

## Planning Commission Staff Report

<b>Project Type:</b>	Site Development Section Plan
<b>Meeting Date:</b>	October 22, 2018
<b>From:</b>	Andrew Stanislav, Planner <i>AS</i>
<b>Location:</b>	18301 Edison Avenue
<b>Description:</b>	<b>Spirit of St. Louis Airpark, Lot 19 (AVMATS Hangar):</b> A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 4.93 acre leasehold area within a 9.45 acre tract of land zoned "M-3" Planned Industrial District located north of Edison Avenue just east of its intersection with N Bell Avenue and approximately 700 feet west of its intersection with Spirit of St. Louis Boulevard.

### PROPOSAL SUMMARY

Stock and Associates Consulting Engineers, Inc., on behalf of AVMATS Jet Support, has submitted a request for a 45,000 square foot office/warehouse and hangar facility located on the north side of Edison Avenue just east of its intersection with N Bell Avenue. The majority of the proposed facility will contain hangar space (35,133 square feet) with the remainder of the building serving as warehouse and office spaces. The subject site is zoned "M-3" Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 1430. The exterior building materials will primarily consist of metal wall panels painted both fox gray and medium gray. Ground mounted mechanical equipment screening and a trash enclosure will be six-feet in height and match the color of the building's metal panel façade.



Figure 1: Site Aerial

## **HISTORY OF SUBJECT SITE**

St. Louis County approved a rezoning from an “NU” Non-Urban District to an “M-3” Planned Industrial District for Spirit of St. Louis Airport via Ordinance 2,212 prior to the incorporation of the City of Chesterfield. The ordinance was subsequently amended by St. Louis County Ordinances 9,642, 11,768, 13,838, and 13,935, as well as by City of Chesterfield Ordinances 656, 870, 1156, 1312, and 1378. The ordinance amendments were to allow for additional uses, amend setbacks, and amend the boundaries of the “M3” Planned Industrial District. The current ordinance governing the site is City of Chesterfield Ordinance 1430.

The subject site has never been developed.

## **LAND USE AND ZONING OF SURROUNDING PROPERTIES**

The land use and zoning for the properties surrounding this parcel are described below:

<b>Direction</b>	<b>Zoning</b>	<b>Land Use</b>
North	“M-3” Planned Industrial District	Airport/Runway/Openspace
South	“M-3” Planned Industrial District	Airport/Office & Hangar
East	“M-3” Planned Industrial District	Airport/Office & Retail services
West	“M-3” Planned Industrial District	Airport/Office & Hangar

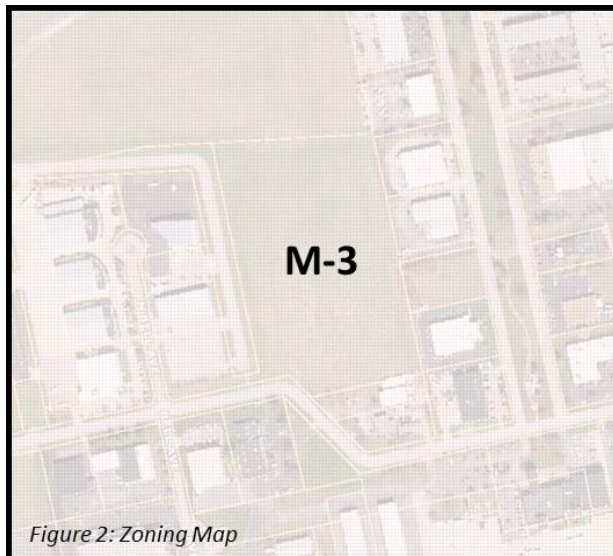


Figure 2: Zoning Map



Figure 3: Comprehensive Land Use Plan

## **COMPREHENSIVE PLAN ANALYSIS**

The subject site is located within Ward 4 of the City of Chesterfield and is within the Spirit Airport land use designation per the City’s Land Use Plan as seen in Figure 3 above. The Comprehensive Plan identifies the Spirit Airport designation as incorporating institutional, light industrial, office, and other airport related uses.

The Comprehensive Plan includes Industrial Development Policies as well as specific policies which are applicable to developments within the Chesterfield Valley sub-area.

### Industrial Development Policy

- **6.1 Low-intensity Industrial**— Low intensity industrial development should be limited to Chesterfield Valley, including low-intensity industrial assembly, distribution, and research and development business parks, and corporate campuses.

The intent of this policy is to ensure low-intensity industrial related developments are limited to the Chesterfield Valley and located near other compatible uses in the surrounding area. The proposed hangar facility complies with this policy as it is compatible with the surrounding Spirit Airport uses referenced in the surrounding land use table above.

### Chesterfield Valley Sub-Area and Chesterfield Valley Design Policies

- **3.5.1 Chesterfield Valley Region Retail and Low Intensity Industry**—Regional retail and low-intensity industrial developments should be located in Chesterfield Valley. These include low-intensity industrial developments encouraged to locate west of Long Road.

The location of the proposed hangar facility complies with this policy as it will be located in Spirit Airport with other compatible uses west of Long Road.

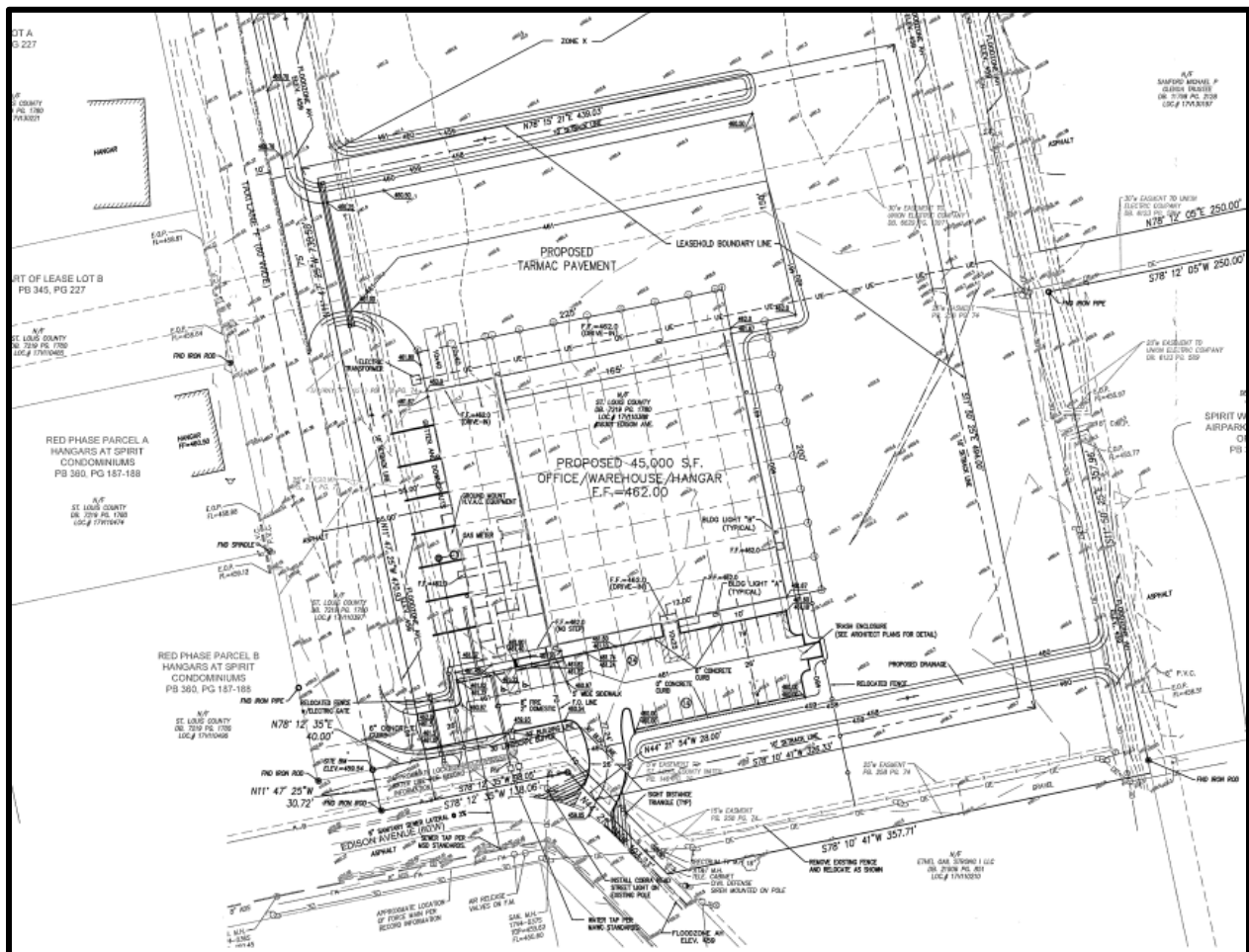


Figure 4: Portion of Site Development Section Plan

## **STAFF ANALYSIS**

### **Zoning**

The subject site is zoned “M-3” Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 1430. The submittal was reviewed against the requirements of City of Chesterfield Ordinance 1430 and all applicable requirements of the Unified Development Code and the proposed development adheres to the applicable requirements.

### **Circulation System & Access**

The subject site will be served by a single access drive from Edison Avenue along the southern portion of the site, providing access to all 38 proposed parking spaces. A tarmac area is proposed at the rear of the building for access to the existing taxiway. Restricted vehicular access to the taxiway will also be available along the western portion of the parking area by entering through an electric gate within the relocated fence. The proposed trash enclosure caps the opposite end of the parking area to the east.

Access to the taxiway is governed by the Spirit of St. Louis Airport, and the applicant will be required to provide the necessary authorizations for the scope of work presented. Pedestrian access from off-site areas is not provided as part of this project and is very limited on-site due to the nature of the proposed use and proximity to the taxiway.

### **Topography and Parking**

The site is generally flat with approximately one to two feet of grade change across the property. Swales will be located to the north, south, and west of the improved area for storm water management. All proposed parking is located on the southern portion of the site between the front of the building and Edison Avenue. Two ADA parking spaces are located near the building’s main entrance.

### **Landscape Design and Screening**

Several different areas of landscaping are proposed for the site, including parking lot landscaping, street trees along the frontage of the limits of the lease lot, and a 30-foot landscape buffer along Edison Avenue between the western portion of the parking area. Landscaping has also been incorporated along the west building elevation that occupies the proposed office space.

Screening systems for the ground-mounted mechanical units and the trash enclosure are proposed to match the building’s gray exterior. The ground-mounted units adjacent to the building will be screened with a six-foot tall metal panel material on all three exposed sides to match the building, while the trash enclosure will consist of a six-foot screen of split face CMU and prefinished metal coping cap with composite swinging gates.

### **Lighting**

Lighting is planned in association with the proposed development as required by the City of Chesterfield. The proposed lighting plan consists of utilitarian lighting for the parking area as well as general site illumination to navigate the site. Two utilitarian wall-mounted light fixtures are

proposed on each of the four façades. A cobra head streetlight will also be installed on an existing pole on the north side of Edison Avenue west of the proposed access drive.

### Architectural Elevations

The exterior building materials will primarily consist of ribbed metal panels and a standing seam metal roof. The hangar portion of the building will be approximately 45 feet tall at its highest point and consist of fox gray painted metal panels, while the office/warehouse portion of the building will be approximately 18 feet tall at its highest point with a metal panel exterior painted a darker medium gray.

The proposed main entry will consist of a clear anodized aluminum storefront with blue tinted glazing to match the proposed windows on the south, east, and west elevations. All other pedestrian doors, utility doors, and metal louvers will be painted the darker medium gray color to contrast the fox gray color of the hangar's exterior.

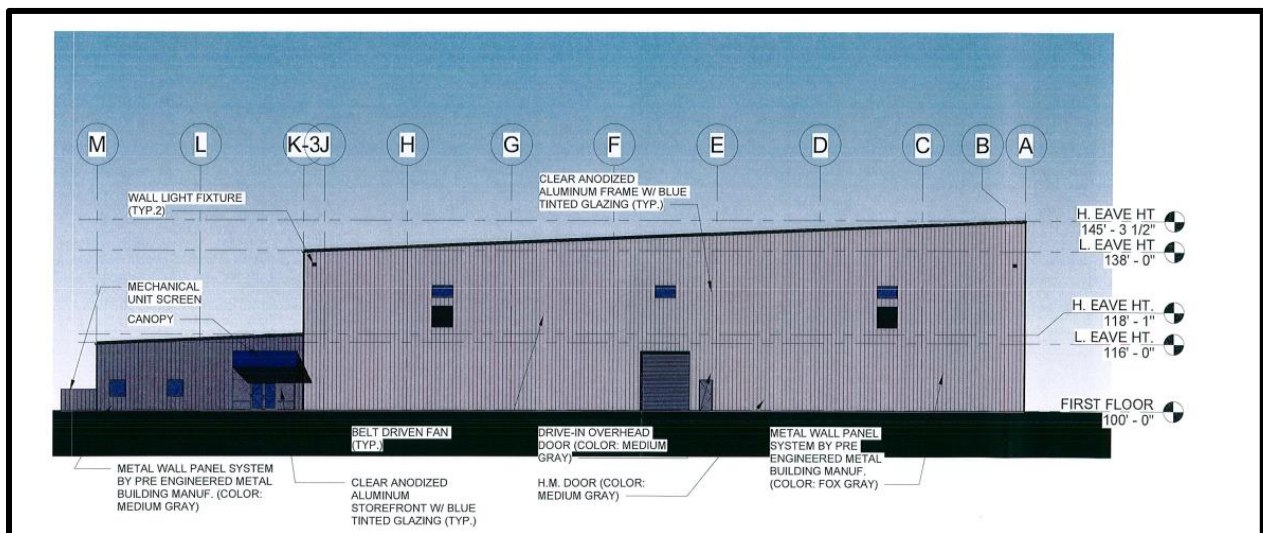


Figure 5: South Elevation

### ARCHITECTURAL REVIEW BOARD INPUT

This project was reviewed by the Architectural Review Board on August 9, 2018. At that meeting, the Board recommended approval with three conditions.

- Differentiate the exterior material color of the office/warehouse and hangar portions of the building.

The applicant has since revised their architectural elevations to include medium gray on the exterior of the office/warehouse portion of the building to better contrast with the fox gray color on the remaining hangar portion of the building.

- Soften the white color of the proposed man doors and hangar door to be more compatible with the airport environment and the building's proposed exterior color.

The applicant has revised the originally proposed white color of the man doors and hangar door on the proposed architectural elevations to medium gray to soften the elevations and compliment the same darker gray color now proposed for the exterior of the office/warehouse portion of the building. It was recognized by the ARB that this revised color would be better suited in an airport environment where a white color exterior may discolor or not be as compatible with the nature of activity at the airport overtime.

- **Provide additional landscaping along the west elevation to carry around plantings from the office area up to the mechanical units.**

The applicant has included additional plantings on the Landscape Plan along the office portion of the western elevation of the building up to the mechanical units as requested by the ARB. The additional plantings are intended to soften the more pedestrian scale portion of the proposed development which may also be visible in some instances while traveling along Edison Avenue.

### **STAFF RECOMENDATION**

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect’s Statement of Design and has found the proposal to be in compliance with the site specific ordinance, Comprehensive Plan, and City Code requirements. Staff recommends approval of the proposed development of the AVMATS Hangar.

### **MOTION**

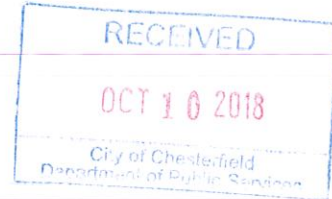
The following options are provided to the Planning Commission for consideration relative to this application:

- 1) “I move to approve (or deny) the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect’s Statement of Design for the AVMATS Hangar.”
- 2) “I move to approve (or deny) the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations, and Architect’s Statement of Design for the AVMATS Hangar with the following conditions...” (Conditions may be added, eliminated, altered, or modified).

Attachments:     Site Development Section Plan  
                          Landscape Plan  
                          Lighting Plan  
                          Lighting Cut Sheets  
                          Architect’s Statement of Design  
                          Architectural Elevations  
                          Rendering

July 27, 2018

Architectural Review Board  
City of Chesterfield  
Department of Planning  
690 Chesterfield Parkway West  
Chesterfield, MO 63017-0760



**Re: Architect's Statement  
AVSMATS Hangar**

Dear members of the Architectural Review Board,  
The following is the Architect's Statement for the AVSMATS Hangar, located at 18301 Edison Ave.

**The Site:**

***Physical features and Access:***

The 4.9 acre leasehold area will contain a one story, 45,000 square foot building planned for an office/warehouse and hangar. To the West of the proposed site are existing hangars and to the East are existing office/warehouse buildings which fronts Spirit of St. Louis Blvd. Site access for the proposed building will be located on Edison Avenue. The site has very little to no slope with no existing trees or shrubs. The adjacent properties to the west have very few trees or shrubs.

***Site Relationship & Circulation:***

The site which is accessed off of Edison Avenue which contains parking in the front and a tarmac at the rear of the building for access to the taxi runways. Landscaping will be located at the South elevation for a buffer zone from the street view. Mechanical equipment will be located on the west side elevation of the building but will be screened with a 6' high metal panels to match the proposed building materials. The trash dumpster will also be screened with a painted 6' high split face CMU and prefinished metal coping cap with composite or white vinyl swinging gates which is located on the east side of the front parking lot.

***Topography & Retaining walls:***

The natural topography is relatively level and will not require any retaining walls. Swales will be located to the north, west, and south for storm water management. We are following Spirit of St. Louis Airport regulations for bio retention requirements.

**The Building:**

***Materials:***

The materials on the building include one color for the ribbed metal panels, one color for all hollow metal doors, hangar doors, and overhead doors, one color standing seam metal roof, clear aluminum storefront windows with bluish tinted glazing. The gutter, downspouts and trim will match the metal panels of the building. The entry canopy will complement the bluish tinted windows and the logo for the company.

