

**VILLAGE OF HINSDALE  
ENVIRONMENT AND PUBLIC SERVICES COMMITTEE MINUTES  
MONDAY, SEPTEMBER 8, 2014**

Chairman Laura LaPlaca called the meeting of the Environment and Public Services Committee to order at 7:34 P.M., Monday, September 8, 2014, in Memorial Hall of the Memorial Building, 19 East Chicago Avenue, Hinsdale, IL.

**PRESENT:** Chairman Laura LaPlaca, Trustee William Haarlow, Trustee Gerald Hughes, Trustee Bob Saigh

**ABSENT:** None

**ALSO PRESENT:** Kathleen Gargano, Village Manager; Suzanne Ostrovsky, Management Analyst; George Franco, Director of Public Services; Tom Bueser, Deputy Director of Public Services; Dan Deeter, Village Engineer.

**Approval of Minutes – June 9, 2014**

The EPS Committee reviewed the minutes from the June 9, 2014 meeting. Trustee Saigh motioned for approval of the June 9, 2014 minutes. Trustee Hughes seconded. The motion passed unanimously.

**Proposed Parkway Tree Removal at 134 East Hickory Street**

Chairman LaPlaca introduced this agenda item. Mr. Franco provided background on the area and condition of the tree. Ray and Melissa Temple of 134 East Hickory addressed the committee. They are requesting the removal of the tree as part of an effort to improve drainage on their property to prevent further flooding in their home. In response to Chairman LaPlaca's question Mr. Finnell stated that it was appropriate for the committee to consider the condition of the tree when deciding whether it should be removed. After being asked about the health of the tree, Mr. Finnell replied that he could not accurately predict how long the tree would last. The tree could live three to ten years. Mr. Finnell described the tree as in fair condition. This means that there was a health or structure issue that may cause short or long term management issues. Mr. Finnell stated the tree was "over mature" and he expected it to be in "continuous decline" rather than rebounding to better health. After discussing the request, the committee members agreed that 1) considering the reason for removing the tree, that is, to improve stormwater management and reduce home flooding, and 2) the fact that the tree was in fair condition and was expected to die naturally within the next decade, it was appropriate to approve the residents' request to remove the tree. Mr. Temple asked the committee for some financial relief from the costs of the tree removal. Chairman LaPlaca noted that the ordinance did not allow the committee to waive the \$5000 fee.

Additionally, tree removal costs have typically been paid by residents in past requests. However, the committee agreed that the cost of planting a new tree at a location designated by the Village Forester would be borne by the Village.

### **Proposed Parkway Tree Removal at 208 E. 8<sup>th</sup> Street**

A representative from Terrain Landscaping provided background on the proposed tree removal. Chairman LaPlaca noted that there is a \$5,000 fee associated with the tree removal. The representative stated that he would need to consult the homeowner to gauge willingness to pay the fee.

**Public Comment.** Nate and Sandra Wasson addressed the committee concerning the flooding during the August 22 storm. They asked that the area should be still considered for improvements. Staff has sent out plans for Phase 1 improvements to the existing contractors for bids as a change order to the existing construction work within the Village. This should expedite the construction and reduce its cost since it will incorporate current bids and reduce mobilization costs.

### **Public Services Monthly Report**

Mr. Franco noted September 15<sup>th</sup> ends water restrictions and that electrical work on the Village parking lot starts this week. In response to Chairman LaPlaca's question, Ms. Gargano stated that the staff is working on a new landscaping plan for the parking lot in 2016. Trustee Saigh noted that the Village would be putting a new floor at the ticket office in the main train station. Mr. Franco confirmed that notices had been posted to make the public aware of this.

### **Engineering Monthly Report**

Mr. Deeter highlighted portions of the Engineering Monthly Report.

- Staff is working to meet resident comments concerning select driveways on Taft Road in the Woodlands Phase 2 project.
- Bid opening for the Elm/Third Street water main project is scheduled for 9/11/14.
- Resident-funded alley paving has been requested for alleys on the 100-block of N. Lincoln/N. Grant and the 700-block of S. Bodin/S. Monroe.
- Oak Street Bridge: HR Green continues to coordinate with ComEd for power line burying costs and just submitted samples of Bridge lighting.
- Oak Street Bridge: Staff continues to look for cost effective alternatives to secure the lateral bracing on the bridge.

**To Approve "A Resolution Approving and Accepting A Plat of Consolidation To Consolidate The Properties Commonly Known As 217 – 227 W. 55<sup>th</sup> Street In the Village of Hinsdale, County of DuPage".**

Chairman LaPlaca introduced this agenda item and provided some background. The residents intend to consolidate two residential lots into one and tear down one home. The Zoning Board of Appeals has approved the variation to the side yard setback this creates. Trustee Hughes moved to approve. Trustee Saigh seconded. The motion passed unanimously.

**To Award the Crack Sealing and Seal Coating Services Project to Patriot Pavement Maintenance in the Amount Not To Exceed \$30,000.**

Chairman LaPlaca introduced this agenda item. Mr. Deeter provided background information on this item. This is a new, cost-effective endeavor recommended by the engineering staff to improve street condition and longevity. Committee members commented that we should incorporate this into our annual road maintenance program. Trustee Saigh moved to approve. Trustee Haarlow seconded. The motion passed unanimously.

**To award Bid #1575 for the service of street sweeping to DeJana Industries, Inc. in the year 1 bid estimated amount of \$33,521.60**

Chairman LaPlaca introduced and provided background information on this item. Mr. Franco provided further information. Trustee Hughes moved to approve. Trustee Saigh seconded. The motion passed unanimously.

**To award Bid #1576 for the service of sewer cleaning, televising, and root cutting to National Power Rodding, Inc., in the bid comparison price of \$46,500, not to exceed the budgeted amount of \$43,000.**

Chairman LaPlaca introduced this agenda item. Mr. Franco provided background on this item which consists of contractual sewer maintenance and noted that quantities will be adjusted to remain within budget parameters. National Power Rodding Inc. has completed work for the Village in the past. Trustee Saigh moved to approve. Trustee Hughes seconded. The motion passed unanimously.

**Other Business**

Mr. Deeter informed the Committee of the recommended payment of \$3,375.00 to BnA Management, LLC to improve stormwater management in Localized Flooding Area #7 (the rear yard of 228 Fuller Road) under the Localized Drainage Solutions program. Staff has developed new procedures to record and follow up drainage complaints from the August 21-22 rain event.

DRAFT

**Adjournment**

With no further issues to be brought before the Committee, Trustee Hughes moved to adjourn. Trustee Saigh seconded. Motion carried and the meeting was adjourned at 9:04 P.M.

Respectfully submitted,

Dan Deeter, PE  
Village Engineer



September 23, 2014

**To:** Kathleen A. Gargano, Village Manager  
**From:** George Franco, Director of Public Services  
**RE:** August 2014 Monthly Report

To summarize, the Public Services Department kept busy doing:

- Summer special event assistance: Farmer's Market, Uniquely Thursdays, and Recreation Department's Party in the Park.
- Daily task continuation.
- The preparation of and pre-construction meetings for the Village Lot and Burlington Park electrical upgrades and the salt shed roof replacement.
- The re-bidding of contractual services for street sweeping and sewer cleaning/televising and root cutting.

#### Department Trainings

Date	Subject	Presenter
8/1/14	Water Division General Safety Requirements review and sign off sheet	Hinsdale
8/1/14	Water Main Repair JSA (Job Safety Analysis) review and sign off sheet	Hinsdale
8/6/14	Hazard Assessment Overview with sign off sheet	Hinsdale
8/7/14	Emergency Traffic/Work Zone Safety Policy with sign off sheet	Hinsdale
8/25/14	Work zone Safety for Construction and Utility Employees safety video	IRMA
8/25/14	Planned Workplace Inspections video	IRMA
8/25/14	Coaching the Backhoe Operator video	IRMA

Significant issues for this month: A Public Services Safety Committee was formed which includes eleven members of the department and the Village's Management Analyst, Suzanne Ostrovsky.

## ROADWAY MAINTENANCE (PUBLIC SERVICES)

### Activity Measures

Standard Tasks	August 2014	Prev Mo	YTD 2014
Signs	7	9	64
Posts	3	3	23
Signs Repaired	18	3	33
Cold Mix (tons)	2	1.5	183.5
Hot Mix (tons)	53	176	350
Gravel for Alleys (tons)	0	0	98
White Paint (gallons)	96	66	239
Yellow Paint (gallons)	0	0	30
Basin Top Cleaning (man-hours)	101	124	630
Alley Grading (man-hours)	19	3	134
Alley Trimming (man-hours)	0	16	40
Concrete (yards)	0	0	0
Snow & Ice Callouts	0	0	31
Road Salt Used (tons)	0	0	818
Sand Used (tons)	0	0	167
Salt & Calcium for Walks, Stairs, etc. (tons)	0	0	13.45
Leaves Swept Up (yards)	0	0	0
Central Business District Sweeps	5	4	23
Complete Village Sweeps	0	0	1
Parking Lot Sweeps	1	1	3
Scheduled Vehicle Maintenance	7	7	154
Unscheduled Vehicle Maintenance	17	16	268

Significant issues for this month: Completed the painting of all crosswalks, implemented sign changes at Oak St./Chicago Ave. and Madison St./Walnut St. Crews continued on the asphalt grinding/patching list.

## **BUILDING MAINTENANCE (PUBLIC SERVICES)**

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### **Activity Measures**

<b>Standard Tasks</b>	<b>August 2014</b>	<b>Prev Mo</b>	<b>YTD 2014</b>
Light Bulb/Ballast Replacement	0	15	27
Light Pole Knockdown	0	0	2
Light Pole Replacement / Install	2	1	8
Cable Repairs	0	0	2
Control Cabinet Upgrade / Replacement	0	0	0
Underground Utility Locates (JULIE)	0	0	10
Banners Installed	26	12	158
LED Bulbs/Fixtures Installed	0	0	3
Building Inspections	7	17	64
Building RPZs Inspected and Installed	19	0	21
Boiler & Water Chiller Inspections	20	20	164
Emergency Generator Inspections	10	12	58
Fire Suppression System Inspections	0	1	4

Significant issues for this month:

1. Install security cameras at Burns Field house.
2. Met with IRMA to inspect building boiler systems.
3. Review and preparation for the Memorial Hall elevator upgrade project.
4. Prepare and coordinate the Brush Hill station floor replacement project.
5. Inspect all cooling systems in Village buildings for proper operation.
6. Complete Memorial Hall interior downspout drain project by pouring cement and building cover around pipe.

**Parks Maintenance  
Aug 2014**

**Contractual Maintenance**

<b>Type</b>	<b>Contract or</b>	<b>Scope</b>	<b>Frequency</b>	<b>Additional Maintenance</b>
Landscape Maintenance and Mowing	Zenith	Mowing 151 acres at 68 locations; Bed and shrub maintenance at 5 locations	Once or twice per week; site and weather specific	Shrub and bed clean up at Hinsdale Center for the Arts Building at KLM
Rain Garden Maintenance	Encap Inc	Remove debris and weeds from Phase I gardens	Once per month	N/A
Garbage Disposal Service	Allied Waste	Empty garbage receptacles in the business district and at the following parks: Peirce, Burns, Eleanors, Robbins, Deitz, Melin, Brook and Veeck	Three times per week (Mon, Wed, Fri)	N/A
Rolling Athletic Fields	Molitor	Smooth athletic fields by rolling at the following locations: Veeck, Brook, Monroe School and Oak School	Once per request	N/A

**In-House Maintenance**

**I) Routine Maintenance**

- **Bathrooms**
  - Cleaning and stocking park facility bathrooms
  - Facilities located at Peirce West, Peirce East, Burns Field, Robbins Park, Katherine Legge Annex Building, Brook Park, Veeck Park
  - Performed daily, including weekends

**TREE PRESERVATION (PUBLIC SERVICES)**

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**Activity Measures**

	<b>August 2014</b>	<b>Prev Mo</b>	<b>YTD 2014</b>
Tree Pruning Contractual	0	0	678
Tree Pruning In-House	12	11	48
Small Tree Pruning In-House	68	0	68
Tree Removal Contractual	29	2	78
Tree Removal In-House	41	38	151
Trees Planted	2	1	151
Dutch Elm Disease Losses (Private)	28	0	28
Elm Losses (Public)	10	5	27
Ash Tree Removal - EAB (Private)	5	0	5
Ash Tree Removal – EAB (Public)	In-House 30	In-House 28	In-House 108
	Contracted 25	Contracted 0	Contracted 57
Tree Preservation Plan Reviews	24	17	113

Significant issues for this month: Since February 2011, 547 public Ash trees have been removed due to Emerald Ash Borer (EAB).

- **Garbage**

- Emptying garbage receptacles in central business district and parks
- Performed in conjunction with disposal contractor
- Staff completes on Tuesdays, Thursdays, Saturdays, Sundays and Holidays

<b>Location</b>	<b>Number of Receptacles</b>
Burns Field	6
Burlington Park	2
Deitz Park	2
Eleanor's Park	2
Highland Park	N/A
Melin Park	2
Peirce Park	12
Robbins Park	10
Brook Park	14
Stough Park	2
KLM	18 (garbage) 4 (dog waste)
Memorial Building	4
Woodland Park	N/A
Ehert Park	N/A
Central Business District	54
<b>Total</b>	<b>132</b>

- **Burlington Park Fountain**

- Staff performs a visual inspection, skims and cleans the filters of the Burlington Park fountain on a daily basis

- **Planting Beds and Containers**

- 40 planting beds and 17 containers in the central business district are watered and weeded
  - Staff weeded six beds in the month of August
  - Watering occurred at least 3 days per week

- **Katherine Legge Grounds**

- 2 pavilions and the lodge grounds are cleaned for rentals which typically occur Friday through Sunday

## II) Athletics

- KLM lacrosse field was aerated and overseeded with 125 lbs of athletic field mix
- The baseball diamond at Veeck was prepared on Mondays, Tuesdays and Wednesdays to accommodate men's softball
- Two tennis nets replaced at Robbins Park
- Crews have completed the layout and marking of sixteen athletic fields outlined below

**2014 Fall Field Layout Schedule**

	Monroe C	Monroe B	Monroe A	HMS	Duncan Field C	Duncan Field B	Duncan Field A	Oak School	Pool	Stough B	Stough A	Dietz	Mein B	Mein A	Veeck C	Veeck B	Veeck A	Burns Soccer C	Burns Soccer B	Burns Soccer A	H	G	F	E	D	C	B	A	Football	Robbins Football	K.M. Lacrosse 3	K.M. Lacrosse 2	K.M. Lacrosse 1	
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	8/28/2014																																	
	8/29/2014																																	





Water/Sewer Division - Water

**Water Activity Measures**

<b>Standard Tasks</b>	<b>August 2014</b>	<b>Prev Mo</b>	<b>YTD 2014</b>
Utility Locates (JULIE)	471	516	3643
B-Box/Service Locates	567	583	4291
Water Mains Located	96	143	810
Main Break Repairs	3	2	58
B-Box/Service Repairs	3	2	23
Hydrants Replaced/Repaired	15	21	43
Service Connections/Inspections	4	7	29
Valve Installations/Repairs	1	1	9
Valves Exercised	7	8	133
Valves Located	7	8	165
Leak Investigations	3	4	70
Hydrants Flushed	15	11	60
High Bill Investigations	3	10	74
Water Fountains Serviced/Replaced	0	0	10
Disconnect Inspections	5	12	47
Meter Repairs	2	10	23
Meter/Remote Installs	5	11	51
Meters Removed	6	13	43
Meter Readings	92	144	1088

Water Main Break Repairs

<b>July 2014</b>	<b>Prev Mo</b>	<b>YTD 2014</b>
<u>2</u>	<u>5</u>	58

July Water main Break Locations

8/5/14	432 Minneola	6" Cast Iron/Water service
8/29/14	Elm & Walnut	12" Cast Iron
8/29/14	239 E. Walnut	4" Cast Iron

*Water/Sewer Division - Sewer*

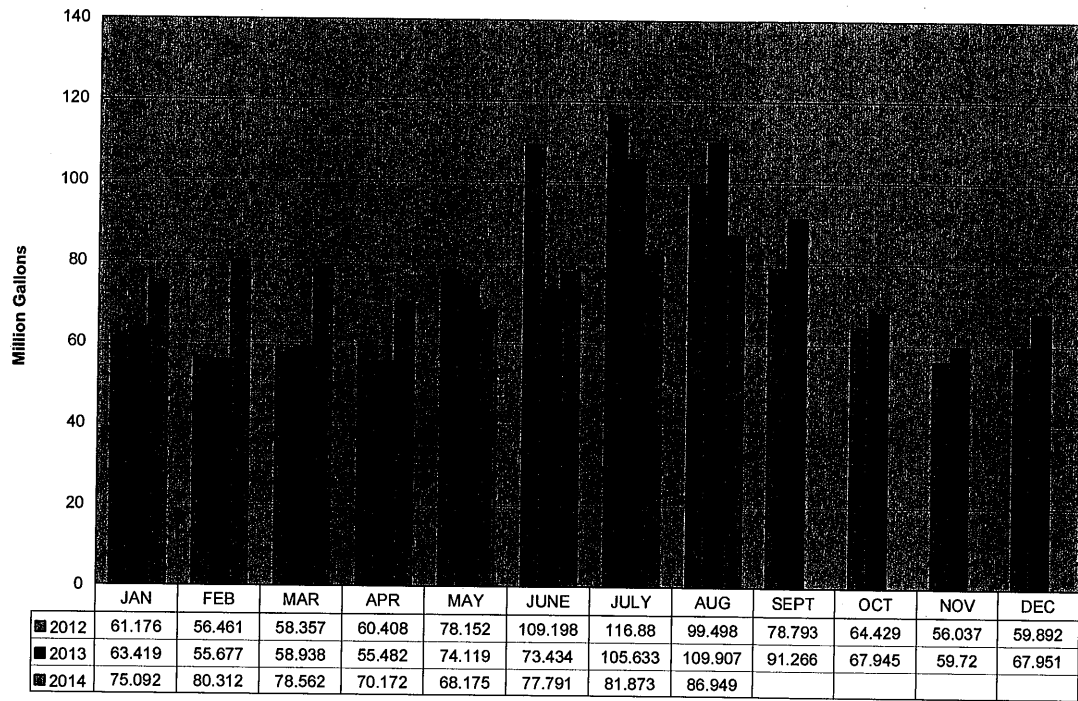
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**Sewer Activity Measures**

<b>Standard Tasks</b>	<b>August 2014</b>	<b>Prev Mo</b>	<b>YTD 2014</b>
Catch Basins Replaced/Repaired	2	0	4
Inlet Replaced/Repaired	0	0	1
Manhole Replaced/Repaired	0	0	1
Catch Basins/Inlets Cleaned	15	1	24
Sewers Cleaned (feet) In-House	80	500	9560
Sewers Cleaned (feet) Contractor	0	450	4500
Sewers Televised (feet) Contractor	0	526	1946
Sewers Replaced/Repaired (feet)	0	0	0
Sewer Mains Located	13	3	21
Back-up Investigations	1	1	14
Manholes Located	16	8	116
Cave-ins Checked	3	2	6
Sewer Inspections	0	0	0
IEPA Sampling Due to Overflow Event of Combined Sewers (Veeck CSO)	2	2	12

# WATER

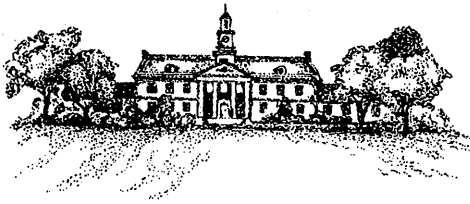
## MONTHLY WATER PUMPAGE



August 2014

Standard Tasks	Check Oil, Grease Fittings	Bacteria Sampling
High Service Pumps #1, #2, #3, #4	✓	N/A
Well Pump Motors #2, #5, #10	✓	✓

Standard Tasks	August 2014	Prev Mo
Bacteria Samples	24	26
Field Chlorine	21	24
Field Turbidities	21	21
Lab Chlorine	26	26
Lab Turbidities	26	26
Lab pH	26	26
Lab Fluoride	26	26
Precipitation Readings	0	1
Temperature Readings (air)	24	26
Temperature Readings (water)	31	31
DBP Samples	0	8
Pumps Serviced	7	7
Sprinkling Violations	0	0
Special Well Samples	0	0



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## Village of Hinsdale

## Memorandum

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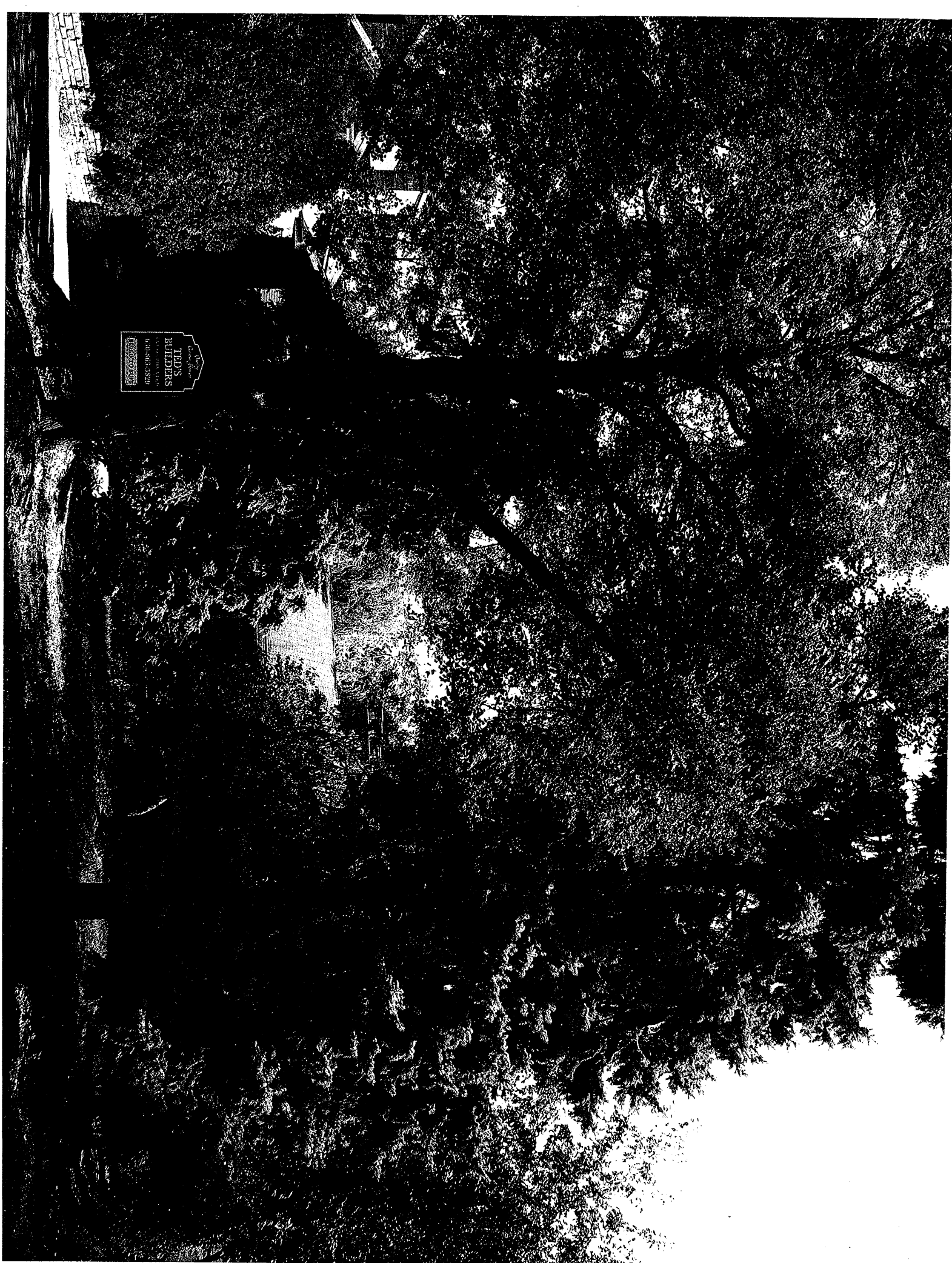
**To:** Chairman LaPlaca and the EPS Committee  
**From:** George Franco, Director of Public Services  
**Date:** October 1, 2014  
**Subject:** Proposed Parkway Tree Removal at 407 North Quincy Street

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Ted's Builders are planning a new home at 407 N. Quincy St. They have requested permission to remove one tree located in the parkway.

The tree is a Colorado blue spruce tree that has a 13.0" diameter at 4.5' above grade. The estimated height of the tree is 40' and the estimated canopy width is 25'. The tree's condition is good, and the shoot growth in the canopy is average. There are no significant visible structural defects in the trunk or scaffold branches. The tree canopy is not balanced due to poor spacing with the parkway linden tree to the north. The tight spacing of the two trees limited the amount of sunlight and air circulation to the north and east portion of the spruce, creating an area of thin and weak growth and dead branches.

Staff has determined that the tree does not meet the forestry program's requirements for tree removal and has not permitted the removal of the spruce tree as requested. Ted's Builders are appealing that decision to the EPS Committee per their function as the Village's "Tree Board". Due to limitations of the tree as described above, Staff recommends the Committee consider allowing the removal of the tree per Village Code 7-2-2 b (1). Staff is requesting direction from the Committee in responding to this request.



Ted's Builders Inc  
536 Ridgemoor Drive  
Willowbrook, IL 60527  
(630) 863-3829

August 28, 2014

EPS Board  
Village Of Hinsdale  
19 East Chicago Ave  
Hinsdale, IL 60521

RE: 407 N. Quincy\_Tree Removal

Dear EPS Board,

We are asking for permission to take down the spruce tree in the parkway area. We proposed new driveway on the south end of the property based on engineering and architectural design of the home. From an architectural standpoint it lowers the elevation points and has southern sun exposures as homes next door do. Engineering reason for putting driveway south end of property is elevation sloping down south and drainage.

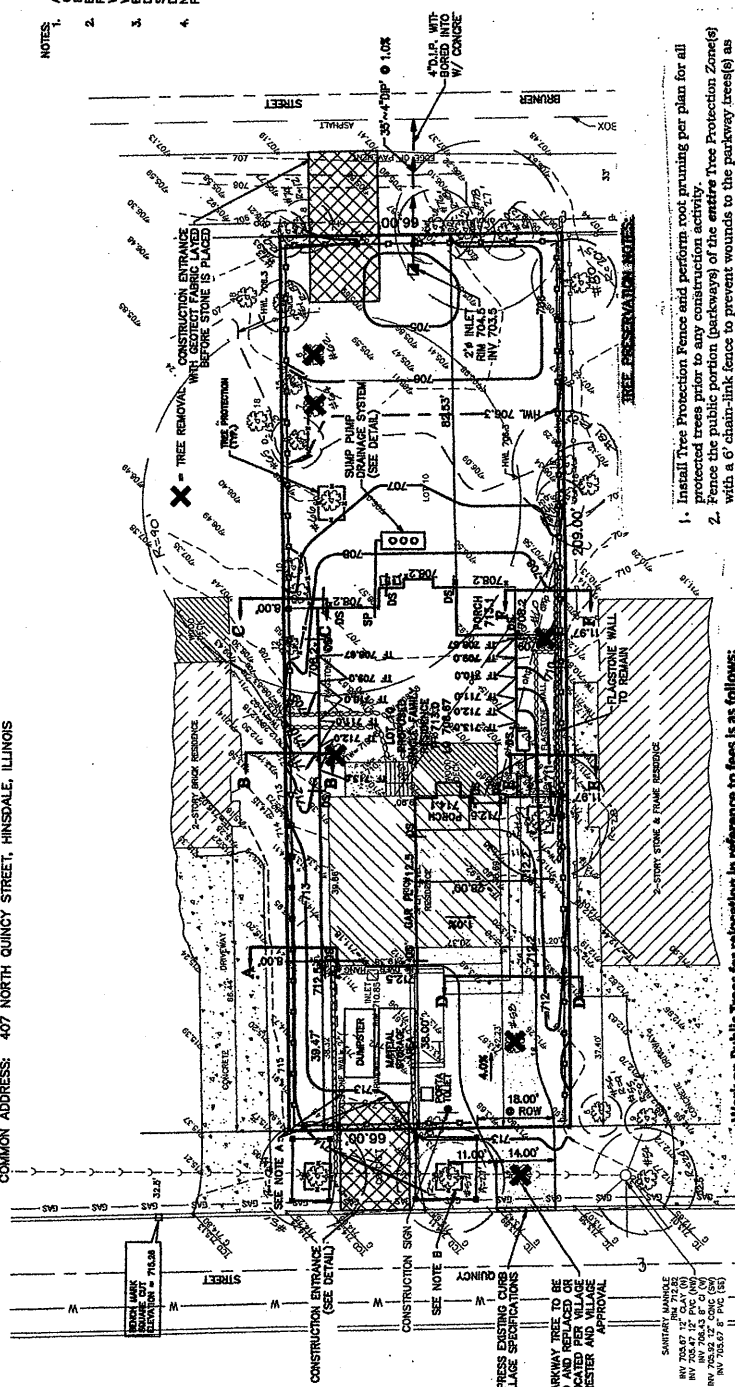
Talking with few tree experts, they say you are risking the life of both trees. Better to eliminate one to save the other one. The tree is half dead. We will replace the spruce with a village-approved tree if required.

Thank You,

Ted Bart

LOT 10 IN BLOCK 4 IN STOUGH'S RESUBDIVISION OF BLOCKS 3 TO 6, 11 TO 14, 19 AND 20, IN ESTABROOK'S ADDITION TO HINSDALE IN SECTION 2, TOWNSHIP 38 NORTH,  
EAST OF THE THIRD PRINCIPAL MERIDIAN, ACCORDING TO THE PLAT THEREOF RECORDED APRIL 2, 1874 AS DOCUMENT 17786, IN DU PAGE COUNTY, ILLINOIS.,  
COMMON ADDRESS: 407 NORTH QUINCY STREET, HINSDALE, ILLINOIS.

1. ALL TREES TO BE PROTECTED DURING CONSTRUCTION, UNLESS NOTED FOR REMOVAL BY OWNER OR SHOWN ON GRADING PLAN.
2. TREES TO BE REMOVED TO BE REIMPOSED TO THE PUBLIC WATERMAIN (PREFER TO VILLAGE PUBLIC WORKS DEPT. FOR LOCATION).
3. EXISTING SANITARY SERVICE LINE IS TO BE DISCONNECTED AT THE PUBLIC SEWER AND SEALED AND CAPPED (SEE PUBLIC WORKS DEPT. FOR LOCATION).
4. NO PLANTING OR CONSTRUCTION OF STREET FROM SITE DEVELOPMENT.



Work on Public Trees for relocation in reference to fees is as follows:

Any fee hereunder shall apply for a permit issued to move a tree on any public street or parkway to another location on a public street or parkway (said location to be determined by the director of public services or the village forester). If provided, however, that any permit to move such a tree shall provide that it, within a time frame specified by the director of public services nor the village forester (not to exceed 36 months) from the date of the issuance of the permit, the tree shall then a five thousand dollar (\$5,000.00) fee designated and paid to the village.

MUNICIPAL CODE OF NORTH STREET

1. Install Tree Protection Fence and perform root pruning per plan for all protected trees prior to any construction activity.
2. Fence the main portion (pathways) of the **entire** Tree Protection Zone(s) with a chain-link fence to prevent wounds to the parkway tree(s) as well as soil compaction. Post the fence with a sign stating "Tree Protection Zone - Keep Out".
3. No trenching should be done within the Tree Protection Zones for any construction activity unless pre-approved by Building Department staff. Parkway trees should be done within the Tree Protection Zones of all grade changes for any construction activity.
4. Locate the proposed water and sewer lines outside of the Tree Protection Zone or install the utilities using trench-less methods. . If at any time twenty-five percent (25%) of the area within the TPZ is being separated from the tree base trench, then the line shall be either relocated or installed using trench-less methods. **Anger through the entire Tree Protection Zone.**
5. **Should it be necessary to excavate within the TPZ for disconnection or capping of existing utilities, all trenches shall be hand dug. No roots larger than two inches (2") shall be cut unless no other alternative is feasible. All smaller roots that require cutting shall be cut with pruning saws. Cuts shall be made flush with the tree side of the excavation.**
6. **Removal of any handspike within the Tree Protection Zones will be done by hand. No roots larger than two inches (2") shall be cut unless there is no alternative is feasible. Cuts will be made with a sharp pruning saw to avoid tearing and will be flush with the tree side of the trench.**
7. **At no time shall any equipment, materials, supplies or fill soil be allowed in the Tree Protection Zone(s). Do not store excavated soil, building materials or the dumper within the drip-line (TPZ) of the parkway tree(s).**
8. **The Tree Protection Zone may be mulched to improve the growing conditions for tree roots, and minimize the maintenance of the parkway**

Tree Protection Zone (TPZ) is the designated area that encompasses an entire tree canopy. However, for practical purposes the Village of Himsdale requires that the public portion be delineated with chain link fencing.

**PLOT PLAN**  
**407 N. QUINCY ROAD**

UNIT	DATE	TIME	LOCATION	TYPE	REMARKS
1	10/10/1964	10:00	1000	1000	1000
2	10/10/1964	10:00	1000	1000	1000
3	10/10/1964	10:00	1000	1000	1000
4	10/10/1964	10:00	1000	1000	1000
5	10/10/1964	10:00	1000	1000	1000
6	10/10/1964	10:00	1000	1000	1000
7	10/10/1964	10:00	1000	1000	1000
8	10/10/1964	10:00	1000	1000	1000
9	10/10/1964	10:00	1000	1000	1000
10	10/10/1964	10:00	1000	1000	1000
11	10/10/1964	10:00	1000	1000	1000
12	10/10/1964	10:00	1000	1000	1000
13	10/10/1964	10:00	1000	1000	1000
14	10/10/1964	10:00	1000	1000	1000
15	10/10/1964	10:00	1000	1000	1000
16	10/10/1964	10:00	1000	1000	1000
17	10/10/1964	10:00	1000	1000	1000
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19	10/10/1964	10:00	1000	1000	1000
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21	10/10/1964	10:00	1000	1000	1000
22	10/10/1964	10:00	1000	1000	1000
23	10/10/1964	10:00	1000	1000	1000
24	10/10/1964	10:00	1000	1000	1000
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31	10/10/1964	10:00	1000	1000	1000
32	10/10/1964	10:00	1000	1000	1000
33	10/10/1964	10:00	1000	1000	1000
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35	10/10/1964	10:00	1000	1000	1000
36	10/10/1964	10:00	1000	1000	1000
37	10/10/1964	10:00	1000	1000	1000
38	10/10/1964	10:00	1000	1000	1000
39	10/10/1964	10:00	1000	1000	1000
40	10/10/1964	10:00	1000	1000	1000
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45	10/10/1964	10:00	1000	1000	1000
46	10/10/1964	10:00	1000	1000	1000
47	10/10/1964	10:00	1000	1000	1000
48	10/10/1964	10:00	1000	1000	1000
49	10/10/1964	10:00	1000	1000	1000
50	10/10/1964	10:00	1000	1000	1000
51	10/10/1964	10:00	1000	1000	1000
52	10/10/1964	10:00	1000	1000	1000
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**Ted Bantano**  
Executive VP

407 N. Quincy St., Haverdale

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Amount		
Unit		

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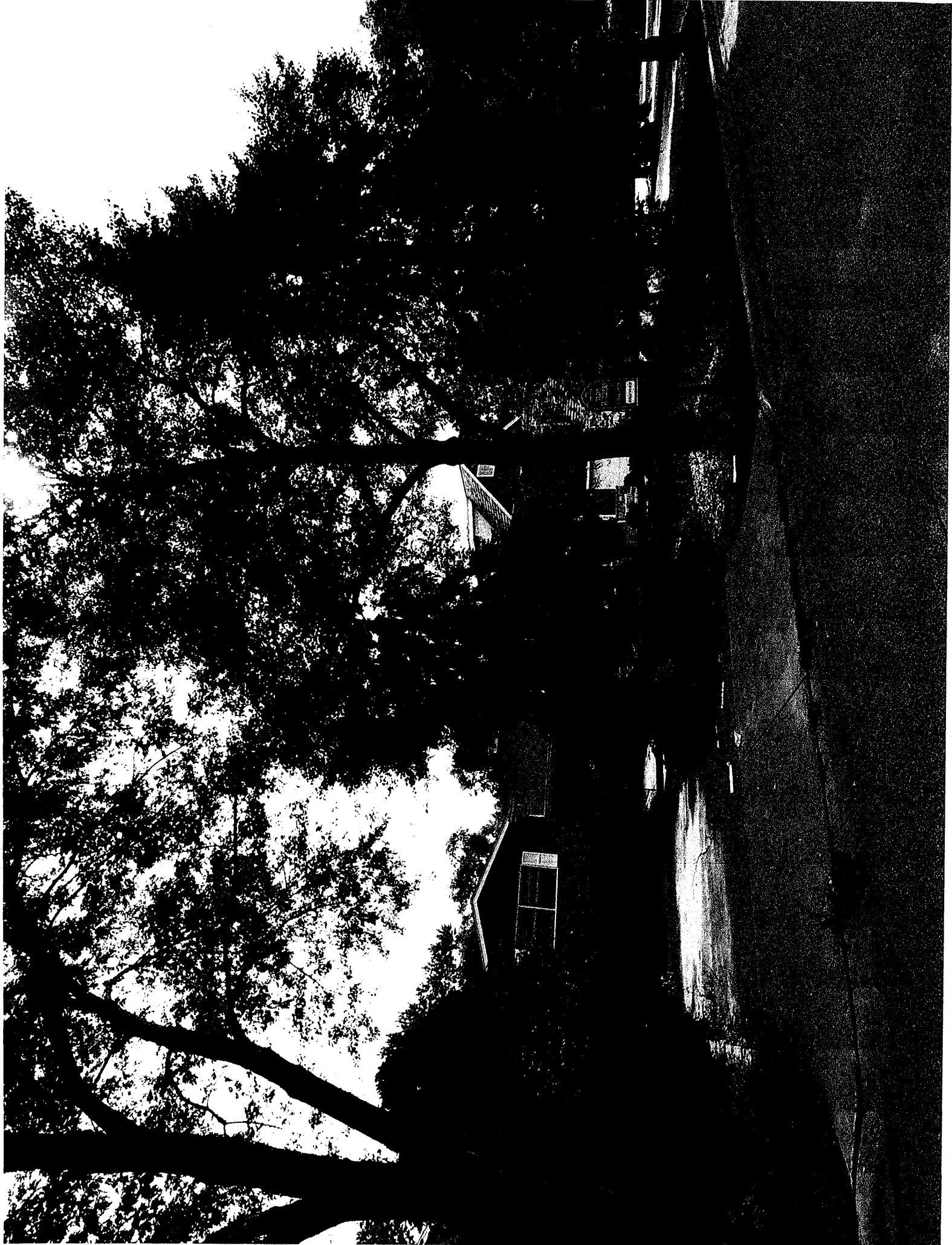
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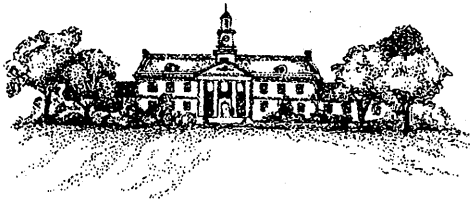
**Abstract**











2 ii

## Village of Hinsdale

## Memorandum

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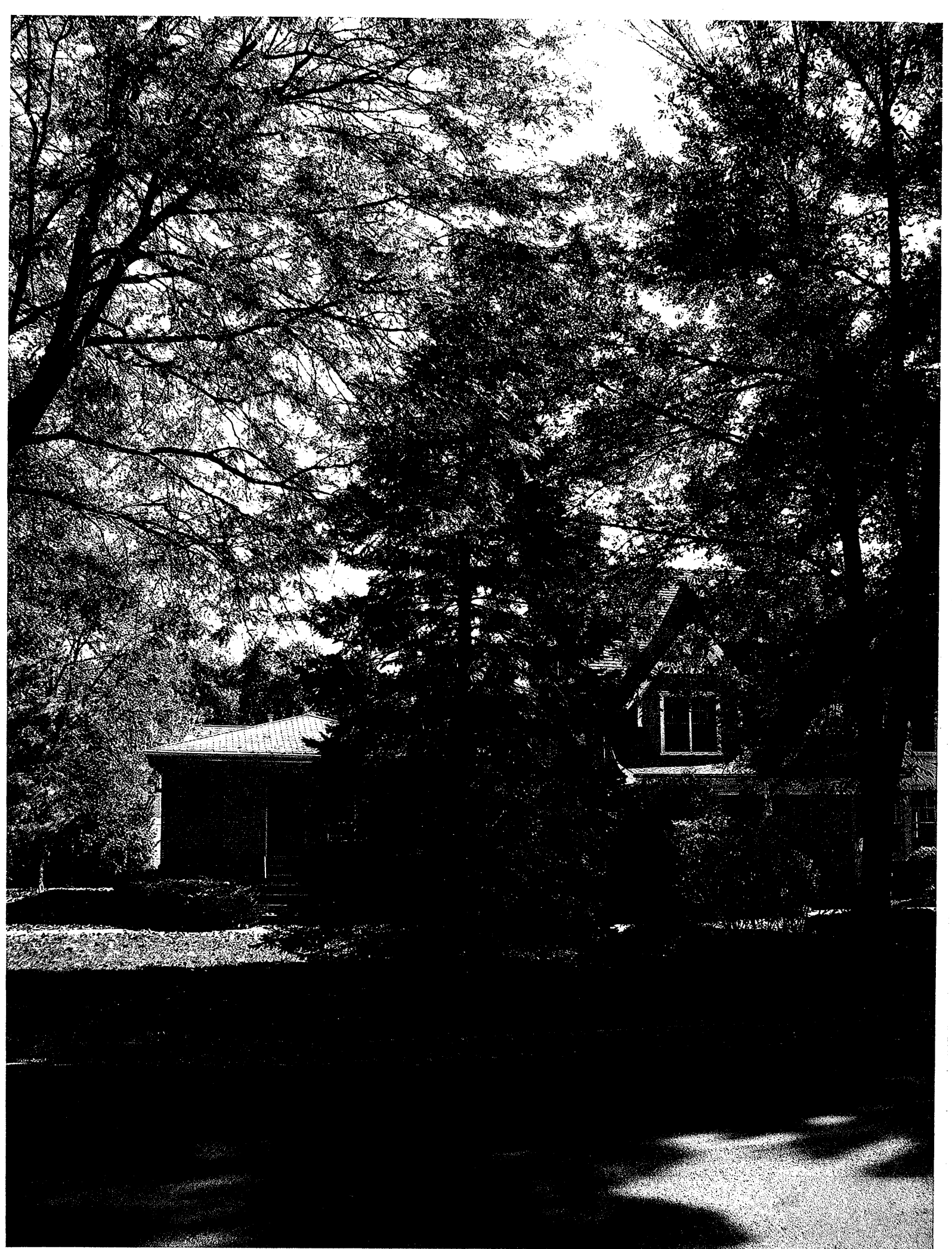
**To:** Chairman LaPlaca and the EPS Committee  
**From:** George Franco, Director of Public Services  
**Date:** October 1, 2014  
**Subject:** Proposed Parkway Tree Removal at 521 N. County Line Road

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Matt and Jessica Sorem are planning a new home at 521 N. County Line Road. They have requested permission to remove one tree located in the parkway.

The tree is a Colorado blue spruce tree that has a 10.0" diameter at 4.5' above grade. The estimated height of the tree is 30' and the estimated canopy width is 20'. The tree's condition is good, and the shoot growth in the canopy is average. There are no significant visible structural defects in the trunk or scaffold branches. The tree canopy is not balanced due to poor spacing with a parkway honeylocust and an ash tree located east of the spruce. The tight spacing of the three trees limited the amount of sunlight and air circulation to the east portion of the spruce, creating an area of thin and weak growth and dead branches.

Staff has determined that the tree does not meet the forestry program's requirements for tree removal and has not permitted the removal of the spruce tree as requested. The Sorems are appealing that decision to the EPS Committee per their function as the Village's "Tree Board". Due to limitations of the tree as described above, as well as the limited impact the tree has on the streetscape, Staff recommends the Committee consider allowing the removal of the tree per Village Code 7-2-2 b (1). Staff is requesting direction from the Committee in responding to this request.



## George Franco

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**From:** Matthew Sorem <mattsorem@gmail.com>  
**Sent:** Wednesday, September 10, 2014 9:09 AM  
**To:** George Franco  
**Cc:** Jessica Sorem  
**Subject:** Tree Board Request  
**Attachments:** 521 N. County Line.pdf

Mr. Franco,

We are writing to request the tree board's permission to remove a spruce tree from the parkway at 521 N. County Line Road. My wife and I just purchased the property and plan to build a home. The tree we would like to remove is on the western part of the property, approximately 30 feet from County Line Road. I've attached a diagram of the property for reference.

My wife and I spoke to John Finnell, who examined the tree last week and determined that it is healthy, but suffering from a lack of sunlight due to shade from the larger trees closer to the street. Mr. Finnell believes that if the trees at the street are pruned, the spruce will receive more sunlight and should recover.

We would like to remove the tree for several reasons:

- First, the tree is unsightly. On the lower half of the side facing the street, it is patchy and bare.
- Second, as you can see from the diagram, there are mature trees in the parkway lining the County Line and Mineola sides of the lot. The spruce is set back so far it is almost off of the parkway. It is not part of the canopy along the street. Removing it would have no impact on the street's tree-lined appearance.
- Third, the tree limits the positive impact of our new home on the appearance of the block. The exterior of the ranch home currently on the property is not in good repair, and we expect our new neighbors will be happy to see it go. In its place, we are building a tasteful coastal-craftsman-style home. However, from County Line Drive, the spruce tree sits directly in front of the home and will obstruct the view of the house from the street. If we remove the tree, it will open up the front of the house to the street.
- Fourth, the tree's placement makes it impossible to build a walkway from the front door of the house straight out to the street.
- Fifth, we would like to plant a flowering tree, likely on the northwest portion of the property, but the spruce limits the area available to do this.

We understand that there are potentially significant fees associated with removing a parkway tree. Before imposing a fee, we ask the board to consider the positive impact the spruce tree's removal would have on the appearance of the block, our interest in planting a different tree in a more appropriate location on the property, and the considerable cost we would already be incurring to do this work.

