

**STAFF REPORT: 09/22/2021 MEETING**

**PREPARED BY: A. DYE**

**APPLICATION NUMBER: 21-7477**

**ADDRESS: 2200 (2600) ATWATER**

**HISTORIC DISTRICT: ARETHA FRANKLIN AMPHITHEATER/CHENE PARK**

**APPLICANT: CITY OF DETROIT, GENERAL SERVICES DEPARTMENT**

**PROPERTY OWNER: CITY OF DETROIT**

**DATE OF PROVISIONALLY COMPLETE APPLICATION: 08/30/2021**

**DATE OF STAFF SITE VISIT: 05/20/2021**

**SCOPE: UPGRAGE EIGHT (8) EXISTING LED SIGNAGE (CURRENTLY STATIC SURFACE), INSTALL TWO (2) NEW LED SIGNS; ALL SIGNS TO HAVE DIGITAL SURFACES**

**EXISTING CONDITIONS**

The Aretha Franklin Amphitheater/Chene Park is located on the East Riverfront, along the Detroit Riverwalk, about 1.25 miles east of downtown. Consisting of a single 9.3-acre parcel, the site contains a covered amphitheater and stage, seating and an adjacent multi-level pavilion. The Detroit firm Shervish, Vogel and Merz was awarded the contract to design the park and the firm’s basis of design was to treat the park as an environmental sculpture. Groundbreaking took place in 1982; the site opened in 1984.

The architectural and historic description below is taken from the Historic Designation Advisory Board’s Final Report:

“Overall, the park has an organic sculptural feeling. Circles, semicircles and wave patterns are used to connect the river to the land. The landscape architects’ vision of linking the park from the Renaissance Center to Belle Isle suggest its past relationship to an industrial landscape and a new connection to modern architecture of the Renaissance Center. Walkways curve and flow around the property allowing for visitors to pause for scenic vistas of the interplay of the property landscape, artworks, and views of the Detroit River and Canada beyond. A semicircular pond covers approximately two-thirds of the frontage with East Atwater Street making the connection to Bloody Run Creek that once flowed into the Detroit River nearby but has since been enclosed and incorporated into the modern sewer system.

The asymmetrical multi-level pavilion is directly adjacent and north of the amphitheater and consists of a series of circular and semicircular concrete structure segments. It is arranged with multiple stacked round silo-shaped structures with exterior gray rough texture concrete finishes and houses the concession stands, restroom facilities, private event space and mechanical operations. Between the period of 1984 and 1990, the pavilion was expanded from three-levels to five-levels with four new concession and two new restroom facilities that extended the original accommodations seven-fold. The pavilion pattern slopes up and over the crest of the hill with hardscape areas of solid rough textured cylinders resembling piers that slope down to the pond framing the landscaped area.”



Amphitheater and Pavilion, Looking Southwest. HDC Staff photo, July 2021



Designation Photo of Pavilion, Looking Southeast. HDAB, 2019

The amphitheater consists of a round, flat 30-foot concrete stage flanked by two twenty-foot wings at ground level with a metal fence blocking off access to the Detroit River. The stage and seating is covered by a large Teflon-coated fiberglass tensile structure. At the stage, the covering is supported by four rough textured gray concrete support columns that act as the base for the main stage house framework and mechanical space. The tensile structure covering the fixed seating is supported by nine inverted “V” concrete structures along the outside; seven at the top of the hill create a fan-shaped roof structure, and one on each side help anchor the sides. Inside and underneath the tensile roof structure are three fixed slightly-diagonal steel support towers that are fluted at the top and provide a catwalk and open half cage area for mounting the lighting and audio equipment.”



View to stage,  
looking southwest.  
HDC Staff photo,  
May 2021



Upper path, looking east. HDC staff photo, May 2021

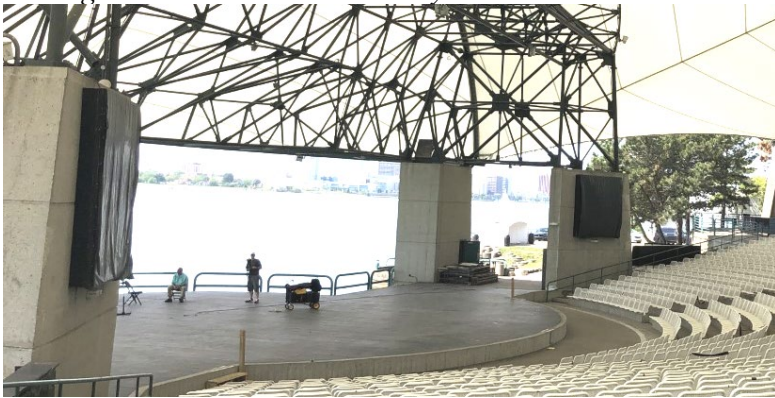
**PROPOSAL**

The applicant is proposing to replace eight (8) existing LED signs (currently static graphics) and install two (2) additional LED signs. The ten (10) signs will have digital surfaces. The below photos were taken by HDC staff in May 2021 (unless otherwise noted).

Locations – The numbers correspond with the applicant’s location map.

