



CITY of NOVI CITY COUNCIL

Agenda Item 7
July 18, 2011

SUBJECT: Approval to award a construction contract for the 2010 Neighborhood Road Program (Asphalt) project to Ajax Paving Industries, Inc., the low bidder, in the amount of \$517,362. Ph. II

SUBMITTING DEPARTMENT: Department of Public Services, Engineering/Field Operations Divisions

CITY MANAGER APPROVAL: *[Handwritten signatures and initials: R24, BTC, M.W.]*

EXPENDITURE REQUIRED	\$367,383 (FY10-11 Neighborhood Road Program) \$ 28,515 (Vista Hills) \$121,464 (Storm Drain System Maintenance)
AMOUNT BUDGETED	\$401,400 (FY10-11 Neighborhood Road Program) (FY10-11 rollover) \$ 36,000 (Vista Hills) (FY10-11 rollover) \$550,000 (Storm Drain System Maintenance)
LINE ITEM NUMBER	203-203.00-865.431 (FY10-11 Neighborhood Road Program) 203-203.00-865.197 (Vista Hills) 210-211.00.872.000 (Storm Drain System Maintenance)

BACKGROUND INFORMATION:

[The 2010 Neighborhood Road Program was approved for FY10/11 but construction was deferred until calendar year 2011 to ensure the availability of adequate funding in the Local Street Fund. For consistency, the project title has remained the same.]

For several years, the City Council has made it a goal to invest annually in neighborhood streets to maintain the City's local road network. To implement this goal, the City selects several residential streets to be addressed based on an evaluation of the pavement condition using PASER ratings, field observations by staff, and resident concerns. The 2010 Neighborhood Road Program will implement the City's Asset Management approach for pavements that was established in 2009. The asset management program stresses the importance of using preventative maintenance to preserve good quality roads using low-cost rehabilitation techniques, rather than allowing the roads to deteriorate to a point that requires reconstruction involving much more effort at a higher cost. Roads that have deteriorated significantly will be addressed with rehabilitation methods such as overlays, panel replacements, and joint repairs to allow more efficient application of available road funds to maximize the number of neighborhood streets included in each year in the program.

This year's program consists of two separate contracts: one for concrete pavement (recently awarded to Hard Rock Concrete at the April 4, 2011 meeting) and the other for asphalt. This contract addresses the rehabilitation of asphalt streets listed below:

Road Segment	From	To	PASER	Treatment
Mansfield Drive	Yorkshire	Newberry	3	Mill and overlay with discrete full-depth repairs
Yorkshire Drive	Huntington	Mansfield	3/4	Mill and overlay with discrete full-depth repairs
Cascade Drive	Singh Blvd	Heatherbrae	3/4	Mill and overlay with discrete full-depth repairs
Meridian Lane	Cascade	Heatherbrae	4	Mill and overlay with discrete full-depth repairs

In addition to the Neighborhood Road Program, there are two other components to the project. Part 2 involves the rehabilitation of catch basins that have been identified for repair in the Vista Hills Subdivision. These repairs are being funded by the remaining budget allocated for the street rehabilitation performed prior to accepting the roads as public. Paving work was completed in the subdivision in 2009 and consisted of the rehabilitation of selected areas throughout the subdivision.

Part 3 involves the rehabilitation or reconstruction of catch basins in Orchard Ridge Estates and Fairfield Farms subdivisions where numerous structures have been identified for repair. This work has been included with this project to assist the DPS with the labor-intensive task of repairing the large number storm drainage structures throughout the City needing attention.

Three (3) bids were received and opened on July 7, 2011 following a public bid solicitation period. The lowest bidder is Ajax Paving Industries (Ajax). Ajax's bid is recommended as being in the best interest of the City as it is responsive [i.e., Ajax has complied with all requirements of the bidding instructions] and it is the lowest price. (SDA's award recommendation letter including the bid tabulation dated July 11, 2011 is attached.) A summary of the three bids is as follows:

Bidder	PART 1 Neighborhood Roads Asphalt	PART 2 Catch Basin Repairs Vista Hills	PART 3 Catch Basin Repairs Frld Frms/Orchd Rdg	Total Bid Price [PARTS 1+2+3]
Ajax Paving	\$367,383	\$28,515	\$121,464	\$517,362
Florence Cement	\$391,049	\$35,390	\$157,055	\$583,494
Cadillac Asphalt	\$419,173	\$35,250	\$151,745	\$606,168

Ajax successfully completed the Meadowbrook Road Repaving project in 2004.