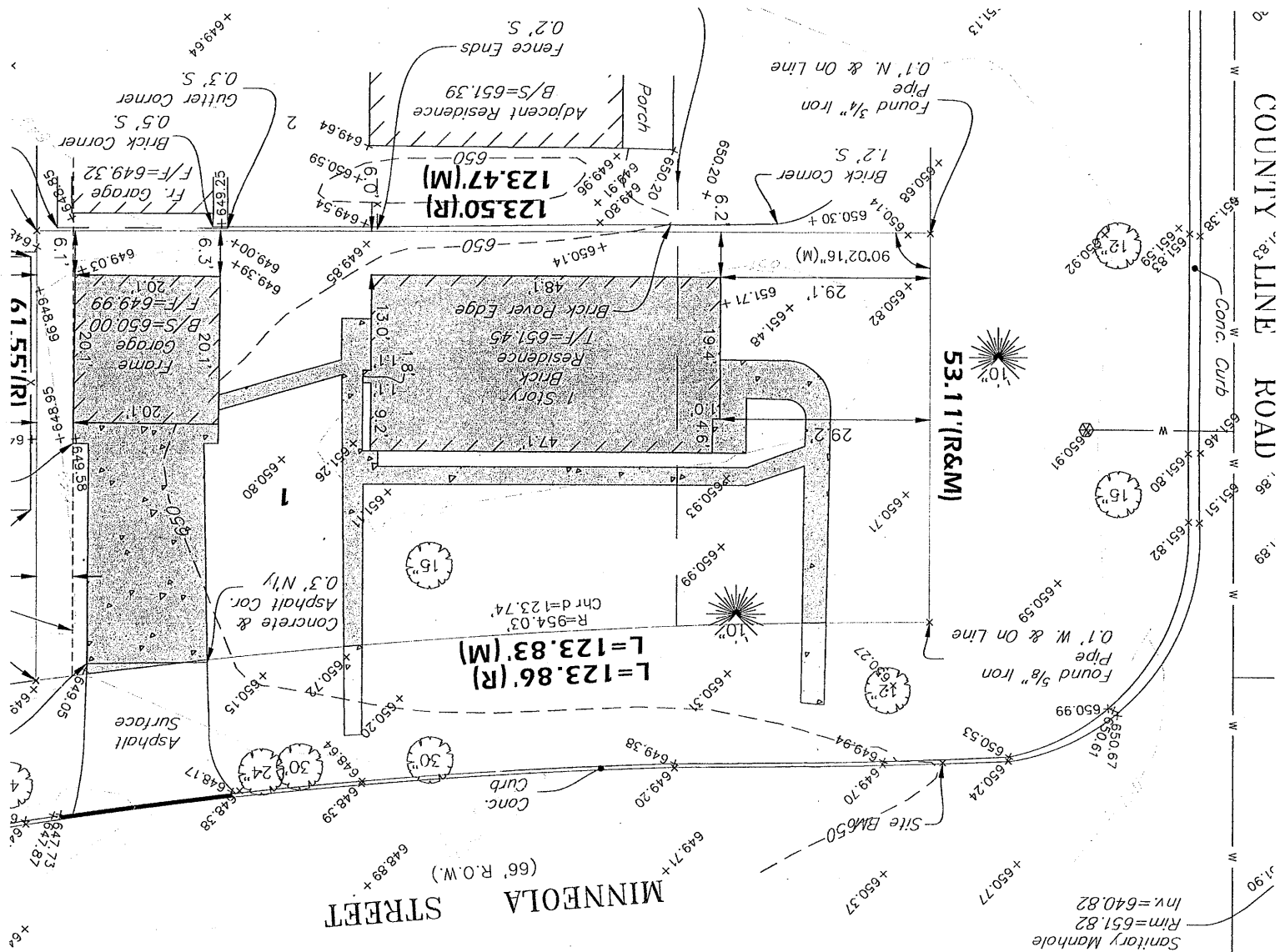
Thank you for considering our request. Feel free to e-mail or call, and please let us know if there is any other information we can provide. We look forward to hearing from you.

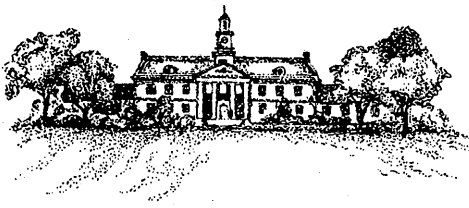
Matt and Jessica Sorem  
(312) 952-0234

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— Conc. Curb —————





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## Village of Hinsdale

## Memorandum

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**To:** Chairman LaPlaca and the EPS Committee  
**From:** George Franco, Director of Public Services  
**Date:** October 1, 2014  
**Subject:** Proposed Parkway Tree Removal at 536 North Vine Street

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Satish Vayuvegulaare and Cindy Brooks are in the process of building a new home at 536 N. Vine St. They have requested permission to remove one tree located in the parkway.

The tree is a Catalpa that has a 36.0" diameter at 4.5' above grade. The estimated height of the tree is 65' and the estimated canopy width is 35'. The tree's condition is good, and the shoot growth in the canopy is average. There are no significant visible structural defects in the trunk or scaffold branches. The tree canopy is balanced. The tree was last pruned in 2011 following the significant wind storms in June and July. There is root loss due to excavation for the new drive located south of the tree and soil compaction due to construction activity west of the tree.

Staff has determined that the tree does not meet the forestry program's requirements for tree removal and has not permitted the removal of the Catalpa tree as requested. The homeowners are appealing that decision to the EPS Committee per their function as the Village's "Tree Board". Staff agrees with Satish that there is a possibility of decline in the tree in the future where removal may need to be considered. However, at this time, Staff does not believe that this possibility warrants the removal of this tree. Staff recommends the Committee deny the removal of the tree per Village Code 7-2-2 b (1). Staff is requesting direction from the Committee in responding to this request.







Drop Zone

PORTAGE SERVICE INC.  
(877) 984-7663

**John Finnell**

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**From:** Satish Vayuvegula [teeshv@live.com]  
**Sent:** Thursday, September 04, 2014 11:59 AM  
**To:** George Franco; John Finnell  
**Cc:** Cindy Brooks  
**Subject:** Request for addition to the agenda for the September 8th Meeting  
**Follow Up Flag:** Follow up  
**Flag Status:** Completed  
**Attachments:** 536 N Vine - Parkway Catalpa Tree Assessment 2014.08.04.pdf

Hi George-

My name is Satish Vayuvegula, my wife Cindy Brooks and I are building a house at 536 N. Vine St. Your name was given to us through our landscaper and John Finnell as the person to request inclusion on the schedule for the September 8th meeting of the Environment and Public Services Committee regarding a tree we would like to remove on our property.

There is a Catalpa Tree on the northwest corner of the parkway on our property that our Arborist feels is dying and has recommended removal. His assessment is attached. Although it looks alright to the layperson, it does not seem viable for the long term. Given that it appears that we would need to remove this tree at a later date, we are requesting consideration for its removal now. Removal of this tree would change the design of our landscaping which we want to make sure provides the best appearance for our home and the Village.

Please let me know if there is any thing else we need to do prior to the meeting. We truly appreciate your time.

Sincerely,

Satish Vayuvegula and Cindy Brooks  
Future residents of 536 N. Vine St.

10/1/2014



## PREMIER

*August 4, 2014*

Satish Vayuvegula  
700 Megan Ct  
Westmont, IL 60559

RE: 536 N. Vine St., Hinsdale – Parkway Catalpa Tree Assessment

Mr. Satish Vayuvegula:

Per your request, I have assessed the condition of the Catalpa Tree located in the northeast corner of the parkway at the subject address listed above. Below is a summary of my assessment.

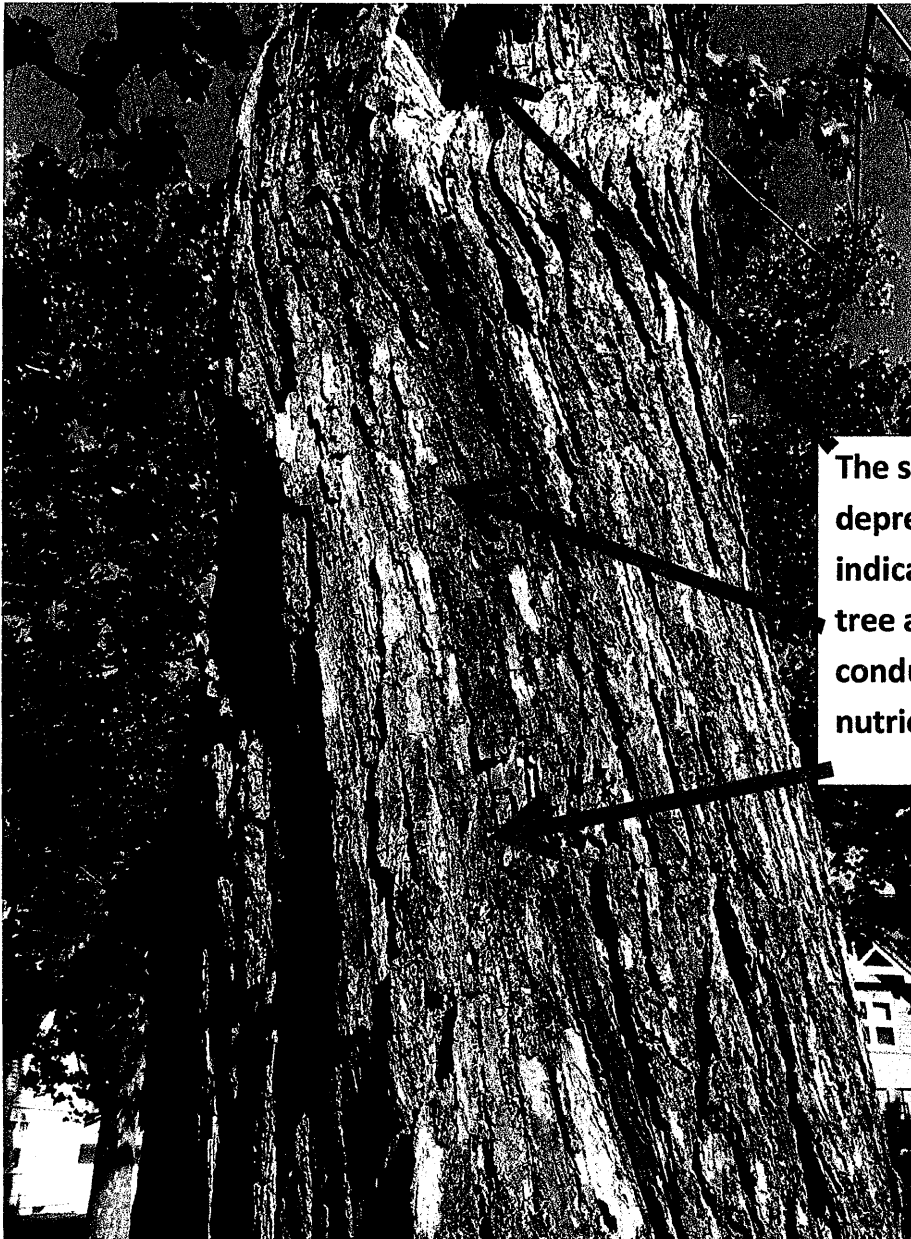
- The west side of the trunk of the tree is mostly dead and will not conduct water and nutrients for the tree.
- There are multiple old lightning strike damaged areas on the trunk.
- The canopy of the tree has many branches that have been cut back either from dieback or storm damage

Respectfully,

John Beckett  
Turf and Plant Health Care Manager  
Certified Arborist - #IL - 4849

## **Parkway Tree Assessment Photos**

**536 N. Vine St.  
Hinsdale, IL**



The sunken strip and depressed area of the tree indicate that this part of the tree are dead and will not conduct water and necessary nutrients for the tree.



► **Branches of the tree have been cut back severely, most likely to storm damage**



**Branches of the tree have  
been cut back severely, most  
likely to storm damage**





**Branches of the tree have  
been cut back severely, most  
likely to storm damage**



**Branches of the tree have  
been cut back severely, most  
likely to storm damage**

## MEMORANDUM

**TO:** Chairman LaPlaca and EPS Committee  
**FROM:** Dan Deeter  
**DATE:** October 13, 2014  
**RE:** Engineering Monthly Report

The Engineering Division has continued to work with the Building Division in order to complete site inspections, as well as responding to drainage complaints. In total, three Engineering employees performed 154 site inspections for the month of September. The Engineering staff submitted four on-time environmental reports in August, which were Discharge Monitoring Reports (DMRs) to the Illinois EPA - one for each of the Village's four Combined Sewer Overflow (CSO) locations. The following capital improvement projects and engineering studies are underway:

**Oak Street Bridge Replacement Engineering Phase II/Design Engineering** (See attached memo.)

**Woodlands Green Infrastructure Improvements, Phase 1**

- ✓ Final Completion (plantings, surface course) June 2013
- The contractor will provide two years of rain garden maintenance to establish native plantings through spring 2015.

**2013 Reconstruction (W. Fourth Street)**

- ✓ Construction May – Nov. 2013
- 2013 Reconstruction (W. Fourth and other streets)
  - Village attorneys have been working to get the Village dropped from the current law suit involving payments between Chicagoland Paving and their trucking sub-contractors. To do this, the Village attorneys recommend depositing the amount of the lien (which the Village has withheld from Chicagoland payments) with the Clerk of the Circuit Court. Currently, the Circuit Court judge is considering this proposal.

**2014 Reconstruction (Walnut St.) & Woodlands Phase 2**

- 2014 Reconstruction Streets
 

○ W. Walnut	Madison to Washington	developing punch list
○ E. Walnut	Garfield to Oak	binder pavement 10/8-9/14
○ N. Clay	Walnut to Maple	developing punch list
○ N. Garfield	Vicinity of Walnut St.	developing punch list
○ N. Madison	Walnut to Hickory	developing punch list
○ Walker	York to The Lane	developing punch list
○ Maple	Lincoln to Washington	developing punch list

- Woodlands Phase 2 streets
  - Woodland Avenue County Line to Taft awaiting surface pavement & sod
  - Cleveland Woodland to south end installing rain gardens & sod
  - Taft Woodland to 55<sup>th</sup> restoring driveways, rain gardens
  - Harding Woodland to Taft awaiting surface asphalt & seed

**2014 Infrastructure Improvements (consolidation of Resurfacing, Water Main, Maintenance & Parking Lot Resurfacing Projects)**

- Municipal Partnering Initiative Project includes resurfacing streets
  - N. Madison Street Bonnie Brae to Warren Terrace resurfaced
  - S. Monroe Street Seventh to Eighth resurfaced
  - S. Adams Street Hinsdale to Fourth resurfaced
  - S. Stough Street Chicago to Railroad resurfaced
  - Chicago Street Rte 83 to Stough resurfaced
  - York Road Ogden to The Lane resurfaced
  - E. Fifth Street Park to Fourth resurfaced
  - E. Fourth Street Garfield to Elm resurfaced
  - E. Third Street Park to Elm resurfaced
  - N. Bruner Street North end to North Street resurfaced
  - W. Hickory Street Adams to Madison resurfaced
  - N. Grant Street Ogden to Center resurfaced
  - N. Lincoln Street Pavement change to Ayres resurfaced
  - Burlington Parking Lot paving after lights installed
  - Village Parking Lot btwn Washington & Lincoln paving after lights installed
  - Brook Park Parking Lot resurfaced
- 2014 Roadway & Utilities Improvements
  - S. Adams Street Fourth to Eighth Storm sewer began
  - W. Sixth Street Bodin to Monroe Storm sewer 10/9-14/14
  - W. Seventh Street Monroe to Madison WM constructed
  - S. Bodin Street Ninth to south end WM constructed
  - S. Monroe Street Ninth to south end WM constructed
  - S. Garfield Street 55<sup>th</sup> to 57<sup>th</sup> WM construction began
  - Maple Street Garfield to Park
  - Fuller Road Justina to Mills
  - Clay Street Fourth to Sixth Concrete patching 10/16-18
  - Robbins Park Clay to Grant
- 2014 Water Main Improvements
  - Elm Street 55<sup>th</sup> to 57<sup>th</sup> BOT approval 10/07/14
  - Third Street Grant to Lincoln BOT approval 10/07/14
- 50/50 Sidewalk Program D'Land Construction Beginning Early October
- 2014 Crack Sealing – Patriot Paving Contracts signed September

## **2015 Reconstruction & Resurfacing Design**

The Village approved Bowman Consultants and Christopher B. Burke Engineering Ltd. (CBBEL) for the 2015 Resurfacing and Reconstruction Projects' design (respectively) at the 05/20/14 meeting of the Board of Trustees. Design, permitting, and construction document development will be conducted from May 2014 to January 2015. Staff intends to bid the project in February 2015, have the contract approved in March 2015, and construction start in April 2015.

### **2015 Reconstruction Project**

- Objectives
  - Separate +/-2,500 feet of combined sewer on Ravine Road to eliminate sanitary sewer overflows in homes & on streets.
  - Improve stormwater management in identified localized flooding areas at the intersection of Forest/Ravine and on Ravine from Elm to Oak.
  - Reconstruct +/-5,600 feet of roads in fair - poor condition.
  - Replace +/-2,250 feet of water main pipe in poor condition.
  - Line or replace +/-1,600 feet of sanitary sewer pipe.
- Areas Improved
  - Ravine Road                      Garfield to County Line Road
  - Radcliff Way                      Ravine to Hickory
  - Forest Road                      The Lane to Hickory
  - Elm Street                      Ravine to Hickory
  - Mills Street                      North End to The Lane
  - Oak Street                      The Lane to Ravine

### **2015 Resurfacing Project**

- Objectives
  - Resurface +/-6,000 feet of roads in fair – poor condition.
  - Replace +/-2,200 feet of water main pipe in poor condition.
  - Line or replace +/-1,900 feet of sanitary sewer pipe.
- Areas Improved
  - Lincoln Street                      North to Hickory
  - N. Stough Street                      Quincy to South End
  - S. Stough Street                      Chicago to Chestnut
  - Second Street                      Monroe to Vine

## **State and Federal Funding Opportunities**

A summary of the Grant Funds awarded or applied for by the Village of Hinsdale is attached.

## **Other Engineering Activities in the Area**

Alley Paving. Staff has been working with residents who wish to pave the following alleys. The residents are asking for committee approval to proceed with the paving.

- Partial paving of the north – south alley between N. Lincoln & Grant (100-block).

- Full paving of the north – south alley between Bodin & Monroe north of Eighth. For adequate drainage, this alley will require several inlets to connect to an existing storm sewer. Staff estimates this contribution by the Village for stormwater improvements will be approximately \$5,000.

Flagg Creek Water Reclamation District (FCWRD) will be conducting a sewer maintenance project in the southern parkway of 55<sup>th</sup> Street between Quincy and Monroe during the 2014 construction season. FCWRD anticipates that there will be daily temporary closures of the right-hand eastbound lane. Since these closures will delay eastbound traffic on 55<sup>th</sup> Street, residents are advised to avoid this area if possible. FCWRD is waiting on a permit from DuPage Division of Transportation (DOT) before starting the project. The construction will be scheduled after the DuPage DOT permit is received.

Cc: President and Board of Trustees  
Village Manager

## Change Order Field Record

Change Request No.	Date	Pay Item	Description and Reason for Change	Status	Estimated Cost		Submitted Cost		Change Order No.	Board Approval Date
					Addition	Deduction	Addition	Deduction		
1	03/28/14	TREE PROTECTION	Change from trunk protection to tree protection fencing.	Completed			\$ 6,319.90	\$ 10,965.00		
2	03/28/14	DIRECTIONAL BORING - 18" DIA. SS-CL B2 (DUCTILE IRON)	Change to pipe material from Ductile Iron to PVC	Completed		\$ 6,030.00				
3	04/16/14	TIME & MATERIALS	Investigation of field conditions on Harding Road concerning water main connection to the Hinsdale Oasis.	Completed	\$ 2,000.00					
4	05/02/14	STORM SEWER, CL B, TYPE 1, 18-INCH	The quantity of special material encountered on Harding Road exceeded the quantity estimated during design. To avoid a \$100,000 increase in special waste disposal costs, the design was modified to include landscaping berms in area between Harding & 55th Street and raising the Harding finished pavement elevation. The landscaping berm will improve the planned noise/visual barrier for residents.	Completed						
		STORM SEWER, CL B, TYPE 1, 18-INCH								
		SPECIAL WASTE			\$ 94,551.96		\$ 4,058.40			
		EARTH EXCAVATION				\$ 57,456.00				
		GCDD/LUST MATERIALS ANALYSIS, MGMT. & COMPLIANCE				\$ 35,000.00				
		REMOVAL AND DISPOSAL OF UNSUITABLE SOILS				\$ 15,434.67				
		12" CORRUGATED METAL PIPE WITH SLOTTED OPENINGS			\$ 2,700.00					
5	06/03/14	PIPE UNDERDRAIN, 4"	Resident at 936 Taft is constructing underdrain pipe from their back yard and side yard to the Taft Road ROW to address drainage issues. Village will provide underdrain on public property to connect private underdrain to the nearest rain garden.	Completed	\$ 1,536.00					
6	07/09/14	TIME & MATERIALS	Resident at 855 Cleveland is adding horseshoe driveway after plans were completed. Two Ash trees have been removed in front of the property due to EAB damage. Resident is requesting the Village reduce the size of the rain garden to allow for driveway and one replacement parkway tree. HR Green T&M for re-calculating the hydrologic model.	Completed	\$ 750.00					
7	07/10/14	WATER MAIN, 8"	Water main needed to be relocated away from a rain garden to provide sufficient cover for freeze protection.	Completed	\$ 3,300.00					
8	08/20/14	SANITARY SEWER, 12"	Sewer cleaning & televising prior to sewer lining identified an area of sanitary sewer on Harding Street that has deteriorated to the extent that it cannot be lined. This section must be replaced.	Planned						
		SEWER, CLASS B, TYPE 1 12"			\$ 12,180.00					
		TRENCH BACKFILL			\$ 600.00					
		MANHOLE, TYPE A, 4'-DIAMETER, TYPE 1 FRAME & GRATE			\$ 4,700.00					
		CURE-IN-PLACE PIPE (CIPP), 12"				\$ 11,600.00				
9	09/03/14	LANDSCAPING	Restoration of the landscaping screening at the south end of Cleveland had to be changed due to the location of underground utilities. Staff and the contractor are getting bids for an arborvitae screening.	In-progress	\$ 2,000.00					

## Change Order Field Record

Change Request No.	Date	Pay Item	Description and Reason for Change	Status	Estimated Cost		Submitted Cost		Change Order No.	Board Approval Date
					Addition	Deduction	Addition	Deduction		
10	09/15/14	Miscellaneous Storm Sewer Work	Revise driveway curb & gutter on Taft Road including the addition of slotted drain tile across driveways at 955, 967, and 975 Taft in response to resident comments.	Planned	\$ 19,000.00					
Subtotal					\$ 143,317.96	\$ 125,520.67	\$ 10,378.30	\$ 10,965.00		
Total					\$	\$ 17,210.59	Addition			

Construction Observation		Construction	
Budget: \$	340,451.00	Project Budget	
Bid: \$	179,360.00	John Neri Construction Bid	
Change Order		Construction Contingency	
Contingency: \$	161,091.00	Contingency balance Less Net Change Orders	

3,862,649.00
3,118,004.75
744,644.25
727,433.66

Total Project Contingency: \$ 888,524.66



## Change Order Field Record

[illegible]

Construction Observation		Construction
Budget: \$	322,935.00	Project Budget
Bid: \$	151,883.00	John Neri Construction Bid
Change Order		Construction Contingency
Contingency:	\$ 171,052.00	Contingency balance Less Net Change Orders

**Total Project Contingency: \$ 213,944.40**

Contingency balance Less Net Change Orders

**Total Project Contingency: \$ (3,671.00)**

## **MEMORANDUM**

**TO:** Chairman LaPlaca and the Environment & Public Services Committee  
**FROM:** Dan Deeter, PE Village Engineer  
**DATE:** October 13, 2014  
**RE:** Oak Street Bridge Lighting and Burial of Overhead Utility Lines

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### **Street Lamps**

Staff's recommendation for the Street lighting for the Oak Street Bridge Project is attached. Scott Creech (HR Green), Tim Scott and Dan Deeter reviewed a number of different pole and light configuration from a variety of vendors. This pole configuration from our current, low cost vendor, Valmont, was selected as best complementing the current street light design at the Highland Station and Central Business District.

Both lights are equipped with LEDs to improve energy efficiency and reduce light pollution outside of the ROW. These lights will replace the existing, ComEd street lights in the project area. There are:

- Three lights north of the bridge on Oak Street – one at Oak & Walnut, one at the mid-block cross walk, and one at Oak & Hill Grove
- One light south of the bridge on Oak Street at the south end of the bridge
- Three lights on Hill Grove across from the Highland Station

This light pole configuration has been shown to Jim Today, Adventist Hinsdale Hospital Administrative Director of Facilities, who had no objections.

Unless there are any objections from the Committee members, HR Green will include these lights in their next plan submittal to IDOT in mid-October.

### **Burial of Overhead Utility Lines**

Under the franchise agreements the Village has with the public utility companies, if the utility company infrastructure conflicts with a Village infrastructure improvement, the utility company will relocate their infrastructure at their expense. This relocation at utility expense will be in a like manner. That is, if the existing utility is overhead, the utility company will relocate their utility to a new overhead location. If the Village requests the utility to be buried (a more expensive alternative), the Village would be responsible for paying for the cost of burying the utility.

Attached is the current estimate of the cost to the Village to bury the overhead utility lines. As noted, the overall cost includes the cost to bury existing overhead ComEd

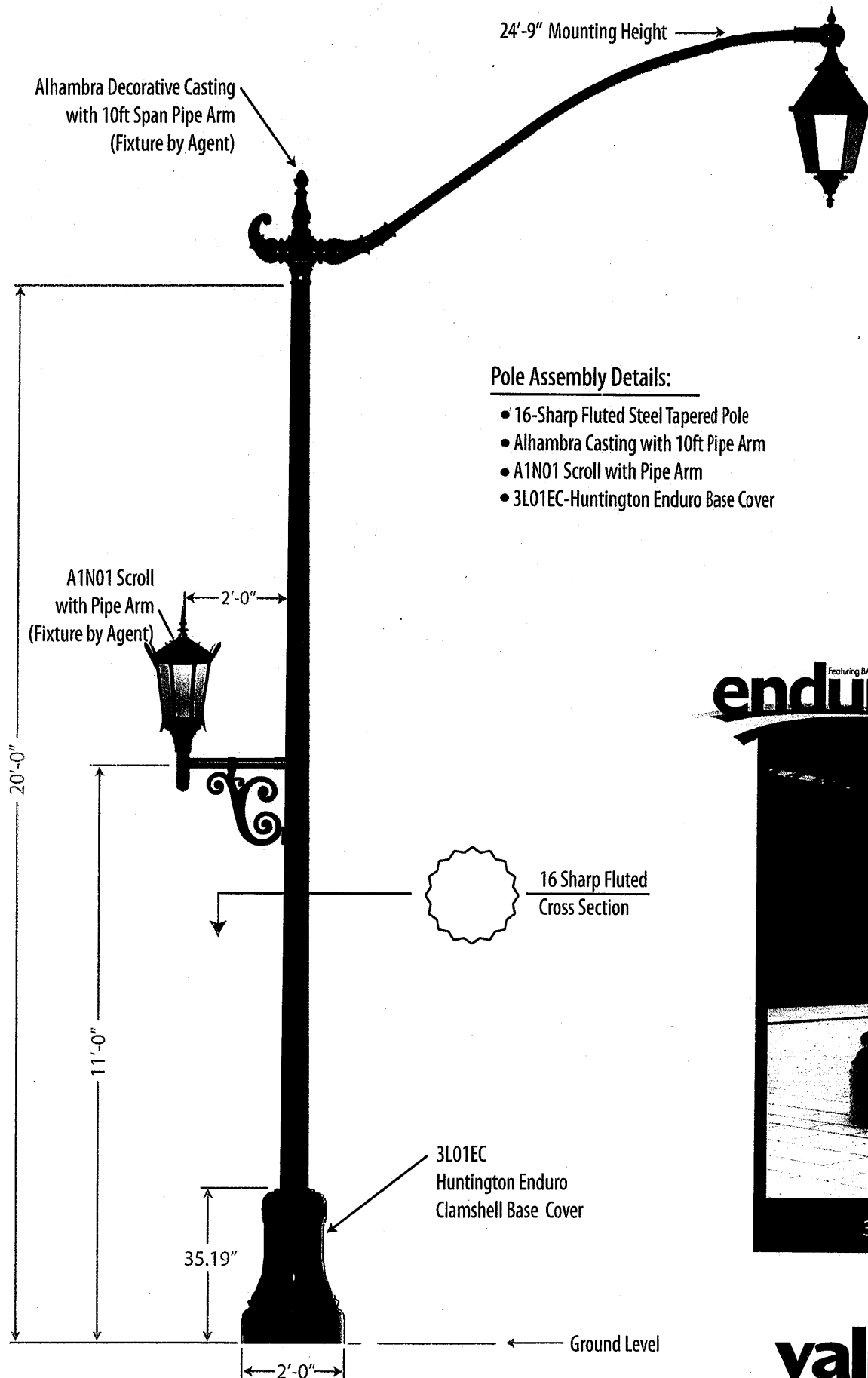
and Comcast primary and service lines. AT&T lines are already buried in the construction area. Per the franchise agreement, AT&T relocations (buried relocated to a new buried location) will be at AT&T's expense.

Staff is looking at an alternative that is less costly. However, it would eliminate the overhead lines south of the bridge only. Currently, the overhead lines south of the bridge serve the following location:

- |                                     |                    |
|-------------------------------------|--------------------|
| 1. Signal light controller          | (to be demolished) |
| 2. Street light south of the bridge | (to be replaced)   |
| 3. 14 N. Oak Street                 | (to be demolished) |
| 4. 4 N. Oak Street                  | (to remain)        |

Items 1, 2, & 3 above will be eliminated. Therefore, the associated overhead lines would be eliminated at the utilities' expense. The service to the proposed street light (replacement for item #2 above) will be underground as part of the project. The Village would only have to pay for burying the service lines to 4 N. Oak Street. The lines north of the bridge would be relocated overhead at the utilities' expense.

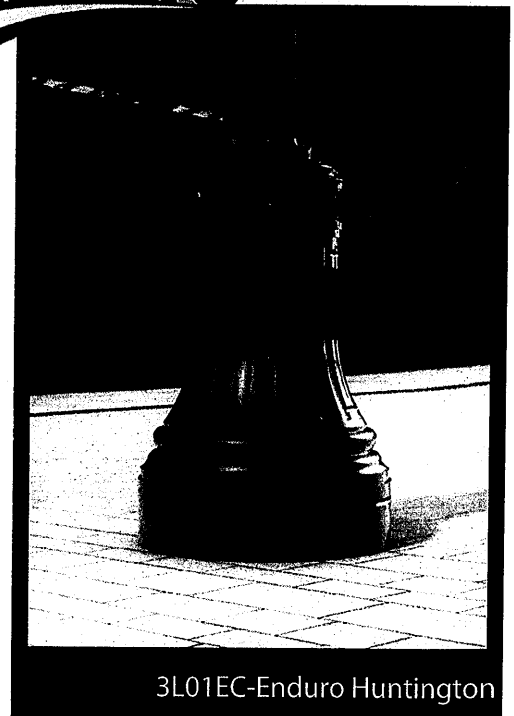
cc: Kathleen A. Gargano, Village Manager



**Pole Assembly Details:**

- 16-Sharp Fluted Steel Tapered Pole
- Alhambra Casting with 10ft Pipe Arm
- A1N01 Scroll with Pipe Arm
- 3L01EC-Huntington Enduro Base Cover

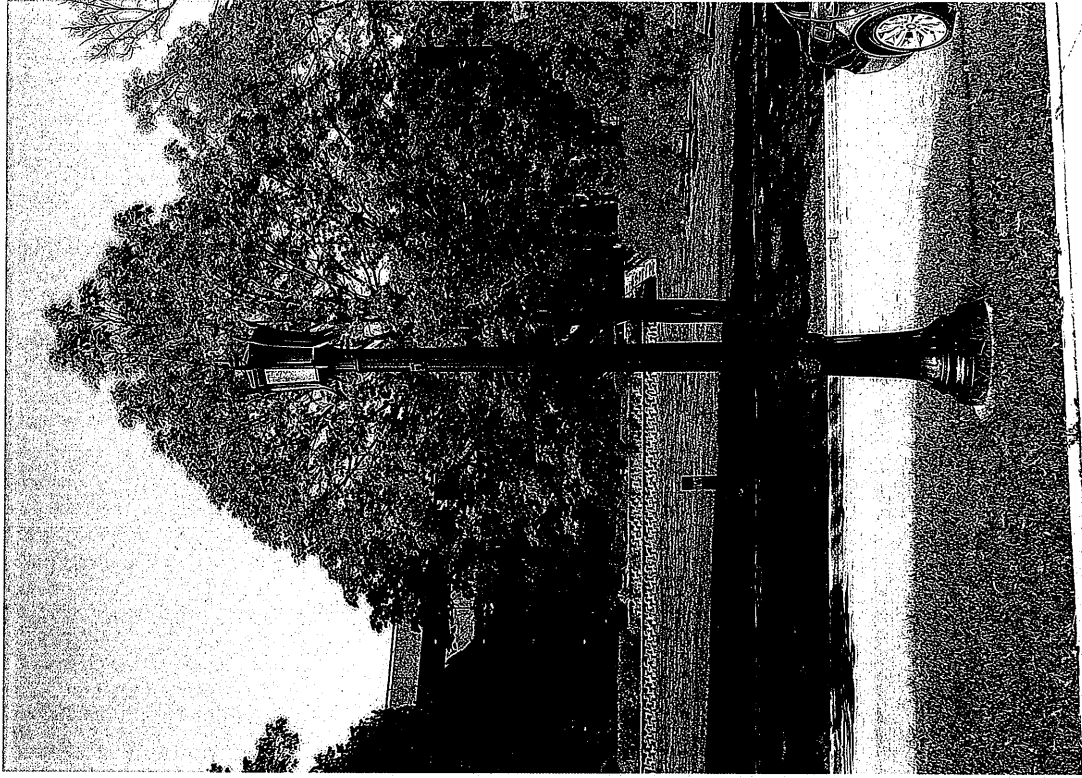
Featuring BASF Chemistry  
**enduro**



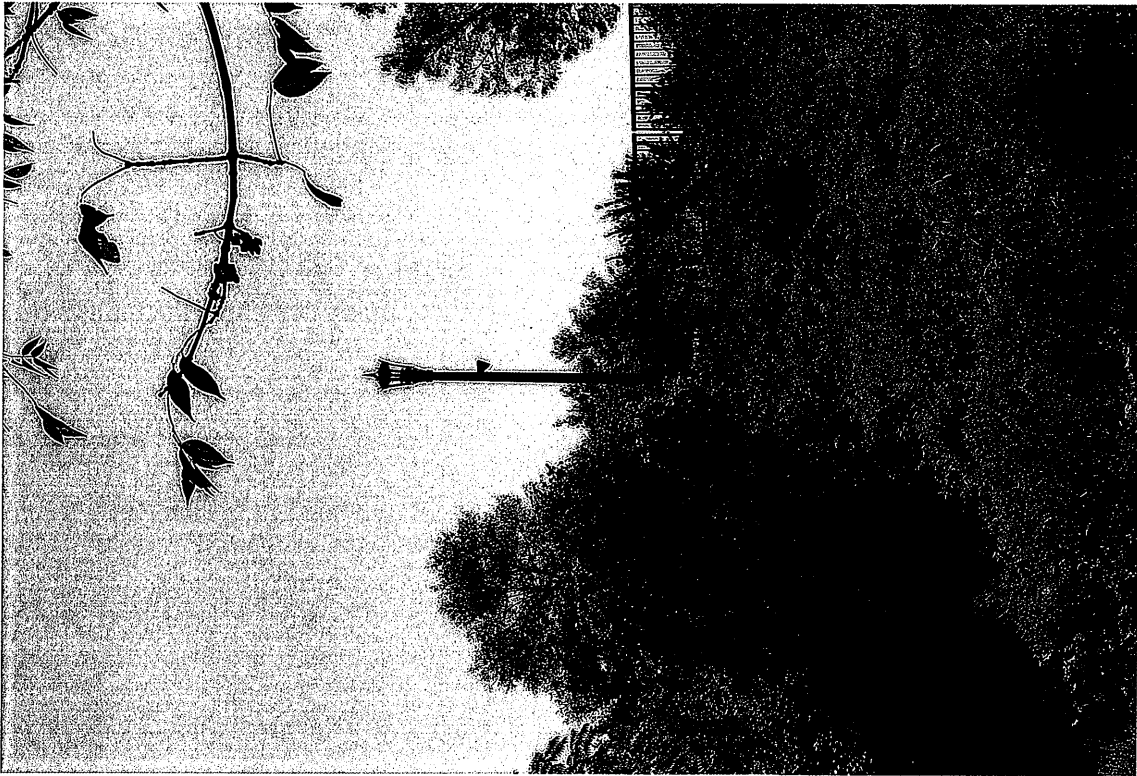
**valmont**

STRUCTURES





EXISTING N. COUNTY LINE ROAD LIGHT



EXISTING HIGHLAND STATION LIGHT

Burying Lines on Oak Street  
Oak Street Bridge Replacement Project  
Hinsdale, Illinois  
Date: 10/07/14

Utility Company	Construction Issues	Engineer's Estimate of Probable Village Cost	Notes
ComEd	Primary line burial	\$ 174,927	09/23/14 letter from ComEd
	Re-connect services	\$ 30,000	Estimated cost from 10/07/14 phone call w/ComEd project engineer for 4 N. Oak & RR shack.
AT&T	Primary line burial		All AT&T wires are currently buried. Relocation will be at AT&T's expense.
	Re-connect services		
Comcast	Primary line burial	\$ 38,473	09/30/14 letter from Comcast
	Re-connect services	\$ 30,000	Estimated cost from 10/07/14 phone call w/ComEd project engineer for 4 N. Oak. & 119 N. Oak.
Sub-total		\$ 273,400	
Contingency (10%)		\$ 27,340	
Total		<u>\$ 300,740</u>	

Notes:

1. Primary line burial costs include a credit for the cost to relocate the overhead lines.
2. The Village's franchise agreement requires relocation of utilities in a "like" manner.



IDOT Project Kickoff Meeting	HRG/Staff	10-15-2013 Completed
<i>This is an initial coordination meeting at IDOT District 1's Bureau of Local Roads which is required for any project receiving federal funds</i>		
Project Working meeting	HRG/Staff	11-22-2013 Completed
<i>Coordination meeting with Village staff to review transition issues from Phase 1 to Phase 2 and prepare for a meeting with Adventist Hinsdale Hospital (AHH).</i>		
AHH Coordination Meeting	HRG/ Staff/AHH	12-9-2013 Completed
<i>A meeting to review AHH concerns and update them on plans to address these issues including Oak Street access, traffic staging plans, and maintenance of utilities.</i>		
Draft 30% Submittal To Village	HRG/Staff	01-10-2014 Completed
<i>Progress drawings for Staff's review and information. This allows the Village to monitor and comment as the consultant provides more details to the plan's structural components (typically described as "Type, Size, &amp; Location" information or TSLs) and civil components (typically described as "Plans, Specifications, &amp; Estimates" information or (PSEs).</i>		
CWG Update Meeting	Staff/CWG/HRG	02-6-2014 Completed
<i>A meeting to update Community Working Group (CWG) members concerning the status of the design development. These meetings will highlight significant design changes (if any) and update the CWG members on plan development in areas of public interest such as traffic management and aesthetics.</i>		
Preliminary Plans and Costs to ICC	HRG	03-07-2014 Completed
<i>Preliminary information to the ICC. More detailed plans will accompany the formal petition</i>		
Preliminary Plans to IDOT	HRG	03-10-2014 Completed
<i>Submittal will consist of roadway plans with all required Right of Way shown; revised Type, Size and Location drawings for the bridge and retaining wall; a technical memorandum covering any changes from the approved Project Development Report and a preliminary opinion of constructed cost. If Right of Way impacts are the same or less</i>		

*than what was estimated in Phase 1, development of the Right of Way Plats, appraisals and appraisal reviews will begin immediately.*

Respond to 30% Submittal Comments	HRG	03-10-2014
		Completed

*Preliminary information to the ICC. More detailed plans will accompany the formal petition.*

Bridge Inspection		03-28-2014
		Completed

National Bridge Inspection System (NBIS) annual bridge inspection & report forwarded to IDOT.

#### Public Meeting

Public Meeting	Vill. Staff/CWG/HRG	04-29-2014
		Completed

*Presentation of the bridge design to the public to address comments received during the February CWG meeting and to receive any other comments before plans reach the 60% stage of completion.*

Public Meeting comments due	Residents	05-15-2014
		Completed

#### Design Process

Right of Way Plats to IDOT	HRG	05-07-2014
		Submitted

*Plats must be submitted to and approved by IDOT before negotiations can be started.*

60% submittal to Village Staff and BNSF	HRG	05-28-2014
		Submitted

*This is a progress submittal for the benefit of the Village staff, BNSF and ICC. IDOT does not require a 60% submittal.*

Adventist Hinsdale Hospital Update Meeting	AHH/HRG/Staff	05-30-2014
		Completed

*This is a meeting to update AHH management concerning the Oak Street Bridge project's impact on AHH.*

**BNSF Coordination**

HRG/BNSF

May - November, 2014

*BNSF coordination is on-going*

Staff and HR Green will coordinate with BNSF to support the ICC petition process, identify anticipated Right of Way impacts, BNSF restrictions on construction and scheduling.

**Resident Engineer Selection**

Village Staff

05-30-2014

*Qualifications received*

Begin selection of the consultant to provide construction observation/resident engineering services during Construction, Phase III. The Village will follow the state qualifications based selection (QBS) process under the Local Government Professional Services Selection Act (50 ILCS 510/).

**Land Acquisition**

Negotiations with Property Owners

HRG

May 2014 – January 2015

*Process follows IDOT guidelines using IDOT certified negotiator. The Village of Hinsdale is discussing separate issues with AHH.*

**ICC Petition**

ICC Petition for review

HRG/EPS Comm.

7-1-2014

*Petition submitted 10/02/14*

Completed Petition should include 60% plans.

ICC Petition to Hearing

ICC

11-15-2014

Completed petition to the Administrative Law Judge to be reviewed in November. It does not appear the board has to sign this document but a cover letter from the Village will certainly be required.

ICC Approval

ICC

12-31-2014

Need no later than early January in order for IDOT to authorize project for construction and March 2015 letting.

**Complete the Plans**

Submit ROW to IDOT

HRG/IDOT

10-15-2014

*On-time for pre-final submittal*

IDOT Bureau of Land Acq. must approve. Some documents may require Village Engineer's signature.

90% (Pre-final) plans to IDOT & Village

HRG/IDOT

10-17-2014

*On-time for pre-final submittal*

Hard deadline for submittal.

Final Plans, Specifications and Estimate to IDOT by HRG	12-15-2014
Again, deadline must be met make letting. Plan cover sheet will have to be signed by Village Engineer.	

Draft Joint and Const. Agreements to IDOT	HRG/Vill. Staff	12-15-2014
Selection of a construction engineer should be started before this date. IDOT may allow the Village to use HR Green if Village wishes to do so (policy is ambiguous right now) but, if the consultant selection process is required, the process should start when Pre-Final Plans are available.		

#### **Construction Phase Agreements through the Village Board**

Final CE, Joint and RR Agreements	Village Board	Dec-Jan 2015
The above are intergovernmental agreements prepared by HRG or IDOT for approval by the Village Board.		

Final CE, Joint and RR Agt. To IDOT	Village Staff/HRG	01-16-2015
<i>The approved intergovernmental agreements are due to IDOT.</i>		

#### **Preparation for Letting Project**

Start relocation of private utilities	HRG/Village Staff	01-01-2015
Coordination with private utilities will resume as the Pre-Finals are submitted to IDOT.		

ROW Certified by IDOT	IDOT	01-21-2015
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Letting by IDOT	IDOT	03-6-2015
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#### **Construction**

Construction starts	RE/Village Staff/Contractor	May 2015
---------------------	-----------------------------	----------

Final construction completion	RE/Village Staff/Contractor	June 2016
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Spare Veeck Park Monitoring Site  
Hinsdale, Illinois

Date	Bar Screen Channel Downstream (feet)	Overflow Ht. Above Weir (feet)	Storage Tank Elevation (feet)	Precipitation (inches of water)
09/01/14	0.16		3.97	0.02
09/02/14	0.15		4.21	
09/03/14	0.13		2.79	
09/04/14	0.15		3.01	0.28
09/05/14	0.23		3.64	0.35
09/06/14	0.15		2.98	
09/07/14	0.07		3.36	
09/08/14	0.07		3.32	
09/09/14	0.06		2.76	0.02
09/10/14	1.32	0.33	19.28	0.96
09/11/14	0.00		3.16	
09/12/14	0.00		3.00	0.01
09/13/14	0.02		3.44	0.01
09/14/14	0.00		2.72	
09/15/14	0.01		3.35	
09/16/14	0.00		2.74	
09/17/14	0.00		2.32	
09/18/14	0.01		2.15	
09/19/14	0.03		2.56	
09/20/14	0.03		2.74	0.29
09/21/14	0.02		3.40	0.09
09/22/14	0.00		3.77	
09/23/14	0.00		3.88	
09/24/14	0.00		3.90	
09/25/14	0.00		3.91	
09/26/14	0.02		3.92	
09/27/14	0.00		3.95	
09/28/14	0.00		4.00	
09/29/14	0.00		2.36	
09/30/14	0.00		3.13	

Total Precipitation in September: 2.03  
Departure from Normal: -1.18 inches  
63% of normal rainfall

Notes:

1. Minimum tank elevation is 2.0 feet to avoid running the pumps dry and damaging them.
2. Rain data from McClure JHS weather station.

3a

DATE: October 13, 2014**REQUEST FOR BOARD ACTION**

<b>AGENDA</b>	<b>ORIGINATING</b>
<b>SECTION NUMBER</b> Board of Trustees Item	<b>DEPARTMENT</b> Community Development
<b>ITEM</b> Graue Mill Flood Protection Improvements Engineering Services	<b>APPROVAL</b> Daniel M. Deeter Village Engineer

Request For Proposals (RFP) for design engineering services for the Graue Mill Flood Protection Improvements were sent to five engineering consultants with satisfactory relationships with the Village in accordance with 50 ILCS 510, section 5. These consultants are: Bowman Consulting Group; Christopher B. Burke Engineering, Ltd.; ERA Consultants, Inc.; HR Green, Inc.; and James J. Benes & Associates, Inc. ERA Consultants and James J. Benes respectfully declined to send a proposal. The other three consultants provided proposals which are available electronically for the committee members. The proposals were evaluated against the RFP requirements by staff at the DuPage County Department of Environmental Concerns (DEC). Consultant fees are listed below:

- Bowman Consulting \$169,298.88
- Christopher B. Burke Engineering \$348,402.21
- HR Green \$277,188.00

After reviewing the proposals and receiving input from the DuPage DEC staff and Graue Mill HOA leadership, staff is recommending Christopher B. Burke Engineering, Ltd. as the best qualified consultant to provide the design services. The design will required an advanced understanding of hydraulic modelling in general, the Salt Creek watershed in particular, and the knowledge and experience to effectively coordinate between a variety of Federal, State, County, and local stakeholders. Christopher B. Burke Engineering's prior experience on conducting hydraulic modelling of Salt Creek is invaluable in developing a successful design for Graue Mill. Their experience in developing both the preliminary engineering study of the Graue Mill flooding and the Federal Emergency Management Agency (FEMA) grant application shows that they have the best understanding of the challenges they will encounter designing, permitting, and coordinating among the various stakeholders. Thus, it is staff's opinion that Christopher B. Burke Engineering is best qualified to meet the needs of this project and to ensure a successful completion. The design engineering budget for the Graue Mill Flood Protection Improvements is \$379,000.

**Motion: To Award the Engineering Services for Design of the Graue Mill Flood Protection Improvements to Christopher B. Burke Engineering, Ltd. in the Amount Not to Exceed \$348,402.21.**

<b>APPROVAL</b>	<b>APPROVAL</b>	<b>APPROVAL</b>	<b>APPROVAL</b>	<b>MANAGER'S APPROVAL</b>
<b>COMMITTEE ACTION:</b>				
<b>BOARD ACTION:</b>				

## Daniel Deeter

---

**From:** Hunn, Sarah <Sarah.Hunn@dupageco.org>  
**Sent:** Wednesday, September 03, 2014 8:32 AM  
**To:** Daniel Deeter  
**Subject:** FW: Send data from MFP07826207 09/03/2014 08:19  
**Attachments:** DOC090314-09032014081947.pdf

**Follow Up Flag:** Follow up  
**Flag Status:** Flagged

**Categories:** Red Category

Dan,

Per your request, I have evaluated the proposal for the Graue Mill project. I have attached a copy of the proposal evaluations in case you need back up documentation from my evaluations. I will note, they are not easy to read or decipher.

My rating was as follows:

1. CBBEL
2. HR Green
3. Bowman

Thank you.