***Scale & Design:***

The one story building is appropriately scaled to the few buildings that are located near the proposed property and matches the architecture of the buildings that are located to the West and South of the site. In order to break down the scale of the building, the office/warehouse component has been brought down to a lower eave height. Windows were located on the South and East elevation of the hangar to provide natural lighting into the hangar as well as articulation to the building facade. The building is further broken down to a human scale with a simple lower entry canopy. The building's simple look is complimentary but not overwhelming to the existing AVSMATS Jet Support main headquarters which is located less than a quarter mile West of the proposed site.

***Landscape design and screening:***

The required number of trees and shrubs has been provided and, along the street frontage, have been located to provide shade at strategic points while also allowing "view corridors" into the site and an aesthetically pleasing buffer between the building and the street.

The plant palette, designed for low maintenance, has been selected from Chesterfield's list of approved trees. The chosen plants also provide pollinators and seasonal color & texture throughout the site as designed by the landscape architect.

***Signage:***

Signage shall be designated high on the North and South sides of the hangar. Address signage shall consist of individual numbers on the glass transom above the entry doors.

***Lighting standards:***

The building, tarmac, and parking areas will be illuminated by full cutoff, low profile, LED wall mounted fixtures and equipped with house side shields where located at property lines to minimize glare and light trespass. The fixtures will be mounted at 30' A.F.F. on the hangar and approximately 13' A.F.F. at the office/warehouse component. Foot candles are 0.0 minimum and 4.9 average. Maximum foot candles at the property lines are at 1.2 or below with most areas at 0.0. Average foot candles at all building entry are approximately 1.3.

Sincerely,  
mw Weber Architects

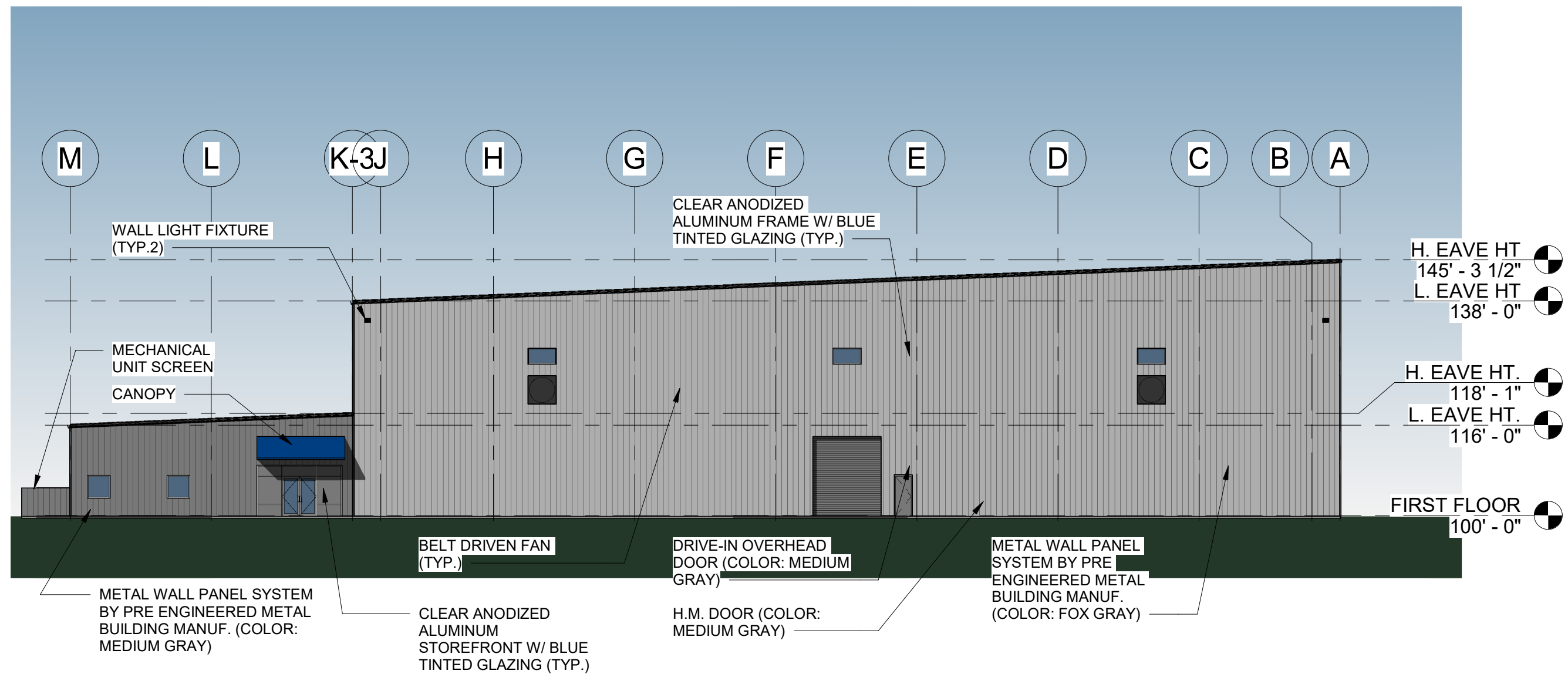


Tonny Jun  
Project Manager



# AVMATS Hanger

18301 Edison Ave.  
Chesterfield, MO 63005



## South Elevation

1" = 20'-0"

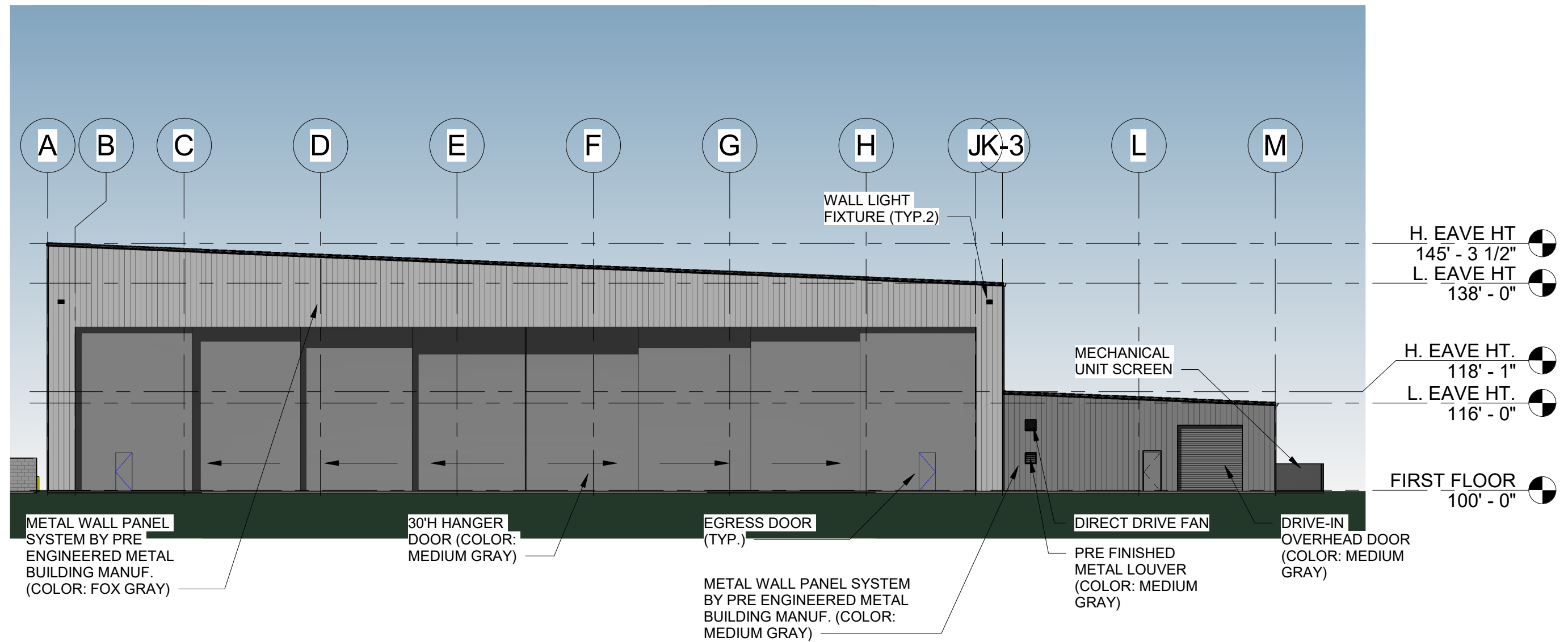
mw  
weber  
architects

636.519.1400

11 SEPT 2018  
18.009

# AVMATS Hanger

18301 Edison Ave.  
Chesterfield, MO 63005



## North Elevation

1" = 20'-0"

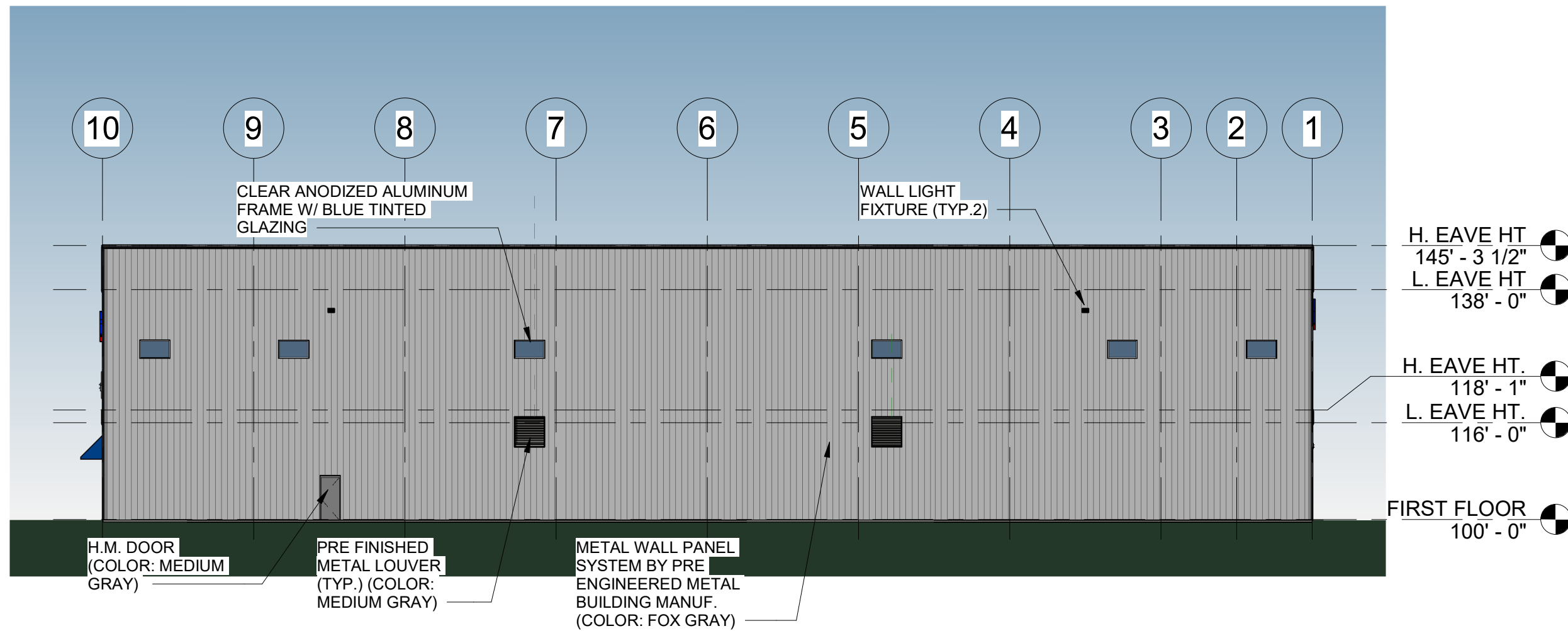
mw  
weber  
architects

636.519.1400

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# AVMATS Hanger

18301 Edison Ave.  
Chesterfield, MO 63005



## East Elevation

1" = 20'-0"

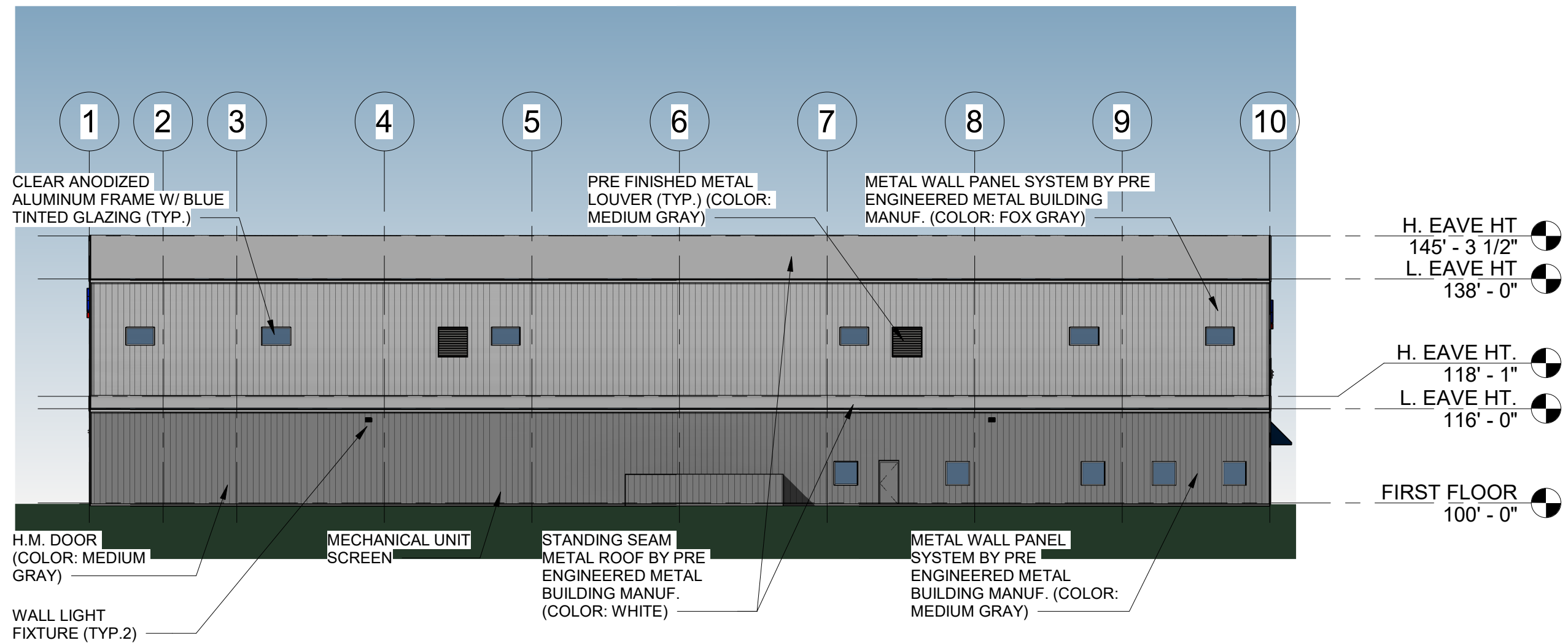
mw  
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architects

636.519.1400

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# AVMATS Hanger

18301 Edison Ave.  
Chesterfield, MO 63005



## West Elevation

1" = 20'-0"

mw  
weber  
architects

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11 SEPT 2018  
18.009

# AVMATS Hanger

18301 Edison Ave.  
Chesterfield, MO 63005



Perspective

mw  
weber  
architects

636.519.1400

16 AUG 2018  
18.009



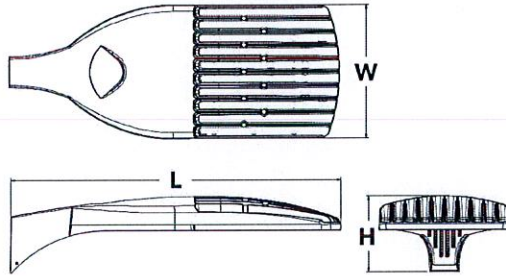
# D-Series Size 1 LED Area Luminaire

d<sup>series</sup>



## Specifications

<b>EPA:</b>	1.01 ft <sup>2</sup> (0.09 m <sup>2</sup> )
<b>Length:</b>	33" (83.8 cm)
<b>Width:</b>	13" (33.0 cm)
<b>Height:</b>	7-1/2" (19.0 cm)
<b>Weight (max):</b>	27 lbs (12.2 kg)



A+ Capable options indicated by this color background.

Catalog Number	DSX1-LED-P4-40K-T4TM-MV
Notes	
Type	B

Hit the tab key or mouse over the page to see all interactive elements.

