



690 Chesterfield Pkwy W • Chesterfield MO 63017-0760
 Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

Planning Commission Staff Report

Meeting Date: August 14th, 2023

From: Alyssa Ahner, Planner

Location: Spirit Valley Business Park II

Description: Spirit Valley Business Park II, Lot 3 (Tubular USA) SDSP: A Site Development Section Plan, Landscape Plan, Lighting Plan, and Architectural Elevations for an 8.15-acre tract of land located south of Olive Street Rd and west of Spirit Valley Central Dr.

PROPOSAL SUMMARY

Stock & Associates, on behalf of Tubular USA, has submitted a Site Development Section Plan, Landscape Plan, Lighting Plan, and Architectural Elevations for a proposed office/warehouse with drive-thru.

HISTORY OF SUBJECT SITE

Pre-1988: Subject site zoned "NU" Non-Urban.

2007: Subject site rezoned from "NU" Non-Urban to "PI" Planned Industrial under current [Ordinance 2413](#).

2010: A Site Development Concept Plan was approved.

2023: Improvement plans for the entirety of SVBP II, record plat, and Lot 3 were submitted.



Figure 1: Subject Site

ZONING & LAND USE

The subject site is zoned "PI" Planned Industrial under the provisions of [Ordinance 2413](#).

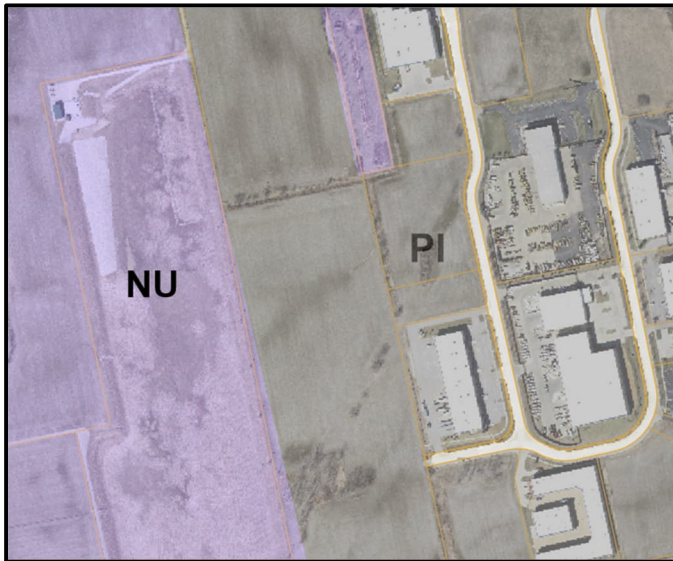


Figure 2: Zoning Map



Figure 3: Land Use Map

<u>Direction</u>	<u>Zoning</u>	<u>Land Use</u>
North	Planned Industrial	Undeveloped
South	Planned Industrial	Undeveloped
East	Planned Industrial	Industrial/Office/Warehouse
West	Non-Urban	Undeveloped

COMPREHENSIVE PLAN - Industrial

The City of Chesterfield provides a character description of this area: *"Conventional industrial park and associated activity involving an airport. These areas generally support manufacturing and production uses, including warehousing, distribution, light manufacturing, airport support businesses, and assembly operations. They are found in close proximity to major transportation corridors (i.e., highways and airports) and are generally buffered from surrounding development by transitional uses or landscaped areas that shield the view of structures, loading docks, or outdoor storage from adjacent properties"*. Industrial areas have the following Development Policies:

- Limit curb cuts on arterial streets, and where possible concentrate access at shared entrance points
- Primary entrance points should be aligned with access points immediately across the street
- Connectivity may vary as industrial parks may have low connectivity due to dead ends and lack of connection to adjacent areas
- Landscape buffering should be utilized between roadways to screen areas of surface parking
- Residential projects should be limited to areas outside of the Chesterfield Valley

STAFF ANALYSIS

A. Circulation, Parking, & Access

The development is proposing two curb cuts along what would be the newly constructed Spirit Valley West Dr road extension. Access would be taken off of a proposed cross-access easement that would be shared with the lots just south of the subject site. The second access would be solely for Lot 3 and would be located on the north end of the site where the parking is also depicted.

The improvement plans for the construction of the road extension are currently under review by Staff. The proposed public road may be seen in *Figure 4*. This road extension would provide connectivity between Spirit Valley Business Park Phase I and Spirit Valley Business Park Phase II.



Figure 4: Proposed Spirit Valley West Dr

The parking calculations are broken down between the "Office, general" use and the "Warehouse" use. The total parking spaces required for the site would be thirty-one (31) spaces. The applicant is proposing twenty-seven (27) parking spaces. There's potential in the northeast corner of the site for the developer to provide the additional four (4) spaces required thus a deferral of parking construction is being sought. Per [Section 405.04.040](#), "An applicant may request to defer the construction of the number of required parking spaces during the site plan, site development concept plan, site development section plan, or site development plan review process. A parking deferral means that some of the required parking spaces would not be provided until full build-out occurs, but that an area on the site would be reserved so that these spaces could be provided in the future upon demand or request by the City. Said demand would be made if the spaces were needed to meet the parking needs of the project."

B. Landscape Design & Screening

While a landscape buffer is not required along Spirit Valley West Dr., street trees are required and have been provided every fifty (50) feet. A fifteen (15) foot landscape buffer is required on along the eastern boundary of Lot 3 per [Site Specific Ordinance 2413](#). The applicant has provided a mixture of trees and shrubs where possible as there are restrictions on what may be planted within the existing conveyance channel and pipeline easement. Thirty percent (30%) openspace is requirement for the development and roughly thirty-seven percent (37%) is being provided.

A 6' tall trash enclosure is proposed in the northeast portion of the site. It will be constructed of tilt-up concrete panels to match the building and the gate will be constructed of cedar slats with a clear finish. The perimeter of the enclosure will be screened with a mixture of shrubs.

C. Lighting

There are fourteen (14) lighting standards proposed around the perimeter of the site and thirteen (13) wall packs proposed around the perimeter of the building. The cutsheets of the fixtures have been provided in the Applicant's packet. All lighting has been found to be code compliant.

D. Architectural Elevations

The building is proposed as tilt-up concrete panels which is what is predominantly seen throughout Phase 1 of Spirit Valley Business Park. There will be three different colors of grey/neutral colors used to accent the building and "break up the building wall surfaces" per the applicant. The entrance to the building will feature a tinted glass and clear anodized aluminum mullion system.

Roll-up doors are proposed on the north and south building elevations to accommodate the drive thru and the delivery of materials. The doors will share the similar neutral color scheme as the rest of the building.

E. Architectural Review Board

This project was reviewed by the Architectural Review Board on July 13th, 2023. At that time, the Board made a motion to recommend approval with the following condition:

- Revise the elevations to depict the location and color of the scuppers and downspouts.

The elevations have since been revised to depict the location and color of the scuppers and downspouts.

RENDERING



DEPARTMENT INPUT

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, and Architectural Elevations for Spirit Valley Business Park II, Lot 3 (Tubular USA) and found that it meets the requirements to be presented to the Planning Commission for review, and staff recommends action.

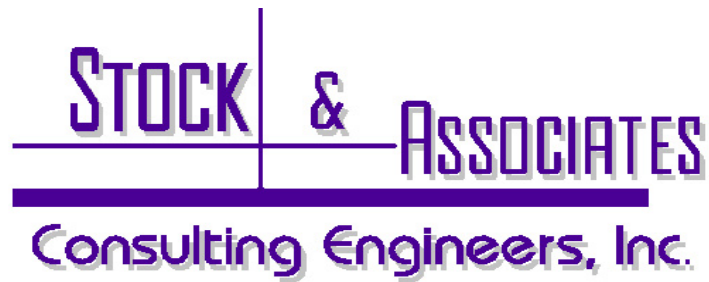
MOTION

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, and Architectural Elevations for Spirit Valley Business Park II, Lot 3 (Tubular USA)."
- 2) "I move to approve the Site Development Section Plan, Landscape Plan, Lighting Plan, and Architectural Elevations for Spirit Valley Business Park II, Lot 3 (Tubular USA) with the following conditions..." (Conditions may be added, eliminated, altered or modified)

Attachments:

1. Applicant Submittal Packet
2. Parking Deferral Request



June 20, 2023

City of Chesterfield
690 Chesterfield Parkway W
Chesterfield, MO. 63017-0760

Attention: Mr. Justin Wyse-City Planner

Re: Lot 3 Spirit Valley Business Phase 2 - Site Development Section Plan
for the Tubular USA
686 Spirit Valley West Drive
(Ordinance No. 2413)
(Stock Project No. 2022-7289)

Dear Mr. Wyse:

**Lot 3 Spirit Valley Business – Tubular USA
Request for Parking Deferral**

This firm is the professionally licensed civil engineering firm that has been engaged to prepare and process the Site Development Section Plan for Tubular USA. Included in that engagement is the preparation and submission of this Request for Parking Deferral, parking requirements are contained in Section 405.04.040 of the City of Chesterfield Unified Development Code (UDC). Under the provisions of the Off-Street Parking, Stacking and Loading Space Requirements, Office/Warehouse minimum parking requirements for the proposed facility, including the required 3.3 spaces per 1,000 square feet for office and 2 spaces for every 3 employees for warehouse. The calculated required parking spaces for the development is 31 spaces. Under these provisions, the requirements are as follows:

3.3spaces/1000 s.f. x 5,944 s.f. = **20 spaces**
2spaces/3 employees x 16 = **11 spaces**
Total Spaces Required: **31 spaces**

Tubular USA is proposing 27 spaces, which includes 2 accessible spaces. We are asking for a deferral of 4 spaces that we have shown as future parking spaces located in the northeast corner of the site. The parking shown meets the needs of Tubular USA and as indicated the additional spaces can be added without decreasing the required openspace.