Sarah Hunn, PE - Chief Engineer  
DuPage County Stormwater Management  
421 N. County Farm Rd  
Wheaton, IL 60187  
Ph: 630-407-6676  
e-mail: [sarah.hunn@dupageco.org](mailto:sarah.hunn@dupageco.org)  
Fax: 630-407-6701

-----Original Message-----

**From:** toshiba copier [mailto:[toshibacopier@dupageco.com](mailto:toshibacopier@dupageco.com)]  
**Sent:** Wednesday, September 03, 2014 8:20 AM  
**To:** Hunn, Sarah  
**Subject:** Send data from MFP07826207 09/03/2014 08:19

Scanned from MFP07826207  
Date:09/03/2014 08:19  
Pages:3  
Resolution:200x200 DPI  
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# Consultant Evaluation

#1

Project: CBOEL  
Prime Consultant: GRAUE

<b>Project Management, Organization and Staffing</b>	(30) 30%	
Is the Project Team and the role(s) of the prime/ subs clearly identified? Qualifications, number of people and work assignments appropriate?	15.0% 15	Flow chart
Does the team organization identify key staffing per the RFQ?	5 5.0%	
Does the Project Team represent a commitment to partnering?	10 10.0%	-
<b>Project Team Experience:</b>	(38) 40%	
Does key staffing of the prime/ subs have identified relevant, similar experience as required for this project?	20% 19	Yes - all listed by task
Has key staffing worked for DPC in the past and/or does DPC have past experience working with identified key staffing?	10%	
Does key drainage staffing have experience securing DuPage County stormwater permit? For wetland projects?	10% 9	Noted Majority Experience
<b>Project Understanding/ Approach</b>	(30) 30%	
Statement of Interest conveys clear understanding of the project scope and required professional services. Goes beyond what was in the RFQ?	15% 15	Yes. specifically noting all people
Issues that could impact the project schedule are identified and potential solutions are offered (i.e., permits, local coordination, utilities, etc.)	10%	
Are the project stakeholders identified and/or does the submittal consider/ include a coordination/ public involvement strategy?	5% 5	Noted in chart
<b>Additional Comments</b>		

98



# Consultant Evaluation

# 2

Project: Grave

Prime Consultant: ERA/HR Green

<b>Project Management, Organization and Staffing</b>	(29) 30%	
Is the Project Team and the role(s) of the prime/ subs clearly identified? Qualifications, number of people and work assignments appropriate?	15.0% 15	Defined by work group & consult
Does the team organization identify key staffing per the RFQ?	5.0% 5	
Does the Project Team represent a commitment to partnering?	10.0% (10)	
<b>Project Team Experience:</b>	(10) 40%	
Does key staffing of the prime/ subs have identified relevant, similar experience as required for this project?	20% 20	
Has key staffing worked for DPC in the past and/or does DPC have past experience working with identified key staffing?	10% 10	
Does key drainage staffing have experience securing DuPage County stormwater permit? For wetland projects?	10% 10	Yes listed
<b>Project Understanding/ Approach</b>	(24) 30%	
Statement of Interest conveys clear understanding of the project scope and required professional services. Goes beyond what was in the RFQ?	15% 13	
Issues that could impact the project schedule are identified and potential solutions are offered (i.e., permits, local coordination, utilities, etc.)	10% 8	lacking detailed schedule
Are the project stakeholders identified and/or does the submittal consider/ include a coordination/ public involvement strategy?	5% 3	
<b>Additional Comments</b>		

(93)

# Village of Hinsdale

## Request for Proposal for Professional Engineering Services Graue Mill Flood Protection Improvements



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*July 31, 2014*

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### **SUBMITTED BY:**

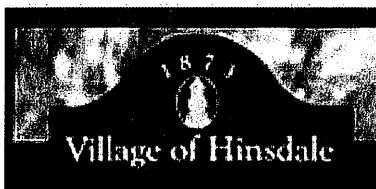
THOMAS T. BURKE, PHD, PE

CHRISTOPHER B. BURKE ENGINEERING, LTD.

9575 W. HIGGINS ROAD, SUITE 600

ROSEMONT, IL 60018

TBURKE@CBBEL.COM



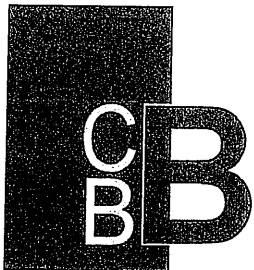
# Consultant Evaluation

#3

Project: Bowman/Gravel  
Prime Consultant:

<b>Project Management, Organization and Staffing</b>	(29) 30%	
Is the Project Team and the role(s) of the prime/ subs clearly identified? Qualifications, number of people and work assignments appropriate?	15.0% 15	HH <del>no resume</del> <del>no notes</del>
Does the team organization identify key staffing per the RFQ?	5.0% 5	Yes
Does the Project Team represent a commitment to partnering?	10.0% 9	Yes.
<b>Project Team Experience:</b>	(37) 40%	
Does key staffing of the prime/ subs have identified relevant, similar experience as required for this project?	20% 18	project lead lacks stormwater experience
Has key staffing worked for DPC in the past and/or does DPC have past experience working with identified key staffing?	10% 9	Yes for Subs - no for Prime
Does key drainage staffing have experience securing DuPage County stormwater permit? For wetland projects?	10% 10	WBK qualified
<b>Project Understanding/ Approach</b>	(21) 30%	
Statement of Interest conveys clear understanding of the project scope and required professional services. Goes beyond what was in the RFQ?	15% 13	lacking insight
Issues that could impact the project schedule are identified and potential solutions are offered (i.e., permits, local coordination, utilities, etc.)	10% 5	No schedule - discussed critical items
Are the project stakeholders identified and/or does the submittal consider/ include a coordination/ public involvement strategy?	5% 3	Not noted clearly in submittal
<b>Additional Comments</b>		

(87)



**CHRISTOPHER B. BURKE ENGINEERING, LTD.**

9575 West Higgins Road Suite 600 Rosemont, Illinois 60018 TEL (847) 823-0500 FAX (847) 823-0520

July 31, 2014

Village of Hinsdale  
19 East Chicago Avenue  
Hinsdale, Illinois 60521-3489

Attention: Mr. Daniel Deeter  
Village Engineer

Subject: ***Request for Proposal (RFP)***  
***Graue Mill Flood Protection Improvements***

Dear Mr. Deeter:

Christopher B. Burke Engineering, Ltd. (CBBEL) along with James J. Benes & Associates, Inc. (JJB), Thomson Surveying, Ltd. (TSL) and Testing Service Corporation (TSC) are pleased to submit our response to the Village of Hinsdale's (Village) Request for Proposal for the Graue Mill Flood Protection Improvements. These improvements will provide much needed safety and flood relief for the Graue Mill residents. We trust that the information provided in the enclosed proposal will demonstrate that our team is highly qualified to successfully complete these projects.

CBBEL has conducted a detailed drainage study for the Graue Mill Homeowners Association (HOA) and we are very familiar with drainage issues in this area. We began working for the HOA on stormwater issues in 2010. We also have detailed knowledge of the Salt Creek Watershed Plan and have dealt with similar drainage situations in other communities. CBBEL staff developed the FEQ modeling for DuPage County as part of the overall Salt Creek Floodplain Mapping project. We assisted the County in incorporating the HOA projects in the Lower Salt Creek Watershed Plan. We bring the additional expertise and local knowledge from the engineering experts at JJB who have performed numerous studies and reviews in Hinsdale. The enclosed materials provide an indication of the types of stormwater studies and projects we have completed in recent years. We are uniquely suited to take this project from start to finish quickly and efficiently. CBBEL successfully submitted and assisted in obtaining the large FEMA \$2,576,475 grant funding for the project and the IDNR-OWR \$626,438 grant. We have been through this process before with FEMA and know the many forms and back-up documents it takes to request reimbursement. We are ready to start immediately, and with the size and capabilities of our project team, we have the resources to meet the Village's timeline for completion of the study. We believe CBBEL has demonstrated our abilities and commitments to the Village throughout the years, including our current work on the Village's 2015 Resurfacing Project.

In addition to CBBEL's highly qualified staff, we are partnering with JJB whose focus will be on design engineering of some of the projects and the compensatory storage at Fullersburg Forest Preserve. TSL will handle all surveying requirements of the project and TSC will perform the geotechnical study. We are confident that our combined team will satisfy the Village's timeline and technical requirements with our large, experienced and qualified staff. The enclosed materials provide a sampling of the types of stormwater studies and design projects our team has successfully completed in recent years.

The project team will be led by Thomas Burke, Jr., PhD, PE and his information, as well as that of other staff we propose for this project, is located in **TAB 3**. If you need any additional information please do not hesitate to contact me or Thomas at (847) 823-0500.

Sincerely,

A handwritten signature in black ink, appearing to read "Chris Burke", followed by the word "for" in a cursive script.

Christopher B. Burke, PhD, PE, D.WRE, Dist.M.ASCE  
President

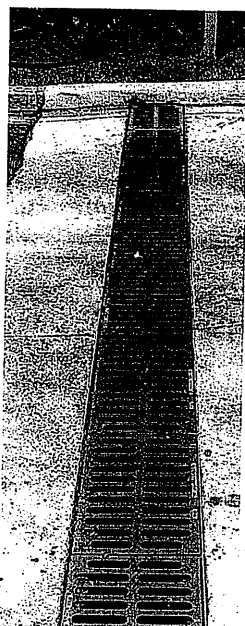
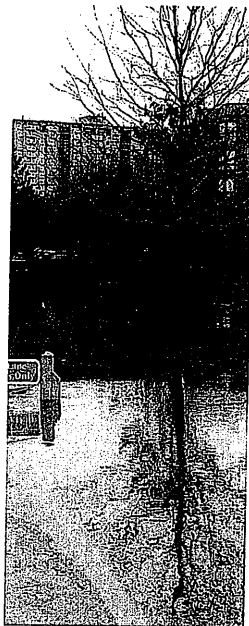
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## **Tab 1**

# STATEMENT OF QUALIFICATIONS



## FIRM HEADQUARTERS

Christopher B. Burke Engineering, Ltd. (CBBEL)  
9575 West Higgins Road, Suite 600  
Rosemont, Illinois 60018  
T: 847.823.0500 | F: 847.823.0520  
cbbel.com

**80** LICENSED  
PROFESSIONALS

TOTAL  
STAFF **179**

**27** YEARS IN  
BUSINESS

CBBEL is unique among consulting engineering and surveying firms in that we are a full-service company that can comprehensively meet the needs of both private and public sector clients. Guided by founder and President Christopher B. Burke, our "family business" corporate philosophy allows for a level of personal service that provides peace of mind. Our Illinois based staff of 179 and expansive list of specializations—civil, municipal, transportation, water resource, mechanical, structural, construction, traffic, and environmental engineering and environmental resource services—provide professionalism and a depth of expertise that promote project success.



*Christopher B. Burke Engineering, Ltd.*





CBBEL will apply our personal service and specialization to continuing the work on the Graue Mill HOA flood control project. We have developed an excellent relationship with the Graue Mill HOA Board members and management staff. They know that CBBEL understands the problems and has developed concept design for solutions to their continuous flooding problems. Our work with the HOA on flooding problems began in 2010 after they interviewed several firms. We have proven our ability to work with the HOA, Village and DuPage County. We understand the flooding situation and the solutions to solve it. We know what projects can move forward with design and construction and which will require more detailed/complex permitting. The projects will need to prove there is a watershed benefit and are best permitted together. We have discussed the projects in detail with County staff. Our knowledge and experience on this project provides unique advantage to moving forward quickly without any learning curve. Our specializations can cover all the requirements of the various projects.

## RESOURCES

Having received his doctoral degree in civil engineering from Purdue University, CBBEL President Christopher B. Burke embraces education and encourages continued learning among his employees. Our staff includes four PhDs, 75 licensed professional engineers, and a team of licensed professional land surveyors, a licensed structural engineer, a licensed landscape architect, 3 are LEED accredited professionals, 3 are professional traffic operations engineers (PTOE), and 4 have received the designation of Diplomate Water Resource Engineer (D.WRE). Twenty-five staff are certified floodplain managers (CFM) and 20 are certified professionals in erosion and sediment control (CPESC).

Through leadership positions and active membership in a variety of professional associations and University involvement, CBBEL is able to deliver cutting-edge technology and techniques as they emerge. The outcome is a context-sensitive approach that rejects out-dated cookie-cutter remedies and instead provides the best solution for your needs. Staff take part in national and local organizations including the American Society of Civil Engineers, the American Council of Engineering Companies, the American Public Works Association, the Illinois Association of Environmental Professionals, the Illinois Association for Floodplain and Stormwater Management, the Society of American Military Engineers, the American Academy of Water Resource Engineers, Chicago Wilderness Corporate Council, the Society of Ecological Restoration, Western Society of Engineers, the Society of Wetland Scientists, the Irish Engineers and Contractors, and the Illinois Road and Transportation Builders Association to name a few.

Given CBBEL's commitment to hiring exceptional personnel, prioritizing client relationships, and valuing education, it's not surprising that we have received numerous prestigious awards from the American Council of Engineering Companies of Illinois, the American Public Works Association, the Illinois Section of the American Society of Civil Engineers, the Illinois Chapter of the American Planning Association, the Illinois Department of Transportation, and the Illinois Tollway. We were honored with the 2003 Employer of the Year Award from the Women in Transportation Seminar and the Private Sector Employee Recognition Award from the ASCE Illinois Section in 1997, 2003, and 2009. In 2012, we received a Governor's Sustainability award and an honorable mention in 2013.

## SERVICES

Since its founding in 1986 the size of our company and the complexity of our projects have grown. Today we provide not only design services, but also planning, preliminary engineering, permitting, and construction observation. We have successfully completed the design, permitting and construction of numerous major transportation and local municipal roadway projects, multi-use paths, bridges, flood control reservoirs, pump stations, embankments, water mains and water systems, storm sewers, and large open channels.

We have served as lead engineer on a variety of major municipal and county undertakings. As a full-service firm we also conduct water resource related studies, perform GIS services, environmental resource assessments, mitigation planning and permitting, and a myriad of traditional civil engineering functions.

CHRISTOPHER B. BURKE  
ENGINEERING, LTD.  
9575 W. Higgins Road  
Suite 600  
Rosemont, IL 60018  
T: 847.823.0500  
F: 847.823.0520  
cbbel.com

CBBEL has provided professional review services for municipalities, counties, and state agencies. Our experience includes the review of drainage, roadway, subdivision, sanitary sewer, and mechanical engineering submittals prepared by third-party consultants for both private and public sector clients.

CBBEL specializes in the design and construction of complex stormwater projects, and we're proud of the reputation we've built as experts in the field. Based on our vast experience with creative flood mitigation project development, hydrologic/hydraulic modeling, and engineering design and permitting, we believe we are well qualified to provide these services as a continuation of the work we have already performed. We routinely complete design and permitting of flood mitigation projects at the local and state level. Our office prepares an impressive number of high-quality stormwater management studies and permit applications, having obtained more than 1,000 US Army Corps of Engineers Section 404 permits with accompanying IEPA water quality certifications, more than 500 Illinois Department of Natural Resources-Office of Water Resources floodway construction permits, and 450 Federal Emergency Management Agency Letters of Map Amendment and Letters of Map Revision. **In recent years, we have completed similar scale projects as the proposed Graue Mill improvements in Buffalo Grove, Bartlett, Crystal Lake, Park Ridge and other communities.** We have highly experienced staff in Water Resources, Survey, Civil Design, Mechanical and Environmental Resources disciplines able to accomplish the tasks necessary for successful completion of the projects.

**CBBEL is uniquely prequalified with DuPage County in the following classifications:**

- Natural Areas Management
- Education and Outreach
- Advanced Hydrology and Hydraulics

These are specific services that are required to complete the design and permitting of the Graue Mill project. We are not aware of any other firm that meets the same prequalifications with the County.

## GREEN INITIATIVES

CBBEL is at the forefront of sustainability/green initiatives and is a corporate leader when it comes to implementation. Our Rosemont headquarters has a green roof, an aggressive recycling program, and a long range plan to implement other energy saving devices courtesy of our company's sustainability committee.

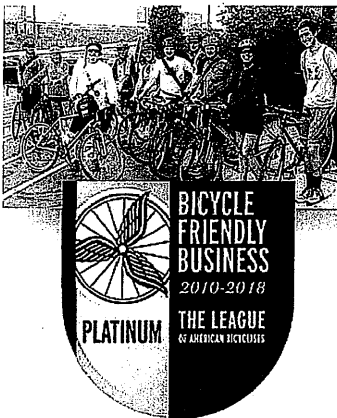
**In 2012 and 2013 (Honorable Mention), CBBEL received the Governor's Sustainability Award for achievements in improving the environment. The company received the award for our significant achievements in protecting the environment, helping sustain the future, and improving the economy.**

Some of the sustainability efforts the firm was honored for include our bike to work program where CBBEL provides mileage reimbursement, changing facilities and bicycle storage. Nearly 180 employees (from all of the Burke Group companies) have participated in the program and more than 208,000 miles have been commuted on bike.

We also have been recognized by the League of American Bicyclists as a Bicycle Friendly Business. Previously a silver status company, in 2014 the League awarded CBBEL "Platinum" status. The Bicycle Friendly Business recognizes employer's efforts to encourage a more bicycle friendly atmosphere for employees and clients and honors innovative bike friendly efforts. **CBBEL is the only Illinois firm to be awarded Platinum status and is one of the few Midwestern non-bike related businesses to be awarded Gold status or higher.**

CBBEL also has partnered with Enterprise CarShare, Chicago's only local car sharing company, to provide vehicles to employees. We are the first Enterprise CarShare corporate member to reduce its own vehicle fleet by more than 50 percent and in turn use the CarShare vehicles. Employees have access to three CarShare cars and CBBEL recently installed CarShare software in two of their own fleet vehicles. We also have installed 2 electric car charging stations on the exterior of the building.

Additionally, CBBEL's sustainability committee has implemented extensive recycling programs and created a rooftop vegetable garden.



CHRISTOPHER B. BURKE  
ENGINEERING, LTD.  
9575 W. Higgins Road  
Suite 600  
Rosemont, IL 60018  
T: 847.823.0500  
F: 847.823.0520  
cbbel.com



# Illinois Department of Transportation

2300 South Dirksen Parkway / Springfield, Illinois / 62764

July 14, 2014

Subject: PRELIMINARY ENGINEERING  
Consultant Unit  
Prequalification File

Christopher Burke  
BURKE, CHRISTOPHER B. ENG., LTD.  
9575 W. Higgins Road  
Suite 600  
Rosemont, IL 60018

Dear Christopher Burke,

We have completed our review of your "Statement of Experience and Financial Condition" (SEFC) which you submitted for the fiscal year ending Dec 31, 2013. Your firm's total annual transportation fee capacity will be \$62,400,000.

Your firm's payroll burden and fringe expense rate and general and administrative expense rate totaling 123.72% are approved on a provisional basis. The actual rate used in agreement negotiations may be determined by our Office of Quality Compliance and Review in a pre-award audit.

Your firm is required to submit an amended SEFC through the Engineering Prequalification & Agreement System (EPAS) to this office to show any additions or deletions of your licensed professional staff or any other key personnel that would affect your firm's prequalification in a particular category. Changes must be submitted within 15 calendar days of the change and be submitted through the Engineering Prequalification and Agreement System (EPAS).

Your firm is prequalified until December 31, 2014. You will be given an additional six months from this date to submit the applicable portions of the "Statement of Experience and Financial Condition" (SEFC) to remain prequalified.

Sincerely,  
John Baranzelli  
Acting Bureau Chief  
Bureau of Design & Environment

# SEFC PREQUALIFICATIONS FOR BURKE, CHRISTOPHER B. ENG., LTD.

CATEGORY	STATUS
Special Studies - Feasibility	X
Hydraulic Reports - Waterways: Typical	X
Hydraulic Reports - Waterways: Complex	X
Special Studies - Location Drainage	X
Location Design Studies - New Construction/Major Reconstruction	X
Location Design Studies - Rehabilitation	X
Highways - Roads and Streets	X
Special Studies - Lighting: Complex	X
Special Services - Sanitary	X
Special Studies - Traffic Signals	X
Special Services - Mechanical	X
Special Studies - Signal Coordination & Timing (SCAT)	X
Special Studies - Pump Stations	X
Structures - Highway: Simple	X
Environmental Reports - Environmental Assessment	X
Special Services - Electrical Engineering	X
Environmental Reports - Environmental Impact Statement	X
Location Design Studies - Reconstruction/Major Rehabilitation	X
Structures - Highway: Typical	X
Special Services - Surveying	X
Special Studies - Traffic Studies	X
Special Services - Landscape Architecture	X
Special Studies - Lighting: Typical	X
Special Studies - Safety	X
Special Services - Construction Inspection	X
Hydraulic Reports - Pump Stations	X
Highways - Freeways	X

X	PREQUALIFIED
A	NOT PREQUALIFIED, REVIEW THE COMMENTS UNDER CATEGORY VIEW FOR DETAILS IN EPAS.
S	PREQUALIFIED, BUT WILL NOT ACCEPT STATEMENTS OF INTEREST

## DESCRIPTION OF FIRM

---

**Firm Name:** JAMES J. BENES AND ASSOCIATES, INC.  
950 Warrenville Road, Suite 101  
Lisle, Illinois 60532

**Telephone:** (630) 719-7570  
**Fax:** (630) 719-7589

**Contact:** Jeffery C. Ziegler  
Vice President  
**Email:** [jziegler@jjbenes.com](mailto:jziegler@jjbenes.com)

---

JAMES J. BENES AND ASSOCIATES, INC. was founded as a Professional Civil Engineering Corporation in 1970. Since that time, we have served more than 200 individual public and private clients in over 70 communities in 5 states. Our services have included preliminary engineering and environmental studies, final design and construction supervision for a wide variety of roadway, drainage, utility and infrastructure projects.

We have been pre-qualified with the Illinois Department of Transportation since 1970 and are currently pre-qualified to perform the following services:

### PLANS, SPECIFICATIONS AND ESTIMATES

Highways – Roads and Streets  
Traffic Signals

### SPECIAL STUDIES

Location Drainage  
Traffic  
Safety  
Feasibility

### LOCATION AND DESIGN STUDIES

Rehabilitation  
Reconstruction/Major Rehabilitation

### HYDRAULIC REPORTS

Waterways: Complex  
Waterways: Typical

### SPECIAL SERVICES

Construction Inspection

Our firm currently employs as staff of 15, comprised of engineers, engineering / CADD technicians, an environmental specialist and administrative staff. We have seven licensed Professional Engineers and a Licensed Professional Land Surveyor. Many staff members have obtained certifications in various specialties including Certified Floodplain Manager, Professional Traffic Operations Engineer, Certified Professional in Erosion and Sediment Control, ISA-Certified Arborist, Certified Wetland Specialist, and Designated Erosion Control Inspector.

Our experience includes Phase I preliminary engineering and Phase II final engineering services for Illinois Department of Transportation (IDOT) State highway improvements throughout the Chicago Metropolitan Area. We are proud to have received a "good" rating on our latest Phase I project and the 2008 Award for Exceptional Consulting Engineering Service from IDOT for one of our more recent Phase II projects.

## Description of Firm

The services provided to our municipal, state and county clients account for approximately 98 percent of our total annual billing. The engineering services provided to our municipal clients have included: preparation of plans and specifications for a wide variety of capital improvement projects; construction inspection; engineering reviews for private developments; coordination with residents; development of multi-year capital improvement programs; attendance at meetings with municipal staffs, elected officials and residents; and traffic engineering reviews and designs. Our experience serving as the designated municipal engineer for Lisle, Western Springs, and Woodridge, in addition to providing specialized engineering services to numerous other communities, gives us a unique understanding of the specific needs related to the Village of Hinsdale Graue Mill Improvements.

We believe our size and corporate structure affords us the ability to provide immediate and personalized service as well as direct access to project managers and company principals. This capability enables us to respond to unforeseen needs in an effective and timely manner, without the delay and miscommunication that may occur with a larger firm.

We are very pleased that 85 to 90 percent of our work in recent years has been with previous municipal clients. We believe that our firm has been given the opportunity to continue serving our municipal clients because of their satisfaction with the quality and timeliness of service we provide. If we are selected by the Village, the team assigned to the project will be experienced and thoroughly knowledgeable in all aspects necessary for the successful completion of the design engineering services.



## FIRM OVERVIEW

Thomson Surveying, Ltd. (TSL) is a full-service surveying firm located in Rosemont. Started in 1974, the firm provides high quality services to both public and private sector clients throughout the Chicagoland area. We pride ourselves on providing personal, high quality service on-time and within budget.

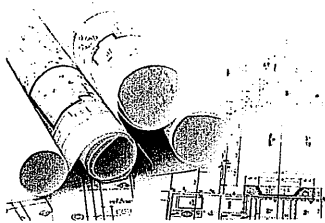
TSL can provide all aspects of surveying needed for design projects, major transportation projects, flood control reservoirs, pump stations, embankments, watermain, sanitary and storm sewer, pavement, large open channels and large subdivisions. We are experienced with GIS systems and have incorporated GIS into several projects and municipalities.

Our experience in preparing topographic surveys along roadways and open spaces and through residential subdivisions will allow projects to be undertaken in a comprehensive and cost effective manner to the benefit of the County. Staff members will be available to meet with County staff as necessary throughout the project.

TSL has experience ranging from topographic surveys for individual homes to topographic surveys and construction staking of multi-million dollar subdivisions.



During the past several years we have performed over 85 transportation related surveys, providing field and office assistance for surveys, plats of highway and parcel descriptions as well as stream cross-sections and topographic surveys for Illinois Department of Transportation, DuPage County Department of Environmental Concerns, DuPage County Forest Preserve District, FEMA, METRA, PACE and Illinois State Toll Highway Authority.



TSL has extensive experience providing land surveys, route surveys, plats of easement & dedication, writing legal descriptions, locating monuments and general professional land surveying services.

Our commitment to providing personal, one on one land surveying services to our clients separates TSL from the others. We combine a "back to basics" philosophy with a staff who has adopted a "whatever it takes" mentality in an effort to maintain all project deadlines. We have the knowledge and experience to get the job done effectively and efficiently.

The company is IDOT pre-qualified in Surveying Services and has two licensed Illinois Land Surveyors on staff.

## **FIRM BACKGROUND INFORMATION**

**T**esting Service Corporation (TSC) has a recognized reputation for provision of professional engineering services. Since our 1954 incorporation, the firm has completed more than 80,000 projects, primarily throughout Central and Northern Illinois. The corporate project list includes large scale residential, commercial, retail and industrial development, as well as medium to large scale structures. Public infrastructure items such as roadways, bridges, tunnels, underground and earth retention systems are also included.

TSC operates from its corporate headquarters in Carol Stream, Illinois. Our firm has branch facilities in Bloomington, DeKalb, Gurnee, Rockford and Shorewood, Illinois. TSC employs a staff of more than 125 people, including 15 Professional Engineers and Geologists. Our Geotechnical Engineering and Material Engineering operational groups are supported by Laboratory and Drilling departments. These four departments can operate together or independently depending on client/project specific needs.

**Geotechnical Engineering (GEO)** - TSC has practiced geotechnical engineering since its 1954 incorporation. Our professional engineers have developed recommendations for standard spread footings, as well as deep foundations including driven piles and caissons. Lateral earth pressure criteria has been developed for evaluation and design of temporary and permanent support systems for deep excavations and tunnels. Data from inclinometers and Menard pressuremeters is regularly employed by TSC's geotechnical staff. In addition, our geotechnical staff is well experienced in roadway/ infrastructure projects.

**Construction Materials Engineering (CME)** - Our CME department is staffed by about 80 personnel including eight (8) Professional Engineers. TSC technicians provide testing, observation and sampling services for soils, Portland cement and bituminous concrete, structural steel and roofing materials on construction projects. The following list highlights major field and laboratory construction materials services that are routinely provided by TSC's Construction Materials Engineering group:

Technicians receive appropriate training for the services they are required to perform. Field technicians assigned to various projects are certified and well versed in project specific requirements and information. TSC has in-house capability to provide technicians with the radiation safety training necessary for Nuclear/Moisture Density Gauge operators. Regular training for Structural Steel NDT Technicians (Certified to SNT-TC-1A for UT, Mt and PT), Illinois Department of Transportation QC/QA - Levels 1, 2 & 3, and Portland cement concrete testing using American Concrete Institute materials are elements of the continuing training provided our technicians.

TSC maintains and operates a dedicated pick-up van service for field samples. The personnel who perform this function are trained in ACI standards for handling of freshly cast concrete samples. There is a charge for this service. However, responsible and expedient treatment of sample materials makes this service a value.

**Laboratory** - The physical materials testing laboratory at TSC's location in Carol Stream is the largest of its type in the state of Illinois. TSC's Bloomington branch office is also equipped with a full-service physical materials testing laboratory. TSC's laboratory is an active participant in the National Voluntary Laboratory Accreditation program. The firm is a member of the American Council of Independent Laboratories.

**Drilling** - TSC owns, operates and maintains a drill fleet of 13 units. These drills have a wide range of configurations and access capacity including truck, rubber tire and track mounted All-Terrain Vehicle (ATV), skid and tripod. Drill supervisors are licensed, well drillers and crews have the OSHA 40-Hour Health & Safety training.



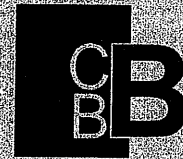
## **Tab 2**

HINSDALE, ILLINOIS

# GRAUE MILL FLOOD RISK REDUCTION ASSESSMENT



*The Graue Mill Subdivision is located north of Ogden Avenue and west of York Road along the banks of Salt Creek. The subdivision experienced significant flooding during the rain event of July 23-24, 2010.*



## 2010 - PRESENT

### PROJECT TEAM

Thomas Burke, PhD, PE  
Water Resources Project  
Manager

David Vogel, PE  
Water Resources Engineer

### CLIENT

Graue Mill  
Homeowners Association

### CONSTRUCTION COST

\$3.4 million

### FEE

\$60 thousand

### FUNDING SOURCE

Local

The Graue Mill Homeowner's Association (HOA) retained CBBEL to study existing drainage conditions in an effort to establish causes of flooding for the July 2010 storm event. Since that time, the HOA and CBBEL have been working together toward long-term drainage improvements for the areas that experienced significant flood damage. Meetings were held with the residents early on in the study process to present the initial findings and gather input from the residents. XP-SWMM hydrologic and hydraulic models were developed of the existing drainage system and proposed drainage improvements were summarized in the flood study.

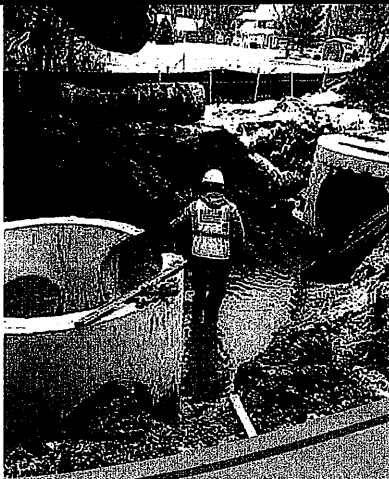
Due to the subdivision's location adjacent to Salt Creek and within special management areas, CBBEL was required to create unique solutions to the flooding issues. CBBEL recommended a combination of berms, flood walls, and self-raising flood gates while maintaining the use of available storage volume within the subdivision's detention basins. The improvements were aimed at isolating the subdivision from Salt Creek bank overflow and allowing the existing drainage infrastructure on-site to control on-site runoff.

On behalf of the HOA, CBBEL prepared a Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Program (HMGP) application for the flood mitigation projects identified in the study. The application included development of a benefit-cost analysis using FEMA software. CBBEL secured \$2.6 million in funding from the Illinois Emergency Management Agency (IEMA) and FEMA.

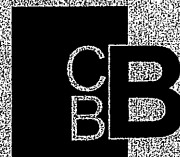
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Rosemont, IL 60018  
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F: 847.823.0520  
[www.cbbel.com](http://www.cbbel.com)

BARTLETT, ILLINOIS

# BREWSTER CREEK HEADWATERS



*In response to flooding in September 2008, CBBEL and the Village of Bartlett worked with DuPage County Stormwater, the Forest Preserve District of DuPage County (FPDDC) and the Bartlett Park District to develop drainage improvements for the Brewster Creek Headwaters.*



## 2009 - 2013

### PROJECT TEAM

Darren Olson, PE  
Project Manager

Lee Fell, PE  
Civil Design Lead

Emily Anderson, PE  
Water Resources Engineer

William Schultz, EI  
Structural Engineer

### CLIENT

Village of Bartlett  
Bob Allen, PE  
630.837.0800

DuPage County Stormwater  
Sarah Burn  
630.814.8867

### CONSTRUCTION COST

\$5.3 million

### FEE

\$380 thousand

### FUNDING SOURCE

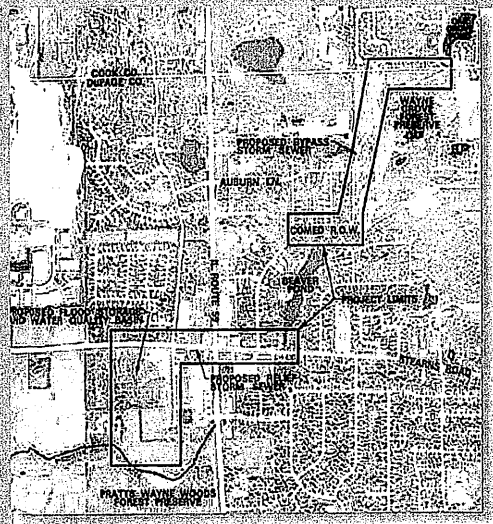
Local

A Watershed Plan was developed and approved in February 2010 that identified conveyance improvements and flood storage that would provide a 100-year level of protection to 11 homes, one state highway (IL 59), a County roadway (Stearns Road) and multiple roadways within the Bartlett Estates Subdivision. The project included 4,000 LF of 15" diameter storm sewer in the Wayne Grove Forest Preserve, 2,000 LF of 60" storm sewer under Stearns Road (600' to be tunneled under the intersection of IL 59 and Stearns Road) and a 58 acre-ft flood storage basin and dam on the Pratt's Wayne Woods Forest Preserve.

### Services included:

CBBEL provided design and permitting for the improvements.

- Watershed Plan preparation
- Site topographic survey and utility mapping
- Unsteady HEC-RAS Hydrologic/hydraulic modeling
- Preparation of plans, specifications, and bid documents
- Design coordination with the Village, DuPage County, FPDDC and the Bartlett Park District
- Permitting through DuPage County, IDNR-OWR Dam Safety, USACE, IDOT, DuDOT, KDSWCD, IEPA
- Securing easements from ComEd and the Bartlett Park District



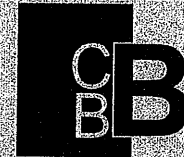
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# FEMA – BARTLETT FLOOD CONTROL PROJECT

BARTLETT, ILLINOIS

*The Village recently experienced two severe flooding events in 2008 and 2010. Both storm events caused widespread flooding in homes, streets and backyards.*



## 2011 - 2012

### PROJECT TEAM

Darren Olson, PE  
Project Manager/QA/QC

Jedd Anderson, EWS  
Project Manager - Design

Lee Fell, PE  
Project Engineer

David Vogel, PE  
Project Engineer

### CLIENT

Village of Bartlett

### CONSTRUCTION COST

\$5 million (estimated)

### FEE

\$287 thousand

### FUNDING SOURCE

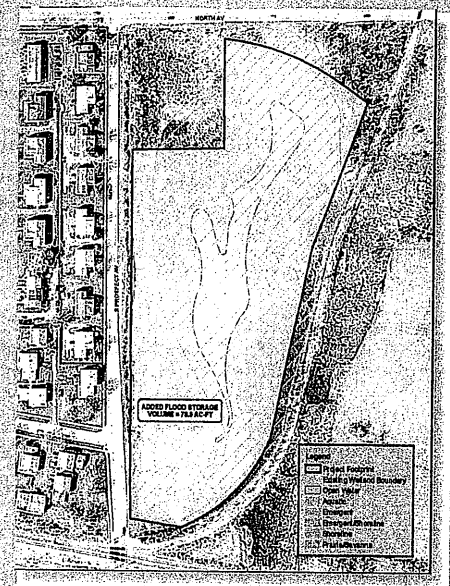
Local/Federal

On behalf of the Village of Bartlett, CBBEL prepared and submitted an application to the Federal Emergency Management Agency (FEMA) for a Hazard Mitigation Grant Program (HMGP) grant to provide 75% of estimated funding for final design, permitting, and construction of Phase 2 concept level drainage improvements presented in the 2009 CBBEL Village of Bartlett Flood Study. The improvements consist of 83 acre-feet of new flood storage volume and several storm sewer improvements designed to lower peak flood elevations in adjacent residential areas. CBBEL prepared a detailed Benefit-Cost Analysis (BCA) showing that the proposed project is cost effective. Close coordination with FEMA, the Village, and homeowners led to the award of \$3.8 million in FEMA HMGP funding in August 2013.

CBBEL was awarded the design contract by the Village in 2014 and is preparing final design plans and permit submittals for the proposed drainage improvements. Permits will be obtained from the USACE, MWRDGC, IDNR and the Village. Construction is anticipated to begin in late 2014 and be completed in 2015.

### Services included:

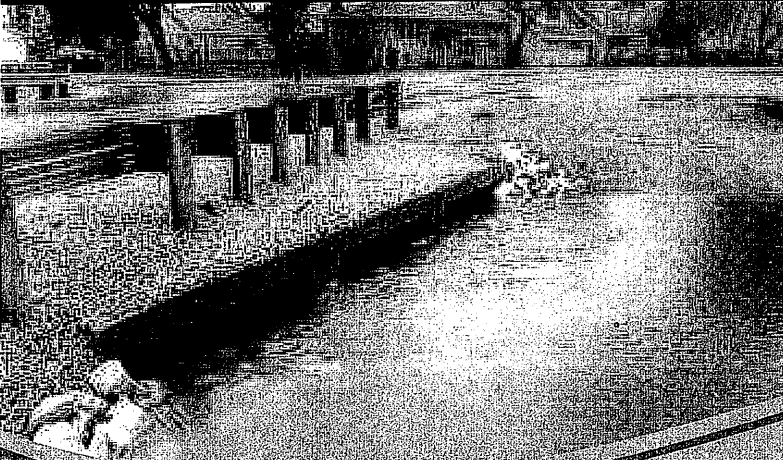
- HMGP Grant Application
- Benefit-Cost Analysis
- IEMA Grant Reporting
- Final Design of Improvements
- Design Plans and Construction Bidding Documents
- Permitting
- Bidding Services



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CRYSTAL LAKE, ILLINOIS

# NORTH SHORE DRIVE RELIEF STORM SEWER



*CBBEL reviewed and analyzed drainage improvement alternatives after the City experienced historical flooding.*



## 2011 - 2012

### PROJECT TEAM

Lee Fell, PE  
Project Manager

Darren Olson, PE  
Water Resources

John Murphy, PE, PLS  
Survey

Jason Souden, PE  
QA/QC

### CLIENT

City of Crystal Lake  
Abigail Wilgreen, PE  
815.356.3615

### CONSTRUCTION COST

\$700 thousand

### FEE

\$48.6 thousand

### FUNDING SOURCE

Grant

In 2007 the City experienced some of the heaviest rain fall totals in its history, several areas throughout the City experienced flooding. The City completed a Flood Study in 2009 and the North Shore Drive area was identified as an area that experienced significant roadway and residential flooding. Drainage alternatives included:

- Adding 3 Shallow Box Culverts under North Shore Drive
- Raising North Shore Drive
- Expanding Existing Overflow Swale
- Enhancing Emergency Access Route at Woodland Drive
- Installation of a Storm Sewer System to Meet Current Design Standards

### Services included:

CBBEL refined the drainage improvement alternatives and prepared engineering plans and permit submittals for the preferred project.

- Project Coordination with the Crystal Lake Park District and Public Meetings

- Topographic Survey
- Utility Coordination
- Hydraulic Modeling
- Concept Level Refinement
- Permitting through USACE & Soil Water Conservation District
- Design Plans, Specifications, Estimate of Construction Cost and Construction Schedule
- Stormwater Management Report including Best Management Practices
- Construction Plans, Specifications, and Construction Cost Estimates



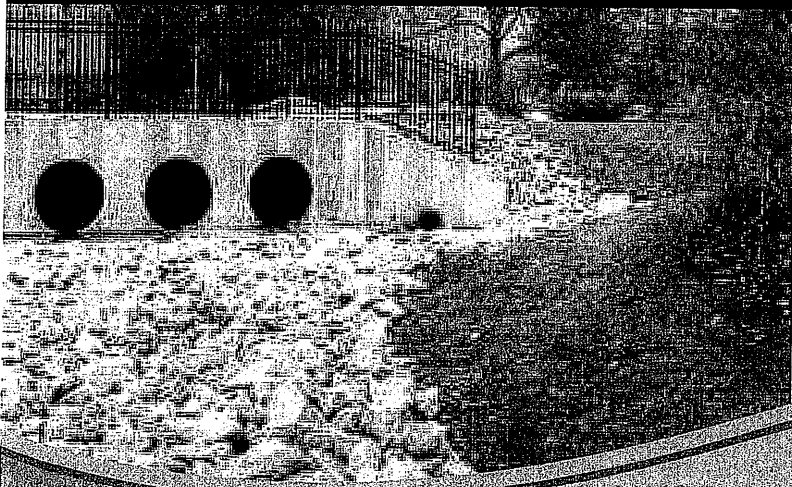
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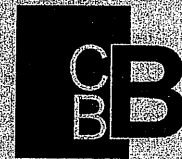


DARIEN, ILLINOIS

# WALNUT DRIVE CULVERT CROSSING & SPILLWAY RECONSTRUCTION



*This project included design and re-construction of the Sawmill Creek culvert crossing and concrete spillway at Walnut Drive that failed in severe storm events in 2008 - 2009 and resulted in the collapse of the roadway.*



## 2009 - 2010

### PROJECT TEAM

Daniel Lynch, PE  
OA/QC

Darren Olson, PE  
Project Manager

Andrew Puhndt, PE  
Project Engineer

Lisa Gasperec, PE  
Resident Engineer

Scott Griffith, PE  
Water Resources Engineer

William Schultz, EI  
Structural Engineer

### CLIENT

City of Darien  
Dan Gombac  
630.852.5000

### CONSTRUCTION COST

\$418 thousand

### FEE

\$109 thousand

### FUNDING SOURCE

Local, DuPage County

The culvert and concrete spillway system had been originally designed and built over 30 years ago prior to modern stormwater management practices. The safety issue that presented itself after the failure of the system required an expedited design and permitting process so that the roadway could be re-opened as soon as possible.

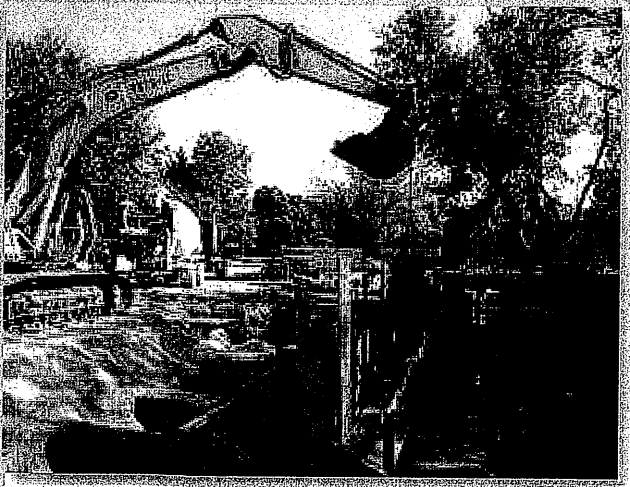
### Services included:

CBBEL has been the consulting engineer for the City of Darien since 1995. Shortly after failure of the old culverts, meetings were held with DuPage County and IDNR-OWR to lay the framework for emergency authorizations that would allow construction of the project to move forward prior to the final permit being received. The failed existing three 65"x46" Corrugated Metal Pipe (CMP) elliptical pipe culverts and concreted chute spillway were replaced with four 48" diameter Ductile Iron Pipe (DIP) culverts and a stepped reinforced concrete and riprap spillway system that met the permitting requirements for a small Class III dam. Prior to the culvert and spillway work, a 2" diameter gas pipeline and a sleeved 8" ductile iron water main had to be lowered under the roadway.

The replacement of the culverts and the spillway structure required the following permits:

- Dam Safety Permit from the IDNR-OWR
- Floodway Construction Permit from DuPage County.

The project design was completed in the Summer of 2009 and the emergency authorizations were obtained shortly thereafter. Construction occurred in the Fall of 2009.



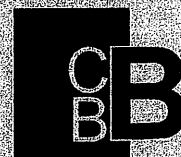
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DOWNERS GROVE, ILLINOIS

# WASHINGTON PARK STORMWATER IMPROVEMENTS



*CBBEL developed a solution that maximized stormwater storage while creating state-of-the-art recreational facilities as a focal point of the neighborhood.*



## 2008 - 2010

### PROJECT TEAM

Darren Olson, PE  
Project Manager

Nick Morel, PE  
Project Engineer

Dave Vogel, PE  
Water Resources Engineer

Doug Gotham, LIA  
Landscape Architect

### CLIENT

Village of Downers Grove  
Nan Newlon, PE  
630.434.5500

### CONSTRUCTION COST

\$3 million

### FEE

\$235 thousand

### FUNDING SOURCE

Local

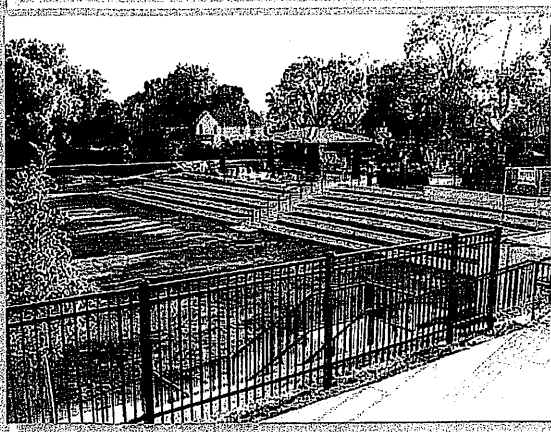
Starting in 2008, the Village and the Park District began working together through an Intergovernmental Agreement on a plan for a mutually beneficial project that would provide this section of the Village with significant flood relief while also creating a park that would be a focal point of the neighborhood. This project consisted of total reconstruction of an existing park to incorporate approximately 10 acre-ft of stormwater storage and state of the art recreational facilities. The flood storage provides a safe location to storage runoff from the northeast side of the Village during heavy rain events. The planning process for the project included creating a park that included 2 soccer fields, a softball field, terraced and bleacher seating, 2 playgrounds, a gazebo, horseshoe pit and a decorative fountain.

### Services included:

- Design coordination with the Village, Park District, and residents
- Site topographic survey and utilities
- Hydrologic/hydraulic modeling and storm sewer design
- Site design and ADA compliant grading plan
- Sanitary, water, electrical and fountain design
- Structural design for 4,000 LF of cast-in-place decorative concrete retaining walls
- Site landscaping plan
- Preparation of plans, specifications and bid documents

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**JAMES J. BENES AND ASSOCIATES, INC.**  
**CONSULTING ENGINEERS**

## **Hydraulic Reports – Waterways: Complex**

### 1420 Weber Road

Phase I study for the widening and realignment of 2 miles of a strategic regional arterial from Airport Road to 135th Street. The project includes widening from a four lane to a six lane cross section with raised median, modernization of four signalized intersections, a potential new traffic signal installation, replacement of a 6'x4' cross culvert, replacement of a major twin 10'x4' reinforced concrete box culvert crossing conveying Mink Creek, potential replacement of 2200' of a 6'x4' roadside box culvert, wetland and floodplain encroachment mitigation, and potential noise mitigation, Phase I study processed as a Group II Categorical Exclusion.

