

Northville DDA Design Committee Meeting

Monday, January 14, 2019 Meeting Room A – 3:00 pm

Meeting Agenda

- 1. November Meeting Minutes (Attachment 1)
- 2. 2019 Committee Projects Updates:
 - A. Piano in Old Church Square Suzie Cozart
 - B. Downtown Murals Chuck Murdoch (Attachment 2.B)
 - C. Fire Pits Fred Sheill
 - D. Banner Pole Hardware Request (Attachment 2.D) Lori Ward
 - E. Light Conversion Lori Ward (Attachment 2.E)
 - F. Bench and Other Site Furnishing Sponsorships (handout)
 - G. Wheels on Market Umbrellas (Attachment 2.G)
- 3. Entranceway Sign Project
 - A. Proposal (Attachment 3.A)
 - B. Examples (Attachment 3.B)
- 4. Other Projects
 - A. Christmas Lights and Downtown Decorations
- 5. Next Meeting February 11, 2019
- 6. Adjourned

Northville DDA – Design Committee

MEETING MINUTES

November 13, 2018

Meeting Called to Order: At 3:04 pm

Attendance: Lori Ward, Robert Miller, Chuck Murdock, Frederick Sheill, Suzie Cozart, Carol Maise

Minutes of Prior Meeting: Approved.

American Flags and Poles (Lori):

- Lori has received 150 new flags and 24 extra poles to be used as replacements. Our intent was to have the flags up for Veterans Day. But, the Chamber didn't want the flags up at the same time as the military veteran banners. As it turns out, the banners, flags, garland and lights all up at the same time is too crowded looking, and didn't work anyway. The new flags will be saved for next spring.
- The Chamber wants to expand the number of military banners from 31 this month, to about 55 next year. A possibility is to expand along north Center street toward 8-mile, as those poles can be fitted with existing banner bracketry.
- Some discussion about starting a "flag donor" program. People could contribute \$tbd to pay for a
 new flag and installation. Donors could be recognized in some way in Town Square. Still need to
 work this out.

Holidays Activities (All):

We segued into a discussion about the need for more holiday activities around town. Things like:
 carriage rides, carousel, life-size nutcrackers, Santa's workshop, line the rooftops with lights, etc. It
 was agreed to create a separate sub-committee, and put out a call for volunteers. Lori will place a
 notice in the City e-Newsletter for volunteers.

Piano in Old Church Square (Suzie):

- Still need to determine what to do with the piano during the winter. It was agreed to place it in the Comerica Walkthrough. Lori will ask the DPW to move it.
- Mill Race Village receives multiple piano donation requests during the year, which they turn away.
 They are willing to accept more pianos, if we want to expand the program. Lori to work it out with them.
- Tessa put a tarp over the piano to protect it. Now, it seems the tarp is discouraging people from using it. We need to figure out how to get the tarp on/off. The backside still needs to be sealed.
- We still need to look into an awning.

Downtown Murals (Chuck):

- No new info since the last meeting. Chuck to work with the Mural Committee.
- Lori placed a call to the building owner, but could only leave a message. Hopefully, we will arrange a meeting in the near future, to get permission for a mural. Lori and Carol to follow-up with owner.

Fire Pits (Fred):

• We haven't used the fire pits very much in recent years, as it's labor intensive to turn them on/off. Need a better method – need a remote control or a timer unit. Also, need the flames to be more visible. Frederick has made initial contact with a local fire pit company, but they really need to inspect our system. Fred to see if a local rep can meet in Town Square to inspect the fire pit.

Tree Guard and Bench Memorial Plagues:

- Lori is working with Kurt Kuban of *The 'Ville*, to create an interest article about the plaques, and try to locate donors/owners.
- We keep turning people away who want to donate something to the City benches, tree guards, flags, etc. We need to be able to capture these donations we need a donor program. It was suggested that we create a "wish list" that could be posted on the City website. It would be a ready-made list of items that people can just purchase. Chuck to look into the DNR program as an example.