As always, we greatly appreciate your cooperation.
Sincerely,



Joseph E. Fischer
Associate

CC: Mr. Bill Snyder, President, Tubular USA
Mr. Dirk Daveline, Vice President/CFO, Tubular USA
Mr. Dan Hayes, Vice President, NAI Desco
Mr. Bill Hardie, President, Keystone
Mr. Larry Milles, Principal, Gray Design
Mr. George M. Stock, President

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Product Features



Product Certifications



Interactive Menu

- Ordering Information [page 2](#)
- Mounting Details [page 3](#)
- Optical Distributions [page 5](#)
- Product Specifications [page 5](#)
- Energy and Performance Data [page 6](#)
- Control Options [page 10](#)

Quick Facts

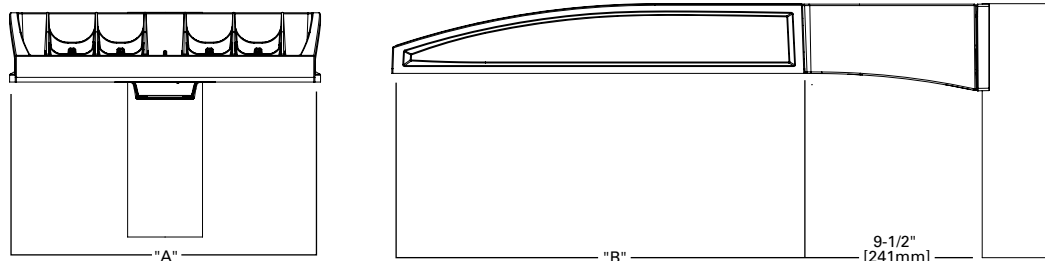
- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Connected Systems

- WaveLinx Lite
- WaveLinx

Dimensional Details

Standard Arm



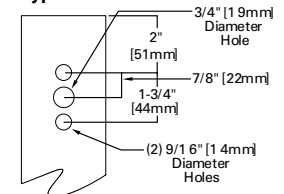
Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.95
5-6	22"	22"	39 lb	0.95
7-9	22"	28-1/8"	48 lb	1.1

NOTES:
For arm selection requirements and additional line art, see Mounting Details section.

NOTES:
1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified (3000K CCT and warmer only, fixed mounting options)

Pole Drilling Patterns

Type "N"




Ordering Information

SAMPLE NUMBER: GALN-SA4C-740-U-T4FT-GM

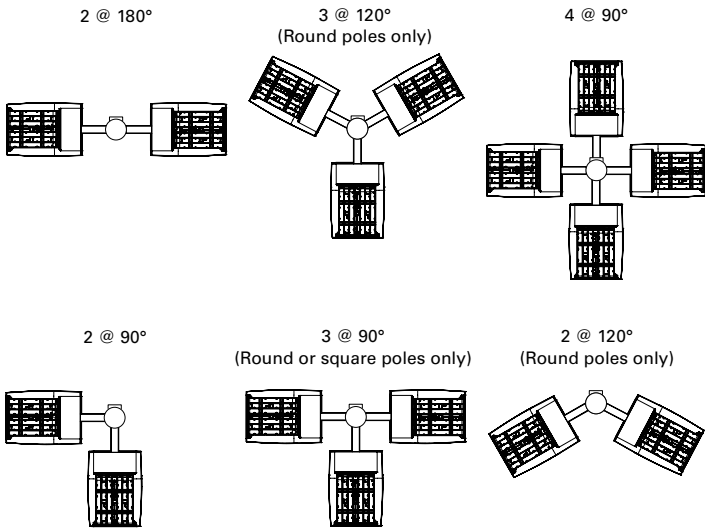
Product Family ^{1,2}	Light Engine		Color Temperature	Voltage	Distribution	Mounting	Finish
	Configuration	Drive Current					
GALN =Galleon II BAA-GALN =Galleon II Buy American Act Compliant ²⁷ TAA-GALN =Galleon II Trade Agreements Act Compliant ²⁷	SA1 =1 Square SA2 =2 Squares SA3 =3 Squares SA4 =4 Squares SA5 =5 Squares SA6 =6 Squares SA7 =7 Squares SA8 =8 Squares SA9 =9 Squares	A =600mA B =800mA C =1000mA D =1200mA ^{4,17} Z =Configured ³³	722 =70CRI, 2200K 727 =70CRI, 2700K 730 =70CRI, 3000K 735 =70CRI, 3500K 740 =70CRI, 4000K 750 =70CRI, 5000K 760 =70CRI, 6000K 827 =80CRI, 2700K 830 =80CRI, 3000K AMB =Amber, 590nm ^{15,17}	U =120-277V H =347V-480V ^{7,30} 1=120V 2=208V 3=240V 4=277V 8=480V ⁷ 9=347V ^{7,30} DV =277V-480V DuraVolt Drivers ^{29,30,31}	T2 =Type II T2R =Type II Roadway T3 =Type III T3R =Type III Roadway T4FT =Type IV Forward Throw T4W =Type IV Wide 5NQ =Type V Narrow 5MQ =Type V Square Medium 5WQ =Type V Square Wide SL2 =Type II w/Spill Control SL3 =Type III w/Spill Control SL4 =Type IV w/Spill Control SLL =90° Spill Light Eliminator Left SLR =90° Spill Light Eliminator Right RW =Rectangular Wide Type I AFL =Automotive Frontline	[Blank] =Standard Pole Mount Arm QM =Standard Pole Mount Arm with Quick Mount Adaptor PA =Pole Mount, Adjustable SP =Slipfitter, Adjustable ⁸ MA =Mast Arm, Fixed WM =Wall Mount, Fixed WA =Wall Mount, Adjustable UP =Upswept Arm	AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White RALXX =Custom Color
Options (Add as Suffix)			Controls and Systems Options (Add as Suffix)			Accessories (Order Separately) ²⁸	
DIM =External 0-10V Dimming Leads ²⁰ F =Single Fuse (120, 277 or 347V Specify Voltage) FF =Double Fuse (208, 240 or 480V Specify Voltage) 20K =20kV UL 1449 fused surge protective device ¹⁰ 2L =Two Circuits ¹⁰ HA =50°C High Ambient HSS =Installed House Side Shield ¹⁸ GRSBK =Glare Reducing Shield, Black ²³ GRSWH =Glare Reducing Shield, White ²³ LCF =Light Square Trim Painted to Match Housing ²⁶ TH =Tool-less Door Hardware ⁵ CC =Coastal Construction finish ³ L90 =Optics Rotated 90° Left R90 =Optics Rotated 90° Right AHD145 =After Hours Dim, 5 Hours ²² AHD245 =After Hours Dim, 6 Hours ²² AHD255 =After Hours Dim, 7 Hours ²² AHD355 =After Hours Dim, 8 Hours ²² DALI =DALI Drivers			BPC =Button Type Photocontrol ⁶ PR =NEMA 3-PIN Photocontrol Receptacle PR7 =NEMA 7-PIN Photocontrol Receptacle ²¹ FADC =Field Adjustable Dimming Controller ³² SPB2 =Dimming Motion Sensor, 9'-20' mounting ²⁴ SPB4 =Dimming Motion Sensor, 21'-40' mounting ²⁴ SPB2/X =Dimming Motion Sensor, limited square count, 9'-20' mounting ²⁴ SPB4/X =Dimming Motion Sensor, limited square count, 21'-40' mounting ²⁴ ZW =WaveLinX-enabled 4-PIN Twistlock Receptacle ¹⁹ ZD =SR Driver-enabled 4-PIN Twistlock Receptacle ¹⁹ ZW-WOBXX =WaveLinX Lite, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{19,12,13} ZW-WOFXX =WaveLinX Lite, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{19,12,13} ZD-WOBXX =WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{19,12,13} ZD-WOFXX =WaveLinX Lite, SR Driver, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{19,12,13} ZW-SWPD4XX =WaveLinX Pro, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{19,12,13} ZW-SWPD5XX =WaveLinX Pro, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{19,12,13} ZD-SWPD4XX =WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{19,12,13} ZD-SWPD5XX =WaveLinX Pro, SR Driver, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{19,12,13} DIM10-L20 =Synapse Occupancy Sensor (9'-20' Mounting) ¹⁹ DIM10-L40 =Synapse Occupancy Sensor (21'-40' Mounting) ¹⁹			OA/RA1013 =Photocontrol Shorting Cap MA1252 =10kV Surge Module Replacement MA1036-XX =Single Tenon Adapter for 2-3/8" O.D. Tenon MA1037-XX =2@180° Tenon Adapter for 2-3/8" O.D. Tenon MA1197-XX =3@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1188-XX =4@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1189-XX =2@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1190-XX =3@90° Tenon Adapter for 2-3/8" O.D. Tenon MA1191-XX =2@120° Tenon Adapter for 2-3/8" O.D. Tenon MA1038-XX =Single Tenon Adapter for 3-1/2" O.D. Tenon MA1039-XX =2@180° Tenon Adapter for 3-1/2" O.D. Tenon MA1192-XX =3@120° Tenon Adapter for 3-1/2" O.D. Tenon MA1193-XX =4@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1194-XX =2@90° Tenon Adapter for 3-1/2" O.D. Tenon MA1195-XX =3@90° Tenon Adapter for 3-1/2" O.D. Tenon SRA238 =Adapter kit for mounting to 2-3/8" O.D. Tenon LS/HSS =Field Installed House Side Shield ^{9,18} LS/GRSBK-2PK =Glare Reducing Shield, Black ^{9,23} LS/GRSWH-2PK =Glare Reducing Shield, White ^{9,23} LS/PFS =Perimeter Shield, Black ¹⁸ WOLC-7P-10A =WaveLinX Outdoor Control Module ^{11,19} WOB-XX =WaveLinX Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 7' - 15' Mounting ^{12,13,14,19} WOF-XX =WaveLinX Lite Sensor, Dimming Motion and Daylight, Bluetooth Programmable, 15' - 40' Mounting ^{12,13,14,19} SWPD4-XX =WaveLinX Sensor, Dimming Motion and Daylight, WAC Programmable, 7' - 15' Mounting ^{12,13,14,19} SWPD5-XX =WaveLinX Sensor, Dimming Motion and Daylight, WAC Programmable, 15' - 40' Mounting ^{12,13,14,19}	
<p>NOTES:</p> <ol style="list-style-type: none"> Customer is responsible for engineering analysis to confirm pole and fixture compatibility for all applications. Refer to our white paper WP513001EN for additional support information. DesignLights Consortium® Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. Not available with TH option. Drive current 1200mA not available with color temperatures 722, 727 or 830 when either HA or HSS options are selected. TH option not 3G rated. Not available with Coastal Construction (CC) option. Not available with voltage options H, 8 or 9. Requires the use of an internal step down transformer when combined with sensor options. Not available in combination with the HA high ambient and sensor options at 1A. Adjustable Slipfitter arm limited to vertical 3" tenon. For mounting to 2-3/8" O.D. tenons, order accessory SRA238. One required for each Light Square. 2L is not available with SPB at 347V or 480V. Not available with WaveLinX or Enlighted sensors, or 20kV surge option. Requires PR7. Replace XX with sensor color (WH, BZ or BK.) WAC Gateway required to enable field-configurability. Order WAC-PoE and WP0E-120 (10V to PoE injector) power supply if needed. WAC not required for LC Bluetooth sensors. Requires ZW or ZD receptacle. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. Set of 4 pcs. One set required per Light Square. Not available with HA option. Not for use with 5NQ, 5MQ, 5WQ or RW optics. Cannot be used with other control options. Low voltage control lead brought out 18" outside fixture. Not available with DALI or integrated controls options Not available if any SPB, LWR, or WaveLinX sensor is selected. Motion sensor has an integral photocell. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocell control accessory. Not for use with T4FT, T4W or SL4 optics. See IES files for details. Sensor configuration mobile application required for configuration. See controls page for details. Replace X with number of Light Squares controlled by the SPB, referencing the "SPB/X Availability Table" on the controls page. Not available with HSS, GRSWH or GRSBK. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC.PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.Signify.com/DuraVolt for more information. 480V not to be used with ungrounded or impedance grounded systems. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB. Cannot be used with PR7 or other motion response control options. Use GALN Product Configurator to specify lumen output, drive current and wattage. Not available with AMB. 							

