ST. CHARLES SINCE 1834

HISTORIC PRESERVATION COMMISSION AGENDA ITEM EXECUTIVE SUMMARY

| Title/Address: | COA: 2 E. Main Street, Municipal Center |
|------------------|---|
| Proposal: | New exterior lighting plan |
| Petitioner: | City of St. Charles |

Please check appropriate box (x)

Aganda Itam

| PUBLIC HEARING | MEETING 7/22/13 | X |
|----------------|--------------------|---|
| | | |

AGENDA ITEM CATEGORY:

| X Certificate of Appropriateness (COA) | | Façade Improvement Plan |
|--|--------------------|-------------------------------|
| | Preliminary Review | Landmark/District Designation |
| | Discussion Item | Commission Business |

ATTACHMENTS:

Presentation of Municipal Building Lighting Concept by KJWW

EXECUTIVE SUMMARY:

The Municipal Center exterior renovation project is underway. As a part of the construction, existing flood lights sitting on wood structures on the lower canopy roofs on the south and west elevations have been dismantled and moved off of the roof. These flood lights were installed in the mid to late 1990s. The initial plan was to return the floodlights to their previous location when the construction was complete.

The City is considering a new lighting scheme for the exterior of the building. Older photos and exterior fixture locations indicate that historically, the building was not flooded with light, but rather accent lighting was used in specific locations to highlight architectural details. Lighting was also provided under the first floor canopy. A photo from the early 1990s is attached. (The second floor Council Chambers portion of the building did not appear to be illuminated previously.)

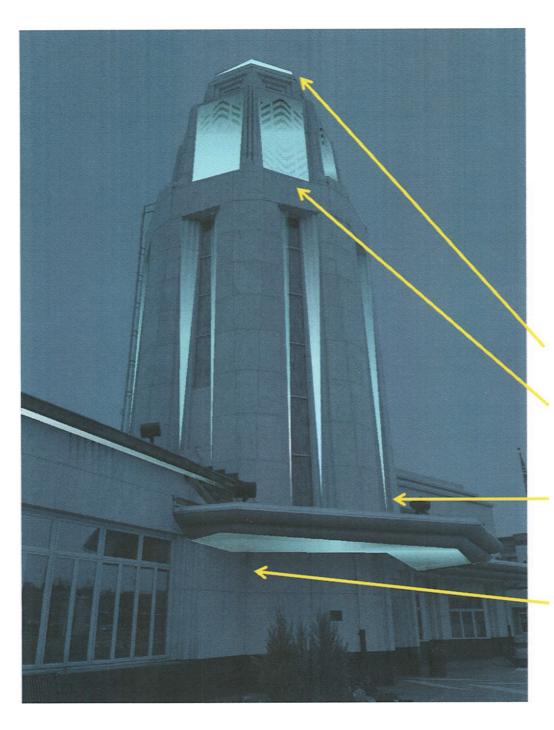
Information on the proposed lighting scheme was presented at the 7/17/13 meeting and is described in the attached presentation.

The Commission asked for the different LED light tones to be displayed on the building. Sample lights will be set up for the Commission to view and vote on a preferred tone.

RECOMMENDATION / SUGGESTED ACTION:

Provide feedback and recommendations for approval of the COA.





St. Charles Municipal Building Lighting Concept

Concept: to provide a compositional Hierarchy that accentuates the architecture while creating balance

