City of Troy

CITY COUNCIL ACTION REPORT

November 17, 2008

TO: Phillip L. Nelson, City Manager

FROM: John M. Lamerato, Asst. City Manager/Finance & Administration
Brian P. Murphy, Asst. City Manager/Economic Development Services
Steven J. Vandette, City Engineer

SUBJECT: Agenda Item – Second Amendment to Preliminary Engineering Agreement – Rochester Road, Torpey to Barclay – Project No. 99.203.5

Background:

- By Resolution #2000-100, the City entered into a Contract with MDOT for preliminary engineering of Rochester Road, from Torpey to Barclay to be completed by Hubbell, Roth & Clark, Inc. (HRC) for $452,086.87.
- By Resolution #2006-01-006, a Contract Amendment was approved for an additional scope of services that brought the preliminary engineering to $512,869.81.
- The Second Amendment would increase the scope of services by $224,260.15 for a total design cost of $737,129.96 and is detailed in the supporting documentation which can be summarized by the following three categories:
    - Additional Traffic Items
    - Project Schedule Change
    - Changes in Scope
- HRC was selected to provide the design services for the project based on MDOT's Qualifications Based Selection (QBS) whereby professional services are awarded based on qualifications. Price is negotiated after a selection has been made.
- As this is an amendment to a federally funded project, MDOT Local Agency Programs Unit and MDOT Commission Audit have reviewed and approved the amendment subject to approval and execution by the city.
- Although MDOT has approved the agreement, the preliminary engineering phase is capped at the original amount obligated and any increase becomes the local agencies share.
- Increases to federally funded projects are considered for funding by the Oakland County Funding Committee of which Troy is a voting member. However, the funding committee does not consider requests for additional costs for the preliminary engineering phase. Additionally, the committee is considering not funding preliminary engineering phases on projects in the future to try and stretch available funds.
- The city has accepted significantly less federal funds in the past for the preliminary engineering phase on other major road projects just to get initial funding approved and become a "next phase" project. This strategy typically brings significantly higher federal funds in the right-of-way and construction phases down the road.
- The term "next phase" refers to a project that has received funding for a previous phase (i.e. preliminary engineering or right-of-way). Once a project has been approved by the Funding Committee and received funding for a phase, it is moved into the "next phase" category and is

considered for future funding before new projects are considered. More or less, a first in first out process.

- Troy has used this process to acquire federal funds for "next phase" projects on most all of our projects as the design phase is a relatively small cost compared to the right-of-way and construction phases that are funded down the road.
- This approach has been critical in our success in securing and receiving federal funds for major road projects in Troy which now exceeds $100,000,000 and has put us at the front of the line for next phases on Rochester Road, John R, Livernois and Dequindre Roads totaling additional federal funds in excess of $33,000,000.
- We are currently acquiring right-of-way for the Rochester Road project in order that utility relocations may begin in late winter 2009 and be completed prior to the start of the construction phase. The right-of-way phase is funded based on an estimated cost of $6,400,000 with $5,120,000 of this amount paid with federal funds.
- The construction phase of the project is anticipated to start in early 2010. The construction phase is funded based on an estimated cost of $13,036,000 with $9,686,000 paid with federal funds.
- Wattles Road, east and west of Rochester Road has been combined with the Rochester Road project so that they will bid as one large contract and will be constructed at the same time.
- There is a separate agenda item covering a request for a separate amendment to the Wattles Road project.

Financial Considerations:

- Traditionally, preliminary engineering is estimated at 8% to 10% of the estimated construction cost, depending on the size and complexity of the project. Comparing the amended design fee of $737,129.96 to the estimated construction cost of $13,036,000 yields a design fee percentage of 5.7%.
- Capital Funds are available in the 2008-09 budget, Major Road fund account #401.447.479.7989.992035.

Legal Considerations:

- The format and content of this Second Amendment is consistent with the original contract and the First Amendment, both previously approved by City Council.

Policy Considerations:

- Troy has enhanced the health and safety of the community (Goal I)
- Troy adds value to properties through maintenance or upgrades of infrastructure and quality of life venues (Goal II).