LumenSafe Integrated Network Security Camera Technology Options (Add as Suffix)

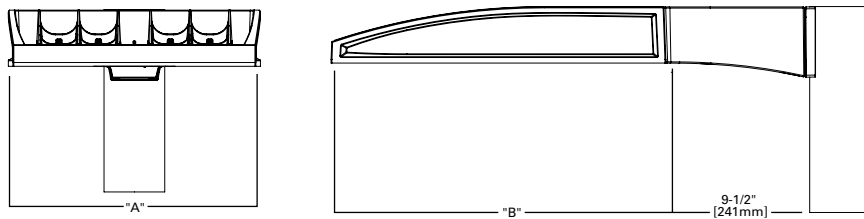
Product Family	Camera Type	Data Backhaul
L =LumenSafe Technology 	D =Standard Dome Camera H =Hi-Res Dome Camera Z =Remote PTZ Camera	C =Cellular, No SIM A =Cellular, AT&T V =Cellular, Verizon S =Cellular, Sprint R =Cellular, Rogers W =Wi-Fi Networking w/ Omni-Directional Antenna E =Ethernet Networking

Mounting Details

Pole Configuration Options

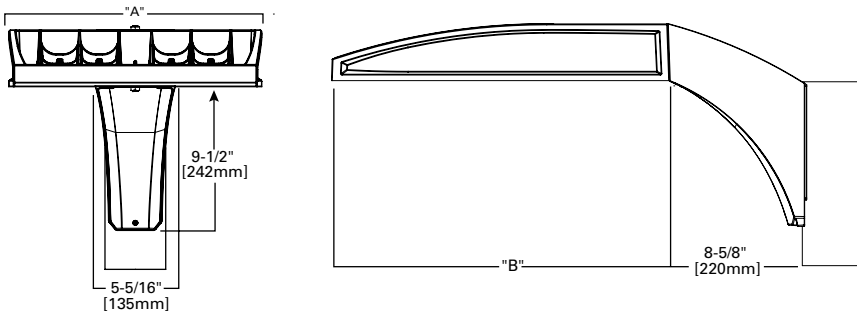


Quick Mount Arm (QM) *



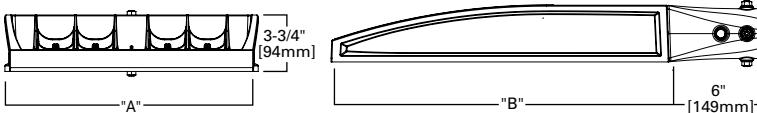
*NOTE: Use Type N drilling pattern

Upswept Arm (UP) *

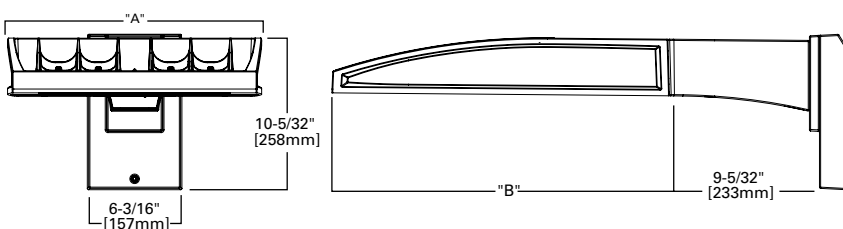


*NOTE: Use Type N, R or M drilling pattern

Mast Arm, Fixed (MA)

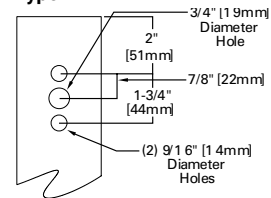


Wall Mount, Fixed (WM)

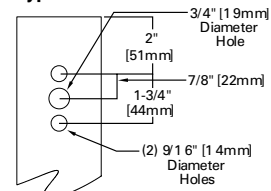


Pole Drilling Patterns

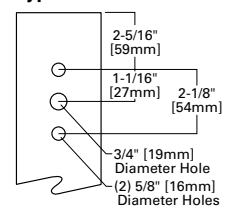
Type "N"



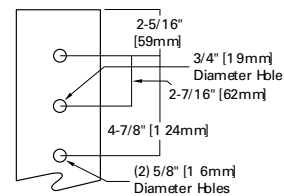
Type "N"



Type "R"

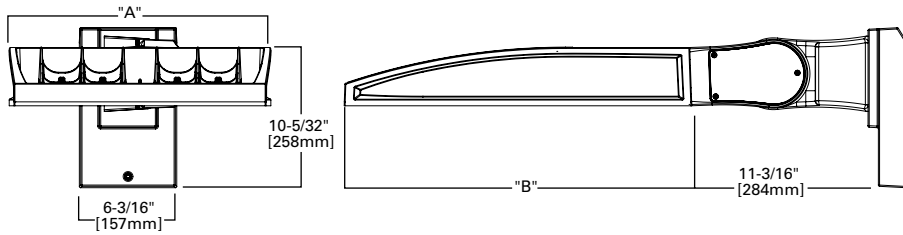


Type "M"

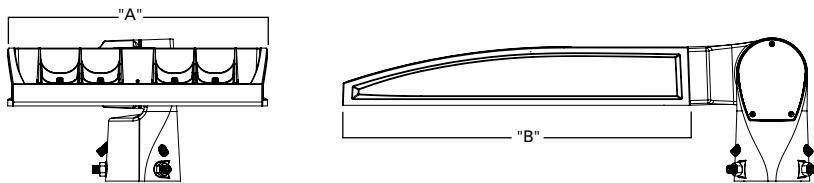


Mounting Details

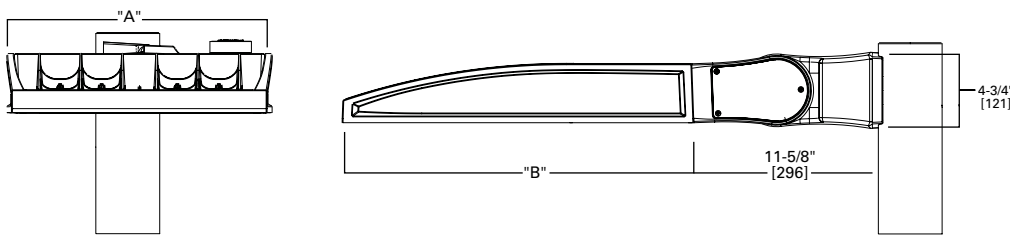
Wall Mount, Adjustable (WA)



Slipfitter, Adjustable (SP)

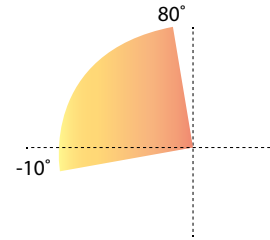


Pole Mount, Adjustable Arm (PA)



Adjustable Arm Range of Motion

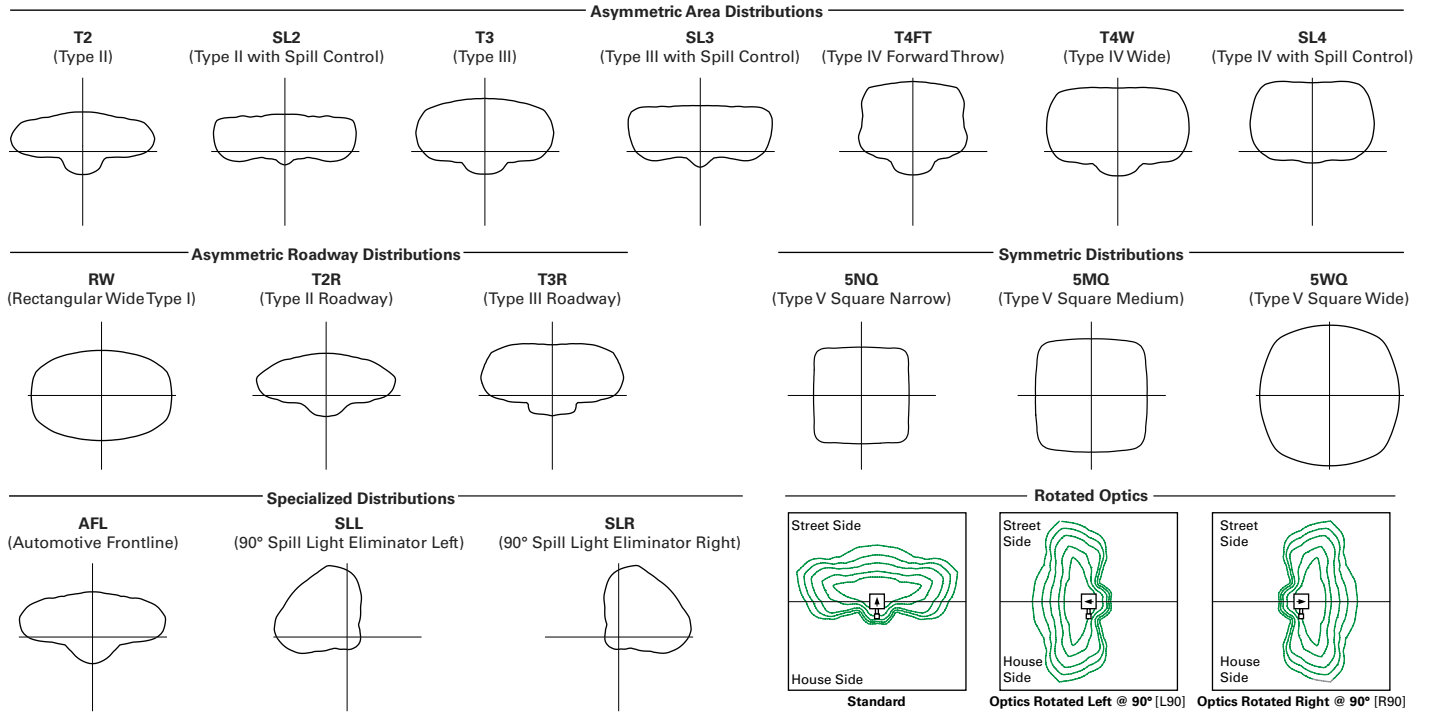
- Wall Mount (WA), Slipfitter (SP) and Pole Mount (PA)
- Adjustable in increments of 5°
- Must maintain downward facing orientation