Phase I study including geometric analysis of alternate roadway alignments, preparation of a location drainage study including storm water detention evaluation and design, hydraulic reports for one typical and one major culvert crossing, crash analyses, intersection design studies at four signalized intersections, warrant analysis for potential signalization of a fifth intersection, intersection capacity analysis at a sixth intersection, wetland impact evaluations, preparation of an Environmental Survey Request and highway noise analysis. The scope includes preparation of the Project Development Report, coordination with Will County, local agencies, utility owners, and IDOT, preparation of presentations and exhibits for public meetings and a public hearing. Data collection includes wetland delineations, tree species and condition survey, and performing manual and automatic traffic counts.

Sub consultant tasks include topographic survey and preparation of plats of highway; geotechnical investigations including roadway and structural soil borings; special waste screening and preparation of a Preliminary Environmental Site Assessment; and preparation of a bridge condition report and TS&L drawings for major box culvert replacement.

## **Hydraulic Reports – Waterways: Typical**

### 1432 St. Joseph Creek at IL Rte 53 Flood Study

Due to flooding caused by the April 18, 2013 storm, a drainage study is performed to determine if the IDOT's IL Route 53 bridge replacement project that is currently under construction had an effect on adjacent flooding.

The scope of work includes performing hydraulic cross section and preparation of a hydraulic analysis and report for the IL Route 53 Bridge at St. Joseph Creek.





**JAMES J. BENES AND ASSOCIATES, INC.**  
**CONSULTING ENGINEERS**

**Special Studies - Location Drainage**

**1418 Indian Lakes Park Village of Bloomingdale**

The proposed improvements consist of a passive park located on a former golf course property purchased by the Village of Bloomingdale. Although final details for the public park have not yet been finalized, it will likely include two ponds, a sled hill, a small parking lot, and pedestrian and/or bicycle paths.

The scope of work includes reviewing the 2010 drainage study, collecting information from the Village of Bloomingdale and the Indian Lakes Resort and Country Club, refining the design of the proposed retention ponds to ensure that they fit well with the other park improvements, revise TR-20 modeling to identify the level of flood relief provided by the ponds, review the pavement design, grading, drainage and geometrics for the proposed parking lot, pedestrian trails and service paths, and prepare a preliminary cost estimate for all of the improvements. After the park concept has been approved by the Village, coordination, refinement of the grading plan to achieve an earthwork balance, and preparation of an engineer's estimate of probable construction cost.

**Environmental Studies**

**1366 Northbrook Storm Water Facility**

Completed wetland delineations, endangered specie consultations, and, tree survey for a regional detention facility and pedestrian trail relocation area.

**1363 Prentiss Creek**

Provided wetland and riparian consulting services to the Village of Downers Grove and Living Waters Consultants, Inc. for three conceptual pond and stream bank improvement plans.

**1358 Seven Bridges Retention Basin Restoration**

Prepared After-the-Fact Permit Documentation for Shoreline Restoration for the Village of Woodridge. Work included providing riparian area documentation and all of the necessary Tab 5 documentation including landscape plans; schedules; maintenance provisions; construction observation; and site monitoring.



## FIRM EXPERIENCE

Thomson Surveying, Ltd. has completed various surveying services for roadways and subdivisions in the following communities:

- Antioch
- Bartlett
- Chicago Ridge
- Elgin
- Frankfort
- Lake Zurich
- Mundelein
- Northlake
- Palos Park
- Rosemont
- Schaumburg
- Wayne
- Willowbrook
- Barrington
- Bensenville
- Downers Grove
- Elmwood Park
- Kane County
- Lockport
- Northbrook
- Orland Park
- Plainfield
- St. Charles
- Streamwood
- Will County
- Wood Dale

Additional Clients include, but are not limited to:

- Kane County Department of Transportation
- Village of Downers Grove
- Christopher B. Burke Engineering, Ltd.
- Illinois Department of Transportation
- K. Hovnanian Homes
- Meritus Homes
- PulteGroup
- St. Charles Park District
- SPACECO, Inc.
- Terra Consulting Group
- Wills Burke Kelsey & Associates
- Village of Schaumburg

The field operation uses Total Stations for accuracy and easy translation to MicroStation. We also use Leica GPS units for our control work.

Both field and office are completely computerized to provide fast and accurate survey work. Drawings will be completely in MicroStation format. Our equipment is capable of English/Metric conversion.

## PROJECT

## SERVICES PERFORMED

Bolcum Road over Ferson Creek  
Kane County, IL

The existing structure consists of a three-span bridge which has a length of 93 feet. The structure supports a two-lane pavement and has a width of 26 feet. The original plans for the bridge show the abutments are supported on timber piles and the two piers on 14-inch precast concrete piles.

Deerfield Road Reconstruction  
Deerfield, IL

The project limits for Deerfield Road extend for approximately 6,550 lf from Station 1+43 to 66+95, i.e. Waukegan Road to Windsor Road. The roadway currently consists of four (4) traffic lanes with a middle median and/or left turn lanes at intersections. It has an asphalt surface with curb and gutter and sidewalks on both sides.

Eldamain Road over Rob Roy Creek  
Kendall County, IL

The existing arch culvert carrying Eldamain Road over Rob Roy Creek will be replaced with a single-span steel I-beam bridge structure with integral fully encased steel H-pile bent wall abutments. It will have an overall length of 61'-3" back to back of abutments and a width of 61'-2" out to out. The new bridge will be widened to accommodate two (2) lanes of traffic, with a 18-foot median.

Hill Road Bridge over the North  
Branch of Nippersink Creek  
McHenry County, IL

The existing structure consists of a two-span bridge which has a length of about 70 feet. The structure supports a two-lane pavement and has a width of approximately 24 feet. The original plans for the bridge show closed concrete type abutments supported on timber piles and a pile bent pier cap type center pier supported on 14" diameter metal shell (MS) piles.

Pedestrian Tunnels for CMAQ  
Sidewalk Project  
Northlake, IL

The CMAQ Sidewalk Project will consist of the construction of new PCC sidewalks along the north and south sides of Grand Avenue in the City of Northlake. They will extend from Northwest Avenue (bordering I-294) on the west to Rhodes Avenue on the east. Union Pacific Railroad (UPRR) embankments have to be crossed near the eastern end of these limits. In this regard, a bridge structure carries the UPRR tracks over Grand Avenue, being elevated about 18 feet above the roadway.

Phase II Design of Route 34  
Reconstruction and Widening  
Kendall County, Illinois

Project consists of the reconstruction of approximately three miles of U.S. Rt 34 from Illinois Route 47 to Orchard Road. The existing 2 lane road will be widened to 5 lanes. The westernmost approximate 2 miles will utilize a buried stormwater infiltration system to handle all runoff.

Peace Road Widening, from Illinois  
Route 38 to Pleasant Street  
DeKalb, IL

Widening of roadway from 2 to 4 lanes. Work included geotechnical exploration and lab testing, and a slope stability analysis at railroad overpass embankment.

Pioneer Parkway extended from  
Allen Road to Trigger Road  
Peoria, IL

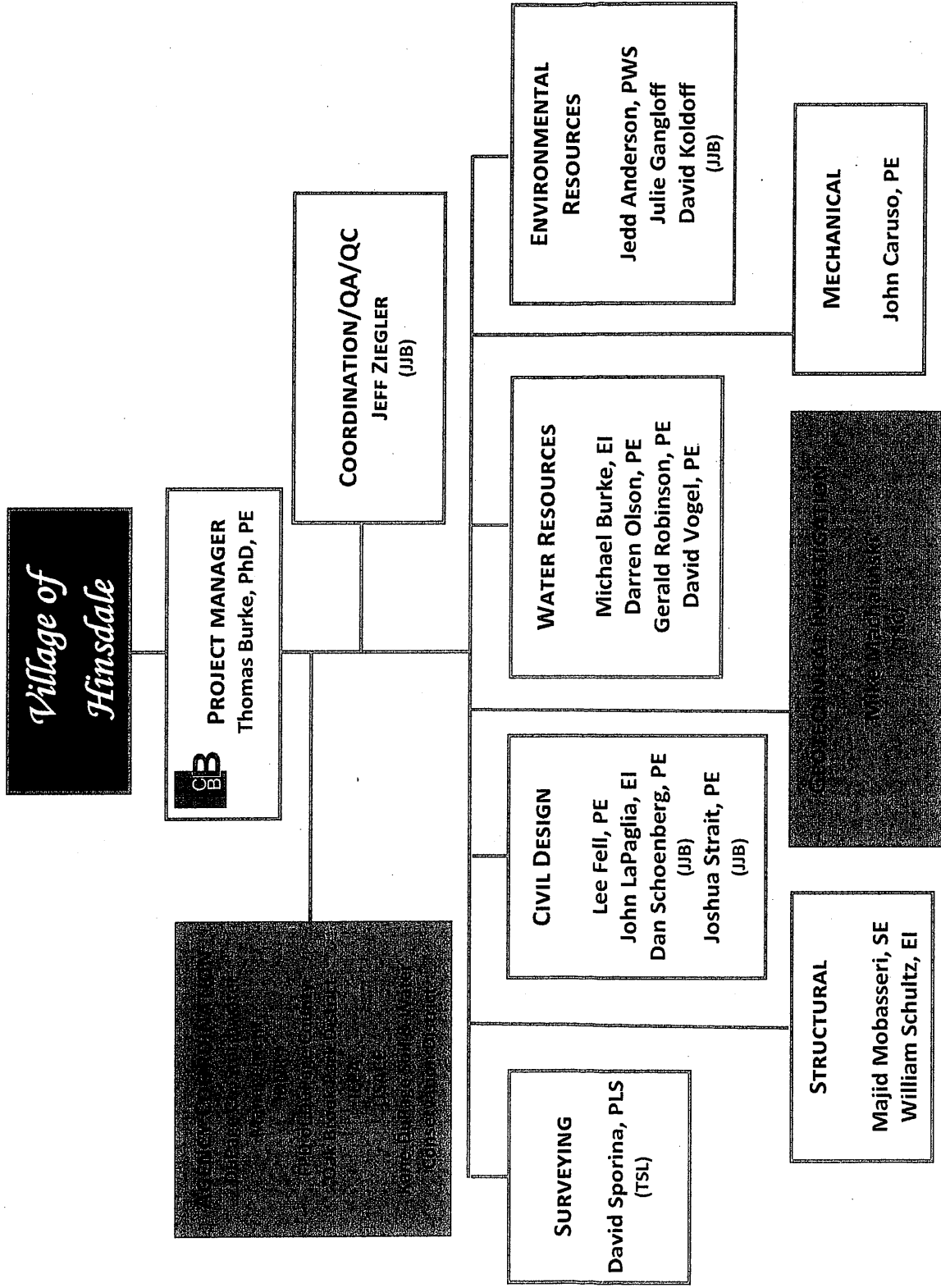
The extension will require a new bridge over the UP railroad tracks. This bridge will be a four-span structure with a total length of approximately 785 feet. The bridge width will be approximately 111 feet. Construction will consist of steel girders bearing on cast-in-place concrete piers and abutments. Construction of approach embankments with heights ranging from approximately 42 feet on the west side and 27 feet on the east side will be required.

Intersection Improvement, Traffic  
Signals, IL-47 & Cross Street  
Sugar Grove, IL

Four (4) new traffic signals are to be added to the intersection of Illinois Route 47 and Cross Street. They will be added to each of the corners of the intersection. Improvements also include widening the intersection for three (3) new right-hand turn lanes. They will be added to the north and south bound lanes of IL Route 47 as well as the west bound lane of Cross Street.

## **Tab 3**

# Graue Mill Flood Protection Improvements



## PROJECT TEAM

We are proposing a project team with a strong background in Stormwater Management, Civil Design, Pump Design, Surveying, Structural and Environmental Resources. We are IDOT pre-qualified in hydraulic reports-waterways-complex as shown in Tab 1. As stated below, our team exceeds the minimum requirements of one civil or environmental engineer that must be an Illinois Licensed Professional Engineer, at least one Environmental Scientist or Biologist and Surveyor must be an Illinois Licensed Professional Land Surveyor. The lead members of our proposed project team, who will be responsible for all aspects of this project, include the following:



**Thomas Burke, PhD, PE, D.WRE, CFM, CPESC** will be the project manager for all project assignments. Thomas is Vice President and Head of the Water Resources Department with 17 years of experience. Thomas has an excellent working relationship with the Graue Mill Homeowners Association and is familiar with Village policies and procedures. In addition, he has intimate knowledge of the DuPage County Countywide Ordinance, having worked on the newly revised Ordinance, and the Salt Creek Watershed Plan. Thomas has experience in water resource engineering projects, design, and reviews, including land use characterization, watershed and floodplain/floodway delineation, steady and unsteady river hydraulic analysis, stormwater management, feasibility studies, and development of countywide ordinances. Thomas has been involved with all the stormwater studies for the HOA including the FEMA and IDNR-OWR grant applications and working with the County.

**Lee Fell, PE, CPESC** will be the Lead Project Engineer. Lee is a Senior Project Manager with 19 years of experience. Lee has prepared numerous engineering plans from simple drainage projects to larger complex flood control projects throughout the Chicagoland area. His work includes overseeing the design of the plans, specifications and estimating, as well as permitting, bidding and coordination with private utility companies. Lee has been involved with the Graue Mill HOA projects the past 6 months.



**John LaPaglia, EI** is Civil Engineer in the Civil Engineering Design Department assisting Project Engineers on various design projects, including storm water management systems, roadway construction, utility replacement and rehabilitation, water mains, and sanitary sewer systems. John is familiar with IDOT Standards and Specifications. His responsibilities include preparation of construction plans and specifications, construction cost estimates, and bid tabulations. John's software Experience includes Microsoft Office Programs (Word, Excel, and PowerPoint), AutoCAD and MicroStation

**Michael Burke, EI, CFM** will assist with water resources engineering and permitting related to the project. Michael is a water resources engineer with 3 years of experience. He has modeled various flood reduction projects in Bartlett, Lombard, and Elmhurst. Michael has performed steady and unsteady river analyses, watershed and floodplain delineation, and flood improvement design using XPSWMM modeling.



## PROJECT TEAM



**Darren Olson, PE, D.WRE, CFM, CPESC** will be the lead engineer for these projects. Darren is responsible for water resources engineering project analysis and design, watershed studies, steady and unsteady river hydraulic analyses, stormwater management studies, permitting, and flood control project feasibility. Darren has supervised several successful FEMA HMGP grants including a recent \$3.8 million award to the Village of Bartlett. He has also performed necessary coordination with FEMA and the Illinois Emergency Management Agency (IEMA). Darren has completed flood reduction projects in Bartlett, Buffalo Grove, and Downers Grove among several others.

**Gerald Robinson, PE** is a Senior Project Manager with 28 years of experience. Jerry is responsible for civil and water resources engineering project analysis and design, and stormwater permit review coordination. He has completed a watershed plan for Kress Creek in West Chicago and is working on completing the FEQ modeling and floodplain mapping for Lower Salt Creek. He is responsible for supervising review of complex engineering projects for both DuPage County and the DuPage County Division of Transportation for compliance with the DuPage County Countywide Stormwater and Floodplain Ordinance. He prepared the FEQ unsteady flow hydraulic modeling to compare 3 different modifications of the Busse Woods Dam in Cook County.



**David Vogel, PE, CFM** will lead the stormwater management work. Dave is a Water Resources Engineer with 9 years of experience. At the request of the Graue Mill Homeowners Association, Dave built the XP-SWMM model of their subdivision and provided recommendations for improvements. Dave also prepared the FEMA Hazard Mitigation Grant Program (HMGP) application for Graue Mill which was awarded in February 2014. He has extensive modeling experience and has worked on flood reduction projects in Bartlett, Hinsdale, and Clarendon Hills.

**Jedd Anderson, PWS, CPESC** will coordinate, assist and provide QA/QC in regards to potential environmental affects, focusing on wetlands, buffers and permitting. Jedd is Vice President and Head of the Environmental Resources Department with 25 years of experience. He has personally been involved in over 5,000 Environmental Resource projects. His department has obtained more than 1,000 USACE Section 404 permits. Jedd has over 25 years of practice in assisting in review of design, permitting and monitoring projects and their impact on wetland and natural areas. Jedd was a principal author of the latest version of DuPage County Countywide Stormwater and Flood Plain Ordinance, being personally responsible for preparation of the wetland, buffer, best management practice, and soil erosion and sediment control sections of the document and completing a QA/QC review of the overall document. This in-depth knowledge of the current Ordinance is a valuable asset to the permitting of the Graue Mill project.



## PROJECT TEAM



**Julie Gangloff, CWS** is a Biologist with 17 years of experience practicing environmental resources in northern Illinois and Indiana. Julie is responsible for the completion of wetland delineations, Section 404 (Clean Water Act) permit applications, DuPage County permit applications in compliance with the DuPage County Countywide Stormwater and Floodplain Ordinance and mitigation activities. She assists with the coordination and implementation of US Army Corps of Engineers (USACE) permit conditions and obligations. In addition, her tasks include the monitoring and analysis of vegetation and hydrology conditions at wetland mitigation sites; conducting habitat quality assessments; and writing technical reports. Julie coordinates with the US Fish and Wildlife Service, the Illinois Department of Natural Resources (IDNR) for state-listed threatened and endangered species, Illinois Historic Preservation Agency for cultural resources and the Illinois Environmental Protection Agency (IEPA) under Section 401 of the Clean Water Act (CWA). Her tasks also include coordination with IDNR under the Interagency Wetland Policy Act of 1989.

**Majid Mobasseri, PhD, PE, SE** is Head of the Structural Engineering Department responsible for the study, design, and generation of construction contract documents for structural systems employed in buildings, industrial facilities and bridges serving rail and highway traffic. Experience includes planning and concept design, bridge type/size/location studies, structural inspections, structural ratings, rehabilitation and renovation studies, final designs and the production of plans, specifications and estimates, and construction inspection.



**William Schultz, EI** is a Civil Engineer responsible for structural design and preparation of contract plans, specifications and cost estimates. Bill is involved in the design of new bridges, retaining wall structures, and various storm water control structures, including culverts and junction chambers. His responsibilities also include bridge inspections for several municipalities, construction observation services, and inspection of buildings and parking garages. IDOT Approved Team Leader, Bridge Inspection.

**John Caruso, PE** is the Head of CBBEL's Mechanical/Electrical Department. Pump station projects, potable water storage and treatment projects, electrical standby power projects, HVAC, water transmission mains, hydraulic modeling as well as sanitary sewer and wastewater treatment/pumping, and lighting projects are performed by the Mechanical/Electrical Department at CBBEL. John's background is concentrated in design and construction observation for potable water supply facilities/wastewater and storm water pumping stations/electrical systems, water distribution systems modeling and roadway lighting. His experience encompasses a range of engineering disciplines including civil, mechanical, electrical and SCADA. His field experience together with his design experience provides John with the ability to execute complete project designs. John has performed as Design Engineer and Resident Engineer for a variety of pumping projects including: Potable Water Pump Stations, Stormwater Pump Stations, and Sewage Lift Stations for municipalities such as Lombard, Elmwood Park, Wheaton, Darien, Willowbrook and others.





## ***PROJECT TEAM***

### **James J. Benes & Associates, Inc.**

**Jeffery C. Ziegler** is a principal and Vice President of James J. Benes & Associates, with 28 years' experience in engineering planning and design, plan review and construction inspection. He is responsible for the management, direction and quality control for roadway, sanitary sewer, water main, street lighting and drainage projects, as well as street sufficiency studies and capital improvement programs. He is a member of the American Public Works Association. He is Project Manager responsible for engineering reviews and stormwater reviews for single family, commercial and private developments in the Village of Hinsdale; and is the principal responsible for all engineering services related the firm's role as consulting municipal engineer for the Village of Western Springs.

**Daniel H. Schoenberg, PE** is a senior project engineer with 41 years of experience in engineering design, plan review and construction inspection. His assignments have included roadway, traffic signal, water main and drainage projects and stormwater management reviews for residential, commercial and industrial developments.

**Joshua D. Strait, PE** is a project engineer with twelve years' experience in engineering design, plan review and construction inspection. His assignments have included roadway, water main and drainage projects.

**David A. Koldoff, CPESC** has a strong background in land-use planning and environmental consulting and has completed several hundred projects in DuPage County involving site development and stormwater permitting. With approximately 20 years of experience, he has successfully completed projects in each DuPage County municipality, including approximately 50 projects in Downers Grove. David has managed stormwater-related projects on behalf of DuPage County DOT and DEC, and the Forest Preserve District. Most projects have involved impact analysis and project permitting for natural resources (including wetlands), and have involved state and federal agencies (IDNR, IEPA, IDOT, IHPA, NRCS, SWCD, and ACOE). David has extensive expertise in Best Management Practice (BMP) design and streambank stabilization. He is an ISA-Certified Arborist, a Certified Wetland Specialist, and a Certified Professional in Erosion and Sediment Control (CPESC).

### **Thomson Surveying, Ltd.**

**David M. Sporina, PLS** is a land surveyor with 27 years of experience. He is responsible for the day to day operations of the company which includes QA/QC, preparing and maintaining project budgets as well as overall company budget.

### **Testing Service Corporation**

**Michael V. Machalinski, PE** has 38 years of experience. He is responsible for directing soil and groundwater investigations and associates engineering analysis. Typical projects include residential developments, infrastructure improvements, and roadways.



**YEARS EXPERIENCE:** 23  
**YEARS WITH CBBEL:** 18

#### **EDUCATION**

Doctor of Philosophy, 1996  
Civil Engineering  
Purdue University

Master of Science, 1992  
Civil Engineering  
Purdue University

Bachelor of Science, 1991  
Civil Engineering  
Northwestern University

#### **PROFESSIONAL REGISTRATION**

Professional Engineer, IL, 062052048, 1998  
Professional Engineer, IA, 17060, 2004  
Professional Engineer, IN, 10708209, 2007

#### **CERTIFICATIONS**

Certified Floodplain Manager  
IAFSM

Certified Professional in Erosion and  
Sediment Control (CPESC)

Diplomate Water Resources Engineer  
(D.WRE)

Kane County-Engineer Review Specialist

#### **PROFESSIONAL DEVELOPMENT**

##### **SEMINARS TAUGHT**

HEC-HMS. Instructor for National ASCE  
teaching the course throughout the United  
States, 2003-Present

Introduction to Hydrology and Hydraulics.  
Teach one to two times a semester to  
students at Purdue University enrolled in  
CE290, 2004-present.

Naturalizing Detention Basins Using BMP's.  
Presentation for the Conservation  
Foundation and DuPage County DEC at the  
Stormwater BMP's for Communities  
workshop, March 18, 2004.

Selected to attend a Legislative Fly-In Session  
sponsored by ASCE in Washington, DC,  
March 9 & 10, 2004, to train & meet with  
members of the Congress & Senate  
regarding legislation affecting Civil  
Engineering.

Stormwater Drainage Computer Workshops:  
TR-20, TR-55, HY-8 and Stormwater Drainage  
Disk; seven one-day courses taught in  
Columbus, Evansville, Muncie and South  
Bend, IN, August, 1996.

TR-55 Workshop, Purdue University -  
Calumet Campus, Sponsored by Lake County  
Surveyors and HERPICC, August 4, 1993.

WSPRO (HY-7) Workshop, Future Now -  
Computer Store, Sponsored by Indiana  
Association of County Engineers and  
HERPICC, June 18, 1993.

Professional Engineer experienced in civil and water resources engineering. Responsible for water resources engineering project, design, and reviews, including land use characterization, watershed and floodplain/floodway delineation, steady and unsteady river hydraulics analysis, stormwater management, feasibility studies, and development of countywide ordinances. Head of Water Resources Department, responsible for 24 water resources engineers performing technical analysis and design. Projects include developing hydrologic and hydraulic models, establishing floodplain and floodway limits, evaluating proposed modifications, stormwater management design for commercial, industrial, and residential development, obtaining permits through municipal, county, state and federal agencies and Letters of Map Change. Served as an expert witness for cases involving stormwater management in Illinois and Indiana. Stormwater consultant for the Lake County Surveyor's Office and Lake County Drainage Board in Indiana. Oversee the stormwater reviews for several communities in the Chicagoland area and northwest Indiana.

#### **WATERSHED PLANNING STUDIES**

**Upper Salt Creek FEQ Study, DuPage County:** Performed hydraulic analysis using FEQ unsteady-state model for a comparison study with HEC-2 steady-state model.

**Flagg Creek Watershed Plan, DuPage County:** Performed hydraulic analysis using FEQ unsteady-state model, economic analysis of damages from historical events and assisted in the preparation of a watershed plan.

**Addison Creek Watershed Plan, DuPage County:** Performed hydraulic analysis using HEC-2 steady state model, economic analysis of damages from design storm event and preparing a watershed plan which allows the Village of Bensenville to plan and obtain funding for regional stormwater projects.

**Upper Des Plaines River Tributaries, DuPage County:** Completed a Watershed Study for Willow-Higgins Creek and Bensenville Ditch as they relate to the City of Chicago O'Hare International Airport Modernization Program. The plan allows for the future development to meet the intent of the DuPage County Stormwater and Flood Plain Ordinance by reducing peak discharges leaving the airport property and identifies known flooding problems in the watershed.

**Downers Grove Downtown Redevelopment Watershed Plan, DuPage County:** Completed a special watershed study of St. Joseph's Creek to allow downtown Downers Grove to develop without having to provide detention on each site and meeting the intent of the Ordinance by improving the watershed. The plan also provides the supporting calculations and documentation for the fee-in-lieu of detention value.

#### **SPECIAL STUDIES**

**Winnetka Flood Risk Reduction Study:** Performed a flood risk reduction analysis based on the flooding from the September 2008 event. The purpose of the study was to evaluate the existing storm sewer systems for the 2-, 5-, and 10-year design events, establish causes for the flooding and provide improvement plans to reduce the risk of future flooding. There were five study areas identified within the Village through a series of public meetings and flood damage questionnaires. Causes of flooding were identified and conceptual improvement plans, along with estimated costs, were prepared. The study was then expanded to cover three additional areas and include evaluation of protection up to the 100-year design storm event following significant flooding in July 2010.

**Elmhurst Comprehensive Flood Plan:** Completed an overall study of 10 areas that significantly flooded during the July 2010 storm event. After analyzing the existing conditions, proposed solutions were provided to reduce the risk of future flooding. Hydrologic and hydraulic modeling were used in the evaluation of alternatives. Cost estimates were determined for each solution. We also reviewed the current stormwater practices and made recommended improvements. Several presentations were made to the City and many meetings with a citizen task force were held.

**Economic Impact Study, Metropolitan Water Reclamation District of Greater Chicago:** Managed an engineering analysis and report, in support of the Economic Impact Study, to evaluate the site impacts and corresponding stormwater infrastructure costs associated with implementing the Draft Watershed Management Ordinance. The report was provided to an economic consultant to assist in the preparation of the Economic Impact Study conducted by the Metropolitan Water Reclamation District of Greater Chicago.

**Orland Park Flood Risk Reduction Assessment:** As the result of significant flooding in the Village of Orland Park from a severe rainstorm on July 27, 2003, CBBEL performed a flood risk reduction analysis. The primary goal at the study was to determine the extent and cause of flood damage throughout the Village. There were 21 study areas identified within the Village and conceptual



Stormwater Drainage Conference, Purdue University, West Lafayette, IN, March, 1992 to Present.

Teaching Assistant for seven different upper-level undergraduate and graduate courses at Purdue University, 1992 to 1996.

Assisted Christopher Burke in teaching graduate level course, CME 427-Engineering Hydrology, at University of Illinois at Chicago, Fall 2001 to Present.

Assisted Christopher Burke in teaching undergraduate level course, CME 215-Hydraulics and Hydrology, at University of Illinois at Chicago, Fall 2002 to Present.

#### PUBLICATIONS

*Assigning Weights to Precipitation Stations*, Water Resources Engineering, Volume 1, pages 810-814, 1995 by ASCE (TT Burke and AR Rao).

*Manual for HERPICC Stormwater Drainage Disk*, Highway Extension Research Projects for Indiana Counties and Cities, School of Civil Engineering, Purdue University, page 54, July 1995 (TT Burke, D Bhattacharya and AR Rao).

*Short Time Increment Characteristics of Indiana Rainfall*, 1995 Annual Meeting, March 24, 1995 by ASCE Central Branch (AR Rao, TT Burke and DJ Schuller).

*Simulation in Hydraulics and Hydrology*, Chapter 36, The Civil Engineering Handbook, pages 1139-1156, 2003 by CRC Press (AR Rao, CB Burke and TT Burke).

*Spatial and Temporal Characteristics of Palmer's Drought Severity Index*, ASCE North American Water and Environment Congress, June 1996 (TT Burke and AR Rao).

*Stormwater Drainage Manual*, Purdue Research Foundation, West Lafayette, IN, Revised February 2008 (CB Burke and TT Burke).

*Syntheses Study on the Use of Concrete Recycled from Pavements and Building Rubble in the Indiana Highway System*, Technical Report, FHWA/IN/JHRP-92/15, page 117, 1992 (TT Burke, MD Cohen, CF Scholar).

*Urban Drainage*, Chapter 31, The Civil Engineering Handbook, pages 1034-1049, 2003 by CRC Press (AR Rao, CB Burke and TT Burke).

estimates of construction costs were prepared for possible solutions. A flood damage questionnaire was distributed throughout the Village and multiple neighborhood meetings were held.

**Orland Park Stormwater Management Plan:** Utilizing the analysis prepared in the Orland Park Flood Risk Reduction Assessment, CBBEL prepared a stormwater management plan for the Village which addressed implementing specific drainage improvements in 16 of the 21 study areas. The plan varied from construction of new storm sewers to increasing storage capacity to modifying overland flow routes.

**Wood Dale – Itasca Spillway:** Design and analysis of a spillway diverting large flows into a reservoir. Performed wave run-up calculations for permitting and hydraulic analysis using FEQ unsteady-state model to analyze the economic benefit of many scenarios. Project includes the optimization of four gate setting for diverting flow from Salt Creek into a large pump-evacuated reservoir. Used economic data to determine project benefits for State funding.

**Lincoln Park Zoo, Chicago:** Part of a consulting team renovating the South Pond area that will inspire lifelong environmental stewardship for Chicago area students, families, and community members. We worked on the design to enhance the pond by improving the water quality by replacing surrounding asphalt paths with native vegetated edges, introduce interactive elements along the pond, add a boardwalk through the pond, restore and protect the island in the pond and improve the surrounding landscape.

**Morton Arboretum Main Parking Lot Design, Lisle:** CBBEL worked with The Morton Arboretum to incorporate Best Management Practices (BMPs) into the design of their 6-acre Main Parking Lot. The Main Parking Lot is located in the floodplain of the East Branch of the DuPage River, and stormwater runoff from the parking lot will drain to Meadow Lake. The design of the Main Parking Lot includes the following BMPs: Wetland Sedimentation Basin, Porous Pavement, Depressed Medians, and Subsurface Stormwater Storage. Following the completion of the project a study comparing the results of runoff volume from the Main Parking Lot with the runoff volume from the staff parking lot (typical impervious coverage) was performed to demonstrate the reduction of runoff using BMPs.

#### ORDINANCE DEVELOPMENT

**DuPage County Stormwater Ordinance (2012):** Worked on complete overhaul of the County Stormwater Ordinance to reflect the current and future development conditions in DuPage County. The revised ordinance was developed with input from the Steering Committee made up of municipal engineers and County staff.

**Kane County Stormwater Ordinance (2001):** Worked for the Kane County Department of Environmental Management to produce an ordinance that reflects the Kane County Stormwater Master Plan and the appropriate stormwater criteria for the County. Assisted in the writing, research and presentations of the Ordinance.

**Kane County Technical Manual (2001):** Responsible for the development of a manual that is used as a supplement to the new Ordinance. The manual includes example calculations and standard forms that will be used in every stormwater submittal and example plans to assist the design engineer in preparing a submittal.

#### State of Indiana:

Town of Dyer Stormwater Management Ordinance (2012)

Town of Dyer Stormwater Quality Management Plan (2012)

Lake County, Indiana Stormwater Management and Clean Water Regulations Ordinance (2006)



**YEARS EXPERIENCE:** 19  
**YEARS WITH CBBEL:** 19

**EDUCATION**

Bachelor of Science, 1994  
Civil Engineering  
Purdue University

**PROFESSIONAL REGISTRATION**

Professional Engineer, IL, 062053708, 2000

**CERTIFICATIONS**

Certified Professional in Erosion and  
Sediment Control (CPESC)

**PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers  
*IS-UP&DG: Chair (2001-2002), Vice Chair  
(2000-2001), Treasurer (1999-2000),  
Secretary (1998-1999)*

International Erosion Control Association  
*Great Lakes Chapter, Member (#56590)*

Senior Project Manager responsible for assisting project managers and project engineers with the development of various design projects, including stormwater management systems, review of plans for compliance with local and state regulations, and roadway construction. Experienced in roadway and utility design including Phase I and Phase II design. Serve as main point-of-contact with clients/municipalities, contractors, architects, consultants and subcontractors while overseeing a team of civil engineers for projects ranging from \$100K to \$25 million. Act as Senior Project Manager, monitoring internal design and construction budgets and project deadlines. Also act as main resource for all project questions from inception to completion, attending Village Board Meetings, Public Hearings and Town Hall Meetings. Provide guidance to municipalities regarding State and Federal funding opportunities and strategic direction for yearly budgets and capital programs.

**Lead contact for the following municipalities:**

- Algonquin
- Clarendon Hills
- Darien
- Harwood Heights
- Hawthorn Woods
- Oak Lawn

**Palos Hills Sanitary Sewer Lining, Palos Hills:** Project Manager for the Palos Hills Sanitary Sewer Lining project. The project included providing professional engineering services relating to the City of Palos Hills Sanitary Sewer Lining Projects for compliance with the IEPA Violation the City received on October 1, 2007. The project included the design, permitting and construction observation of the sanitary sewer lining project and included addressing sewer deficiencies for approximately 15,000 lineal feet of 8" and 10" sanitary sewer due to infiltration. To be in compliance with the Metropolitan Water Reclamation District (MWRD), the City and CBBEL coordinated plans to reduce infiltration and eliminate illegal sump pump connections. These sanitary sewers were cleaned and televised in preparation for installation of cured-in-place pipe (CIPP). CBBEL prepared all specifications and contract documents for the televising and installation of the cured-in-placing lining of the designated sewers; prepared an Engineer's Opinion of Probable Cost; permitted the project through MWRD; attended project coordination meetings; and handled bidding for the project.

**Lincoln Park Zoo, Chicago:** Worked as the Project Manager on a consulting team to renovate the South Pond that will inspire lifelong environmental stewardship for Chicago area students, families, and community members. CBBEL and several consultants worked on the design to enhance the pond by improving the water quality by replacing surrounding asphalt paths with native vegetated edges, introduce interactive elements along the pond, add a boardwalk through the pond, restore and protect the island in the pond and improve the surrounding landscape. CBBEL was in charge of the civil, MEP, water quality and at-grade structural portions of the project.

**Village Engineer, Hawthorn Woods:** The Village of Hawthorn Woods is a rapidly growing community of approximately 5,000 in Lake County. Its location along major thoroughfares such as Gilmer, Old McHenry, and Rand Roads makes it an attractive location for extensive development from a residential, commercial and industrial perspective. In 2003, the Village hired CBBEL to assist them in managing this growth and development and the significant engineering challenges that accompany it. CBBEL oversees all municipal engineering responsibilities, and Lee serves as Village Engineer for the Village. He regularly works with the Village in a variety of capacities, including administration and design of municipal programs and projects, coordination of development reviews and construction inspections, and regular attendance at Village Board meetings, Water and Infrastructure Meetings, and bi-weekly staff meetings.

**Aquatic Center, Hawthorn Woods:** Project Manager for design of the Aquatic Center located along Midlothian Road. Engineering services included: design of the civil plans outside the deck area which includes storm, water and sanitary sewers, grading plans and erosion control plan; submittal of SMC Permit for the site development, an IDOT Permit for the entrance driveway on Midlothian Road, Army Corps of Engineers Permits, a Stormwater Pollution Prevention Plan (SWPPP), a permit from AQUA and IEPA for the watermain, and sanitary sewer and temporary hauling permits.

**Lawrence Avenue Streetscape, Harwood Heights:** Project Manager for Phase II Engineering for streetscape improvements to Lawrence Avenue between Olcott Avenue and Harlem Avenue, a distance of approximately 2000 feet as well as drainage, water main and utility improvements. This project included preparation of Plans, Specifications and Engineer Estimates for inclusion on an IDOT construction letting in accordance with Federal Illinois Transportation Enhancement Program (ITEP) Project Development Procedures. Major components of the streetscape improvements included: intermittent widening of Lawrence Avenue within the existing right-of-way to improve existing parking and provide new parallel on-street parking spaces in designated areas, along with a public parking lot on the south side of Lawrence Avenue. The improvements



also included new CTA Bus Stops, trees, planters, trash receptacles, bicycle racks, furnishings, decorative street lighting, new sidewalks, intersection lighting and higher visibility crosswalks consisting of brick pavers. This project is partially funded by the ITEP. The streetscape plan was developed based on the Streetscape Concept Layout developed by Vandewalle & Associates. The project required coordination with the Village, utilities and the CTA.

**Laraway Road Metra Station, New Lenox:** Project Engineer for the Phase I design and partial development of a new transit-oriented development. Designed various entities of the project including: the Access Road from Laraway Road to the commuter lot with 300 stalls, a 465 foot platform, and a detention pond for the Phase I improvements. Responsibilities consisted of preparing 30%, 60%, 90% and final plans, specifications and estimates and attending numerous Village board meetings. Responsible for receiving Village permits and IEPA permits for water and sewer. Plans included paving, grading, structural, architectural, lighting, and landscaping plans, as well as the installation of storm sewers, municipal watermain, and municipal sanitary sewers, and utility coordination.

**Depke Center, Lake County Department of Transportation:** Project Engineer. The project involved the realignment of the Depke Center's entrance roadway to IL Route 21 and the expansion of their parking lot. The Depke Center Courthouse and Juvenile Detention Center's entrance drive was offset from Woodbine Road across IL Route 21. To improve intersection operations, safety and set up the intersection for a future traffic signal, the entrance drive was realigned with Woodbine and a left turn lane was constructed on IL Route 21 as part of a new development across the street. Due to lack of parking during court proceedings, the at-grade parking lot was reconstructed and expanded and coordinated with future building expansion plans. The new parking lot included lighting, landscaping and on-site detention in accordance with the Lake County Development Ordinance and the Stormwater Ordinance. During preliminary engineering, several alternate concept plans were designed and presented to LCDOT, Depke Center officials, and Lake County Building and Zoning. Upon approval of a concept alternate, CBBEL proceeded with permitting and final design. Permits were required from IDOT, Lake County Stormwater Management Commission, and Lake County Building and Zoning. Additional coordination was required with the Village of Vernon Hills and adjacent developments.

**Waukegan Tannery Substation Construction, ComEd Energy Delivery, Waukegan:** Project Manager for the Commonwealth Edison (ComEd) ±38-acre Waukegan Tannery 345kV new substation and the ±16-acre 138kV substation expansion study areas in Waukegan, Lake County, Illinois. The project entailed stormwater, floodplain, wetland permitting, and preparation of engineering plans, specifications, and engineer's estimate for the project. Coordination was required between Sargent & Lundy for the transmission lines and URS for remediation of the site.

**ComEd TSS117 Prospect Heights Substation Expansion, ComEd Energy Delivery, Wheeling:** Project Manager for the Commonwealth Edison (ComEd) TSS117 Prospect Heights Substation expansion in Wheeling, Cook County, Illinois. The project entailed stormwater, floodplain, wetland permitting, and preparation of engineering plans, specifications, and engineer's estimate for the project. Coordination was required between Sargent & Lundy for the transmission lines.

**Transmission Line & TDC 480 Substation, ComEd Energy Delivery:** Project Manager for the Commonwealth Edison (ComEd) ±4.5 mile transmission line and the TDC 480 Substation in Cook and Will Counties, Illinois. The project entailed stormwater, floodplain, wetland permitting, and preparation of engineering plans, specifications, and engineer's estimate for the project. Coordination was required between Sargent & Lundy for the transmission lines.



**YEARS EXPERIENCE:** 1  
**YEARS WITH CBBEL:** 1

**EDUCATION**

Bachelor of Science, 2012  
Civil Engineering  
Purdue University

**PROFESSIONAL REGISTRATION**

Engineer Intern, IL, 061-037438, 2013

Civil Engineer in the Civil Engineering Design Department assisting Project Engineers on various design projects, including storm water management systems, roadway construction, utility replacement and rehabilitation, water mains, and sanitary sewer systems. Familiar with IDOT Standards and Specifications, John's responsibilities include preparation of construction plans and specifications, construction cost estimates, and bid tabulations.

Software Experience: Microsoft Office Programs (Word, Excel, and PowerPoint), AutoCAD and MicroStation

**The Highlands, Phase II, Algonquin:** Engineer Intern/Civil Engineer responsible for preparation of plans, specifications, and cost estimate for roadway and drainage improvements for The Highlands Subdivision. The project consisted of complete removal of the existing pavement section, the excavation of 6" of sub-grade material, and the construction of a pavement section consisting of 12" of aggregate base course, 3" HMA binder course, and 1.5" HMA surface course. All curb and gutter was replaced, as well as any sidewalk adjacent to curb and gutter, and spot repairs of sidewalk and driveway aprons due to curb and gutter or sidewalk replacement.

**ComEd Substations:** Engineer Intern and Civil Engineer responsible for plan preparation and cost estimate completion on various ComEd Substations in several areas around Illinois. Projects included the Waukegan Tannery, the SVC TSS117 Substation in Prospect Heights, the TDC 480 Transmission Line and Substation in Lockport, and the TSS103 Substation Expansion in Lisle.

**Abbott Laboratories:** Worked on two projects for Abbott Laboratories as both an Engineer Intern and Civil Engineer. Completed cost estimate for the K-Complex Flood Proof Study, which included removing all the existing Hot-Mix Asphalt and replacing it with 2 ½" of Hot-Mix Asphalt Binder Course and 1 ½" of Hot-Mix Asphalt Surface Course, as well as proof rolling the existing subgrade. Prepared plans and cost estimate for the K2 Storm Sewer and Roof Drainage Improvements project, which involved replacing the existing storm sewer system, and replacing a timber retaining wall.

**Fieldcrest Farms Sections 1 and 2, Phase I, Algonquin:** Civil Engineer responsible for preparing a Project Development Report for the Fieldcrest Farms Subdivision in Algonquin, which also included plan and cost estimate preparation, and various field measurements. The project scope involved resurfacing the proposed 1.97 miles of roadways with 2" of surface course and 3 ½" of binder course, as well as spot repairing approximately 40% of the curb and gutter, sidewalk repairs, spot sewer repair, and restoration.

**Rosemont Park District Brick Pavers:** Civil Engineer. The Rosemont Park District hired CBBEL to remove and replace the existing brick pavers at Margaret Lange Park due to old age and a recent water main break. Prepared cost estimate and spec book.

**2012 Street Program, Westchester:** Engineer Intern responsible for reviewing sewer tapes, and preparing plans and a cost estimate. The Village of Westchester completed a street program in 2012 that involved complete resurfacing of five streets, including new curb and gutter: Westminster Drive, Carlisle Street, Bedford Street, Downing Street, and Evers Avenue.

**2012 Water Main and Street Resurfacing, Oak Lawn:** Engineer Intern. The project included street and water main improvements to 39 streets for over 5 miles of roadway and 2 miles of water main in the Village. The improvements include hot-mix asphalt grinding, resurfacing, patching of curb and gutter, water main replacement, fire hydrant, water services, structure replacements and restoration. The scope included preparing the engineering plans, specification and estimate, receiving IEPA and CCHD Permits, and providing construction observation.

**Elgin-O'Hare West Bypass Tier Two, IDOT, Cook and DuPage Counties:** Engineer Intern assisted in preparing both existing and proposed drainage plans. This included full design and implementation of storm sewer conveyance systems and drainage features within proposed drainage plans and storm water detention calculations.

**Northside Park, Wheaton Park District:** Engineer Intern for the Wheaton Park District project to restore the park and lagoon to benefit park patrons, while providing the necessary flood mitigation benefit necessary to allow the North Main Street culvert to be permitted for the Wheaton Park District. The project included preparation of plans and specifications for the shoreline restoration, docks, weir replacement, Bridge No. 4 replacement, east shoreline reclamation and flood control compensatory storage; Thompson and Wheaton Oaks property storm water improvements; and sanitary sewer force main and storm sewer outfall relocation.

**Taft Street Drainage, Merrillville:** Engineer Intern, responsibilities included preparation of plans, specifications, and estimates, bidding assistance, and pre-construction tasks. The project included performing professional engineering services for design, permitting and construction



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observation services for drainage improvements along Taft Street between US 30 and approximately 2,500 feet north of 73rd Avenue in the Town of Merrillville. The project was in response to significant flooding experienced by residential structures west of Taft Street between US 30 and 73rd Avenue during the September 2008 storm event.

**Flood Improvements, Crystal Lake:** Engineer Intern. The City of Crystal Lake experienced some of the heaviest rain fall totals in its history in the summer of 2007. As a result of these heavy rain totals, several areas throughout the City experienced flooding so a flood study was completed in 2009. Area 1B and the North Shore Drive re-route were identified in the flood study as potential drainage improvements. Area 1D also currently experiences some localized drainage problems. The flood study previously determined that residents experience yard flooding and basement/crawlspace flooding in this area. A concept level plan was developed for Area 1D that increased the level of protection for the residents. Possible solutions included the construction of a new inlet and storm sewer to convey flow west, along North Shore Drive, from the existing depressional area to the re-graded swale. After a concept level plan was agreed upon with the City for Area 1D, engineering plans for the preferred project were prepared. The plans and specifications for the improvements were designed according to the applicable Federal, State and Local (City of Crystal Lake) requirements including the Crystal Lake Storm Water Ordinance. The project was located within the Crystal Lake Watershed and utilized Best Management Practices identified in the Crystal Lake Watershed Design Manual. Also, the City received a grant from the Illinois Department of Commerce and Economic Development.

**2012 SSA Roadway Program, Clarendon Hills:** Engineer Intern for the SSA Program project which covered approximately 11,000 linear feet and included resurfacing, installing a two-foot wide concrete shoulder, patching, minor drainage improvements, and restoration of the following streets using SSA Funds Fairview, Hudson, Iroquois, Mohawk, Ridge, Juliet, N. Jackson, Eastern, and Harris. This resurfacing included grinding two inches, patching, installation of the two foot concrete shoulder and resurfacing the roadway with ¾ inches of leveling binding with 1 ½ inches of surface course. The scope included preparation of the bid documents using a bid booklet.

**Wilson Street Streetscape and Roadway Design, Batavia:** Engineer Intern assisted in preparation of plans and specifications, and completion of cost estimate. The City of Batavia Downtown Streetscape project aided in improving the streets, sidewalks, lighting, landscaping, and related infrastructure in the Downtown area. This project included West Wilson Street from North Batavia Avenue (IL Route 31) to North Island Avenue (approximately 1,100 feet).

**Sanitary Sewer Atlas, Northlake:** Engineer Intern responsible for preparation of full size plans and exhibits. Project included update of the City of Northlake's sanitary sewer atlas with the aid of CBBEL surveyors.



**YEARS EXPERIENCE:** 3  
**YEARS WITH CBBEL:** 3

**EDUCATION**

Master of Science, 2011  
Civil Engineering  
Southern Illinois University, Carbondale

Bachelor of Science, 2009  
Civil Engineering  
Southern Illinois University, Carbondale

**PROFESSIONAL REGISTRATION**

Engineer Intern, IL, 061035221, 2010

**PROFESSIONAL DEVELOPMENT**

CE 370 Fluid Mechanics, Laboratory  
Instructor, Southern Illinois University,  
Carbondale, January-May 2011

ENGR 351 Numerical Methods, Graduate  
Assistant, Southern Illinois University,  
Carbondale, January-December 2010

**PUBLICATIONS**

"Use of Unsteady Modeling to Predict  
Flooding by Correlating Stream Gages: A  
Case Study", Burke, M; (Master's Thesis);  
2011.