Newspaper Racks:

• Lori has purchased (4) newspaper racks.

Christmas Lights:

- The existing lights we have in town are failing, and are difficult to fix. The lights on trees typically need to be replaced every few years. And, they keep blowing circuit breakers. The lights really need to be cut out, and replaced. Lori will get quotes.
- Carol mentioned that Romulus is leasing holiday lights instead of buying/installing themselves. It's a big cost savings for them. Carol will get Lori some contact info.

Light Conversion:

- Based on Lori's survey, about 70 post lights still need to be converted. Lori has received a quote from Candela Corp for 100 conversion kits for QL Induction lamps (efficiency of the QL lamps is pretty close to LED). Total project is \$17,600. Lori will discuss with the Executive Committee on Wednesday.
- Plan is for the DPW to install the lamps, as time permits, over the next 4-5 months.

Meeting Adjourned: 4:34pm

Next Meeting: Monday, December 10 @ 3:00pm

Submitted: C. Murdock 10/14/2018





From: Lori Ward

To: Patrick Sullivan

Subject: RE: Military Banner pole brackets

Date: Friday, October 19, 2018 2:24:00 PM

Pat, I have been here almost 20 years and we have never purchased banner hardware before, so I am not sure how they were funded initially. They may have been part of the Main Street 78 project, which tells you how old they are. The DDA has never needed more than the 30 or so that we have. There really isn't an organization that would put up 50 + banners, it is too cost prohibitive to pay for the fabrication and installation of that many for a single event or holiday. I have not looked to see what the cost would be for just ordering hardware from a banner site like Kalamazoo Banner or Britton. Do you know why they are having them fabricated instead of just buying readymade ones from a company

I would be happy to put this on the Design Committee's next agenda and have them review the issue. We have just ordered \$5,000 new flags for the downtown to be installed with the Chamber's Vet's Banner program in November. LW

From: Patrick Sullivan

Sent: Friday, October 19, 2018 11:28 AM **To:** Lori Ward lward@ci.northville.mi.us

Cc: Sandi Wiktorowski <swiktorowski@ci.northville.mi.us>; Loyd Cureton

<lcureton@ci.northville.mi.us>

Subject: FW: Military Banner pole brackets

Lori,

I'm assuming the DDA paid for brackets in the past? Would you be willing to participate in this cost? Does this sound like a reasonable cost for the brackets? I think Jody said that they have a volunteer that can fabricate them.

Pat

From: Jody Humphries [mailto:jodyhumphries@northville.org]

Sent: Friday, October 19, 2018 10:58 AM

To: Patrick Sullivan <<u>psullivan@ci.northville.mi.us</u>> **Cc:** Aaron Cozart <<u>aaron.cozart@navoak.com</u>>

Subject: Military Banner pole brackets

We have added an additional 25 banners for a November total of 56, which is great! With that said, as you know, the City currently only has 31 brackets, so the Chamber is fronting the project to get an additional 30 made for this round (we need to replace at least five that are being used now, since they drop, or look awful). It is going to cost us about \$3k, which I have a donor for half and we'll cover the rest. So, here are my questions:

- 1) Would the City be willing to waive our installation fee for this round (\$10 a banner) that would help us with our costs
- 2) Can we work with you in the future to phase the purchase of additional brackets in...our next installation won't be until May, and we may lose some that we had in the two month cycle, but just a question to consider for the future.

Thanks, any help is appreciated!