Fixture Weights and EPAs

Tilt Angle (Degrees)	Number of Light Squares	Weight	1 @ 90°	2 @ 180°	2 @ 90°	2 @ 120°	3 @ 90°	3 @ 120°	4 @ 90°
0°	1-4	33.5 lb (15.2 kg)	0.85	1.70	1.46	1.66	2.31	2.25	2.35
	5-6	43.5 lb (19.7 kg)	0.86	1.71	1.62	1.80	2.49	2.35	2.50
	7-9	52.5 lb (23.8 kg)	0.98	1.95	1.75	1.98	2.73	2.55	2.76
15°	1-4	33.5 lb (15.2 kg)	1.10	1.71	1.95	2.26	2.81	3.30	2.87
	5-6	43.5 lb (19.7 kg)	1.42	1.71	2.27	2.72	3.13	3.63	3.15
	7-9	52.5 lb (23.8 kg)	1.69	1.96	2.67	3.22	3.65	4.38	3.72
30°	1-4	33.5 lb (15.2 kg)	1.72	1.81	2.58	3.21	3.44	4.59	3.53
	5-6	43.5 lb (19.7 kg)	2.26	2.29	3.11	4.00	3.97	5.27	4.00
	7-9	52.5 lb (23.8 kg)	2.75	2.85	3.73	4.83	4.71	6.45	4.81
45°	1-4	33.5 lb (15.2 kg)	2.25	2.36	3.10	4.00	3.96	5.63	4.08
	5-6	43.5 lb (19.7 kg)	2.96	2.99	3.81	5.06	4.67	6.49	4.71
	7-9	52.5 lb (23.8 kg)	3.63	3.76	3.73	6.17	5.59	8.03	5.73
60°	1-4	33.5 lb (15.2 kg)	2.63	2.77	3.49	4.58	4.34	6.21	4.48
	5-6	43.5 lb (19.7 kg)	3.46	3.51	4.32	5.84	5.19	7.01	5.22
	7-9	52.5 lb (23.8 kg)	4.27	4.44	5.25	7.15	6.23	8.80	6.40

Optical Distributions



Product Specifications

Construction

- Die-cast aluminum housing and heat sink
- Three housing sizes, using 1 to 9 light squares

Optics

- High-efficiency injection-molded AccuLED Optics technology
- 16 optical distributions for area site and roadway applications
- 3 shielding options include HSS, GRS and PFS
- IDA Certified (3000K CCT and warmer only, fixed mounting options)

Electrical

- Removable power tray assembly includes drivers, surge modules and control modules for ease of maintenance and serviceability
- Standard with 0-10V dimming
- Standard with 10kV surge module, optional 20kV surge module

- Suitable for operation in -40°C to 40°C ambient environments. Optional 50°C high ambient (HA) configuration

Mounting

- Arms are factory installed, enabling closed-housing installation
- All arms suitable for round or square pole installation
- All arms provide clearance for multiple fixture installations at 90°

Finish

- 6 standard finishes use super durable TGIC polyester powder coat paint, providing 2.5 mil nominal thickness and salt-spray tested to 3,000 hours per ASTM B117
- RAL and custom color matches available
- Coastal Construction (CC) option salt-spray tested to 5,000 hours per ASTM B117, achieving a scribe rating of 9 per ASTM D1654

Typical Applications

- Outdoor, Parking Lots, Walkways, Roadways, Building Areas

Warranty

- Five year limited warranty

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

* Supported by IES TM-21 standards

** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

Energy and Performance Data

Lumen Maintenance (TM-21)

Drive Current	Ambient Temperature	25,000 hours*	50,000 hours*	60,000 hours*	100,000 hours**	Theoretical L70 hours**
Up to 1A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.7%	98.3%	98.1%	97.4%	> 1.9M
	50°C	98.2%	97.2%	96.8%	95.2%	> 851,000
1.2A	25°C	99.4%	99.0%	98.9%	98.3%	> 2.4M
	40°C	98.5%	97.9%	97.7%	96.7%	> 1.3M

Lumen Multiplier

Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

* Supported by IES TM-21 standards

** Theoretical values represent estimations commonly used; however, refer to the IES position on LED Product Lifetime Prediction, IES PS-10-18, explaining proper use of IES TM-21 and LM-80.

FADC Settings

SA1-SA3 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	25%
2	48%
3	56%
4	65%
5	75%
6	80%
7	85%
8	90%
9	95%
10	100%

FADC Settings

SA4-SA6 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	14%
2	25%
3	32%
4	43%
5	49%
6	57%
7	65%
8	72%
9	80%
10	100%

FADC Settings

SA7-SA9 (A, B, C, D Drive Current)

FADC Position	Percent of Typical Lumen Output
1	19%
2	38%
3	47%
4	63%
5	74%
6	85%
7	95%
8	97%
9	100%
10	100%

Performance Table, Drive Current "A" (615mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		33	63	93	121	154	182	215	244	274
Input Current @ 120V		0.283	0.529	0.778	1.058	1.310	1.556	1.839	2.089	2.335
Input Current @ 208V		0.165	0.309	0.460	0.618	0.771	0.919	1.082	1.240	1.379
Input Current @ 240V		0.143	0.270	0.398	0.540	0.671	0.796	0.944	1.078	1.194
Input Current @ 277V		0.125	0.237	0.352	0.473	0.581	0.705	0.818	0.962	1.057
Input Current @ 347V		0.098	0.181	0.272	0.362	0.454	0.544	0.636	0.738	0.816
Input Current @ 480V		0.073	0.133	0.200	0.267	0.335	0.400	0.470	0.554	0.600
Optics										
T2	4000K Lumens	4,654	9,249	13,730	18,194	23,032	27,273	32,034	37,138	41,694
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	141	147	148	150	150	150	149	152	152
T2R	4000K Lumens	4,716	9,372	13,913	18,437	23,340	27,637	32,462	37,634	42,251
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
	Lumens per Watt	143	149	150	152	152	152	151	154	154
T3	4000K Lumens	4,589	9,120	13,538	17,940	22,711	26,892	31,587	36,620	41,112
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	139	145	146	148	147	148	147	150	150
T3R	4000K Lumens	4,735	9,411	13,970	18,513	23,436	27,751	32,596	37,790	42,425
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	143	149	150	153	152	152	152	155	155
T4FT	4000K Lumens	4,617	9,176	13,622	18,051	22,851	27,058	31,782	36,847	41,366
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	140	146	146	149	148	149	148	151	151
T4W	4000K Lumens	4,631	9,203	13,662	18,104	22,918	27,138	31,876	36,955	41,488
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	150	149	149	148	151	151
SL2	4000K Lumens	4,619	9,180	13,627	18,058	22,860	27,069	31,795	36,861	41,383
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
	Lumens per Watt	140	146	147	149	148	149	148	151	151
SL3	4000K Lumens	4,586	9,115	13,531	17,931	22,699	26,879	31,571	36,602	41,091
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	139	145	145	148	147	148	147	150	150
SL4	4000K Lumens	4,529	9,002	13,363	17,708	22,417	26,544	31,178	36,146	40,580
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	137	143	144	146	146	146	145	148	148
5NQ	4000K Lumens	4,829	9,598	14,247	18,880	23,901	28,301	33,242	38,539	43,266
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
	Lumens per Watt	146	152	153	156	155	155	155	158	158
5MQ	4000K Lumens	4,853	9,645	14,318	18,974	24,020	28,442	33,407	38,731	43,482
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	147	153	154	157	156	156	155	159	159
5WQ	4000K Lumens	4,843	9,625	14,288	18,934	23,969	28,382	33,337	38,649	43,390
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	147	153	154	156	156	156	155	158	158
SLL/SLR	4000K Lumens	3,989	7,927	11,768	15,594	19,741	23,375	27,456	31,831	35,736
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
	Lumens per Watt	121	126	127	129	128	128	128	130	130
RW	4000K Lumens	4,774	9,488	14,085	18,665	23,628	27,979	32,863	38,100	42,774
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	145	151	151	154	153	154	153	156	156
AFL	4000K Lumens	4,673	9,286	13,785	18,268	23,126	27,384	32,164	37,290	41,864
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3
	Lumens per Watt	142	147	148	151	150	150	150	153	153

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Performance Table, Drive Current "B" (800mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		44	82	121	164	204	243	286	325	364
Input Current @ 120V		0.367	0.689	1.014	1.378	1.704	2.027	2.393	2.716	3.041
Input Current @ 208V		0.213	0.401	0.594	0.802	0.997	1.188	1.400	1.605	1.782
Input Current @ 240V		0.184	0.347	0.510	0.694	0.860	1.021	1.210	1.386	1.531
Input Current @ 277V		0.160	0.303	0.449	0.605	0.757	0.898	1.065	1.242	1.347
Input Current @ 347V		0.125	0.235	0.355	0.471	0.592	0.710	0.828	0.958	1.065
Input Current @ 480V		0.092	0.172	0.258	0.344	0.432	0.517	0.605	0.706	0.775
Optics										
T2	4000K Lumens	5,790	11,508	17,083	22,638	28,658	33,935	39,859	46,210	51,879
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	132	140	141	138	140	140	139	142	143
T2R	4000K Lumens	5,868	11,662	17,311	22,941	29,041	34,388	40,391	46,827	52,572
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
	Lumens per Watt	133	142	143	140	142	142	141	144	144
T3	4000K Lumens	5,710	11,347	16,845	22,322	28,258	33,461	39,303	45,565	51,155
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5
	Lumens per Watt	130	138	139	136	139	138	137	140	141
T3R	4000K Lumens	5,892	11,710	17,383	23,035	29,161	34,530	40,558	47,020	52,788
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	134	143	144	140	143	142	142	145	145
T4FT	4000K Lumens	5,745	11,418	16,949	22,460	28,433	33,668	39,546	45,847	51,471
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
T4W	4000K Lumens	5,762	11,451	16,999	22,526	28,517	33,767	39,662	45,982	51,622
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	140	140	137	140	139	139	141	142
SL2	4000K Lumens	5,747	11,422	16,956	22,469	28,444	33,681	39,561	45,865	51,491
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	131	139	140	137	139	139	138	141	141
SL3	4000K Lumens	5,707	11,342	16,836	22,311	28,244	33,444	39,283	45,542	51,129
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	130	138	139	136	138	138	137	140	140
SL4	4000K Lumens	5,636	11,201	16,627	22,034	27,893	33,028	38,794	44,976	50,493
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	128	137	137	134	137	136	136	138	139
5NQ	4000K Lumens	6,009	11,942	17,727	23,492	29,739	35,214	41,362	47,953	53,835
	BUG Rating	B2-U0-G1	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
	Lumens per Watt	137	146	147	143	146	145	145	148	148
5MQ	4000K Lumens	6,039	12,001	17,816	23,609	29,887	35,389	41,568	48,191	54,103
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	137	146	147	144	147	146	145	148	149
5WQ	4000K Lumens	6,026	11,976	17,778	23,559	29,824	35,315	41,480	48,090	53,989
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	137	146	147	144	146	145	145	148	148
SLL/SLR	4000K Lumens	4,963	9,863	14,642	19,403	24,563	29,085	34,163	39,607	44,465
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	113	120	121	118	120	120	119	122	122
RW	4000K Lumens	5,940	11,806	17,526	23,224	29,400	34,813	40,891	47,407	53,222
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	135	144	145	142	144	143	143	146	146
AFL	4000K Lumens	5,814	11,555	17,153	22,730	28,775	34,073	40,021	46,398	52,090
	BUG Rating	B1-U0-G1	B2-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4
	Lumens per Watt	132	141	142	139	141	140	140	143	143