## A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL<sup>®</sup> controls marked by a **shaded background**. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability<sup>1</sup>
- This luminaire is part of an A+ Certified solution for ROAM<sup>®</sup> or XPoint<sup>™</sup> Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a **shaded background**<sup>1</sup>

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

## Ordering Information

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA DDBXD

Series	LEDs	Color temperature	Distribution	Voltage	Mounting
DSX1 LED	<b>Forward optics</b> P1 P4 P7 P2 P5 P8 P3 P6 P9 <b>Rotated optics</b> P10 <sup>1</sup> P12 <sup>1</sup> P11 <sup>1</sup> P13 <sup>1</sup>	30K 3000 K 40K 4000 K 50K 5000 K AMBPC Amber phosphor converted <sup>2</sup>	T1S Type I short T2S Type II short T2M Type II medium T3S Type III short T3M Type III medium T4M Type IV medium TFTM Forward throw medium TSVS Type V very short T5S Type V short T5M Type V medium T5W Type V wide BLC Backlight control <sup>2,3</sup> LCCO Left corner cutoff <sup>2,3</sup> RCCO Right corner cutoff <sup>2,3</sup>	MVOLT <sup>4,5</sup> 120 <sup>6</sup> 208 <sup>5,6</sup> 240 <sup>5,6</sup> 277 <sup>6</sup> 347 <sup>5,6,7</sup> 480 <sup>5,6,7</sup>	<b>Shipped included</b> SPA Square pole mounting RPA Round pole mounting WBA Wall bracket SPUMBA Square pole universal mounting adaptor <sup>8</sup> RPUMBA Round pole universal mounting adaptor <sup>8</sup> <b>Shipped separately</b> KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) <sup>9</sup>

Control options	Other options	Finish (required)
<b>Shipped installed</b> NLTAIR2 nLight AIR generation 2 enabled <sup>10</sup> PER NEMA twist-lock receptacle only (controls ordered separate) <sup>11</sup> PERS Five-wire receptacle only (controls ordered separate) <sup>11,12</sup> PER7 Seven-wire receptacle only (controls ordered separate) <sup>11,12</sup> DMG 0-10V dimming extend out back of housing for external control (leads exit fixture) DS Dual switching <sup>13,14</sup> PIR Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 5fc <sup>5,15,16</sup> PIRH Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 5fc <sup>5,15,16</sup> PIRHN Network, Bi-Level motion/ambient sensor <sup>17</sup> PIR1FC3V Bi-level, motion/ambient sensor, 8-15' mounting height, ambient sensor enabled at 1fc <sup>5,15,16</sup>	PIRH1FC3V Bi-level, motion/ambient sensor, 15-30' mounting height, ambient sensor enabled at 1fc <sup>5,15,16</sup> BL30 Bi-level switched dimming, 30% <sup>5,14,18</sup> BL50 Bi-level switched dimming, 50% <sup>5,14,18</sup> PNMTDD3 Part night, dim till dawn <sup>5,19</sup> PNMTSD3 Part night, dim 5 hrs <sup>5,19</sup> PNMTGD3 Part night, dim 6 hrs <sup>5,19</sup> PNMT7D3 Part night, dim 7 hrs <sup>5,19</sup> FAO Field adjustable output <sup>20</sup>	<b>Shipped installed</b> HS House-side shield <sup>21</sup> SF Single fuse (120, 277, 347V) <sup>5</sup> DF Double fuse (208, 240, 480V) <sup>5</sup> L90 Left rotated optics <sup>1</sup> R90 Right rotated optics <sup>1</sup> <b>Shipped separately</b> BS Bird spikes <sup>22</sup> EGS External glare shield <sup>22</sup>
		DDBXD Dark bronze DBLXD Black DNAXD Natural aluminum DWHXD White DDBTXD Textured dark bronze DBLTXD Textured black DNATXD Textured natural aluminum DWHGXD Textured white



## Ordering Information

### Accessories

Ordered and shipped separately.

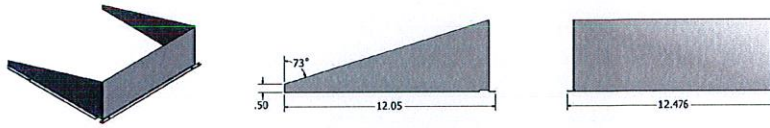
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>23</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>23</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>23</sup>
DSHORT 5BK U	Shorting cap <sup>23</sup>
DSX1HS 30C U	House-side shield for 30 LED unit <sup>21</sup>
DSX1HS 40C U	House-side shield for 40 LED unit <sup>21</sup>
DSX1HS 60C U	House-side shield for 60 LED unit <sup>21</sup>
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) <sup>24</sup>
KMA8 DDBXD U	Mast arm mounting bracket adaptor (specify finish) <sup>4</sup>

For more control options, visit [DTL](#) and [ROAM](#) online.

### NOTES

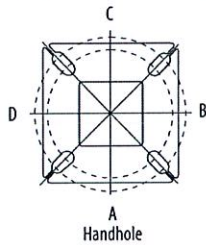
- P10, P11, P12 or P13 and rotated optics (L90, R90) only available together.
- AMBPC is not available with BLC, LCCO, RCCO or P4, P7, P8, P9 or P13.
- Not available with HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Any PIRx with BL30, BL50 or PNMT, is not available with 208V, 240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Not available in P1 or P10. Not available with BL30, BL50 or PNMT options.
- Existing drilled pole only. Available as a separate combination accessory; for retrofit use only; PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
- Must order fixture with SPA option. Must be ordered as a separate accessory, see Accessories information. For use with 2-3/8" mast arm (not included).
- Must be ordered with PIRHN.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting cap included.
- IF ROAM<sup>®</sup> node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Not available with DCR. Node with integral dimming. Shorting cap included.
- Provides 50/50 fixture operation via (2) independent drivers. Not available with PER, PERS, PER7, PIR or PIRH. Not available P1, P2, P3 or P4.
- Requires (2) separately switched circuits.
- Reference Motion Sensor table on page 3.
- Reference PER table on page 3 to see functionality.
- Must be ordered with NLIAIR2. For more information on nLight Air 2 visit [this link](#).
- Not available with 347V, 480V, PNMT, DS. For PER5 or PER7, see PER Table on page 3. Requires isolated neutral.
- Not available with 347V, 480V, DS, BL30, BL50. For PER5 or PER7, see PER Table on page 3. Separate Dusk to Dawn required.
- Not available with other dimming controls options
- Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER, PERS or PER7 option. See PER Table on page 3.
- For retrofit use only.

## External Glare Shield



## Drilling

### HANDHOLE ORIENTATION



### Tenon Mounting Slipfitter\*\*

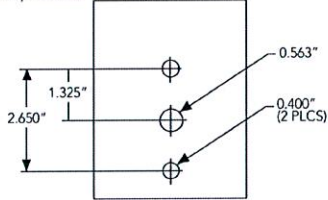
Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

Pole drilling nomenclature: # of heads at degree from handhole (default side A)					
DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature

Template #8

Top of Pole



Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3" @ 90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
DSX SPA	Y	Y	Y	N	-	-	-	-
DSX RPA	Y	Y	N	N	Y	Y	Y	Y
DSX SPUMBA	Y	N	N	N	-	-	-	-
DSX RPUMBA	N	N	N	N	Y	Y	Y	N

\*3 fixtures @ 120 require round pole top/tenon.

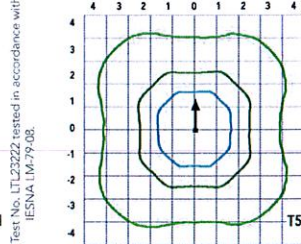
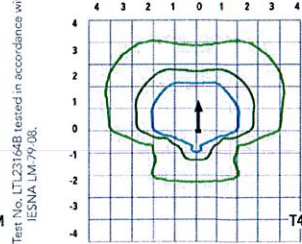
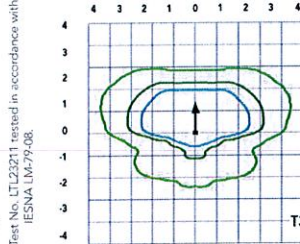
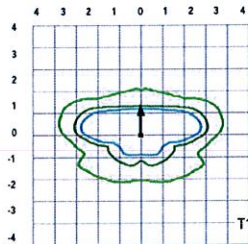
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's [D-Series Area Size 1 homepage](#).

Isofootcandle plots for the DSX1 LED 60C 1000 40K. Distances are in units of mounting height (25').

### LEGEND

- 0.1 fc
- 0.5 fc
- 1.0 fc



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25000	50000	100000
Lumen Maintenance Factor	1.00	0.96	0.92	0.85

### Electrical Load

	Performance Package	LED Count	Drive Current	Wattage	Current (A)					
					120	208	240	277	347	480
Forward Optics (Non-Rotated)	P1	30	530	54	0.45	0.26	0.23	0.19	0.10	0.12
	P2	30	700	70	0.59	0.34	0.30	0.25	0.20	0.16
	P3	30	1050	102	0.86	0.50	0.44	0.38	0.30	0.22
	P4	30	1250	125	1.06	0.60	0.52	0.46	0.37	0.27
	P5	30	1400	138	1.16	0.67	0.58	0.51	0.40	0.29
	P6	40	1250	163	1.36	0.78	0.68	0.59	0.47	0.34
	P7	40	1400	183	1.53	0.88	0.76	0.66	0.53	0.38
	P8	60	1050	207	1.74	0.98	0.87	0.76	0.64	0.49
	P9	60	1250	241	2.01	1.16	1.01	0.89	0.70	0.51
Rotated Optics (Requires L90 or R90)	P10	60	530	106	0.90	0.52	0.47	0.43	0.33	0.27
	P11	60	700	137	1.15	0.67	0.60	0.53	0.42	0.32
	P12	60	1050	207	1.74	0.99	0.87	0.76	0.60	0.46
	P13	60	1250	231	1.93	1.12	0.97	0.86	0.67	0.49

### Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

\*for use with Inline Dusk to Dawn or timer.

### PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)		
		Wire 4/Wire5	Wire 4/Wire5	Wire 4/Wire5	Wire 6/Wire7	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	▲	Wired to dimming leads on driver	▲	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM	✗	✓	Wired to dimming leads on driver	▲	Wired to dimming leads on driver	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	✗	▲	Wires Capped inside fixture	▲	Wires Capped inside fixture	Wires Capped inside fixture
Future-proof*	✗	▲	Wired to dimming leads on driver	✓	Wired to dimming leads on driver	Wires Capped inside fixture
Future-proof* with Motion	✗	▲	Wires Capped inside fixture	✓	Wires Capped inside fixture	Wires Capped inside fixture

✓ Recommended
✗ Will not work
▲ Alternate

\*Future-proof means: Ability to change controls in the future.









## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.01 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hours at 25°C). Class 1

electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 1 to withstand up to a 3.0 G vibration load rating per ANSI C136.31. The D-Series Size 1 utilizes the AERIS™ series pole drilling pattern (template #8). Optional terminal block and NEMA photocontrol receptacle are also available.

### LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D672,492 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.





d<sup>series</sup>

# D-Series Size 2 LED Area Luminaire



Catalog Number DSX2-LED-P7-40K-T4M-MV

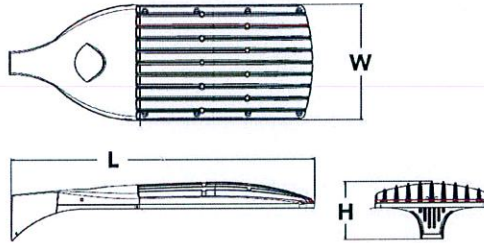
Notes

Type A

Hit the Tab key or mouse over the page to see all interactive elements.

## Specifications

<b>EPA:</b>	1.1 ft <sup>2</sup> (0.10 m <sup>2</sup> )
<b>Length:</b>	40" (101.6 cm)
<b>Width:</b>	15" (38.1 cm)
<b>Height:</b>	7-1/4" (18.4 cm)
<b>Weight (max):</b>	36 lbs (16.3 kg)



## A+ Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency
- This luminaire is A+ Certified when ordered with DTL® controls marked by a **shaded background**. DTL DLL equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability<sup>1</sup>
- This luminaire is part of an A+ Certified solution for ROAM® or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a **shaded background**<sup>1</sup>

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately: [Link to Roam](#); [Link to DTL DLL](#)

A+ Capable options indicated by this color background.

## Ordering Information

EXAMPLE: DSX2 LED P7 T3M MVOLT SPA DDBXD

DSX2 LED		Color temperature		Distribution		Voltage	Mounting
<b>Series</b>	<b>LEDs</b>	30K	3000 K	T1S	Type I Short	TSVS	Type V Very Short
DSX2 LED	<b>Forward optics</b>	40K	4000K	T2S	Type II Short	TSS	Type V Short
	P1 P5	50K	5000 K	T2M	Type II Medium	TSM	Type V Medium
	P2 P6	AMBPC	Amber phosphor converted <sup>2,3</sup>	T3S	Type III Short	TSW	Type V Wide
	P3 P7			T3M	Type III Medium	BLC	Backlight control <sup>2,3</sup>
	P4 P8			T4M	Type IV Medium	LCCO	Left corner cutoff <sup>2,3</sup>
	<b>Rotated optics<sup>1</sup></b>			TFTM	Forward Throw Medium	RCCO	Right corner cutoff <sup>2,3</sup>
	P10 P13						
	P11 P14						
	P12						
						MVOLT <sup>4,5</sup>	<b>Shipped included</b>
						120 <sup>6</sup>	SPA Square pole mounting
						208 <sup>5,6</sup>	RPA Round pole mounting
						240 <sup>5,6</sup>	WBA Wall bracket
						277 <sup>6</sup>	SPUMBA Square pole universal mounting adaptor <sup>8</sup>
						347 <sup>5,6,7</sup>	RPUMBA Round pole universal mounting adaptor <sup>8</sup>
						480 <sup>5,6,7</sup>	<b>Shipped separately</b>
							KMA8 DDBXD U Mast arm mounting bracket adaptor (specify finish) <sup>9</sup>

Control options	Other options	Finish (Figure 7)
<b>Shipped installed</b>	<b>Shipped installed</b>	DDBXD Dark bronze
NLTAIR2 nLight AIR generation 2 enabled <sup>10</sup>	HS House-side shield <sup>20</sup>	DBLXD Black
PER NEMA twist-lock receptacle only (no controls) <sup>11</sup>	SF Single fuse (120, 277, 347V) <sup>6</sup>	DNAXD Natural aluminum
PER5 Five-wire receptacle only (no controls) <sup>11,12</sup>	DF Double fuse (208, 240, 480V) <sup>6</sup>	DWHXD White
PER7 Seven-wire receptacle only (no controls) <sup>11,12</sup>	L90 Left rotated optics <sup>1</sup>	DDBTXD Textured dark bronze
DMG 0-10V dimming extend out back of housing for external control (no controls)	R90 Right rotated optics <sup>1</sup>	DBLTXD Textured black
DS Dual switching <sup>13,14</sup>	<b>Shipped separately</b>	DNATXD Textured natural aluminum
PIRH Bi-level, motion/ambient sensor, 15'-30' mounting height, ambient sensor enable at 5fc <sup>5,15</sup>	BS Bird spikes <sup>21</sup>	DWHGXD Textured white
PIRHN Network, Bi-Level motion/ambient sensor <sup>16</sup>	EGS External glare shield <sup>11</sup>	
PIRH1FC3V Bi-level, motion sensor, 15'-30' mounting height, ambient sensor enabled at 1fc <sup>5,15</sup>		
BL30 Bi-level switched dimming, 30% <sup>5,13,17</sup>		
BL50 Bi-level switched dimming, 50% <sup>5,13,17</sup>		
PNMTDD3 Part night, dim till dawn <sup>5,18</sup>		
PNMTSD3 Part night, dim 5 hrs <sup>5,18</sup>		
PNMT6D3 Part night, dim 6 hrs <sup>5,18</sup>		
PNMT7D3 Part night, dim 7 hrs <sup>5,18</sup>		
FAO Field Adjustable Output <sup>19</sup>		



## Ordering Information

### Accessories

Ordered and shipped separately.

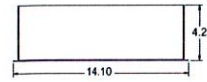
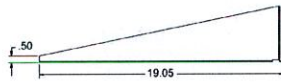
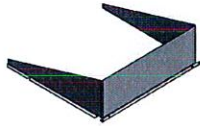
DLL127F 1.5 JU	Photocell - SSL twist-lock (120-277V) <sup>21</sup>
DLL347F 1.5 CUL JU	Photocell - SSL twist-lock (347V) <sup>21</sup>
DLL480F 1.5 CUL JU	Photocell - SSL twist-lock (480V) <sup>21</sup>
DSHORT 5BK U	Shorting cap <sup>21</sup>
DSX2HS 80C U	House-side shield for 80 LED unit <sup>28</sup>
DSX2HS 90C U	House-side shield for 90 LED unit <sup>28</sup>
DSX2HS 100C U	House-side shield for 100 LED unit <sup>28</sup>
PUMBA DDBXD U*	Square and round pole universal mounting bracket (specify finish) <sup>21</sup>
KMA8 DDBXD U	Must arm mounting bracket adaptor (specify finish) <sup>1</sup>

For more control options, visit [DTL](#) and [ROAM](#) online.

### NOTES

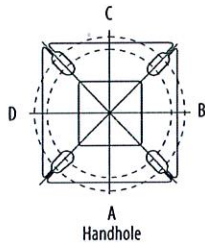
- P10, P11, P12 or P14 and rotated optics (L90, R90) only available together.
- AMBPC not available with BLC, LCCO, RCCO, HS or P5, P7, P8, P13 or P14.
- Not available with HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- Any PIRx with BL30, BL50 or PNMT, is not available with 208V, 240V, 347V, 480V or MVOLT. It is only available in 120V or 277V specified.
- Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.
- Not available with BL30, BL50 or PNMT options.
- Existing drilled pole only. Available as a separate combination accessory; for retrofit use only; PUMBA (finish) U; 1.5 G vibration load rating per ANCI C136.31.
- Must order fixture with 5PA option. Must be ordered as a separate accessory; see Accessories information. For use with 2-3/8" mast arm (not included).
- Must be ordered with PIRHN.
- Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Not available with DS option. Shorting Cap included.
- If ROAM® node required, it must be ordered and shipped as a separate line item from Acuity Brands Controls. Node with integral dimming. Shorting Cap included.
- Requires (2) separately switched circuits. See Outdoor Control Technical Guide for details.
- Provides 50/50 fixture operation via (2) independent drivers. Not available with PER, PER5, PER7, PIR or PIRH.
- Reference Motion Sensor table on page 3.
- Must be ordered with NLTAIR2. For more information on nLight Air 2 visit [this link](#).
- Not available with 347V, 480V, DS and PNMT. For PER5 or PER7 see PER Table on page 3. Requires isolated neutral.
- Not available with 347V, 480V, DS, BL30, BL50. For PER5 or PER7 see PER Table on page 3. Separate Dusk to Dawn required.
- Not available with other dimming controls options.
- Not available with BLC, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.
- Must be ordered with fixture for factory pre-drilling.
- Requires luminaire to be specified with PER, PER5 and PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls.
- For retrofit use only.

## External Glare Shield



## Drilling

### HANDHOLE ORIENTATION



### Tenon Mounting Slipfitter\*\*

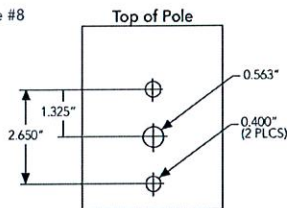
Tenon O.D.	Single Unit	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2-3/8"	AST20-190	AST20-280	AST20-290	AST20-320	AST20-390	AST20-490
2-7/8"	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

### Pole drilling nomenclature: # of heads at degree from handhole (default side A)

DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS
1 @ 90°	2 @ 280°	2 @ 90°	3 @ 120°	3 @ 90°	4 @ 90°
Side B	Side B & D	Side B & C	Round pole only	Side B, C, & D	Sides A, B, C, D

Note: Review luminaire spec sheet for specific nomenclature

Template #8



Pole top or tenon O.D.	4.5" @ 90°	4" @ 90°	3.5" @ 90°	3" @ 90°	4.5" @ 120°	4" @ 120°	3.5" @ 120°	3" @ 120°
DSX SPA	Y	Y	Y	N	-	-	-	-
DSX RPA	Y	Y	N	N	Y	Y	Y	Y
DSX SPUMBA	Y	N	N	N	-	-	-	-
DSX RPUMBA	N	N	N	N	Y	Y	Y	N

\*3 fixtures @ 120 require round pole top/tenon.