Part 1 is the neighborhood roads asphalt rehabilitation portion of the project, and was included in the FY2010-11 capital improvement program in the budgeted amount of \$828,300, of which \$367,383 is now being recommended for award to Ajax for construction. The initial phase of the neighborhood road program for concrete streets was awarded in April and is expected to be completed by fall 2011. Construction engineering services for the current asphalt streets project is being recommended for award to SDA as a separate item on this agenda.

Construction of this project is scheduled to begin in summer 2011 and completion is anticipated by fall 2011.

RECOMMENDED ACTION: Approval to award a construction contract for the 2010 Neighborhood Road Program (Asphalt) project to Ajax Paving Industries, Inc., the low bidder, in the amount of \$517,362.

	1	2	Y	N
Mayor Landry				
Mayor Pro Tem Gatt				
Council Member Fischer				
Council Member Margolis				

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

NOT A GUARANTEE OF ACCURACY

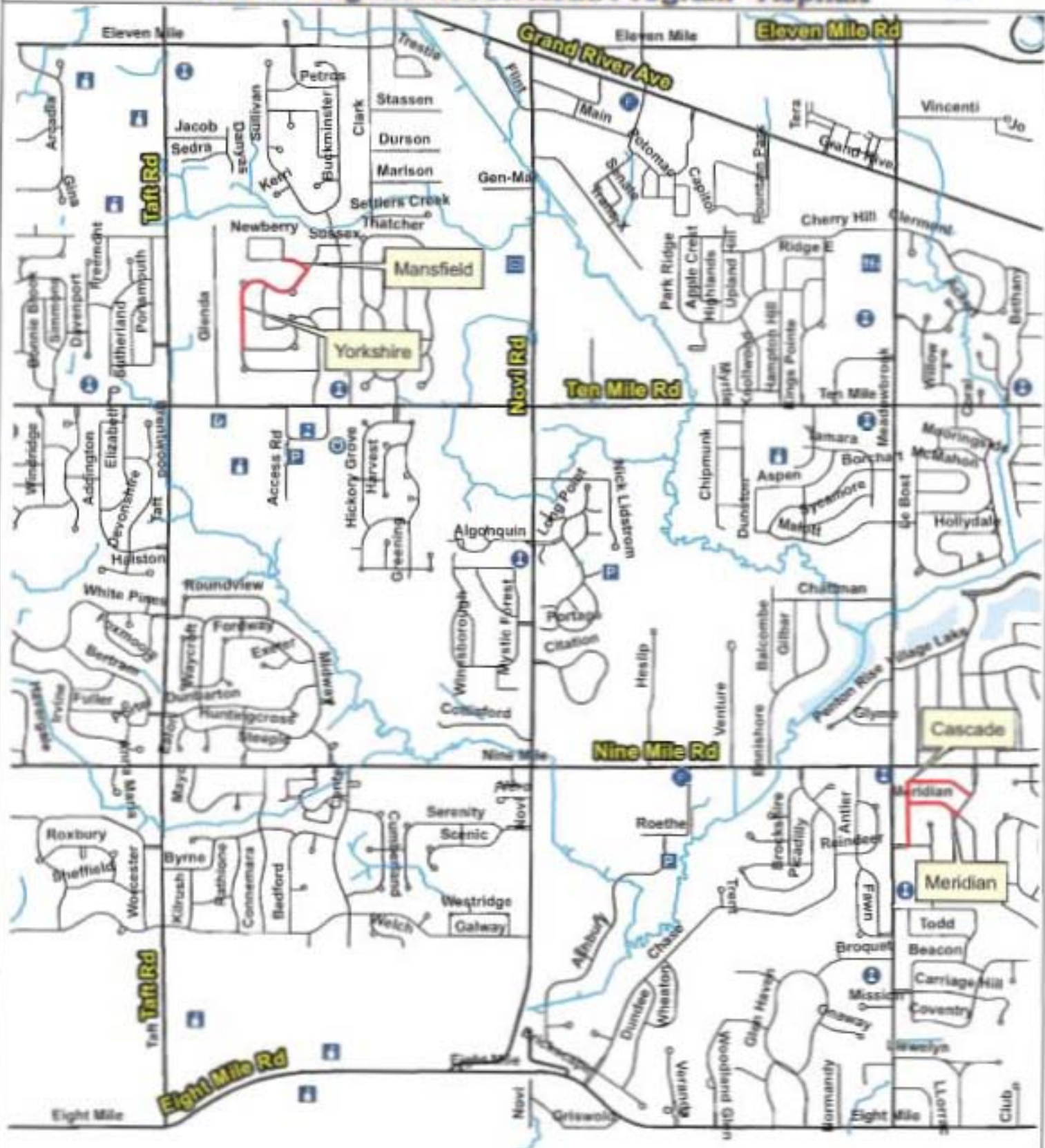
Information obtained from various sources is available for any other or primary source. This map may not include all road names or features. Changes to the map may occur without notice. The City of Novi is not responsible for any errors or omissions. The City of Novi is not responsible for any damages or injuries resulting from the use of this map. The City of Novi is not responsible for any damages or injuries resulting from the use of this map.