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Performance Table, Drive Current "C" (1050mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		57	108	160	213	269	321	377	429	481
Input Current @ 120V		0.478	0.905	1.338	1.810	2.244	2.675	3.150	3.584	4.013
Input Current @ 208V		0.279	0.532	0.780	1.064	1.313	1.559	1.845	2.093	2.339
Input Current @ 240V		0.243	0.458	0.664	0.916	1.123	1.328	1.582	1.788	1.991
Input Current @ 277V		0.213	0.404	0.582	0.808	0.997	1.164	1.401	1.589	1.745
Input Current @ 347V		0.164	0.322	0.471	0.644	0.795	0.943	1.117	1.269	1.414
Input Current @ 480V		0.121	0.235	0.341	0.469	0.579	0.681	0.814	0.923	1.022
Optics										
T2	4000K Lumens	7,154	14,219	21,107	27,970	35,408	41,927	49,247	57,094	64,098
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	126	132	132	131	132	131	131	133	133
T2R	4000K Lumens	7,250	14,408	21,389	28,344	35,881	42,487	49,905	57,857	64,954
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	127	133	134	133	133	132	132	135	135
T3	4000K Lumens	7,054	14,020	20,812	27,580	34,914	41,342	48,560	56,297	63,203
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
T3R	4000K Lumens	7,280	14,468	21,477	28,461	36,029	42,663	50,111	58,096	65,222
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	128	134	134	134	134	133	133	135	136
T4FT	4000K Lumens	7,098	14,107	20,941	27,751	35,130	41,598	48,860	56,646	63,594
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
T4W	4000K Lumens	7,119	14,148	21,003	27,832	35,233	41,720	49,004	56,812	63,781
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	131	131	130	130	132	133
SL2	4000K Lumens	7,101	14,112	20,949	27,761	35,144	41,614	48,879	56,668	63,619
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	125	131	131	130	131	130	130	132	132
SL3	4000K Lumens	7,051	14,013	20,802	27,566	34,897	41,321	48,535	56,269	63,172
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	124	130	130	129	130	129	129	131	131
SL4	4000K Lumens	6,963	13,839	20,543	27,223	34,463	40,808	47,932	55,569	62,386
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	122	128	128	128	128	127	127	130	130
5NQ	4000K Lumens	7,424	14,755	21,903	29,025	36,743	43,508	51,104	59,247	66,515
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
	Lumens per Watt	130	137	137	136	137	136	136	138	138
5MQ	4000K Lumens	7,461	14,828	22,012	29,169	36,926	43,725	51,359	59,542	66,846
	BUG Rating	B3-U0-G1	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	138	137	137	136	136	139	139
5WQ	4000K Lumens	7,445	14,797	21,966	29,108	36,849	43,633	51,250	59,417	66,705
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	131	137	137	137	137	136	136	139	139
SLL/SLR	4000K Lumens	6,132	12,187	18,091	23,973	30,348	35,936	42,210	48,935	54,938
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
	Lumens per Watt	108	113	113	113	113	112	112	114	114
RW	4000K Lumens	7,340	14,587	21,653	28,694	36,325	43,013	50,522	58,573	65,757
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	129	135	135	135	135	134	134	137	137
AFL	4000K Lumens	7,183	14,276	21,193	28,084	35,552	42,098	49,448	57,327	64,359
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G4
	Lumens per Watt	126	132	132	132	132	131	131	134	134

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Performance Table, Drive Current "D" (1200mA)

Number of Light Squares		1	2	3	4	5	6	7	8	9
Nominal Power (Watts)		65	125	184	245	309	368	433	493	552
Input Current @ 120V		0.546	1.041	1.535	2.082	2.578	3.070	3.619	4.114	4.605
Input Current @ 208V		0.318	0.610	0.893	1.219	1.504	1.786	2.113	2.397	2.679
Input Current @ 240V		0.276	0.523	0.758	1.046	1.282	1.516	1.806	2.041	2.274
Input Current @ 277V		0.241	0.460	0.662	0.920	1.133	1.325	1.593	1.807	1.987
Input Current @ 347V		0.187	0.370	0.543	0.740	0.915	1.085	1.285	1.459	1.628
Input Current @ 480V		0.138	0.269	0.391	0.537	0.663	0.782	0.932	1.057	1.173
Optics										
T2	4000K Lumens	7,872	15,645	23,225	30,777	38,962	46,135	54,189	62,824	70,530
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	126	126	125	125	127	128
T2R	4000K Lumens	7,977	15,854	23,535	31,188	39,482	46,751	54,913	63,663	71,472
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	127	128	127	127	129	129
T3	4000K Lumens	7,762	15,427	22,901	30,348	38,418	45,491	53,433	61,947	69,546
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
T3R	4000K Lumens	8,010	15,920	23,632	31,317	39,645	46,944	55,139	63,925	71,767
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	123	127	128	128	128	128	127	130	130
T4FT	4000K Lumens	7,810	15,522	23,043	30,535	38,655	45,772	53,763	62,330	69,976
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
T4W	4000K Lumens	7,833	15,568	23,110	30,625	38,769	45,907	53,921	62,513	70,182
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	121	125	126	125	125	125	125	127	127
SL2	4000K Lumens	7,813	15,528	23,052	30,547	38,670	45,790	53,784	62,354	70,003
	BUG Rating	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	120	124	125	125	125	124	124	126	127
SL3	4000K Lumens	7,758	15,419	22,889	30,332	38,398	45,468	53,406	61,916	69,511
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
	Lumens per Watt	119	123	124	124	124	124	123	126	126
SL4	4000K Lumens	7,662	15,228	22,605	29,955	37,921	44,903	52,742	61,146	68,646
	BUG Rating	B1-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	118	122	123	122	123	122	122	124	124
5NQ	4000K Lumens	8,169	16,235	24,101	31,938	40,431	47,874	56,232	65,193	73,190
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
	Lumens per Watt	126	130	131	130	131	130	130	132	133
5MQ	4000K Lumens	8,210	16,316	24,221	32,097	40,632	48,113	56,512	65,517	73,554
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	131	132	131	131	131	131	133	133
5WQ	4000K Lumens	8,192	16,282	24,170	32,029	40,546	48,011	56,393	65,379	73,399
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
	Lumens per Watt	126	130	131	131	131	130	130	133	133
SLL/SLR	4000K Lumens	6,747	13,410	19,906	26,379	33,394	39,542	46,445	53,846	60,451
	BUG Rating	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5
	Lumens per Watt	104	107	108	108	108	107	107	109	110
RW	4000K Lumens	8,076	16,050	23,826	31,574	39,970	47,329	55,592	64,450	72,356
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5
	Lumens per Watt	124	128	129	129	129	129	128	131	131
AFL	4000K Lumens	7,904	15,709	23,320	30,902	39,120	46,323	54,410	63,079	70,817
	BUG Rating	B1-U0-G1	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4
	Lumens per Watt	122	126	127	126	127	126	126	128	128

* Nominal data for 70 CRI. ** For additional performance data, please reference the Galleon Supplemental Performance Guide.

Control Options

0-10V (DIM)

This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

Photocontrol (BPC, PR and PR7)

Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable "dusk-to-dawn" lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD)

This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a "dusk-to-dawn" period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB)

These passive infrared (PIR) sensors are factory installed in the luminaire housing. When the SPB sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when no motion is detected. After a period of time, the luminaire turns off, and when motion is detected, the luminaire returns to full light output. The SPB sensor default parameters are listed in the table below, and can be configured utilizing the Sensor Configuration mobile application for iOS and Android devices. The SPB/X is configured to control only the specified number of light squares. An integral photocontrol can be activated with the app for "dusk-to-dawn" control or daylight harvesting - the factory default is off. Three sensor lenses are available to optimize the coverage pattern for mounting heights from 8'-40'. Four sensor colors are available; Bronze, Black, Gray and White, and are automatically selected based on the luminaire finish as indicated by the table below.