**PROFESSIONAL AFFILIATIONS**

American Society of Civil Engineers  
Illinois Section of EE&WR Technical Group

Water Resources Engineer responsible for water resources engineering project analysis and design. Duties include the following hydrologic and hydraulic engineering tasks: land use characterization, floodplain/floodway delineation, detention and compensatory storage determination, steady and unsteady hydraulic analyses, and design of conveyance systems.

Computer Skills include: HEC-HMS, HEC-RAS, HEC-2, HY-8, Hydraflow, TR-20, XPSWMM, ArcGIS MicroStation

**Riverside Comprehensive Sewer Study, Village of Riverside, Riverside:** Project Engineer responsible for model development and preparation of final project report. Scope included development of an Info SWMM sewer model of the Village of Riverside's entire combined and storm sewer system.

**MWRDGC/Addison Creek Drainage Improvements:** Assisted with the creation and evaluation of an XPSWMM model for existing sewer systems in Melrose Park and Stone Park for purpose of developing alternatives to reduce flooding.

**Chateau Woods Detention Analysis, Dyer, IN:** Used XPSWMM modeling to analyze poorly drained dry-bottom detention pond. Developed several improvement alternatives and demonstrated the benefit of connecting the existing detention outlet pipe to a proposed pump station.

**Elgin-O'Hare West Bypass, IDOT:** Project Engineer. Prepared HEC-HMS hydrologic models and HY-8 hydraulic models to analyze minor waterway crossings as part of the Location Drainage Study. Developed methodology for median ditch design in Microsoft Excel incorporating Rational Method and Manning's Equation to design proposed median ditches along the proposed Elgin O'Hare corridor.

**Smith Ditch Culvert Replacement Project, Crown Point, IN:** Project involved the design of three new culvert crossings through the Stillwater Subdivision using HEC-RAS hydraulic modeling software. The previous crossings were installed without permits. A floodway construction permit was obtained from the Indiana DNR.

**I-90 Roadway Widening Project, IDOT:** Project Engineer. Performed minor waterway crossing analyses for Tyler Creek West Tributary and Tyler Creek East Tributary culvert crossings under I-90 near Gilberts, IL. Tasks included development of HEC-HMS and HEC-RAS models to analyze existing culverts and develop proposed culvert design. Also determined required compensatory storage and performed detention analysis.

**ComEd Station 16, Waukegan:** Performed multiple engineering tasks for the proposed 10-acre ComEd substation pad in Waukegan. Tasks included existing BFE determination through the project site, development of project site grading plan, and storm water conveyance and detention design. The existing BFE determination was approved by Lake County SMC.

**Amherst Drive Proposed Storm Sewer, Bartlett:** Project involved design of proposed 30-inch storm to alleviate flooding at Bartlett Rd and Amherst Dr. Proposed sewer discharges to Country Creek in DuPage County. Performed TR-20 and HEC-RAS analysis of Country Creek for existing and proposed conditions to obtain stormwater management permit.

**Plum Creek / Hart Ditch Early Warning System and Flood Forecasting, Lake County Surveyors Office, Dyer, IN:** Created stream gage correlation between two USGS stream gages to predict flooding as part of Master's Thesis Project at Southern Illinois University, Carbondale. Stream gages used for correlation were located at Burrville Rd on Plum Creek and 213<sup>th</sup> Street on Hart Ditch. Converted steady state model of Plum Creek / Hart Ditch to unsteady state model. Calibrated model to accurately simulate maximum stage heights at each gage for a particular storm event. Simulated 40 large storm events using unsteady model to create correlation between the two gages. Stream gage correlation is currently used to predict flooding in downstream Dyer during large storm events.

**Lower Des Plaines River Detailed Watershed Plan, Metropolitan Water Reclamation District of Greater Chicago, Cook County:** Project involved complete hydrologic and hydraulic analysis of the Lower Des Plaines River Watershed in Cook County. Collected data within the watershed for modeling purposes. Delineated inundation areas throughout the watershed to represent benefits provided by proposed improvements recommended in the study.

**Village of Winnetka Flood Reduction Assessment (25-, 50-, and 100-year):** Project Engineer responsibilities included XPSWMM modeling, exhibit and presentation preparation. This project included a Village-wide drainage study in response to the July 2011 flood. Improvements were recommended for three levels of flood protection from the 25-, 50-, and 100-year storm events.







**YEARS EXPERIENCE:** 16  
**YEARS WITH CBBEL:** 16

#### EDUCATION

Master of Business Administration, 2003  
Kellogg School of Management  
Northwestern University

Master of Science, 1998  
Civil Engineering  
University of Illinois at Urbana-Champaign

Bachelor of Science, 1997  
Civil Engineering  
University of Illinois at Urbana-Champaign

#### PROFESSIONAL REGISTRATION

Professional Engineer, IL, 062056302, 2003  
Professional Engineer, IA, 17027, 2004

#### CERTIFICATIONS

Certified Floodplain Manager  
IAFSM

Certified Professional in Erosion and  
Sediment Control (CPESC)

Diplomate Water Resources Engineer  
(D.WRE)  
ASCE

Kane County-Engineer Review Specialist  
Kane County, IL, E-233

Designated Erosion Control Inspector (DECI)  
Lake County, IL

#### PROFESSIONAL DEVELOPMENT

Course/Seminar Instructed:

XP-SWMM  
HEC-HMS  
Win TR-20  
Win TR-55  
HEC-RAS

Seminar/Training Attended:

Ethics in City Government, Ethics Training for  
CDA/OMP Contractors, Vendors &  
Employees

#### PUBLICATIONS

Olson, Darren. "Illinois infrastructure has  
improved - but it's nothing to celebrate".  
Crain's Chicago Business. April 23, 2014.

"Methodology, Data Collection, and Data  
Analysis for Determination of Water-Mixing  
Patterns Induced by Aerators and Mixers",  
USGS Water-Resources Investigations Report  
00-4101. Gary P. Johnson, Nancy J.  
Hornever, Dale M. Robertson, Darren T.  
Olson, and Josh Gioja. Urbana, IL. 2000.

"The Thermal Response of a Small Water  
Body to Bubble-Plume Destratification",  
Master's Thesis, University of Illinois. Darren  
T. Olson. Urbana, IL. 1997.

#### PROFESSIONAL AFFILIATIONS

Professional Engineer experienced in water resources. Responsible for engineering studies and proposals that include floodplain mapping, watershed studies, floodplain/floodway delineation studies and permitting, steady and unsteady river hydraulic analyses, stormwater management studies and permitting, flood control project feasibility, design studies, and engineering review. Previous experience at the USGS includes flow and sediment field measurements, and hydraulic data analysis.

Computer modeling skills include FEQ, HEC-RAS, HEC-HMS, HEC-1, HEC-2, WSP-2, XP-SWMM, and GIS applications.

#### FLOOD CONTROL PROJECT FEASIBILITY AND DESIGN ANALYSIS

**Washington Park Floodwater Storage Facility, Village of Downers Grove, Downers Grove:** Project Manager responsible for management of stormwater modeling and civil design of park reconstruction as well as coordination with the Village and Park District. This project included enhancement of Washington Park in Downers Grove to include 10 acre-ft of stormwater storage to provide flood relief to adjacent residents. In addition to the stormwater storage, the park was enhanced to include tiered retaining walls for seating, 2 soccer fields, a baseball field with stadium seating, a reconstructed park plaza with fountain, underdrain system, irrigation system, ADA accessibility and other landscape features.

**Village of Bartlett Flood Reduction Assessment, Village of Bartlett, Bartlett:** Project Manager, responsibilities included managing stormwater studies, hydrologic modeling, public presentations and civil design of drainage improvement projects. This project included a Village-wide drainage study in response to the September 2008 flood event that devastated the Village. Five study areas were identified, and drainage improvement projects were designed in each area to reduce the risk of future flooding. The projects involved partnerships with DuPage County, Village of Streamwood, Commonwealth Edison and the Forest Preserve District of DuPage County.

**Village of Buffalo Grove Stormwater Drainage Projects, Buffalo Grove:** Project Manager, responsible for management of stormwater modeling and civil design of drainage improvement projects. This project included a Village-wide flood reduction assessment in response to the August 2007 storm event. Twelve study areas were identified in the initial flood reduction assessment. The concept-level analysis was developed into full design drawings and permitting of 12 drainage improvement projects throughout the Village. Coordination was required with the Park District, Cook County Highway Department, High School and local residents.

**Skokie River Watershed Flood Storage Feasibility Study, East Skokie Drainage District, Lake County:** Project Manager, responsibilities included managing hydrologic and hydraulic modeling, public presentations, client contact. This project involved a flood reduction feasibility study for the Skokie River Watershed in Lake County, IL. Approximately 45 flood reduction alternatives were analyzed using the regulatory hydrologic and hydraulic models. The alternatives included combinations of floodwater storage and conveyance improvements throughout the watershed. The results of the hydraulic analysis were provided to the IDNR-OWR for a benefit/cost analysis. The study results were summarized in a final report to stakeholders within the watershed.

**Blackberry Creek Watershed Phase 2 Study, Kane County Department of Environment, Kane County:** Project Manager, responsibilities included management of hydrologic and hydraulic modeling, economic analysis and client contact. The Blackberry Creek Watershed hydrologic and hydraulic models that were prepared by the U.S. Geological Survey were used to identify drainage improvement projects within the watershed. The projects included conveyance improvements and floodwater storage. A concept-level design and cost analysis was completed for each alternative. An economic analysis was also performed using the IDNR-OWR Damages software. A report summarizing the modeling results and economic analysis was prepared and utilized for requesting funds from FEMA for the recommended drainage improvement project.

**Walnut Drive Culvert Reconstruction, City of Darien, Darien:** Project Manager, responsibilities included management of hydrologic and hydraulic modeling, permitting and design. This project consisted of reconstruction of the Walnut Drive culvert crossing that had failed during the September 2008 storm event. Hydrologic and hydraulic modeling was completed to develop a design that mimicked the hydraulic properties of the original structure but was less prone to failure. Design drawing and permit submittals were prepared to demonstrate compliance with the DuPage County Ordinance and IDNR-OWR rules for floodway construction and dam safety. Within 1 year of the storm event, the construction was underway to replace the failed culverts.

**Pottawattomi Park Stormwater Storage Facility, Tinley Park:** Developed and calibrated an XP-SWMM hydrologic and hydraulic model for a 535-acre watershed that experienced severe flooding in the summer of 2001. The model was used to evaluate flood control alternatives and design a stormwater storage facility that was constructed in November 2002. In July of 2003, the stormwater storage facility functioned as designed during a nearly 100-year storm event in the



American Society of Civil Engineers  
Region 3 Governor, ASCE National;  
Illinois Section Director, 2002-2004;  
Communications Chair, 2004-2006;  
Treasurer, 2007-2009;  
President-Elect, 2010, President 2010-2011  
Environmental Engineering and Water  
Resource (EE&WR) Technical Group:  
Secretary, 1999; Treasurer, 2000, 2009;  
Vice-Chair, 2001; Chair, 2002

Association of State Dam Safety Officials

Lt. Governor's Science Advisory Committee  
*The Science Advisory Committee is a group of experts that will assist Lieutenant Governor Sheila Simon in her efforts to protect Illinois' rivers from potential threats and reduce flood damages. The seven-member panel serves as the scientific arm of the Illinois, Mississippi, and Ohio/Wabash River Coordinating councils. The committee will work with Simon to advance scientific research and help determine what legislative policies should be implemented to protect Illinois waterways. The committee previously published research illustrating the importance of preventing Asian carp and other invasive species from moving between the Great Lakes and Illinois River.*

#### AWARDS

American Society Civil Engineers (ASCE),  
2004 Illinois Section Young Civil Engineer of  
the Year

Western Society of Engineers, 2006 Charles  
Ellet Award

Village; when the facility filled to capacity and no residential structures were flooded. This project won the American Society of Civil Engineers (ASCE) 2003 Project of the Year, under \$5 million.

**Chicago Underflow Plan (CUP) Reservoir Design Analysis, Riverside and Evanston:** Developed and calibrated XP-SWMM hydrologic and hydraulic models for a 300-acre and 1800-acre watersheds in Riverside and Evanston, respectively. The models were calibrated to USGS continuous flow data and MWRD BOD data to determine BOD loadings to the TARP drop shafts to be used as for input into US Army Corps of Engineers CUP reservoir modeling.

**Midway/Whitfield Stormwater Management Study, Northbrook:** Performed detailed XP-SWMM hydrologic and hydraulic analyses of 90-acre watershed to develop cost/benefit analysis for various flood damage reduction alternatives within the Northbrook East Subdivisions. The economic analysis allowed the Village of Northbrook to incorporate the proposed alternatives into their village-wide Stormwater Management Plan.

**Skokie Boulevard/Edens Ditch Stormwater Study, Northbrook:** Developed an XP-SWMM hydrologic and hydraulic model of a 170-acre watershed in Northbrook that drained to a restrictive culvert under the Edens Expressway. The study evaluated the proposed Sunset Ridge Road improvements by the Cook County Highway Department (CCHD) and nine proposed drainage improvements within the watershed.

#### STORMWATER MANAGEMENT AND FLOODPLAIN PERMIT APPLICATIONS

**Pingree Road Reconstruction, Crystal Lake:** Completed stormwater and floodplain permitting. CBBEL developed federal Phase II construction bid documents for the reconstruction of Pingree Road and provided the following engineering services: Topographic Survey; Preliminary Site Assessment for Special Waste; Stormwater Management Report including Best Management Practices; Construction Plans, Specifications & Construction Cost Estimates. Utilized STP funding.

**Madison Street Reconstruction, Willowbrook:** Refined Flagg Creek FEQ Watershed Study hydraulic model to evaluate impacts of roadway reconstruction in support of DuPage County Stormwater Management Permit.

**Samatas Pedestrian Bridge Crossing of Salt Creek, Oak Brook:** Updated the Upper Salt Creek FEQ Watershed Study model to evaluate impacts of pedestrian bridge over Salt Creek in support of a DuPage County Stormwater Management Permit.

**Naperville Park District Riverwalk Playground Reconstruction, Naperville:** Reconstruction of a playground in the floodway of the West Branch of the DuPage River along the Riverwalk in Naperville. Steady-state and unsteady-state hydraulic modeling was required using HEC-RAS and FEQ hydraulic model software. This project required a variance from the DuPage County Stormwater Ordinance for appropriate uses of the floodway.

**The Morton Arboretum Stormwater Management Permits, Lisle:** Coordinated wetland, riparian, stormwater and floodplain submittals for DuPage County Stormwater Management Permits for projects within The Morton Arboretum. These projects included a bridge over the East Branch of the DuPage River, over 1 mile of new roadway, three Visitor Stations, streambank rehabilitation, two compensatory storage facilities, an 8-acre Children's Garden, four detention basins, a new Visitor Center, and Main Parking Lot. The permitting of the Main Parking Lot took advantage of permeable pavement technology, which reduced the stormwater storage required for the projects.

**Butler National Golf Club Streambank Stabilization, Oak Brook:** Obtained IDNR-OWR Floodway Construction Permit and DuPage County/Village of Oak Brook Stormwater Management Permit for 2,000 linear feet of streambank stabilization and riparian restoration within the Butler National Golf Club.

**Butler National Golf Club Fairway and Bunker Reconstruction, Oak Brook:** Floodway construction permitting and hydraulic modeling for the reconstruction of fairways and bunkers within the floodway of Salt Creek in Oak Brook. The project required a variance from the DuPage County Stormwater Ordinance for appropriate use in the floodway.

**Pratt's Wayne Woods Wetland Restoration, DuPage County Forest Preserve:** Secured DuPage County Stormwater and Floodplain Permit for 50-acre wetland restoration project within the Pratt's Wayne Woods Forest Preserve. The project design restored the hydrology to nearly 50 acres of critical wetland within the floodplain of Brewster Creek.

**Wards Creek Streambank Stabilization, Darien:** Used the DuPage County Wards Creek FEQ watershed model to secure a floodway construction permit and DuPage County Stormwater Management Permit for stabilization of 2,000 linear feet of streambank stabilization of Wards Creek within the Brookridge Subdivision. The design called for gabion walls to protect residential structures in danger of being undermined by bank failure.



**YEARS EXPERIENCE:** 28  
**YEARS WITH CBEL:** 27

#### **EDUCATION**

Bachelor of Science, 1986  
Agricultural Engineering  
University of Illinois at Urbana-Champaign

#### **PROFESSIONAL REGISTRATION**

Professional Engineer, IL, 062047272, 1992

#### **CERTIFICATIONS**

Certified Floodplain Manager  
Illinois

Certified Open Water Diver,  
PADI

#### **PROFESSIONAL DEVELOPMENT**

Ethics in City Government, Ethics Training for  
CDA/OMP Contractors, Vendors &  
Employees

#### **PROFESSIONAL AFFILIATIONS**

American Society of Agricultural Engineers

American Society of Civil Engineers

Association of State Floodplain Managers  
*Chapter 2 District Director, 2006-2012*

Illinois Association for Floodplain and  
Stormwater Management  
*Treasurer 1999-2000; Vice-Chair 2001-2002;  
Chair 2003-2004; Past Chair 2005-2006*

Professional Engineer responsible for civil and water resources engineering project analysis and design, and stormwater permit review coordination. Duties include developing hydrologic and hydraulic models to establish floodplain and floodway limits and evaluate proposed modifications. Works with department head to evaluate alternatives, generate project reports documenting results and recommendations, and assist in preparation of project construction plans. Utilizes unsteady flow hydraulic models to determine feasible flood control projects for implementation. Responsible for managing the maintenance and updating of PC based hardware, software and network administration.

Computer proficiency includes: TR-20, WSP-2, DEC-2, FEQ, HSPF, SCALP, HEC-1 and HEC-2 modeling.

#### **FLOOD CONTROL PLANNING STUDIES**

**Busse Woods Dam Modification:** Prepared the FEQ unsteady flow hydraulic modeling to compare 3 different modifications of an existing reservoir in Cook County. The recommended alternative is an inflatable rubber dam that will provide flood reductions downstream of the reservoir. The work included coordination of the recommended alternatives with Forest Preserve of Cook County, DuPage County Department of Development and Environmental Concerns and the Illinois Department of Natural Resources - Office of Water Resources staff. A physical model study was completed by Northwest Hydraulic Consultants of North Vancouver, British Columbia to develop rating curves for the proposed alternatives.

**Kress Creek, DuPage County:** Responsible for the preparation of the Kress Creek Watershed Plan. Developed the FEQ unsteady flow hydraulic model to evaluate flood control projects and to develop floodplain mapping. Coordinated the preparation of the environmental portions of the Kress Creek Watershed Plan.

**Lower Salt Creek, DuPage County:** Responsible for preparation of the DuPage County Department of Environmental Concerns study on the Lower Salt Creek Basin. Utilized the FEQ unsteady flow hydraulic model to determine the effectiveness of various flood control alternatives. Attended numerous meetings with community officials and residents of the Lower Salt Creek Basin. Utilized the economic model DEC-2, to determine the economic feasibility of the recommended flood control projects for the County.

**Upper Salt Creek, Lake and Cook County:** Worked on the comparison of the steady state hydraulic models and the unsteady flow hydraulic model (FEQ). Responsible for updating and extending the unsteady flow hydraulic models to run through the PVSTATS simulation of extreme storm events.

**Wood Dale-Itasca Flood Control Project:** Responsible for the hydraulic design of the Wood Dale - Itasca Flood Control Project. This project entailed evaluation of numerous flood control reservoir configurations to determine the optimum downstream benefits. The Lower Salt Creek FEQ and DEC-2 economic models were utilized to determine reservoir performance. Coordinated the model testing of the proposed gate and baffle block spillway. Prepared a report for including in the Interim Salt Creek Watershed Plan for DuPage County.

**Drainage Report, Village of South Barrington:** Coordinated a multi-disciplinary team of hydrologists, environmental engineers, hydraulic engineers, structural engineers and wetland specialists to examine nine (9) problem areas within the Village of South Barrington. Attended public meetings and made presentation of the initial and final recommendations of the study. Reviewed the final reports which addressed both qualitative and quantitative items recommended to reduce and/or eliminate residents' concerns.

**Royal Fox Subdivision, City of St. Charles:** Reviewed the existing drainage system at two (2) locations in the Royal Fox Subdivision. Coordinated the modeling effort to simulate the existing and proposed drainage systems. Worked with City staff and area residents to develop an acceptable solution for the drainage problems.

**Hinsdale Reach of Salt Creek, Oak Brook:** Responsible for coordination of surveying over 82 cross-sections and 15 bridges in the Oak Brook - Hinsdale Reach of Salt Creek. The purpose of this project was to screen various alternative projects that could be used for mitigating flood damages in the area. The project entailed revision of the Lower Salt Creek FEQ model, recalibration of the FEQ model, and updating the DEC-1 data for the Oak Brook/Hinsdale area. Prepared a report for presentation to the Village of Oak Brook Board.

**Dam and Pump Station, Addison:** The project entailed evaluation of the construction of a dam and pump station on Westwood Creek to reduce the hydraulic effects of backwater from Salt Creek. Responsible for modification of the Westwood and Salt Creek FEQ models to simulate the effects of the pump station and to determine the mitigation necessary to offset the selected



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pumping rate necessary to reduce upstream water surface elevations and reduce flooding. This project was evaluated with the combination of FEQ and DEC-1 analyses. Developed alternatives for presentation to the Village of Addison Board and Village residents.

**Black Partridge Creek, DuPage and Will County:** Reviewed and updated the existing FEQ unsteady flow hydraulic model. Reviewed and evaluated the recommended flood control projects for the watershed. Reviewed the DEC-1 economic model for consistency within current DuPage County standards.

**Westmont Stormwater Master Plan, Village of Westmont:** Evaluated the storm sewer and open channel network within the Village of Westmont. Prepared and summarized a flood damage questionnaire completed by Village residents. Held a series of public meetings to gather information for area residents about their flooding problems. Supervised assembly of SWMM modeling of the storm sewered areas. Presented results to the public at a special meeting of the Village Board. Completed opinions of probable cost for the recommended projects.

#### **FLOODPLAIN MAPPING PROJECTS**

**Lower Salt Creek, DuPage County:** Reviewed and updated the existing FEQ unsteady flow hydraulic model. Used PVSTATS and severe storm analysis to generate 2-, 5-, 10-, 50- and 100-year recurrence interval floodplain elevations for the watershed. Developed a floodway for the stream using the FEQUTL model. Attended public meetings to present the results to the communities. Generated summary report of the results for approval by FEMA.

**Westwood Creek, DuPage County:** Reviewed and updated the existing FEQ unsteady flow hydraulic model. Used PVSTATS and severe storm analysis to generate 2-, 5-, 10-, 50- and 100-year recurrence interval floodplain elevations for the watershed. Developed a floodway for the stream using the FEQUTL model. Generated summary report of the results for approval by FEMA.

**Kress Creek, DuPage County:** Reviewed and updated the existing FEQ unsteady flow hydraulic model. Used PVSTATS and severe storm analysis to generate 2-, 5-, 10-, 50- and 100-year recurrence interval floodplain elevations for the watershed. Developed a floodway for the stream using the FEQUTL model. Generated summary report of the results for approval by FEMA.

#### **STORMWATER MANAGEMENT PROJECTS**

**Klein Creek Development, DuPage County:** Modified and updated the existing DuPage County FEQ model for Klein Creek to reflect the impact of the proposed golf course development. Analyzed multiple alternatives to maximize flood control benefits to downstream areas. Performed an economic analysis to evaluate each alternative's flood control benefit. Coordinated cost sharing agreement between DuPage County and the project's developer.

**Cornerstone Lakes, DuPage County:** Responsible for the coordination of the HEC-1 and HEC-2 modeling required to permit a proposed 330 acre residential development in West Chicago. Coordinated the permitting requirements for the proposed development with IDNR-OWR, DuPage County, COE, etc. Developed interim condition models for each of the development phases. Coordinated the permitting and design of a 25 acre multi-use wetland mitigation bank.

**Gary Avenue Gardens, DuPage County:** Coordinated the design and modeling for a storm sewer project and outlet channel for residential subdivision near Carol Stream, Illinois. Revised a FEQ unsteady flow hydraulic model to determine the benefits of the proposed drainage improvements. Responsible for the permitting of the proposed project with the various regulatory agencies (DuPage County, COE, Carol Stream, etc.).



**YEARS EXPERIENCE:** 9  
**YEARS WITH CBEL:** 9

**EDUCATION**

Master of Science, 2009  
Civil Engineering  
University of Illinois at Chicago

Bachelor of Science, 2004  
Civil Engineering  
University of Illinois at Chicago

**PROFESSIONAL REGISTRATION**

Professional Engineer, IL, 062062248, 2009

**CERTIFICATIONS**

Certified Floodplain Manager  
IAFSM

**PROFESSIONAL DEVELOPMENT**

Ethics in City Government, Ethics Training for  
CDA/OMP Contractors, Vendors &  
Employees

Water resources engineer responsible for engineering studies including floodplain mapping, watershed studies, floodplain/floodway delineation studies and permitting, steady and unsteady river hydraulic analyses, stormwater management studies and permitting, continuous hydrologic and water quality simulation, and engineering review.

Computer modeling skills include TR-20, HEC-1, HEC-2, HEC-RAS, HEC-HMS, XP-SWMM, hydroflow, and HY-8.

**SEWER MODELING AND FLOOD REDUCTION STUDIES**

**Flood Risk Reduction Assessment, Village of Clarendon Hills:** Prepared XP-SWMM simulations for several study areas within the Village of Clarendon Hills to evaluate flooding conditions from recent storm events. The models were used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding.

**Flood Risk Reduction Assessment, Hinsdale:** Prepared XP-SWMM simulations for the Graue Mill Subdivision in the Village of Hinsdale to evaluate flooding conditions from recent storm events. The models were used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding.

**Flood Risk Reduction Assessment, Park Ridge:** Project Engineer. Prepared XP-SWMM models for several study areas in Park Ridge to evaluate flooding conditions from recent storm events. The models were used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding.

**Watershed Improvement Assessment, Downers Grove:** Prepared XP-SWMM simulations for residential subdivisions within the Village of Downers Grove to evaluate the effectiveness of the existing storm sewer system. The models were used to recommend improvements to the stormwater conveyance system within the Village in order to reduce flooding.

**Flood Risk Reduction Assessment, Bensenville:** Prepared XP-SWMM simulations for several study areas within the Village of Bensenville to evaluate flooding conditions from recent storm events. Questionnaires were sent to area residents and used to help evaluate specific flooding concerns. The models and questionnaires were then used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding.

**Flood Risk Reduction Assessment, Bartlett:** Prepared XP-SWMM simulations for several study areas within the Village of Bartlett to evaluate flooding conditions from recent storm events. Questionnaires were sent to area residents and used to help evaluate specific flooding concerns. The models and questionnaires were then used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding.

**Flood Risk Reduction Assessment, Winnetka:** Prepared XP-SWMM simulations for several study areas within the Village of Winnetka to evaluate flooding conditions from recent storm events. Questionnaires were sent to area residents and used to help evaluate specific flooding concerns. The models and questionnaires were then used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding.

**Flood Risk Reduction Assessment, Buffalo Grove:** Prepared XP-SWMM simulations for several study areas within the Village of Buffalo Grove to evaluate flooding conditions from recent storm events. Questionnaires were sent to area residents and used to help evaluate specific flooding concerns. The models and questionnaires were then used to design improvements to the stormwater conveyance and storage system to reduce the risk of future flooding. Permits were obtained from the Illinois Department of Natural Resources (IDNR) and Metropolitan Water Reclamation District (MWRD) for the improvements.

**HYDROLOGIC & HYDRAULIC ANALYSES**

**I-90 Reconstruction, IDOT:** Project Engineer. Prepared HEC-HMS hydrologic models to determine base flood elevations and size proposed structures. Permits for the proposed crossings were obtained from the Illinois Department of Natural Resources.

**Illiana Expressway, IDOT:** Project Engineer. Prepared HEC-HMS hydrologic models and HEC-RAS hydraulic models to determine base flood elevations and size proposed structures. The project required close coordination with roadway design teams at partnering firms.

**Green Street Pump Station, IDOT:** Project Engineer. Created detailed XP-SWMM models of the proposed drainage system and pump station serving approximately 4,000 feet of the Elgin-O'Hare West Bypass roadway alignment. Designed the proposed pump station and prepared a pump station hydraulic report following IDOT standards.



**Pump Station 30, IDOT:** Project Engineer. Created detailed XP-SWMM models of the existing drainage system and pump station serving approximately one mile of the I-55 roadway alignment. Prepared a pump station hydraulic report following IDOT standards to evaluate the effectiveness of the existing pump station at meeting design criteria.

**US Route 14 Pump Station, IDOT:** Project Engineer. Created detailed XP-SWMM models of the proposed drainage system and pump station for the US Route 14 grade separation project. The pump station serves approximately one mile of the US Route 14 roadway alignment. Designed the proposed pump station and prepared a pump station hydraulic report following IDOT standards.

**Elgin-O'Hare West Bypass, IDOT:** Project Engineer. Prepared HEC-HMS hydrologic model to determine non-riverine depressional storage requirements. Performed hydrologic (TR-20) and hydraulic (HY-8) analysis of minor waterway crossings as part of the Location Drainage Study. Performed a flood risk reduction assessment of the North Avenue underpass of I-290/I-294 in response to roadway flooding from recent storm events. Improvements to the local stormwater infrastructure were designed to reduce the risk of future flooding.

**Peterson Road/IL Route 83 Roadway Improvements, Lake County Division of Transportation, Libertyville:** Project Engineer. Analysis included TR-20 modeling to determine on-site Base Flood Elevations and detention storage requirements. A Watershed Development Permit was obtained from Lake County SMC.

**Deerfield Road Bikepath, Lake County Division of Transportation, Riverwoods:** Project Engineer. Added a bikepath crossing at Deerfield Road to the Des Plaines River regulatory HEC-2 hydraulic model to show no upstream impacts. A Watershed Development Permit was obtained from Lake County SMC.

**Plum Farms Parcel, Hoffman Estates:** Prepared a HEC-HMS hydrologic and HEC-RAS hydraulic model of Spring Creek to re-map existing floodplain on the project site. A Federal Emergency Management Agency (FEMA) Letter of Map Revision (LOMR) was obtained for the re-mapped floodplain. A TR-20 hydrologic model was also prepared to determine the required detention storage volume for a proposed residential/commercial development.

**Lakewood Forest Preserve Hydrologic Restoration, Wauconda:** Prepared a HEC-HMS hydrologic model of the Lakewood Forest Preserve. The model was used to adjust water flow on the property to improve wetland habitats. A Watershed Development Permit was obtained from the Lake County Stormwater Management Commission (SMC).

**Commonwealth Edison Substation, Round Lake Beach/Grayslake:** Performed a stormwater management study for a new ComEd substation in Round Lake Beach/Grayslake, Illinois. A TR-20 model was created to determine stormwater detention requirements and compensatory storage was designed for regulatory floodplain impacts. A Watershed Development Permit was obtained from Lake County SMC.

**Grasslands Regional Detention Basin, Orland Park:** Performed hydrologic analysis of surrounding area to size a regional detention facility for future developments. Analysis included hydrologic modeling and a dam breach analysis to determine impacts to downstream areas.

**Addison Creek Culvert Replacements, Bensenville:** Performed hydraulic analysis of Addison Creek to size culvert replacements. Analysis included development of HEC-RAS hydraulic model to maintain stormwater conveyance & reduce flood elevations. A DuPage County Stormwater Permit & FEMA LOMR were obtained for the improvements.

**NPDES Phase II Permitting:** Prepared yearly compliance reports to the EPA for various communities. Community activities were tabulated and the applicability of each activity to NPDES requirements was evaluated.

**Jedd Anderson, PWS, CWS, CPESC**  
**Vice-President, Head, Environmental Resources Department**



**YEARS EXPERIENCE: 25**  
**YEARS WITH CBEL: 25**

**EDUCATION**

Bachelor of Arts, 1985  
Geology  
Augustana College

**CERTIFICATIONS**

Professional Wetland Scientist (PWS)  
Society of Wetland Scientists

Certified Professional in Erosion and  
Sediment Control (CPESC)

Certified Wetland Specialist (CWS)  
Lake County, IL

Certified Wetland Specialist (MC-CWS)  
McHenry County, IL

Designated Erosion Control Inspector (DECI)  
Lake County, IL

Qualified Wetland Review Specialist (WRS)  
Kane County, IL

Certified Open Water Diver  
PADI

**PROFESSIONAL DEVELOPMENT**

**SEMINARS TAUGHT**

"Unique Components of the West Branch  
Wetland Restoration Area, DuPage, IL"  
Attendee and Presenter at the American  
Society of Civil Engineers-2010 Watershed  
Management Conference, Madison, WI,  
August 23-27, 2010

"In Stream Construction and Bank  
Protection":  
Attendee and Presenter at the 2010 Ground  
Control Conference, Bloomington, IL;  
Society of American Military Engineers, Post  
Meeting, Rock Island, IL, June 9, 2010;  
The Burke Group, Rosemont, IL, June 30,  
2010

"Main Street/Northside Park Flood Control  
Project", Attendee and Presenter at the  
2010 IAFSM Conference, Tinley Park, IL

Del Webb - Edgewater Homeowners  
Association, Follow-up to Natural Areas in  
Your Community, September 2008

"DuPage County New Water Quality  
Standards", The Burke Group, August 2008

"Best Management Practices for the Next 5  
Years" - Chicago Metro Chapter - American  
Public Works Association Conference,  
October 2007

"Update on the Procedures for Determining  
Jurisdictional Wetlands and Waters of the  
United States", Illinois Association of  
Environmental Professionals, October 2007

Del Webb - Edgewater Homeowners  
Association, Natural Areas in Your

Head of Environmental Resources Department and Vice President with experience in over 4,500 Environmental Resource projects. Obtained more than 1,000 COE Section 404 permits. Over 25 years of practice in assisting in review of design, permitting and monitoring projects and their impact on wetland and natural areas. Responsibilities include the day-to-day coordination of 14 environmental professionals, coordination and completion of wetland and natural area assessments, delineations, design, permitting, maintenance and monitoring, as well as resolution of Corps of Engineers/United States Environmental Protection Agency enforcement actions. In addition, performs mitigation design and development and technical tasks associated with civil and water resources engineering and geological analysis in Illinois, Indiana and Wisconsin. Also responsible for coordination with clients on implementation of and compliance with NPDES Regulations. Veteran in the design and installation of sediment and erosion control. Completed hydro-geomorphologic studies to assist in stream restoration and re-meandering. Well versed in soil bioengineering techniques for streambank stabilization and provides environmental, wetland, sediment, and erosion control. Performs review services for a number of municipalities and complete reviews of projects to ensure compliance with local environmental, wetland and stormwater regulations and ordinances. Has expertise in the National Environmental Policy Act (NEPA), the Endangered Species Act, and biological assessments for threatened and endangered species. Clients include governmental agencies, municipalities, forest preserve districts, park districts and school districts, as well as private enterprises. Responsible for review of all projects for compliance with Villages of Kildeer and Riverwoods Ordinances. Also, currently provides wetland consultation services for Addison, Algonquin, Bensenville, Bloomingdale, Carol Stream, Crystal Lake, Downers Grove, Hawthorn Woods, Huntley, Woodridge, Wood Dale, and DuPage County, Illinois.

**West Branch Wetland Mitigation Area, DuPage County and Forest Preserve District of DuPage County:** Project Manager for the design and permitting of a 130-acre wetland mitigation area in conjunction with 340-acres of upland/prairie restoration and 5000' of stream restoration. Responsible for the completion of the wetland delineation, floristic inventory, and installation of the groundwater monitoring wells. Coordinated completion of the soil survey, field tile survey, topographic survey, hydrology and hydraulic study, and all CAD work. Principal designer of the restoration program, which included design of all on-site grading, field tile abandonment, restoration and planting plans, along with 5000' of streambank restoration which included, design of riffles and re-meandering of the West Branch DuPage River. Prepared construction, long-term management and monitoring cost estimates.

**Northside Park Restoration, Wheaton Park District:** Project Manager and Lead Environmental Design and Permitting, responsible for project coordination and management, design, construction cost estimates, and permitting, including response to comments and meeting attendance and coordination. Designed grading plans, stormwater pollution prevention plan, erosion and sediment control plans, paths, planting and seeding plans, wetland and riparian enhancement plans, and long term management and monitoring plan. The project had a number of components including shoreline restoration, lagoon hydraulic and conventional dredging, and sediment dewatering and disposal. Lagoon access improvements included 5 new bridges, 10 fishing docks and new walking paths. Park improvements also included building reconstruction and maintenance building demolition, Thompson and Wheaton Oaks properties stormwater improvements, sanitary sewer forcemain, and storm sewer outfall relocation. Activities required permitting through the City of Wheaton, DuPage County, Kane-DuPage Soil and Water Conservation District, Illinois Department of Natural Resources-Threatened and Endangered Species Consultation, Illinois Environmental Protection Agency, United States Fish and Wildlife Service and US Army Corps of Engineers.

**Illinois Department of Transportation, Elgin O'Hare - West Bypass, Cook and DuPage Counties:** CBEL Lead for preparation of Environmental Impact Statement, environmental fieldwork, data collection, impact assessment, and GIS database development (as subconsultant) for 127 square mile study area. Specific responsibilities included preparation of scope of services, methodology, data collection, preliminary environmental fieldwork/coordination (wetlands, water resources, upland habitat, and aquatics), agency coordination, and quality assurance and quality control pertaining to environmental resources. Primary author for several sections of the Tier One Draft Environmental Impact Statement (DEIS) and various other project documents. Participated in public involvement meetings and tasks in accordance with IDOT Context Sensitive Solution (CSS) policies and procedures.

**Pine Dunes Wetland Mitigation Area, Illinois State Toll Highway Authority, Lake County, IL:** Project Manager responsible for coordination of project design and permitting of the Pine Dunes Wetland Mitigation Area as well as principal designer of the restoration program which included: design of all on-site grading; location of amenities, including bike paths, bridges & boardwalks; field tile abandonment; restoration and planting plans; and stream restoration plans which included design of pool riffle structures. Responsible for the completion of the wetland delineation, floristic inventory, and threatened and endangered species survey. Coordinated completion of the soil survey, field tile survey, topographic survey, hydrology and hydraulic study, and all CAD work. Assisted with preparation of construction, long-term management and





Community, September 2007

"Procedures for Determining Jurisdictional Wetlands and Waters of the United States", The Burke Group, September 2007

National Pollutant Discharge Eliminations System/Wetland Regulation Seminars – 4 courses taught, Summer 2005

Moderator "Wetlands", IL Association for Floodplain and Stormwater Management Conference, March 1997 to 2002

"Basic Wetland Delineation", IL Association for Floodplain and Stormwater Management Conference, March 1995

#### SEMINARS ATTENDED

Stream Functions Pyramid Workshop, Stream Mechanics, Parma, OH, April 29 - May 2, 2014

Physical and Biological Goals of the Clean Water Act: What Stormwater Professionals Need to Know, The Conservation Foundation and DuPage County Stormwater Management Division, Naperville, IL, April 26, 2012

Illinois Stream Mitigation Conference, Rosemont, IL, October 2011

Beyond the Basics, The Evolution of Stormwater Best Management Practices, The Conservation Foundation, Lisle, IL, September 20, 2011

Vegetative Establishment, Ero-tex, Libertyville, IL, August 30, 2011

Designated Erosion Control Inspector Workshops Sessions 1&2, Lake County Stormwater Management Commission, Libertyville, IL, August 2, 2011

Rainwater Harvesting, Rosemont, IL, July 2011

Lake County SMC – Designated Erosion Control Inspector Workshop, February 8, 2011

Ethics in City Government, Ethics Training for CDA/OMP Contractors, Vendors & Employees

Natural Areas Management Seminar, DuPage County, Wheaton, IL, February 22, 2010

Control of the Common Carp: Benthic Mesh, The Wetlands Initiative, Rosemont, IL, January 6, 2010

Beyond the Basics: Green Infrastructure for Clean Water, The Conservation Foundation, Woodridge, IL, February 18, 2010

monitoring cost estimates. Pine Dunes Wetland Mitigation Area includes approximately 220 acres of upland within the 315 acre parcel that are currently under agricultural production or are woodlands comprised of white oak, red oak and other hardwoods. The project involves wetland creation, wetland enhancement, stream restoration, forest enhancement and restoration, and restoration of upland areas to prairie/savanna. The mitigation potential includes about 32 acres of wetland enhancement, 58 acres of wetland restoration, and 20 acres of upland enhancement credit, 100 acres of woodland enhancement, 3,300 feet of stream restoration, for a total of about 85 acres of wetland/waters mitigation credit. In addition to wetland mitigation design and permitting services, CBEL designed a 24 car parking lot, restroom, well, water fountain and nearly 3 miles of bike path, along with a 300' long bridge and 3 boardwalks.

**Illiana Corridor, I-55 to I-65, IDOT & INDOT, Will and Kankakee Counties, Illinois and Lake County, IN:** Lead for preparation of the Groundwater Resources Section and assisted with the Water Resources Section of the Tier One and Tier Two Environmental Impact Statement, environmental fieldwork, data collection, and impact assessment (as subconsultant) for the approximately 950 square mile study area located in portions of Will and Kankakee counties in Illinois and Lake County in Indiana. Specific responsibilities included technical writing for the Tier One and Tier Two EIS; preparation of scope of services, budget, methodology, data collection, environmental fieldwork/coordination (for Indiana water resources: streams, lakes/ponds, habitat assessments, fish, mussels, and aquatic macroinvertebrates), agency coordination, and quality assurance and quality control. The Tier One EIS Record of Decision was granted by the FHWA in January 2013, and the Tier Two EIS Record of Decision is anticipated in mid-2014. CBEL/Jedd is lead consultant on wetland/water permitting for the project.

**Illinois State Toll Highway Authority (ISTHA):** Principal reviewer for CBEL's ISTHA Environmental Services Projects contract. Projects include: soil erosion and sediment control inspections, wetland assessments, delineations and floristic inventories for roadway improvements, drainage improvements and proposed interchanges. Sample project sites include: Interstate 57 and Interstate 294 interchange, Interstate 88 at Eola Road interchange, Interstate 88 at Farnsworth Road, and Interstate 90 widening and drainage improvements.

**Seneca I-80 Riverport, Seneca I-80 Riverport, LLC, Seneca:** Project Manager responsible for the completion of wetland delineation, and Corps of Engineers and Illinois Environmental Protection Agency (IEPA) permitting. The IEPA permit required an individual permit requiring completion of an anti-degradation submittal and coordination. The proposed project consists of installation of a new barge and grain handling facility for the export of agricultural products on the Illinois River.

**DuPage County Stormwater Ordinance (2012):** Worked on complete overhaul of the County Stormwater Ordinance to reflect the current and future development conditions in DuPage County. The revised ordinance was developed with input from the Steering Committee made up of municipal engineers and County staff. Specifically responsible for preparation of the Wetland/Waters, Buffer, BMP and Soil Erosion and Sediment Control Sections of the new ordinance.

**Watershed Management Ordinance Implementation, MWRD of Greater Chicago:** CBEL is the prime consultant for engineering services in support of the MWRD's new Watershed Management Ordinance Implementation. CBEL developed a Technical Guidance Manual (TGM) to be used as a technical reference for the stormwater management regulations contained in the Watershed Management Ordinance (WMO) and worked with the City of Chicago, the Metropolitan Planning Council, and other stakeholders to develop guidance for the design of green infrastructure. Jedd was the lead environmental consultant for preparation of the relevant sections of the manual and training classes.

**Covenant Village of Northbrook Streambank Stabilization Project, Covenant Village of Northbrook, Northbrook:** Principal Project Manager responsible for completion of wetland/waters delineation, design of all bank stabilization treatments, and coordination of all CAD drafting. Obtained Village of Northbrook, Corps of Engineers, Illinois Environmental Protection Agency and Soil and Water Conservation District Approvals. Provided bid assistance and performed all construction observation. Covenant Village of Northbrook (CVON), a retirement community located in the northwest suburbs, contacted CBEL to assist with design, permitting, bid assistance and construction observation of a streambank stabilization project. The purpose of the project was to replace an existing timber retaining wall and restore near vertical eroded banks along 900 feet of Techny Drain, which passes through the front of the CVON property. CBEL was tasked with providing alternative designs, presenting the aesthetics and benefits of each alternative and evaluating the cost to install each on a linear foot basis, since nearly 1,800 linear feet of work would be required. The project was broken into 3 units based on the location of entrance roads. The esthetic importance of each unit was evaluated and assigned esthetic priority levels. Higher priority units would receive higher quality esthetic bank treatments. Project involved design of limestone block walls, gabion walls and boulder toe treatments.



**YEARS EXPERIENCE:** 17  
**YEARS WITH CBBEL:** 13

**EDUCATION**

Bachelor of Science, 1997  
Biology  
Saint Mary's College, Notre Dame, IN

**CERTIFICATIONS**

Certified Wetland Specialist (CWS)  
Lake County, IL

Designated Erosion Control Inspector (DECI)  
Lake County, IL

Qualified Wetland Review Specialist (WRS)  
Kane County, IL

**PROFESSIONAL DEVELOPMENT**

Wetland Delineator Certification Program:  
Wetland Training Institute, Madison, WI,  
1997

The Chicago Wilderness Midwest Ecological  
Prescription Burn Crew Member Training,  
2002

Illinois Hydric Soils Class: Lenore Vasilas and  
Bruce Vasilas, DuPage County, 2002

Wetland Plant Identification Class: Robert H.  
Mohlenbrock, DuPage County, 2003

Biologist experienced in environmental resources. Responsible for the completion of wetland delineations, Section 404 (Clean Water Act) permit applications and mitigation activities. Assists with the coordination and implementation of US Army Corps of Engineers (USACE) permit conditions and obligations. Tasks include the monitoring and analysis of vegetation and hydrology conditions at wetland mitigation sites; conducting wetland field reconnaissance and mapping of wetlands; conducting habitat quality assessments; preparing wetland permit applications and mitigation plans; and writing technical reports. Coordinates with the US Fish and Wildlife Service under Section 7 of the Endangered Species Act of 1973, as amended, the Illinois Department of Natural Resources (IDNR) for state-listed threatened and endangered species, Illinois Historic Preservation Agency for cultural resources and the Illinois Environmental Protection Agency (IEPA) under Section 401 of the Clean Water Act (CWA). Tasks also include coordination with IDNR under the Interagency Wetland Policy Act of 1989. Responsible for preparing Lake County Watershed Development permit applications in compliance with the Watershed Development Ordinance, DuPage County permit applications in compliance with the DuPage County Countywide Stormwater and Floodplain Ordinance, and Kane County Watershed Development permit applications in compliance with the Kane County Stormwater Ordinance. Computer application experience includes: Floristic Quality Assessment Program for the Chicago Region.

**Cambridge Homes, Pingree Grove:** Assisted with the wetland delineation, report preparation, and USACE and Kane County permit applications for the Pingree Grove Assemblage of properties.

**Cambridge Homes, Beach Park:** Assisted with the wetland delineation and report preparation for the Beach Park Assemblage of properties. Tasks included preparation of the Section 404 Regional Permit 1 application for the Cambridge at Heatherstone – Wheeler Parcel in Beach Park.

**Commonwealth Edison Projects:**

**Rutland Township (Sandwald) Substation, Kane County:** Project Manager for the construction of the Lake Bluff Substation in Lake County, Illinois. Responsible for coordinating and assisting with the delineation, the USACE permit application and the Kane County Stormwater Management Permit application. Tasks included coordination with the USACE and Kane County during their permit review process.

**Wolfs-Oswego Right-of-Way, Kendall County:** Project Manager for the installation of a ±4-mile overhead utility line from the Montgomery Substation to the Oswego Substation in Kendall County. Responsible for assisting with the wetland delineation (utilizing GPS) and preparation of a Section 404 permit application for authorization under Nationwide Permit 12. Tasks included project coordination with the US Fish and Wildlife Service to obtain compliance under Section 7 of the Endangered Species Act of 1973 and with the Rock Island USACE for Section 404 permit authorization.