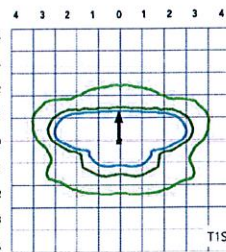
## Photometric Diagrams

To see complete photometric reports or download .ies files for this product, visit [Lithonia Lighting's D-Series Area Size 2 homepage](#).

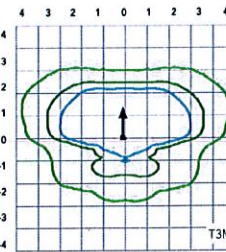
Isofootcandle plots for the DSX2 LED 80C 1000 40K. Distances are in units of mounting height (30').

### LEGEND

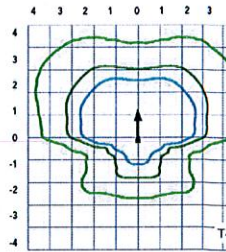
0.1 fc
0.5 fc
1.0 fc



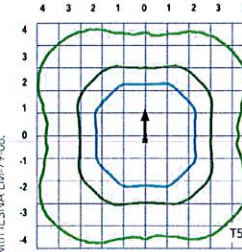
Test No. LTL2242SP1 tested in accordance with IESNA LM-79-08.



Test No. LTL22423AP1 tested in accordance with IESNA LM-79-08.



Test No. LTL22423BP1 tested in accordance with IESNA LM-79-08.



Test No. LTL22423CP1 tested in accordance with IESNA LM-79-08.



## Performance Data

### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambient		Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15°C	59°F	1.02
20°C	68°F	1.01
25°C	77°F	1.00
30°C	86°F	0.99
35°C	95°F	0.98
40°C	104°F	0.97

### Projected LED Lumen Maintenance

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	0	25000	50000	100000
Lumen Maintenance Factor	1.00	0.96	0.92	0.85

### Electrical Load

Performance Package	LED Count	Drive Current	Wattage	Current (A)						
				120	208	240	277	347	480	
Forward Optics (Non-Rotated)	P1	80	530	140	1.18	0.68	0.59	0.51	0.40	0.32
	P2	80	700	185	1.56	0.90	0.78	0.66	0.52	0.39
	P3	80	850	217	1.82	1.05	0.90	0.80	0.63	0.48
	P4	80	1050	270	2.27	1.31	1.12	0.99	0.79	0.59
	P5	80	1250	321	2.68	1.54	1.34	1.17	0.93	0.68
	P6	100	1050	343	2.89	1.66	1.59	1.37	1.00	0.71
	P7	100	1250	398	3.31	1.91	1.66	1.45	1.16	0.81
	P8	100	1350	431	3.61	2.07	1.81	1.57	1.25	0.91
Rotated Optics (Requires L90 or R90)	P10	90	530	156	1.30	0.76	0.65	0.62	0.45	0.32
	P11	90	700	207	1.75	1.01	0.87	0.74	0.60	0.46
	P12	90	850	254	2.12	1.22	1.06	0.94	0.73	0.55
	P13	90	1200	344	2.88	1.65	1.44	1.25	1.00	0.73
	P14	90	1400	405	3.39	1.95	1.71	1.48	1.18	0.86

### Motion Sensor Default Settings

Option	Dimmed State	High Level (when triggered)	Photocell Operation	Dwell Time	Ramp-up Time	Ramp-down Time
PIR or PIRH	3V (37%) Output	10V (100%) Output	Enabled @ 5FC	5 min	3 sec	5 min
*PIR1FC3V or PIRH1FC3V	3V (37%) Output	10V (100%) Output	Enabled @ 1FC	5 min	3 sec	5 min

\*for use with Inline Dusk to Dawn or timer.

### PER Table

Control	PER (3 wire)	PER5 (5 wire)		PER7 (7 wire)	
		Wire 4/Wire5	Wire 4/Wire5	Wire 6/Wire7	Wire 6/Wire7
Photocontrol Only (On/Off)	✓	▲	Wired to dimming leads on driver	▲	Wires Capped inside fixture
ROAM	✗	✓	Wired to dimming leads on driver	▲	Wires Capped inside fixture
ROAM with Motion (ROAM on/off only)	✗	▲	Wires Capped inside fixture	▲	Wires Capped inside fixture
Future-proof*	✗	▲	Wired to dimming leads on driver	✓	Wires Capped inside fixture
Future-proof* with Motion	✗	▲	Wires Capped inside fixture	✓	Wires Capped inside fixture

✓ Recommended
✗ Will not work
▲ Alternate

\*Future-proof means: Ability to change controls in the future.





# Performance Data

## Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Forward Optics																														
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)										
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW						
80	1250	P5	321W	T1S	35,193	4	0	4	110	37,912	4	0	4	118	38,392	4	0	4	120											
				T2S	35,155	4	0	5	110	37,872	4	0	5	118	38,351	4	0	5	119											
				T2M	35,336	4	0	4	110	38,067	4	0	4	119	38,549	4	0	4	120											
				T3S	34,222	4	0	5	107	36,866	4	0	5	115	37,333	4	0	5	116											
				T3M	35,251	3	0	4	110	37,974	3	0	5	118	38,455	4	0	5	120											
				T4M	34,485	3	0	5	107	37,149	4	0	5	116	37,620	4	0	5	117											
				TFTM	35,229	3	0	5	110	37,951	3	0	5	118	38,431	3	0	5	120											
				TSVS	36,639	5	0	1	114	39,470	5	0	1	123	39,970	5	0	1	125											
				T5S	36,669	5	0	2	114	39,502	5	0	2	123	40,002	5	0	2	125											
				T5M	36,576	5	0	4	114	39,403	5	0	4	123	39,901	5	0	4	124											
				TSW	36,336	5	0	5	113	39,144	5	0	5	122	39,640	5	0	5	123											
				BLC	28,884	3	0	4	90	31,115	3	0	4	97	31,509	3	0	4	98											
				LCCO	21,492	2	0	4	67	23,153	2	0	5	72	23,446	3	0	5	73											
				RCCO	21,492	2	0	4	67	23,153	2	0	5	72	23,446	3	0	5	73											
				100	1050	P6	343W	T1S	37,824	4	0	4	110	40,747	4	0	4	119	41,263	4	0	4	120	21,838	1	0	1	64		
								T2S	37,784	4	0	5	110	40,704	4	0	5	119	41,219	4	0	5	120	21,787	1	0	1	64		
T2M	37,979	4	0					4	111	40,913	4	0	4	119	41,431	4	0	4	121	21,824	1	0	1	64						
T3S	36,780	4	0					5	107	39,623	4	0	5	116	40,124	4	0	5	117	21,776	1	0	1	63						
T3M	37,886	3	0					5	110	40,814	4	0	5	119	41,331	4	0	5	120	21,819	1	0	1	64						
T4M	37,063	4	0					5	108	39,927	4	0	5	116	40,433	4	0	5	118	22,175	1	0	1	65						
TFTM	37,863	3	0					5	110	40,789	4	0	5	119	41,305	4	0	5	120	21,773	1	0	1	63						
TSVS	39,379	5	0					1	115	42,422	5	0	1	124	42,959	5	0	1	125	23,029	2	0	0	67						
T5S	39,411	5	0					2	115	42,456	5	0	2	124	42,993	5	0	2	125	23,016	2	0	0	67						
T5M	39,311	5	0					4	115	42,349	5	0	4	123	42,885	5	0	4	125	22,906	2	0	1	67						
TSW	39,053	5	0					5	114	42,071	5	0	5	123	42,604	5	0	5	124	22,619	2	0	1	66						
BLC	31,043	3	0					4	91	33,442	3	0	4	97	33,865	3	0	4	99											
LCCO	23,099	2	0					5	67	24,884	3	0	5	73	25,199	3	0	5	73											
RCCO	23,099	2	0					5	67	24,884	3	0	5	73	25,199	3	0	5	73											
100	1250	P7	398W					T1S	42,599	4	0	4	107	45,890	4	0	4	115	46,471	4	0	4	117							
								T2S	42,553	4	0	5	107	45,842	4	0	5	115	46,422	4	0	5	117							
				T2M	42,773	4	0	4	107	46,078	4	0	4	116	46,661	4	0	5	117											
				T3S	41,423	4	0	5	104	44,624	4	0	5	112	45,189	4	0	5	114											
				T3M	42,669	4	0	5	107	45,966	4	0	5	115	46,548	4	0	5	117											
				T4M	41,742	4	0	5	105	44,967	4	0	5	113	45,537	4	0	5	114											
				TFTM	42,643	4	0	5	107	45,938	4	0	5	115	46,519	4	0	5	117											
				TSVS	44,350	5	0	1	111	47,777	5	0	1	120	48,381	5	0	1	122											
				T5S	44,385	5	0	2	112	47,815	5	0	3	120	48,420	5	0	3	122											
				T5M	44,273	5	0	4	111	47,695	5	0	4	120	48,298	5	0	4	121											
				TSW	43,983	5	0	5	111	47,382	5	0	5	119	47,982	5	0	5	121											
				BLC	34,962	3	0	4	88	37,664	3	0	5	95	38,140	3	0	5	96											
				LCCO	26,015	3	0	5	65	28,025	3	0	5	70	28,380	3	0	5	71											
				RCCO	26,015	3	0	5	65	28,025	3	0	5	70	28,380	3	0	5	71											
				100	1350	P8	448W	T1S	45,610	4	0	4	106	49,135	4	0	4	114	49,757	4	0	4	115							
								T2S	45,562	4	0	5	106	49,083	4	0	5	114	49,704	4	0	5	115							
T2M	45,797	4	0					4	106	49,336	4	0	5	114	49,960	4	0	5	116											
T3S	44,352	4	0					5	103	47,779	4	0	5	111	48,384	4	0	5	112											
T3M	45,686	4	0					5	106	49,216	4	0	5	114	49,839	4	0	5	116											
T4M	44,693	4	0					5	104	48,147	4	0	5	112	48,756	4	0	5	113											
TFTM	45,657	4	0					5	106	49,186	4	0	5	114	49,808	4	0	5	116											
TSVS	47,485	5	0					1	110	51,155	5	0	1	119	51,802	5	0	1	120											
T5S	47,524	5	0					3	110	51,196	5	0	3	119	51,844	5	0	3	120											
T5M	47,404	5	0					4	110	51,067	5	0	5	118	51,713	5	0	5	120											
TSW	47,093	5	0					5	109	50,732	5	0	5	118	51,374	5	0	5	119											
BLC	37,434	3	0					5	87	40,326	3	0	5	94	40,837	3	0	5	95											
LCCO	27,854	3	0					5	65	30,006	3	0	5	70	30,386	3	0	5	71											
RCCO	27,854	3	0					5	65	30,006	3	0	5	70	30,386	3	0	5	71											

## Performance Data

### Lumen Output

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Rotated Optics																								
LED Count	Drive Current	Power Package	System Watts	Dist. Type	30K (3000 K, 70 CRI)					40K (4000 K, 70 CRI)					50K (5000 K, 70 CRI)					AMBPC (Amber Phosphor Converted)				
					Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW
90	530	P10	156W	T1S	20,145	4	0	4	129	21,702	4	0	4	139	21,977	4	0	4	141	11,475	3	0	3	77
				T2S	20,029	4	0	4	128	21,577	4	0	4	138	21,850	4	0	4	140	11,448	3	0	3	76
				T2M	20,391	4	0	4	131	21,967	4	0	4	141	22,245	4	0	4	143	11,467	3	0	3	76
				T3S	19,719	4	0	4	126	21,242	4	0	4	136	21,511	4	0	4	138	11,442	3	0	3	76
				T3M	20,379	4	0	4	131	21,954	4	0	4	141	22,232	4	0	4	143	11,464	4	0	4	76
				T4M	19,995	4	0	4	128	21,540	4	0	4	138	21,812	5	0	5	140	11,440	4	0	4	76
				TFTM	20,511	4	0	4	131	22,096	5	0	5	142	22,376	5	0	5	143	11,651	4	0	4	78
				TSVS	20,655	4	0	1	132	22,251	4	0	1	143	22,533	4	0	1	144	12,288	3	0	1	82
				T5S	20,482	4	0	2	131	22,064	4	0	2	141	22,343	4	0	2	143	11,978	3	0	1	80
				T5M	20,477	5	0	3	131	22,059	5	0	3	141	22,338	5	0	3	143	12,301	4	0	2	82
				TSW	20,293	5	0	3	130	21,861	5	0	3	140	22,138	5	0	4	142	12,109	4	0	2	81
				BLC	16,846	4	0	4	108	18,148	4	0	4	116	18,378	4	0	4	118					
				LCCO	12,032	2	0	3	77	12,961	2	0	3	83	13,125	2	0	3	84					
				RCCO	12,016	4	0	4	77	12,944	4	0	4	83	13,108	4	0	4	84					
				T1S	25,518	4	0	4	123	27,490	4	0	4	133	27,837	4	0	4	134	14,387	3	0	3	70
				T2S	25,371	5	0	5	123	27,331	5	0	5	132	27,677	5	0	5	134	14,354	3	0	3	70
				T2M	25,829	4	0	4	125	27,825	4	0	4	134	28,177	4	0	4	136	14,378	4	0	4	70
				T3S	24,977	5	0	5	121	26,907	5	0	5	130	27,248	5	0	5	132	14,347	4	0	4	70
				T3M	25,814	5	0	5	125	27,809	5	0	5	134	28,161	5	0	5	136	14,374	4	0	4	70
				T4M	25,327	5	0	5	122	27,284	5	0	5	132	27,629	5	0	5	133	14,344	4	0	4	70
TFTM	25,981	5	0	5	126	27,989	5	0	5	135	28,343	5	0	5	137	15,408	4	0	1	75				
TSVS	26,164	5	0	1	126	28,185	5	0	1	136	28,542	5	0	1	138	15,019	4	0	1	73				
T5S	25,943	4	0	2	125	27,948	5	0	2	135	28,302	5	0	2	137	15,424	4	0	2	75				
T5M	25,937	5	0	3	125	27,941	5	0	3	135	28,295	5	0	3	137	14,609	4	0	4	71				
TSW	25,704	5	0	4	124	27,691	5	0	4	134	28,041	5	0	4	135	15,182	4	0	2	74				
BLC	21,339	4	0	4	103	22,988	4	0	4	111	23,279	4	0	4	112									
LCCO	15,240	2	0	4	74	16,418	2	0	4	79	16,626	2	0	4	80									
RCCO	15,220	5	0	5	74	16,396	5	0	5	79	16,604	5	0	5	80									
T1S	29,912	4	0	4	118	32,223	4	0	4	127	32,631	5	0	4	128									
T2S	29,740	5	0	5	117	32,038	5	0	5	126	32,443	5	0	5	128									
T2M	30,277	4	0	4	119	32,616	5	0	5	128	33,029	5	0	5	130									
T3S	29,278	5	0	5	115	31,540	5	0	5	124	31,940	5	0	5	126									
T3M	30,259	5	0	5	119	32,597	5	0	5	128	33,010	5	0	5	130									
T4M	29,688	5	0	5	117	31,982	5	0	5	126	32,387	5	0	5	128									
TFTM	30,455	5	0	5	120	32,808	5	0	5	129	33,224	5	0	5	131									
TSVS	30,669	5	0	1	121	33,039	5	0	1	130	33,457	5	0	1	132									
T5S	30,411	5	0	2	120	32,761	5	0	2	129	33,176	5	0	2	131									
T5M	30,404	5	0	3	120	32,753	5	0	3	129	33,168	5	0	3	131									
TSW	30,131	5	0	4	119	32,459	5	0	4	128	32,870	5	0	4	129									
BLC	25,013	4	0	4	98	26,946	4	0	4	106	27,287	4	0	4	107									
LCCO	17,865	2	0	4	70	19,245	2	0	4	76	19,489	2	0	4	77									
RCCO	17,841	5	0	5	70	19,220	5	0	5	76	19,463	5	0	5	77									
T1S	38,768	5	0	5	113	41,764	5	0	5	121	42,292	5	0	5	123									
T2S	38,545	5	0	5	112	41,523	5	0	5	121	42,049	5	0	5	122									
T2M	39,241	5	0	5	114	42,273	5	0	5	123	42,808	5	0	5	124									
T3S	37,947	5	0	5	110	40,879	5	0	5	119	41,396	5	0	5	120									
T3M	39,218	5	0	5	114	42,249	5	0	5	123	42,783	5	0	5	124									
T4M	38,478	5	0	5	112	41,451	5	0	5	120	41,976	5	0	5	122									
TFTM	39,472	5	0	5	115	42,522	5	0	5	124	43,060	5	0	5	125									
TSVS	39,749	5	0	1	116	42,821	5	0	1	124	43,363	5	0	1	126									
T5S	39,415	5	0	2	115	42,461	5	0	2	123	42,998	5	0	2	125									
T5M	39,405	5	0	4	115	42,450	5	0	4	123	42,988	5	0	4	125									
TSW	39,052	5	0	5	114	42,069	5	0	5	122	42,602	5	0	5	124									
BLC	32,419	5	0	5	94	34,925	5	0	5	102	35,367	5	0	5	103									
LCCO	23,154	3	0	5	67	24,943	3	0	5	73	25,259	3	0	5	73									
RCCO	23,124	5	0	5	67	24,910	5	0	5	72	25,226	5	0	5	73									
T1S	42,867	5	0	5	106	46,180	5	0	5	114	46,764	5	0	5	115									
T2S	42,621	5	0	5	105	45,914	5	0	5	113	46,495	5	0	5	115									
T2M	43,390	5	0	5	107	46,743	5	0	5	115	47,335	5	0	5	117									
T3S	41,959	5	0	5	104	45,201	5	0	5	112	45,773	5	0	5	113									
T3M	43,365	5	0	5	107	46,716	5	0	5	115	47,307	5	0	5	117									
T4M	42,547	5	0	5	105	45,834	5	0	5	113	46,414	5	0	5	115									
TFTM	43,646	5	0	5	108	47,018	5	0	5	116	47,614	5	0	5	118									
TSVS	43,952	5	0	1	109	47,349	5	0	1	117	47,948	5	0	1	118									
T5S	43,583	5	0	2	108	46,950	5	0	2	116	47,545	5	0	2	117									
T5M	43,572	5	0	4	108	46,939	5	0	4	116	47,533	5	0	4	117									
TSW	43,181	5	0	5	107	46,518	5	0	5	115	47,107	5	0	5	116									
BLC	35,847	5	0	5	89	38,617	5	0	5	95	39,106	5	0	5	97									
LCCO	25,602	3	0	5	63	27,580	3	0	5	68	27,930	3	0	5	69									
RCCO	25,569	5																						

## FEATURES & SPECIFICATIONS

### INTENDED USE

The sleek design of the D-Series Area Size 2 reflects the embedded high performance LED technology. It is ideal for applications like car dealerships and large parking lots adjacent to malls, transit stations, grocery stores, home centers, and other big-box retailers.

### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing is completely sealed against moisture and environmental contaminants (IP65). Low EPA (1.1 ft<sup>2</sup>) for optimized pole wind loading.

### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

### OPTICS

Precision-molded proprietary acrylic lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K, or 5000 K (70 CRI) configurations. The D-Series Size 2 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

### ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L85/100,000 hrs at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

### INSTALLATION

Included mounting block and integral arm facilitate quick and easy installation. Stainless steel bolts fasten the mounting block securely to poles and walls, enabling the D-Series Size 2 to withstand up to a 2.0 G vibration load rating per ANSI C136.31. The D-Series Size 2 utilizes the AERIS™ series pole drilling pattern (Template #8). NEMA photocontrol receptacle is available.

### LISTINGS

UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP65 rated. Rated for -40°C minimum ambient. U.S. Patent No. D670,857 S. International patent pending.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL) to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

### WARRANTY

5-year limited warranty. Complete warranty terms located at: [www.acuitybrands.com/CustomerResources/Terms\\_and\\_conditions.aspx](http://www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx)

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.

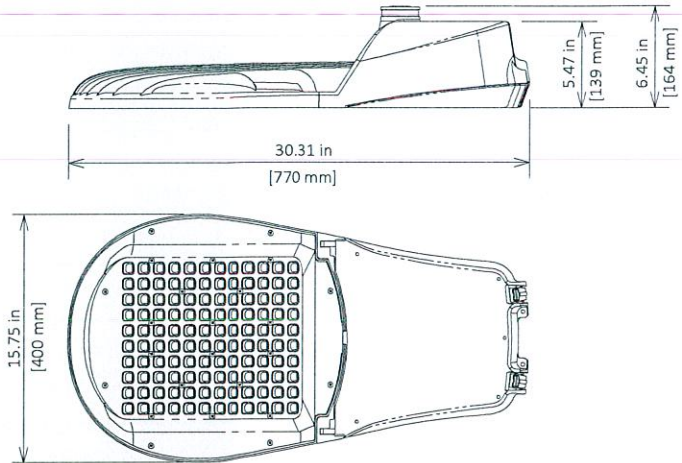


# GreenCobra™ LED Street Light

## GC2 F-Series Specification Data Sheet

### Luminaire Data

**Weight** 25 lbs [11.3 kg]  
**EPA** 0.77 ft<sup>2</sup>



### Ordering Information

Sample Catalog No. GC2 80F MV NW 2 GY FDC350

Product	No. & Type of LEDs	Voltage <sup>1</sup>	Color Temperature	Distribution	Finish <sup>2</sup>	Drive Current Code <sup>3</sup>	Options
GC2	90F 100F 120F	MV 120-277V HV 347-480V	WW 3000K NW 4000K CW 5000K	2 Type 2 3 Type 3	GY Gray DB Dark Bronze BK Black	350 350mA	HSS <sup>5</sup> House Side Shield (Factory Installed) FDC <sup>6</sup> Fixed Drive Current FFA <sup>7</sup> Full Field Adjustability LPCR Less Photocontrol Receptacle PCR7 ANSI 7-wire Photocontrol Receptacle PCR7-CR <sup>8</sup> Control Ready 7-wire Photocontrol Receptacle SC PCR Shorting Cap WL Utility Wattage Label
						530 530mA	
						700 700mA	
GC2	80F					Drive Current Code <sup>3</sup>	
						700 1A <sup>4</sup>	700mA 1A

**Notes:**

- MV is DLC qualified. HV is DLC qualified on request, consult factory.
- Gray, Black and Dark Bronze standard, consult factory for other finishes.
- Specified drive current code is the factory set maximum drive current. Field adjustable current selector enables standard dimming to lower wattage drive currents only. Consult factory if wattage limits require a special drive current.
- 1A drive current only available with 80F.
- Flush mounted house side shield factory installed. Shield cuts light off at 1/2 mounting height behind luminaire.
- Non-field adjustable, fixed drive current.
- The FFA option enables full field adjustability from the specified drive current code to all drive currents available. This option is not DLC qualified.
- Control-ready wired at factory for wireless node dimming. Supplied at maximum drive current. If lower drive current is required, consult factory.
- Flush mounted house side shield. Shield cuts light off at 1/2 mounting height behind luminaire. Specify Model and Color.
- Specify Color (GY, DB, BK)
- Specify MV (120-277V) or HV (347V-480V)

### Accessories\*

HSSGC <sup>9</sup>	House Side Shield
SPB <sup>10</sup>	Square Pole Horizontal Arm Bracket
RPB <sup>10</sup>	Round Pole Horizontal Arm Bracket
PTB <sup>10</sup>	Pole Top Tenon Horizontal Arm Bracket
WB <sup>10</sup>	Wall Horizontal Arm Bracket
BSK	Bird Deterrent Spider Kit
LLPC <sup>11</sup>	Long-Life Twist Lock Photocontrol
SC	Twist Lock Shorting Cap

\*Accessories are ordered separately and not to be included in the catalog number

### Luminaire Specifications

#### Housing

Die cast aluminum housing with universal four-bolt slip fitter mounts to 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter mast arm. Aluminum housing provides passive heat-sinking of the LEDs and has upper surfaces that shed precipitation. Mounting provisions meet 3G vibration per ANSI C136.31-2010 Normal Application, Bridge & Overpass. Mounting has leveling adjustment from + 10° to -5° in 2.5° steps and integral bubble level standard. Electrical components are accessed without tools and are mounted on removable power door with stainless steel latches. Standard rubber wildlife guard conforms to mast arm with no gaps.

#### Light Emitting Diodes

Hi-flux/Hi-power white LEDs produce a minimum of 90% of initial intensity at 100,000 hours of life based on IES TM-21. LEDs are tested in accordance with IES LM-80 testing procedures. LEDs have correlated color temperature of 3000K (WW), 4000K (NW), or 5000K (CW) and 70 CRI minimum. LEDs are 100% mercury and lead free.

#### Field Adjustability

LED drive current can be changed in the field to adjust light output for local conditions (not available with PCR7-CR option). The specified drive current code will be the factory set maximum drive current and field adjustments can only be made to available lower wattage drive currents. Select the FFA option if full field adjustability to all available drive currents (700mA max or 1A max) is desired. The FFA option is not DLC qualified.

#### Quality Control

Every luminaire is performance tested before and after a 2-hour burn-in period. Assembled in the USA.

#### Optical Systems

Micro-lens optical systems produce IESNA Type 2 or Type 3 distributions and are fully sealed to maintain an IP66 rating. Luminaire produces 0% total lumens above 90° (BUG Rating, U=0). Optional house side shield cuts light off at 1/2 mounting height behind luminaire.

#### Electrical

Rated life of electrical components is 100,000 hours. Uses isolated power supply that is 1-10V dimmable. Power supply is wired with quick-disconnect terminals. Power supply features a minimum power factor of .90 and <20% Total Harmonic Distortion (THD). EMC meets or exceeds FCC CFR Part 15. Terminal block accommodates 6 to 14 gauge wire and is aligned for strait wire entry. Surge protection complies with IEEE/ANSI C62.41 Category C High, 20kV/10kA.

#### Controls

3-Wire photocontrol receptacle is standard. ANSI C136.41 7-wire (PCR7) photocontrol receptacle is available. All photocontrol receptacles have tool-less rotatable bases. Wireless control module is provided by others.

#### Finish

Housing receives a fade and abrasion resistant polyester powder coat finish. Finish tested to withstand 3000 hours in salt spray exposure per ASTM B117. Finish tested 500 hours in UV exposure per ASTM G154 and meets ASTM D523 gloss retention.

#### Listings/Ratings/Labels

Luminaires are UL listed for use in wet locations in the United States and Canada. DesignLights Consortium™ qualified 120-277V 4000K product. International Dark Sky Association listed. Luminaire is qualified to operate at ambient temperatures of -40°C to 40°C.

#### Photometry

Luminaires photometrics are tested by certified independent testing laboratories in accordance with IES LM-79 testing procedures. IES files for all CCTs are available at leotek.com.

#### Warranty

10-year limited warranty is standard on luminaire and components.

### Performance Data

All data nominal. IES files for all CCTs are available at leotek.com.

No. of LEDs & Type	Drive Current (mA)	System Wattage (W)	Delivered Lumens (lm) <sup>1</sup>	Efficacy (lm/W)	Type 2	Type 3
					BUG Rating	BUG Rating
80F	700	180	17700	98	B3 U0 G3	B3 U0 G3
	1000	277	24500	88	B4 U0 G4	B4 U0 G4
90F	350	95	10800	114	B2 U0 G2	B3 U0 G3
	530	150	16050	107	B3 U0 G3	B3 U0 G3
100F	700	195	19800	102	B3 U0 G3	B3 U0 G3
	350	105	11700	111	B3 U0 G3	B3 U0 G3
	530	167	17400	104	B3 U0 G3	B3 U0 G3
120F	700	220	22000	100	B3 U0 G3	B3 U0 G3
	350	130	14600	112	B3 U0 G3	B3 U0 G3
	530	200	20800	104	B3 U0 G3	B3 U0 G3
	700	260	26400	102	B4 U0 G4	B4 U0 G4

#### Notes:

1 All data nominal lumens for 4000K (NW) and 5000K (CW). For 3000K (WW) apply a LLF of 0.93. Normal tolerance ± 10% due to factors including distribution type, LED bin variance, and ambient temperatures.

# PART OF LEASE LOT 19 OF SPIRIT OF ST. LOUIS AIRPORT - SITE DEVELOPMENT SECTION PLAN

A TRACT OF LAND BEING PART OF LEASE LOT 19 OF SPIRIT OF ST. LOUIS AIRPORT PLAT 1 AS RECORDED IN PLAT BOOK 258, PAGE 74 TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI

### PARKING CALCULATIONS

<b>BUILDING AREA DATA:</b>	
HANGAR:	35,133 S.F.
WAREHOUSE:	5,370 S.F.
OFFICE:	4,497 S.F.
<b>REQUIRED PARKING:</b>	
(MINIMUM)	3.3/1,000 GFA = 3.3/1,000 x 4,497 = 14 SPACES
OFFICE:	2 SPACES FOR EVERY 3 EMPLOYEES ON THE MAXIMUM SHIFT (25 EMPLOYEES = 16 SPACES)
WAREHOUSE/HANGAR:	2 SPACES FOR EVERY 3 EMPLOYEES ON THE MAXIMUM SHIFT (25 EMPLOYEES = 16 SPACES)
TOTAL PERMITTED (MINIMUM):	30 SPACES
(MAXIMUM)	4.5/1,000 GFA = 4.5/1,000 x 4,497 = 20 SPACES
OFFICE:	1.2 SPACES PER EMPLOYEE ON THE MAXIMUM SHIFT (25 EMPLOYEES = 30 SPACES)
WAREHOUSE/HANGAR:	1.2 SPACES PER EMPLOYEE ON THE MAXIMUM SHIFT (25 EMPLOYEES = 30 SPACES)
TOTAL PERMITTED (MAXIMUM):	50 SPACES
TOTAL PROVIDED:	38 SPACES (2 ACCESSIBLE)
REQUIRED LOADING:	10x40 LOADING SPACE (2) 10x25 LOADING SPACE (1)
TOTAL REQUIRED:	3 SPACES
TOTAL PROVIDED:	3 SPACES

### OPEN SPACE CALCULATIONS

LEASEHOLD AREA:	214,623 S.F.
BUILDING AREA:	45,000 S.F.
F.A.R.: (45,000 / 214,623)	0.21
VEHICLE PAVEMENT AREA:	63,555 S.F.
PERCENT OPENSPACE:	$[(214,623 - (45,000 + 63,555)) / 214,623] \times 100 = 49.42\%$

### LEGEND

EXISTING CONTOURS	---
PROPOSED CONTOURS	---
EXISTING SANITARY SEWERS	---
EXISTING STORM SEWERS	---
PROPOSED SANITARY SEWERS	---
PROPOSED STORM SEWERS	---
EXISTING RIGHT-OF-WAY	---
PROPOSED RIGHT-OF-WAY	---
CENTERLINE	---
EASEMENT	---
NOTES PARKING SPACES	(18)
GUY WIRE	+
EXISTING SPOT ELEVATION	+ EL. 120.10
PROPOSED SPOT ELEVATION	~120.10
SWALE	---
TO BE REMOVED	T.B.R.
TO BE REMOVED & RELOCATED	T.B.R. & R.
TO BE USED IN PLACE	U.I.P.
BACK OF CURB	B.C.
FACE OF CURB	F.C.
TRASH ENCLOSURE	✕
EXISTING LIGHT STANDARD	*
GAS MAIN	G
WATER MAIN	W
UNDERGROUND TELEPHONE	T
UNDERGROUND TELEPHONE	(E)

### LEASEHOLD AREA PROPERTY DESCRIPTION

A tract of land being part of Lease Lot 19 of Spirit of St. Louis Airport Plat 1 as recorded in Plat Book 258, Page 74 Township 45 North, Range 3 East of the 5th Principal Meridian City of Chesterfield, St. Louis County, Missouri being more particularly described as follows: Commencing at a found iron rod located at the intersection of the west line of above said Lease Lot 19 and the north right-of-way line of Edison Avenue, 80 feet wide, thence along said right-of-way line, North 78 degrees 12 minutes 35 seconds East, 39.64 feet to its intersection with the direct southeasterly prolongation of the east line of Taxway F, 80 feet wide, of above said Spirit of St. Louis Airport Plat 1, said point also being the POINT OF BEGINNING of the herein described tract, thence departing said right-of-way line along said prolongation line and the east line of said Taxway F, North 11 degrees 47 minutes 25 seconds West, 470.93 feet, thence departing said east line, North 78 degrees 15 minutes 21 seconds East, 439.03 feet to a point being 71.82 feet west of the east line of above said Lease Lot 19, thence along a line parallel to and 71.82 feet west of the east line of said Lease Lot 19, South 11 degrees 50 minutes 25 seconds East, 484.00 feet to a point being 63.42 feet north of the south line of said Lease Lot 19, thence along a line being parallel to and 63.42 feet north of the south line, South 78 degrees 10 minutes 41 seconds West, 326.33 feet to the eastern right-of-way line of above said Edison Avenue, thence along the western and northern right-of-way lines of Edison Avenue, North 44 degrees 21 minutes 54 seconds West, 28.00 feet and South 78 degrees 12 minutes 35 seconds West, 98.05 feet to the POINT OF BEGINNING. Containing 214,623 square feet or 4.927 acres, more or less according to calculations performed by Stock & Associates Consulting Engineers, Inc. on July 23, 2018.



### SITE INFORMATION

ADDRESS = 18301 EDISON AVENUE CHESTERFIELD, MO 63005  
LEASEHOLD AREA = 4.93 ACRES  
OWNER = ST. LOUIS COUNTY  
CITY = CITY OF CHESTERFIELD  
ZONING = "M3" PLANNED INDUSTRIAL DISTRICT  
FLOOD MAP = 29189C0145K  
SEWER DISTRICT = MSD  
WATERSHED = MISSOURI RIVER  
FIRE DISTRICT = MONARCH CHESTERFIELD  
SCHOOL DISTRICT = ROCKWOOD R-6  
ELECTRIC SERVICE = AMEREN  
GAS SERVICE = SPIRE  
PHONE SERVICE = ATT  
WATER SERVICE = MO. AMERICAN WATER CO.  
CABLE SERVICE = CHARTER COMMUNICATIONS

### GENERAL NOTES

- BOUNDARY AND TOPOGRAPHICAL SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. (BASIS OF BEARINGS: MISSOURI STATE PLANE, GRID NORTH)
- SUBJECT PROPERTY LIES WITHIN FLOOD ZONES "AH" AND "X" (AREAS OF 500-YEAR FLOOD); AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 100-YEAR FLOOD) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP FOR ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS PER MAP NO. 29189C0145K WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015 WITH AN ELEVATION OF 459.
- ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. SHOULD ANY CONFLICTS BE EVIDENT, THE CONTRACTOR SHALL NOTIFY THE OFFICE OF THE ENGINEER IMMEDIATELY.
- ON-SITE STORM WATER DRAINAGE REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE SPIRIT OF SAINT LOUIS AIRPORT NPDES PERMIT MOR80FD16.
- ALL PROPOSED UTILITIES SHALL BE CONSTRUCTED TO THE CITY OF CHESTERFIELD STANDARDS.
- ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS PER MAP NO. 29189C0145K AND SPIRIT OF SAINT LOUIS AIRPORT STANDARDS.
- STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- THIS SITE DEVELOPMENT SECTION PLAN WILL ADHERE TO THE PARKING AND LOADING REGULATIONS OF THE CITY OF CHESTERFIELD CODE.
- ALL UTILITIES WILL BE INSTALLED UNDERGROUND. THE DEVELOPMENT OF THIS PARCEL WILL COORDINATE THE INSTALLATION OF ALL UTILITIES IN CONJUNCTION WITH THE CONSTRUCTION OF ANY ROADWAY.
- SIGNAGE WILL BE WALL MOUNT, NO FREE-STANDING BUSINESS SIGNS ARE PROPOSED.
- ALL LIGHTING SHALL CONFORM TO THE LIGHTING ORDINANCE OF THE CITY OF CHESTERFIELD AND MEET THE SPIRIT OF SAINT LOUIS AIRPORT REQUIREMENTS.
- PLANS SUBJECT TO CHANGE PENDING AGENCY REVIEWS AND FINAL ENGINEERING.
- ALL UTILITY BOXES, INCLUDING TRANSFORMERS AND METERS, EXCEPT WHEN FLUSH WITH GROUND, WILL BE SCREENED AS REQUIRED BY CITY OF CHESTERFIELD CODE (APPENDIX A SECTION 1003.177.11(D)).

