



**McDonough Associates Inc.**  
130 East Randolph Street  
Suite 1000  
Chicago, Illinois 60601-6214  
312/946-8600 Fax: 312/946-7199  
[www.maiengr.com](http://www.maiengr.com)

**Village Manager's Office**

MAY 12 2011

May 10, 2011

Mayor Daniel J. McLaughlin  
Village of Orland Park  
14700 Ravinia Avenue  
Orland Park, IL 60462

**VILLAGE OF ORLAND PARK**

Attn: Paul Grimes  
Village Manager


Re: Phase 2 Engineering Design Services  
143<sup>rd</sup> Street – Wolf Road to Will Cook Road

Dear Mayor McLaughlin:

Please find attached a proposal to complete Phase 2 Engineering Design Services for the above referenced project. The proposed services for Phase 2 engineering as detailed in the attached documents total \$420,699.80 including sub-consultant services. Please be advised Phase 2 engineering is programmed for \$450,000 utilizing STP funding. The local share is 30%. Since 143<sup>rd</sup> Street is an unmarked state route under IDOT jurisdiction, the Village should consider writing a letter and request a joint agreement, as they did in Phase I, for IDOT to split the local match.

We appreciate the opportunity to provide engineering services to the Village of Orland Park. Please call me at (312) 946-7104 if you have any questions or require additional information.

Very truly yours,  
McDonough Associates, Inc.

  
Feroz Nathani  
President

cc. Ed Wilmes, Mike Hannemann

**143rd Street Reconstruction  
Will-Cook Road to Wolf Road  
Village of Orland Park**

**Scope of Work**

The project objective is to prepare Phase II Contract Plans and Specifications for the improvement of the 143rd Street between Will-Cook Road and Wolf Road. The roadway is being reconstructed from two-lane to four-lane with median/left-turn lane. The limits will be from the east leg of Will-Cook Road to the west leg of Wolf Road, tying into adjacent projects. It is assumed that no land bridge will be constructed as a part of this project. If this is not the case, an extra will be required to design the land bridge. Design includes a 10'x6' triple box culvert, new traffic signal installation at Creek Crossing Drive, new sidewalk and new closed drainage system. Approximate total length of project is 4,700 feet. All work will be performed in full accordance with IDOT standards, procedures, requirements and criteria.

**1. Ground Survey**

	Man-hours	Direct Costs
<b>Survey</b>		
Establish Project Control and Alignment	64	
Cross Sections	48	
Topographic (object type, size, location, condition)	96	
Drainage Survey (size, type, invert and flow direction)	40	
CADD	32	
<b>Survey Materials</b>		\$ 100.00
<b>Vehicle Allowance</b>		\$ 630.00
<b>Sub-Total</b>	<b>280</b>	<b>\$ 730.00</b>

**2. Final Design Items**

	Man-hours	Direct Costs
<b>Culvert</b>		
10'x6' Triple Box Culvert TS&L	80	
<b>Drainage System</b>		
Storm Sewer Calculations	24	
Detention Calculations	16	
<b>Safety</b>		
Guardrail and Handrail Design	40	
<b>Sub-Total</b>	<b>160</b>	<b>\$ 150.00</b>

**3. Ground Stabilization Design and Coordination**

	Man-hours	Direct Costs
Piled Embankment Design	40	\$ 81,925.80
Settlement Analysis and Discussions	24	
Preferred Alternative Meetings with Wang Engineering and Village Officials	24	
<b>Sub-Total</b>	<b>88</b>	<b>\$ 81,925.80</b>

**4. Permitting**

	Man-hours	Direct Costs
United States Army Corps of Engineers 404 Permit and Regional Permits	40	
Illinois Department of Natural Resources - Office of Water Resources Floodway Permit	20	
Illinois Environmental Protection Agency - NPDES Permit	4	
<b>Sub-Total</b>	<b>64</b>	<b>\$ 250.00</b>

**5. Roadway - Contract Plans, Specifications and Estimate**

	Sheets	Hrs/Sheet	Man-hours	Direct Costs
Cover Sheet	1	8	8	
Plan Index, General Notes and Legend	1	30	30	
Summary of Quantities and Schedules	5	20	100	
Alignment, Ties, Benchmarks and Right-Of-Way Corners	2	20	40	
Traffic Control Drawings (3 Stages)	8	20	160	
Typical Cross Section Drawings	2	24	48	
Roadway Plan and Profile Drawing (4 Mainline)	4	30	120	
Drainage Plan and Profile Drawings (4 Mainline)	4	30	120	
Retaining Wall Details and Sections	3	30	90	
Triple Box Culvert Plans and Details	3	40	120	
Ground Stabilization Plans and Details	4	40	160	