**Lake Bluff Substation, Lake County:** Project Manager for the construction of the Lake Bluff Substation in Lake County, Illinois. Responsible for coordinating and assisting with the delineation and the Regional Permit application. Tasks included extensive coordination with the USACE during their permit review process and with the Lake County Forest Preserve District to facilitate the wetland mitigation.

**Round Lake Beach Substation, Lake County:** Project Manager for the construction of the Round Lake Beach Substation in Lake County, Illinois. Responsible for coordinating and assisting with the delineation and coordinating with the Lake County Stormwater Management Commission to obtain permit authorization.

**Bristol Right-of-Way, Kendall County:** Project Manager for the installation of an overhead utility line in Bristol, Kendall County. Responsible for assisting with the wetland delineation (utilizing GPS) and preparation of a Section 404 permit application for authorization under Nationwide Permit 12. Tasks included project coordination with the US Fish and Wildlife Service to obtain compliance under Section 7 of the Endangered Species Act of 1973 and with the Rock Island USACE for Section 404 permit authorization.

**Line 11323 (Waterman to Steward), DeKalb County:** Assisted with the wetland delineation of wetland boundaries within the 13-mile right-of-way, and helped coordinate the professional land survey (utilizing GPS) of the wetland boundaries.

**Line 17121 (Wempletown to Lena), Winnebago and Stephenson Counties:** Assisted with the wetland delineation of wetland boundaries within the 22-mile right-of-way. Tasks included delineating 25 jurisdictional wetlands and waters of the US.

**Line 0901 (Joliet to Matteson), Will County:** Assisted with the delineation of 10 wetland and waters of the US boundaries within the 19.6-mile right-of-way. Also helped prepare an aerial photograph exhibit illustrating the locations of the flagged wetlands and waters of the US.



**Algonquin TDC 259 Substation to Randall Road, McHenry County:** Project Manager for the installation of a utility line through Woods Creek and adjacent wetlands using an open trench technique. Responsible for preparing a Section 404 permit application for authorization under Regional Permit 8. Tasks included project coordination with the US Fish and Wildlife Service to obtain compliance under Section 7 of the Endangered Species Act of 1973 and with the McHenry County Soil and Water Conservation District.

**Johnson Drive N/Lake-Cook Cable Replacement in Buffalo Grove, Lake County:** Project Manager for the wetland delineation of the Buffalo Grove right-of-way and preparation of the USACE Regional Permit 8 application for the proposed underground polypipe. Coordination was required with the: USACE during their permit review process, US Fish and Wildlife Service, and with the Buffalo Grove Prairie Steward to ensure the project would not impact the high quality plant communities within the existing prairie, which is located less than one mile from the habitat of the Eastern massasauga, a state-listed endangered species and a candidate for federal listing under the Endangered Species Act.

**Line 15507/08 (TSS 155 Nelson to TSS 107 Dixon), Lee County:** Assisted with determining the limits of ten wetlands/waters of the US within the existing 0.9-mile right-of-way. Authored technical memorandum.

**Ferry Road Relocation:** Project Manager for successfully compiling, submitting, coordinating and obtaining the DuPage County Stormwater Management Permit application. Additional tasks included preparing a restoration plan for the special management area impacts.

**Lombard to Franklin Park, Unincorporated DuPage County:** Assisted with the wetland delineation of four wetlands and a portion of the East Branch DuPage River covering approximately 34 acres within the right-of-way. Tasks included coordinating the professional land survey (utilizing GPS) of the wetland and waters boundaries. Successfully compiled and obtained the DuPage County Stormwater Management Permit for the new distribution line. Coordination was required with the DuPage County Department of Development and Environmental Concerns (DEC) during their permit review process.

**Davis Junction Right-of-Way, Ogle County:** Project Manager for the installation of an overhead utility line in Davis Junction, Ogle County. Responsible for completing the wetland delineation and preparing a Section 404 permit application for authorization under Nationwide Permit 12. Tasks included project coordination with the US Fish and Wildlife Service to obtain compliance under Section 7 of the Endangered Species Act of 1973 and with the Rock Island USACE for Section 404 permit authorization.

**DuPage County Department of Drainage Division, DuPage County:** Assisted with the wetland delineation and prepared the DuPage County Tab 4 and Tab 5 Wetland and Riparian Submittal and the USACE Permit application for the Reach 8 Winfield Creek Flood Control Project in Unincorporated DuPage County. Also prepared the wetland buffer mitigation-planting plan.

**Cedar Ridge Subdivision, Pulte Homes, Lockport:** Project Manager for the wetland delineation for a ±165 acre residential subdivision in Lockport. This project included coordinating and completing the delineation and the Section 404 Permit application for authorization under Regional Permit 3. Extensive coordination was required with the USACE during their permit review process and the City of Lockport to facilitate the review and approval of the project.

**Hampton Reserve, Pulte Homes, Mundelein:** Project Manager for the wetland delineation for a 0.55 acre residential development in Mundelein. This project included coordinating and completing the delineation, the Section 404 permit application for authorization under Regional Permit 7 and Regional Permit 8, and the Lake County Stormwater Management Permit application. Extensive coordination was required with the review agencies during their permit review process and with the Village of Mundelein to facilitate the review and approval of the project.

**Armitage Creek Streambank Stabilization, Glendale Heights, DuPage County:** Project Manager responsible for completing the wetland delineation, the DuPage County Tab 4 and Tab 5 Wetland and Riparian Submittal and the USACE Permit application for the Armitage Creek Streambank Stabilization Project in Glendale Heights, DuPage County, Illinois. Also prepared the wetland buffer and riparian environment mitigation-planting plan.

**College of Lake County, Vernon Hills:** Project Manager for the wetland delineation for the College of Lake County-Vernon Hills campus expansion. Responsible for coordinating and assisting with the delineation and the Lake County Stormwater Management permit application. Extensive coordination was required with the project team, the City of Vernon Hills and the Lake County Stormwater Management Commission (LCSMC) during their permit review process.



**YEARS EXPERIENCE:** 30  
**YEARS WITH CBBEL:** 8

#### EDUCATION

Doctor of Philosophy, 1986  
Structural Engineering  
University of Texas at Austin

Master of Science, 1981  
Structural Engineering  
Washington State University

Bachelor of Science, 1978  
Structural Engineering  
Arya-Mehr University, Tehran, Iran

#### PROFESSIONAL REGISTRATION

Structural Engineer, IL, 081005058, 1993  
Professional Engineer, IL, 062047793, 1992  
Professional Engineer, IN, PE10101277, 2001  
Professional Engineer, WI, 35090-006, 2001  
Professional Engineer, MA, 35481, 1990

#### CERTIFICATIONS

Bridge Inspection Calibration Class  
IDOT

Bridge Inspection Refresher Course  
National Highway Institute

IDOT Approved Bridge Program Manager  
IDOT

National Bridge Inspection Standards (NBIS)  
Qualified

#### PROFESSIONAL DEVELOPMENT

International Bridge Conference, Pittsburgh,  
PA

- LRFD Design of Steel Girders
- LRFD Design of PPC Beams

IDOT, Springfield, IL

- Design and Construction of Segmental Concrete Bridges
- Design of Highway Bridges for Seismic Loads

Boston Society of Civil Engineers & ASCE,  
Continuing Education Program, Boston, MA

- Lecture Series on Composite Construction
- Selected Topics on Bridges

ASCE, Boston, MA

- Parking Structures Restoration and Rehabilitation

Post-Tensioning Institute, Minneapolis, MN

- Structural Design Fundamentals for Post-Tensioned Buildings and Parking Structures

Structural Stability Research Council,  
Milwaukee, WI

- Is Your Structure Suitable Braced?

Head of Structural Engineering responsible for the study, design, and generation of construction contract documents for structural systems employed in buildings, industrial facilities and bridges serving highway traffic. Experience includes planning and concept design, bridge type/size/location studies, structural inspections, structural ratings, rehabilitation and renovation studies, final designs and the production of plans, specifications and estimates, and construction inspection. IDOT Approved Bridge Program Manager for 11 municipalities.

**Balmoral Avenue Underpass, Illinois Department of Transportation, District One:** Structural Project Manager responsible for the preparation of design plans for the construction of a new underpass on new alignment. The underpass will carry traffic from southbound Mannheim Road (US 45) to Balmoral Avenue. The project required extensive coordination with the Federal Aviation Authority as the underpass is located within the flight pattern of two runways that serve O'Hare Airport. Structural improvements included the construction of two new steel plate girder bridges (117 ft - single span) to carry Mannheim Road over the underpass, approximately 300 ft of cantilevered soldier pile retaining walls, approximately 300 ft of tied back soldier pile retaining walls and approximately 375 ft of cantilevered concrete retaining walls. The retaining walls varied in height, with a maximum retained height of approximately 20 ft. The construction cost for this project was \$13.5 million.

**Balmoral Ave over I-294, Rosemont:** Structural Project Manager. This project consists of Phase II engineering and development of contract documents for construction of a northbound exit ramp from the Tri-State Tollway (I-294) to Balmoral Avenue, reconstruction of the SB entrance ramp and widening of the Balmoral Bridge over I-294. The existing structure is a two span bridge with 102' and 119' spans. The superstructure consists of 82'-0" deck supported on eleven 63" Bulb T-Beams. The proposed deck is 94'-7" deck providing five 12'-0" traffic lanes, 16'-0" median and 6'-7" sidewalk. The existing deck was partially removed and widened with three new beams. The substructure members were widened in kind and new retaining walls were constructed in front of the existing ones. This project is part of a larger series of improvements to Balmoral Avenue to improve regional access to the Rosemont Convention Center area and O'Hare International Airport. Phase I investigated an ultimate extension of Balmoral Avenue west to Bessie Coleman Drive on O'Hare Airport grounds, as well as the impact of future improvements by the Tollway at the major divergence of I-294 and I-190/I-90.

**IL Route 53 West and East Frontage Roads, Rolling Meadows:** Project Manager responsible for overseeing the design, developing construction plans, coordination with project architect, QA/QC, and managing the project. The project consists of the replacement of the existing bridge decks and complete substructure repairs as needed on the IL Route 53 West and East Frontage Roads. CBBEL performed in depth field inspection and prepared Bridge Condition Reports (BCR) for both structures. The BCR's revealed that the existing beams are in good condition and only deck slabs should be replaced. Also the NW wingwall of the abutment has failed and will be replaced. CBBEL completed the final plans and construction documents and the project was let in July 2010. Upon completion of the project the bridges will be jurisdictionally transferred from IDOT to the City.

**Huffman Street Project, Naperville:** Structural Project Manager. Responsibilities included designing several large cast-in-place control structures and concrete end sections to connect approximately 1400 linear feet of dual precast box culverts. Plans, specifications, cost estimates and shop drawing review were included in the project.

**Naperville Riverwalk Renovation, Naperville:** Structural Project Manager. The project involved the design of several hundred feet of tiered retaining walls along the West Branch of the DuPage River in downtown Naperville. The existing walls were removed and replaced with cast in place concrete walls with an architectural facade to resemble natural stone. The improvements also included the design of stairs, an ADA compliant ramp and a circular overlook area at the end of the newly designed park area.

**Lincoln Park Zoo, Chicago:** Structural Project Manager. The project scope included preparing design plans and specifications for the foundation of the proposed Educational Pavilion, Ticket Kiosk and bathroom. These foundations were built on grade. CBBEL provided design plans and specifications for the on grade boardwalk.

**Washington Park, Downers Grove:** Structural Project Manager. This project included several long walls to function and provide seating in the fields, stairways, floodwall, and foundation for the other structures. The walls had a special form liner, selected by the Downers Grove Park District, to have esthetically pleasing look. This project required a lot of coordination and special details because of its complicated geometry. CBBEL prepared plans, specification, and cost estimate for the project.

**Mainline Roadway Widening & Reconstruction of Northbound Tri-State Tollway:** Project Manager responsible for overseeing the design, developing construction plans, coordination with Lorig Construction, QA/QC, and managing the project. CBBEL, Schnabel and Lorig Construction



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**PROFESSIONAL AFFILIATIONS**

American Concrete Institute

American Railway Engineering and  
Maintenance-of-Way Association (AREMA)

American Society of Civil Engineers

Earthquake Engineers Research Institute

provided Design Built plans and construction to Mainline Roadway Widening and Reconstruction of Northbound Tri-State I-294 Tollway from north of Touhy Avenue up to Dempster Street. CBBEL was responsible for developing design plans and specifications of retaining walls. Tollway was adding a lane of traffic and a shoulder to northbound of I-294 and there was not enough right-of-way to support the roadway embankment widening. Therefore the only option to support the new roadway lane and shoulder was retaining walls. The scope included developing design plans and details for five different retaining walls with moment slab and parapet or coping along the project limits.

**33rd Street Viaduct over I90/94, Chicago:** Structural Project Manager. Completed shop drawing review for the removal and replacement of the existing seven-span bridge with five continuous steel spans and two simply supported concrete T beams and replacement with galvanized composite steel beams, substructure repairs, full replacement of two piers caps and partial replacement of four others, building new approach slabs, milling and resurfacing of the approach roadway, traffic signal modernization, and deck and underpass lighting.

**Donald E. Stephens Convention Center East Parking Garage, Rosemont:** Structural Project Manager. Performed inspections and prepared repair plans with specifications for a four story single helix, two way precast parking garage. Inspections included chain dragging the garage decks and hammer sounding accessible areas of the precast triple tee beams, ledger beams and columns to document areas of deteriorated. Repair plans included installation of a waterproof membrane system, joint repairs and replacement of several precast tee beams with cast in place concrete supported by steel beams.

**Aloft Hotel Pedestrian Walkway, Rosemont:** Structural Project Manager. Prepared structural plans and specifications for the 170 foot long elevated pedestrian walkway over Purdue Drive in Rosemont's Entertainment District. The glass enclosed steel truss walkway connects the 2nd floor of the newly constructed Aloft Hotel to the south stairway of the Williams Street parking garage. The structural design was coordinated with the architectural features of the hotel and garage.

**BRIDGES**

**Timber Edge Drive Bridge over Salt Creek, Oakbrook Terrace (2007):** Structural Engineer responsible for overseeing structural design of the Timber Edge Drive Bridge over Salt Creek in Oakbrook Terrace, Illinois. The proposed bridge is a 156 ft long, three span continuous composite wide flange stringer superstructure supported on solid web piers and integral abutments. The overall deck width is 35'-2", which provides two 12' lanes, two 4' shoulders and two F-shaped concrete parapets. Responsibilities include design of the bridge superstructure and substructure, preparation of cost estimates, special provisions and structural steel shop drawing review.

**Pedestrian Bridges:** Project Manager responsible for overseeing the design, developing construction plans, QA/QC, and coordination with civil engineer. CBBEL has designed several pedestrian bridges for different municipalities, park districts, golf courses, and counties. The span length of the bridges range from 40' to 120' and their width varies from 10' to 16'. The pedestrian bridges are typically designed for 85 psf live load plus a maintenance vehicle of 12,000 lb, but some agencies require bridges to be designed for a heavier vehicle of 20,000 lb.

**Parapet Mounted Noise Abatement Walls Along I-294:** Project Manager responsible for overseeing the design, developing construction plans, coordination with Lorig Construction, and QA/QC. A section of the I-294 NB at the ramp to West Dempster Street required Noise Abatement Walls. The roadway shoulder at this section consists of moment slab with type F parapet, supported by modular block walls. The timber noise abatement walls had to be supported by the parapet. The wall is approximately 350' long, 18' high and designed for a minimum 35psf wind load. The 3" timber panel panels, between the columns, are supported by steel WF columns. CBBEL design all the panels, columns, and the connection of steel columns to concrete parapets. CBBEL provided design plans, specifications, and structural calculations.

**Stone Bridge of Lake Bluff, Retaining Walls, Lake Bluff:** Project Manager responsible for overseeing the design, developing construction plans, coordination with project architect, QA/QC, and managing the project. New England Builder was developing a site for new housing community. There were several ponds along the proposed roadways retaining walls required to support roadway embankments. Each retaining wall was approximately 55-65 feet. The height of the walls varied from approximately 8' to 18'. There are 3'-1" parapets mounted at the top of the walls and an over look area cantilevered out in the middle of walls. The face of the walls had natural stone veneer supported by the walls and special formliner to give impression of a tunnel. The walls had to be water tight to reduce any possible water loss of the pond. Geotechnical investigation revealed that the underlying soil was very poor material. Shear keys were designed to provide minimum required sliding safety factors. CBBEL provided design plans, specification for the project.



**YEARS EXPERIENCE:** 9  
**YEARS WITH CBBEL:** 9

**EDUCATION**

Master of Science, 2004  
Civil Engineering, Structures  
Southern Illinois University

Bachelor of Science, 2002  
Civil Engineering, Structures  
Southern Illinois University

**PROFESSIONAL REGISTRATION**

Engineer Intern, IL, 061030701, 2003

**CERTIFICATIONS**

IDOT Approved Team Leader, Bridge  
Inspection  
IDOT

Safety Inspection of In-Service Bridges  
National Highway Institute

Documentation of Contract Quantities  
IDOT, 14-0208

**PROFESSIONAL AFFILIATIONS**

American Institute of Steel Construction

American Society of Civil Engineers

Tau Beta Pi National Engineering Society

Civil Engineer responsible for structural design and preparation of contract plans, specifications and cost estimates. Involved in the design of new bridges, retaining wall structures, and various storm water control structures, including culverts and junction chambers. Responsibilities also include bridge inspections for several municipalities, construction observation services, and inspection of buildings and parking garages. IDOT Approved Team Leader, Bridge Inspection.

**CULVERTS/FLOOD CONTROL PROJECTS**

**Huffman Street Flood Control Project, Naperville:** Responsibilities included designing several large cast-in-place control structures and concrete end sections to connect approximately 1400 linear feet of dual precast box culverts. Plans, specifications, cost estimates and shop drawing review were included in the project.

**Book Road and 83rd Street Improvements, Naperville:** Responsible for the structural design and preparation of contract plans for dual 10'x3' precast concrete box culverts. The design included cast-in-place concrete headwalls and vertically cantilevered wingwalls.

**Nickels Farm Development, Somonauk:** Responsible for the structural design and preparation of contract plans for dual 12'x5' concrete box culverts. The box culverts convey stormwater between detention ponds at three locations in the new residential development. Due to the culverts being located in areas of high visibility, the cast-in-place headwalls and apron end section utilized form lined concrete to improve the aesthetics of the culvert end sections.

**North Broadway Improvements, Lombard:** Assisted in the design of a 22'x33'x28' deep cast-in-place concrete pump station receiving stormwater from a 108" diameter pipe. Special attention was given to the design of the reinforced concrete walls due to a large unbalanced soil load and opening for the pipe.

**BRIDGE PROJECTS**

**Balmoral Avenue over Tri-State Tollway (I-294), Rosemont:** The project involved the design of a new exit ramp from the northbound Tri-State Tollway to connect Balmoral Avenue in Rosemont. The project included widening the Balmoral Avenue Bridge to accommodate additional traffic and provide dual turn lanes onto both the northbound and southbound ramps. Responsibilities included preparation of design plans and specifications for the bridge widening which included 63" pre-stressed bulb T beams, pile supported abutments and piers along with the design of a vaulted concrete approach slab.

**135<sup>th</sup> Street over Long Run Creek, Will County:** Provided structural design and preparation of contract plans for a 112 foot long two span continuous rolled steel beam bridge. The superstructure consists of eleven composite steel beams which provides four 12 foot wide traffic lanes and a 16 ft wide painted median/turn lane. The bridge is supported by integral abutments and a solid concrete pier. The bridge was designed to accommodate 120,000 pound permit loads due to heavy truck traffic in the area.

**Big Timber Road Bridge over Tyler and Pingree Creek, Kane County:** The project involved the design of a composite steel plate girder bridge. The 96 foot long single span bridge has a width of 86'-10" which accommodates 4 traffic lanes, shoulders, striped median and a 14 foot wide bicycle path. The plate girder superstructure is supported on piles and integral abutments. Responsibilities included review and design of the superstructure/substructure and preparation of plans.

**IL Route 53 Frontage Road Bridges, Rolling Meadows:** The project consisted of replacement of the existing bridge decks, substructure repairs and complete replacement of a failed wingwall on the East and West Frontage Road Bridges in Rolling Meadows. Responsibilities included an initial inspection, preparation of a Bridge Condition Report, structural design, reviewing design plans and assisting the Resident Engineer with shop drawing review.

**71<sup>st</sup> Street Reconstruction, Burr Ridge:** This project consisted of the complete reconstruction of 71<sup>st</sup> Street including an extension across Flagg Creek to Wolf Road. The proposed bridge was a two-span precast three-sided structure with architectural element to function as an entrance feature to the recently redeveloped business and retail center. Responsibilities included structural design and preparation of plans for the three sided precast arch supported on drilled concrete shafts that were drilled down to bedrock.

**Deerfield Road Bike Path, Lake County:** Structural Engineer responsible for design and preparation of plans for a 340 foot long four span pedestrian bridge over the Des Plaines River in the Lake County Forest Preserve. Each of the four 85 feet long prefabricated steel truss spans is supported on concrete cap/column piers and abutments. The bridge layout was coordinated with the construction of a 600 foot long elevated timber approach boardwalk which was utilized to reduce the amount of fill in the floodplain and to minimize environmental impacts.





**YEARS EXPERIENCE:** 26  
**YEARS WITH CBEL:** 26

**EDUCATION**

Bachelor of Science, 1988  
Mechanical Engineering  
University of Illinois at Chicago

**PROFESSIONAL REGISTRATION**

Professional Engineer, IL, 062.048356, 1993  
Professional Engineer, WI, 43186-6, 2013  
Professional Engineer, IN, PE11012145, 2010

**PROFESSIONAL DEVELOPMENT**

Ethics in City Government, Ethics Training for  
CDA/OMP Contractors, Vendors &  
Employees

**PROFESSIONAL AFFILIATIONS**

American Society of Mechanical Engineers

Engineers Without Borders

Illuminating Engineers Society

Professional Engineer experienced in design of mechanical/electrical engineering projects. Experience includes pump station design, water model studies, roadway and site lighting design, SCADA system design and irrigation design. Participated and/or acted as the Resident Engineer on various potable water and sewage related pumping station projects, roadway lighting and stormwater management projects. Responsibilities include design coordination with all related engineering disciplines on various projects with an emphasis on pumping applications including storm, sewage and potable water pump stations, as well as roadway lighting design and electrical design. Duties include preparation of design memorandum and preliminary engineering reports; acquisition of permits from state, county, and local agencies; preparation of contract specifications and construction plans; review of drawings and specifications for code compliance; providing resident engineer services; design of standby engine generators and electric services; design of lighting systems for roadway, parking lot, landscape, and interior applications; and design of SCADA systems for sanitary, storm and potable water applications. Performs water model analyses using WaterGems, Infowater, WaterCAD and EPANET.

**PUMP STATIONS**

**Flood Mitigation Project, Elmwood Park:** Project Manager/Lead Designer for 150 cfs stormwater pump station, including four (4) 250 Hp pumps, 1600A motor control center, 1000 kW engine generator, 30' x 12' control building, SCADA, CCTV and 1,000 feet of twin 36" HDPE forcemains. Construction cost \$3.6 million.

**Cummins Technical Center Flood Risk Reduction, Columbus, IN:** Project Manager responsible for design of flood control pumping stations. Project was a flood wall design to protect the Technical Center building. Included 45 cfs pump station, 5 cfs pump station, and over 500 feet of concrete flood wall.

**Wastewater Treatment Plant Modifications, Rochester, IN:** Modifications included replacement of six (6) electric motors with inverter duty rated motors, installation of six (6) variable frequency drives for trickling filter effluent pumps. Construction cost of \$200,000.

**Old Plank Park, Naperville:** Design of approximately 7 cfs stormwater dewatering pump station for approximately 80 ac-ft stormwater detention facility for the City of Naperville, IL. Required coordination and modifications to existing Country Commons pumping facility.

**Graff Drive Stormwater Pump Station, Rosemont:** Design of 20 cfs stormwater pump station including SCADA and 100kw standby generator to alleviate local flooding in residential area. Construction cost \$586,000.

**Country Commons, Naperville:** Design of 2 cfs stormwater pump station to dewater 49 acre-feet stormwater reservoir underdrain system. Construction cost \$550,000.

**Well No. 9, Shorewood:** Design of brick Well House for electrical, variable frequency drive and SCADA controls for 400 Hp, 1200 gpm deep well pump. Packaged meter vault, manual transfer switch, and 2400 volt step up transformer included.

**Sycamore Well Nos. 6 & 8, Sycamore:** Project Manager and Lead Designer for rehabilitation of two existing well houses in City of Sycamore. Upgrades include building additions to accommodate future radium treatment/removal equipment; electrical upgrades to existing well pumps; new diesel stand-by generator; underground piping revisions; well house piping revisions.

**Wood Dale-Itasca Reservoir and Pump Station, Wood Dale:** Multi-phased stormwater management project along the Salt Creek for the DuPage County Department of Environmental Concerns. Project included the excavation of over 500,000cy. of material; construction of an earthen embankment approximately 0.5 mile long; 25 cfs pump station, 45ft. deep with two 75 hp pumps; 5 hp dewatering well, and SCADA telemetry system with a 75ft. tall radio antenna. Construction cost \$5 million.

**Westwood Creek Dam and Pump Station, Addison:** Assisted in the preparation of construction drawings for a stormwater dam and pump station consisting of three 300hp submersible tube type propeller pumps, three 6' x 8' motor operated sluice gates, and associated level sensing and control devices. Pump station is rated @ 500cfs, and is provided with an 800kw diesel-electric generator for standby power. Responsibilities included Resident Engineer for 2 years during construction, contract administration and preparation of O & M manual. Perform annual dam inspection report for submission to IDOT Division of Water Resources. CECI 1995 Engineering Excellence Achievement Award Winning Project. Construction cost of \$2 million.

**Finley/Crescent Pond, Lombard:** Design and resident engineering of 3 acre ft. stormwater detention reservoir and 6cfs pump station. Construction cost \$800,000.





**Sycamore Well No. 9, Sycamore:** Designed a 250 hp 1350 gpm well pump for potable water deep well. Designed a well house including provisions for radium treatment equipment. Design included a 350kw standby power generator, SCADA controls and chemical treatment facilities. Construction cost \$827,000.

**William Street Reservoir and Pump Station, Rosemont:** Assisted in the design and preparation of construction documents for a below grade, poured-in-place concrete SMG reservoir and 6000gpm potable water pumping station for the Village of Rosemont. Responsibilities included sizing of the diesel electric generator; lighting, electrical power, piping layouts and implementation of CAD to prepare contract drawings. Major items of equipment included four 1,500gpm vertical turbine pumps driven by variable frequency drives; standby diesel electric generator; HVAC system for cooling main water pumps and heating the pump station; chlorination equipment; control and alarm telemetry; and excavation support system. CECI 1995 Engineering Excellence Achievement Award Winning Project.

#### **LIFT STATIONS**

**Regency Drive Lift Station, Glendale Heights:** Project Manager for design of 400 gpm sewage lift station modifications to convert it from a can lift station to submersible pumps. Project also included a 50 kW natural gas generator.

**VFW Lift Station, Rochester, IN:** Design of sanitary lift station modifications for rehabilitation of existing lift station including pumps, controls, valves, hatches and bypass pumping. Construction cost of \$140,000.

**Klestad Lift Station, Wood Dale:** Project Manager for rehabilitation of duplex submersible sewage lift station conversion from dry pit station. Included 60kw natural gas standby generator. Construction cost \$450,000.

**Peck Farm Park, Geneva:** Design of a lift station, distribution watermain and electrical service to 50,000 sf recreational building. Construction cost \$800,000.

**Blacksmith Drive Lift Station Improvements, Wheaton:** Design and construction upgrades to existing sewage lift station including natural gas stand-by generation housed in pre-cast concrete building. New pump control panel and pump controls via transducer and backup floats.

**Lorraine Blockhouse Improvements, Wheaton:** Design and construction of upgrades to an existing sewage lift station including: Demolition of existing 12' x 12' brick building housing submersible pump controls, Installation of a 10' x 16' pre-cast concrete building with faux brick finish, New 60kw natural gas fueled generator, Pump control panel, Transducer and back-up floats. Overhead electrical service was replaced with below ground conduit and cables, along with new ComEd pad mounted transformers. New hatches were provided on existing concrete pad and new pump guide-rail system and wet well piping was installed.

**Geneva Water Quality Subdivision, Geneva:** Design and part-time construction observation services for sewage lift station and parking lot lighting. Lift station received backwash from future city water treatment plant filter tanks.

**Lift Station Upgrades Phases I & II, Lombard:** Project Manager/Design Engineer/Resident Engineer for the design and construction observation of eight sanitary lift stations and two stormwater pump stations throughout the Village including demolition of existing dry-type stations. Total construction cost \$4.5 million.

#### **WATER MODEL STUDIES**

**Water Distribution Study, Village of Bensenville:** Developed and calibrated a water distribution model (MWH Soft Info Water) and established user demands for water distribution system in the Village of Bensenville. Identified impacts on the system from the removal of the existing piping and water supply demand within the O'Hare Modernization Program expansion area.

**Village of Palos Park:** Three, million dollar construction contracts let in 1998 and 1999 for more than 10 miles of watermain and sanitary sewer in the Village. Through the use of CYBERNET, AutoCAD and KYPIPE, a water model was constructed and analyzed to size booster pump stations and watermain throughout selected portions of the Village.

**DuPage Technology Park, West Chicago:** Analyzed fire flow and water demands of Technology Park being connected to existing City of West Chicago water supply system.

**City of Rolling Meadows:** Review of an existing water model to determine effects of potable water pump station upgrades and pump selection.

## Key Personnel

### Jeffery C. Ziegler

*Vice President*

Mr. Ziegler is a principal and Vice President of James J. Benes & Associates, with 28 years' experience in engineering planning and design, plan review and construction inspection. He is responsible for the management, direction and quality control for roadway, sanitary sewer, water main, streetlighting and drainage projects, as well as street sufficiency studies and capital improvement programs. He is a member of the American Public Works Association.

#### ***Education***

*BS, Civil Engineering  
Technology, Southern  
Illinois University, 1985*

*Roadway Lighting Seminar  
IDOT & CECI*

*IDOT Documentation  
Seminar*

*IDOT Pavement  
Management Seminar*

*Stormwater Best  
Management Practices  
Course NIPC/ASCE*

#### ***Experience***

##### **Municipal Engineering Services:**

Clients: Village of Western Springs, Village of Hinsdale

Project manager responsible for engineering reviews and stormwater reviews for single family, commercial and private developments in the Village of Hinsdale; and is the principal responsible for all engineering services related the firm's role as consulting municipal engineer for the Village of Western Springs.

##### **20 Year Infrastructure Management Plan**

Client: Village of Western Springs

Project engineer responsible for preparation of a street sufficiency study for all Village owned and maintained streets. Work included an evaluation of existing pavements and development of a multi-year improvement and maintenance program.

##### **BNSF Pedestrian Underpass**

Client: Village of Western Springs

Project manager responsible for the preparation of a Phase 1 Project Development Report and Phase 2 construction plans and documents for a federally funded pedestrian underpass under the Burlington Northern Santa Fe Railroad.

##### **Johnson Avenue Roadway and Water Main Improvements**

Client: Village of Western Springs

Project manager responsible for preparation of final plans, specifications and cost estimates and for construction management for reconstruction of 3,600' of residential street and replacement of 3,600' feet of water main.

**Hillgrove Avenue Improvements**

Client: Village of Western Springs

Project manager responsible for Phase 1, 2 and 3 engineering services for reconstruction of 2,700' of street in the central business district. The project was funded through the federal Surface Transportation Program.

**2005 Alleyway Improvements**

Client: Village of Western Spring

Project manager responsible for the preparation construction plans and documents for reconstruction of 1,200' of concrete alleys. The project included sewer connections and permitting through the Metropolitan Water Reclamation District of Greater Chicago.

**2008 Microsurfacing Program**

Client: Village of Western Springs

Project manager responsible for the preparation of construction contract documents and construction engineering for microsurfacing of 35,000 square feet of residential streets.

**CMAQ Parking Lot Expansion**

Client: Village of Western Springs

Project manager responsible for preparation of final plans, specifications and cost estimates, and for construction management for expansion of a commuter parking lot. The project was funded with a CMAQ grant.

**Burlington Avenue Improvements**

Client: Village of Western Springs

Project Manager responsible for Phase 1, 2 and 3 engineering services for reconstruction of 2,700 feet of street. The project was funded by a grant through the Surface Transportation Program.

**Special Service Area No. 9**

Client: Village of Hinsdale

Project manager responsible for preparation of final plans, specifications and cost estimates for construction of a rear yard storm sewer system that was funded with Special Service Area funding.

## Key Personnel

### **Daniel H. Schoenberg, P.E.**

*Project Engineer*

Mr. Schoenberg is a senior project engineer with 41 years experience in engineering design, plan review and construction inspection. His assignments have included roadway, traffic signal, water main and drainage projects and stormwater management reviews for residential, commercial and industrial developments.

#### ***Education***

*BS, Civil Engineering  
Lehigh University  
Bethlehem, PA 1971*

*MS, Civil Engineering  
Purdue University  
West Lafayette, IN 1972*

*APWA National  
Conferences*

*IL Transportation &  
Highway Engineering  
Conferences*

*Stormwater Management &  
Sediment Control Seminar*

*Original Member of the  
DuPage County Municipal  
Engineers Workgroup*

#### ***Professional Registrations***

*Professional Engineer – IL  
Professional Engineer - NJ*

#### ***Experience***

##### **Review Services**

Client: Village of Western Springs

Project engineer responsible for engineering reviews and stormwater management reviews for site development and special projects manager.

##### **Review Services**

Client: City of Elmhurst

Project engineer responsible for stormwater management reviews for residential, commercial and industrial developments requiring detention or impacting Special Management Areas.

##### **Review Services**

Client: City of Warrenville

Project engineer responsible for engineering reviews and stormwater management reviews for single family homes and residential, commercial and industrial developments.

##### **Review Services**

Client: Village of Hinsdale

Project engineer responsible for engineering reviews and stormwater management reviews for single family homes and residential developments.

##### **Director of Public Services**

Employer: Village of Hinsdale

Director of Public Services and Village Engineer, responsible for public works, sewer and water, engineering, planning, code enforcement, and building maintenance programs. He administered stormwater management reviews for all new and redevelopment. He was also responsible for several municipal drainage improvements, road projects and park development programs.



## Key Personnel

### Joshua D. Strait, P.E.

*Project Engineer*

Mr. Strait is a project engineer with twelve years' experience in engineering design, plan review and construction inspection. His assignments have included roadway, water main and drainage projects.

#### ***Education***

*BS, Civil Engineering  
University of Illinois  
Champaign, IL, 2002*

*IDOT Documentation  
Seminar*

*IDOT/APWA Project  
Finalization Procedures  
Seminar*

#### ***Professional Registrations***

*Professional Engineer – IL*

#### ***Experience***

##### **2014 CDBG Reconstruction and Water Main Improvements**

Client: Village of Bensenville

Project engineer responsible for the preparation of final plans, specifications and cost estimates for pavement reconstruction from a rural section to an urban section of 1,500 feet of residential streets. The project included sidewalks, water main replacement, storm sewers, and sanitary sewer spot repairs.

##### **2013 Wood Avenue CDBG Reconstruction and Water Main**

Client: Village of Bensenville

Project engineer responsible for the preparation of final plans, specifications and cost estimates for pavement reconstruction from a rural section to an urban section of 2,500 feet of residential streets. The project included sidewalks, water main replacement, storm sewers, and sanitary sewer spot repairs.

##### **2012 Volk Brothers Subdivision Infrastructure Reconstruction**

Client: Village of Bensenville

Project engineer responsible for the preparation of final plans, specifications and cost estimates for pavement reconstruction from a rural section to an urban section of 1,500 feet of residential streets. The project included sidewalks, storm sewers, and sanitary sewer spot repairs.

##### **IL Route 31 at IL Route 176 Intersection Improvements**

Client: Illinois Department of Transportation

Project engineer responsible for preparation of final plans and documents for improvements at the intersection of two State Routes. The improvement included pavement widening and reconstruction, storm sewers, traffic signal replacement, and stormwater detention.

**Johnson Avenue Reconstruction**

Client: Village of Western Springs

Project engineer responsible for preparation of final construction plans and estimates for the reconstruction of 3,800 feet of residential street. The project included water main replacement and sidewalks.

**2007 Paving Project**

Client: Village of Oak Brook

Project engineer responsible for preparation of final plans, construction documents and estimates for the resurfacing of 3.2 miles of residential streets.

**2010 Drainage Improvements**

Client: Village of Lisle

Project engineer responsible for the hydrologic and hydraulic analyses and preparation of final plans, specifications and estimate for installation of 2,200 feet of storm sewers. The study area and storm sewer improvements were located in a residential neighborhood and regulatory flood plain.

**CSO Drainage Study**

Client: Village of Western Springs

Project engineer responsible for performing a hydraulic analysis of an existing combined sewer system. The IEPA SWMM modeling software was used for analysis and identification of hydraulic deficiencies and development of future sewer improvements to reduce combined sewer overflows.

**Indian Lakes/Country Club Drainage Study**

Client: Village of Bloomingdale

Project engineer responsible for the hydrologic and hydraulic analysis of a 390 acre watershed. The analyses included operation of storm sewers and detention basins, identification of deficiencies and evaluation of alternate improvements.

**2010, 2011 & 2012 Water Main Replacement Projects**

Client: Village of Oak Brook

Project engineer responsible for the preparation of final plans, specifications and cost estimates for replacement of 5 miles of water main, trenched and bored. Permits were obtained from the IEPA and the DuPage County Highway Department.

## Key Personnel

### David A. Koldoff, CPESC

*Director of Natural Resources*

Mr. Koldoff has a strong background in land-use planning and environmental consulting and has completed several hundred projects in DuPage County involving site development and stormwater permitting. With approximately 20 years of experience, he has successfully completed projects in each DuPage County municipality, including approximately 50 projects in Downers Grove. David has managed stormwater-related projects on behalf of DuPage County DOT and DEC, and the Forest Preserve District. Most projects have involved impact analysis and project permitting for natural resources (including wetlands), and have involved state and federal agencies (IDNR, IEPA, IDOT, IHPA, NRCS, SWCD, and ACOE). David has extensive expertise in Best Management Practice (BMP) design and streambank stabilization. He is an ISA-Certified Arborist, a Certified Wetland Specialist, and a Certified Professional in Erosion and Sediment Control (CPESC).

#### ***Education & Registrations:***

*Bachelor of Science,  
Environmental Biology  
Eastern Illinois Univ. 1993*

*CPESC (#4509)*

*Institute of Wetland and  
Environmental Education  
and Research*

*Kane County Wetland  
Review Specialist (#W-011)*

*Lake County Certified  
Wetland Specialist (#C-016,  
and Designated Erosion  
Control Inspector (DECI)*

*ISA -Arborist (IL-4729A)*

#### ***Special Assignments:***

*The Morton Arboretum  
Research Dept (Intern) and  
Collections Dept., 1993*

*Wetland Training Inst. 1995*

#### ***Experience:***

##### **DuPage County Department of Environmental Concerns**

Supervisor for team of ecologists working on mitigation monitoring sites at various locations throughout the County. Coordinated schedule and logistics with County staff on approximately 50 sites.

##### **DuPage County Division of Transportation (Various Projects)**

Review and preparation of wetland submittals and supportive documentation in conjunction with administration of county and municipal stormwater and floodplain ordinance. Completed various roadway projects in Downers Grove including: Highland Avenue; 75<sup>th</sup> Street; and Fairview Avenue.

##### **Cantera Industrial Park**

###### Client: LaSalle Partners

Participated in the development and implementation of a comprehensive erosion and sediment control program; supervised staff for three-season monitoring of waterfowl in 40-ac wetland complex; completed fish stocking program; and monitored vegetation establishment. Prepared reports and facilitated ACOE approvals.

##### **High Speed Rail – Chicago to St. Louis, IL**

###### Client: Illinois Department of Transportation

Conducted field investigations for T&E species, water resources, wetlands, and prairie remnants in areas of proposed project impact along a 280-mile long corridor; developed affected environmental consequences text on water resources including U.S. Waters and fish and aquatic habitat for four action alternatives for project Environmental Impact Statement (EIS).



## David A. Koldoff

### *Special Assignments (cont.)*

*Prescription Burning,  
Public Presentation,  
Kennedy Group, 1998*

*Volunteer Work, West  
Chicago Prairie, 1999*

*ASLA Native Plant  
Restoration Series, 2000*

*DuPage County Hydric  
Soils Course, 2002*

*Green Roof Seminar, 2002*

*Designers and Specifiers  
Ground Control Workshop,  
2005*

*Wetland Restoration Plan,  
Build, and Maintenance,  
2001-2006*

*America in Bloom, 2006*

*U.S. Green Building Consul  
LEED Seminar 2006*

*Volunteer: Hope Garden,  
Naperville Evangelical Free  
Church, 2006-07*

*ASFSM Conference 2006*

*Warrenville Environmental  
Advisory Commissioner  
2007*

### **Naperville River Walk Phase I Renovation (Seg. 2)**

Client: City of Naperville

Arborist responsible for tree impact assessments resulting from proposed Riverwalk and Amphitheatre renovation, including bulkhead wall and retaining wall removal along a 400-foot section of the City of Naperville's renowned downtown Riverwalk.

### **Illinois Route 336, Macomb, IL**

Client: Illinois Department of Transportation

Conducted Field investigations of wetlands, wildlife, and proposed wetland mitigation areas for proposed highway improvement project Environmental Impact Statement (EIS)

### **Thunderhawk Golf Course, Lake Co. IL**

Client: Lake County Forest Preserve District

Project manager responsible for wetland and wildlife analysis, and Section 404 permitting for a 240-acre parcel of land for LCFPD's Audubon "Signature" design course.

### **(TBON), Northern Illinois**

Client: Commonwealth Edison

Field Supervisor for wetland delineation on more than 200 miles of fiber optic corridor. Activities included wetland delineations, report preparation, and regulatory agency coordination.

### **Wetland and Wildlife Services**

Client: Forest Preserve District of DuPage County

Project manager responsible for evaluation of wildlife habitat, floristic quality, threatened/endangered species, and water resources. Representative projects include: Springbrook Prairie Regional Trail; Springbrook Prairie Wetland Bank; Deep Quarry Lake Fishery Improvement; Herrick Lake Pedestrian Pathway; Blackwell Facility Expansion; McDowell Woods Pedestrian Trail, Pratt Wayne Woods/Brewster Creek Wetland Initiative; Danada Visitor Garden; Danada Headquarters Visitor Center; Danada Wetland Bank; and Hidden Lake Pedestrian Trail.

### **Other Representative Projects:**

Nike Park – Naperville Park District  
Northside Park Lake Restoration – PEI/Wheaton Park District  
Lyman Woods Streambank Restoration – Downers Grove P.D.  
Salt Creek Restoration – Patrick Engineering/DuPage County DEC  
DuPage River Trail – Plainfield Township Park District  
Cantigny Park Re-development – Cantigny Foundation, Wheaton, IL  
E. Highlands Subdivision Roads and Sidewalk – City of Naperville  
Village of Downers Grove- Various wetland reviews  
Warrenville Road Permeable Pavers – Grant Procurement



**David M. Sporina, PLS**  
**President, Thomson Surveying, Ltd.**

**Professional Registration**

Professional Land Surveyor  
Illinois #35-3394  
Wisconsin #2414-1998

**Education**

North Park College, Non-Degree Engineering, Two Years

**Employment History**

1993 to present, Thomson Surveying, Ltd.  
1987 to 1993, SPACECO, Inc.

**Experience**

Professional Land Surveyor with 27 years experience, 21 years with Thomson Surveying, Ltd. Responsible for managing the day to day operations. This includes QA/QC procedures, contract preparation, scheduling, and preparing and maintaining project budgets as well as overall company budget. Representative projects include ALTA/ACSM Land Title Surveys, Plats of Annexation, Plats of Vacation, Topographic Surveys, construction staking, residential subdivision layout and Final Plats of Subdivision.

**Construction Projects**

**Metra Fox River Grove Commuter Station, Fox River Grove, IL**

Provided various land development surveying services including horizontal and vertical control, demolition staking, utility staking (catch basins, inlets and sanitary services), concrete pavement (ADA ramps and pads), shelter layout, spot survey of each sidewalk and final as-construction survey.

**NIU Outdoor Intramural Recreation Facility, DeKalb, IL**

Surveying services included, but not limited to, rough grade staking, fine grade staking, utility staking, concrete pavement staking, entry plan staking, and shelter layout. Setting control and staking out sidewalk, building columns, rugby goals, storm sewer, west field contours and underdrain.

**Residential Subdivisions**

**Grand Dominion - Mundelein, IL 764 Lot Subdivision**

Survey Manager for development and preservation of land purposes of a 310 acre site located in Lake County, Illinois for a future residential development. Responsibilities included the establishment of both horizontal and vertical control utilizing both FEMA and Lake County datums, the preparation a one foot topographic exhibit for design purposes consisting of a 50 foot grid and cross-sections throughout the property including approximately 2 miles of 50 foot roadway cross-sections. Also included was the preparation of an ALTA Survey of the properties to be subdivided and developed which included analysis of recorded documents and obtaining existing field evidence to aid in the determination of the existing boundaries of the subject property. Several Plats of Highway and Plats of Subdivision, as well as required Plats of Dedication and Plats of Easement were prepared for the development. Coordinated the construction layout for all underground, grading and houseline items required for the development.



**David M. Sporina, PLS**  
**President, Thomson Surveying, Ltd.**

**Lakewood Springs Subdivision – Plano, IL 1300 Lot Subdivision**

Survey Manager for development and preservation of land purposes of a 660 acre site located in Kendall County, Illinois for a future residential development. Responsibilities included the establishment of both horizontal and vertical control utilizing both FEMA and Kendall County datums, the preparation a one foot topographic exhibit for design purposes consisting of a 50 foot grid and cross-sections throughout the property including approximately 2 miles of 50 foot roadway cross-sections. Also included was the preparation of an ALTA Survey of the properties to be subdivided and developed which included analysis of recorded documents and obtaining existing field evidence to aid in the determination of the existing boundaries of the subject property. Several Plats of Highway and Plats of Subdivision, as well as required Plats of Dedication and Plats of Easement were prepared for the development. Coordinated the construction layout for all underground, grading and houseline items required for the development.

**Topographic Surveys**

**Downers Grove, IL – Watershed Development**

Survey Manager for topographic survey services for a flood study relating to flooding problems experienced by Downers Grove residents. Responsibilities included the establishment of both horizontal and vertical control utilizing both FEMA and DuPage County datums, the preparation a one foot topographic exhibit for design purposes consisting of a 50 foot grid and cross-sections throughout the property and including approximately 4 miles of 50 foot roadway cross-sections. Also included was the establishment of right of way limits on several city streets and property lines of several privately-owned parcels for the construction of new storm lines and pond re-design. Several Plats of Easement were prepared for the project.

**Downers Grove, IL – 2011 Storm Sewer Project Survey**

Survey Manager for topographic survey services for the 2011 Storm Sewer Project Survey for various streets located within the Village of Downers Grove. Referenced lines parallel to right-of-way lines. Setting sufficient permanent control points on the base line at 100 foot intervals. Field survey work encompassing the entire right-of-way width of chosen streets. Top of foundation elevations, field locations of all buried/marked utilities, detailed information for all storm sewer structures, pipes, culverts, end sections, etc. within survey limits. Detailed topography with 1 foot contour intervals. Also located and identified all above ground structures along with all landscape materials.

**Schaumburg, IL-Braintree Drive Storm Sewer Improvements**

Creek Survey – obtained cross-sections at 50 foot intervals from top of bank to top of bank for 700 linear feet of the creek from the Braintree Drive culvert to the Cambridge Drive culvert.