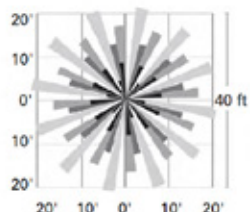
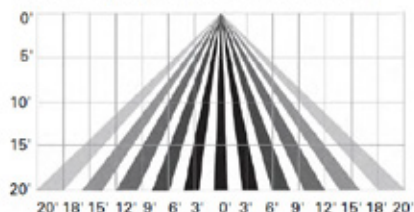
SPB sensor finish matched to luminaire finish		
Luminaire Finish		SPB Sensor Finish
WH	White	White
BK	Black	Black
GM	Graphite Metallic	Black
BZ	Bronze	Bronze
AP	Gray	Gray
DP	Dark Platinum	Gray

SPB/X Availability Table	
Fixture Square Count	Available SPB/X Square Count
1	Not Available
2	Not Available
3	Not Available
4	2
5	2 or 3
6	3
7	2, 3, 4 or 5
8	2, 3, 5 or 6
9	3 or 6

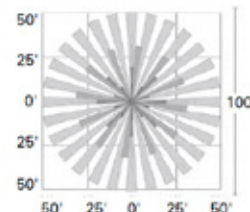
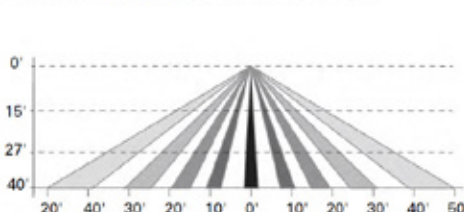
WaveLinx Wireless Control and Monitoring System

Operates on a wireless mesh network based on IEEE 802.15.4 standards enabling wireless control of outdoor lighting. WaveLinx and WaveLinx Lite sensors utilize the Zhaga Book 18 compliant 4-PIN receptacle (ZD or ZW), while the WOLC control module utilizes a 7-PIN receptacle. ZW option provides 4-PIN receptacle and control module to enable future installation of WaveLinx sensors. ZD option provides 4-PIN receptacle and sensor-ready (SR) driver to enable future installation of WaveLinx sensors, power monitoring, and advanced functionality. WaveLinx (SWPD4 to SWPD5) outdoor wireless sensors offer passive infrared (PIR) occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx mobile application for set-up and configuration. At least one Wireless Area Controller (WAC) is required for full functionality and remote communication (including adjustment of any factory pre-sets). WaveLinx Lite (WOF and WOB) outdoor wireless sensors provide PIR occupancy and photocell for closed loop daylight harvesting, and can be factory or field-installed. Sensors are factory preset to dim down to 50% after 15 minutes of no motion detected. Two lens options are available for mounting heights of 7' to 40'. Use the WaveLinx Lite mobile application for set-up and configuration. WAC not required. WaveLinx Outdoor Control Module (WOLC-7P-10A) accessory provides a photocontrol enabling astronomic or time-based schedules to provide ON, OFF and dimming control of fixtures utilizing a 7-PIN receptacle. The out-of-box functionality is ON at dusk and OFF at dawn.

For mounting heights up to 15' (SWPD4 and WOB)



For mounting heights up to 40' (SWPD5 and WOF)



LumenSafe Integrated Network Security Camera (LD)

Cooper Lighting Solutions brings ease of camera deployment to a whole new level. No additional wiring is needed beyond providing line power to the luminaire. A variety of networking options allows security integrators to design the optimal solution for active surveillance. As the ideal solution to meet the needs for active surveillance, the LumenSafe integrated network camera is a streamlined, outdoor-ready fixed dome that provides HDTV 1080p video. This IP camera is optimally designed for deployment in the video management system or security software platform of choice.

Synapse (DIM10)

SimplySNAP integrated wireless controls system by Synapse. Includes factory installed DIM10 Synapse control module and FSP-201 motion sensor; requires additional Synapse system components for operation. Contact Synapse at www.synapsewireless.com for product support, warranty and terms and conditions.

Project		Catalog #		Type	
Prepared by		Notes		Date	



McGraw-Edison

GWC Galleon Wall

Wall Mount Luminaire

Product Features



Product Certifications



Interactive Menu

- Ordering Information [page 2](#)
- Product Specifications [page 2](#)
- Optical Configurations [page 3](#)
- Energy and Performance Data [page 4](#)
- Control Options [page 6](#)

Quick Facts

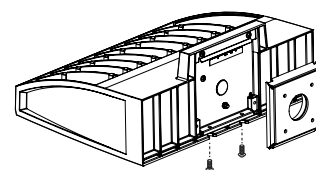
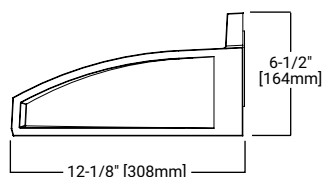
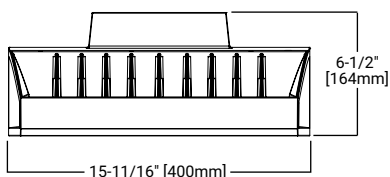
- Choice of thirteen high-efficiency, patented AccuLED Optics
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Connected Systems

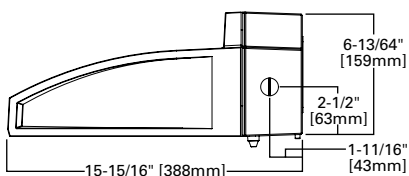
- WaveLinx
- Enlighted

Dimensional Details

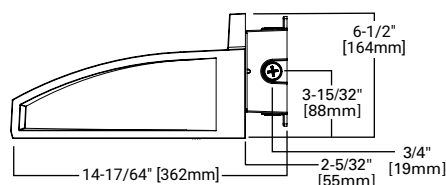
Net Weight: 17.0 lbs (7.7 kgs)



GWC with CBP option installed
(Thru-Branch Back Box accessory MA1059XX)



GWC with accessory BB/GWCXX Back Box installed



NOTES:
1. Visit <https://www.designlights.org/search/> to confirm qualification. Not all product variations are DLC qualified.
2. IDA Certified for 3000K CCT and warmer only.

Ordering Information

SAMPLE NUMBER: GWC-SA2C-740-U-T4FT-GM

Product Family ¹	Light Engine		Color Temperature	Voltage	Distribution	Finish
	Configuration	Drive Current				
GWC =Galleon Wall BAA-GWC =Galleon Wall, Buy American Act Compliant ³⁵ TAA-GWC =Galleon Wall, Trade Agreements Act Compliant ³⁵	SA1 =1 Square SA2 =2 Squares ²	A =615mA B =800mA C =1000mA D =1200mA ⁴	722 =70CRI, 2200K 727 =70CRI, 2700K 730 =70CRI, 3000K 735 =70CRI, 3500K 740 =70CRI, 4000K 750 =70CRI, 5000K 760 =70CRI, 6000K 827 =80CRI, 2700K 830 =80CRI, 3000K AMB =Amber, 590nm ^{3,4}	U =120-277V 1 =120V 2 =208V 3 =240V 4 =277V 8 =480V ^{6,7} 9 =347V ⁶ DV =277-480V DuraVolt Drivers ^{7,8,37}	T2 =Type II T3 =Type III T4FT =Type IV Forward Throw T4W =Type IV Wide SL2 =Type II w/Spill Control SL3 =Type III w/Spill Control SL4 =Type IV w/Spill Control SLL =90° Spill Light Eliminator Left SLR =90° Spill Light Eliminator Right RW =Rectangular Wide Type I 5NQ =Type V Square Narrow 5MQ =Type V Square Medium 5WQ =Type V Square Wide	AP =Grey BZ =Bronze BK =Black DP =Dark Platinum GM =Graphite Metallic WH =White
Options (Add as Suffix)		Controls and Systems Options (Add as Suffix)			Accessories (Order Separately) ³⁶	
F =Single Fused (120, 277 or 347V. Must Specify Voltage) FF =Double Fused (208, 240 or 480V. Must Specify Voltage) 10K =10kV Surge Module 20K =Series 20kV UL 1449 Surge Protective Device 2L =Two-Circuit Light Engine ³⁸ DIM =External 0-10V Dimming Leads ^{9,10} CBP =Battery Pack with Back Box, Cold Weather Rated ^{2,4,14,33} CBP-CEC =Battery Pack with Back Box, Cold Weather Rated, CEC compliant ^{2,4,14} BB =Shipped with Back Box Accessory ³⁹ L90 =Optics Rotated 90° Left R90 =Optics Rotated 90° Right HSS =Factory Installed House Side Shield ²³ GRSBK =Factory Installed Glare Shield, BK ^{4,27} GRSWH =Factory Installed Glare Shield, WH ^{4,27} UPL =Uplight Housing ¹⁵ HA =50°C High Ambient ¹² LCF =Light Square Trim Plate Painted to Match Housing ²² MT =Factory Installed Mesh Top CC =Coastal Construction finish ⁵ CE =CE Marking and Small Terminal Block ²⁴ AHD145 =After Hours Dim, 5 Hours ¹⁶ AHD245 =After Hours Dim, 6 Hours ¹⁶ AHD255 =After Hours Dim, 7 Hours ¹⁶ AHD355 =After Hours Dim, 8 Hours ¹⁶ DALI =DALI Driver ¹¹		BPC =Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage) PR =NEMA 3-PIN Twistlock Photocontrol Receptacle PR7 =NEMA 7-PIN Twistlock Photocontrol Receptacle ¹⁵ FADC =Field Adjustable Dimming Controller ⁴⁹ SPB1 =Dimming Occupancy Sensor with Bluetooth Interface, <8' Mounting ^{19,34} SPB2 =Dimming Occupancy Sensor with Bluetooth Interface, 8' - 20' Mounting ^{19,34} SPB4 =Dimming Occupancy Sensor with Bluetooth Interface, 21' - 40' Mounting ^{19,34} MS-LXX =Motion Sensor for On/Off Operation ^{17,18,19} MS-DIM-LXX =Motion Sensor for Dimming Operation ^{17,18,19} ZW =WaveLinX-enabled 4-PIN Twistlock Receptacle ^{29,30} ZD =WaveLinX Module with DALI driver and 4-PIN Receptacle ^{29,30} SWPD4XX =WaveLinX Sensor Only, 7'-15' ^{31,32} SWPD5XX =WaveLinX Sensor Only, 15'-40' ^{31,32} WOBXX =WaveLinX Sensor with Bluetooth, 7'-15' ^{31,32} WOFXX =WaveLinX Sensor with Bluetooth, 15'-40' ^{31,32} LWR-LW =Enlighted Wireless Sensor, Wide Lens for 8'-16' Mounting Height ^{19,20,21} LWR-LN =Enlighted Wireless Sensor, Narrow Lens for 16'-40' Mounting Height ^{19,20,21}			OA/RA1013 =Photocontrol Shorting Cap MA1252 =10kV Circuit Module Replacement MA1059XX =Thru-branch Back Box (Must Specify Color) BB/GWCX =Back Box (Must Specify Color) LS/HSS =Field Installed House Side Shield ^{23,25} LS/GRSBK-2PK =Glare Shield, Black ^{25,27} LS/GRSWH-2PK =Glare Shield, White ^{25,27} LS/PFS =Perimeter Shield, Black ²⁸ FSIR-100 =Wireless Configuration Tool for Occupancy Sensor ¹⁷ WOLC-7P-10A =WaveLinX Outdoor Control Module (7-pin) ^{26,29} SWPD4-XX =WaveLinX Wireless Sensor, 7' - 15' Mounting Height ^{29,30,31,32} SWPD5-XX =WaveLinX Wireless Sensor, 15' - 40' Mounting Height ^{29,30,31,32}	
NOTES: 1. DesignLight Consortium® Qualified. Refer to www.designlights.org, Qualified Products List under Family Models for details. 2. Two light squares with CBP options limited to 25°C. CBP not available in combination with sensor options at 1200mA. 3. Narrow-band 590nm +/- 5nm for wildlife and observatory use. Choose drive current A; supplied at 500mA drive current only. Exact luminaire wattage available in IES files. Available with 5WQ, 5MQ, SL2, SL3 and SL4 distributions. Can be used with HSS option. 4. Not available with HA option. 5. Coastal construction finish salt spray tested to over 5,000-hours per ASTM B117, with a scribe rating of 9 per ASTM D1654. 6. Require the use of a step down transformer. Not available in combination with sensor options at 1200mA. 7. 480V not to be used with ungrounded or impedance grounded systems. 8. DuraVolt drivers feature added protection from power quality issues such as loss of neutral, transients and voltage fluctuations. Visit www.signify.com/duravolt for more information. 9. Cannot be used with other control options. 10. Low voltage control leads extended 18" from fixture. 11. Not available in 1200mA. When used with CBP or HA options, only available with single light square. 12. Not available in 1200mA, UPL or CBP options. Available with single light square. 13. Not available with SL2, SL3, SL4, HA, CBP, PR or PR7 options. 14. Operates a single light square only. Operates at -20°C to +40°C. Backbox is non-IP rated. Control option limited to BPC. 15. Compatible with standard 3-PIN photocontrols, 5-PIN or 7-PIN ANSI controls. 16. Requires the use of BPC photocontrol or the PR7 or PR photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 17. The FSIR-100 configuration tool is required to adjust parameters such as high and low modes, sensitivity, time delay and cutoff. Consult your lighting representative at Cooper Lighting Solutions for more information. 18. Replace LXX with L08 (<8' mounting), L20 (8'-20' mounting) or L40W (21'-40' mounting). 19. Includes integral photosensor. 20. Enlighted wireless sensors are factory installed requiring network components in appropriate quantities. 21. White sensor shipped on all housing color options. 22. Not available with HSS or GRS options. 23. Not for use with 5NQ, 5MQ, 5WQ or RW optics. The light square trim plate is painted black when the HSS option is selected. 24. CE is not available with the 1200, DALI, LWR, MS, MS/DIM, BPC, PR or PR7 options. Available in 120-277V only. 25. One required for each light square. 26. Requires PR7. 27. Not for use with T4FT, T4W or SL4 optics. 28. Set of 4 pcs. Once set required per Light Square. 29. Cannot be used in conjunction with additional photocontrol or other controls systems (BPC, PR, PR7, MS, LWR). 30. WAC Gateway required to enable field-configurability. Order WAC-PoE and WPOE-120 (10V to PoE injector) power supply if needed. 31. Requires ZW or ZD receptacle. 32. Replace XX with sensor color (WH, BZ, or BK). 33. Specify 120V or 277V. 34. Smart device with mobile application required to change system defaults. See controls section for details. 35. Only product configurations with these designated prefixes are built to be compliant with the Buy American Act of 1933 (BAA) or Trade Agreements Act of 1979 (TAA), respectively. Please refer to DOMESTIC-PREFERENCES website for more information. Components shipped separately may be separately analyzed under domestic preference requirements. 36. For BAA or TAA requirements, Accessories sold separately will be separately analyzed under domestic preference requirements. Consult factory for further information. 37. Not available in 1 square configuration at 800mA or below. Not available with any control option except SPB. 38. 2L not available with FF, AHD or DALI options. Controls and/or battery packs operate only one of the two circuits when 2L is specified. 2L with controls options not available with 347V or 480V. 39. Not available with CBP or CBP-CEC options. 40. Cannot be used with PR7 or other motion response control options.						

