

**VILLAGE BOARD  
COMMITTEE OF THE WHOLE MEETING**

**SEPTEMBER 21, 2015 – 7:00 PM  
LEMONT VILLAGE HALL  
418 MAIN ST.  
LEMONT, IL 60439**

**AGENDA**

- I. CALL TO ORDER**
- II. ROLL CALL**
- III. DISCUSSION ITEMS**
  - A. 2015 WATER SYSTEM ANALYSIS PRESENTATION  
(PUBLIC WORKS)(BLATZER)(PUKULA)**
  - B. QUICKET SOLUTIONS CONTRACT DISCUSSION  
(POLICE DEPT.)(MIKLOS)(MATON)**
  - C. VISUAL IDENTITY PROJECT UPDATE  
(PLANNING & ED)(CHIALDIKAS)(JONES)**
- IV. UNFINISHED BUSINESS**
- V. NEW BUSINESS**
- VI. AUDIENCE PARTICIPATION**
- VIII. ADJOURN**

# **Village Board**

## **Agenda Memorandum**

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To: Mayor Brian Reaves  
Village Board of Trustees

From: Ralph Pukula, Public Works Director

Subject: 2015 Water System Analysis

Date: September 21, 2015

### **BACKGROUND / HISTORY**

For the 2014-2015 budget year, the Village has teamed up with H.R Green to perform a complete Water System Analysis. Areas of priority that were analyzed were:

1. Current and future pumping capacities.
2. Current and future storage capacities.
3. Current and future fire flow capabilities.
4. Bottlenecking within the system.
5. Water main break history.

### **Attachments**

Preliminary executive summary



## MEMO

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To: Mr. Ralph Pukula – Village of Lemont  
CC: Mr. George Schafer – Village of Lemont  
Mr. Gerald Turrise – Village of Lemont  
From: Mr. Mark Hardie – HR Green, Inc.  
Subject: Village of Lemont Water Study Update  
Project No. 86150006  
Date: June 5, 2015

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The Village of Lemont (Village) contacted HR Green in early 2015 to complete a water study. The study consists of analysis of the current water system demands and future projected water system demands based on the Village’s 2030 Comprehensive Plan. One of the Village’s main goals from the study is to determine if the Village will need more storage tank capacity and/or well capacity.

### **Population Projection:**

The Village’s population based on the 2010 Census is 16,000. The Chicago Metropolitan Agency for Planning (CMAP) estimates that Lemont’s population will be about 30,209 in the year 2030.

The Village provided expansion information to 2030 from Community Viz, which is the planning program used by the Village’s Planning and Economic Development Department. Three different expansion scenarios were received including a high level build out scenario, a middle level build out scenario, and a low level build out scenario. The high level build out scenarios was analyzed. The high level scenario population projection is 31,779. The high level scenario population is about 1,500 over the CMAP projection for 2030.

### **Water Demand Projection:**

The Village provided pumping data from January 2010 to February 2015. Table 1 shows the results of the past pumping data. The average day (gpd/capita) is inclusive of all demand (residential, commercial, industrial, etc.). The peaking factor was determined by averaging the peaking factor for each year from 2010 to 2014.

Table 1: Summary of Past Pumping Data

Average Day (MGD)	Average Day (gpd/capita)	Max Day (MGD)	Peaking Factor
1.70	105	4.11	2.20

Future water demands were estimated based on the future population projection, the historical average gpd/capita, and the historical peaking factor. The future average day demand was determined by multiplying the projected population by the average day gpd/capita. The future maximum day demand was determined by multiplying the future average day demand times the historical peaking factor. Table 2 shows the summary of future water demands based on the Village’s 2030 Comprehensive Plan.

Table 2: Summary of Future Water Demands

2030 Population Projection	Average Day (MGD)	Average Day (gpd/capita)	Max Day (MGD)	Peaking Factor
31,779	3.34	105	7.34	2.20

The Village’s current water system includes 5 wells with a total capacity of 5.84 MGD. The FIRM capacity (well capacity with largest well out of service) is 4.40 MGD. It is recommended that the system’s average day demand be able to be handled by the well FIRM capacity, while the maximum day demand be able to be handled by the total well capacity. Figure 1 and Figure 2 show the average day and maximum day demand compared to existing well capacity respectively.