SPIRIT OF ST. LOUIS AIRPORT OPERATES UNDER THE FOLLOWING PERMITS: GENERAL PERMIT MO-R80FD16 AND LAND DISTURBANCE PERMIT MOR 103441

### ABBREVIATIONS

W	- WATER	DB	- DEED BOOK
E	- ELECTRIC	PB	- PLAT BOOK
OE	- OVERHEAD ELECTRIC	PG	- PAGE
UE	- UNDERGROUND ELECTRIC	(T,W)	- RIGHT-OF-WAY WIDTH
G	- GAS	(REC)	- RECORD INFORMATION
T	- TELEPHONE	FT	- FEET
T	- TO BE REMOVED	N/F	- NOW OR FORMERLY
TBR	- TO BE REMOVED AND REPLACED	FND	- FOUND
TBR & R	- TO BE REMOVED AND REPLACED	SQ	- SQUARE
UIP	- USE IN PLACE	CO	- CLEANOUT
ATG	- ADJUST TO GRADE	MH	- MANHOLE
BC	- BACK OF CURB	AI	- AREA INLET
FC	- FACE OF CURB	CI	- CURB INLET
TW	- TOP OF WALL	GI	- GRATE INLET
BW	- BOTTOM OF WALL	YD	- YARD DRAIN
PVMT	- PAVEMENT	YD	- YARD DRAIN
ASPH	- ASPHALT	PVC	- POLYVINYL CHLORIDE PIPE
CONC	- CONCRETE	RCP	- REINFORCED CONCRETE PIPE
GRND	- GROUND	CMP	- CORRUGATED METAL PIPE
FG	- FINISHED GRADE	VCP	- CLAY PIPE
FF	- FINISHED FLOOR	FL	- FLOWLINE
LL	- LOWER LEVEL	TS	- TAILSTAKE
TT	- TOP OF TURF	ELEV, EL	- ELEVATION
TC	- TOP OF CURB	PROP, PR	- PROPOSED
SG	- SUBGRADE	EXIST, EX	- EXISTING
MG	- METHANE GAS	TYP	- TYPICAL
		BMP	- BEST MANAGEMENT PRACTICES
		SWPPP	- STORMWATER POLLUTION PREVENTION PLAN

### ST. LOUIS COUNTY NOTES

- ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY STANDARDS.
- NO SLOPES WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).
- STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- ALL PROPOSED ACCESS TO ST. LOUIS COUNTY ROADS SHALL MEET MINIMUM ST. LOUIS COUNTY SIGHT DISTANCE REQUIREMENTS.
- ALL SIDEWALKS AND ASSOCIATED ACCESSIBILITY IMPROVEMENTS WITHIN RIGHT-OF-WAY SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY ADA STANDARDS.
- A SIGNED/SEALED NOTE SHALL BE ADDED TO THE CONSTRUCTION PLANS INDICATING THAT THE UNIMPROVED EXISTING SIDEWALK/PEDESTRIAN PATH ALONG THE PROJECT FRONTAGE MEETS THE CURRENT ST. LOUIS COUNTY ADA STANDARDS.
- ALL GRADING AND DRAINAGE SHALL BE IN CONFORMANCE WITH ST. LOUIS COUNTY AND MSD STANDARDS.
- ALL HYDRANTS, POWER POLES OR OTHER POTENTIAL OBSTRUCTIONS WITHIN THE ST. LOUIS COUNTY ROAD RIGHT-OF-WAY SHALL HAVE A MINIMUM TWO (2) FOOT SETBACK FROM FACE OF CURB OR EDGE OF PAVEMENT, AS DIRECTED BY THE ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION.
- ANY ENTITY THAT PERFORMS WORK ON ST. LOUIS COUNTY MAINTAINED PROPERTY SHALL PROVIDE THE COUNTY WITH A CERTIFICATE OF INSURANCE EVIDENCING GENERAL LIABILITY COVERAGE (BODILY INJURY AND PROPERTY DAMAGES) IN THE AMOUNTS SPECIFIED AS THE LIMITS OF LIABILITY SET FORTH BY THE STATE FOR PUBLIC ENTITIES. SUCH CERTIFICATE SHALL INCLUDE "ST. LOUIS COUNTY" AS AN ADDITIONAL INSURED AND SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF ANY PERMIT. CERTIFICATE SHALL PROVIDE FOR A 30-DAY POLICY CANCELLATION NOTICE TO ST. LOUIS COUNTY. UPON REQUEST, THE COUNTY WILL PROVIDE THE SPECIFIC AMOUNTS FOR BOTH PER PERSON AND PER OCCURRENCE LIMITS.
- PRIOR TO "SPECIAL USE PERMIT" ISSUANCE BY THE ST. LOUIS COUNTY DEPARTMENT OF TRANSPORTATION, A SPECIAL CASH ESCROW OR A SPECIAL ESCROW SUPPORTED BY AN IRREVOCABLE LETTER OF CREDIT, MAY BE REQUIRED TO BE ESTABLISHED WITH THE ST. LOUIS COUNTY TRANSPORTATION DEPARTMENT TO GUARANTEE COMPLETION OF THE REQUIRED ROADWAY IMPROVEMENTS.
- CONTINUOUS PEDESTRIAN ACCESS SHALL BE PROVIDED DURING THE CONSTRUCTION PROCESS. PRIOR TO THE START OF CONSTRUCTION, ADEQUATE PEDESTRIAN ACCESS AROUND THE SITE SHALL BE PROVIDED AND VERIFIED. NO EXISTING SIDEWALK SHALL BE REMOVED WITHOUT PROVIDING ADEQUATE PEDESTRIAN FACILITIES AND ROUTES DURING CONSTRUCTION ACTIVITIES.

### BENCHMARK

SL-40: BRASS DISC STAMPED "SL-40, 1990" ON THE NORTH SIDE OF NORTH OUTER 40 RD, ACROSS FROM THE INTERSECTION OF SPIRIT OF ST. LOUIS BOULEVARD. ELEV.=486.55

### SITE BENCHMARK

ELEV.=461.90  
FND. IRON PIPE AT THE NORTHWEST CORNER OF SITE AS SHOWN HEREON.

prepared for:

CONTEGRA CONSTRUCTION LLC  
22 GATEWAY COMMERCE CENTER DRIVE WEST  
SUITE 110  
EDWARDSVILLE, ILLINOIS 62025

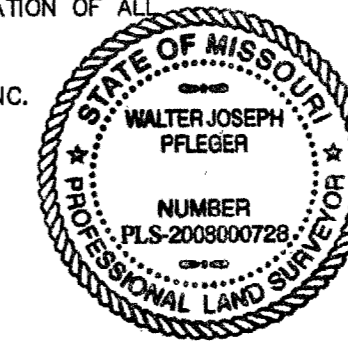
AVMATS JET SUPPORT  
18377 EDISON AVENUE  
CHESTERFIELD, MISSOURI 63005

### SURVEYOR'S CERTIFICATION

THIS IS TO CERTIFY THAT STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. HAS PREPARED THIS SITE DEVELOPMENT SECTION PLAN FROM A FIELD SURVEY AND DOES NOT REPRESENT A PROPERTY BOUNDARY SURVEY. THIS SITE DEVELOPMENT SECTION PLAN IS A CORRECT REPRESENTATION OF ALL EXISTING AND PROPOSED LAND DIVISIONS.

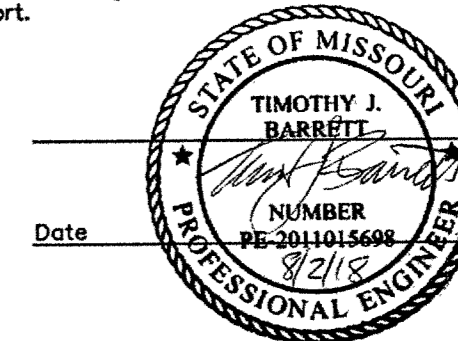
STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.  
L.S. No. 222-D

By: [Signature]  
WALTER J. PFEGER, MISSOURI L.S. No. 2008000728



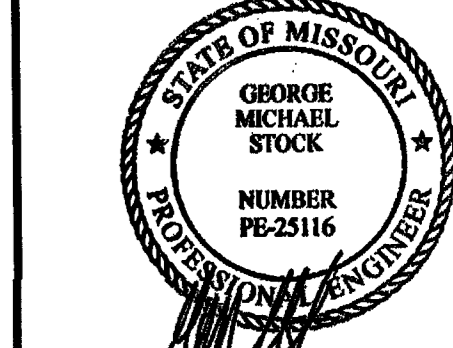
### GEOTECHNICAL STATEMENT

SCI ENGINEERING, INC., at the request of Contegra Construction Company has provided geotechnical services for the project proposed hereon. A geotechnical investigation titled "Geotechnical Report AVMATS HANGAR CHESTERFIELD, MISSOURI", May 2018, SCI No. 2009-0313.11. Our findings indicate that the earth-related aspects are suitable for the development proposed pursuant to the geotechnical recommendations set forth in our Geotechnical Report.



PREPARED BY:  
**STOCK & ASSOCIATES**  
Consulting Engineers, Inc.  
257 Chesterfield Business Parkway  
St. Louis, MO 63005 PH: (636) 599-9100  
FAX: (636) 599-9100  
e-mail: general@stockandassoc.com  
Web: www.stockandassoc.com

DATE: 10/10/18



GEORGE M. STOCK E-25116  
CIVIL ENGINEER  
CERTIFICATE OF AUTHORITY  
NUMBER: 000996

### REVISIONS:

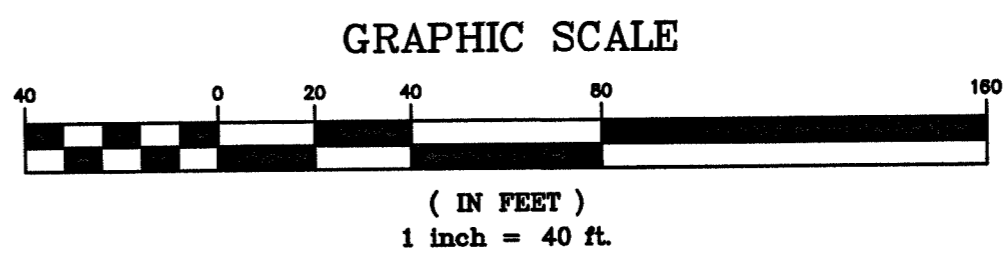
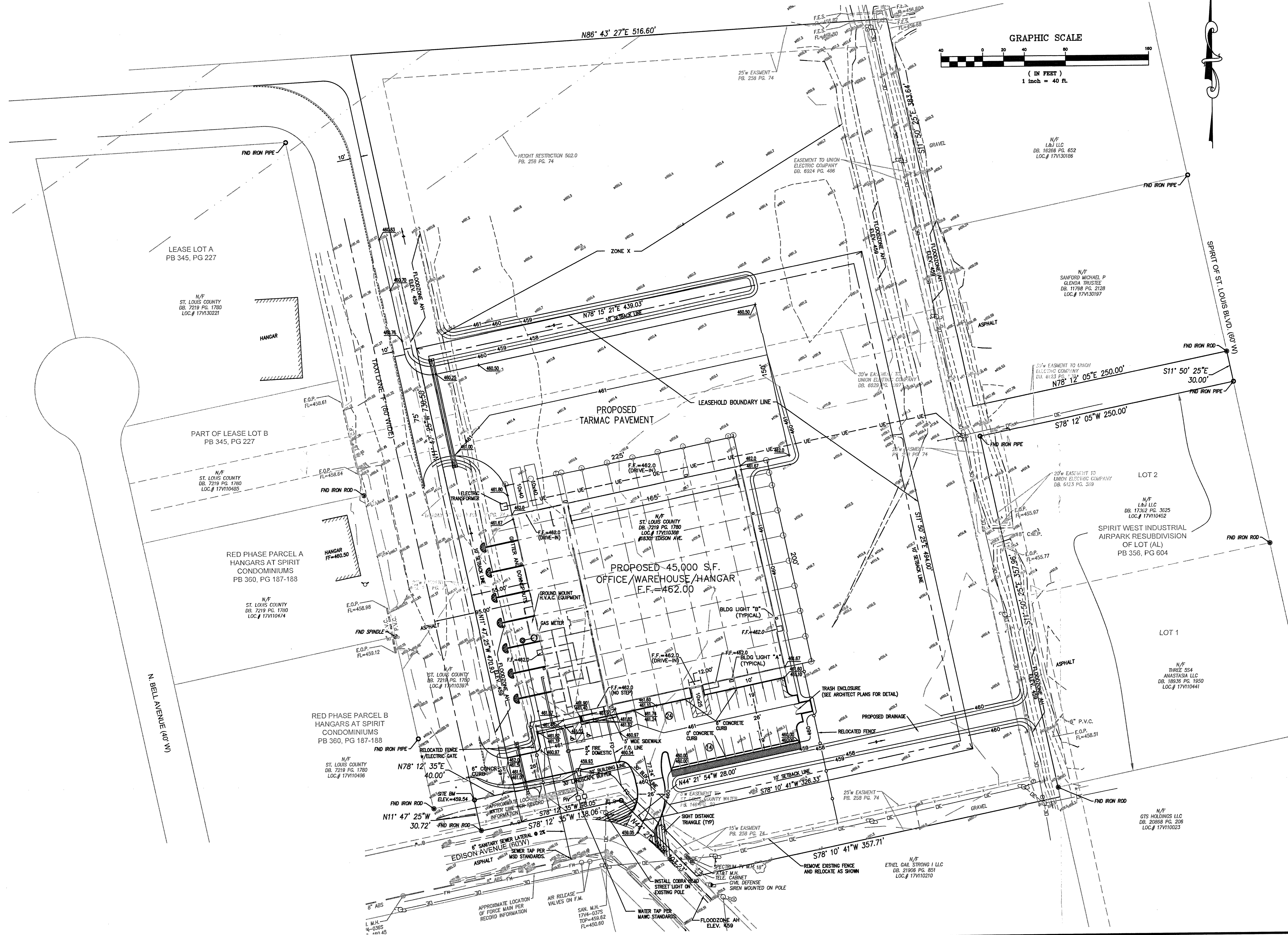
1	2018-07-25 REVISED PER AIRPORT, CLIENT AND CITY. ISSUE SDSP TO OUTSIDE AGENCIES FOR APPROVAL
2	2018-08-16 ADDED ST. LOUIS COUNTY NOTES TO TITLE SHEET
3	2018-08-20 SUBMIT REVISED SDSP TO CITY FOR APPROVAL
4	2018-09-24 SUBMIT REVISED SDSP TO CITY FOR APPROVAL
5	2018-10-10 SEVENTEEN SETS SUBMITTED TO CITY FOR PLANNING COMMISSION

DRAWN BY:	D.P.B.	CHECKED BY:	G.M.S.
DATE:	06/05/18	JOB NO.:	218-6256
REVISION #:	18MSD-00461	BASE MAP #:	
SLC MAP #:	HT-4215	NAT. SURV. #:	
MOBILE #:	NO-RA		

SHEET TITLE:

TITLE SHEET

SHEET NO. SDSP-01



PREPARED BY:

STOCK & ASSOCIATES  
 Consulting Engineers, Inc.

257 Chesterfield Business Park  
 St. Louis, MO 63105 PH: (636) 580-9100 FAX: (636) 580-9130  
 e-mail: genny@stockassoc.com  
 Web: www.stockassoc.com

SITE DEVELOPMENT SECTION PLAN FOR:  
**PROPOSED 45,000 S.F. "AVMATS HANGAR"  
 @ SPIRIT AIRPORT**  
 18301 EDISON AVENUE  
 CHESTERFIELD  
 MISSOURI

DATE: 10/10/18

GEORGE M. STOCK E-25116  
 CIVIL ENGINEER  
 CERTIFICATE OF AUTHORITY  
 NUMBER: 000996

- REVISIONS:
- 2018-07-25 REVISED PER AIRPORT CLIENT AND CITY. ISSUE SDSP TO OUTSIDE AGENCIES FOR APPROVAL
  - 2018-08-15 ADDED ST. LOUIS COUNTY NOTES TO TITLE SHEET
  - 2018-08-20 SUBMIT REVISED SDSP TO CITY FOR APPROVAL
  - 2018-09-24 SUBMIT REVISED SDSP TO CITY FOR APPROVAL
  - 2018-10-10 SEVENTEEN SETS SUBMITTED TO CITY FOR PLANNING COMMISSION

DRAWN BY: D.P.B. CHECKED BY: G.M.S.  
 DATE: 06/05/18 JOB NO.: 218-6256  
 M.S.D. # 18MSD-00461 BASE MAP #  
 S.L.C. # 11-4215 HNT SUP. # -  
 M.D.R. # MC-RA  
 SHEET TITLE:

**SITE PLAN**  
 SHEET NO.:  
**SDSP-02**



**Specifications**  
 EPA: 3.1 ft<sup>2</sup> (0.30 m<sup>2</sup>)  
 Length: 40" (1016 mm)  
 Width: 15" (381 mm)  
 Height: 7.5" (190 mm)  
 Weight: 36 lbs (16.3 kg)  
 (max)

Catalog Number: DSX2-LED-P7-40K-T4M-MV  
 Noise: \_\_\_\_\_  
 Type: A

**Capable Luminaire**  
 This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency.
- This luminaire is A+ Certified when ordered with DTL\* controls marked by a shaded background. DTL\* equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability!
- This luminaire is part of an A+ Certified solution for ROAM\* or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background!