Options:

- Staff recommends that City Council approve the attached Second Amendment to Contract No. 00-5024/S1 with Hubbell, Roth & Clark, Inc. (HRC) for preliminary engineering services required in connection with the reconstruction of Rochester Road, from Torpey to Barclay. Furthermore, staff recommends that the Mayor and City Clerk be authorized to execute the agreements.

JENNIFER M. GRANHOLM
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF TRANSPORTATION
LANSING

KIRK T. STEUDLE
DIRECTOR

November 12, 2008

Mr. Bill Huotari
City of Troy
500 W. Big Beaver Road
Troy, Michigan 48084-5285

Dear Bill Huotari:

STU 63459, 40323C, STP 9963(061), HH 2221
MDOT Third Party Agreement No. 00-5024/S1/A2
ROCHESTER TORPEY - WATTLES

The Local Agency Programs Unit of the Michigan Department of Transportation approved Amendment #2 to the subject agreement on November 12, 2008. Enclosed are three copies of the said agreement to be executed by the City of Troy.

Please enter the project numbers and the date of execution in the indicated spaces on Page 1 of the agreement and return one copy of the agreement to the Local Agency Programs Unit. Please be sure the title and signature lines are completed on these forms.

Sincerely,

Brent Schriner, P.E.
Urban Staff Engineer
Local Agency Programs

Enclosures

RECEIVED
NOV 14 2008
ENGINEERING

Michigan Department of Transportation
1322 (05/01)

SUBCONTRACT APPROVAL

DISTRIBUTION: WHITE - Approval Process CANARY - Requester

CONTRACT NUMBER: 00-5024/S1/A2

MDOT

BUREAU	DIVISION	ORG. CODE
Highway Development	Design	

BUREAU CONTACT PERSON	PHONE NO.
Brent M. Schriner, P.E.	(517) 241-2911

PRIME CONTRACT

PRIME CONTRACTOR

City of Troy

PURPOSE OF PRIME CONTRACT

Amendment #2 for a 3rd Party Agreement for PE Phase for Rochester Rd, Torpey to Barclay, City of Troy

STU 63459-40323C

TERM OF PRIME CONTRACT	AMOUNT OF PRIME CONTRACT
BEGINNING DATE: 01/01/2000 ENDING DATE:	$ 452,086.87

SUBCONTRACT

SUBCONTRACTOR

Hubbell, Roth, & Clark

PURPOSE OF SUBCONTRACT

Design - Preliminary Engineering

All subcontract costs over $452,086.87 will be 100% local.

ARE THERE PREVIOUS SUBCONTRACTS WITH THIS PRIME?

☐ YES ☑ NO

(If Yes, list Subcontract number, Contractor and amount on attached sheets.)

TERM OF SUB CONTRACT	AMOUNT OF SUBCONTRACT
BEGINNING DATE: 01/01/2000 ENDING DATE:	$ 737,129.96

REQUESTEOR

REQUIRED APPROVAL DATE	REASON FOR REQUIRED APPROVAL DATE
asap	continue PE work

I have reviewed the terms of the subcontract and am satisfied that it complies with all the terms and conditions of the prime contract.

CONTRACT ADMINISTRATOR (Signature)	PHONE #	DATE
William C Stonebrook	3-2281	11-6-08

REVIEW COMPLETED

COMMISSION AUDIT (Signature)	DATE
Linda S Shepard	11/7/08

APPROVED

DEPUTY DIRECTOR - BUREAU OF FINANCE (Signature)	DATE
	11/10/08

NEED: ☐ FHWA ☐ FAA ☐ OTHER: _____

SECOND AMENDMENT to PE AGREEMENT #00-5024/S1
ROCHESTER ROAD, TORPEY to BARCLAY

City of Troy – Hubbell, Roth & Clark, Inc.