Jody Humphries
Executive Director
Northville Chamber of Commerce
248-349-7640
www.northville.org

CANDELA CORPORATION

Irvine CA | Norcross GA | Bethlehem PA

Phone: 800-922-9226 Fax: 800-822-8226



Quote # Location Date Q-01332512 001 5/1/2018

Quotation

Bill To

NORTHVILLE DOWNTOWN DEVELOPMENT AUTHORITY (508677) 215 W. MAIN STREET NORTHVILLE, MICHIGAN 48167 US **Ship To**

NORTHVILLE DOWNTOWN DEVELOPMENT AUTHORITY (508677) 215 W. MAIN STREET NORTHVILLE, 48167

US

Quote Date Expire Date Contact 5/1/2018 6/30/2018 Lori Ward

Customer PO Number Payment Terms

Credit Card Purchase

Freight Terms Sales Person

Phone Number

Ship Via

Prepay and Add James Baas 1-800-922-9226 x 4200 FEDEX GROUND

Product	Qty.	Price	U/M	Extended
QL-HEATSINK HEAT SINK FOR ALL QL LAMP SYSTEMS- PASSIVE COOLING DEVICE- FOR VERTICAL MOUNTED FIXTURES	100	8.74	EA	873.60
QL-HF85W/115/DIM 85W INDUCTION GENERATOR good in stock	100	93	EA	9,300.00
QL85W/840/ALUM/BASE 85W 4000K LAMP COUPLER COMBO good in stock	100	75	EA	7,500.00

Merchandise TotalHandlingMisc ChargeTaxFreightQuote Total17673.6017,673.60

Quote Notes

^{**}You can review our return policy by visiting https://www.candelacorp.com/Policies or by clicking <a href="https://www.candelacorp.com/Polic

QL Induction vs LED

The market needs choice!

Comparison

- Market developments
- Comparison Induction VS LED
 - Pro's and Con's of LED versus Induction
 - Lumens maintenance
 - CRI
 - Installation cost comparison
 - Maintenance & Serviceability
 - TCO
- Summary
- Looking Ahead Market trends
- Looking Ahead Energy

Background

- While induction lamp technology has matured in the last few years, is often overlooked or underutilized in lighting applications since none of the major manufacturers promoted induction lamps in any significant way. LED lighting seems to get the most "buzz" in the market as LEDs are promoted as the best alternative to conventional lighting due to their longevity. Induction lamps have a lifespan of 80,000 to 100,000 hours (depending on type and model), which is much longer than the typical high-power white LED lamp lifespan which is in the 50,000 to 55,000 range. The major difference between the technologies (other than lifespan) is in conversion efficiency (energy utilization) and costs.
- Most presently available commercial LED lighting fixtures have conversion efficiencies in the 35 to 60 Lumens/Watt (L/W) range. LED elements with a conversion efficiency of 70~75 L/W are available, but still quite expensive. There are reports of LEDs with conversion efficiencies of up to 100 L/W operating in research labs, but they are not yet commercially available.
- Induction lamps have a conversion efficiency ranging from 65 L/W in low wattage (8 ~ 20 W internal inductor types) to 90 L/W in the high wattage (250 ~ 400 W external inductor models) range. Ongoing research will see some small improvements in these numbers. When considering commercial/industrial lighting and using a 200 W fixture as an example, the induction lamp version will produce 16,000 Lumens while an LED version would only produce 11,000 Lumens (about 31% less light) with the same energy input.
- Since the most powerful single element LEDs available at this time are in the 20 ~ 25W range, to make a 200W fixture, an array of LED elements must be used. This adds to the expense of the fixture since the cost of these more powerful LEDs is presently quite high and they require custom heat-sinks for thermal management. Since induction lamps use well established and mature glass moulding and coating technology with electronic ballasts (similar to fluorescent lamp technology), manufacturing costs are lower and yields higher than high power LEDs at this time. Typically an induction lamps fixture will cost 50% to 75% less than a similar output LED based fixture. This cost gap will be erased over time as LED production ramps up since sold-state devices are more amenable to cost reduction through mass manufacturing techniques.

LED Lighting concerns drive increasing demand of QL Induction

Main LED concerns:

- High development costs
- Significant initial costs for investor
- Degrade performance over lifetime,
- Replacement costs which will appear at a disputable time.

Borderline concerns

- Heat issues
- Colour
- Glare
- Cumulative lifecycle issues
- QL Induction is sustainable and proven alternative.
 - These dissatifying aspects more and more lead to the request for a sustainable alternative!
- A straight forward comparison LED to Induction has shown
 - Most benefits of LED are also present in Induction
 - Many of the LED concerns and risks are not/less present in Induction solutions.

