Clemens and Armada Township. As the main client contact, Jim is responsible for supervising the completion of all engineering work SDA receives for these communities. He is also required to attend board meetings, council meetings, planning commission meetings, SAD public hearings, etc. to discuss projects and answer questions from the community leaders and public.

Mr. Van Tiflin has extensive experience in performing detailed QA/QC reviews of engineering plans and specifications for municipal projects. He provides engineering expertise which will ensure quality construction documents are produced so that the best value is obtained for the project. Jim has also served as an internal auditor and Department coordinator for the company's ISO Certification.

### RELEVANT EXPERIENCE

**West Oaks Regional Detention Basin Improvements, City of Novi, MI** – Provided overall project management for the repair and improvement to a regional detention basin serving 169 acres of commercial property. The repair included replacing two inlets to the basin, repairing eroded areas along the banks, repairing inlet structures, and modifying the outlet control structure's bar grate to prevent clogging under high flow conditions. The project also includes adding suitable habitats for wildlife and vegetative swales and diversion berms to improve the water quality of the discharge into the adjacent natural water course. The water quality goal is dictated by the requirements of the City's National Pollutant Discharge Elimination System (NPDES) Phase II stormwater discharge permit.

**Engineering Consultations, City of Mt. Clemens and Armada, Clinton, Macomb and White Lake Townships, MI** – Performed engineering review of site plans, condominium site plans, site condominium plans and all phases of subdivision plats for conformance with local ordinance requirements. Additionally, performed detailed site development engineering plan review for conformance with current local ordinance requirements and sound engineering practices. This review work encompasses public water and sanitary sewer, storm drainage facilities, site paving and grading, etc. for residential, commercial, industrial and institutional sites. Developed checklists and standard procedures to refine review process.

### EDUCATION

BSCE, Michigan State University, 1992

### REGISTRATION

PE, Michigan, 1997

### PROFESSIONAL AFFILIATIONS

American Water Works Association (AWWA) – Member since 2005

### SPECIALIZED TRAINING

American Council of Engineering Companies (ACEC) – Project Manager Training

PSMJ Resources, Inc. - Project Management Bootcamp

Leadership Macomb



# James L. Van Tiflin, PE

## Lead Design / Plan Review Engineer

**24 Mile Road Sanitary Sewer S.A.D., Macomb Township, MI** – Provided overall project management for the design of 600 feet of 15-inch trunkline sanitary sewer. Obtained municipal approvals and permits for the project and provided documents for easement acquisition. Also performed construction contract administration including processing payment estimates, change orders, and construction engineering consultations.

**Romeo Plank Water Main Replacement, Macomb Township, MI** - Provided overall project management and QA/QC review for the replacement of one and a half miles of 16-inch water main. Supervised design team, maintained constant contact with the client, and obtained all necessary permits. The project also included coordinating the acquisition of all easements and the simultaneous design and construction of Township utilities with a county road widening project.

**Marseilles Road Sanitary Sewer S.A.D. and Water Main Replacement, Macomb Township, MI** – Provided overall project management and QA/QC review for the design of 1,750 feet of 10-inch sanitary sewer financed through a Special Assessment District. The project also included the replacement of 1,700 feet of existing 6-inch water main with new 8-inch which was financed through Capital Improvement Program funds. Obtained municipal approvals and permits for the project and provided documents for easement acquisition through a tight residential area.

**Garfield Road Sidewalk Connection, Macomb Township, MI** – Supervised the design of 850 feet of 5' sidewalk to fill in gap between two existing sidewalks. Project included preparing easements for acquisition from property owner and designing to meet easement conditions.

**Section 36 Water Main Rehabilitation, Macomb Township, MI** - Performed construction contract administration including processing payment estimates, change orders, and construction engineering consultations.

**Gratiot Avenue Water Main Replacement, Clinton Township, MI** - Designed 12,000 feet of 12-inch water main to replace an old 10-inch water main to provide better pressure in the area. Also wrote contract specifications, obtained municipal approval, bid project, and performed construction contract administration.

**Residential Plot Plan and Grade Certificate Review, Macomb Township, MI** – Developed checklists and standard procedures to reform review process for community. Supervises and performs detailed review of residential plot plans for grading and drainage ordinance requirements. Supervises and performs detailed review and field inspection of preliminary grade certificate for conformance with approved plot plan and ordinance requirements.

# James L. Van Tiflin, PE

## Lead Design / Plan Review Engineer

**Sanitary Pump Station No. 7 Replacement, Macomb Township, MI** – Provided overall project management and QA/QC review for the replacement of a 24 cubic feet per second sanitary pumping station, ¼ mile of 20-inch force main and ½ mile of 16-inch water main. Supervised design team, maintained constant contact with the client, and obtained all necessary permits. The project also included coordinating the acquisition of all easements and real estate necessary to construct the utilities as designed.