MDOT Job No. 40323
Troy Project No. 99.203.5

This agreement made and entered into this _____ day of_____, 20___, by and between Hubbell, Roth & Clark, Inc., a Michigan Corporation, hereinafter referred to as the CONSULTANT, and the City of Troy, hereinafter referred to as the CITY, provides as follows:

WHEREAS, the CONSULTANT and the CITY, entered into Agreement No. 00-5024/S1, dated December 13, 1999 ("the Agreement") for the performance of certain Preliminary Engineering services required in connection with the reconstruction of Rochester Road, from Torpey to Barclay, hereinafter referred to as the PROJECT; and

WHEREAS, subsequent to execution of the Agreement it was determined that additional SERVICES are required related to changes in the scope, additional traffic items and project schedule changes; and

WHEREAS, subconsultant Mansell Associates, Inc., hereinafter referred to as the SUBCONSULTANT, has provided detailed itemization of additional hours expended due to the additional traffic signal items; and

WHEREAS, the parties hereto intend to amend the Agreement to incorporate the additional services required due to changes in the scope, additional traffic items and project schedule changes.

NOW, THEREFORE, it is agreed between the parties to amend the Agreement as follows:

1. **SECOND AMENDMENT SERVICES**

   In addition to the services set forth in the Agreement, the CONSULTANT shall perform the SERVICES set forth in the Second Amendment Exhibit A, attached hereto.

   The additional costs for the SERVICES, as set forth in the Second Amendment Exhibit B is Two Hundred Twenty Four Thousand Two Hundred Sixty Dollars and Fifteen Cents. ($224,260.15).

   The amount of fixed fee contained within the total amount of Two Hundred Twenty Four Thousand Two Hundred Sixty Dollars and Fifteen Cents. ($224,260.15) is Nineteen Thousand Five Hundred Seven Dollars and Twenty Two Cents ($19,507.22).

2. MAXIMUM AGREEMENT AMOUNT PAYABLE

The not-to-exceed fee , as amended by the First Amendment, is amended by the Second Amendment to provide that the not-to-exceed fee amount payable is increased by Two Hundred Twenty Four Thousand Two Hundred Sixty Dollars and Fifteen Cents. ($224,260.15) to a total not-to-exceed fee of Seven Hundred Thirty Seven Thousand One Hundred Twenty Nine Dollars and Nintey Six Cents ($737,129.96).

The fixed fee, as amended by the First Amendment, is amended by the Second Amendment to provide that the fixed fee amount payable is increased by Nineteen Thousand Five Hundred Seven Dollars and Twenty Two Cents ($19,507.22) to a total fixed fee of Eighty Five Thousand Seven Hundred Sixty Five Dollars and Fifty Five Cents ($85,765.55).

3. CONTINUATION OF REMAINING PROVISIONS

Except as specifically set forth herein all terms and provisions of the Agreement and attachments and exhibits remain as originally set forth thereon.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals by their duly authorized agents and representatives the day and year first above written.

HUBBELL, ROTH & CLARK, INC.

By Walter W. Alip

Its Vice Pres

CITY OF TROY

By _____
Louise Schilling

Its ***Mayor***

By _____
Tonni L. Bartholomew

Its ***City Clerk***

Second Amendment to PE Agreement No. 00-5024/S1

Exhibit A

Rochester Road, Torpey to Barclay

City of Troy – Hubbell, Roth & Clark, Inc.

MDOT Job No. 40323
Troy Project No. 99.203.5

AMENDED PROJECT SCOPE SUMMARY EXHIBIT

The project scope is amended to include changes in the scope, additional traffic items and project schedule changes, as detailed below:

1. Changes in Scope

    a. Additional Topographic Survey
    b. Remonumenation of Corner
    c. Plan Revision – Developments
    d. Redesign Sidewalk Ramps
    e. Preparing Right-of-Way (ROW) Documents
    f. Utility Relocation Assistance
    g. Water Main & Sanitary Sewer Design

2. Additional Traffic Items

    a. Traffic Engineering Assistance
    b. Additional Traffic Signal Design

3. Project Schedule Change

    a. Completing Work Later than Proposed
    b. Plan Revisions for MDOT Standards
    c. Combining Wattles and Rochester

Second Amendment to PE Agreement No. 00-5024/S1

Exhibit B

Rochester Road, Torpey to Barclay

City of Troy – Hubbell, Roth & Clark, Inc.