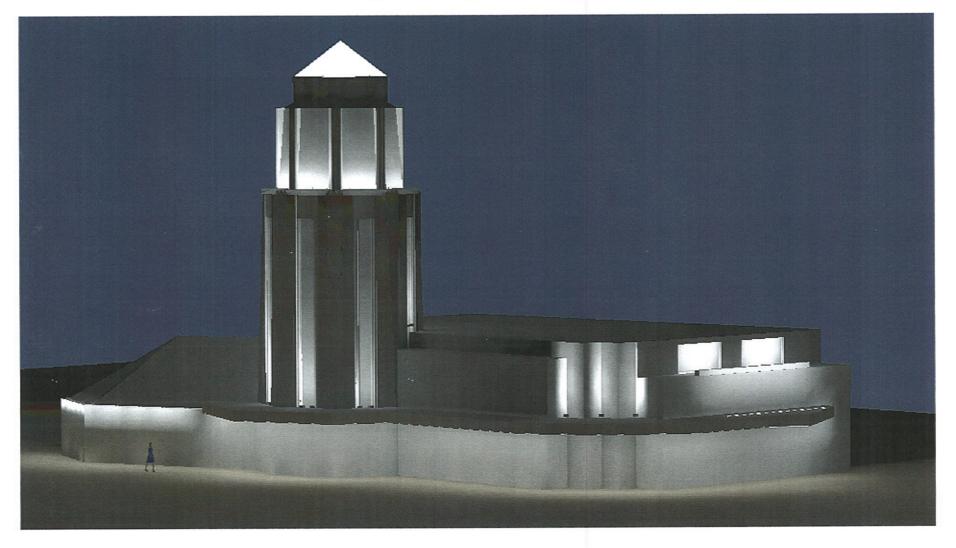
Existing lighting in dome to remain

Linear grazing luminaire to accentuate and punch architectural relief

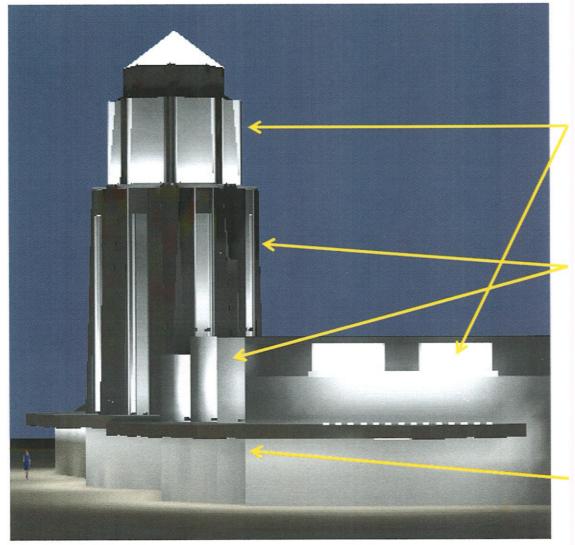
Directional spots with tight 7° beam spread to highlight the fluting and create Interest

Hidden linear lighting to subtly add balance and illuminate the lower plane of the building

St. Charles Municipal Building Lighting Design



St. Charles Municipal Building
Lighting Design





St. Charles Municipal Building Additional Lighting Options and Concepts



- Add wall mount luminaires to East Entrance
- Add Landscape lighting in flower beds adjacent to entrance
- Color changing LED at top to allow for seasonal tones or shows.
- Illuminating diagonal shafts in lieu of fluted columns.
- Energy Code Note: IECC 2012 exempts lighting to highlight features of registered historic buildings



DynaFlood HO

| Client: | |
|-------------|--|
| Project: | |
| Type: | |
| Order Code: | |
| Quantity: | |





DynaFlood HO is a high powered flood fixture designed for exterior illumination and outdoor signage. It's integral power supply is universal voltage and can be dimmed via ELV or TRIAC. The head pivots 180° to help you get the exact angle needed for your application.

SPECIFICATIONS

| Color Temperature | 2700k, 3000K, 3500K, 4000k | |
|-----------------------|--|--|
| Beam Angle | 7º Standard, 20º, 40º, 10º x 60º, 70º via LSF Filter | |
| Drive Current | 500ma | |
| Power Consumption | 50W | |
| Total Lumens | 2455 @ 4000K, 7º | |
| Efficacy (lm/W) | 49 | |
| CRI | 79 | |
| Lumen Maintenance | 70% @ 50,000 hours | |
| Housing | Die Cast Aluminum | |
| Operating Temperature | -40°F to 122°F (-40°C to 50°C) | |
| Operating Voltage | 90-135VAC / 200-300VAC | |
| Dimming | ELV, TRIAC | |
| Fixture Connections | 2 Conductor, Bare Wire Leads | |
| Rating | IP 66, Wet Location | |
| Warranty | 5 Years | |
| Weight | 6 lbs (2.7 kg) | |
| Dimensions | W 9.6" x H 13.9" x D 5.9' (245 mm x 221 mm x 149.5mm) | |