**#2 and #8 - Left and right sides of stage**

*New signs: 2 - 10' x 10' video wall system*



**#3 – North side of east/side roof support**

*New sign: 6'-6" x 6'-6" trapezoidal column video wall sign replacement*



**#4, #5, #6, #7 – Northern roof supports.**

*New signs: 4 (or 5 – see “Issues”) 6'-6" x 6'-6" LED video wall replacement trapezoidal signs*



**#10 – Adjacent restroom, upper level.**

*New sign: 1 - 10' x 10' curved LED video wall sign*



**#1 and #9 – exterior supports flanking stage - west support shown here.**

*New signs: 2 - 10' x 10' LED advertising signs*



Adhesive signs shown in a 2017 photo, [cheneparkdetroit.com](http://cheneparkdetroit.com)

**STAFF OBSERVATIONS AND RESEARCH**

- The Aretha Franklin Amphitheater/Chene Park Historic District, established in December 2019, consists of a 9.3-acre parcel and is owned by the Detroit General Services Department.
- According to the HDAB Final Report:
  - Its period of significance is defined as 1982, when the groundbreaking ceremony took place, to 1990, when the park reopened after undergoing site improvements.
  - The lead project landscape architect, David Schervish, “treated the park as an environmental sculpture...”
  - A new electronic changeable sign...near the Entry Plaza does not contribute to significance. The lighting fixtures, benches and metal bollards were replaced after 1990 period of significance.
    - The fifteen-foot-high venue sign was revealed on May 17, 2019.

- The main pavilion is reminiscent of “Brutalism” style of architecture in which structures are massive and/or monolithic in size and shape. The building material, poured concrete being the most common, was generally left unfinished and sometimes given a rough surface. In the case of the amphitheater, the pavilion structures were given a heavily textured vertical concrete surface, similar to the surface treatment of the interior structure of the Renaissance Center.
- While Brutalist buildings are very often monochromatic in color (i.e., unfinished concrete and steel), color is sometimes used in clearly defined areas. This is the case with this district. The rehabilitation of the concession stands (#20-6962, December 2020 meeting, COA issued) included the return of original colors (yellow, red, black, purple and gray) which were minimally used to contrast against the concrete structures. The amphitheater seating and tensile roof are white, which offers a subtle contrast to the gray concrete supports and allows the stage and Detroit River to retain multi-colored dominance (through stage lighting and continual boat traffic).
- While color offers a spot-specific contrast and relief from the visual heaviness of uncolored concrete, the integrated landscape creates a larger contrast across the entire site. The relatively unadorned and precisely vertical striations of the concrete, along with the smooth surfaces of the concrete roof supports, offer a static/non-changing backdrop to the everchanging organic forms of the landscape as the site moves through the four seasons. The contrasts between the natural and built environment make both elements stronger than if they were alone.
- Character-defining features of this site not only include specific structures and landscape elements (such as the pavilions, tensile roof, integrated planters, and riverside location), it is staff’s opinion the integration and interdependence of the built and natural forms are equally important, thus allowing all elevations and views (including vantage points from the river) to be character-defining features.
- Staff does not know the original designs and locations of the signage that was present during the period of significance (1982 – 1990) of this district. The applicant states in an email the existing signs pre-date 2004 when The Right Productions, Inc. took over the entertainment booking, production, facility management and marketing services of the amphitheater. However, some of the signs seem to be newer than that, as shown in pictures following this report.

## ISSUES

- There is a discrepancy on the sign order when compared to the narrative. The narrative identifies eight existing and two new sign locations, whereas the order states eleven signs (six rather than five 6’-6” x 6’6” trapezoidal signs are listed) will be fabricated.
- It is staff’s opinion the proposal to install digital surface signs is in conflict with the following Elements of Design:
  - **4) Rhythm of solids and voids in the front facades** – *“...An irregular rhythm of solids to voids exists on all elevations of the merchandising, pavilion and administration buildings. The pavilion voids are irregularly placed; some voids act as window, doorways and viewing points...”*
    - As the Elements of Design count windows as voids, it is staff’s opinion the flat, mounted sign surfaces should also be considered voids. Staff is concerned about the reduction of “solids” when additional concrete surfaces are covered with moving digital displays.
  - **10) Relationship of architectural details** – *“...Cylinder shapes are arranged in an asymmetrical modern style spare of details. The primary façade of the pavilion is dominated by rough textured concrete with vertical textured elements...”*
  - **13) Relationship of significant landscape features and surface treatments** – *“...Mature trees are found on the east elevation and surrounding the amphitheater. Mature shrubbery are located throughout all elevations along the building footprint and paved walkways. The Entry Plaza, Mall and Festival Plaza, and sidewalks along the pond are flanked with grass. The hill beyond the fixed seating of the amphitheater is covered with grass. Collections of low-level multi-height cylinder shaped*

*landscaping features are arranged along the riverfront and within the landscaped areas and some include the vertical texturizing found on the outside of the pavilion and stair risers...*

- This district is a park as well as an amphitheater. While illumination and signage are needed for safety and informational purposes, staff believes it should remain static and thereby secondary to the larger development.
- **19) Degree of complexity within the facades** – *“A low degree of complexity is found at façade openings...and administrative building main entrances; door and window openings throughout are unadorned. A subtle but high degree of complexity is found in the architectural details of the pavilion due to the stacked nature of the cylinder shapes that create a tower of cylindrical elements with vertical texture.”*
  - It is staff’s opinion that dynamic digital signs are counter to the low degree of complexity designed for the manmade surfaces and will further disrupt the atmosphere of the district.
- **20) Orientation, vistas, overviews** – *“The primary orientation of all buildings, amphitheater and stage structure, and objects are designed to maximize views of the Detroit River...The pavilion openings provide frames for viewing the mature landscape and water features. The amphitheater provides patrons vistas of the Detroit River and is the backdrop for the stage. The parcel was designed to engage and connect people with the natural beauty of the riverfront with the City of Detroit as its backdrop by placing mature trees into the landscape.”*
- **22) General environmental character** – *“The district consists of a multi-building entertainment venue that’s interrelationship is to enjoy the entertainment complimented within its natural environment...”*
  - It is staff’s conclusion upon reading the District’s Final Report and Elements of Design, this site was designed to balance equally competing interests: the solitude beauty of nature with the spectacle and auditory experience of performances; one should not outdo the other.
- While reviewing projects for this district over the past two years, staff has witnessed contractors and architects confronted with challenges during the design phases which caused substantial revisions from the first HDC application to the final application, ultimately creating stronger designs. Staff understands there are programming and financial needs for signage. The sign strategy is another opportunity to find creative and innovative site-specific ways to offer informational signage and advertising while staying true to the original mission and design philosophy of this site as this park approaches its 40<sup>th</sup> anniversary in 2022.
- While staff is concerned with the impact of dynamic and more visible signage, the applicant could consider retaining the existing static signage.