Braintree Drive and Cornell Court – located all visible improvements within the right-of-way and 25 feet past the right-of-way onto private property (limits) or up to the face of the existing homes and obtain top of foundation elevations as well as low entry elevations. TSL will locate all trees 6 inches and greater DBH as well as sidewalks, fencing, driveways, mail boxes, lighting, etc. TSL will also locate all visible sanitary, storm and water main with rim and invert elevations. TSL will also obtain cross-sections at 50 foot intervals as well as obtain profiles of each private driveway, as shown on the attached exhibit.

Park Site – obtained cross-sections at 50 foot intervals on the park site, as shown on the attached exhibit.

## PROFESSIONAL HISTORY

### **MICHAEL V. MACHALINSKI, P.E.** **Principal Geotechnical Engineer** **Vice President**

#### **PRIMARY RESPONSIBILITIES**

Manager Geotechnical Department  
Principal Geotechnical Engineer

#### **EDUCATION**

M.S. in Civil Engineering, University of Illinois at Champaign-Urbana, 1976  
B.S. in Civil Engineering, University of Illinois at Champaign-Urbana, 1975

#### **PROFESSIONAL REGISTRATION**

Professional Engineer: Illinois #062-038559, 1979

#### **PROFESSIONAL EXPERIENCE**

Testing Service Corporation, Vice President, 1992 - Present  
Testing Service Corporation, Principal Geotechnical Engineer, 1989 - 1992  
Testing Service Corporation, Senior Engineer, 1987 - 1989  
Mirza Engineering, Inc., Senior Engineer, 1982 - 1987  
Harding Lawson Associates, Project Engineer, 1979 - 1982  
Testing Service Corporation, Staff Engineer, 1976 - 1979

#### **EXPERIENCE HIGHLIGHTS**

Mr. Machalinski's responsibilities as Vice President, Manager Geotechnical Department and Principal Geotechnical Engineer include providing direction of soil and groundwater investigations and associated engineering analysis. Typical projects include mid to high-rise building structures, governmental and commercial properties, business park and residential developments, infrastructure improvements, and roadways. He has provided design criteria for drilled pier, pile and mat foundations. He performs engineering analysis for bearing capacity and settlement of heavy structures using Menard Pressuremeter data; stability of cut slopes, new embankments and landfills modeled by computer studies; and hydrologic investigations related to below grade structures and retention ponds. Prior duties as Senior Engineer in the CME Department included review of engineering reports related to construction inspection services. As a Project Engineer, his duties for selected projects have included testing and observation of foundation soils, engineered fill, cast-in-place concrete, structural steel, masonry, roofing materials, sprayed-on-fireproofing, drilled piers and piles. Mr. Machalinski has also performed engineering analysis for pile load tests, underpinning of foundations, cofferdams and settlement monitoring.

#### **RECENT ROADWAY PROJECTS**

Gougar Road & US Route 30  
Intersection, New Lenox, IL

151<sup>st</sup> Street Widening, Orland  
Park, IL

IL Route 176 at Briarwood Road,  
McHenry County, IL

St. Francis over Union Ditch, Will  
County, IL

IL-31 Retaining Wall at  
Mooseheart Road, North Aurora,  
IL

111<sup>th</sup> Street Reconstruction,  
Naperville, IL

French Road Bridge over  
Burlington Creek, Kane County, IL

Deerfield Road Reconstruction,  
Deerfield, IL

## **Tab 4**

## **PROJECT UNDERSTANDING**

We understand that the Village of Hinsdale (Village) wishes to construct the flood protection improvements we designed for the Graue Mill HOA. These projects are being funded by a FEMA HMGP Grant that the Village received and are based on the 2011 Flood Risk Reduction Assessment prepared by CBBEL. Entities involved with the permitting and authority over the projects include the Village, Oak Brook, Oak Brook Park District, Forest Preserve District of DuPage County, DuPage County Stormwater Management and IDNR-OWR.

CBBEL is uniquely familiar with the surrounding drainage area and has built XP-SWMM models of the stormwater storage and conveyance systems. The Graue Mill subdivision and surrounding properties adjacent to Salt Creek require special consideration due to the presence of several special management areas on-site including wetlands, floodplain, and floodway. We have substantial experience in designing and permitting projects through DuPage County Stormwater Management and other regulatory agencies within the constraints that special management areas impose.

CBBEL has worked closely with the Graue Mill HOA and residents since 2010. We have presented our design at several public meetings and obtained buy-in from the HOA, residents, and regulatory agencies such as DuPage County Stormwater Management, the FPD, and the Village. Together, CBBEL and JJB have an unmatched relationship with all stakeholders in this project.

The proposed FEMA HMGP improvements are as follows:

- Storm sewer improvements, a new pump station, and site grading adjacent to Graue Mill Building A;
- Site grading and storm sewer improvements at Graue Mill Building B;
- Site grading, pump stations, and storm sewer improvements at Graue Mill Condo II/III;
- Site grading adjacent to residences on Hawthorne Lane in Graue Mill;
- Storm sewer improvements on the Dean Farm Parcel located north of the Graue Mill Subdivision and owned by the Oak Brook Park District;
- Compensatory storage grading on the Fullersburg Parcel located southwest of the Graue Mill Subdivision and owned by the Forest Preserve District of DuPage County;
- Raising one pump station pad adjacent to the Graue Mill Subdivision south detention basin. New concrete pads have already been constructed for the utility box relocations. It is anticipated that Commonwealth Edison (ComEd) will have completed utility relocation prior to commencement of the remainder of construction activities.

We previously collected topographic survey of the Old Mill Road and Indian Trail Road intersection, the berm and driveway at Building A, and the Building B driveway and storm sewer system. It is anticipated that 23 days of field survey will be required to perform topographic survey of remaining improvement areas within Graue Mill, the Fullersburg Parcel, and portions of the Dean Farm Property.

The previous hydrologic and hydraulic models, calculations and drainage design will be updated using the additional survey to finalize the design of the drainage improvements. The model results will be the basis of the design drawings for the proposed storm sewer improvements and site grading.

## **PROJECT UNDERSTANDING**

CBBEL will coordinate with the utility companies during the design process. The location, depth, and type of utilities on or near each project area will be determined and considered during the design phase.

JJB will also coordinate with the FPD and Oak Brook Park District regarding portions of the proposed construction activities taking place on their property. We have interfaced with FPD personnel throughout the concept design phase and have an excellent working relationship. Should the Oak Brook Park District not allow the overflow conveyance storm sewer on the southern end of their property, we can relocate the pipe entirely on the HOA property. This can remove a possible stumbling block for a major component of the project.

Using this information, we will prepare design drawings, permit documents and process the applications for the proposed improvements listed in the bullet points on the previous page. In the interest of seeing some projects completed as soon as possible, we propose to break out the projects that require relatively minor permitting. These projects include larger inlet grates, relocation of downspouts and one pump station upgrade. The remaining projects will require detailed hydrologic and hydraulic modeling along with compensatory storage. Therefore, we anticipate that the projects requiring more detailed permitting will be bid together as one large project. We will prepare specifications and bid documents for the overall project and assist in the bidding and award process.

CBBEL previously completed a wetland delineation and jurisdictional determination from the U.S. Army Corps of Engineers (USACE) for the wetlands on and adjacent to the Graue Mill property. CBBEL has received a Letter of No Objection (LONO) for the project from the USACE.

Permit submittals will be required to DuPage County Stormwater Management. We anticipate that detailed modeling of the proposed improvements using the DuPage County regulatory Full Equations (FEQ) model of Salt Creek will be required to demonstrate no negative impacts to water surface elevations.

Permits or approvals will also be required from the Illinois Department of Natural Resources (IDNR) for Inter-Agency Wetland Policy Act (IWPA) compliance and the Illinois Department of Natural Resources – Office of Water Resources (IDNR-OWR) for work in a floodway and work in a floodplain with greater than 640 acres.

A Stormwater Pollution Prevention Plan (SWPPP) will be prepared for the project and submitted to the Illinois Environmental Protection Agency (IEPA) for review and issuance of a National Pollution Discharge Elimination System (NPDES) permit for the overall project. If required, the SWPPP will also be sent to the Kane-DuPage Soil & Water Conservation District (KDSWCD) for review and approval.

As part of the FEMA HMGP grant for this project, quarterly grant reports are required in addition to reimbursement requests to the Illinois Emergency Management Agency (IEMA). We have successfully managed FEMA/IEMA coordination for several projects including the Bartlett-FEMA Flood Control Project in the Village of Bartlett and the North Avenue Flood Improvements in the Village of Glendale Heights. CBBEL will work with Village staff to complete and submit the required documentation.

## ***PROJECT UNDERSTANDING***

By separating out the projects that require more detailed permitting associated with floodplain, floodway, compensatory storage and increased pumping, we allow the Village to move forward on some projects while going through the necessary permitting on other projects. This will allow opportunities to construct some improvements as early as possible. Early and continuous coordination with the permitting agencies, especially DuPage County, will be key. The Intergovernmental Agreement (IGA) with the Forest Preserve of DuPage County is important to complete so the compensatory storage can be designed and finalized.

CBBEL will coordinate with partnering firms, JJB, TSL and TSC. CBBEL has partnered with many firms on hundreds of projects and has confidence we can coordinate and manage the desired schedule as all of these firms are highly qualified and respected for their various disciplines.



## **Tab 5**

## SCOPE OF SERVICES

Upon selection by the Village, CBBEL will set up a kick-off meeting with the Village to discuss the goals and objectives of the project, formalize working relationships and review the project schedule. The kick-off meeting will also serve as an opportunity to discuss project issues and design details with the Village.

Key elements of the kickoff meeting will include the following:

- Verification of scope of improvements.
- Discussion of design alternatives.
- Acquisition of project information to be provided by the Village including water, storm and sanitary atlases.
- Establishment of project procedures and primary points of contacts between the Village and CBBEL.
- Establishment of design criteria to be utilized.
- Identification of any anticipated design, permitting and construction issues.
- Discussion of unique project elements and opportunities
- Project phasing and construction sequencing
- Resident Coordination
- Special Village considerations/concerns

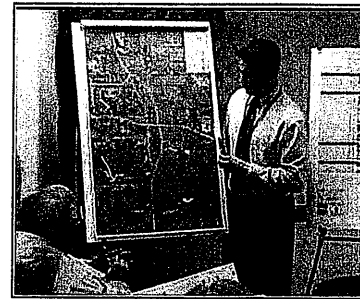
Subsequent to the kickoff meeting with the Village, CBBEL will concurrently initiate the following tasks:

- Task 1 – Topographic Survey
- Task 4 – Geotechnical Investigation
- Task 5 – Utility Coordination

### KEYS TO THE PROJECT

#### PUBLIC COORDINATION

This is an area in which the CBBEL team excels in each of our projects. It will be important to continue to coordinate the improvements with the HOA and the Village. It will also be important to coordinate with the Police, Fire, Post Office and garbage/recycling pickup. We can prepare exhibits and other material and attend a Public Information Meeting with the residents within the project limits, if the Village desires. It will be important to get input on our proposed construction plans as well as other issues at a public meeting.



## SCOPE OF SERVICES



## UTILITY COORDINATION

CBBEL has coordinated with ComEd on this project to relocate their utilities. However, CBBEL will send project location maps and the other existing utilities will be added to our base sheets. CBBEL will then send preliminary plans with potential conflicts identified, and will set up meetings to discuss necessary utility relocations or plan adjustments. A set of final plans will be submitted to utility companies for verification of facilities and in order for the utilities to design any necessary relocations. This will minimize any unforeseen delays or cost during construction.

## CONSTRUCTION/PARKING

A major concern for residents will be parking and access to their homes during construction. CBBEL will develop recommendations to maintain traffic, access, garbage/recycling pick-up, and parking. We will review the alignment of the berms, floodwalls, and make recommendations to keep either open to local traffic or possible staging construction to minimize access and parking issues while maintaining a work zone for the contractor. Our staging recommendations will be presented to the Village and HOA for review and comment. Again, if the Village and HOA desires the parking and staging plans can be presented in a public open house meeting for the residents within the project limits. Our experience shows that keeping property owners informed early on in the process reduces their concerns during construction.



## STAY ON-SCHEDULE AND ON-BUDGET

CBBEL prides itself in adhering to the project schedule and staying within the agreed upon contract amount. CBBEL will send the Village project status reports monthly along with our invoices. The status report will include % complete per task, items completed this month, items to be completed next month, due dates, items needed from the Village (if any), and a schedule and budget analysis. One of the keys to staying on schedule will be proactive coordination and communication with the Village.

[illegible]

### Sample Progress Report

# SCOPE OF SERVICES

## QUALITY ASSURANCE/QUALITY CONTROL

Below is a brief outline of the general QA/QC objectives to be followed through all elements of the Graue Mill Flood Protection Improvements.

### I. Project Team

The organization chart that was prepared for this RFP will be followed throughout the course of the project. A description of the key team members and their responsibilities has been provided in Tab 6.

The CBBEL QC/QA plan emphasizes an integrated project development process, with a guiding principal to ensure cost effective and practical infrastructure management that advocates a safe, constructible and cost effective design solution that minimizes change orders and schedule delays.

### II. Project Control

As Project Manager, Lee Fell, PE will provide Village staff weekly updates on the status of design via email. Monthly written progress reports will also be provided to the Village. Jeff Ziegler (JJB), the QA/QC Manager, will perform a comprehensive evaluation of the following items throughout the design process.

- A. Scoping/Field Checks
- B. Submittals
- C. Design Calculations
- D. Computer Inputs/Outputs
- E. Documentation of Decisions and Directives
- F. Pay Items and Quantity Calculations
- G. Project Records
- H. Compliance Statements

**ALL SUBMITTALS  
PLAN, SPECIFICATION & ESTIMATE  
QC/QA CHECKLIST**  
Page 1 of 1

**TO BE USED ON ALL PROJECTS**

Project: \_\_\_\_\_ Section: \_\_\_\_\_  
Route: \_\_\_\_\_ PS&E Discipline: \_\_\_\_\_  
Client: \_\_\_\_\_  
Designed By: \_\_\_\_\_ Date Submitted: \_\_\_\_\_  
Reviewed By: \_\_\_\_\_ Date Reviewed: \_\_\_\_\_

Cross off each item when fixed (not just marked up) and submit to Project QA/QC Manager. First check box is for Designer, second check box is for Reviewer.

☐ Cross section C&F values updated and match schedule and quantities.  
Earthwork values inserted into cross sections only.  
Earthwork values input into schedule and SOQ only.

☐ Drainage tables on Drainage sheets match schedule and quantities.  
Tables inserted into sheets on by \_\_\_\_\_  
Drainage tables last updated only.  
Drainage pipes inserted into cross sections only.  
East Utilities inserted into cross sections only.

☐ Tables on \_\_\_\_\_ sheets match schedule and quantities.  
Tables inserted into sheets on by \_\_\_\_\_  
Tables last updated only.

☐ Quantities and schedules on sheets match C&F sheets.  
Quantities and schedules inserted into sheets on by \_\_\_\_\_  
Quantities and schedules last updated only.

☐ Special Provisions match Pay Items.  
Pay Item names and units completed only.  
Table of Contents updated only.  
IDOT project only. Final Special Provisions to be submitted "blind" (no binding).

☐ Plans and Specs reference only involved Agencies.  
Special Provisions verified on by \_\_\_\_\_  
Plan sheets verified only.

☐ CADD QC/QA of Plans on by \_\_\_\_\_

☐ Engineering QC/QA of Plans on by \_\_\_\_\_

**ALL SUBMITTALS  
PLAN, SPECIFICATION & ESTIMATE  
A CHECKLIST**  
Page 1 of 1

**WITH FEDERAL FUNDING AND IDOT REVIEW**

Section: \_\_\_\_\_  
PS&E Discipline: \_\_\_\_\_  
Date Submitted: \_\_\_\_\_  
Date Reviewed: \_\_\_\_\_  
Project QA/QC Manager: \_\_\_\_\_

Give this completed form to the Project QA/QC Manager.

Items shown with numbers are CBBEL requirements.

**ALL SHEETS**

☐ 1. Complete sheet index block in the upper right-hand corner with the project section number, route number, county, and sheet numbers.

☐ 2. Make sure that the appropriate symbols, call letters, reference files, and abbreviations were used from the IDOT CADD Roadway Drafting Reference Guide.

☐ 3. Spot check to make sure full size print sheets are printed to road scale.

☐ 4. Comments from previous submittal have been addressed on all sheets.

**COVER SHEET**

☐ 1. Indicate the location of the index of sheets, if it's not on the cover sheet.

☐ 2. Show the information in the top center of the sheet and include:

- ☐ project name, number and common name,
- ☐ section designation number,
- ☐ location of improvement,
- ☐ type of improvement,
- ☐ county, and
- ☐ construction job number.

☐ 3. Below the sheet index block, note the design number.

☐ 4. Check that the Illinois State map is along the right side of the sheet, and the project location is indicated.

☐ 5. Check that no graphic scales used on plans, profiles, and cross sections are in the lower left-hand side of the sheet.

☐ 6. Print the contract number in the lower left-hand corner of the sheet.

☐ 7. Check that the project layout map is in bottom center of the sheet including:

- ☐ location of project, and north arrow,
- ☐ beginning and end stations,

Sample QC/QA Check Sheets

The Project Manager manages the overall project quality control's process and, through the QC/QA Manager, assigns qualified senior quality reviewers for pending deliverables as required.

### III. Final QC/QA Review/Plan Reviews

In order to provide the best possible quality on all our projects, it is CBBEL's intention to go beyond the basic definition of QA/QC. Jeff Ziegler, the project's QA/QC Manager, will perform/oversee plan reviews to optimize the following parts of the design:

## **SCOPE OF SERVICES**

- Project constructability, with an emphasis on avoiding conflicts between existing conditions and the proposed work,
- Construction using the proper methods and materials,
- Potential alternate solutions that would increase economy or shorten the schedule,
- Best workflow that minimizes temporary widening or other temporary construction,
- Construction traffic staging that maximizes the public safety while giving the Contractor sufficient working room and safe working conditions, and
- Plans, specifications, and cost and time estimates that communicate the design as clearly as possible and are free from internal contradictions, correctible drafting errors, or important omissions.

Jeff will fill out our design check sheets included in our company QC/QA manual with each submittal. We will also have one of our senior construction staff review our plans, specifications and estimates for constructability, accuracy and completeness.

### **SCOPE OF SERVICES**

CBBEL proposes the following Scope of Services for the Graue Mill Flood Protection Improvements.

Task 1 – Topographic Survey: Thomson Surveying, Ltd. (TSL) will complete a survey of the project. The survey will be used as a base map for design purposes. Included are the following survey tasks to be performed throughout the project which includes approximately 21 acres of rear yard/side yard/forest preserve topography; 1,000 feet of driveway and roadway; 8 to 15 building detail survey and verifying utilities including storm sewer.

**Horizontal Control:** Utilizing state plane coordinates, TSL will set recoverable primary control utilizing NAD '83 IL. EAST SPC Datum.

**Vertical Control:** TSL will perform a level circuit throughout the entire length of the project establishing benchmarks and assigning elevations to the horizontal control points. The elevations will be based on NAVD '88.

**Topographic Survey:** TSL will field locate all pavements, driveways, curb and gutters, signs, manholes, utility vaults, drainage structures, driveway culverts, cross road culverts, etc.

**Utility Survey:** TSL will survey all above ground utilities including, but not limited to: water, sanitary sewer, storm sewer, telephone, electric, cable and gas, etc. Identify size, type, rim, and invert elevations.

**Tree Survey:** TSL will locate all trees over 6 inches in diameter within twenty feet of the proposed improvements.

**Field recon and survey to locate existing monumentation and boundary evidence.**

**Analyze Record and Field Data necessary to compute approximate Right-of-Way.**

## **SCOPE OF SERVICES**

TSL will also obtain utility information from all known utility companies along the project corridor and include the utility information in the existing conditions base sheets developed from the above information. The base sheets will be drafted at a scale of 1"=20'.

**Task 2 – Plat of Easement:** TSL will prepare a Plat of Easement for the compensatory storage area on the Fullersburg Forest Preserve Property, this work includes the following:

1. Initial coordination with Client
2. Research at the DuPage County Recorder's Office
3. Field recon and survey to locate existing monumentation and boundary evidence
4. Office calculations and plotting of field and record data
5. CAD drafting of the Plat of Easement for the proposed easement area
6. Write legal descriptions for the proposed easement area
7. Final review and submittal by an Illinois Professional Land Surveyor

**Task 3 – Revisions to Hydrologic and Hydraulic Models and Calculations:** Using the information collected in the previous tasks, CBBEL will update the previously prepared hydrologic and hydraulic models for the watershed. The models will be used to refine the concept designs that were prepared as part of the Graue Mill flood study.

**Task 4 – Geotechnical Investigation:** Eleven (11) soil borings will be drilled as part of the Geotechnical Exploration by Testing Services Corporation (TSC). Seven (7) borings will be extended to a depth of 20 feet. Three (3) borings will be extended to a depth of 30 feet. One (1) boring will be extended to a depth of 50 feet. Total drilling footage on this basis is estimated to be about 280 lineal feet.

Upon completion of sampling and testing, an engineering report summarizing field and laboratory test data, including a boring location plan and computer generated boring logs will be prepared. The report will address anticipated soil and groundwater conditions impacting site development based upon the information obtained from the borings. It will also provide recommendations to guide design and specification preparation pertaining to geotechnical issues relevant to the structure or purpose described in this proposal. These may include the following:

- General earthwork and construction considerations
- Remedial work and/or treatment of unstable or unsuitable soil types
- Fill placement and compaction for foundations, floor slabs and pavements
- Foundation type, capacity and depth/elevation
- Protective measures required for frost action

**Task 5 – Utility Coordination:** We will send the survey and engineering plans to all known utility companies at the project locations for information on the horizontal and vertical locations of their utilities. We will use the information received from the utility companies to assist in preparation of the engineering plans.

## SCOPE OF SERVICES

**Task 6 – Engineering Plans, Specifications and Cost Estimate:** CBBEL and JJB will prepare plans and specifications in accordance with IDOT standards on the project. The following drawings are estimated:

### Sheet Name

Cover Sheet  
General Notes and Summary of Quantities  
Earthwork Schedule – Compensatory Storage  
Earthwork Schedule – Berms  
Typical Sections and Construction Details  
Alignment, Ties and Benchmark Sheet  
Grading Plan for Building 11 (1"=20')  
Berm Grading Plan for Building A (1"=20)  
Berm Grading Plan for Building B (1"=20)  
Berm Grading Plan for Hawthorne Lane (1"=20)  
Storm Sewer Plan and Profile  
Compensatory Storage Grading Plan  
Cross-Section  
Wall Type Study  
General Notes  
Plan and Elevation – Condo II/III Building I  
Sections and Details – Condo II/III Building I  
Floodbreak Foundations – Condo II/III Building I  
Plan and Elevation - *Building 2*  
Sections and Details - *Building 2*  
Plan and Elevation - *Building 3*  
Sections and Details - *Building 3*  
Plan and Elevation - *Hawthorn Lane*  
Sections and Details - *Hawthorn Lane*  
Plan and Elevation - *Building B Study Area*  
Sections and Details - *Building B Study Area*  
Mechanical Pump Station Plan  
Mechanical Pump Station Details  
Mechanical Pump Station Notes  
Outfall Structure Detail  
Sediment Erosion, Sediment Control Plan (1"=20')  
Sediment Erosion, Sediment Control Notes and Details  
Cost Estimate  
Specifications

Prefinal Plans, Specifications, and Estimates will be submitted to the Village for review.

### I. Floodwall

**Task 6a – Floodwalls:** CBBEL will study several floodwall types including sheet piling, soldier piles with concrete facing and cast-in-place concrete walls to determine the appropriate choice for the site conditions. CBBEL will coordinate with TSC regarding the preferred wall type. This will cover bearing capacities and seepage concerns under the proposed wall. Once the wall type has been chosen, plan development will begin. The anticipated sheet list and man hours can be found in corresponding table. CBBEL also understands that in conjunction with the berms and flood walls, a passive Flood

## **SCOPE OF SERVICES**

Prevention gate will be utilized at several locations. CBBEL will design the appropriate foundation supports for these gates and include this in the plan set.

### **II. Pump Station at Condo II (South Side)**

Task 6b.1 – Electrical Design: CBBEL will design the required electrical service, motor control center, pump control cabinet, on-site permanent engine generator, and required site lighting. CBBEL will coordinate electrical service requirements with ComEd and prepare and submit the required electrical load letter and service applications.

Task 6b.2 – Pump Station Design: CBBEL will provide pump station design and prepare drawings which will include equipment specifications for the pumping facilities. CBBEL will design the proposed pumping equipment, valving and appurtenances of the proposed pump station. This will include determining the range of pumping flow rate, pumping head, motor horsepower, and size/depth and configuration of the pump station wet well. A new precast concrete wet well structure will be proposed to house the pumps for the storm water pump station. An automatic pump controller housed in a stainless steel or aluminum enclosure will be designed for the pump controls.

### **III. Pump Station at Condo III along Old Mill Road west of Indian Trail Road**

Task 6c – Pump Station Design: CBBEL will provide pump station design and prepare drawings which will include equipment specifications for the pumping facilities. CBBEL will design the proposed pumping equipment, valving and appurtenances of the proposed pump station. This will include determining the range of pumping flow rate, pumping head, motor horsepower, and size/depth and configuration of the pump station wet well. A new precast concrete wet well structure will be proposed to house the pumps for the storm water pump station. An automatic pump controller housed in a stainless steel or aluminum enclosure will be designed for the pump controls.

Task 6c.1 – Electrical Design: CBBEL will design the required electrical service, motor control center, pump control cabinet, on-site permanent engine generator, and required site lighting. CBBEL will coordinate electrical service requirements with ComEd and prepare and submit the required electrical load letter and service applications.

### **IV. Pump Station at Building A**

Task 6d – Pump Station Design: CBBEL will provide pump station design and prepare drawings which will include equipment specifications for the pumping facilities. CBBEL will design the proposed pumping equipment, valving and appurtenances of the proposed pump station. This will include determining the range of pumping flow rate, pumping head, motor horsepower, and size/depth and configuration of the pump station wet well. A new precast concrete wet well structure will be proposed to house the pumps for the storm water pump station. An automatic pump controller housed in a stainless steel or aluminum enclosure will be designed for the pump controls.



## **SCOPE OF SERVICES**

**Task 6d.1 – Electrical Design:** CBBEL will design the required electrical service, motor control center, pump control cabinet, on-site permanent engine generator, and required site lighting. CBBEL will coordinate electrical service requirements with ComEd and prepare and submit the required electrical load letter and service applications.

**Task 7 – Fullersburg Compensatory Storage Basins:** To satisfy DuPage County stormwater permitting requirements, JJB will design approximately 7.5 acre-feet of compensatory storage volume on the Fullersburg Property located immediately southwest of the Graue Mill Subdivision. Two basins are proposed to be excavated, a 1.2 acre-foot basin on the western portion of the site and a 6.7 acre-foot basin on the southeast portion of the site. The 1.2 acre-foot basin includes 0.4 acre-feet of existing depressional storage volume. Final volume, grading and placement of the two basins will be determined based on the analysis from Tasks 1-6. The Fullersburg Property has a sanitary sewer easement at the southeast property line that must be located and accounted for. The design will also take into consideration the presence of any wetland areas.

JJB will coordinate the proposed design with FPD staff and the Village of Oak Brook to ensure compliance with any site restoration and design requirements they may have.

**Task 8 – Preparation of a Storm Water Pollution Prevention Plan (SWPPP):** CBBEL and JJB will prepare SWPPPs in accordance with Part IV of the General NPDES Permit No. ILR10. Please note that completion of this task will require a signed certification statement from the Village and all contractors identified in the SWPPP. An up to date copy of the SWPPP must be maintained on the various project sites during construction activities.

**Task 9 – Bidding Assistance:** CBBEL and JJB will advertise for bidding, distribute plans and specifications to all bidders, any addendums and hold a bid opening. CBBEL and JJB will review and tabulate all of the bids and make a recommendation for award for the various projects.

**Task 10 – Permitting:** Permit submittals will be required to DuPage County Stormwater Management. We anticipate that detailed modeling of the proposed improvements using the DuPage County regulatory Full Equations (FEQ) model of Salt Creek will be required to demonstrate no negative impacts to water surface elevations. CBBEL staff developed the FEQ modeling for DuPage County as part of the overall Salt Creek Floodplain Mapping Project. CBBEL is uniquely qualified to provide the required analysis to permit the overall project.

Permits or approvals will also be required from the Illinois Department of Natural Resources (IDNR) for Inter-Agency Wetland Policy Act (IWPA) compliance and the Illinois Department of Natural Resources – Office of Water Resources (IDNR-OWR) for work in a floodway and work in a floodplain with greater than 640 acres. Permit submittals will also be made to IDNR for compliance with the Inter-Agency Wetland Policy Act (IWPA) and to Kane-DuPage Soil & Water Conservation District (KDSWCD) for compliance with Soil Erosion and Sediment Control (SE/SC) requirements.

A LONO has been received from the USACE, and this task will include guidance from our environmental resources staff on compliance with the requirements of the LONO.

## **SCOPE OF SERVICES**

**Task 11 – FEMA Grant Administration:** CBBEL will work with the Village Finance Staff to prepare quarterly reports to FEMA and the reimbursement requests. We estimate 8 quarterly reports and reimbursement requests for the project duration. We will also coordinate with Village and IEMA/FEMA staff throughout the project duration.

**Task 12 – Meetings:** We anticipate 10 meetings with the Village and other stakeholders including DuPage County, IDNR, and FPD will be required in addition to the kickoff meeting. A Water Resources Engineer and Civil Engineer will attend these meetings.

A Project Schedule which summarizes the Tasks from this Scope of Services is shown in Tab 6. As noted on the Project Schedule, it is contingent on the signed IGA between FEMA and the Village. We are committed to meeting the Village's desired timeline which is within the required timeline of the FEMA grant.

A Fee Schedule has been completed and is included in Tab 7. You will note that the Fee Schedule exceeds the originally estimated engineering fee in the FEMA grant. Based on our experience with other FEMA HMGP grants, we are confident that FEMA will not have a problem with reimbursing for more engineering fees than originally anticipated as long as it is within the total project costs. We know from preparing the FEMA application that \$200,000 was included in the budget to relocate the ComEd switch gear. That work has commenced and is being paid for by ComEd and the HOA. Therefore, since we can inform FEMA the project was completed by the time we are requesting funds for the projects, the \$200,000 becomes available for other costs associated with the overall project. We have attempted to keep the engineering, permitting, design, soil borings and survey to the minimum necessary to complete the project.

## **Tab 6**

## PROJECT SCHEDULE

We propose the following schedule to complete the design:

KICK-OFF MEETING 8/2014\*

\*START DATE IS CONTINGENT ON SIGNED IGA

SURVEY COMPLETE 10/2014

### MINOR PROJECTS

<u>MILESTONE</u>	<u>COMPLETION DATE</u>
70% SUBMITTAL	11/2014
PERMITTING	2/2015
FINAL P, S & E	3/2015
BID OPENING	3/2015
CONSTRUCTION COMMENCES	4/2015
CONSTRUCTION COMPLETE	6/2015

### MAJOR PROJECTS

<u>MILESTONE</u>	<u>COMPLETION DATE</u>
70% SUBMITTAL	4/2015
PERMITTING	8/2015
FINAL P, S & E	9/2015
BID OPENING	9/2015
CONSTRUCTION COMMENCES	10/2015
CONSTRUCTION COMPLETE	6/2016

## **Tab 7**

# Graue Mill Flood Protection Improvements Fee Schedule

Cost Estimate of  
Consultant Services  
(Direct Labor Multiple)

Christopher B. Burke Engineering, Ltd.

Date 07/31/14

Services By Others includes: James J. Benes and Associates, Inc., Thomson Surveying, Ltd. and Testing Service Corporation

	ITEM	MANHOURS (A)	PAYROLL (B)	(2.80+R) TIMES PAYROLL (C)	DIRECT COSTS (D)	SERVICES BY OTHERS (E)	TOTAL (C+D+E)	% OF GRAND TOTAL
Task 1	Topographic Survey	0	\$0.00	\$0.00		\$44,979.43	\$44,979.43	12.91%
Task 2	Plat of Easement	0	\$0.00	\$0.00		\$5,584.55	\$5,584.55	1.60%
Task 3	Revisions to H&H Models & Calcs	32	\$1,546.40	\$4,329.92			\$4,329.92	1.24%
Task 4	Geotechnical Investigation	0	\$0.00	\$0.00		\$28,600.00	\$28,600.00	8.21%
Task 5	Utility Coordination	14	\$531.64	\$1,488.59		\$770.00	\$2,258.59	0.65%
Task 6	Engineering Plans, Specs & Estimates	372	\$15,111.96	\$42,313.49	\$1,000.00	\$18,003.00	\$61,316.49	17.60%
Task 6a	Floodwalls	238	\$11,330.24	\$31,724.67			\$31,724.67	9.11%
Task 6b.1	Condo II-Electrical Design	70	\$2,934.12	\$8,215.54			\$8,215.54	2.36%
Task 6b.2	Condo II- Pump Station Design	116	\$5,381.28	\$15,067.58			\$15,067.58	4.32%
Task 6c	Condo III-Pump Station Design	116	\$5,381.28	\$15,067.58			\$15,067.58	4.32%
Task 6c.1	Condo III-Electrical Design	64	\$2,654.60	\$7,432.88			\$7,432.88	2.13%
Task 6d	Building A-Pump Station Design	116	\$5,381.28	\$15,067.58			\$15,067.58	4.32%
Task 6d.1	Building A-Electrical Design	64	\$2,654.60	\$7,432.88			\$7,432.88	2.13%
Task 7	Fullersburg Compensatory Storage Basins					\$24,761.00	\$24,761.00	7.11%
Task 8	Preparation of SWPPP	16	\$772.00	\$2,161.60			\$2,161.60	0.62%
Task 9	Bidding Assistance	10	\$550.60	\$1,541.68			\$1,541.68	0.44%
Task 10	Permitting	256	\$11,720.48	\$32,817.34	\$1,000.00	\$10,301.00	\$44,118.34	12.66%
Task 11	FEMA Grant Administration	112	\$4,969.60	\$13,914.88			\$13,914.88	3.99%
Task 12	Meetings	92	\$5,295.36	\$14,827.01			\$14,827.01	4.26%
	TOTALS	1688	\$76,215.44	\$213,403.23	\$2,000.00	\$132,998.98	\$348,402.21	100.00%



DATE: October 13, 2014

3b

# **REQUEST FOR BOARD ACTION**

<b>AGENDA</b>	<b>ORIGINATING</b>
<b>SECTION NUMBER</b> Board of Trustees Agenda	<b>DEPARTMENT</b> Community Development
<b>ITEM</b> Contract Change Order #2 2014 Roadway & Utility Improvement Project A Lamp Concrete Contractors, Inc.	<b>APPROVAL</b> Dan Deeter Village Engineer

As discussed at the September 8, 2014 Environment and Public Services Committee meeting, Staff has requested change order costs from contractors for the Robbins Park storm sewer project. Staff sent requests to three companies which currently have projects in the Village: A Lamp Concrete Contractors, John Neri Construction Company, and Congdon Construction. Staff focused on current contractors in order to expedite the bidding process and avoid additional construction costs (mobilization costs and late season material mark-ups).

The budgeted cost for the project is \$113,000. The bids provided are listed below:

- |                                  |              |
|----------------------------------|--------------|
| • A Lamp Concrete Contractors    | \$122,067.00 |
| • John Neri Construction Company | \$151,534.00 |
| • Congdon Construction Company   | \$195,597.00 |

Drainage Background: Our consulting engineers, HR Green, conducted a drainage study with the objective of reducing the frequent flooding in the vicinity of Fifth and Grant Streets. HR Green recommended constructing the Robbins Park storm sewer as the first phase. Their modelling estimated this first phase of construction would reduce the flooding by +/-65%. Should the area continue to flood on a frequent basis, HR Green recommended constructing new storm sewer on the 500-block of Grant Street as the second phase solution.

A Lamp is currently two weeks behind on their construction schedule. They have added an underground utility crew and are working Saturdays to catch up. Their proposal assumed completing the Robbins Park storm sewer after the other Roadway and Utility Project tasks. Staff will continue to monitor A Lamp's progress on this project. While staff is expecting A Lamp to complete their project on time, should their progress be unavoidably delayed (for example: by weather or other unavoidable circumstances), staff will recommend that A Lamp complete the Robbins Park storm sewer before the Fuller Road water main. Under these circumstances, A Lamp has agreed to complete the Fuller Road water main in the spring of 2015 with the same contract unit costs.

**MOTION: To Approve a Resolution for the 2014 Roadway & Utility Improvement Project Construction Contract Change Order Number 2 in the Amount Not to Exceed \$122,067.00 to A Lamp Concrete Contractors, Inc.**

<b>APPROVAL</b>	<b>APPROVAL</b>	<b>APPROVAL</b>	<b>APPROVAL</b>	<b>MANAGER'S APPROVAL</b>
<b>COMMITTEE ACTION:</b>				
<b>BOARD ACTION:</b>				



RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION APPROVING THE 2014 ROADWAY &  
UTILITY IMPROVEMENT PROJECT  
CONSTRUCTION CONTRACT CHANGE ORDER  
NUMBER 2 IN THE AMOUNT NOT TO EXCEED \$ 122,067.00  
TO A LAMP CONCRETE CONTRACTORS, INC.**

**WHEREAS**, the Village of Hinsdale (the "Village") and A Lamp Concrete Contractors, Inc. ("A Lamp") have entered into that certain Contract (the "Contract") providing for the construction of the 2014 Roadway & Utility Improvement Project; and

**WHEREAS**, the President and Board of Trustees of the Village hereby find that the circumstances said to necessitate this Change Order were not reasonably foreseeable at the time the Contract was signed, the Change Order was germane to the original Contract as signed, and the Change Order is in the best interest of the Village of Hinsdale and authorized by law;

**NOW, THEREFORE, BE IT RESOLVED** by the President and Board of Trustees of the Village of Hinsdale, DuPage and Cook Counties and State of Illinois, as follows:

**Section 1. Recital.** The foregoing recitals are incorporated herein as findings of the President and Board of Trustees.

**Section 2. Approval of Change Order.** The Change Order is hereby approved in the form attached (Exhibit A) to this Ordinance and by this reference incorporated herein.

**Section 3. Final Determination.** This Resolution shall constitute the written determination required by Section 33E-9 of the Article 33E of the Criminal Code of 1961, as amended and shall be retained in the Contract file as required by said Section.

**Section 4. Execution of Change Order.** The Village Manager is authorized to execute the Change Order on behalf of the Village.

**Section 5. Effective Date.** This resolution shall be in full force and effective from and after its passage and approval.

**PASSED:** this \_\_\_\_\_ day of \_\_\_\_\_ 2014.

**AYES:**

**NAYS:**

**ABSENT:**

**APPROVED** this \_\_\_\_\_ day of \_\_\_\_\_ 2014.

\_\_\_\_\_  
Village President

**ATTEST:**

\_\_\_\_\_  
Village Clerk

**Exhibit A**  
**VILLAGE OF HINSDALE**  
**CHANGE ORDER**

Project:	2014 Roadway & Utility Improvements	Change Order No. 2
Location:	Various Streets	Contract No. - N/A
Contractor:	A-Lamp Concrete Contractors, Inc.	Date: 10/13/14
		Page 1 of 1

- I.        A.    Description of Changes Involved:
- 1   Addition of the Robbins Park Storm Sewer Construction Project, which will be completed in the 2014 construction season.
- B.    Reason for Change:
- 1   Improve drainage in the vicinity of Fifth & Grant Streets.
- C.    Revision in Contract Price:                      Total Addition: \$    122,067.00
- 1   Addition       \$    122,067.00

II.       Adjustments in Contract Price:

A.    Original Contract Price:	\$ 2,522,898.90
B.    Net (addition)( <del>reduction</del> ) due to all previous Change Order No. <u>1</u>	<u>\$ 319,681.10</u>
C.    Contract Price, not including this Change Order	\$ 2,842,580.00
D.    (Addition)( <del>Deduction</del> ) to Contract Price due to this Change Order	<u>\$ 122,067.00</u>
E.    Contract Price including this Change Order	<u><u>\$ 2,964,647.00</u></u>

Accepted:  
Contractor: A Lamp Concrete Contractors, Inc.

By:		
	Signature of Authorized Representative	Date

Village of Hinsdale:

By:		
	Signature of Authorized Representative	Date



JOHN NERI CONSTRUCTION CO., INC.  
Sewer & Water Contractors  
770 Factory Road \*Addison, IL 60101  
Tel: 630 629-8384\* Fax: 630 629-7001  
www.johnnericonstruction.com

JOB NAME: Robbins Park

Owner: Village of Hinsdale

Bid Date: Time:

ITEM NO.	Description	UNIT	Quantity	Unit Price	Amount
RP-1	TRENCH BACKFILL	CU YD	22	\$ 45.00	\$ 990.00
RP-2	EXPANDED POLYSTYRENE GEOFOAM BLOCK, 18"	SQ FT	240	\$ 28.00	\$ 6,720.00
RP-3	SELECT GRANULAR BACKFILL (SPECIAL)	CU YD	210	\$ 42.00	\$ 8,820.00
RP-4	NON-WOVEN GEOTEXTILE FABRIC, 8 OZ.	SQ YD	50	\$ 5.00	\$ 250.00
RP-5	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	717	\$ 8.00	\$ 5,736.00
RP-6	SEEDING, CLASS 1	ACRE	0.35	\$ 2,000.00	\$ 700.00
RP-7	EROSION CONTROL BLANKET	SQ YD	1,662	\$ 4.00	\$ 6,648.00
RP-8	TEMPORARY FENCE	FOOT	900	\$ 4.00	\$ 3,600.00
RP-9	TREE ROOT PRUNING	EACH	8	\$ 150.00	\$ 1,200.00
RP-10	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	530	\$ 6.00	\$ 3,180.00
RP-11	CLASS B PATCH, TYPE II, 7 INCH	SQ YD	9	\$ 90.00	\$ 810.00
RP-12	CLASS B PATCH, TYPE IV, 7 INCH, SPECIAL (REINFORCEMENT FABRIC)	SQ YD	28	\$ 90.00	\$ 2,520.00
RP-13	DRIVEWAY PAVEMENT REMOVAL	SQ YD	15	\$ 25.00	\$ 375.00
RP-14	AGGREGATE SURFACE COURSE, TYPE B	TON	5	\$ 50.00	\$ 250.00
RP-15	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	SQ YD	15	\$ 50.00	\$ 750.00
RP-16	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	26	\$ 35.00	\$ 910.00
RP-17	SIDEWALK REMOVAL	SQ FT	530	\$ 4.00	\$ 2,120.00
RP-18	STORM SEWERS ADS N-12 ST IB PERFORATED, 24" (WITH ADS SOCK)	FOOT	414	\$ 145.00	\$ 60,030.00
RP-19	STORM SEWERS PVC, 36"	FOOT	45	\$ 225.00	\$ 10,125.00
RP-20	STORM SEWER BLIND CONNECTION - 8" PVC TO 36" PVC	L SUM	1	\$ 1,800.00	\$ 1,800.00
RP-21	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID (SPECIAL BASE)	EACH	1	\$ 4,200.00	\$ 4,200.00
RP-22	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	1	\$ 4,800.00	\$ 4,800.00
RP-23	MANHOLES, TYPE A, 6'-DIAMETER, 4 INCH FRAME, CLOSED LID (SPECIAL BASE)	EACH	1	\$ 9,800.00	\$ 9,800.00
RP-24	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID (SPECIAL BASE)	EACH	1	\$ 9,800.00	\$ 9,800.00
RP-25	STORM SEWER REMOVAL	FOOT	51	\$ 100.00	\$ 5,100.00
RP-26	DRAINAGE & UTILITY STRUCTURES TO BE REMOVED	EACH	1	\$ 300.00	\$ 300.00
				\$ -	\$ -

ROBBINS PARK PROPOSAL TOTAL

\$ 151,534.00

Sincerely,

Nicholas Neri, President  
John Neri Construction Co., Inc.