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

- See ordering tree for details.
- A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately. Link to Roam; Link to DTL D.L.

\*A+ Capable system indicated by this color background.

EXAMPLE: DSX2 LED P7 T3M MVOLT SPA DDBXD

DSX2 LED	Forward optics	Color Temperature	Type	Mounting	Shipped included
P1	30K	3000K	T15	Type I Short	MVOLT <sup>14</sup>
P2	40K	4000K	T25	Type II Short	SPA
P3	50K	5000K	T35	Type III Short	SPA
P4	AMBPC	ambid	T35	Type III Short	AMBPC
P10	AMBPC	ambid	T35	Type III Short	AMBPC
P11	AMBPC	ambid	T35	Type III Short	AMBPC
P12	AMBPC	ambid	T35	Type III Short	AMBPC

LITHONIA LIGHTING One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8011 • [www.lithonia.com](http://www.lithonia.com)  
 © 2011-2018 Acuity Brands Lighting, Inc. All rights reserved.



**Specifications**  
 EPA: 1.01 ft<sup>2</sup> (0.09 m<sup>2</sup>)  
 Length: 33" (838 mm)  
 Width: 13" (330 mm)  
 Height: 7.12" (181 mm)  
 Weight: 27 lbs (12.2 kg)  
 (max)

Catalog Number: DSX1-LED-P4-40K-T4T-MV  
 Noise: \_\_\_\_\_  
 Type: B

**Capable Luminaire**  
 This item is an A+ capable luminaire, which has been designed and tested to provide consistent color appearance and system-level interoperability.

- All configurations of this luminaire meet the Acuity Brands' specification for chromatic consistency.
- This luminaire is A+ Certified when ordered with DTL\* controls marked by a shaded background. DTL\* equipped luminaires meet the A+ specification for luminaire to photocontrol interoperability!
- This luminaire is part of an A+ Certified solution for ROAM\* or XPoint™ Wireless control networks, providing out-of-the-box control compatibility with simple commissioning, when ordered with drivers and control options marked by a shaded background!

To learn more about A+, visit [www.acuitybrands.com/aplus](http://www.acuitybrands.com/aplus).

- See ordering tree for details.
- A+ Certified Solutions for ROAM require the order of one ROAM node per luminaire. Sold Separately. Link to Roam; Link to DTL D.L.

\*A+ Capable system indicated by this color background.

EXAMPLE: DSX1 LED P7 40K T3M MVOLT SPA DDBXD

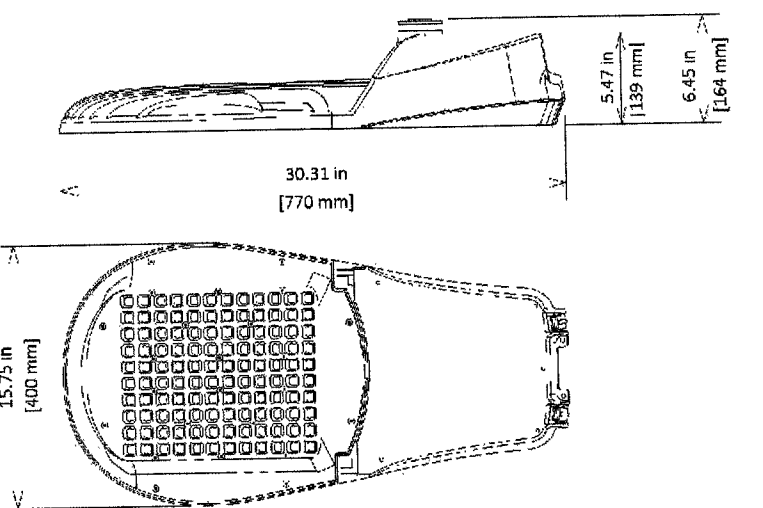
DSX1 LED	Forward optics	Color Temperature	Type	Mounting	Shipped included
P1	30K	3000K	T15	Type I Short	MVOLT <sup>14</sup>
P2	40K	4000K	T25	Type II Short	SPA
P3	50K	5000K	T35	Type III Short	SPA
P4	AMBPC	ambid	T35	Type III Short	AMBPC
P10	AMBPC	ambid	T35	Type III Short	AMBPC
P11	AMBPC	ambid	T35	Type III Short	AMBPC
P12	AMBPC	ambid	T35	Type III Short	AMBPC

LITHONIA LIGHTING One Lithonia Way • Conyers, Georgia 30012 • Phone: 800.279.8011 • [www.lithonia.com](http://www.lithonia.com)  
 © 2011-2018 Acuity Brands Lighting, Inc. All rights reserved.

**LEOTEK**  
 LITE-ON GROUP

**GreenCobra™ LED Street Light**  
**GC2 F-Series Specification Data Sheet**

Luminaire Data  
 Weight: 25 lbs (11.3 kg)  
 EPA: 0.77 ft<sup>2</sup>



Ordering Information  
 Sample Catalog No. GC2 80F MV NW 2 6Y FDC35

Product	No. & Type of LEDs	Voltage	Color Temperature	Distribution	Finish	Drive Current Code	Options
GC2	90F	MV	3000K	2	GY	550	HSS <sup>1</sup> House Side Shield (Factory Installed)
	100F	HV	4000K	3	DB	530	FDC <sup>2</sup> Fixed Drive Current
	120F	CW	5000K	3	BK	700	FFA <sup>3</sup> Full Field Adjustability LPC <sup>4</sup> Less Photocontrol Receptacle PCR7 <sup>5</sup> ANSI 7-wire Photocontrol Receptacle PCR7-CR <sup>6</sup> Control Ready 7-wire Photocontrol Receptacle SC <sup>7</sup> P.C.R. Shorting Cap WL <sup>8</sup> Utility Warning Label
GC2	80F				700	1A <sup>9</sup> 1A	

Notes:  
 1 MV is DLC qualified. HV is DLC qualified on request, consult factory.  
 2 Gray, Black and Dark Bronze standard, consult factory for other finishes.  
 3 Specified drive current code is the factory set maximum drive current. Field adjustable current selector enables standard dimming to lower wattage drive currents only. Consult factory if wattage limits require a specific drive current.  
 4 A drive current only available with 80F.  
 5 Flush mounted house side shield factory installed. Shield cuts light off at 1/2 mounting height behind luminaire.  
 6 Non-field adjustable, fixed drive current.  
 7 The FFA option enables full field adjustability from the specified drive current code to all drive currents available. This option is not DLC qualified.  
 8 Control-ready wired at factory for wireless control dimming. Supplied at maximum drive current. If lower drive current is required, consult factory.  
 9 Flush mounted house side shield. Shield cuts light off at 1/2 mounting height behind luminaire. Specify Model and Color.  
 10 Specify Color (GY, DB, BK).  
 11 Specify MV (120-277V) or HV (347V-480V).

COBRA HEAD INSTALLED AND MAINTAINED BY AMEREN ON EXISTING AMEREN POLE. HEAD HEIGHT AT 25'.

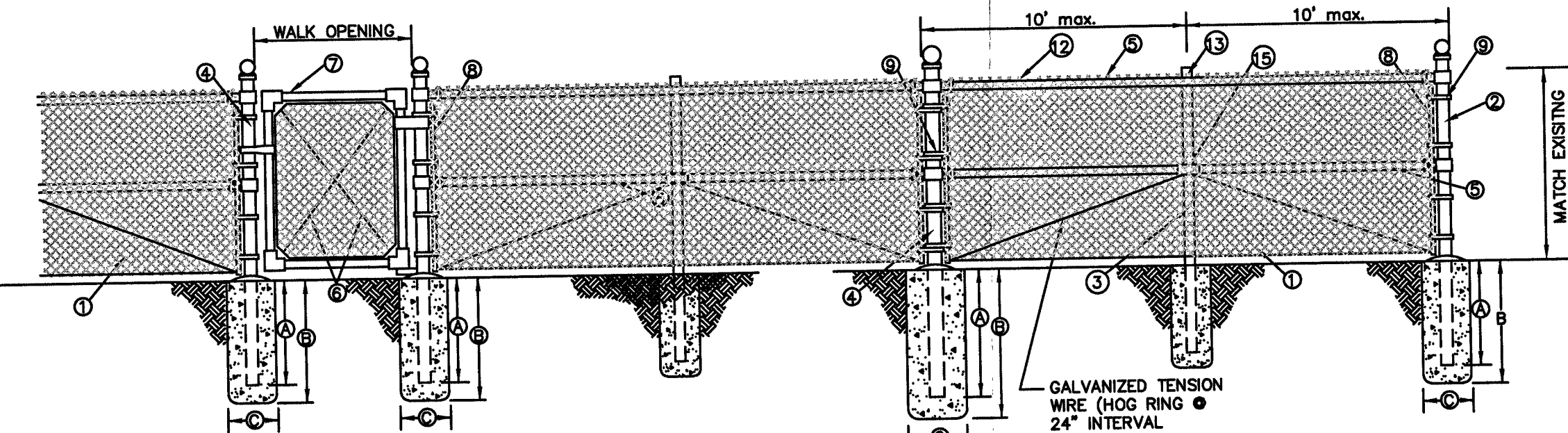


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 GC2\_F-Series\_Spec\_Sheet\_031818. Specifications subject to change without notice.

**LIGHTING DETAILS**  
 (n.t.s.)

DESCRIPTION	HEIGHT OF FENCE	
	72" (EXISTING)	SIZE #/FT.
END CORNER & PULL POST	ROUND	2-1/2" Ø 5.79
LINE POST	(A)	36"
	(B) & (C)	42" x 12" 3.65
GATE POST * (SINGLE GATE OR 1 LEAF OF DOUBLE) WIDTH OVER 18"	H-SECT.	6" x 1.95" 3.26
	(A)	36"
TRUSS ROD	(B) (C)	42" x 10" 5.79
	6" AND LESS	2-1/2" Ø 9.10
GATE FRAME	13" AND LESS	3-1/2" Ø 18.97
	18" AND LESS	6" Ø 24.70
TOP RAIL AND BRACE	8" Ø	2.27
TRUSS ROD	1-1/4"	3/8
GATE FRAME ALL WIDTHS	1-1/2" Ø	2.72

- LEGEND**
- FABRIC
  - END CORNER OR PULL POST
  - LINE POST
  - GATE POST
  - TOP RAIL & BRACE
  - TRUSS ROD
  - GATE FRAME
  - STRETCHER BAR - 1/4"x3/4" PL
  - STRETCHER BAR BAND
  - END OR CORNER CLAMP
  - POST TOPS - OTHER THAN LINE POST
  - FABRIC TIES
  - LINE POST TOPS
  - 1/2 FABRIC HEIGHT
  - EXPANSION SLEEVE

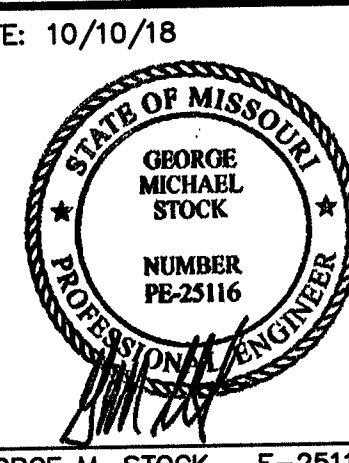


- GENERAL NOTES:**
- DO NOT SCALE DRAWING. FOLLOW DIMENSIONS.
  - MATERIAL IS EXISTING GALVANIZED STEEL FENCING.
  - WEIGHTS OF MATERIALS SHOWN IN TABLE ARE FOR STEEL SIZES. SHOWN ARE APPLICABLE FOR ALL MATERIALS.
  - PULL POSTS SHALL BE USED AT SHARP BREAKS IN VERTICAL GRADE OR AT APPROXIMATE 500' CENTERS ON STRAIGHT RUNS OR AS DIRECTED BY THE ENGINEER.
  - DRILLED HOLES (C) IN SOLID ROCK SHALL PROVIDE A DIAMETER OF NOT LESS THAN TWO INCHES GREATER THAN THE MAXIMUM TRANSVERSE DIMENSION OF THE POST SECTION.
  - ALTERNATE FOR TOP RAIL AND BRACE (E) MAY BE TUBULAR 1-5/8" O.D. (±.005") AT 1.35 POUNDS PER FOOT (TOLERANCE - .5±; + NO LIMIT).
  - CONCRETE FOR FOOTINGS SHALL BE CLASS B. A QUICK SETTING POLYURETHANE FOAM MAY BE USED IN LIEU OF CONCRETE FOR LINE POST OR LINE POST MAY BE DRIVEN AS SHOWN ON THE PLANS.

**FENCE RELOCATION DETAIL**  
 (n.t.s.)

PREPARED BY:

SITE DEVELOPMENT SECTION PLAN FOR:  
**PROPOSED 45,000 S.F. "AVMATS HANGAR" @ SPIRIT AIRPORT**  
 18301 EDISON AVENUE  
 CHESTERFIELD MISSOURI



DATE: 10/10/18  
 GEORGE M. STOCK E-25116  
 CIVIL ENGINEER  
 CERTIFICATE OF AUTHORITY  
 NUMBER: 000996

**REVISIONS:**

NO.	DATE	DESCRIPTION
1	2018-07-25	REVISED PER AIRPORT CLIENT AND CITY ISSUE SOSP TO OUTSIDE AGENCIES FOR APPROVAL
2	2018-08-15	ADDED ST. LOUIS COUNTY NOTES TO TITLE SHEET
3	2018-08-20	SUBMIT REVISED SOSP TO CITY FOR APPROVAL
4	2018-09-24	SUBMIT REVISED SOSP TO CITY FOR APPROVAL
5	2018-10-10	SEVENTEEN SETS SUBMITTED TO CITY FOR PLANNING COMMISSION

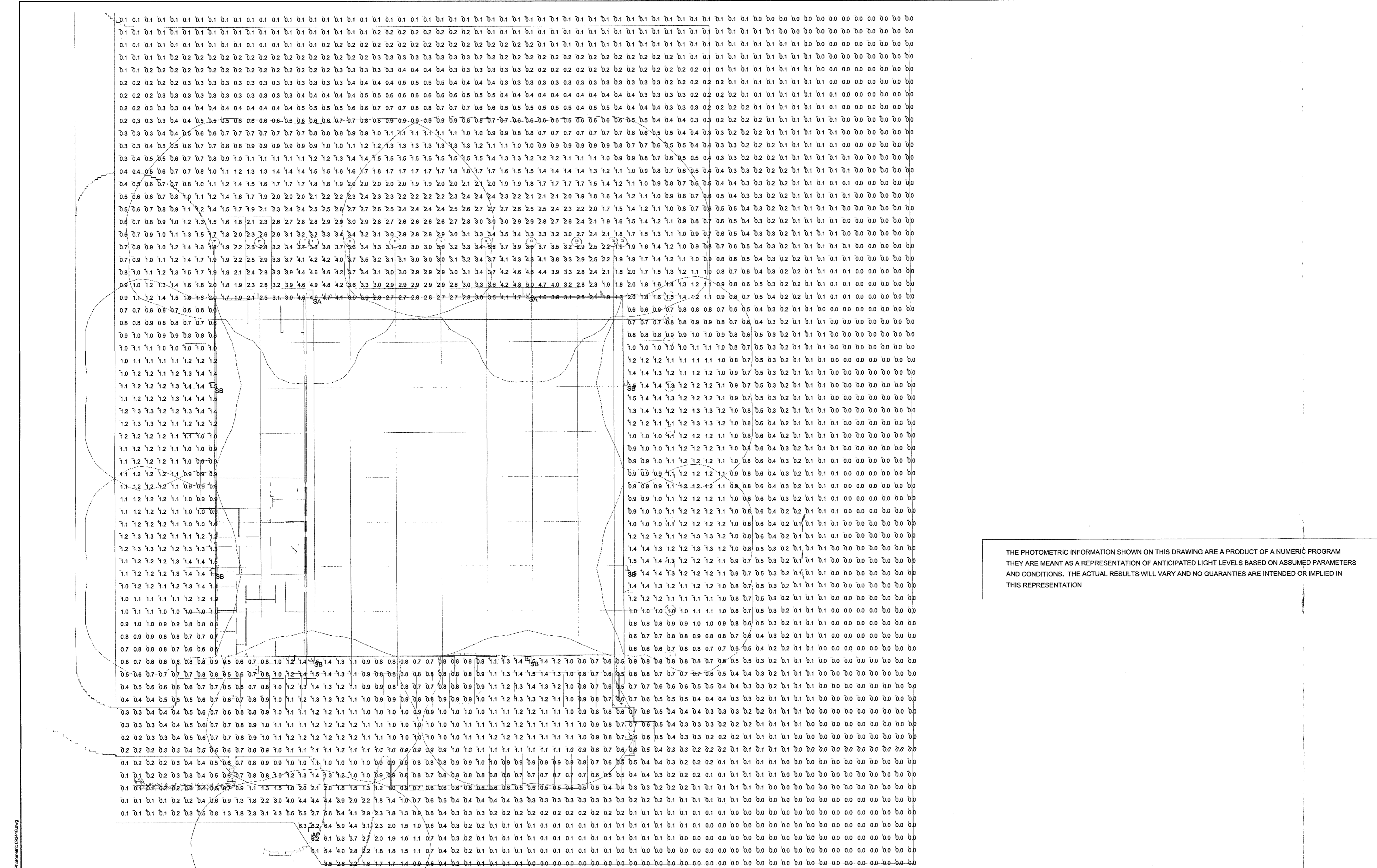
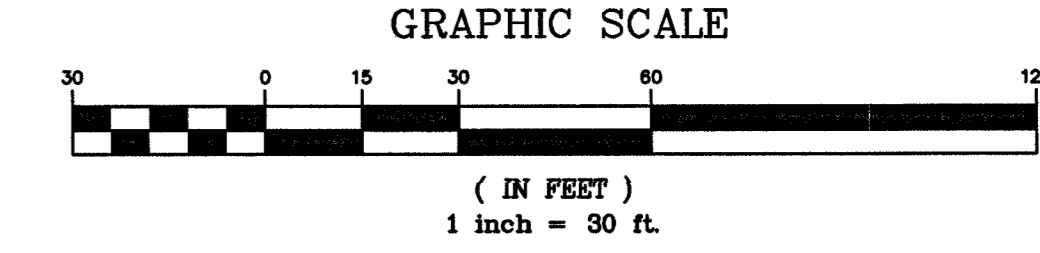
DRAWN BY: D.P.B. CHECKED BY: G.M.S.  
 DATE: 06/05/18 JOB NO.: 218-6256  
 KSD. PR: 18MSD-00461 BASE MAP #:  
 SLD. HAT #: HT-4215 HAT SUP. #:  
 MGRS: MO-RA

SHEET TITLE:  
**DETAILS**  
 SHEET NO.:  
**SDSP-03**

257 Chesterfield Business Center  
 St. Louis, MO 63105 PH: (636) 530-5000  
 530-9100 FAX: (636) 530-5000  
 e-mail: [general@stockassociates.com](mailto:general@stockassociates.com)  
 Web: [www.stockassociates.com](http://www.stockassociates.com)

**STOCK & ASSOCIATES**  
 Consulting Engineers, Inc.





THE PHOTOMETRIC INFORMATION SHOWN ON THIS DRAWING ARE A PRODUCT OF A NUMERIC PROGRAM THEY ARE MEANT AS A REPRESENTATION OF ANTICIPATED LIGHT LEVELS BASED ON ASSUMED PARAMETERS AND CONDITIONS. THE ACTUAL RESULTS WILL VARY AND NO GUARANTIES ARE INTENDED OR IMPLIED IN THIS REPRESENTATION

THE SEALS AND SIGNATURE(S) APPLY ONLY TO THE DOCUMENT TO WHICH THEY ARE AFFIXED FOR ELECTRICAL DESIGN ONLY AND EXPRESSLY DISCLAIM ANY RESPONSIBILITY FOR ALL OTHER PLANS, SPECIFICATIONS, ESTIMATES, REPORTS OR OTHER DOCUMENTS AND INSTRUMENTS RELATING TO OR INTENDED TO BE USED FOR ANY PART OF THE ARCHITECTURAL OR ENGINEERING PROJECT.