## **RECOMMENDATION**

### **Section 21-2-78, Determination of Historic District Commission**

It is staff’s opinion the replacement of the existing static signs with new (and additional) dynamic digital signs will alter the features and spaces that characterize the property. Staff therefore recommends the Commission deny a Certificate of Appropriateness for the work as proposed because it does not meet the Secretary of the Interior Standards for Rehabilitation and the Elements of Design for the district, specifically Standards:

- 1) *A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*
- 2) *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.*
- 9) *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*



Undated photo courtesy of [www.cheneparkdetroit.com](http://www.cheneparkdetroit.com) (no signage is present on the flanking stage supports)

The photographs on the following pages were taken by HDC staff in May 2021, unless otherwise noted.

**Existing Signs**



Existing signs located on the eastern side of the concrete inverted “V” membrane roof supports.



View of the same supports looking toward the east





These are photos of north and south sides of one of the two “side” supports called out in the Final Report. The illuminated sign is on the northside, facing the amphitheater seats.



Looking southwest toward stage. Existing signs/ screens flank the stage.

**Integration of landscape and built environment.**











The seawall, designed by Shervish, Vogel and Merz, illustrates the intentional interrelationship of the amphitheater and nature and offers another example of why all views within, and toward, the district are character-defining features.



This undated photo, from [tripadvisor.com](http://tripadvisor.com), beautifully illustrates the dynamic contrast of the blank facades of the concrete supports against the river, as well as how they frame the performance.

The photo at right is courtesy of [www.thearetha.com](http://www.thearetha.com), and was used in an article celebrating the site's 30<sup>th</sup> anniversary, which would have been in 2012. Therefore, staff believes the current signs (as shown illuminated below), were installed within the last ten years, but likely prior to the 2019 district designation.



Detroit Free Press photo, June 25, 2016 concert. The static signs shown in the above photo reduce the interdependent relationship of structure and site. Moving digital signs will further disrupt the district's environment.



Adhesive signs shown in a 2017 photo, [cheneparkdetroit.com](http://cheneparkdetroit.com). The current application proposes moving graphic signs at these two river-facing locations.



During HDC staff's May 2021 visit, the western roof support did not have a sign affixed to its river-facing elevation.