City of Novi



2010/11 Neighborhood Road Program - Asphalt

0 500 1,000 1,500 2,000 Feet





July 11, 2011

Mr. Benjamin Croy, PE, Civil Engineer
City of Novi
26300 Delwal Drive
Novi, Michigan 48375

Re: **Recommendation for Award**
2011 Neighborhood Road Program - Asphalt
SDA Project No.: NV10-001

Dear Mr. Croy:

On July 7, 2011 at 3:00 p.m. construction bids were opened and publicly read at the City of Novi Civic Center for the 2011 Neighborhood Road Program – Asphalt project.

The City Clerk's office received three (3) sealed bids for this project. The work included in the project was bid in three parts – the core asphalt street rehabilitation, structure repairs in Vista Hills subdivision, and structure repairs in Fairfield Farms and Orchard Ridge subdivisions. The apparent low bidder, Ajax Paving Industries, submitted a total bid of \$579,476.67. Following the bid opening, Spalding DeDecker Associates (SDA) reviewed all of the bids received, verified the calculations, and prepared the attached bid tabulation for the project.

Based on a review of experience and references provided by Ajax, SDA finds that Ajax is qualified to perform the required construction.

It is our recommendation that the project be awarded to the low bidder, Ajax Paving Industries, for the 2011 Neighborhood Road Program - Asphalt project in the amount of \$517,361.67, which is the total bid of \$579,476.67 minus \$62,115.00 for crew days bid.

Upon award by the City Council, our office will coordinate the completion of the Contract Agreement, Bonds and Insurance information with Ajax, and issue the Notice to Proceed upon execution of the contract documents.

Very Truly Yours,
SPALDING DEDECKER ASSOCIATES, INC.

A handwritten signature in black ink, appearing to read 'David P. Eno', is written over a light blue horizontal line.

David P. Eno, P.E. – Project Manager

enclosure: Bid Tabulation

cc: Mr. David Moriarty, Estimating Manager – Ajax Paving Industries, Inc.

Engineering Consultants

Infrastructure • Land Development • Surveying

Project: 2011 Neighborhood Roadways - Asphalt
 Engineer: Spalding DeDecker Associates, Inc

Bid Tabulation - 3 bids received, opened 7/7/2011

No errors in bid line items or totals. As-read amount equals verified amount for all bidders for all parts.

SUMMARY		Engineer's Estimate	Ajax Paving	Cadillac Asphalt	Florence Cement
PART 1 - NEIGHBORHOOD ROADWAYS		427,441.50	387,370.17	415,033.80	444,387.95
PART 2 - VISTA HILLS DRAINAGE STRUCTURE REPAIRS		34,875.00	44,197.50	43,385.00	39,555.00
PART 3 - FAIRFIELD / ORCHARD RIDGE DR STRUCT REPAIRS		156,435.00	147,909.00	175,505.00	165,890.00
TOTAL BID AMOUNT:		\$618,751.50	\$579,476.67	\$633,923.80	\$649,832.95

Note - amounts shown include construction observation. See tabulation below for detail.