MDOT Job No. 40323
Troy Project No. 99.203.5

AMENDED PROJECT COST SUMMARY EXHIBIT

	Total Not-to-Exceed Fee	**Fixed Fee**
Original Preliminary Engineering Agreement	$452,086.87	$58,365.17
First Amendment	$60,782.94	$7,893.16
Second Amendment	$224,260.15	$19,507.22
AMENDED TOTAL AGREEMENT	**$737,129.96**	**$85,765.55**

HRC

HUBBELL, ROTH & CLARK, INC
Consulting Engineers

Principals
George E. Hubbell
Thomas E. Biehl
Walter H. Alix
Peter T. Roth
Michael D. Waring
Keith D. McCormack
Curt A. Christeson
Thomas M. Doran

Chief Financial Officer
J. Bruce McFarland

Senior Associates
Frederick C. Navarre
Gary J. Tressel
Lawrence R. Ancypa
Kenneth A. Melchior
Dennis M. Monsere
Randal L. Ford
David P. Wilcox
Timothy H. Sullivan

Associates
Thomas G. Maxwell
Nancy M.D. Faught
Jonathan E. Booth
Michael C. MacDonald
Marvin A. Olane
Richard F. Beaubien
William R. Davis
Daniel W. Mitchell
Jesse B. VanDeCreek
Robert F. DeFrain
Marshall J. Grazioli
Thomas D. LaCross

October 3, 2008

City of Troy
500 W. Big Beaver
Troy, Michigan 48084

Attn: William Huotari, P.E.

Re: Rochester Road – Torpey to Barclay
Amendment No. 2 Request for Preliminary Engineering

HRC Job No. 19990476

Dear Mr. Huotari

At this time Hubbell, Roth & Clark, Inc. is requesting additional compensation for additional work that was not included in the original scope of our contract. This work can be broken down into 3 categories and are described below. Attached is a spreadsheet indicating person hours and costs for each of these categories.

1. Changes to the Scope
   a. HRC provided additional topographic survey at the following locations:
      - The new developments that have occurred since the original survey was completed which are 3336 Rochester Road, 3655 Rochester Road, 3754 Rochester Road, Mayas Meadows Condominium north of Wattles Road, Fountain Park Condominium south of Lamb Road and Briggs Park Condominium north of Lamb Road.
      - New road improvements needed at Vanderpool Avenue that extended further west.
      - At 3400 Rochester Road, just north of Charrington Drive, property changed since original survey with the addition of walls and new driveways.
      - After survey had been completed a right turn lane was constructed at 3785 Rochester Road. HRC resurveyed this area.
      - At all streets corners with proposed sidewalk ramps so design could adhere to ADA requirements.
   b. Work involved in the remonumentation of the west ¼ corner of section 23. HRC did not agree with the corner set by the remonumentation surveyors. This item was discussed with the City's Land Surveyor and the City requested thru the Remonumentation Board that our corner be accepted, which it was. HRC, at the City's request, performed all the tasks required to have this section accepted including field survey, survey calculations, attending numerous meetings with the Board and the City, redrawing property lines for this new corner, and providing all the documentation to the Board for this acceptance process.
   c. As stated above, numerous developments have been constructed after survey and design were completed. In addition some properties have had physical changes. Topographic survey work is included in the above item and this item covers the cost for redesign and plan changes.
   d. Due to ADA requirements that are new since our original contract all ramps had to be resurveyed and redesigned. Topographic survey work is under the above item and this work

RECEIVED
OCT 8 2008
ENGINEERING

555 Hulet Drive, PO Box 824
Bloomfield Hills, Michigan 48303-0824
Telephone 248 454 6300 **Fax** 248 454 6312
www.hrc-engr.com

Engineering. Environment. Excellence.