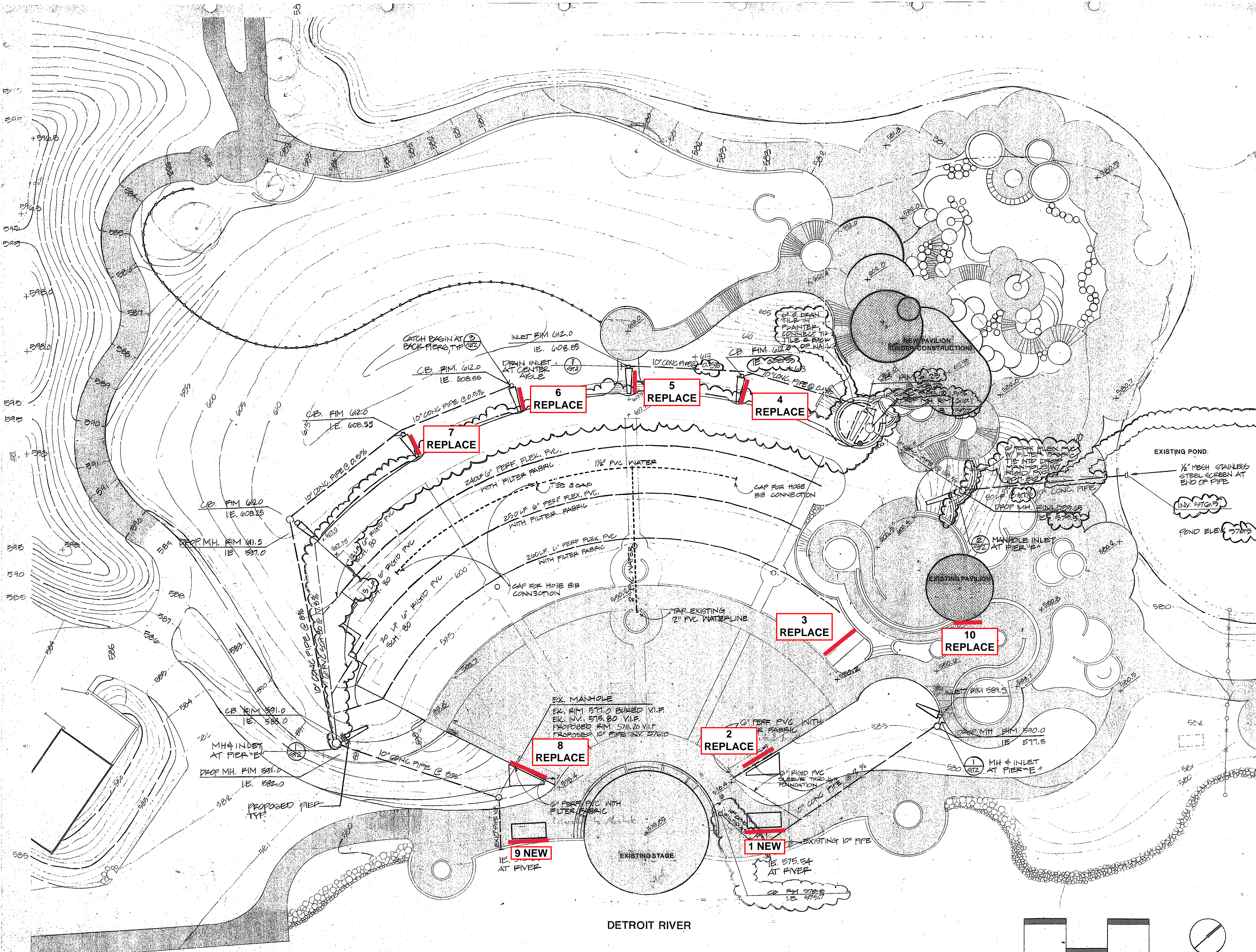


## **Project Narrative – Aretha Franklin Amphitheatre**

The Aretha Franklin Amphitheatre wants to upgrade (8) existing LED signage and add (2) additional LED signage that is currently displayed in the venue from costly static duratran graphics to digital surfaces. This will allow us to expand our messaging within the venue and the areas will no longer be static.

Some added benefits to going digital:

- There won't be replacement costs for printing as information changes because it is now digital. Just a click of a button changes what is display.
- Will never have the labor cost to go up and change these graphics as these are in elevated areas for all to see which requires tall ladders and costly lifts.
- We can run video content instead of one single static image.



# CHENE PARK AMPHITHEATER

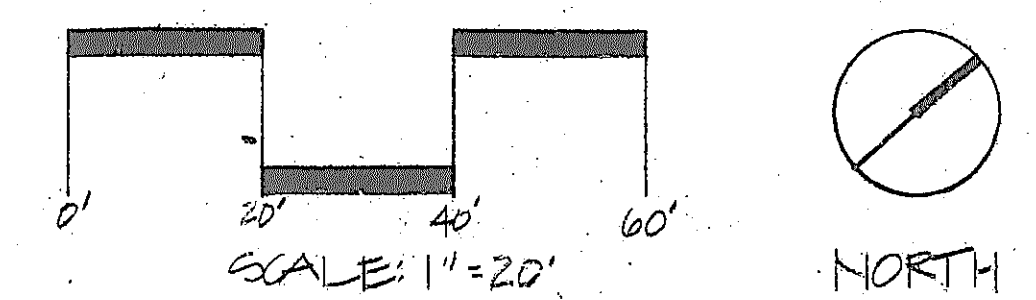
Schervish Vogel Merz  
 Architects  
 Landscape Architects  
 Urban Designers  
 Planners  
 A Professional Corporation  
 1995 E. Woodhull  
 Detroit, Michigan 48207  
 313.567.4300

STATE OF MICHIGAN  
 DAVID W. SCHERVISH  
 ARCHITECT  
 NO. 26940  
 REGISTERED PROFESSIONAL ARCHITECT

Issued For	CM & CITY REVIEW	07-20-09
	191DS	08-02-09
REVISED		08-18-09
CM REVIEW & BIDS		08-18-09
PREPARED SET		9-8-09
CONSTRUCTION		9-29-09
REVISED PER PLUMBING DEPT. REV.		10-15-09

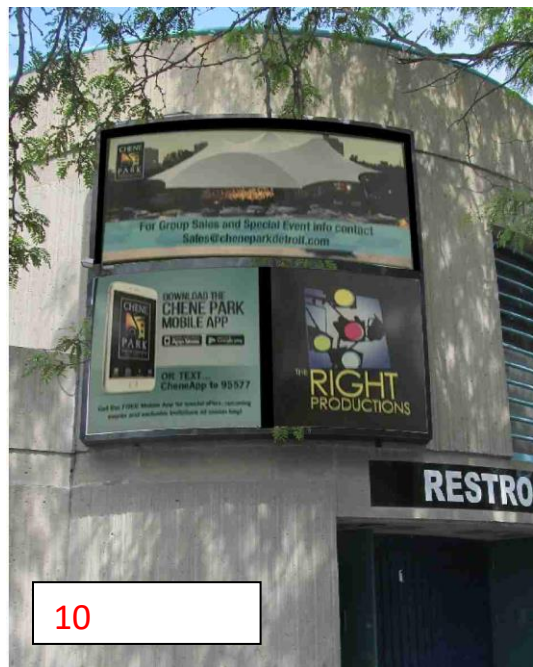
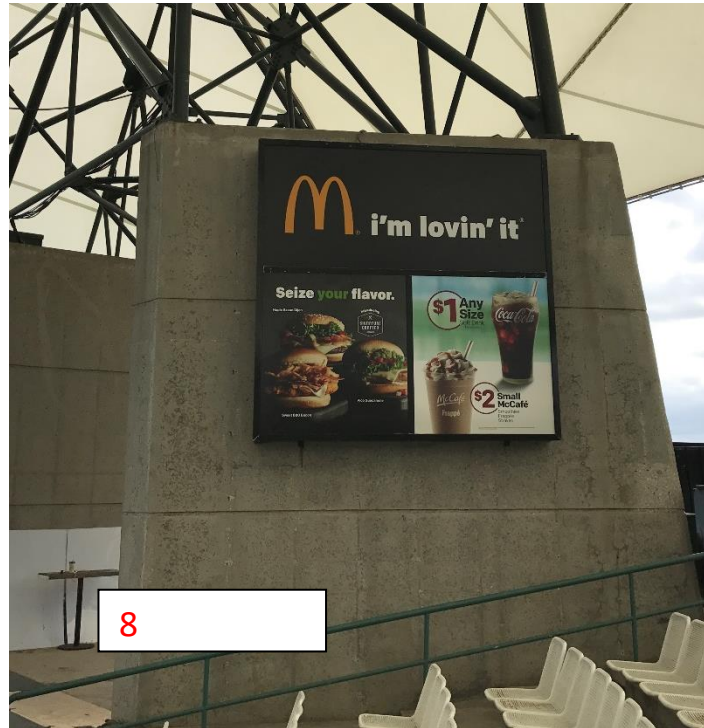
Sheet Description  
**STORM DRAINAGE AND WATER PLAN**