PART 1 - NEIGHBORHOOD ROADWAYS				Engineer's Estimate		Ajax Paving		Cadillac Asphalt		Florence Cement	
Item No.	Item Description	Qty	Unit	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)
1	Mobilization (5% max)	1	LS	19,400.00	19,400.00	7,900.00	7,900.00	10,000.00	10,000.00	11,800.00	11,800.00
2	Pre-Construction Video Review	1	LS	2,700.00	2,700.00	1,360.00	1,360.00	1,500.00	1,500.00	1,300.00	1,300.00
3	Soil Erosion and Sedimentation Control	1	LS	1,800.00	1,800.00	1,000.00	1,000.00	2,000.00	2,000.00	1,210.00	1,210.00
4	Maintaining Traffic	1	LS	2,000.00	2,000.00	1,000.00	1,000.00	4,500.00	4,500.00	8,260.00	8,260.00
5	Cold Milling HMA Surface	15485	SYD	2.00	30,970.00	1.78	27,563.30	2.15	33,292.75	2.00	30,970.00
6	Curb and Gutter, Rem	1782	FT	5.00	8,910.00	7.75	13,810.50	7.75	13,810.50	10.90	19,423.80
7	Mountable Curb & Gutter	1782	FT	15.00	26,730.00	14.50	25,839.00	14.50	25,839.00	17.50	31,185.00
8	Pavt, Rem	300	SYD	5.50	1,650.00	5.00	1,500.00	5.00	1,500.00	11.10	3,330.00
9	Sidewalk, Rem	163	SYD	5.00	815.00	4.00	652.00	4.00	652.00	13.20	2,151.60
10	Excavation, Earth	1801	CYD	8.00	14,408.00	16.25	29,266.25	16.25	29,266.25	14.75	26,564.75
11	Aggregate Base, 12 inch	4204	SYD	8.00	33,632.00	8.50	35,734.00	8.50	35,734.00	10.70	44,982.80
12	Subgrade Undercutting, Type II	105	CYD	25.00	2,625.00	24.00	2,520.00	24.00	2,520.00	23.00	2,415.00
13	Augment, Grade, and Compact Agg Base	3190	SYD	4.00	12,760.00	3.80	12,122.00	3.80	12,122.00	1.90	6,061.00
14	Dr Structure Cover, Adj, Case 1	22	EA	300.00	6,600.00	400.00	8,800.00	375.00	8,250.00	350.00	7,700.00
15	Dr Structure, Rebuild-Adjustment	17	EA	750.00	12,750.00	500.00	8,500.00	425.00	7,225.00	755.00	12,835.00
16	Reconstruct Drainage Structure	6	EA	1,500.00	9,000.00	400.00	2,400.00	700.00	4,200.00	1,115.00	6,690.00
17	Dr Structure Cover	2318	LB	1.50	3,477.00	1.29	2,990.22	1.35	3,129.30	1.00	2,318.00
18	HMA, 4C	2780	TON	70.00	194,600.00	58.28	162,018.40	62.50	173,750.00	64.00	177,920.00
19	Driveway, Nonreinf Conc, 6 inch	200	SYD	24.00	4,800.00	27.50	5,500.00	27.50	5,500.00	30.00	6,000.00
20	Sidewalk, Conc, 4 inch	1036	SFT	5.00	5,180.00	3.00	3,108.00	3.00	3,108.00	3.00	3,108.00
21	ADA Compliant Sidewalk Ramp	547	SFT	6.50	3,555.50	4.00	2,188.00	4.00	2,188.00	5.00	2,735.00
22	ADA Detectable Warning Plate	155	SFT	30.00	4,650.00	15.00	2,325.00	15.00	2,325.00	15.00	2,325.00
23	Seeding and Mulching	2396	SYD	4.00	9,584.00	3.50	8,386.00	3.25	7,787.00	3.00	7,188.00
24	Gate Well Cover, Adj, Case 1	2	EA	350.00	700.00	450.00	900.00	425.00	850.00	350.00	700.00
SUBTOTAL - PART 1:					413,296.50		367,382.67		391,048.80		419,172.95
25	Construction Observation @ \$615/day	*	DAY	23	14,145.00	32.5	19,987.50	39	23,985.00	41	25,215.00
TOTAL PART 1 PRICE:					\$ 427,441.50		\$ 387,370.17		\$ 415,033.80		\$ 444,387.95