### Average Day Demand Vs. Current Water Supply

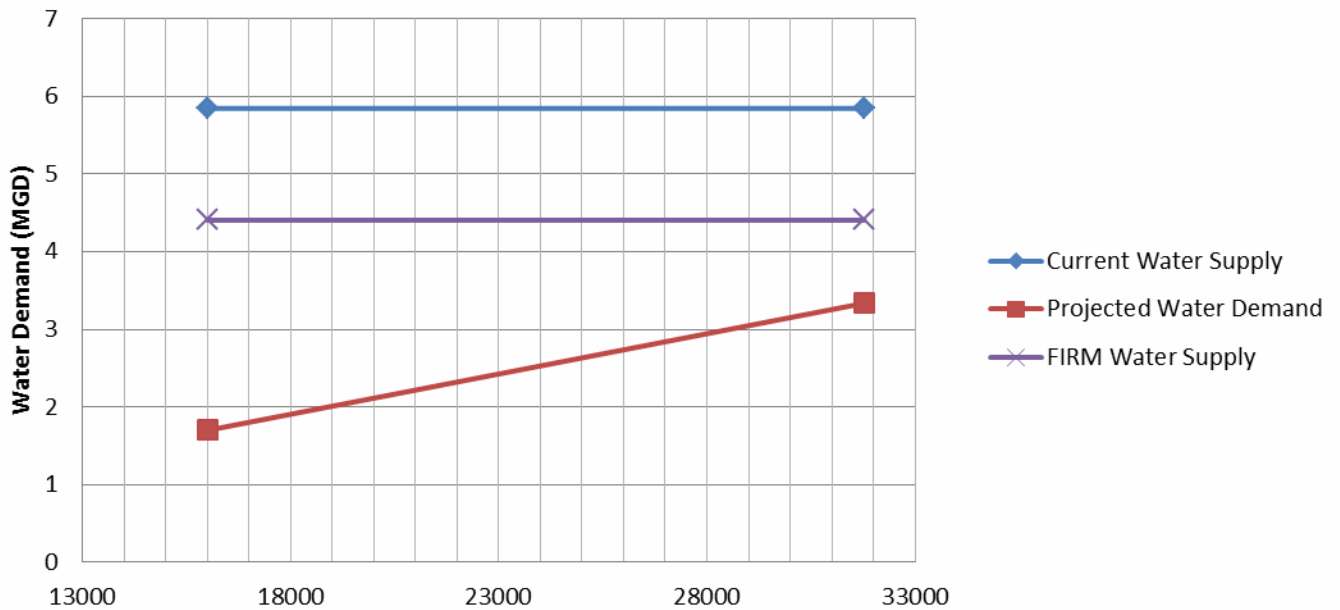


Figure 1: Average Day Demand Compared to Current Water Supply

## Maximum Day Demand Vs. Current Water Supply

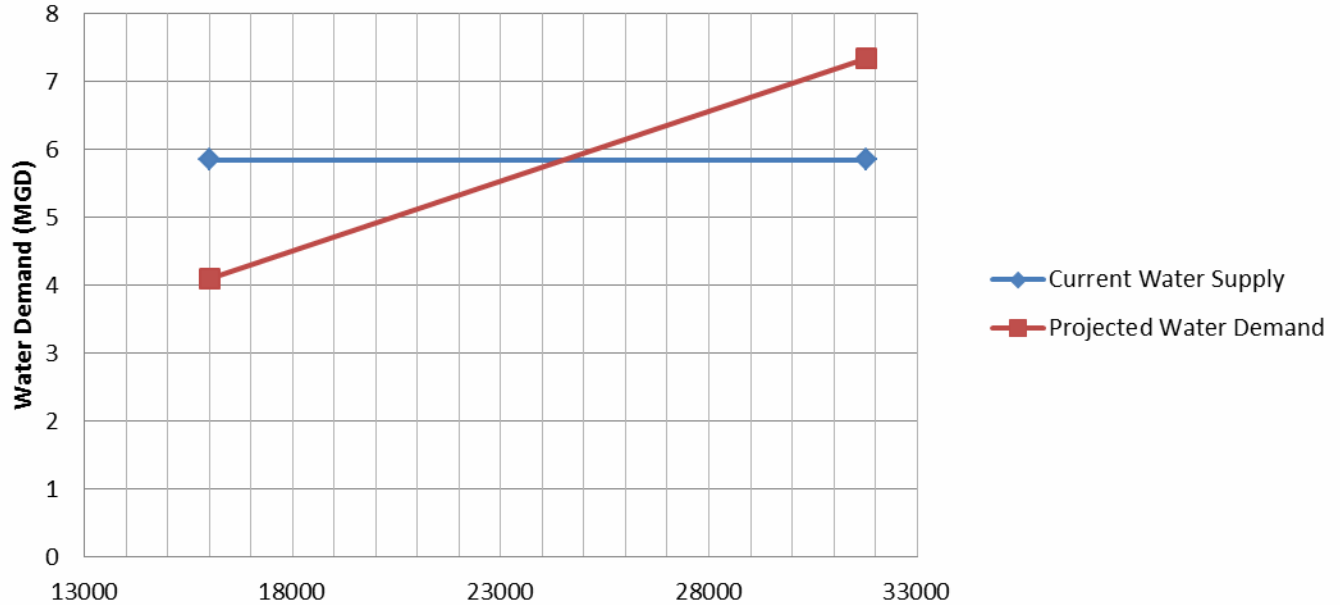


Figure 2: Maximum Day Demand Compared to Current Water Supply

Figure 1 shows that the current and future average day demands are met by the existing well FIRM capacity; however, Figure 2 shows that the future demand is greater than the current well capacity. The future water demand will surpass the existing well capacity at about a population of 24,500. To meet the future maximum day demand, an additional 1.5 MGD (1050 gpm) capacity would be needed.

The Village has expressed concerns with the reliability and water quality of Well #2. Well #2 is the Villages oldest well and was constructed in 1954. Figures 3 and 4 illustrate the effect of removing Well #2 from the system capacity compared to the average and maximum water demands respectively.

Figure 3 shows that the current and future average day demands are met by the existing well FIRM capacity even with Well #2 removed. However, Figure 4 shows that the future demand will surpass the existing well capacity without Well #2 at about a population of 20,500. To meet the future maximum day demand through the year 2030, an additional 2.3 MGD (1,600 gpm) capacity would be needed.