Job No. 8849  
 Drawn: FMD/EAS  
 Checked: EAS  
 Approved:  
 Date: 7-20-09  
 Scale: 1" = 20'-0"









**PLEASE NOTE**

\* The bottom 2 faces will have to be cut down to fit the bottom cabinet. Once they are cut they can't go back in the original cabinet.

\* The red area is where we would need to add panels to fill in the space where the faces don't cover.

## Audra Dye

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**From:** Shahida Mausi <shahida@thearetha.com>  
**Sent:** Friday, September 3, 2021 4:29 PM  
**To:** Audra Dye  
**Cc:** jason@ledtranquility.com; Rhea Bautista; Marie Haener-Patti; Historic District Commission (Staff)  
**Subject:** [EXTERNAL]Re: Signage for Aretha Franklin Amphitheater - HDC application -- Request for more information

Hello,

Please see the responses in **RED**

The narrative states the scope of work is to replace eight existing signs and install two new/additional signs. However, the lighting order shows an additional four signs to be installed (one at the bathroom, and three in the concession area).

- *--Please expand the narrative and map to show locations of all proposed signs; submit additional site/locational photographs as needed.*
- **The order has not been placed; we are only requesting what is described in the narrative.**

*--Please break down the project by sign/location, offering a dimensional/shape comparison of existing to proposed so the Commission understands the change per sign location. The proposed sign should be shown on the column/wall for full understanding of its proportion against the structural component.*

- **Dimensions are listed above and fit very comparatively to the existing space occupied by the signs currently based on site inspection**
- **In each circumstance, we may have exceeded the dimension slightly, to hide any prior weathering or discoloration on the walls**

*--Please state when the signs will be illuminated, and the lumens/brightness of each sign.*

- **Lumen brightness for ALL LED = 5500NITS, which is the highest in the industry**
- **We can VERY EASILY adjust brightness levels through the processor to meet the brightness desired onsite**
- **The signs will be illuminated when audiences are in attendance. If allowed the riverside signage may be illuminated per sponsorship agreements Spring, Summer, Fall.**

*--Were any other locations considered? Why were these locations selected?*

- **As listed above, these were the only locations we discussed per the site inspection where LED was desired.**

*--History - when were the existing signs installed?*

**The history of the signs pre-date the contract between the City of Detroit and The Right Productions, Inc.. All that we can attest too is that the signs pre-date to 2004 when we took over this location.**

*--Please submit a catalog cut of similar signs so the Commission can understand the cabinet design (are there color options and has a color been selected?) and related electrical components that will be visible.*

- **Please download the document from the link below**
- **<https://ledtranquility.wetransfer.com/downloads/d8bb16ea2b2c9fd0cc41132c4b96f9bf20210903181748/e9b3f994f37b03ef19ac34f6e3f5b34020210903181748/7b9cc0>**

Also, does the number of panels per sign impact the design of the sign when it's on and off? Or is it solely a fabrication description?

**It is solely a fabrication description.**

On Thu, Sep 2, 2021 at 8:25 AM Audra Dye <[dyea@detroitmi.gov](mailto:dyea@detroitmi.gov)> wrote:

Good morning,

I've reviewed the submitted materials for the signage application and have the following questions/comments.

The narrative states the scope of work is to replace eight existing signs and install two new/additional signs. However, the lighting order shows an additional four signs to be installed (one at the bathroom, and three in the concession area).

*--Please expand the narrative and map to show locations of all proposed signs; submit additional site/location photographs as needed.*

*--Please break down the project by sign/location, offering a dimensional/shape comparison of existing to proposed so the Commission understands the change per sign location. The proposed sign should be shown on the column/wall for full understanding of its proportion against the structural component.*

*--Please state when the signs will be illuminated, and the lumens/brightness of each sign.*

*--Were any other locations considered? Why were these locations selected?*

*--History - when were the existing signs installed?*

*--Please submit a catalog cut of similar signs so the Commission can understand the cabinet design (are there color options and has a color been selected?) and related electrical components that will be visible.*

Also, does the number of panels per sign impact the design of the sign when it's on and off? Or is it solely a fabrication description?

**Please submit the additional information no later than noon, Tuesday, September 7th.** This will allow me time to review the materials and request any additional clarification before I leave for vacation the following day (returning to the office on Tuesday, September 14th). I am happy to talk by phone later today or tomorrow morning, so that we are all clear on the project details and the additional items needed for the application. Thank you!