* NOTE: Number of Inspection Crew Days bid by contractor. Entered in Unit Price column here for bid tabulation purposes

PART 2 - VISTA HILLS DRAINAGE STRUCTURE REPAIRS

Item No.	Item Description	Qty	Unit	Engineer's Estimate		Ajax Paving		Cadillac Asphalt		Florence Cement	
				Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)
1	Mobilization (5% max)	1	LS	1,500.00	1,500.00	1,100.00	1,100.00	2,000.00	2,000.00	1,000.00	1,000.00
2	Pre-Construction Video Review	1	LS	800.00	800.00	1,900.00	1,900.00	2,000.00	2,000.00	1,800.00	1,800.00
3	Soil Erosion and Sedimentation Control	1	LS	700.00	700.00	1,000.00	1,000.00	2,000.00	2,000.00	500.00	500.00
4	Maintaining Traffic	1	LS	500.00	500.00	1,000.00	1,000.00	1,000.00	1,000.00	400.00	400.00
5	Curb and Gutter, Rem	40	FT	5.00	200.00	10.00	400.00	10.00	400.00	15.00	600.00
6	Mountable Curb & Gutter	40	FT	15.00	600.00	25.50	1,020.00	25.50	1,020.00	30.00	1,200.00
7	Pavt, Rem	40	SYD	5.50	220.00	8.00	320.00	8.00	320.00	25.00	1,000.00
8	Aggregate Base, 12 inch	40	SYD	8.00	320.00	10.00	400.00	10.00	400.00	35.00	1,400.00
9	Dr Structure Cover, Adj, Case 1	20	EA	300.00	6,000.00	400.00	8,000.00	475.00	9,500.00	350.00	7,000.00
10	Dr Structure, Rebuild-Adjustment	17	EA	750.00	12,750.00	500.00	8,500.00	525.00	8,925.00	755.00	12,835.00
11	Reconstruct Drainage Structure	3	EA	1,500.00	4,500.00	400.00	1,200.00	900.00	2,700.00	1,115.00	3,345.00
12	Point-Up Drainage Structure	2	EA	350.00	700.00	175.00	350.00	175.00	350.00	50.00	100.00
13	Dr Structure Cover	1500	LB	1.50	2,250.00	1.30	1,950.00	1.35	2,025.00	1.00	1,500.00
14	HMA, 4C	8	TON	70.00	560.00	150.00	1,200.00	250.00	2,000.00	290.00	2,320.00
15	Seeding and Mulching	50	SYD	4.00	200.00	3.50	175.00	15.00	750.00	5.00	250.00
SUBTOTAL - PART 2:					31,800.00		28,515.00		35,390.00		35,250.00
16	Construction Observation @ \$615/day	*	DAY	5	3,075.00	25.5	15,682.50	13	7,995.00	7	4,305.00
TOTAL PART 2 PRICE:				\$	34,875.00	\$	44,197.50	\$	43,385.00	\$	39,555.00