HRC

includes the redesign of all ramps. Part of the cost for this item is included in our second amendment request for Wattles Road.

e. The City asked HRC to prepare all right of way documents needed for this project and this was not part of our original scope of work. The project required a total of 58 parcel descriptions for right-of-way or easement needs. We have completed all work for this task. Work included providing the descriptions, submitting them to the City, research for those properties where the title work was either missing or outdated, and revising documents at the request of the City to change or add easements to documents already completed.

f. In the original contract HRC anticipated meeting, corresponding and minor design discussions with the utility companies however per the utility meeting held on February 22, 2008 HRC was requested to assist in identifying the actual location for these private utilities to be relocated to. This additional work is also due to the fact that MDOT and the FHWA, since the date of the original contract, have required that the local agencies have private utilities relocated completely prior to construction beginning on the road. This additional task is a substantial amount of work based on the physical items currently existing, and proposed, within this road corridor. Work includes an engineer to horizontally, and vertically if applicable, locate these utilities. In addition cad technicians will assist in this process which will include additional design meetings with each utility company, revisions to proposed locations and possible revisions to HRC design of the City's project. Part of the cost for this item is included in our second amendment request for Wattles Road.

g. As part of our original scope of work, HRC was to evaluate the existing municipal utilities, assist the City in recommendations for upgrades or reconstructions and provide some design for water main. Water main is currently proposed, and designed, for a 12" on the east side from the POB to Wattles Road. In addition, more recently the City requested that a 12" water main be designed for the west side from Wattles to the POE. A short run of sanitary sewer between 69+50 and 73+50 and four additional crossings have currently been designed. The water main north of Wattles on Rochester Road and the sanitary sewer are new items that were not included in the original scope of work.

2. <u>Additional Traffic Items</u>

a. In 2001 HRC counted and analyzed peak hour turning movements at the intersection of Wattles and Rochester Roads. This information assisted in the design of the intersection. Work for this included conducting the field counts, correspondence with the City Traffic Engineer and assisting in the design. HRC Traffic Engineers assisted the City in the final location of traffic signals for the entire project. Work included numerous correspondences with the City and preparation of a formal letter identifying proposed locations for signals. Part of the cost for this item is included in our second amendment request for Wattles Road.

b. Based on the above item, new signals are being designed that were not part of our original scope of work. There have been a total of 5 new half signals added to this project to faciliatate the flow of traffic while providing for pedestrian movement. Two of them are located south of Torpey, two are located at Bishop and Troywood and the fifth one is located north of Troywood for south bound traffic. Mansell Associates will be doing the design of the signals but coordination with our sub consultant will require additional effort by HRC including pedestrian signal locations and revising plan drawings. Part of the cost for this item is included in our second amendment request for Wattles Road.

3. <u>Project Schedule Change</u>

a. The original contract schedule, as submitted in our proposal, indicated that substantially completed preliminary plans were to be done in the years 2000 and 2001. Though the plans were substantially complete, the construction phase was not funded at that time. Final

HRC

plan completion was delayed to allow for updating, to current standards, near the anticipated time of construction. Significant work has been done following 2001 at a higher cost to accommodate the actual construction phase which was finally funded in 2009. Part of the cost for this item is included in our second amendment request for Wattles Road.

b. Since HRC started these plans, in the year 2000, MDOT has had many changes to pay items, specifications, and plan development requirements. The cost to convert these plans from metric units to english was covered in Amendment No. 1. Changes include more detailed ROW plans, changes in how quantities are shown on the plans, more detailed typical sections, soil erosion standards have changed and general changes and updates that occur at MDOT. Part of the cost for this item is included in our second amendment request for Wattles Road.

c. Originally these were to be two separate projects, Rochester Road and Wattles Road, and HRC proceeded with the work per that direction. The City informed HRC that we were to combine these two into one project based on federal funding approval for the construction phase of Rochester Road in 2009 and Wattles Road in 2010. The project will be bid and constructed as one large project to take advantage of economics of scale. The tasks involved in this work included revising the costs estimate and some plan sheets. Part of the cost for this item is included in our second amendment request for Wattles Road.

We have stopped working on this project except as needed to provide our sub consultant, Mansell Associates assistance in the traffic signal design and to continue working with the utility companies to have them relocated in time for construction. We believe that the plans are more than sufficient for the Grade Inspection Meeting that is preliminarily scheduled for the summer 2009.

We have utilized our currently approved overhead rates per MDOT for this amendment. If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.