**Fire Station No. 3 Training Tower, Macomb Township, MI** – Provided overall project management for the design and construction of all site work necessary for a 2,100 square foot training tower. The project included the design of 24,000 square feet of reinforced concrete pavement and associated storm sewer, the concrete building foundation and 500 feet of 8-inch water main. Supervised the design team, maintained contact with the client, and obtained all necessary permits.

**21 Mile and Fairchild DWSD Water Supply Connection, Macomb Township, MI** – Provided overall project management for the design of a 16" water supply connection to the DWSD distribution system. The project included the installation of separate water meter and pressure reducing chambers and associated telemetry. Obtained municipal approvals and permits for the project including DWSD approval for live connection. This project also included coordination with the Township in acquiring easements.

**Macomb Township Civic Center Complex, Macomb Township, MI** - Performed construction contract administration for new civic center complex. The project included the installation of 2,600 feet of 10-inch to 15-inch sanitary sewer, 4,100 feet of 8-inch to 16-inch water main, 4,900 feet of 12-inch to 48-inch storm sewer, a five acre detention basin, a 1,200 foot relocation of the McBride Drain and a half mile extension of Broughton Road with two side streets to serve the new Township Hall. Provided coordination between both general contractors on site, processed payment estimates and change orders, and provided construction engineering consultations.

**Macomb Corners Park, McBride Drain Hydraulic Study, Macomb Township, MI** – Provided overall project management for the preparation of a Hydraulic/Hydrologic analysis of McBride Drain for expansion of the existing Macomb Corners Park. Park improvements include one vehicular bridge and three pedestrian bridges across the McBride Drain. Supervised study team, maintained constant contact with the client and park design team.

## Spalding DeDecker Associates, Inc. Corporate Profile

Founded in 1954 and incorporated in the State of Michigan, Spalding DeDecker Associates, Inc. (SDA) provides consulting civil engineering and surveying services to municipal clients. We are an employee-owned business with more than 70 professionals on staff who have a wide range of skills and expertise. Our multi-disciplined company is exceptionally qualified and able to offer a wide range of services including:

- Construction observation and inspection
- Construction administration and management
- Site development and feasibility studies
- Survey and mapping
- Engineering plan review
- Regulatory compliance
- Master planning
- Bridge and road design
- Utility design
- Structural engineering
- Water and sewer systems operations
- Flow monitoring, maintenance, and hydraulic modeling
- Security engineering
- Traffic analysis
- Landscape architecture

SDA has assembled a strong team to continue to serve all of the requirements of the City of Novi. Many members have served other SDA client communities and bring their experience and diversity from those communities to their role as a City of Novi Team Member.

SDA's success with similar municipal clients is a result of keeping the client apprised of the critical decisions that may affect the successful completion of any project. All communication and coordination between the City of Novi and SDA will be channeled through the Lead Contact, Mr. Ted Meadows.



## Detailed Description of Similar Municipal Engineering Projects

Following is a brief summary of the types of projects SDA currently performs for our municipal clients similar in population and that require similar services to those requested in the Civil Engineering Field Services RFQ for the City of Novi. These are just a few examples of the experience SDA has outside of the services we are currently providing to the City of Novi.

### Township of Macomb

SDA has provided General Engineering Services to the Township of Macomb since 1967. In this capacity, we function as the Township's Engineering Department. SDA performs a wide variety of services for Macomb Township. Detailed descriptions of projects performed for Macomb Township which are similar in nature to the services described in the Civil Engineering Field Services RFQ, are as follows:

- Provide engineering review and inspection of residential plot plans (LIP) for conformance with the ordinance requirements of the Township. Work includes office review of the plot plan for grading and drainage and office review and field inspections of the preliminary grade certificate which indicates horizontal and vertical location of the brick ledge for conformance with approved plot plans and troubleshooting issues at final grade.
- Perform occupancy certificate reviews and inspections for all projects. Work includes office review of acceptance documents (as-builts drawings, structure tables, etc.), field inspection for all site amenities (excluding building), and recommendation for full or partial release of site development bond and occupancy.
- Perform storm water operator inspections and maintain logs as required under NPDES Notice of Coverage for all public projects.
- Perform inspection of pavement (sidewalks, pathways, roads, parking lots, etc.) for private developments. This includes coordination of proof roll, coordination of density testing, and recommendation for acceptance.
- Review detailed engineering plans for conformance with Township ordinance requirements. This includes review of all easements, master deeds, and restrictions before recording.
- Coordination with all other Township Departments and consultants for project approval.
- Provide court testimony as needed for private and public projects.
- Attend Public Meetings as needed. Meetings include Township Board, Planning Commissions, Zoning Board of Appeals, SAD Hearings, etc.
- Review site plans, subdivision plats, and condominium plans for conformance with Township ordinances. This includes site development bond estimate reviews.
- Review of FEMA floodplain alteration documents such as CLOMR, LOMR, and LOMA for private and public projects. Prepare documentation and attend Community Assistance Visit (CAV) with MDEQ. Assist Building Official on the Township's Community Rating System.
- Perform studies such as Inflow and Infiltration, water, sanitary, and storm system modeling, flood plain hydraulics, flow monitoring, etc.
- Design of all minor and major public capital improvements, special assessment, and developer-funded trunkline utility projects for water, sanitary, storm, and sidewalk/pathways.