### Average Day Demand Vs. Current Water Supply Without Well #2

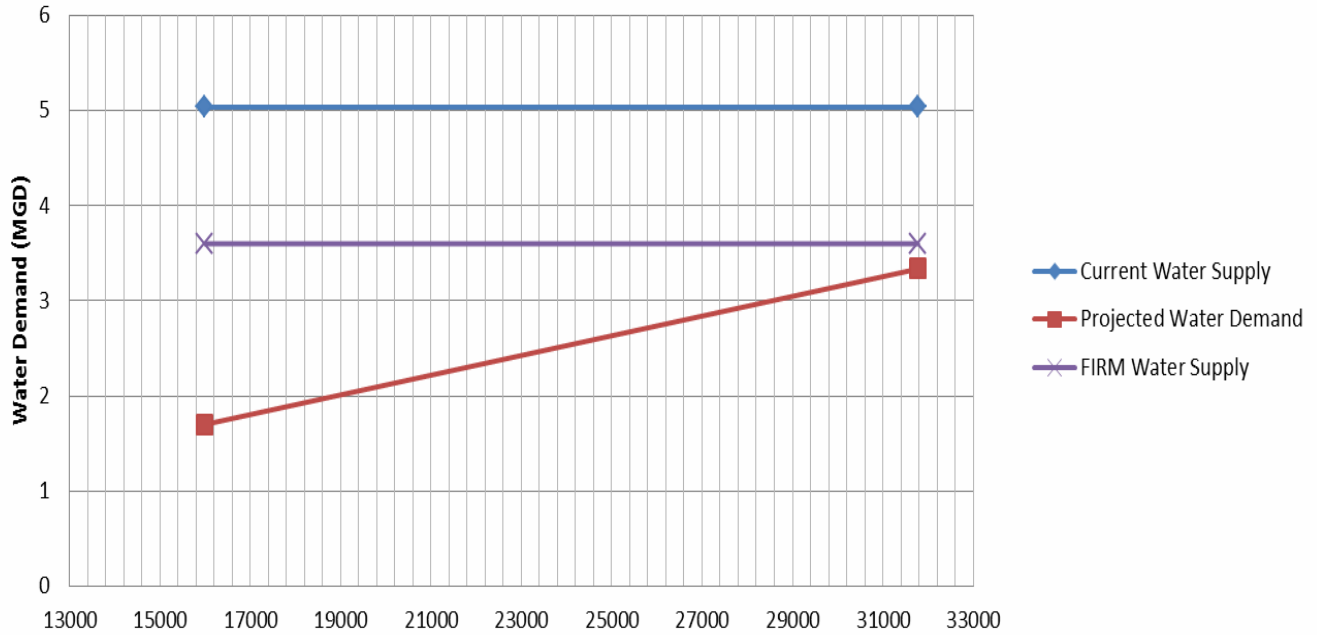


Figure 3: Average Day Demand Compared to Current Water Supply Without Well #2

### Maximum Day Demand Vs. Current Water Supply Without Well #2

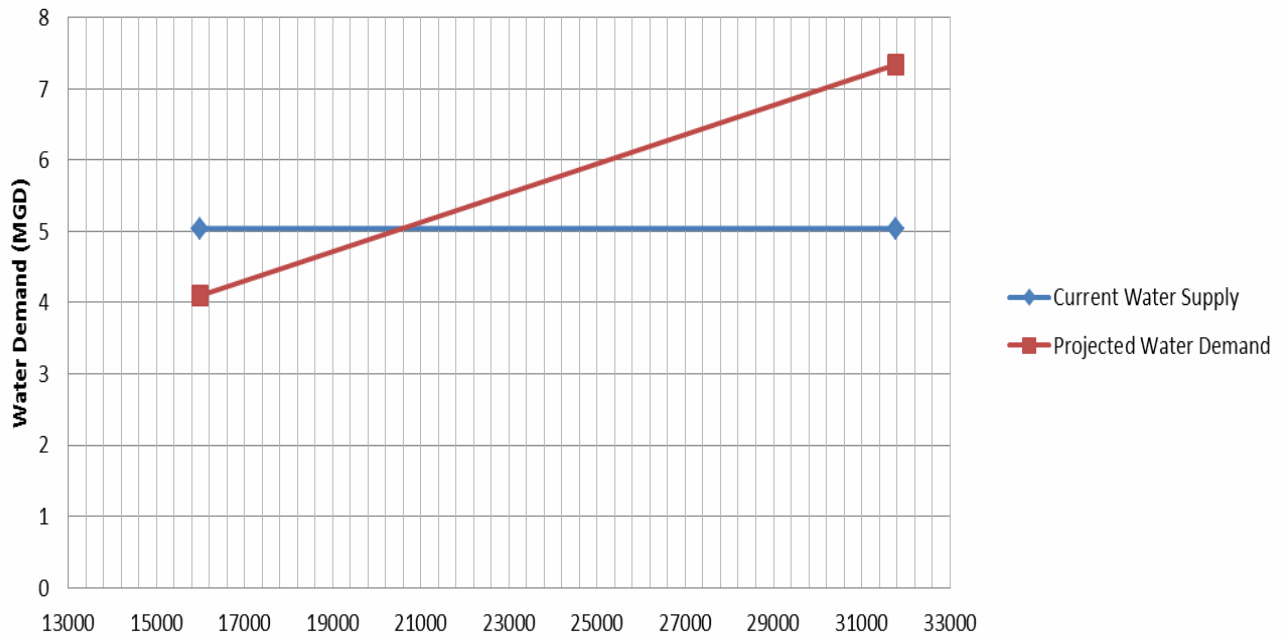


Figure 4: Maximum Day Demand Compared to Current Water Supply Without Well #2

## Water Storage Analysis:

The existing system currently includes two elevated storage tanks and one ground storage reservoir that have a combined 1.6 MG capacity. Well #5 has integral backup power, while the other wells have generator receptacles for use with a portable generator. Well capacity with backup power can be incorporated into total storage capacity. Assuming Well #5 and one additional well (Well #6 using portable generator) the total available storage capacity is 4.48 MG.

The recommended storage volume includes a day of maximum day demand and fire flow. The fire flow storage requirement is based on having the storage capacity for a 3,500 gpm fire flow for 3 hours. This equates to 0.63 MG of storage. Figure 5 shows the comparison between recommended storage and existing storage capacity.