Walter H. Alix

Walter H. Alix, P.E.
Vice President

Enclosure
pc: HRC; N. Faught, File

DERIVATION OF COST PROPOSAL **Exhibit A - Prime**

MDOT Control Section STU 63459, Job Number 40323C HRC Job Number 19990476
Project Description: Rochester Road, Torpey to Barclay, Reconstruction

Consultant Name: Hubbell, Roth and Clark, Inc.

DIRECT LABOR

Classification (Name)	Person Hours	X	Hourly Rate	=	Labor Costs
Associate	34	$	46.00		$ 1,564.00
Department Head	66	$	36.25		$ 2,392.50
Senior Project Engineer	329	$	46.15		$ 15,183.35
Designer	80	$	33.80		$ 2,704.00
Senior CAD Technician	744	$	31.25		$ 23,250.00
Field Office Supervisor	12	$	34.90		$ 418.80
Field Crew	144	$	24.75		$ 3,564.00
Field Office Technician	488	$	26.80		$ 13,078.40
Reproduction	4	$	21.40		$ 85.60

Total Hours 1901 Total Labor $ 62,240.65

OVERHEAD

Total Labor $ 62,240.65 X 161% = $ 100,319.48 Total Labor $100,319.48

DIRECT EXPENSES

Hubbell, Roth and Clark does not charge mileage to or on the job.

Total Direct Costs $0.00

COST OF MONEY

Total Labor
$ 62,240.65 X 1.92% = $ 1,195.02 Total Cost of Money $ 1,195.02

SUBCONSULTANT FEES Total Sub consultant cost $ 40,997.79

FIXED FEE

(Total Labor + Total Overhead)
$ 62,240.65 + $ 100,319.48 X 12% Total Fixed Fee $ 19,507.22

TOTAL COSTS $224,260.15

DERIVATION OF COST PROPOSAL **Exhibit B,Sub-Consultant**

MDOT Control Section STU 63459, Job Number 40323C HRC Job Number 19990476
Project Description: Rochester Road, Torpey to Barclay, Reconstruction

Sub-Consultant Name: Mansell Associates, Inc.

DIRECT LABOR

Classification (Name)	Person Hours	X	Hourly Rate	=	Labor Costs
					$ -
Project Manager	28		$ 45.00		$ 1,260.00
Designer	102		$ 45.00		$ 4,590.00
Engineer IV	78		$ 29.02		$ 2,263.56
Engineer III	129		$ 30.00		$ 3,870.00
TS Technician IV	46		$ 26.00		$ 1,196.00
TS Technician III	30		$ 24.00		$ 720.00
TS Technician III	30		$ 21.00		$ 630.00
TS Technician II	30		$ 18.00		$ 540.00
Surveyor	20		$ 16.00		$ 320.00
					$ -
					$ -
Total Hours	493			Total Labor	$ 15,389.56

OVERHEAD

Total Labor	$ 15,389.56	X	140%	=	$ 21,545.38	Total Labor	$ 21,545.38

DIRECT EXPENSES

Total Direct Costs $ -

COST OF MONEY

Total Labor				
$ 15,389.56	X	=	Total Cost of Money	$ -

FIXED FEE

(Total Labor	+	Total Overhead)				
$ 15,389.56	+	$ 21,545.38	X	11%	Total Fixed Fee	$ 4,062.84

TOTAL COSTS $ 40,997.79

DERIVATION OF COST **Exhibit C**

MDOT Control Section STU 63459, Job Number 40323C HRC Job Number 19990476

Project Description: Rochester Road, Torpey to Barclay, Reconstruction

SUMMARY BY JOB NUMBER AND BY CATEGORY

DIRECT LABOR

PRIME CONSULTANT(S)	Direct Labor Hours	1901	Direct Labor Costs	$ 62,240.65	
SUB-CONSULTANTS	Direct Labor Hours	493	Labor Costs	$15,389.56	
	Total Labor Hours	2394	Total Direct Labor		$77,630.21

OVERHEAD

PRIME CONSULTANT	Overhead Costs	$100,319.48	
SUB-CONSULTANT(S)	Overhead Costs	$21,545.38	
	Total Overhead		$121,864.86