Certifications





DIMENSIONS



8.7"



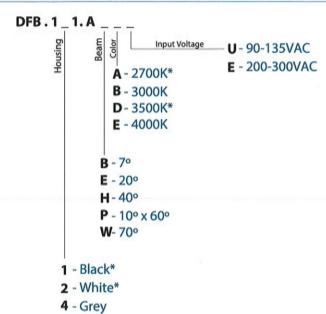




DynaFlood HO

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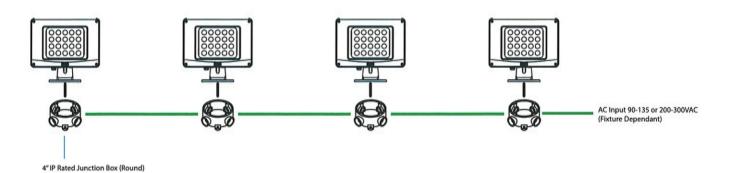
ORDER CODES *special order



RELATED COMPONENTS

| TBD | Dyna Flood Extender Bar 6" | |
|-----|-----------------------------|--|
| TBD | Dyna Flood Extender Bar 12" | |
| TBD | Dyna Flood Extender Bar 36" | |

WIRING





DynaGraze Exterior

| Client: | |
|-------------|--|
| Project: | |
| Type: | |
| Order Code: | |
| Quantity: | |





The **DynaGraze Exterior** is a high power, white LED, outdoor linear fixture.

Available in 1' and 4' sections, it offers smooth linear dimming with ELV modules and 1-100% with most commercially available TRIAC dimmer. Featuring class-leading output, robust housing, LSF filter options, and a glare shield, it is the perfect option for any structure that calls for outdoor linear grazing

SPECIFICATIONS

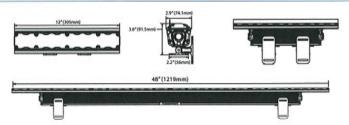
| Color Temperature | 2,700K, 3000K, 3500K, 4000K |
|--------------------------|---|
| Beam Angle | 10°, 40°, 10° × 60°, 30° × 60° |
| Max Fixture Runs | 40' @ 120VAC / 80' @ 240VAC+ |
| Power Consumption | 20w (1') / 80w (4') |
| Total Lumens | 834 (1') @ 2700k - (10x60) / 4,570 (4') @ 4000k - (30x60) |
| Efficacy (lm/W) | 34 @ 2700k / 38 @ 3000k, 41 @ 3500k, 50 @ 4000k |
| CRI | 87 @ 4000K |
| Lumen Maintenance | 70% @ 50,000 Hours |
| Finish | Anodized Brushed Aluminum |
| Housing | Aluminum; Polycarbonate Lens |
| Operating & Storage Temp | -40°F to 122°F (-40°C to 50°C) |
| Operating Voltage | 95-130VAC, 200-300VAC |
| Dimming | ELV or TRIAC |
| Fixture Connectors | Integral, 3 Pin Male & Female Connector |
| Rating | IP 66, Wet Location |
| Warranty | 3 Years |
| Weight | 1' 3 lbs (1.4 kg) 4' 12 lbs (5.4 kg) |
| Dimensions | W 2.9" x H 3.6" x L 12"/ 48" (74.1 mm x 91.5 mm x 305 mm / 1,220 mm) |
| Certifications | |