Recent Publications/Studies

- US Department of Energy
 - -LED Luminaire Lifetime recommendations



- City of San Diego
 - -Evaluation on which technology LED or Induction emerges.



Advantages of QL Induction over LED

- More lumens output and higher lux levels, due to high lumen/watt ratio,
 S/P ratio and lumen/maintenance performance
- Less energy consumption required at wattages above LED 20W
- Proven lifecycle reliability due to mature design and less sensitivity to heat.
- High color rendering index (>80)
- Better protected against glare.
- QL Induction Lighting solution are 1/3 to 1/5 of the costs of comparable LED solutions

LED lighting degrade and compensation

- Independent sources state that with 12 hours usage a day the HP LED solutions will most likely be below 85% Lumens output at year 5, the commercial users of LED lighting are now for the first time being made aware of this concern.
- Recent communication from LED manufacturers are suggesting increasing the power input to a maximum of 113% to compensate for the concerns around the loss of lumens, the results are - Uplift of power input reduces energy savings and further reduces lifespan.
- Additionally compensating for loss of Lumens by increasing power could cause earlier critical failure in high numbers.
- Individual LED failures acceptable under the 2 Y warranty terms.
 Relatively in x% of total LEDs to equal x% loss of Lumens being acceptable, this will naturally be adding to the lumen degrade concerns.

Visually Effective Light

- QL Induction lamps always <u>appear much brighter to the eye than</u> most other light sources, even when those light sources have higher wattages, because the induction lamps produce more light that is useful to the human eye.
- You can Replace traditional lighting (i.e. Metal Halide, HPS, Fluorescent, Mercury Vapor etc) w/induction lamp that is 2/3 of the wattage of a traditional lamp. That represents 33% reduction in energy consumption.

High S/P Ratio of QL induction lamps

The S/P ratio determines the apparent visual brightness of a <u>light source and determines how much light a lamp produces</u> which is useful to the human eye (i.e. Visually Effective Lumens/Lux).

The S/P ratio of a light source is determined by measuring the output in Lumens or Lux using a light meter or spectrometer calibrated first to the Photopic vision sensitivity curve, and then measuring the same light with instruments calibrated to the Scotopic vision sensitivity curve. The resulting numbers form a ratio that is expressed as a single number.

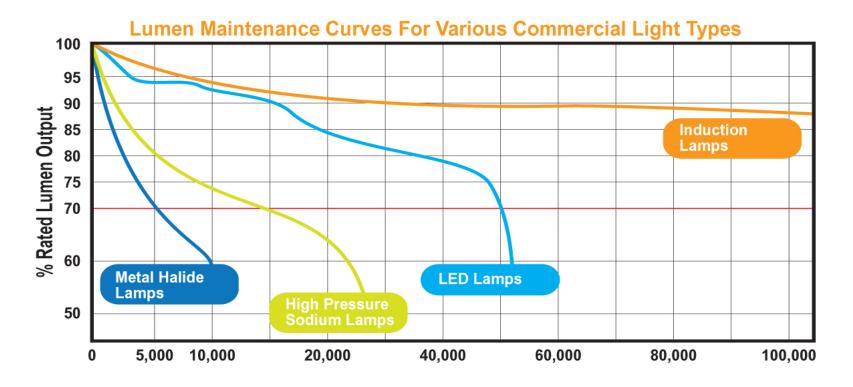
- □ S/P RATIO's of light sources
- Sun + Sky: 2.47
- 6000K White LED(CRI70,Luxeon);2,05
- 5000K QL Induction Lamp(CRI80,Philips): 2.01
- 5000K White LED (CRI75, Nichia); 1.7
- 4000K Induction Lamp: 1.62
- Metal Halide (Na/Sc): 1.49
- Incandescent (2850k): 1.41
- Mercury Vapour : 1.33
- Warm White LED: 1.15
- High Pressure Sodium(50w): 1.14
- Warm White Fluorescent: 1.00
 - (Credit: Francis Rubenstein of Berkley Labs)