DIRECT EXPENSES

PRIME CONSULTANT	Direct Costs	$0.00	
SUB-CONSULTANT(S)	Direct Costs	$0.00	
	Total Direct Costs		$0.00

COST OF MONEY

PRIME CONSULTANT	Cost of Money	$ 1,195.02	
SUB-CONSULTANT(S)	Cost of Money	$ -	
	Total Cost of Money		$1,195.02

FIXED FEE

PRIME CONSULTANT	Fixed Fee Costs	$19,507.22	
SUB-CONSULTANT(S)	Fixed Fee Costs	$4,062.84	
	Total Fixed Fee		$23,570.06
	TOTAL COSTS FOR JOBS		$224,260.15

DERIVATION OF COST **Exhibit D**

MDOT Control Section STU 63459, Job Number 40323C HRC Job Number 19990476

Project Description: Rochester Road, Torpey to Barclay, Reconstruction

SUMMARY BY CATEGORY FOR ALL JOB NUMBERS

DIRECT LABOR

PRIME CONSULTANT(S)	Direct Labor Hours	1901	Direct Labor Costs	$62,240.65	
SUB-CONSULTANTS	Direct Labor Hours	493	Labor Costs	$15,389.56	
	Total Labor Hours	2394	Total Direct Labor		$77,630.21

OVERHEAD

PRIME CONSULTANT	Overhead Costs	$100,319.48	
SUB-CONSULTANT(S)	Overhead Costs	$21,545.38	
	Total Overhead		$121,864.86

DIRECT EXPENSES

PRIME CONSULTANT	Direct Costs	$0.00	
SUB-CONSULTANT(S)	Direct Costs	$0.00	
	Total Direct Costs		$0.00

COST OF MONEY

PRIME CONSULTANT	Cost of Money	$ 1,195.02	
SUB-CONSULTANT(S)	Cost of Money	$0.00	
	Total Cost of Money		$1,195.02

FIXED FEE

PRIME CONSULTANT	Fixed Fee Costs	$19,507.22	
SUB-CONSULTANT(S)	Fixed Fee Costs	$4,062.84	
	Total Fixed Fee		$23,570.06
	TOTAL COSTS FOR JOBS		$224,260.15

DERIVATION OF COST

Exhibit E

MDOT Control Section STU 63459, Job Number 40323C

HRC Job Number 19990476

Project Description: Rochester Road, Torpey to Barclay, Reconstruction

SUMMARY BY CONSULTANT

	Hours	Cost	Fixed Fee	DBE Y/N	% of Cost
PRIME CONSULTANT	1901	$163,755.15	$19,507.22	N	81.60%
SUB-CONSULTANT(S)	493	$36,934.94	$4,062.84	N	18.40%
Totals	2394	$200,690.09	$23,570.06		100%

HOURS -Amendment 2

Rochester Road, Torpey to Barclay
STU 63459, 40323C
City of Troy Project No. 99.203.5

October 3, 2008

Task Description	Firm	Associate	Dept. Manager	Sr. Project Engineer	Designer	Senior CAD Technician	Field Office Supervisor	Field Crew	Field Technician	Reprod.	Total By Task
Additional Topographic Survey	HRC		2	7		84		120	8		221
Remonumentation of Corner	HRC		40			60		24	30		154
Plan Revision - Developments	HRC	1		45		70					116
Redesign Sidewalk Ramps	HRC	1		42	18	50					111
Preparing ROW Documents	HRC	2	24	8		60	12		450	4	560
Utility Relocation Assistance	HRC	2		8	50	32					92
Water Main & Sanitary Design	HRC	1		60		86					147
Traffic Engineering Assistance	HRC	4		1	12						17
Add'l Traffic Signal Design	HRC	3		16		36					55
	Mansell	28		207	102	156					493
Completing Work Later than Proposed	HRC	8		100		140					248
Plan Revisions for MDOT Standards	HRC	12		36		110					158
Combining Wattles and Rochester	HRC			6		16					22
Total Hours by Classification	**HRC**	34	66	329	80	744	12	144	488	4	1901
	Mansell	28	0	207	102	156	0	0	0	0	493