# ROBBINS PARK STORM SEWER INSTALLATION

## PROPOSAL

				ROBBINS PARK	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
RP-1	TRENCH BACKFILL	CU YD	\$50.00	22	\$ 1,100.00
RP-2	EXPANDED POLYSTYRENE GEOFOAM BLOCK, 18"	SQ FT	\$17.00	240	\$ 4,080.00
RP-3	SELECT GRANULAR BACKFILL (SPECIAL)	CU YD	\$45.00	210	\$ 9,450.00
RP-4	NON-WOVEN GEOTEXTILE FABRIC, 8 OZ.	SQ YD	\$5.00	50	\$ 250.00
RP-5	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	\$10.00	717	\$ 7,170.00
RP-6	SEEDING, CLASS 1	ACRE	\$4,000.00	0.35	\$ 1,400.00
RP-7	EROSION CONTROL BLANKET	SQ YD	\$3.50	1,662	\$ 5,817.00
RP-8	TEMPORARY FENCE	FOOT	\$3.00	900	\$ 2,700.00
RP-9	TREE ROOT PRUNING	EACH	\$150.00	8	\$ 1,200.00
RP-10	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	\$6.00	530	\$ 3,180.00
RP-11	CLASS B PATCH, TYPE II, 7 INCH	SQ YD	\$200.00	9	\$ 1,800.00
RP-12	CLASS B PATCH, TYPE IV, 7 INCH, SPECIAL (REINFORCEMENT FABRIC)	SQ YD	\$110.00	28	\$ 3,080.00
RP-13	DRIVEWAY PAVEMENT REMOVAL	SQ YD	\$25.00	15	\$ 375.00
RP-14	AGGREGATE SURFACE COURSE, TYPE B	TON	\$50.00	5	\$ 250.00
RP-15	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	SQ YD	\$150.00	15	\$ 2,250.00
RP-16	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$50.00	26	\$ 1,300.00
RP-17	SIDEWALK REMOVAL	SQ FT	\$2.00	530	\$ 1,060.00
RP-18	STORM SEWERS ADS N-12 ST IB PERFORATED, 24" (WITH ADS SOCK)	FOOT	\$110.00	414	\$ 45,540.00
RP-19	STORM SEWERS PVC, 36"	FOOT	\$140.00	45	\$ 6,300.00
RP-20	STORM SEWER BLIND CONNECTION - 8" PVC TO 36" PVC	L SUM	\$3,500.00	1	\$ 3,500.00
RP-21	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID (SPECIAL BASE)	EACH	\$3,500.00	1	\$ 3,500.00
RP-22	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	\$3,800.00	1	\$ 3,800.00
RP-23	MANHOLES, TYPE A, 6'-DIAMETER, 4 INCH FRAME, CLOSED LID (SPECIAL BASE)	EACH	\$5,800.00	1	\$ 5,800.00
RP-24	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID (SPECIAL BASE)	EACH	\$6,000.00	1	\$ 6,000.00
RP-25	STORM SEWER REMOVAL	FOOT	\$15.00	51	\$ 765.00
RP-26	DRAINAGE & UTILITY STRUCTURES TO BE REMOVED	EACH	\$400.00	1	\$ 400.00
				ROBBINS PARK PROPOSAL = \$ 122,067.00	

A LAMP PROPOSAL

# ROBBINS PARK STORM SEWER INSTALLATION

## PROPOSAL

				ROBBINS PARK	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
RP-1	TRENCH BACKFILL	CU YD	\$50.00	22	\$ 1,100.00
RP-2	EXPANDED POLYSTYRENE GEOFOAM BLOCK, 18"	SQ FT	\$10.00	240	\$ 2,400.00
RP-3	SELECT GRANULAR BACKFILL (SPECIAL)	CU YD	\$65.00	210	\$ 13,650.00
RP-4	NON-WOVEN GEOTEXTILE FABRIC, 8 OZ.	SQ YD	\$10.00	50	\$ 500.00
RP-5	TOPSOIL FURNISH AND PLACE, 6"	SQ YD	\$10.00	717	\$ 7,170.00
RP-6	SEEDING, CLASS 1	ACRE	\$11,000.00	0.35	\$ 3,850.00
RP-7	EROSION CONTROL BLANKET	SQ YD	\$6.00	1,662	\$ 9,972.00
RP-8	TEMPORARY FENCE	FOOT	\$6.00	900	\$ 5,400.00
RP-9	TREE ROOT PRUNING	EACH	\$100.00	8	\$ 800.00
RP-10	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	\$10.00	530	\$ 5,300.00
RP-11	CLASS B PATCH, TYPE II, 7 INCH	SQ YD	\$150.00	9	\$ 1,350.00
RP-12	CLASS B PATCH, TYPE IV, 7 INCH, SPECIAL (REINFORCEMENT FABRIC)	SQ YD	\$175.00	28	\$ 4,900.00
RP-13	DRIVEWAY PAVEMENT REMOVAL	SQ YD	\$25.00	15	\$ 375.00
RP-14	AGGREGATE SURFACE COURSE, TYPE B	TON	\$100.00	5	\$ 500.00
RP-15	HOT-MIX ASPHALT DRIVEWAY PAVEMENT, 3"	SQ YD	\$65.00	15	\$ 975.00
RP-16	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$50.00	26	\$ 1,300.00
RP-17	SIDEWALK REMOVAL	SQ FT	\$2.00	530	\$ 1,060.00
RP-18	STORM SEWERS ADS N-12 ST IB PERFORATED, 24" (WITH ADS SOCK)	FOOT	\$230.00	414	\$ 95,220.00
RP-19	STORM SEWERS PVC, 36"	FOOT	\$300.00	45	\$ 13,500.00
RP-20	STORM SEWER BLIND CONNECTION - 8" PVC TO 36" PVC	L SUM	\$3,500.00	1	\$ 3,500.00
RP-21	MANHOLES, TYPE A, 4'-DIAMETER, TYPE 1 FRAME, CLOSED LID (SPECIAL BASE)	EACH	\$4,000.00	1	\$ 4,000.00
RP-22	MANHOLES, TYPE A, 5'-DIAMETER, TYPE 1 FRAME, CLOSED LID	EACH	\$5,000.00	1	\$ 5,000.00
RP-23	MANHOLES, TYPE A, 6'-DIAMETER, 4 INCH FRAME, CLOSED LID (SPECIAL BASE)	EACH	\$6,000.00	1	\$ 6,000.00
RP-24	MANHOLES, TYPE A, 6'-DIAMETER, TYPE 1 FRAME, CLOSED LID (SPECIAL BASE)	EACH	\$6,000.00	1	\$ 6,000.00
RP-25	STORM SEWER REMOVAL	FOOT	\$25.00	51	\$ 1,275.00
RP-26	DRAINAGE & UTILITY STRUCTURES TO BE REMOVED	EACH	\$500.00	1	\$ 500.00
				ROBBINS PARK PROPOSAL = \$ 195,597.00	

CONGDON PROPOSAL

Spare Veeck Park Monitoring Site  
Hinsdale, Illinois

Date	Bar Screen Channel Downstream (feet)	Overflow Ht. Above Weir (feet)	Storage Tank Elevation (feet)	Precipitation (inches of water)
09/01/14	0.16		3.97	0.02
09/02/14	0.15		4.21	
09/03/14	0.13		2.79	
09/04/14	0.15		3.01	0.28
09/05/14	0.23		3.64	0.35
09/06/14	0.15		2.98	
09/07/14	0.07		3.36	
09/08/14	0.07		3.32	
09/09/14	0.06		2.76	0.02
09/10/14	1.32	0.33	19.28	0.96
09/11/14	0.00		3.16	
09/12/14	0.00		3.00	0.01
09/13/14	0.02		3.44	0.01
09/14/14	0.00		2.72	
09/15/14	0.01		3.35	
09/16/14	0.00		2.74	
09/17/14	0.00		2.32	
09/18/14	0.01		2.15	
09/19/14	0.03		2.56	
09/20/14	0.03		2.74	0.29
09/21/14	0.02		3.40	0.09
09/22/14	0.00		3.77	
09/23/14	0.00		3.88	
09/24/14	0.00		3.90	
09/25/14	0.00		3.91	
09/26/14	0.02		3.92	
09/27/14	0.00		3.95	
09/28/14	0.00		4.00	
09/29/14	0.00		2.36	
09/30/14	0.00		3.13	

Total Precipitation in September: 2.03  
Departure from Normal: -1.18 inches  
63% of normal rainfall

Notes:

1. Minimum tank elevation is 2.0 feet to avoid running the pumps dry and damaging them.
2. Rain data from McClure JHS weather station.

3c

DATE: October 13, 2014

**REQUEST FOR BOARD ACTION**

<b>AGENDA</b>		<b>ORIGINATING</b>		
<b>SECTION NUMBER</b> EPS Consent Agenda		<b>DEPARTMENT</b> Community Development		
<b>ITEM</b> Alley Vacation Request – 713 S. Monroe St		<b>APPROVAL</b> Dan Deeter Village Engineer		
<p>Attached please find an ordinance vacating a portion of a public alley adjacent to 713 S. Monroe Street. The resident at 713 S. Monroe Street has expressed interest in purchasing this portion of the alley. Staff has reviewed the infrastructure requirements for this alley. There are no current infrastructure conflicts on this alley. The alley has previously had vacations approved and is therefore not a through-alley right-of-way. Staff recommends approval of the vacation.</p> <p>Also included is the appraisal report establishing a fair market value for the vacated property. The appraisal established the value of the property at approximately \$27.00 per square foot. The property to be vacated contains an area of 425 square feet. The total appraised value of the property is \$11,500.</p> <p>A plat of vacation will be prepared upon approval of this request for recording at DuPage County. To allow for potential future utility use of the alley, the plat of vacation will include a utility and drainage easement across the vacated area.</p> <p><b>MOTION: To Recommend Adoption of an Ordinance Vacating Half of a Public Alley Right-of-Way Situated East and Adjoining 713 S. Monroe Street at a Purchase Price of \$11,500.</b></p>				
<b>APPROVAL</b>	<b>APPROVAL</b>	<b>APPROVAL</b>	<b>APPROVAL</b>	<b>MANAGER'S APPROVAL</b>
<b>COMMITTEE ACTION:</b>				
<b>BOARD ACTION:</b>				



## VILLAGE OF HINSDALE

ORDINANCE NO. \_\_\_\_\_

### AN ORDINANCE AUTHORIZING THE VACATION OF A CERTAIN PORTION OF AN UNIMPROVED ALLEY SITUATED EAST OF AND ADJOINING 713 S. MONROE STREET IN THE VILLAGE OF HINSDALE, DUPAGE AND COOK COUNTIES, ILLINOIS

**WHEREAS**, the Village of Hinsdale, DuPage and Cook Counties, Illinois (the "Village") is a duly authorized and existing municipal corporation created under the provisions of the laws of the State of Illinois and under the provisions of the Illinois Municipal Code, as from time to time supplemented and amended; and

**WHEREAS**, the property owner of 713 S. Monroe Street, Hinsdale, Illinois, which property is identified by permanent index number ("P.I.N.") 09-11-414-003, has requested that a certain portion of an alley, as more fully described below, be vacated in order to be developed and maintained by said property owner; and

**WHEREAS**, Section 11-91-1 of the Illinois Municipal Code, 65 ILCS 5/11-91-1 *et seq.* (2007) (the "Code"), authorizes the Village to determine whether or not the public interest is served by vacating an alley, or part thereof, within its corporate boundaries, by an ordinance duly adopted by the affirmative vote of three-fourths of the trustees then holding office; and

**WHEREAS**, the Code further provides that upon vacation of an alley, or any part thereof, by the Village, title to the vacated property vest in the then owner or owners of land abutting thereon; and

**WHEREAS**, the Village President and Board of Trustees of the Village of Hinsdale (the "Corporate Authorities") have determined that the relief to the public from the further burden and responsibility of maintaining a certain portion of the alley, as more fully described below, and to return said portion to the tax rolls for the benefit of all taxing bodies is in the public interest.

**NOW THEREFORE, BE IT ORDAINED** by the President and Board of Trustees of the Village of Hinsdale, DuPage and Cook Counties, State of Illinois, as follows:

**Section 1. Recitals Incorporated.** The above recitals and findings are incorporated herein and made a part hereof.

**Section 2. Vacation of Unimproved Alley.** Pursuant to the terms of this Ordinance, the Village shall vacate a 8.5' x 50' portion of the unimproved alley

situated east of and adjoining 713 S. Monroe Street, Hinsdale, Illinois (the "Subject Property"), legally described, as follows:

Lots 90 and 91 in the Resubdivision of Block 24 of Stough's Second Addition to the Town of Hinsdale in Section 11, Township 38 North, Range 11, East of the Third Principal Meridian, in DuPage County, Illinois

P.I.N. 09-11-414-003

**Section 3. Plat of Vacation Approved.** The Plat of Vacation, a copy of which is attached hereto as Exhibit A and made a part hereof, is approved.

**Section 4. Conditions of Vacation.** The Subject Property is vacated subject to any existing easement of public record for any public or private utility for the maintenance, renewal and construction or reconstruction of public and private utilities and that the Village reserves unto itself as a corporate municipality and to any public utility, its successors or assigns, the right to maintain and relocate any respective facilities in, under, across and along those parts of the public alley as herein vacated, with the right of access thereto at all times for any and all such purposes as may be reasonably required for the construction, maintenance and efficient operation of said equipment pursuant to any existing easement of public record.

**Section 5. Payment of Consideration and Title to Vacated Property.** Upon the vacation of the Subject Property, title thereto shall be acquired by and vest to the property owner of 713 S. Monroe Street, Hinsdale, Illinois upon the payment of eleven thousand, five hundred dollars (\$11,500.00) to the Village by the property owner as fair market value for the Subject Property. The vacation of the Subject Property, and the recording of the Plat of Vacation, shall not be effective until said payment is received pursuant to Section 11-91-1 of the Code, 65 ILCS 5/11-91-1.

**Section 6. Execution of Documents.** The Village President, Village Clerk and all other officials are hereby authorized to take any and all action and execute any and all documents required to implement said vacation and record this Ordinance and the Plat of Vacation with the applicable county recorder of deeds upon the payment of the consideration set forth in Section 5 of this Ordinance.

**Section 7. Severability and Repeal of Inconsistent Ordinances.** If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity thereof shall not affect any of the other provisions of this Ordinance. All ordinances in conflict herewith are hereby repealed to the extent of such conflict.

**Section 8. Effective Date.** This Ordinance shall be in full force and effect from and after its passage, approval, and publication in pamphlet form in the manner provided by law.

PASSED this \_\_\_\_\_ day of \_\_\_\_\_, 2014.

AYES:

NAYES:

ABSENT:

APPROVED this \_\_\_\_\_ day of \_\_\_\_\_, 2014

\_\_\_\_\_  
Thomas Cauley, Village President

ATTEST:

\_\_\_\_\_  
Christine Bruton, Village Clerk

**APPRAISAL REPORT**

**An 8.5' X 50' PORTION OF THE UNIMPROVED  
ALLEY SITUATED EAST AND ADJOINING  
713 SOUTH MONROE STREET  
HINSDALE, ILLINOIS**

**Prepared For**

**Mr. Dan Deeter  
Village of Hinsdale  
19 East Chicago Avenue  
Hinsdale, Illinois 60521**

**Prepared By**

**C.A. Benson & Associates, Inc.  
419 North La Grange Road  
La Grange Park, Illinois 60526**

**C.A. BENSON & ASSOCIATES, INC.**  
**419 North La Grange Road - La Grange Park, IL 60526**  
**P.O. Box 157 - La Grange, IL 60525**  
**(708) 352-6056 Fax (708) 352-6070**

September 19, 2014

Mr. Dan Deeter  
Village of Hinsdale  
19 East Chicago Avenue  
Hinsdale, IL 60521

Re: Appraisal of an 8.5' x 50' portion of unimproved  
alley situated east and adjoining 713 South Monroe  
Street, Hinsdale, Illinois

Dear Mr. Deeter:

In accordance with your request, I have inspected the above captioned property and analyzed all pertinent factors relative to it in order to estimate its "as is" market value of the fee simple interest. The property was inspected on September 15, 2014, which is the effective date of this valuation.

The property consists of an 8.5' by 50' portion of unimproved alley located east and adjoining 713 South Monroe Street, Hinsdale, Illinois. It contains 425 square feet and is zoned R-4, Single-Family Residential.

Based on this analysis, it is my opinion that the "as is" Market Value of the subject property as of May 16, 2014 was

<p><b>ELEVEN-THOUSAND DOLLARS</b> <b>(\$11,500)</b></p>
---

This Appraisal Report is intended to comply with the reporting requirements set forth under Standards Rule 2-2(b) of the Uniform Standards of Professional Appraisal Practice. As such, it presents discussions of the data, reasoning and analyses that were used in the appraisal process to develop the appraiser's opinion of value. Supporting documentation concerning the data, reasoning and analyses is retained in the appraiser's file. The depth of discussion contained in this report is specific to the needs of the client and for the intended use stated below. The appraiser is not responsible for unauthorized use of this report.

# C.A. Benson & Associates, Inc.

## DESCRIPTION OF REAL ESTATE APPRAISED:

The subject property is situated in the Village of Hinsdale, approximately 20-miles southwest of the City of Chicago's Central Business District. Hinsdale is bordered by Oak Brook to the north, Burr Ridge to the south, Western Springs to the east and Clarendon Hills to the west.

Hinsdale is a residential community that has a population of 16,834 residents as of the 2010 census and an average family income of \$150,024 (2009). Over the past 12 months, the average sale price of a single-family residence in Hinsdale was \$1,056,071, which is an 8% increase over the prior 12 month average sale price of \$980,067. This is reflective of improving market conditions.

Hinsdale is a substantially built-up community and is one of the communities in the Southern DuPage County suburbs, which include Burr Ridge, Clarendon Hills, Darien, Downers Grove, Glen Ellyn, Lisle, Naperville, Oak Brook, Oakbrook Terrace, Warrenville, Westmont, Wheaton, Willowbrook, Winfield and Woodridge. The majority of these are mid-aged to older established communities that have reached maturity. Redevelopment of new single-family residences is occurring in Hinsdale, Clarendon Hills and Downers Grove on sites where older residences have been demolished. The overall composition of the area provides most amenities such as adequate employee base, established commercial/residential areas and municipal services, educational facilities, etc. The area hospitals include Good Samaritan, La Grange Community and Hinsdale. Hinsdale has a thriving central business district and the Oak Brook Center and Yorktown Center regional shopping malls are in nearby driving distance.

The major transportation systems include the North-South Tollway (I-355), the Tri-State Tollway (I-294) and the East-West Tollway (I-88). In addition, the Metra Commuter Trains and Pace Buses service Hinsdale.

More specifically, the subject property is located in the southwest section of Hinsdale. The immediate area is approximately 98% built-up with single-family residences of varying architectural designs in the range of 0 to 80+ years. The price range varies from \$350,000 for smaller existing single-family residences to in excess of \$1,500,000 for new custom two story residences. Many of the older, smaller residences have been torn down and redeveloped with large custom single-family residences. The immediate occupancy of the neighborhood consists of professionals, executives and white-collar workers. Maintenance level is good and there were no adverse conditions noted on the date of inspection.

Overall, the community of Hinsdale and the subject neighborhood are stable without any land changes anticipated with the exception of residential development of new single residents on lots that were previously improved with older homes. The strengths of the community include the viable central business district, the good community services, ample shopping, proximity to major transportation systems and the historically strong demand for residential, retail and office properties.

The subject property is the west 8.5' of a 17' wide unimproved alley. It has a width of 50', which is equal to the width of the adjoining residence located at 713 South Monroe Street. It is rectangular in shape and has a calculated area of 425 square feet. It is in an R-4, Single Family Residence District which requires a minimum lot area of 10,000 square feet and 70 or 80 feet of street frontage depending on whether the site is an interior or corner parcel. The subject property is not buildable and would be of use only to the adjoining property owner. It is in a zone "X" area of minimal flooding activity per FEMA Map #17043C0903H, dated December 16, 2004.

# C.A. Benson & Associates, Inc.

## **PURPOSE OF THE APPRAISAL:**

The purpose of this appraisal is to provide my best estimate of the market value of the subject real property as of the effective date. *Market Value* is defined by the federal financial institutions regulatory agencies as follows:

*Market Value* means the most probable price which a property should bring in a competitive and open market under all conditions requisite to a fair sale, the buyer and seller each acting prudently and knowledgeably, and assuming the price is not affected by undue stimulus. Implicit in this definition are the consummation of a sale as of a specified date and the passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well informed or well advised, and acting in what they consider their own best interests;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangements comparable thereto; and
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.

(Source: Office of the Comptroller of the Currency under 12 CFR, Part 34, Subpart C-Appraisals, 34.42 Definitions (f))

**INTENDED USE:** The function of this appraisal is to assist the Village of Hinsdale with a possible sale of the subject.

**INTENDED USER:** The intended user of this appraisal report is the Village of Hinsdale.

**INTEREST VALUED:** Fee simple

**DATE OF INSPECTION:** September 15, 2014

**EFFECTIVE DATE OF VALUE:** September 15, 2014

**DATE OF REPORT:** September 19, 2014

**APPRAISAL DEVELOPMENT AND REPORTING PROCESS:** In preparing this appraisal, I have

- Inspected the subject property;
- Examined the Sidwell Plat Book to obtain the size of the subject;
- Reviewed Public Records, Flood Hazard Rate Map and pertinent real estate tax and zoning information.
- Gathered and confirmed information on comparable sales;
- Applied the Sales Comparison Approach to Value to arrive at an indicated value.

This Appraisal Report is a recapitulation of my data, analyses and conclusions. Supporting documentation is retained in my file.

**COMPETENCY OF THE APPRAISER:** The appraiser has the appropriate knowledge and experience to complete this assignment competently as illustrated by the Qualifications of the Appraiser statement contained within this report.

# C.A. Benson & Associates, Inc.

## **ESTIMATE OF EXPOSURE TIME:**

The subject property is an 8.5' x 50' section of an unimproved alley, which can only be sold to the adjoining property owner. As such, estimating a marketing time is futile as a potential sale is reliant on the adjoining property owner's willingness to buy the property. The typical marketing time for area buildable sites and single-family residences is 3 to 9 months.

## **PERMANENT INDEX NUMBER:**

The subject is a section of unimproved alley, which has no permanent index number.

**TOTAL 2013 ASSESSED VALUE:** Not assessed

## **THREE-YEAR PROPERTY HISTORY:**

According to FIRREA and the Uniform Standards of Professional Practice of the Appraisal Foundation, I am required to report and analyze any sale transactions involving the subject property during the past three years or any listing or pending sale transaction involving the subject property.

The subject is part of an unimproved alley under ownership by the Village of Hinsdale. This appraisal will be used as an estimate of market value for a possible sale of the property.

## **HIGHEST AND BEST USE ANALYSIS:**

The subject consists of an 8.5' x 50', rectangular shaped portion of unimproved alley. It cannot be developed by itself and has value only to the adjoining property owner. It is my opinion that the highest and best use of the subject property is in conjunction with the adjoining residential property.

## **SUMMARY OF ANALYSIS AND VALUATION:**

As indicated, the Sales Comparison Approach to Value will only be used.

## **SALES COMPARISON APPROACH TO VALUE AS IMPROVED:**

Definition: A set of procedures in which a value indication is derived by comparing the property being appraised to similar properties that have been sold recently, then applying appropriate units of comparison, and making adjustments to the sale prices of the comparables based on the elements of comparison.\*

\*Source: Page 255, *The Dictionary of Real Estate Appraisal*, Appraisal Institute, Fourth Edition.



# C.A. Benson & Associates, Inc.

## SALES COMPARISON APPROACH TO VALUE - Continued

Based on the above analysis, it is my opinion that \$27.00 per square foot is indicated for the subject property.

425 square feet @ \$27.00 per square foot = \$11,475

**INDICATED VALUE BY THE SALES COMPARISON APPROACH: \$11,500**

### COMMENT AND FINAL VALUE CONCLUSION:

Based on the sales data analyzed in this report, it is my opinion that the "as is" fee simple market value of the subject property as of September 15, 2014 was

<p><b>ELEVEN-THOUSAND FIVE-HUNDRED DOLLARS</b> <b>(\$11,500)</b></p>
--

Respectfully submitted,

C.A. BENSON & ASSOCIATES, INC.



Charles A. Benson, Jr., SRA  
Illinois State Certified General Real Estate Appraiser  
License #553.000387 (Exp. 9/30/15)

# C.A. Benson & Associates, Inc.

## SALES COMPARISON APPROACH TO VALUE - Continued

In order to estimate the market value of the subject property by the Sales Comparison Approach, I have analyzed the following sales.

1. **719 South Adams Street, Hinsdale** was reported sold in July 2014 for \$415,000. This is a 50 foot by 133.5 foot parcel zoned R-4, containing 6,675 square feet. The sales price was equal to \$62.17 per square foot.
2. **211 South Thurlow Street, Hinsdale** was reported sold in August 2013 for \$400,000. This is a 50 foot by 133 foot parcel zoned R-4, containing 6,650 square feet. The sales price was equal to \$60.15 per square foot.
3. **630 South Bodin Street, Hinsdale** was reported sold in February 2014 for \$395,000. This is a 50 foot by 125 foot parcel zoned R-4, containing 6,250 square feet. The sale price was equal to \$63.20 per square foot.
4. **710 South Quincy Street, Hinsdale** was reported sold in February 2014 for \$380,000. This is a 50 foot by 132 foot parcel zoned R-4, containing 6,600 square feet. The sale price was equal to \$57.58 per square foot.

### Commentary

The above sales were all improved with older smaller single-family residences and the sale prices were reflective of land value. Since their acquisitions, one of the existing residences has been demolished and two others were acquired by builders for redevelopment. They sold from \$57.58 to \$63.20 per square foot and averaged \$60.78 per square foot for a buildable site.

The subject consists of a 425 square foot unimproved alley that is not buildable and can only be sold to an adjoining property owner. Historical comparisons of varying size sites indicated that additional rear site area above the standard size lot contributes at a rate of 45% of the base lot. For this analysis, 45% of the \$60.78 average value of a buildable site or \$27.35 per square foot, rounded to \$27.00 per square foot is indicated.

# C.A. Benson & Associates, Inc.

## ASSUMPTIONS AND LIMITING CONDITIONS - Continued

12. It is assumed that the utilization of the land and improvements is within the boundaries or property lines of the property described and that there is no encroachment or trespass unless otherwise stated in this report.

13. The appraiser is not qualified to detect hazardous waste and/or toxic materials. Any comment by the appraiser that might suggest the possibility of the presence of such substances should not be taken as confirmation of the presence of hazardous waste and/or toxic materials. Such determination would require investigation by a qualified expert in the field of environmental assessment. The presence of substances such as asbestos, urea-formaldehyde foam insulation, or other potentially hazardous materials may affect the value of the property. The appraiser's value estimate is predicated on the assumption that there is no such material on or in the property that would cause a loss in value unless otherwise stated in this report. No responsibility is assumed for any environmental conditions or for any expertise or engineering knowledge required to discover them. The appraiser's descriptions and resulting comments are the result of the routine observations made during the appraisal process.

14. Unless otherwise stated in this report, the subject property is appraised without a specific compliance survey having been conducted to determine if the property is or is not in conformance with the requirements of the Americans with Disabilities Act. The presence of architectural and communications barriers that are structural in nature that would restrict access by disabled individuals may adversely affect the property's value, marketability or utility.

15. Any proposed improvements are assumed to be completed in a good workmanlike manner in accordance with the submitted plans and specifications.

16. The distribution, if any, of the total valuation in this report between land and improvements applies only under the stated program of utilization. The separate allocations for land and buildings must not be used in conjunction with any other appraisal and are invalid if so used.

17. Possession of this report, or a copy thereof, does not carry with it the right of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of the appraiser, and in any event, only with proper written qualification and only in its entirety.

18. Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser, or the firm with which the appraiser is connected) shall be disseminated to the public through advertising, public relations, news sales, or other media without prior written consent and approval of the appraiser.

# C.A. Benson & Associates, Inc.

## ASSUMPTIONS AND LIMITING CONDITIONS

1. This Appraisal Report is intended to comply with the reporting requirements set forth under Standard Rule 2-2(b) of the Uniform Standards of Professional Appraisal Practice. It might not include full discussions of the data, reasoning, and analyses that were used in the appraisal process to develop the appraiser's opinion of value. Supporting documentation concerning the data, reasoning and analyses is retained in the appraiser's file. The information contained in this report is specific to the needs of the client and for the intended use stated in this report. The appraiser is not responsible for unauthorized use of this report.
2. No responsibility is assumed for legal or title considerations. Title to the property is assumed to be good and marketable unless otherwise stated in this report.
3. The property is appraised free and clear of any or all liens and encumbrances unless otherwise stated in this report.
4. Responsible ownership and competent property management are assumed unless otherwise stated in this report.
5. The information furnished by others is believed to be reliable. However, no warranty is given for its accuracy.
6. All engineering is assumed to be correct. Any plot plans and illustrative material in this report are included only to assist the reader in visualizing the property.
7. It is assumed that there are no hidden or unapparent conditions of the property, subsoil or structures that render it more or less valuable. No responsibility is assumed for such conditions or for arranging for engineering studies that may be required to discover them.
8. It is assumed that there is full compliance with all applicable federal, state and local environmental regulations and laws unless otherwise stated in this report.
9. It is assumed that all applicable zoning and use regulations and restrictions have been complied with, unless a non-conformity has been stated, defined and considered in this appraisal report.
10. It is assumed that all required licenses, certificates of occupancy or other legislative or administrative authority from any local, state or national governmental or private entity or organization have been or can be obtained or renewed for any use on which the value estimates contained in this report are based.
11. Any sketch in this report may show approximate dimensions and is included to assist the reader in visualizing the property. Maps and exhibits found in this report are provided for reader reference purposes only. No guarantee as to accuracy is expressed or implied unless otherwise stated in this report. No survey has been made for the purpose of this report.

# C.A. Benson & Associates, Inc.

## QUALIFICATIONS OF CHARLES A. BENSON, JR.

### EDUCATION

University of Wisconsin, Madison, B.B.A., 1974  
Major in Real Estate and Urban Land Economics

### APPRAISAL COURSES SUCCESSFULLY COMPLETED

S.R.E.A. Courses 101 (1972), 201 (1976), 202 (1989)  
A.I.R.E.A. Course VIII (1978)  
Standards of Professional Practice - Parts A & B, Appraisal Institute 1998  
USPAP Update - 2014-2015

### SEMINARS

Residential Design and Functional Utility; Subdivision Analysis; Rates, Ratios & Reasonableness; Valuation Under Federal Lending Regulations; Appraisal of Retail Properties; Industrial Valuation: Conditions of the Chicago Real Estate Market, 2012; Fair Lending and the Appraiser; Valuation of Detrimental Conditions in Real Estate; Partial Interest Valuation - Undivided; Forecasting Revenue; Illinois Appraiser's Update - 2004 thru 2014; Professionals Guide to the Uniform Residential Appraisal Report; Appraisal Challenges: Declining Markets and Sales Concessions; The Discounted Cash Flow Model: Concepts, Issues and Applications.

### EXPERIENCE

Actively engaged in the real estate appraisal business since 1975; has made appraisal of thousands of properties of various types including single family residences, apartment buildings, commercial, industrial, special use properties and vacant land.

### CLIENTS

Appraisal clients include: Inland Bank, American Metro Bank, First National Bank of LaGrange, Highland Community Bank, Cathay Bank, Pacific Global Bank, Suburban Bank & Trust, United Trust Bank, The Village of Hinsdale, attorneys, individuals, corporations and others.

Qualified as an expert witness for the Circuit Court of Cook County and the Circuit Court of DuPage County.

### AFFILIATIONS

- The Appraisal Institute - Received SRA designation in April 1988.
- Holds State of Illinois Real Estate Managing Broker's License #471.011778.
- Member of the Mainstreet Organization of Realtors.
- State Certified General Real Estate Appraiser, State of Illinois, License No. 553.000387.

# C.A. Benson & Associates, Inc.

## CERTIFICATION

I certify that, to the best of my knowledge and belief....

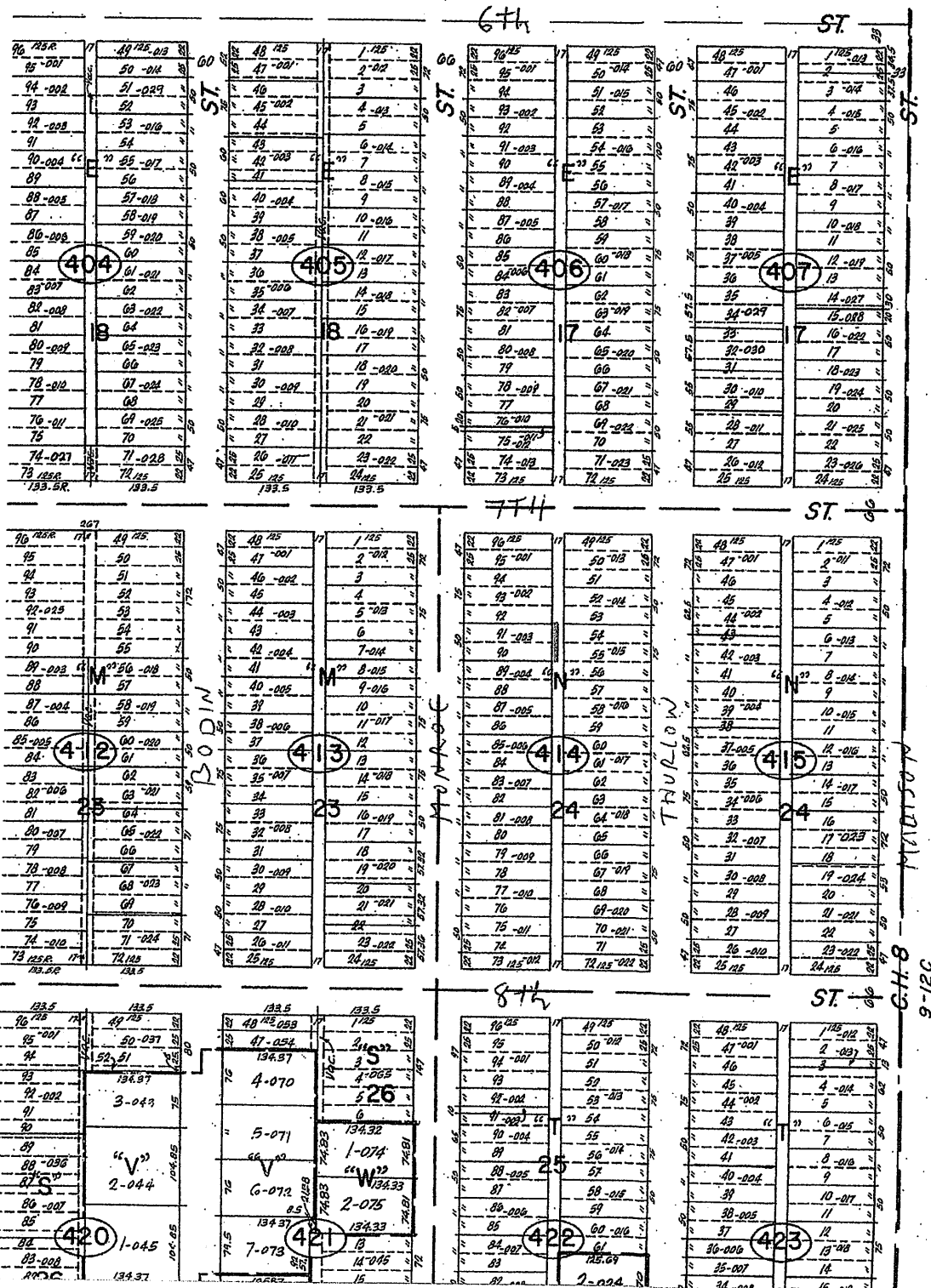
- the statements of fact contained in this report are true and correct.
- the reported analyses, opinion, and conclusions are limited only by the reported assumptions and limiting conditions, are my personal, impartial, and unbiased professional analyses.
- I have no present or prospective interest in the property that is the subject of this report and no personal interest with respect to the parties involved.
- I have performed no services, as an appraiser or in any other capacity, regarding the property that is the subject of this report within the three-year period immediately preceding acceptance of this assignment.
- I have no bias with respect to the property that is the subject of this report or to the parties involved with this assignment.
- my engagement in this assignment was not contingent upon developing or reporting predetermined results.
- my compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
- my analyses, opinions and conclusions were developed, and this report has been prepared in conformity with the *Uniform Standards of Professional Appraisal Practice*.
- I have made a personal inspection of the property that is the subject of this report.
- no one provided significant professional assistance to the person signing this certification.
- the reported analyses, opinions and conclusions were developed, and this report has been prepared in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
- the use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.



Charles A. Benson, Jr., SRA  
Illinois State Certified General Real Estate Appraiser  
License #553.000387 (9/30/15)

# C.A. Benson & Associates, Inc.

## SIDWELL MAP (Subject Shaded in Red)

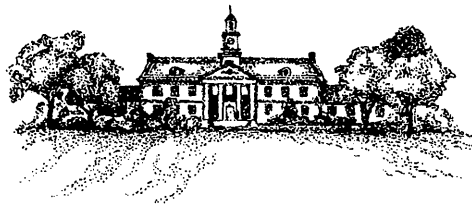


# C.A. Benson & Associates, Inc.

## **ADDENDUM**

### **Sidwell Map**





4a

## Village of Hinsdale

## Memorandum

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**To:** Chairman LaPlaca and the EPS Committee

**From:** John Finnell, Village Forester  
Tom Bueser, Asst. Director of Public Services

**Date:** October 6, 2014

**Subject:** Update on Emerald Ash Borer

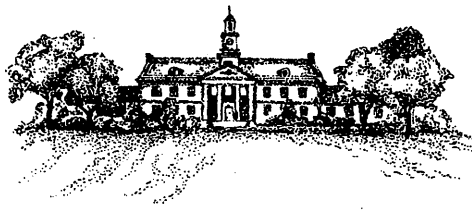
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The Village received confirmation of infestation with the highly invasive and destructive tree pest, Emerald Ash Borer ("EAB"), in February 2011. Staff has developed several programs to manage this foreign pest that has killed millions of ash trees thus far:

- Through collaboration with the EPS Committee, Staff developed an ongoing management program. In 2014, 422 public ash trees were treated.
- In a cooperative effort with the Morton Arboretum research program, an additional 68 ash trees were identified and treated by Arboretum staff.
- Staff incorporated ash trees into its ongoing surveys as a way to identify and schedule removal of heavily infested ash trees. Since 2011, 589 ash trees have been removed from public property.
- Emerald Ash Borer information is available on the Village website, local access channel and in the entryway of Village Hall. EAB impacts on the Village are incorporated into Arbor Day celebrations. Information is given to students to bring home.
- Title 4 Chapter 5 of the Municipal Code has been updated to include management procedures for EAB infested tree removals on private property.

For residents, the main question is what to do with trees on private property. Privately owned ash trees are the responsibility of the individual owner. The first step is education in order to find out whether there are ash trees on the property and what the treatment options may be. Staff is currently managing EAB infested ash trees on private property through a complaint based system. In an ongoing effort to be proactive with assisting residents with the management of EAB infested trees on private property and to improve safety of the entire Village, staff would like to increase utilization of the following tools:

- Public Service Announcements on Channel 6
- The Village website
- Resident water bill mailing



## Discovery

### Signs and Symptoms

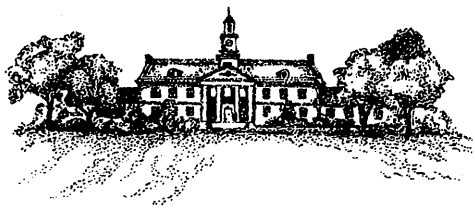
The presence of Emerald Ash Borer in *Fraxinus* species is marked by several distinct symptoms:

- Crown dieback
- Epicormic shoots
- "D" shaped exit holes in the bark
- Serpentine galleries
- Bark splits
- Woodpecker damage



Extensive galleries under bark disrupt translocation of water & nutrients in the tree





Foliage becomes thin, ragged & yellow  
Branch dieback in crown



Ash trees of all species  
& sizes in urban &  
forested areas are  
dying in 1-4 years





Utilizing these forms of community contact can provide:

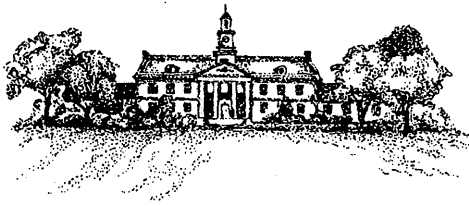
- Improved awareness of the safety hazards of infested ash trees
- Updated status of EAB in the Village
- Tips for identifying ash trees and symptoms of EAB infestation
- Current code requirements for EAB infested ash trees on private property
- Current treatment options
- Contact information for Tree Care Companies

A web site that is a good introduction to Emerald Ash Borer information is [www.emeraldashborer.info](http://www.emeraldashborer.info). This site provides the answers to virtually any question relative to this issue, including ash tree identification and approved treatment options. There are several treatment options and many local arborists who will provide this service. There are also some products available for homeowner use that can be purchased at retail outlets.

If treatment is not an option, Village Code requires that Emerald Ash Borer infested trees located on a private parcel be removed and disposed of within 30 days, similar to what the Village has required for diseased American elm trees for decades.

The Village hopes that its continuing efforts will assist in increasing public awareness and community buy-in to managing this invasive, destructive pest.

The following pages contain some information which can be included and utilized as an educational tool for residents within the Village to combat EAB.



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**Village of Hinsdale****Memorandum**

**To:** Chairman LaPlaca and the Environment and Public Service Committee

**From:** Ralph Nikischer, Village Horticulturalist

**Date:** October 2<sup>nd</sup>, 2014

**Subject:** Village Parking Lot Planting Beds

**Background:**

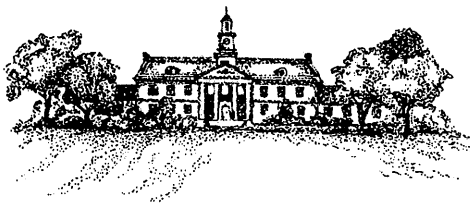
Village Board members requested staff to explore options for nine planting sites in the Village Parking Lot, located between Washington and Lincoln Streets, the train tracks and Chicago Avenue. Resurfacing on this parking lot will be completed Monday, October 13<sup>th</sup>, and consideration was given to plant these beds in conjunction with this work. It was noted that the areas of particular concern were the entrances off Washington and Lincoln Streets. These planting areas are in a highly visible location and should enhance the appearance of the Village's central business district. There is little plant material of value remaining in these areas. Due to the lack of existing plant material, weeds have established in these beds. Parks Maintenance staff has weeded these beds to temporarily improve their appearance. Planting and maintaining new material in these areas will significantly improve the aesthetic appearance of the parking lot.

**Scope of Work:**

Attached to this memo is a proposed design for one of the entrance beds off of Washington Street. The design calls for sustainable plant material that will offer year-round interest with minimal maintenance. If the proposed design is approved by the EPS Committee, the plant palette for this design can be replicated in the eight additional planting areas.

In addition to planting, the following preparation tasks should be included in the project's scope of work:

- Soil tests should be conducted in each bed before planting. A soil test will outline what nutrients are available for plants and if any corrective actions are necessary to amend any soil related issues. This will help ensure plant vigor and appearance.
- To improve soil fertility and structure organic material such as compost should be tilled into each bed
- Weed fabric should be installed to help minimize future weeding.

**Timeframe:**

Staff recommends beginning this project when the ground thaws in early spring of 2015 (March-April). The following considerations should be noted as why this project should begin next spring:

- Nurseries or plant material suppliers are running low on availability in autumn.
- Nurseries will begin digging fresh plant material for 2015 during March and April.
- Plants available in autumn were likely dug the previous spring; they have been above ground for some months, thus inducing stress.
- Plants become dormant during autumn, which means they will not put effort into establishing roots. This can result in a lower probability of winter survival, especially in the harsh environment of the parking islands.

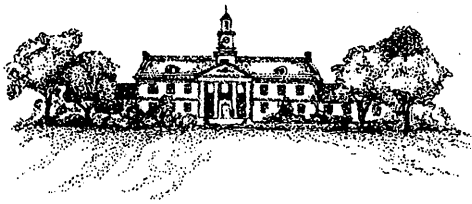
**Budget Impact:**

There is a total of \$245,000 budgeted under capital improvements for Village Lot improvements. These improvements include curb repair, resurfacing and decorative lighting. The estimated actual for this capital item is \$171,000. Approximately \$74,000 will remain for Village Lot improvements.

<b>Village Lot Improvements 2202-7918</b>	
Budgeted Amount	\$245,000.00
Estimated Actual	\$171,000.00
<b>Remaining Budget</b>	<b>\$74,000.00</b>

The attached rendering outlines the estimated materials costs associated with one of the nine planting areas. If the project were to be completed by Public Services staff, the total cost for plant material and installation for all nine planting areas is estimated to be under \$45,000. The estimated labor cost is based on the scale of a full-time Village Public Service Crew Member. The cost for this 430 sq ft bed is estimated at approximately \$5,000, or \$11.60 per sq ft. The approximate square footage for all planting areas is 3,670. At a rate of \$11.60 per sq ft, the total cost for this project would amount to \$42,572.

<b>Estimated cost if completed in-house</b>		
<b>Cost Description</b>	<b>Sq Ft Price</b>	<b>Total for all 9 planting areas (3,670 sq feet)</b>
Material Cost	\$3.81	\$13,982.70
In-house salaries	\$7.79	\$28,589.30
<b>Total</b>	<b>\$11.60</b>	<b>\$42,572.00</b>



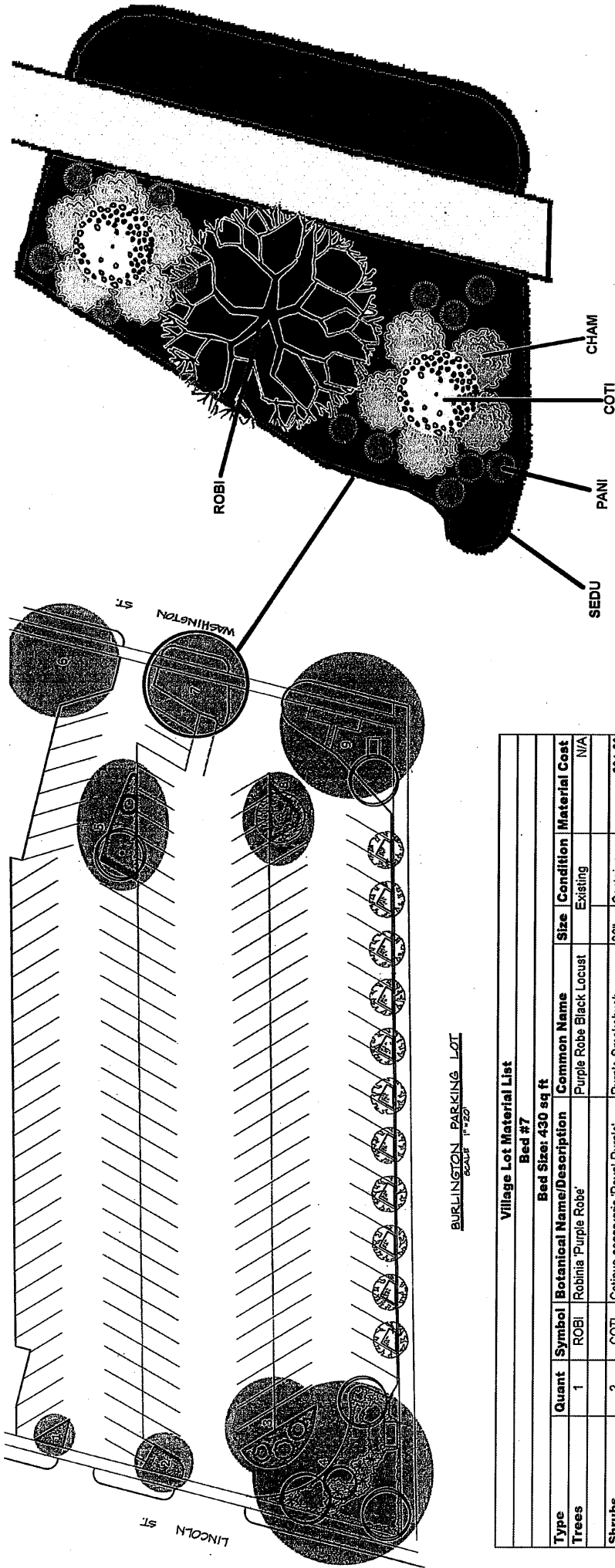
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**Recommendation:**

Funding allocated to the capital item Village Lot Improvements (2202-7918) will expire on May 1<sup>st</sup>, 2015. Due to staff time limitations, if the project were to be completed by Public Services staff, it would need to be staged over three years. Therefore, staff recommends that the Village contract out the work in order to accomplish all plantings before the end of the 2014-15 fiscal year.

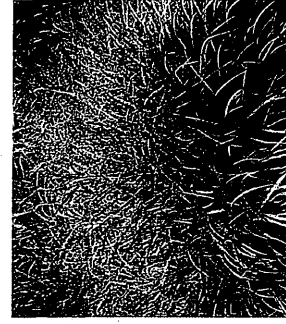
In order to meet this timeline, staff would complete renderings and prepare bidding documents before January, 1<sup>st</sup>, 2015. This project would go out for bid and be awarded to a third-party contractor in February 2015. The contractor would begin, and ideally complete, the work in the spring of 2015 (March and April). As referenced above, funding for this project can be utilized from the existing 2202-7918 account. Please note that if sent out for bid, this project will fall under prevailing wage requirements.

If bids come in over the \$74,000 surplus mentioned above, the option of having in-house staff stage the work over three years can be reconsidered. Staff would plant three areas per season and continue to remove weeds in the other locations. In this case, approximately \$5,000 would need to be allocated annually in the performance budget for materials. In-house labor costs would be included under Public Services Crew Member salaries; however, staff would need to be reallocated from other duties to complete installation.

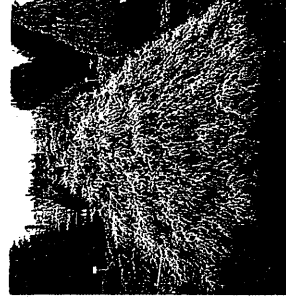


BURLINGTON PARKING LOT  
Scale: 1"=20'

Village Lot Material List							
Bed #7							
Bed Size: 430 sq ft							
Type	Quant	Symbol	Botanical Name/Description	Common Name	Size	Condition	Material Cost
Trees	1	ROB	Robinia 'Purple Robe'	Purple Robe Black Locust		Existing	N/A
Shrubs	2	COTI	Cotinus coggygria 'Royal Purple'	Purple Smokebush	36"	Container	\$91.50
	10	CHAM	Chamaecyparis pisifera 'Golden Mop'	Golden Mop Falsecyparis	24"	B&B	\$600.00
Grass	12	PANI	Panicum virgatum 'Prairie Fire'	Prairie Fire Switch Grass	3 Gal.	Container	\$192.00
Ground Cover	20	SEDU	Sedum spuriatum 'Dragon's Blood'	Dragon's Blood Sedum	24/flat	Plug	\$475.00
Weed Block Fabric	430 sq ft	N/A	1 roll with 100 stakes				\$40.00
Soil Test	1	N/A					\$20.00
Soil Amendments (garden soil mix)	3 cu yds	N/A					\$120.00
Premium Hardwood Mulch	4 cu yds	N/A	Mulch layered at a depth of 3 in				\$120.00
Installation Labor	84 hours	N/A	3 laborers @ \$30.00 per hour + 33% for fringe benefits (\$39.90 per hour)				\$3,351.60
Total estimated cost:							\$5,010.10



Switch Grass



False cypress and Sedum



Royal Purple Smokebush