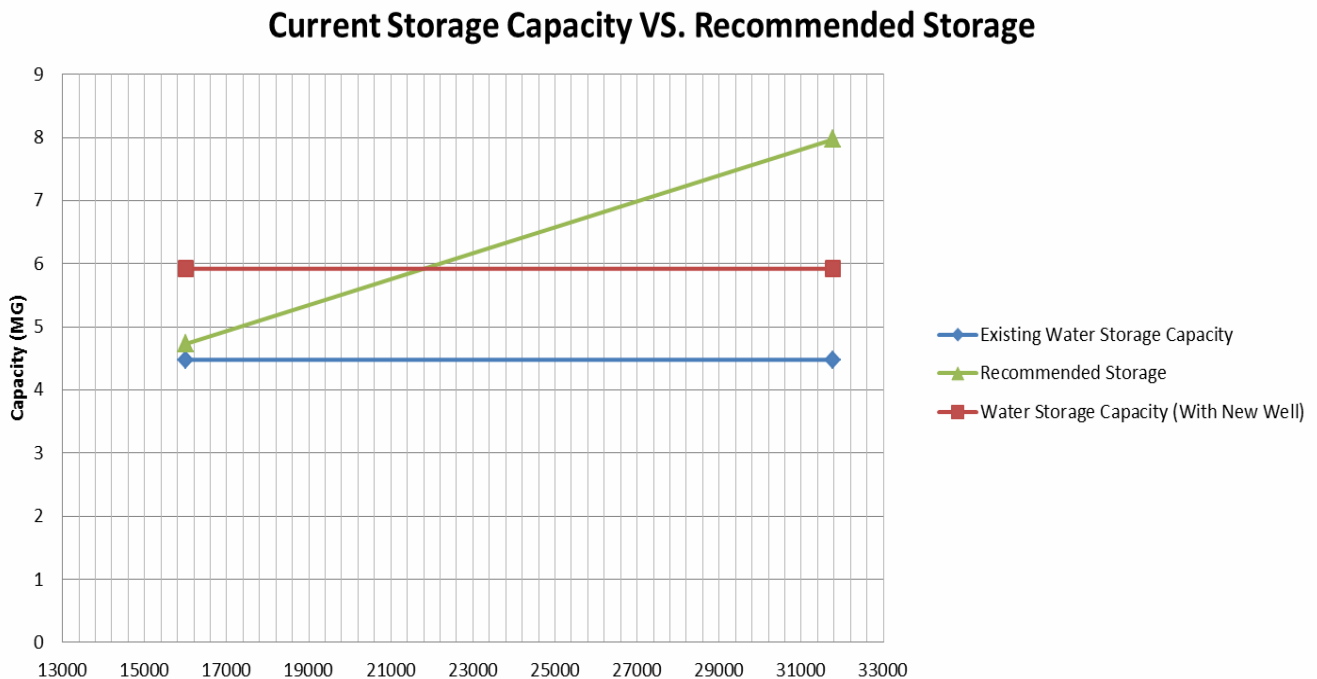


Figure 5: Current Storage Capacity Compared to Recommended Storage.

Figure 5 illustrates that the current water storage capacity is slightly below the recommended storage capacity. An additional 0.25 MG of storage is needed to meet the recommended storage capacity.

To meet the future recommended storage, an additional 3.5 MG of storage is required. If the Village adds additional well capacity (1.5 MGD) with backup power to meet future demands, then to meet the future recommended storage; only an additional 2 MG of storage is needed. Figure 5 shows the effect of adding the additional well capacity. It should be noted the additional storage can be phased to more closely match growth. For example, a 1 MG tank could be constructed now with a future 1 MG tank constructed in the future as population increases.

## **Land Requirements**

It is common to construct the well, treatment facilities, and storage on the same site. If all facilities are constructed on one site we recommend a minimum area of approximately 1.5 acres.



# Village Board

## Agenda Memorandum

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To: Mayor & Village Board  
From: Chief Marc R. Maton  
Subject: **Summary of Quicket Contract**

Date:  
09-28-15

### **BACKGROUND/HISTORY**

Below is a summary of the proposed contract with QUICKET Solutions. QUICKET is proposing a 4-year contract to provide E-reporting solutions.