By: \_\_\_\_\_ Date: 08/24/18 Title: TDM

0 SITE PHOTOMETRIC DRAWING

NEW HANGAR FOR:  
**AVMATS**  
18301 EDISON AVE.  
CHESTERFIELD, MO.

**RJP ELECTRIC**  
9808 South Big Bend Blvd  
St. Louis, MO 63133  
Phone: 314-781-2400  
Fax: 314-781-4720

SHEET NO.  
**E-1**

Scale: As Shown  
Drawing No: 218-6256  
Date: 09/24/18

Schedule	Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Fixture	Lumens Per Lamp	Light Loss Factor	Wattage
	SA		2	Lithonia Lighting	DSX2 LED P7 40K T4M MVOLT	DSX2 LED P7 40K T4M MVOLT	LED	1	DSX2_LED_P7_40K_T4M_MVOL T4s	44955	0.85	368
	SB		6	Lithonia Lighting	DSX1 LED P4 40K TPTM MVOLT HS	DSX1 LED P4 40K TPTM MVOLT with housette shade	LED	1	DSX1_LED_P4_40K_TPTM_MVOL L1_P4HS	11311	1	125
	AP		1	Ledex Electronics USA Corp. San Jose CA 95131	9C2-98P-ANV-W-3-0Y-700	Ledex Spot-mounted 90 LED Street Light, Cat No. 9C2-98P-ANV-W-3-0Y-700. Slanted from left L1-14304-1 Gray powder coated cast aluminum housing with vented cooling fins above LEDs. Removable, hinged, gear housing door. 80 Lumens T1 LED's 1" x 1" @ 1000lm. Luminous opening 9.5" x 7.5". Two Lin-Ch Power LED Drivers, Model No. PL-110-100L, 100-277Vac 50/60Hz. Tested at 120V 60Hz with luminous opening horizontal. Dimming set to 700mA (per spec).	LED	90	9C2-98P-ANV-W-3-0Y-700 9.21x15.6in	220,0629	1	185

Statistics	Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Calc Zone #1			0.6 fc	0.6 fc	0.0 fc	NA	NA

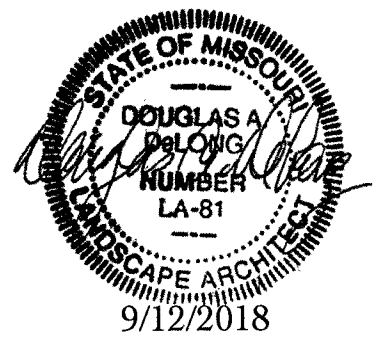
PROPOSED 45,000 S.F. "AVMATS HANGAR" @ SPIRIT AIRPORT  
18301 EDISON AVENUE  
CHESTERFIELD MISSOURI

REVISIONS:

DATE	09/24/18	JOB NO.	218-6256
M.S.D. #		BASE MAP #	
S.L.C. NBT #		NBT SUP. #	
M.O.R. #			

SHEET TITLE:  
**PHOTOMETRIC PLAN**

SHEET NO.:  
**E-1**



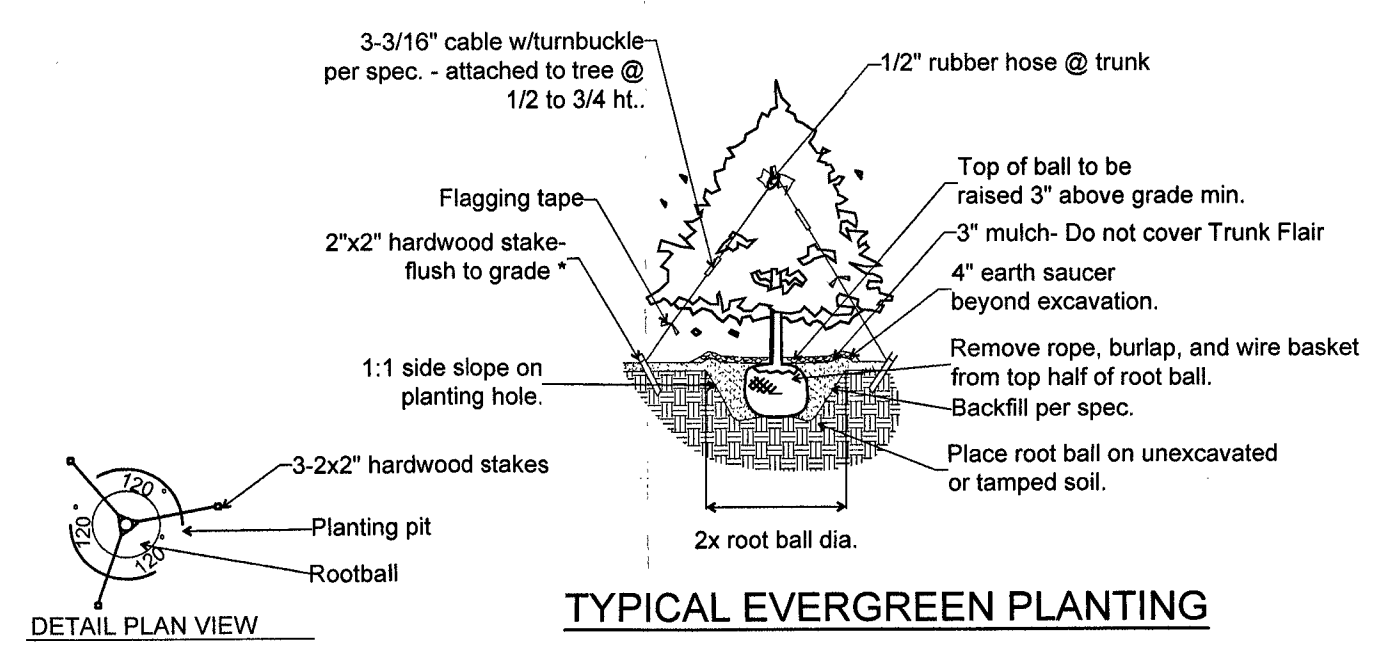
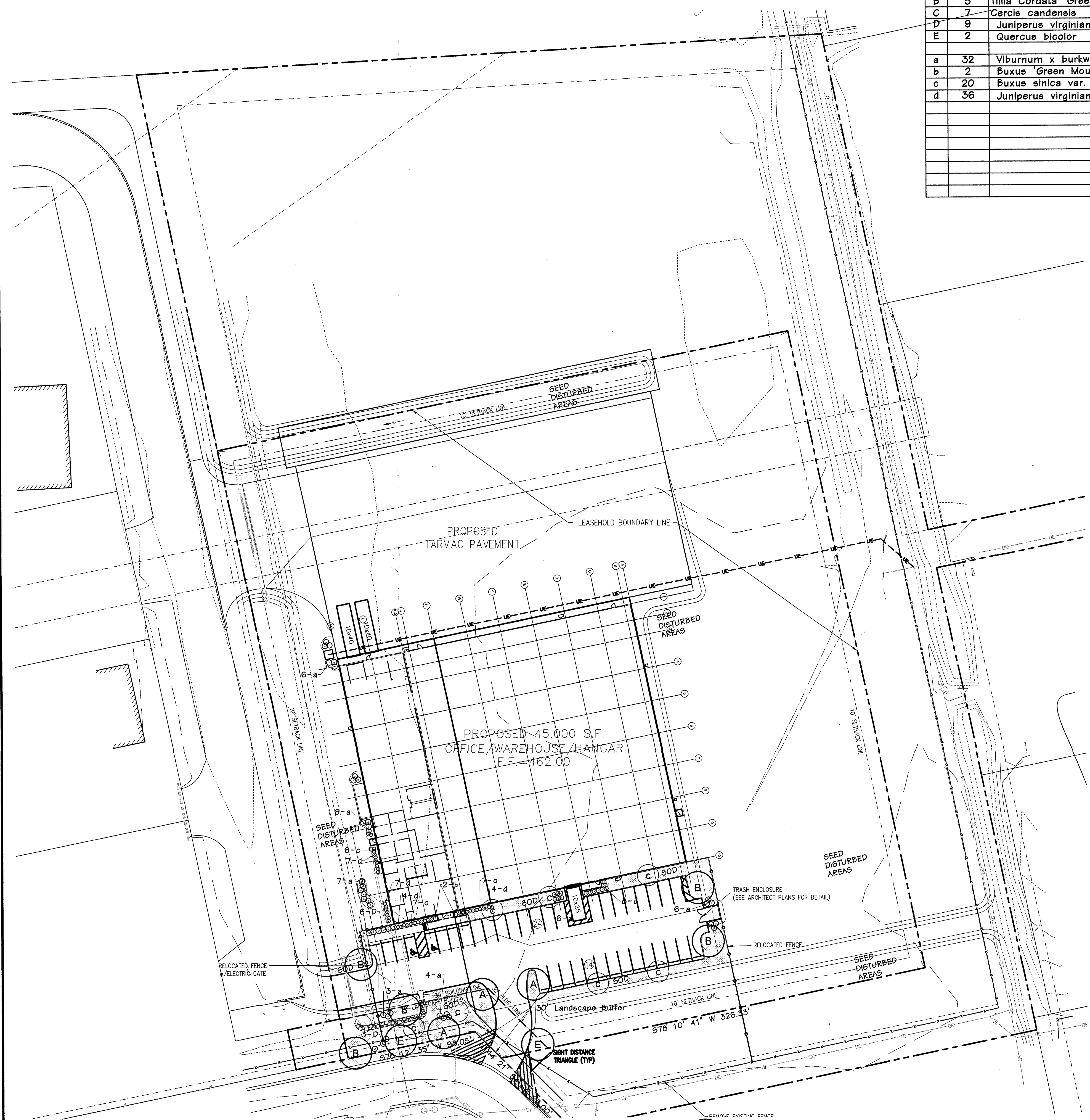
Douglas A. DeLong, Landscape Architect LA-81

Consultants:

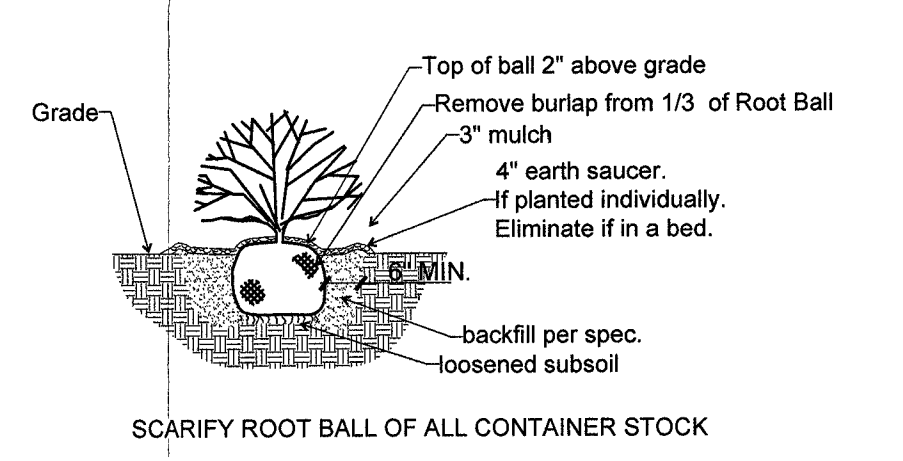
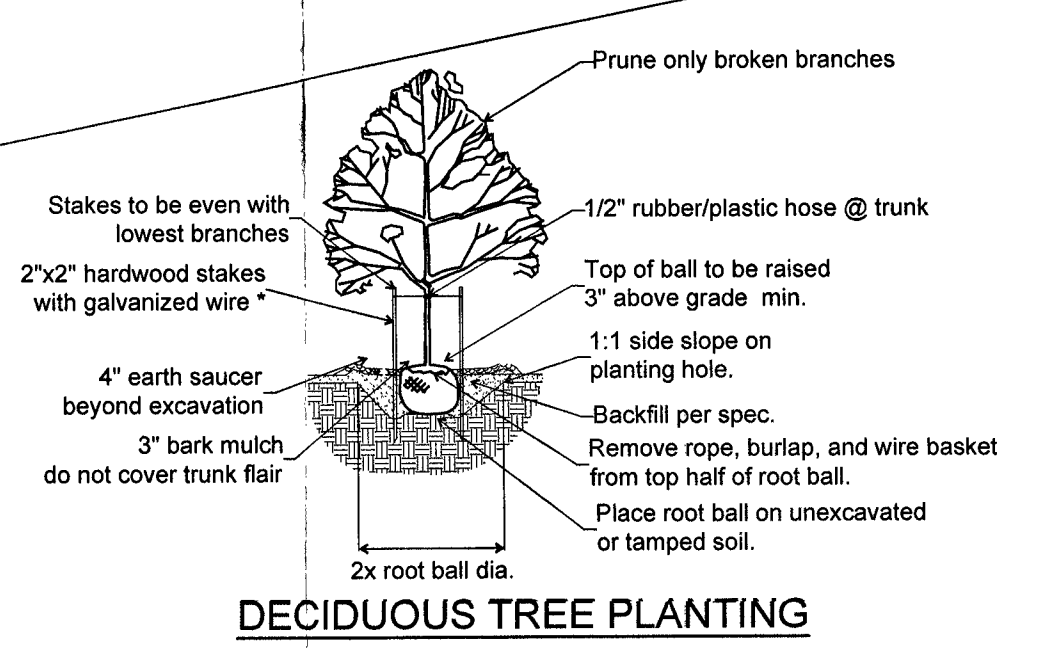
PLANTING SCHEDULE								
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	MATURE HEIGHT	Notes	CATEGORY	PERCENTAGE
A	3	Acer rubrum 'Red Sunset'	Red Sunset Red Maple	2 1/2"	45'+	Fast Growing	Deciduous	12%
B	5	Tilia Cordata 'Greenpire'	Little-leaf Linden	2 1/2"	45'+	Slow Growing	Deciduous	19%
C	7	Cercis canadensis	Redbud	2 1/2"	25'+	Medium Growing	Ornamental	27%
D	9	Juniperus virginiana 'Taylor'	Taylor Juniper	6-8'	25'+	4' O.C.	Evergreen	34%
E	2	Quercus bicolor	Swamp White Oak	2 1/2"	45'+	Medium Growing	Deciduous	8%
a	32	Viburnum x burkwoodii	Burkwood Viburnum	24-30"		3' O.C.		
b	2	Buxus 'Green Mountain'	Green Mountain Boxwood	30-36"		as shown		
c	20	Buxus sinica var. 'Wingergreen'	Wintergreen Boxwood	18-24"		2.5' O.C.		
d	36	Juniperus virginiana 'Gray Owl'	Gray Owl Juniper	18-24"		4' O.C.		

**GENERAL NOTES:**

- 1) Openspace ratio is 49.42% Total Site 214,623 SF/Openspace 106,068 SF
- 2) Street trees - Edison Road 126.0 lf/50 = 2.5 or 3 Street Trees
- 3) All street trees will be located at least 3' from proposed curb.
- 4) All street trees will be located at least 10' from all storm sewer structures.
- 5) All street trees will be located at least 25' from all street lights, signs, and intersections.
- 6) An in-ground irrigation system shall be provided for landscape areas.



- Staking should be done only when:
- Planting in soft, loose soils
- Root balls with sandy soil, or wet clay
- Trees located in an extremely windy location



**"AVMATS HANGAR"**  
45,000 S.F. @ Spirit Airport

18301 Edison Ave, Chesterfield, Missouri

Revisions:

Date	Description	No.
7/25/18	City Comments	1
9/12/18	City Comments	2

Drawn: BAD  
Checked: DAD

DeLong andscape Architecture, LLC  
7620 West Bruno Ave  
St. Louis, MO. 63117  
(314) 346-4856  
delong.la@gmail.com

Sheet Title: LANDSCAPE PLAN  
Sheet No: L-1  
Date: 06-21-2018  
Job #: 171.002

**Landscape Plan**  
SCALE 1"=40'-0"