Color Rendering Index

- LED lamps are highly directional with vertical beam spreads between 15 50° clearly visible only on appearance benefits of Induction lighting vs. LED, Superior color rendering for better customer visibility and safety, security camera monitoring, more natural lighting appearance, and enhanced illumination of forecourt and signage. The real difference is visible from a distance.
- A straight forward comparison on CRI is simple to display Induction outperforming the LED with CRI-80/85 vs. CRI-70/75, however there is more to be seen with the naked eye.
- LED light spectrum peaks at 400 in the blue range above natural light giving the blue light appearance, whilst Induction has a wide flat medium range (400-700nm) resembling more natural light to the eye than LED
- LED manufacturers who rely solely on Chlorophyll Absorption Charts and don't reference Net Photosy-Action Spectra data or the Emerson Effect or VEL (visual effective light), because it's not in their best commercial interest to do so. There are rarely on the web attempts to compare LED above Induction.

Lumen Maintenance / Lm/Wt

 Initially the LED lumens look better, however per Watt the Induction lamps deliver more lumens (LED 40-65, Induction 65-90)



Induction lamps have a 12% depreciation in lumen output over the 100,000 hour lifetime.

Maintenance aspects

- Induction lamps are truly a long term maintenance free equipment, many manufacturers are offering 10-12 year warranties.
- LED the 5-8 Year exchange at EOL will be impossible to extract from FMC maintenance budgets, there will be a need for >50M USD to replace at this time.
- LED lamp failures equal a complete replacement of the lamp plus shoe box, these are sealed units and very time consuming and expensive to maintain at failure, especially beyond the warranty period.
- HSSE improvement is only the 2 and 4 year HID exchange cycle, thereafter with large site disruption a new exchange program will be required.
- Retrofitting some of the existing fittings in the estate with Induction kits could be done as part of a retrofit program with improved HSSE

Serviceability

LED solid state

- Only possible to exchange the whole unit
- Post warranty cost or replacement issue
- Medium Life-cycle maintenance

Induction 4 Main-parts

- Housing
- Lamp bulb
- Inductor
- Generator
- MTBF in 10 years on the bulb 0,00
- Lowest maintenance in the lighting industry

Induction VS LED Summary

- Life cycle Induction has twice the life of the best available LED
- > TCO With low acquisition cost, low maintenance, low energy, long life the LED solution is a less desirable in respect of TCO
- Lumens Induction has more LUX per watt than LED
- Light quality in color correlation, lamp flicker, light spread and appearance Induction lighting is broadly more superior than LED
- ➤ Maintenance 12 hours a day for 20 years Induction has limited maintenance and become part of site infrastructure, LED will remain an equipment requiring multiple replacements during the site life.
- Final Statement:- The impacts for the \$'s; "Undoubtedly many could have saved more energy for the \$'s spent on a more sustainable solution"

Looking far Ahead with Energy "the global energy crisis"

- Due to the global energy crisis post Fukushima there are many philosophies as to where the worlds energy demands will go and/or how much energy will be available.
- Recent political decisions are changing the energy landscape of tomorrow.
 E.g. European industrial "Power House" Germany has confirmed all 22 of the remaining Nuclear power plants will be off the grid by 2022, leaving a huge demand gap.
- The assumed strategy to compensate is; about 50-50 spread on conservation and renewable energy, the forecasts suggest electricity could therefore cost 2 x what it costs today within the next 10 years.

KENTON BENCH

specifications

Product Description

Traditional aesthetics with a contemporary twist, the Kenton collection balances the old and new. Recor, an innovative recycled material, offers the rich texture and hue of wood that endures indoors and out.