QUICKET is proposing to provide a flexible, scalable, and configurable solution, including all necessary equipment, software, middleware, and technical support. The solution shall serve as a method and system to issue and manage electronic citations and electronic reports.

QUICKET'S solution shall include:

- All software, web-based applications, middleware, and equipment components necessary to capture, store, manage, analyze and transmit electronic citations and electronic reports.
- All necessary licenses for the operation of the QUICKET Services Solution.
- All software Upgrades, as defined in the MSSA, which may become available, including new modules that include features previously unavailable in base product or which affect known operations, patches and firmware.
- All support services provided during the term of the MSSA (Base Year and each of Years 2-4).
- All deliverables pertaining to the term of the MSSA.
- A warranty for the software solution
- Equipment:

PANASONIC TOUHPAD 7" FZ-B2 TABLET COMPUTER  
ZEBRA ZQ 520 PRINTER  
ZEBRA 1D/2D BARCODE USB DESKTOP SCANNER  
TOUHPAD CAR CHARGER  
VERIZON 3G/4G WIRELESS DATA SERVICES  
E-CITATION MOBILE SOFTWARE  
CRASH REPORT MOBILE SOFTWARE  
INCIDENT REPORT MOBILE SOFTWARE  
CLOUD-BASED DATA STORAGE  
SYSTEM ADMINISTRATOR INTERFACE  
PAYMENT PROCESSING PORTAL & INTEGRATION  
ADJUDICATION PLATFORM  
DATA ANALYTICS & INSIGHT PLATFORM  
PERFORMANCE TRACKING AND MEASUREMENT PLAN ("PTMP")  
OPERATIONS AND MAINTENANCE SUPPORT

DATA CONVERSION PLAN ("DCP")

**FEE STRUCTURE:**

<b>Device</b>	<b>281.66/mo</b>	<b>\$3,380/yrx12</b>	<b>\$40,560</b>
<b>Administrative</b>			<b>\$ 5,000</b>
<b>TOTAL</b>			<b>\$45,560</b>

**Year 1 Fees**

<b>SUBTOTAL (Year 1):</b>	<b>\$45,560.00</b>
<b>STRATEGIC PARTNER DISCOUNT (Year 1):</b>	<b>\$ 3,120.00</b>
<b>TOTAL (Year 1):</b>	<b>\$42,440.00</b>
<b>INITIAL PAYMENT (Due at Signing):</b>	<b>\$ 5,736.67</b>
<b>MONTHLY CHARGE, Year 1 (Months 2-12):</b>	<b>\$ 3,336.67</b>
<b>SUBTOTAL (Years 2-4):</b>	<b>\$129,480.00</b>
<b>STRATEGIC PARTNER DISCOUNT (Years 2-4):</b>	<b>\$9,360.00</b>
<b>TOTAL (Years 2-4):</b>	<b>\$120,120.00</b>
<b>MONTHLY CHARGE, Years 2-4 (Months 13-48):</b>	<b>\$3,336.67</b>
<b>GRAND TOTAL (Years 1-4):</b>	<b>\$162,500</b>

**RECOMMENDATION** : Approval at future board meeting

**ATTACHMENTS (IF APPLICABLE)**

Summary of Work Statement

**SPECIFIC VILLAGE BOARD ACTION REQUIRED**

Approval at the upcoming Village Board Meeting



Village of Lemont  
*Planning & Economic Development Department*

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418 Main Street · Lemont, Illinois 60439  
phone 630-257-1595 · fax 630-257-1598

TO: Committee of the Whole  
FROM: Charity Jones, AICP, Planning & Economic Development Director  
SUBJECT: Visual Identity Project Update  
DATE: September 15, 2015

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**SUMMARY**

In April 2015, the Village, along with our partners in the Chamber of Commerce, Park District, and Township, entered into a contract with Wohltgroup for the development of a community visual identity system. The new visual identity system will include a logo and tagline that will help communicate the key elements of Lemont's community brand strategy. The visual identity system will help all partners make more effective and efficient use of our resources when promoting Lemont within and outside the community.

Since April, representatives from the partner organizations (Village, Chamber, Park District, and Township) have been working collaboratively with Wohltgroup on the development of the logo component of the visual identity. The group has reached a consensus on a general direction that we wish to advance to final development. At the Committee of the Whole meeting, staff will present an overview of the project progress to-date and present the current draft logo concept.