PART 3 - FAIRFIELD / ORCHARD RIDGE DR STRUCT REPAIRS

Item No.	Item Description	Qty	Unit	Engineer's Estimate		Ajax Paving		Cadillac Asphalt		Florence Cement	
				Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)	Unit Price (\$)	Total (\$)
1	Mobilization (5% max)	1	LS	1,500.00	1,500.00	1,500.00	1,500.00	5,000.00	5,000.00	1,000.00	1,000.00
2	Pre-Construction Video Review	1	LS	800.00	800.00	3,915.00	3,915.00	3,500.00	3,500.00	3,800.00	3,800.00
3	Soil Erosion and Sedimentation Control	1	LS	700.00	700.00	1,500.00	1,500.00	2,000.00	2,000.00	800.00	800.00
4	Maintaining Traffic	1	LS	500.00	500.00	1,500.00	1,500.00	2,000.00	2,000.00	900.00	900.00
5	Curb and Gutter, Rem	585	FT	5.00	2,925.00	9.00	5,265.00	10.00	5,850.00	10.00	5,850.00
6	Mountable Curb & Gutter	585	FT	15.00	8,775.00	19.50	11,407.50	20.00	11,700.00	20.00	11,700.00
7	Pavt, Rem	348	SYD	5.50	1,914.00	15.00	5,220.00	20.00	6,960.00	20.00	6,960.00
8	Aggregate Base, 12 inch	327	SYD	8.00	2,616.00	30.00	9,810.00	30.00	9,810.00	30.00	9,810.00
9	Dr Structure Cover, Adj, Case 1	78	EA	300.00	23,400.00	400.00	31,200.00	300.00	23,400.00	300.00	23,400.00
10	Dr Structure, Rebuild-Adjustment	19	EA	750.00	14,250.00	500.00	9,500.00	705.00	13,395.00	705.00	13,395.00
11	Reconstruct Drainage Structure	49	EA	1,500.00	73,500.00	400.00	19,600.00	1,115.00	54,635.00	1,115.00	54,635.00
12	Point-Up Drainage Structure	10	EA	350.00	3,500.00	175.00	1,750.00	50.00	500.00	50.00	500.00
13	Dr Structure Cover	5500	LB	1.50	8,250.00	1.29	7,095.00	0.90	4,950.00	0.90	4,950.00
14	Concrete Patch, 7 inch	193	SYD	25.00	4,825.00	35.50	6,851.50	35.00	6,755.00	35.00	6,755.00
15	HMA, 4C	29	TON	70.00	2,030.00	150.00	4,350.00	200.00	5,800.00	210.00	6,090.00
16	Seeding and Mulching	200	SYD	4.00	800.00	5.00	1,000.00	4.00	800.00	6.00	1,200.00
SUBTOTAL - PART 3:					150,285.00		121,464.00		157,055.00		151,745.00
17	Construction Observation @ \$615/day	*	DAY	10	6,150.00	43	26,445.00	30	18,450.00	23	14,145.00
TOTAL PART 3 PRICE:				\$	156,435.00	\$	147,909.00	\$	175,505.00	\$	165,890.00

* NOTE: Number of Inspection Crew Days bid by contractor. Entered in Unit Price column here for bid tabulation purposes

PASER (Pavement Surface Evaluation and Rating System)

What is PASER?

PASER is an acronym for Pavement Surface Evaluation and Rating system. It is a system for visually rating the surface condition of a pavement from a scale of 1 to 10, with 1 being a pavement in a failed condition and 10 being a pavement in excellent condition. Guidelines for rating the pavement surface using the PASER system have been developed by the [Michigan Transportation Asset Management Council](#).

Novi has conducted a pavement rating analysis in 2001, 2004 and 2008. Beginning in 2010, the PASER analysis is being completed by City staff over a three year period. A third of the City will be completed each year in 2010, 2011, and 2012.

What do the PASER ratings actually mean?

Most pavements will deteriorate through various phases as shown. The rate at which pavement deteriorates from an excellent (10) to a very poor condition (1) depends largely on its environment, traffic loading conditions, original construction quality, and interim maintenance procedures. Two pavements constructed at the same time may have significantly different lives, or certain portions of a pavement may deteriorate more rapidly than others, due to material or construction problems.

The PASER rating scale can generally be translated into maintenance categories as shown. The normal maintenance or rehabilitation procedure has been found helpful in relating to the surface rating scheme. However, choosing an individual surface rating should not automatically dictate the final maintenance or rehabilitation technique. Future traffic projections, original construction and pavement strength should be considered since these may dictate a more comprehensive rehabilitation. On the other hand, it may be appropriate under special conditions to do nothing and let the pavement fully deteriorate, then rebuild when funds are available.

Asphalt Streets

PASER Rating	Condition	Treatment
9 & 10	Excellent	No maintenance required
8	Very Good	Little or no maintenance
7	Good	Crack sealing and minor patching
5 & 6	Fair – Good	Preservative treatments (non-structural)
3 & 4	Poor – Fair	Structural improvement (overlay)
1 & 2	Failed	Reconstruction

Concrete Streets

PASER Rating	Condition	Treatment
9 & 10	Excellent	No maintenance required
7 & 8	Very Good	Routine maintenance
5 & 6	Fair – Good	Surface repairs, sealing, partial-depth patching
3 & 4	Poor – Fair	Extensive slab or joint rehabilitation
1 & 2	Failed	Reconstruction