Regards,  
Audra

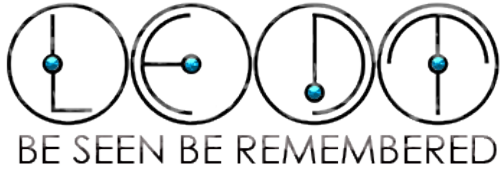
## **Audra Dye**

Architectural Historian, Planner | Planning & Development | City of Detroit  
Coleman A. Young Municipal Center, 2 Woodward Ave. Suite 808, Detroit, MI 48226

[www.detroitmi.gov/hdc](http://www.detroitmi.gov/hdc)

[dyea@detroitmi.gov](mailto:dyea@detroitmi.gov)

**Michael E. Duggan, Mayor**



**LED Tranquility, Inc.**  
 450 Bunker Court  
 Vernon Hills, IL 60061 US  
 888-816-4317  
 jason@ledtranquility.com  
 www.ledtranquility.com

09/17/2021 - HDC Staff crossed out additional signage that is not part of the current application (per applicant's narrative-location map)

## Estimate

<b>ADDRESS</b>	<b>SHIP TO</b>	<b>ESTIMATE #</b> 1618
Shahida Mausi	Shahida Mausi	<b>DATE</b> 06/23/2021
The Right Productions	The Right Productions	<b>EXPIRATION DATE</b> 06/28/2021
2600 AtWater	2600 AtWater	
Detroit, MI 48207	Detroit, MI 48207	
United States	United States	

<b>SHIP DATE</b>	<b>SHIP VIA</b>
06/30/2021	LEDT

ACTIVITY	QTY	RATE	AMOUNT
<b>PURCHASE - COLUMN VIDEO WALL (3) 6' 6" x 6' 6" SYSTEMS TRAPEZOIDAL SIGN REPLACEMENTS 2 LED PANELS HIGH BY 2 LED PANELS WIDE</b>  <b>Video Wall Panel:10mm Pixel Pitch Video Wall Panel</b> OUTDOOR LED VIDEO WALL PANEL 10mm pixel pitch fully waterproof both face and cabinet with structural die-cast cabinet with easy mount fastening pinch cleat. Specifications are as follows:  Panel Size: 960mm*960mm (37.7953" x 37.7953") Physical Density of Pixels: 10,000 Pixel Specifications: 1R1G1B LED Encapsulation: SMD3535 Weight: 36# Module Size (mm): L320xH160xT20 Module Weight (g/pcs): 450 Driving Mode: 1/4S Display Resolution (dots): 32x16=512 Brightness (cd/m2) >5500 Refresh Frequency (Hz): >1920 Frame Frequency (Hz): >60 Module Working Voltage: 4.8-5.2 Module Consumption (w): <27 Max Power Consumption (w/m2): <540	12	1,770.00	21,240.00



ACTIVITY	QTY	RATE	AMOUNT
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Subtotal: 21,240.00

PURCHASE - (2) 10' x 10' VIDEO WALL SYSTEMS FOR THE LEFT AND RIGHT SIDES OF THE STAGE 3 LED PANELS HIGH BY 3 LED PANELS WIDE

<b>Video Wall Panel:10mm Pixel Pitch Video Wall Panel</b> OUTDOOR LED VIDEO WALL PANEL 10mm pixel pitch fully waterproof both face and cabinet with structural die-cast cabinet with easy mount fastening pinch cleat. Specifications are as follows:	18	1,770.00	31,860.00
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Panel Size: 960mm\*960mm (37.7953" x 37.7953")  
 Physical Density of Pixels: 10,000  
 Pixel Specifications: 1R1G1B  
 LED Encapsulation: SMD3535  
 Weight: 36#  
 Module Size (mm): L320xH160xT20  
 Module Weight (g/pcs): 450  
 Driving Mode: 1/4S  
 Display Resolution (dots): 32x16=512  
 Brightness (cd/m2) >5500  
 Refresh Frequency (Hz): >1920  
 Frame Frequency (Hz): >60  
 Module Working Voltage: 4.8-5.2  
 Module Consumption (w): <27  
 Max Power Consumption (w/m2): <540

Subtotal: 31,860.00

PURCHASE - (2) LED ADVERTISING SIGNS FACING WATER 10' x 10' VIDEO WALL SYSTEMS 3 LED PANELS HIGH BY 3 LED PANELS WIDE EACH SYSTEM

<b>Video Wall Panel:10mm Pixel Pitch Video Wall Panel</b> OUTDOOR LED VIDEO WALL PANEL 10mm pixel pitch fully waterproof both face and cabinet with structural die-cast cabinet with easy mount fastening pinch cleat. Specifications are as follows:	18	1,770.00	31,860.00
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Panel Size: 960mm\*960mm (37.7953" x 37.7953")  
 Physical Density of Pixels: 10,000  
 Pixel Specifications: 1R1G1B  
 LED Encapsulation: SMD3535  
 Weight: 36#  
 Module Size (mm): L320xH160xT20  
 Module Weight (g/pcs): 450  
 Driving Mode: 1/4S  
 Display Resolution (dots): 32x16=512  
 Brightness (cd/m2) >5500  
 Refresh Frequency (Hz): >1920  
 Frame Frequency (Hz): >60

ACTIVITY	QTY	RATE	AMOUNT
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Module Working Voltage: 4.8-5.2  
 Module Consumption (w): <27  
 Max Power Consumption (w/m2): <540