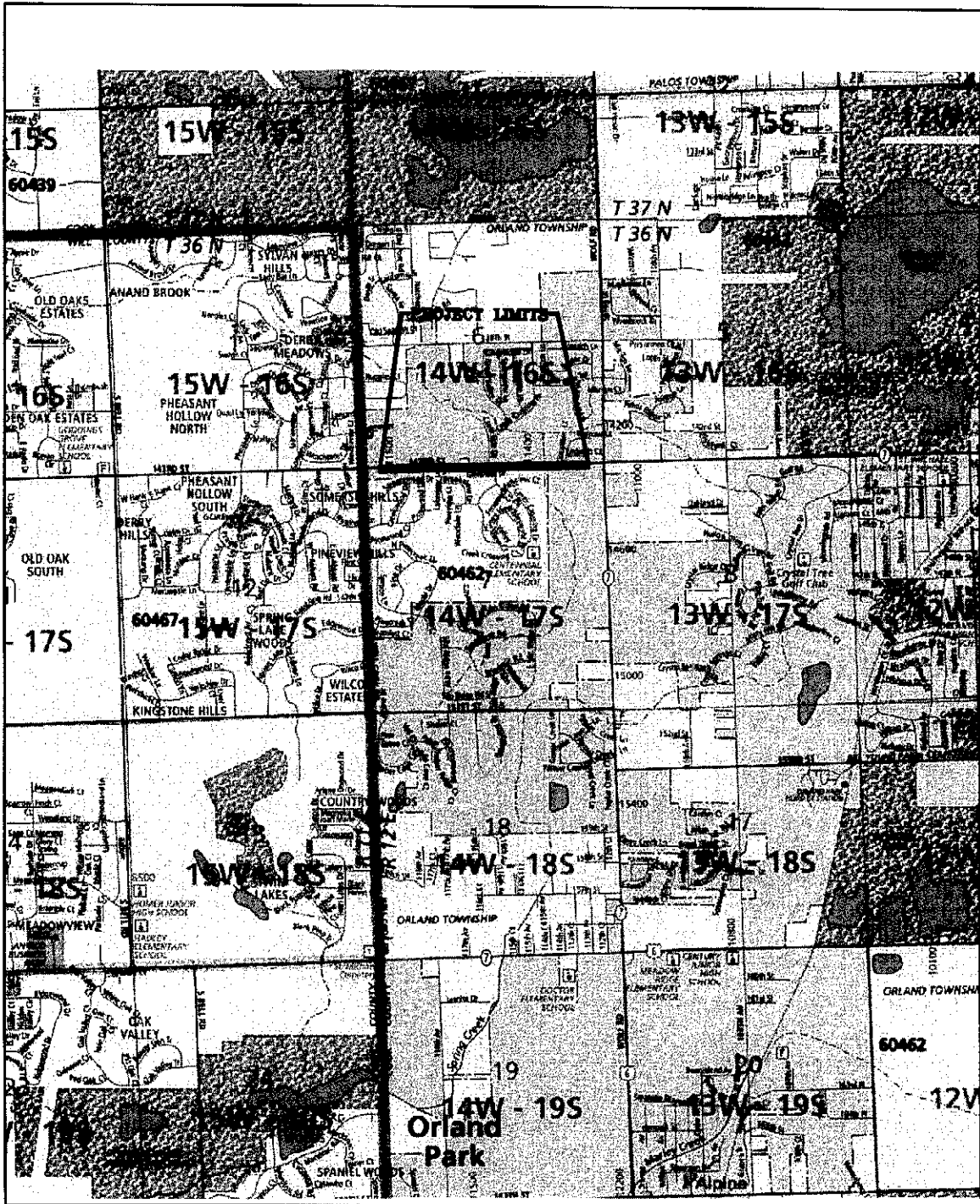
Miscellaneous Design Details	2	20	40	
Traffic Signal Plans (Creek Crossing Drive)	4	30	120	
Traffic Signal Details	4	4	16	
Temporary Erosion Control Plans	4	20	80	
Landscaping and Erosion Control Plans	4	30	120	
Pavement Marking Plans	4	30	120	
Roadway Cross Sections (every 50 feet and driveways)	12	12	144	
Specifications and Special Provisions			40	
Storm Water Pollution Prevention Plan			20	
Engineering Cost Estimate (Preliminary, PreFinal and Final)			20	
Quantity and Design Calculations			40	
QA/QC			80	
Computer Plotting, Xerox Copies and Reproductions (See Exhibit G)				\$ 4,000.00
Meeting Transportation ( 10 meetings at \$36 )				\$ 500.00
<b>Sub-Total</b>	<b>71</b>		<b>1836</b>	<b>\$ 4,500.00</b>

**6. Meetings and Coordination**

Village of Orland Park					40	
Illinois Department of Transportation					40	
United States Army Corps of Engineers					16	
Stakeholders, Businesses and General Public					40	
Project Management and Administration					80	
<b>Sub-Total</b>					<b>216</b>	<b>\$ -</b>

<b>TOTAL MAN-HOURS</b>	<b>2644</b>	
<b>ESTIMATED AVERAGE HOURLY WAGE RATE</b>		<b>\$ 45.00</b>
<b>MULTIPLIER</b>	<b>2.8</b>	
<b>SUB-TOTAL</b>	<b>\$ 333,144.00</b>	
<b>IN-HOUSE COSTS AND SERVICES BY OTHERS (SEE ABOVE)</b>	<b>\$ 87,555.80</b>	
<b>PROJECT TOTAL</b>	<b>\$ 420,699.80</b>	

# 143RD STREET IMPROVEMENTS Will-Cook Road to Wolf Road



LOCATION MAP