Typical Applications

Educational institutions, municipal spaces, health care facilities, malls

Bench Materials Seat and Back

Slats: $1.00'' \times 2.00''$ recor (recycled plastics) or $1.00'' \times 2.00''$ aluminum $0.25'' \times 1.50''$ steel slats Rods: 0.625'' solid steel rods

Optional: wood slats (IPE, mahogany, etc.)

Optional center Arm

Cast aluminum

Supports

Steel/stainless steal/aluminum Cast aluminum end frames 1.50" diameter cross tubes 1.00" diameter cross tube

Dimensions

96"L x 17"H x 25"D 72"L x 17"H x 25"D

Back To Back

96"L x 17"H x 50"D 72"L x 17"H x 50"D

Mounting Options

F - Freestanding S- Surface mount

Steel: Finish on steel is with a superb protective powder coat process that includes a rust inhibitor, an architectural primer coat, and a thermosetting polyester powder coat that is UV and chip resistant.

Installation

Benches are shipped assembled and ready for installation.

٨	Model	Description	Finish	LxHxD	Weight
	SKB-6R	Cast Aluminum, Steel Frame, Recor Slats - 6'	Powder Coat	72" x 34" x 25"	185 lbs.
	SKB-6W	Cast Aluminum, Steel Frame, IPE Slats - 6'	Powder Coat	72" x 34" x 25"	185 lbs.
	SKB-6S	Cast Aluminum, Steel Frame, Steel Slats - 6'	Powder Coat	72" x 34" x 25"	185 lbs.
ľ	SKB-6A	Cast Aluminum, Steel Frame, Aluminum Slats - 6'	Powder Coat	72" x 34" x 25"	185 lbs.

^{*} Benches also available with a center arm and 8' in length

Specifications are subject to change without notice







Phone: 616.940.9830

The Greencorner USA, Inc.

1629 Prime Ct. Ste. 600 Orlando, FL 32809 407 851 7018



ADDRESS

Lori Ward City of Northville 215 W. Main Street Northville, MI 48167 SHIP TO

Lori Ward City of Northville

Northville Department of Publ

Steve Heidt 650 Doheny Street Northville, MI 48167 **ESTIMATE #** 1040 **DATE** 01/10/2019

SALES REP

Lenora

QTY	DESCRIPTION		UNIT PRICE	EXT. PRICE
8	Low Profile Locking Wheel Set (Qty 4)		50.00	400.00T
Early E	Bird Special- 25% discount included along with free shipping.	SUBTOTAL		400.00
Offer e	expires on 1/31/2019 However, you have the option of putting	TAX (0%)		0.00
50% do	own now which will hold your discount. Once you are ready to	DISCOUNT 25%		-100.00
have th	ne order shipped to you you can put down the remaining 50%.	TOTAL	9	300.00

Accepted By Accepted Date



Quote #52418

May 24, 2018



Lori M. Ward, AICP Director, Northville Downtown Development Authority 215 West Main Street Northville, MI 48167

Northville MI, Gateway Design Program, four to five locations

Scope of Design Services:

Study the current gateway signage locations and determine any size, shape or right of way constraints. Based on the designs developed in the wayfinding study we will create three design options showing size, scale and readability of the signage. In addition we will create photo illustrations on the newly developed sign designs at the actual locations.

Once the final design is approved we will create a full set of scaled working drawings complete with material specifications, graphic patterns, color specifications and installation details.

Design fee includes full color image & vector patterns and full copyright ownership rights......\$7,800.00









LORI M. WARD, AICP DIRECTOR
NORTHVILLE DOWNTOWN
DEVELOPMENT AUTHORITY
215 WEST MAIN STREET
NORTHVILLE, MI 48167

PROJECT DESIGNER:

H.L. BIZZELL, SEGD, IDSA

BIZZELL DESIGN, INC. P.O. BOX 1809 DAVIDSON, NC 28036 (704) 651-3528

BUZZ.BIZZELL@GMAIL.COM

STRUCTURAL ENGINEER:

CLINTON D. ROBERTSON, PE, LEED AP BD+C

8611 CONCORD MILLS BLVD., STE. 160 CONCORD, NC 28027