DIMENSIONS



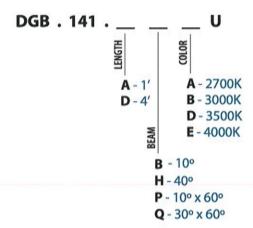




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| Quantity: | |

ORDER CODES

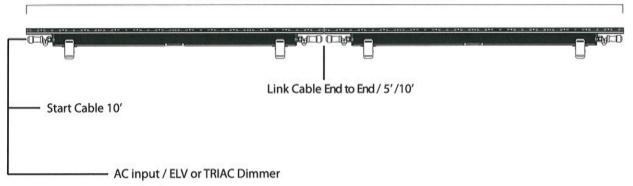


RELATED COMPONENTS

| Start Cable for DynaGraze Exterior 10' | |
|---|---|
| Link Cable for DynaGraze Exterior, End to End | |
| Link Cable for DynaGraze Exterior, 1' | |
| Link Cable for DynaGraze Exterior 5' | |
| Link Cable for DynaGraze Exterior 10' | |
| Extender Bar for DynaGraze Exterior, 6" | |
| Extender Bar for DynaGraze Exterior 12" | |
| Extender Bar for DynaGraze Exterior 36" | |
| | Link Cable for DynaGraze Exterior, End to End Link Cable for DynaGraze Exterior, 1' Link Cable for DynaGraze Exterior 5' Link Cable for DynaGraze Exterior 10' Extender Bar for DynaGraze Exterior, 6" Extender Bar for DynaGraze Exterior 12" |

WIRING

40' Maximum in any combination of 1' & 4' sections





Flex II HO

| Client: | |
|-------------|--|
| Project: | |
| Туре: | |
| Order Code: | |
| Quantity: | |





Flex II HO is a thin and flexible LED circuit strip, mounted inside a silicone, weatherproof housing. It can be cut every two inches to create the exact length needed for your specific application. The combination of it's high output and low profile allows for a wide variety of cove, millwork, signage, and many other applications.

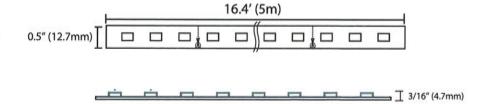
SPECIFICATIONS

| Color Temperature | 2700K, 3000K, 4000K, 6000K | |
|-----------------------|---|--|
| Beam Angle | 1200 | |
| Max Fixture Runs | 16.4 ft, 5m (1 Spool) | |
| Power Consumption | 50W / 3W Per Foot | |
| Lumens Per Foot | 127.8 @ 3000K, 134.1 @ 6000K | |
| Efficacy (lm/W) | 42.6 @ 3000K, 44.7 @ 6000K | |
| CRI | 67 @ 3000K, 81 @ 6000K | |
| Cut & Solder Joints | Located Every 2" | |
| Housing | Flexible Silicone Jacket | |
| Operating Temperature | -40°F to 122°F (-40°C to 50°C) | |
| Operating Voltage | 12VDC | |
| Dimming | TRIAC via M Series Transformers + Compatible LVM Dimmer | |
| Fixture Connectors | 5mm Plug With Bare Wire Adaptor Included | |
| Rating | IP 68, Wet Location / Submersible Up To 3' (1m) | |
| Warranty | 3 Years | |
| Weight | 1 lbs (0.5 kg) | |
| Dimensions | W 0.5" x H 0.18" x L 16.4' (12.7 mm x 4.7 mm x 5000mm) | |
| Certifications | | |

Certifications



DIMENSIONS





Flex II HO

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|-------------|--|
| Project: | |
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ORDER CODES

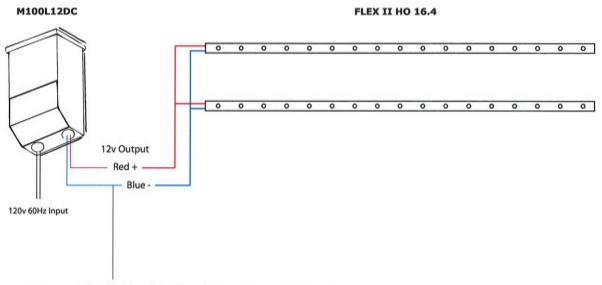
FLEX2H___: Flex II High Output 16.4 ft (5m) Spool

- 2 2700K
- 3 3000K
- 4 4000K
- 6 6000K

RELATED COMPONENTS

| M60L12DC | 12VDC 60W Dimmable Transformer, 120V AC Input / 1 Spool Maximum | |
|-----------|--|--|
| M100L12DC | 12VDC 100W Dimmable Transformer, 120V AC Input / 2 Spool Maximum | |
| M150L12DC | 12VDC 150W Dimmable Transformer, 120V AC Input / 3 Spool Maximum | |
| FLX999 | Aluminum Flex Channel 4' | |

WIRING (M Series Dimmable Transformers)



Maximum 25' with 18/2 solid cable or higher, to be provided by others.