### City of Troy

SDA has been providing General Engineering Services to the City of Troy since 2002. In this capacity, we supplement the City's Engineering Department on an as-needed basis. SDA performs a wide variety of services for the City of Troy. Detailed descriptions of projects performed for the City of Troy which are similar in nature to the services described in the Civil Engineering Field Services RFQ, are as follows:



- Perform Soil Erosion and Sedimentation Control (SESC) inspections for all public and private projects. This includes providing reports on violations and coordinating with the City for the issuance of a Notice of Deficiency.
- Review detailed engineering plans for conformance with City ordinance requirements. This includes review of all easements, master deeds, and restrictions before recording.
- Perform studies such as Inflow and Infiltration, water system losses, local surface and subsurface drainage problems, environmental and wetlands assessments, floodplain, backwater analysis, etc.
- Design of minor and major public capital improvement and special assessment projects for water, sanitary, storm drainage, traffic signals, bridges, and roads.
- Provide full time construction contract administration services.
- Provide full time construction observation services.
- Prepare record drawings.
- Coordinate Material Testing Services.

## **City of Livonia**

SDA has provided General Engineering Services to the City of Livonia since 2004. In this capacity, we supplement the City's engineering department on an as-needed basis. SDA performs a wide variety of services for the City of Livonia. Detailed descriptions of projects performed for the City of Livonia which are similar in nature to the services described in the Civil Engineering Field Services RFQ, are as follows:

- Design of minor and major public capital improvement and special assessment projects for water, sanitary, storm drainage, traffic signals, bridges, and roads.
- Provide construction contract administration services.
- Provide full time construction observation services.
- Provide construction layout services.
- Coordinate Material Testing Services.
- Prepare record drawings.



## Key Staff for Similar Municipal Engineering Projects

The following is a summary of the key SDA staff who participated in the referenced projects listed above, along with a brief description of their duties and responsibilities that are similar to the services requested in the Civil Engineering Field Services RFQ for the City of Novi.

Assigned Personnel	Role on Project
<b>Township of Macomb</b>	
<b>Jim Van Tiflin, PE</b> - Crystal Sapp, PE - Brian McKissen, PE, CFM - Maria Sedki, PE - Mike DeDecker, PS - Chris Robbins, PE - Michael Badamo, CFM	Overall Project Manager Development Plan Review, Studies, and Infrastructure Design Flood Plain and Storm Water Management Review and Studies Design and Studies Manager Survey Field Services Manager Construction Field Services Manager Paving, Storm Water Operator, Occupancy, and Grade Inspections
<b>City of Troy</b>	
<b>Philip Westmoreland, PE</b> - Jim Van Tiflin, PE - Crystal Sapp, PE - Maria Sedki, PE - Mike DeDecker, PS - Dave Eno, PE - Chris Robbins, PE - Bill Jawlik - Kim Danowski	Overall Project Manager Municipal Design Services Manager Development Plan Review, Studies, and Infrastructure Design Utility Design and Studies Manager Survey Field Services Manager Transportation Design and Studies Manager Field Services Manager Construction Technician Soil Erosion and Sedimentation Inspections
<b>City of Livonia</b>	
<b>Cheryl Gregory, PE</b> - Dave Eno, PE - Mike DeDecker, PS - Chris Robbins, PE	Overall Project Manager Design and Studies Manager Survey Field Services Manager Construction Field Services Manager



**References for Municipal Clients with Similar Services**

SDA is very proud of the reputation we have established with our municipal clients during our many years of providing consulting services.

As required in the RFQ, SDA has provided municipal engineering services to all three references throughout the past eight years.

We encourage you to contact the following references in order to obtain an assessment of our performance record in successfully completing projects.

Client Name	Project Description	Project Start & End Date	Client Contact Name	Phone Number	Email Address
Township of Macomb	General Engineering Services	1967 to Present	Gerry Wangelin, Superintendent, Water and Sewer Department	(586) 598-0687	wangeling@macomb-mi.gov
City of Troy	General Engineering Services	2002 to Present	Steve Vandette, PE, City Engineer	(248) 524-3383	vandettesj@troymi.gov
City of Livonia	General Engineering Services	2009 to Present	Todd Zilincik, PE, City Engineer	(734) 466-2561	tzilincik@ci.livonia.mi.us