Subtotal: 31,860.00

PURCHASE - (1) CURVED LED VIDEO WALL BY BATHROOM  
 ENTRANCES 10' x 10' CURVED VIDEO WALL SYSTEMS 3  
 LED PANELS HIGH BY 3 LED PANELS WIDE EACH SYSTEM

<b>Video Wall Panel:10mm Pixel Pitch Video Wall Panel</b> CURVED OUTDOOR LED VIDEO WALL PANEL 10mm pixel pitch fully waterproof both face and cabinet with structural die- cast cabinet with easy mount fastening pinch cleat. Specifications are as follows:	9	1,988.00	17,892.00
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Panel Size: 960mm\*960mm (37.7953" x 37.7953")  
 Physical Density of Pixels: 10,000  
 Pixel Specifications: 1R1G1B  
 LED Encapsulation: SMD3535  
 Weight: 36#  
 Module Size (mm): L320xH160xT20  
 Module Weight (g/pcs): 450  
 Driving Mode: 1/4S  
 Display Resolution (dots): 32x16=512  
 Brightness (cd/m2) >5500  
 Refresh Frequency (Hz): >1920  
 Frame Frequency (Hz): >60  
 Module Working Voltage: 4.8-5.2  
 Module Consumption (w): <27  
 Max Power Consumption (w/m2): <540

Subtotal: 17,892.00

PURCHASE - (3) LED VIDEO WALL TO REPLACE  
 TRAPEZOIDAL SIGNS AT BACK OF HOUSE BY LAWN 6' 6" x  
 6' 6" VIDEO WALL SYSTEMS 2 LED PANELS HIGH BY 2 LED  
 PANELS WIDE EACH SYSTEM

<b>Video Wall Panel:10mm Pixel Pitch Video Wall Panel</b> OUTDOOR LED VIDEO WALL PANEL 10mm pixel pitch fully waterproof both face and cabinet with structural die-cast cabinet with easy mount fastening pinch cleat. Specifications are as follows:	12	1,770.00	21,240.00
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Panel Size: 960mm\*960mm (37.7953" x 37.7953")  
 Physical Density of Pixels: 10,000  
 Pixel Specifications: 1R1G1B  
 LED Encapsulation: SMD3535  
 Weight: 36#  
 Module Size (mm): L320xH160xT20  
 Module Weight (g/pcs): 450

ACTIVITY	QTY	RATE	AMOUNT
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Driving Mode: 1/4S  
 Display Resolution (dots): 32x16=512  
 Brightness (cd/m2) >5500  
 Refresh Frequency (Hz): >1920  
 Frame Frequency (Hz): >60  
 Module Working Voltage: 4.8-5.2  
 Module Consumption (w): <27  
 Max Power Consumption (w/m2): <540

Subtotal: 21,240.00

~~PURCHASE (1) 3.91MM PIXEL PITCH LED VIDEO WALL TO BE MOUNTED ABOVE MAIN CONCESSION STANDS. THIS IS A TIGHTER PIXEL PITCH AS ATTENDEES WILL BE MUCH CLOSER. 2' x 21' VIDEO WALL SYSTEMS 1 LED PANELS HIGH BY 11 LED PANELS WIDE EACH SYSTEM~~

<del>Video Wall Panel:IN3.91mm Video Wall Panel w/die case frame</del> <del>OUTDOOR Waterproof Curved 3.91mm Video Wall Panel w/die case frame (Dimensions 22.6772 inches x 22.6772 inches) 128 pixels x 128 pixels per panel 4K Capable</del>	<del>11</del>	<del>1,170.00</del>	<del>12,870.00</del>
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Subtotal: 12,870.00

~~PURCHASE (1) 3.91MM PIXEL PITCH LED VIDEO WALL TO BE MOUNTED ABOVE BACK OF HOUSE CONCESSION STANDS. THIS IS A TIGHTER PIXEL PITCH AS ATTENDEES WILL BE MUCH CLOSER. 2' x 10' 1" VIDEO WALL SYSTEMS 1 LED PANELS HIGH BY 11 LED PANELS WIDE EACH SYSTEM~~

<del>Video Wall Panel:IN3.91mm Video Wall Panel w/die case frame</del> <del>OUTDOOR Waterproof Curved 3.91mm Video Wall Panel w/die case frame (Dimensions 22.6772 inches x 22.6772 inches) 128 pixels x 128 pixels per panel 4K Capable</del>	<del>5</del>	<del>1,170.00</del>	<del>5,850.00</del>
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Subtotal: 5,850.00

~~PURCHASE (1) 3.91MM PIXEL PITCH LED VIDEO WALL TO BE MOUNTED AROUND COLUMN IN VIP AREA. THIS IS A TIGHTER PIXEL PITCH AS ATTENDEES WILL BE MUCH CLOSER. 2' x 23' 6" VIDEO WALL SYSTEMS 1 LED PANELS HIGH BY 11 LED PANELS WIDE EACH SYSTEM~~

<del>Video Wall Panel:IN3.91mm Video Wall Panel w/die case frame</del> <del>OUTDOOR Waterproof Curved 3.91mm Video Wall Panel w/die case frame (Dimensions 22.6772 inches x 22.6772 inches) 128 pixels x 128 pixels per panel 4K Capable</del>	<del>13</del>	<del>1,170.00</del>	<del>15,210.00</del>
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Subtotal: 15,210.00

ACTIVITY	QTY	RATE	AMOUNT
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~~MAIN PROCESSING & CONTROL FOR ALL VIDEO WALLS LISTED ABOVE~~

<b>Accessories:Video Processor - 2000</b>	1	19,030.00	19,030.00
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- 20K Video Splicing Server
- Faroudja ® Real Color® Picture processing, 10+ Bit Faroudja ® DCDI Cinema Processing and Faroudja ® TureLife™ Video image enhancement
- Advanced interlaced motion image adaptive processing technology to eliminate video image movement tail and saw-tooth phenomenon
- Plug-in design for more flexible and convenient hardware maintenance
- Redundant power supply design, equipment operation more stable and reliable
- CrossPoint fully cross-high bandwidth video switching technology
- Support mixed video seamless switching technology, no black screen between image signals switching
- Whole procedure 60Hz RGB format signal processing and transmission, without reducing image quality and frame rate, perfect image and color reproduction
- Support functions like input text overlay, input signal remark and etc
- Support signal sources preview function, support real-time preview of all input signal sources
- AIAO(Any In Any Out) function, any input crop and any output
- Using advanced sync-frame splicing technology, high-speed images are completely synchronized without tearing image
- Support multiple SD、 HD, analog and digital input
- 16×CVBS 16×VGA
- 16×DVI ( HDMI ) 16×SDI ( SD-SDI / HD-SDI / 3G-SDI )
- The quantity of supported input signal is up to 64, the supported function for any input signal includes opening window , roam , scale , free overlay, etc. it can process 32 signals at the same time, and it can display 32 different images at most
- Maximally 16 preset display modes, switch and select seamlessly
- Standard VESA DVI output, compatible with mainstream full-color control systems
- 16 DVI outputs, maximum output resolution 1920\*1080\_60Hz
- single unit splicing output width up to 20480 pixels or output height up to 9600 pixels
- Any input signals seamless switching and Fade-in/Fade-out switching
- Support RS232 serial port, USB and TCP/IP control, open control protocol, easy integration with various control systems
- PC software is easy to use, any open window , roam, overlay
- Backup or Restore the device settings and adjustment data by a PC
- 24/7 Application, stable and reliable

<b>Accessories:SC-12</b>	1	349.00	349.00
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- 12 PCI slots+12 PCI-e slots

ACTIVITY	QTY	RATE	AMOUNT
<ul style="list-style-type: none"> <li>• 12 pieces of 2 port access sending card or 6 pieces of 4 port sending card</li> <li>• Supply voltage: 5V DC</li> <li>• Power supply mode</li> <li>• Big 4pin ( P5.08mm )</li> <li>• Small 4pin ( P2.54mm )</li> <li>• PC or PCI-E</li> <li>• Input voltage: 100-240VAC 50/60Hz</li> <li>• Power consumption: ≤100W</li> <li>• Environment temperature: 0-45 °C</li> <li>• Environment humidity: 15-85%</li> <li>• Size: 483(L)X270(W)X133.5 ( H ) mm</li> <li>• Weight: G.W. : 5.6Kg, N.W. : 4.3Kg</li> </ul>			
<b>Accessories:Sending Card</b> Sending Card - send data from processor to video wall, remote monitoring	12	270.00	3,240.00
			Subtotal: 22,619.00
<b>SHIPPING, DUTY &amp; CUSTOMS FEES</b>			
<b>Shipping:Shipping - Ocean</b> Shipping - OCEAN Expedited Ocean Freight/Cargo CIF for above listed items ordered Country of Origin: ----- > USA/Los Angeles, CA  Final Destination: Address/Email  Production/Shipping schedule: -- Immediately pulled from stock/start production the day the 50% deposit is received -- 3 days domestic transport, factory > port and customs clearance -- 12-14 at sea, arrive LA, CA USA port and import clearance -- 6-7 days US domestic ground shipping -- Budgetary guideline for shipping costs, final shipping quote will be provided based on rates at time of order	1	8,890.00	8,890.00
<b>Shipping:Transportation</b> Shipping - US Local LTL Direct From Customs LA Port to Detroit MI Final destination listed in Ship to address herein	1	5,150.00	5,150.00
<b>TAX:Import Duty</b> Import Duty (estimated based on current rate of the day)	1	9,890.00	9,890.00
			Subtotal: 23,930.00
<b>INSTALLATION LABOR</b>			
<b>Labor:On-site Labor - Installation</b> On-site Labor - Installation	64	125.00	8,000.00

ACTIVITY	QTY	RATE	AMOUNT
<ul style="list-style-type: none"> <li>• FOUR (4) Workers working 8 hour day (DAY 1)</li> <li>• FOUR (4) Workers working 8 hour day (DAY 2)</li> </ul>			
<b>Services:Lifts</b> Scissor Lift Rental (2) Lifts <ul style="list-style-type: none"> <li>• TWO (2) days each</li> <li>• Includes pick up and drop off</li> </ul>	4	375.00	1,500.00
			Subtotal: 9,500.00

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PURCHASE DETAIL	TOTAL	<b>\$214,071.00</b>
The Aretha Franklin Amphitheatre		
2600 AtWater		
Detroit, MI 48207		

This is an estimate on the goods and services named above.  
 Appropriate sales tax will be invoiced on final where applicable.

Customer Terms:  
 -- 50% of estimate due upon approval to process order | Deposit invoice will be issued  
 -- 100% of all purchase equipment, international shipping and import duty due prior to overseas shipping | Intermediate invoice will be issued  
 -- Balance upon time of completion | Final invoice will reflect the completion date

Thank you!!  
 LED Tranquility, Inc.

Accepted By \_\_\_\_\_ Accepted Date \_\_\_\_\_