Product Specifications

Construction

- Driver enclosure thermally isolated from optics for optimal thermal performance
- Die-cast aluminum heat sinks
- IP66 rated housing
- 1.5G vibration rated

Optics

- Patented, high-efficiency injection-molded AccuLED Optics technology
- 13 optical distributions
- IDA Certified (3000K CCT and warmer only)

Electrical

- LED driver assembly mounted for ease of maintenance
- Standard with 0-10V dimming
- Optional 10kV or 20kV surge module
- Suitable for operation in -40°C to 40°C ambient environments; Optional 50°C high ambient (HA) configuration

Mounting

- Gasketed and zinc plated rigid steel mounting attachment
- "Hook-N-Lock" mechanism for easy installation

Finish

- Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness
- Heat sink is powder coated black
- RAL and custom color matches available
- Coastal Construction (CC) option available

Typical Applications

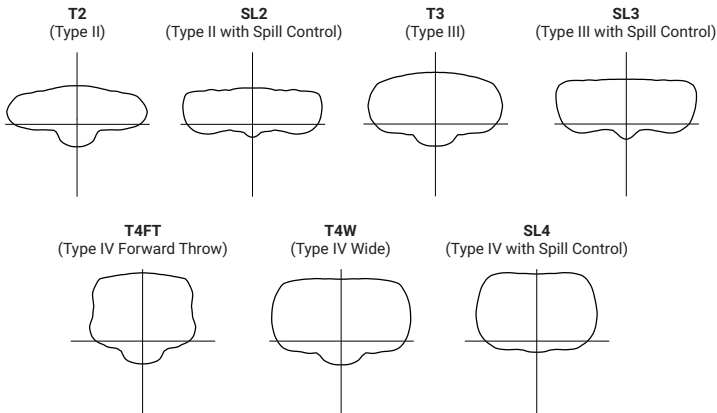
- Exterior Wall, Walkway

Warranty

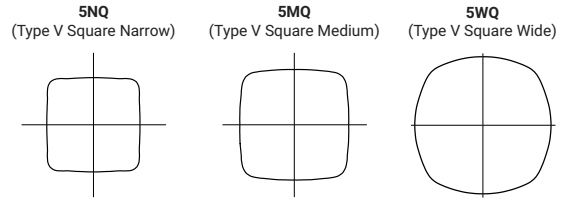
- Five-year warranty

Optical Distributions

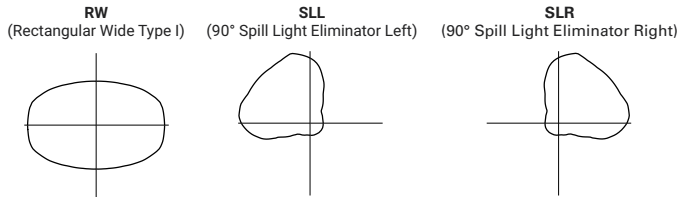
Asymmetric Area Distributions



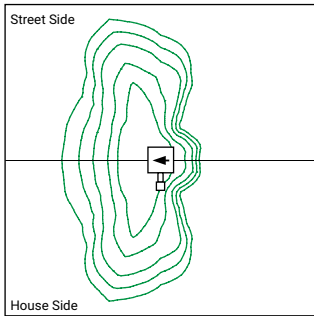
Symmetric Distributions



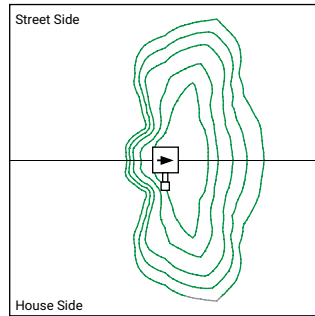
Specialized Distributions



Optic Orientation



Optics Rotated Left @ 90° [L90]



Optics Rotated Right @ 90° [R90]

Energy and Performance Data

Lumen Multiplier

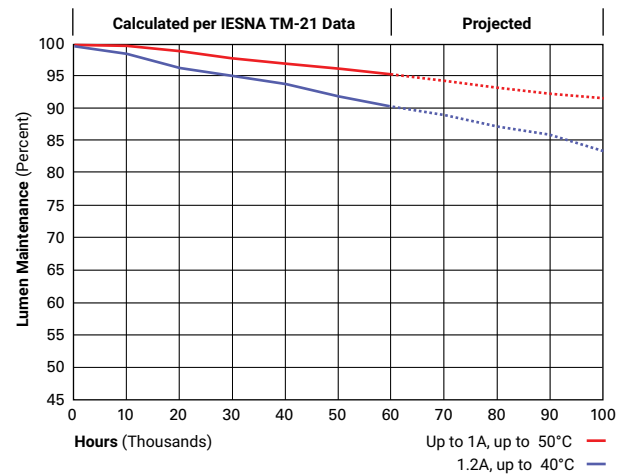
Ambient Temperature	Lumen Multiplier
0°C	1.02
10°C	1.01
25°C	1.00
40°C	0.99
50°C	0.97

FADC Settings

FADC Position	Lumen Multiplier
1	25%
2	46%
3	55%
4	62%
5	72%
6	77%
7	82%
8	85%
9	90%
10	100%

Lumen Maintenance

Drive Current	Ambient Temperature	TM-21 Lumen Maintenance (60,000 Hours)	Projected L70 (Hours)
Up to 1A	Up to 50°C	> 95%	> 416,000
1.2A	Up to 40°C	> 90%	> 205,000



Energy and Performance Data

 View GWC Galleon Wall IES files

4000K/5000K/6000K CCT, 70 CRI

Number of Light Squares		1				2			
Drive Current		615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A
Nominal Power (Watts)		34	44	59	67	66	86	113	129
Input Current @ 120V (A)		0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16
Input Current @ 208V (A)		0.17	0.22	0.29	0.33	0.34	0.44	0.56	0.63
Input Current @ 240V (A)		0.15	0.19	0.26	0.29	0.30	0.38	0.48	0.55
Input Current @ 277V (A)		0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48
Input Current @ 347V (A)		0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39
Input Current @ 480V (A)		0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30
Optics									
T2	Lumens	4,883	5,989	7,412	8,131	9,543	11,703	14,485	15,891
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3
	Lumens per Watt	144	136	126	121	145	136	128	123
T3	Lumens	4,978	6,105	7,556	8,288	9,729	11,929	14,764	16,196
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
T4FT	Lumens	5,008	6,140	7,599	8,337	9,783	11,998	14,850	16,290
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	147	140	129	124	148	140	131	126
T4W	Lumens	4,942	6,060	7,502	8,229	9,658	11,843	14,658	16,080
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3
	Lumens per Watt	145	138	127	123	146	138	130	125
SL2	Lumens	4,874	5,979	7,399	8,117	9,528	11,684	14,461	15,863
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G3
	Lumens per Watt	143	136	125	121	144	136	128	123
SL3	Lumens	4,976	6,104	7,555	8,287	9,727	11,927	14,763	16,194
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	146	139	128	124	147	139	131	126
SL4	Lumens	4,729	5,799	7,178	7,873	9,239	11,333	14,025	15,387
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4
	Lumens per Watt	139	132	122	118	140	132	124	119
5NQ	Lumens	5,134	6,296	7,793	8,547	10,033	12,303	15,226	16,704
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	151	143	132	128	152	143	135	129
5MQ	Lumens	5,228	6,412	7,935	8,705	10,216	12,529	15,508	17,011
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	134	130	155	146	137	132
5WQ	Lumens	5,242	6,428	7,956	8,728	10,244	12,563	15,548	17,056
	BUG Rating	B3-U0-G1	B3-U0-G2	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	154	146	135	130	155	146	138	132
SLL/SLR	Lumens	4,373	5,365	6,640	7,283	8,547	10,481	12,973	14,231
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	129	122	113	109	130	122	115	110
RW	Lumens	5,087	6,238	7,721	8,472	9,941	12,190	15,088	16,553
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	150	142	131	126	151	142	134	128

* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

3000K CCT, 80 CRI

Number of Light Squares		1				2			
Drive Current		615mA	800mA	1050mA	1.2A	615mA	800mA	1050mA	1.2A
Nominal Power (Watts)		34	44	59	67	66	86	113	129
Input Current @ 120V (A)		0.30	0.39	0.51	0.58	0.58	0.77	1.02	1.16
Input Current @ 208V (A)		0.17	0.22	0.29	0.33	0.34	0.44	0.56	0.63
Input Current @ 240V (A)		0.15	0.19	0.26	0.29	0.30	0.38	0.48	0.55
Input Current @ 277V (A)		0.14	0.17	0.23	0.25	0.28	0.36	0.42	0.48
Input Current @ 347V (A)		0.11	0.15	0.17	0.20	0.19	0.24	0.32	0.39
Input Current @ 480V (A)		0.08	0.11	0.14	0.15	0.15	0.18	0.24	0.30
Optics									
T2	Lumens	3,880	4,759	5,890	6,461	7,583	9,300	11,510	12,628
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G3
	Lumens per Watt	114	108	100	96	115	108	102	98
T3	Lumens	3,956	4,851	6,004	6,586	7,731	9,479	11,732	12,870
	BUG Rating	B1-U0-G1	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2
	Lumens per Watt	116	110	102	98	117	110	104	100
T4FT	Lumens	3,980	4,879	6,038	6,625	7,774	9,534	11,800	12,945
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	117	111	102	99	118	111	104	100
T4W	Lumens	3,927	4,816	5,961	6,539	7,675	9,411	11,648	12,778
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G2	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3
	Lumens per Watt	116	109	101	98	116	109	103	99
SL2	Lumens	3,873	4,751	5,880	6,450	7,571	9,285	11,491	12,605
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	114	108	100	96	115	108	102	98
SL3	Lumens	3,954	4,851	6,004	6,585	7,729	9,478	11,731	12,868
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	116	110	102	98	117	110	104	100
SL4	Lumens	3,758	4,608	5,704	6,256	7,342	9,006	11,145	12,227
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3	B1-U0-G3
	Lumens per Watt	111	105	97	93	111	105	99	95
5NQ	Lumens	4,080	5,003	6,193	6,792	7,973	9,776	12,099	13,274
	BUG Rating	B2-U0-G0	B2-U0-G1	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2
	Lumens per Watt	120	114	105	101	121	114	107	103
5MQ	Lumens	4,154	5,095	6,305	6,917	8,118	9,956	12,323	13,518
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	122	116	107	103	123	116	109	105
5WQ	Lumens	4,166	5,108	6,322	6,936	8,140	9,983	12,355	13,553
	BUG Rating	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2
	Lumens per Watt	123	116	107	104	123	116	109	105
SLL/SLR	Lumens	3,475	4,263	5,276	5,787	6,792	8,329	10,309	11,309
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G3	B2-U0-G3
	Lumens per Watt	102	97	89	86	103	97	91	88
RW	Lumens	4,042	4,957	6,135	6,732	7,900	9,687	11,990	13,154
	BUG Rating	B2-U0-G1	B2-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2
	Lumens per Watt	119	113	104	100	120	113	106	102

* Nominal lumen data for 70 CRI. BUG rating for 4000K/5000K. Refer to IES files for 3000K BUG ratings.

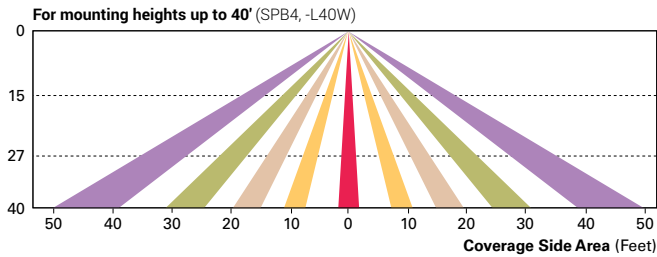
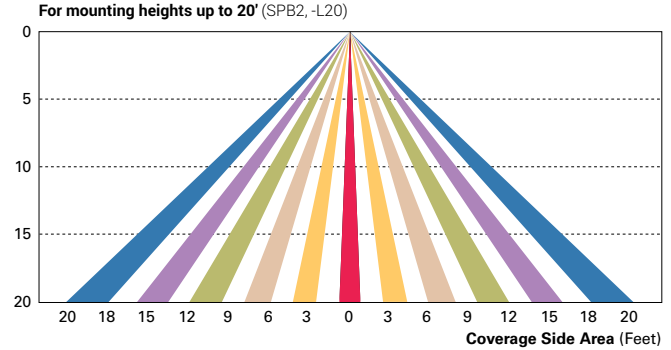
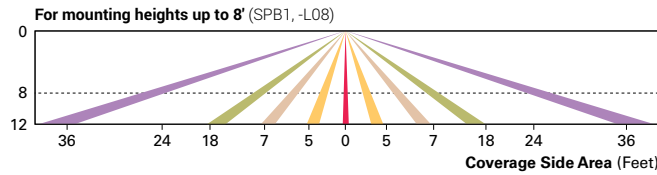
Control Options

0-10V This fixture is offered standard with 0-10V dimming driver(s). The DIM option provides 0-10V dimming wire leads for use with a lighting control panel or other control method.

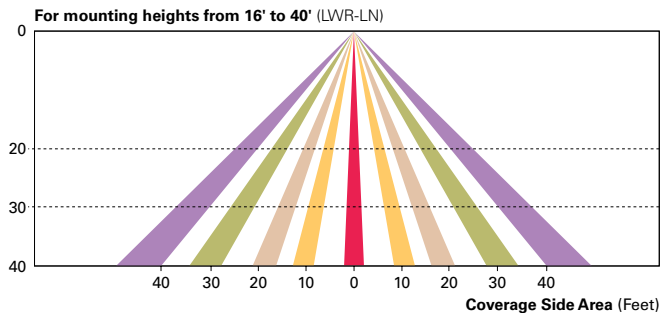
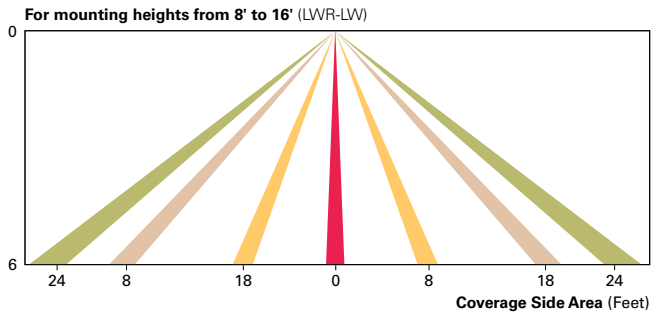
Photocontrol (BPC, PR, and PR7) Optional button-type photocontrol (BPC) and photocontrol receptacles (PR and PR7) provide a flexible solution to enable “dusk-to-dawn” lighting by sensing light levels. Advanced control systems compatible with NEMA 7-pin standards can be utilized with the PR7 receptacle.

After Hours Dim (AHD) This feature allows photocontrol-enabled luminaires to achieve additional energy savings by dimming during scheduled portions of the night. The dimming profile will automatically take effect after a “dusk-to-dawn” period has been calculated from the photocontrol input. Specify the desired dimming profile for a simple, factory-shipped dimming solution requiring no external control wiring. Reference the After Hours Dim supplemental guide for additional information.

Dimming Occupancy Sensor (SPB, MS/DIM-LXX and MS-LXX) These sensors are factory installed in the luminaire housing. When the SPB or MS/DIM sensor options are selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The MS/DIM sensor is factory preset to dim down to approximately 50 percent power with a time delay of five minutes. The MS-LXX sensor is factory preset to turn the luminaire off after five minutes of no activity. SPB motion sensors require the Sensor Configuration mobile application by Wattstopper to change factory default dimming level, time delay, sensitivity and other parameters. Available for iOS and Android devices. The SPB sensor is factory preset to dim down to approximately 10% power with a time delay of five minutes. The MS/DIM occupancy sensors require the FSIR-100 programming tool to adjust factory defaults.



Enlighted Wireless Control and Monitoring System (LWR-LW and LWR-LN) The Enlighted control system is a connected lighting solution, combining LED luminaires with an integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes while collecting valuable data about building performance and use. Software applications utilizing energy dashboards maximize data inputs to help optimize the use of other resources beyond lighting.

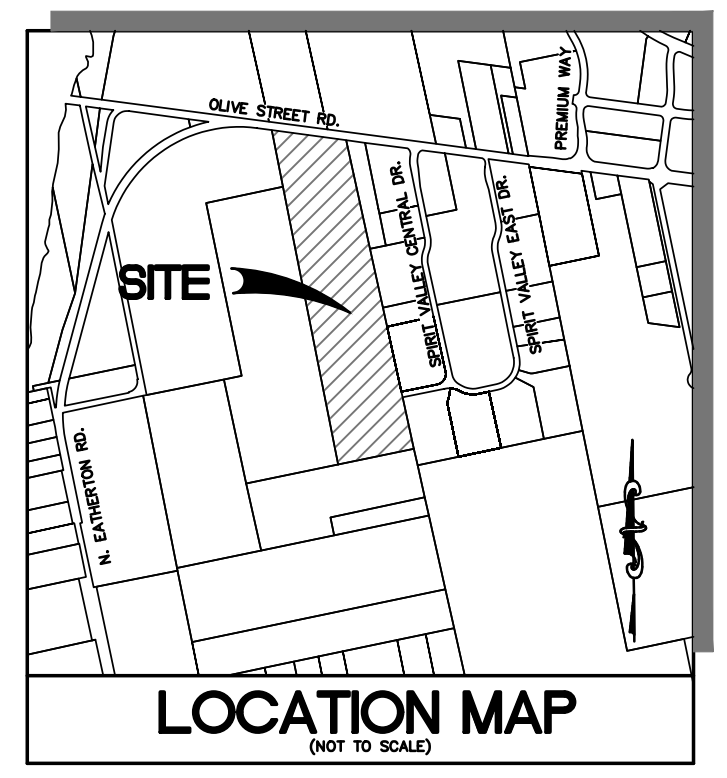
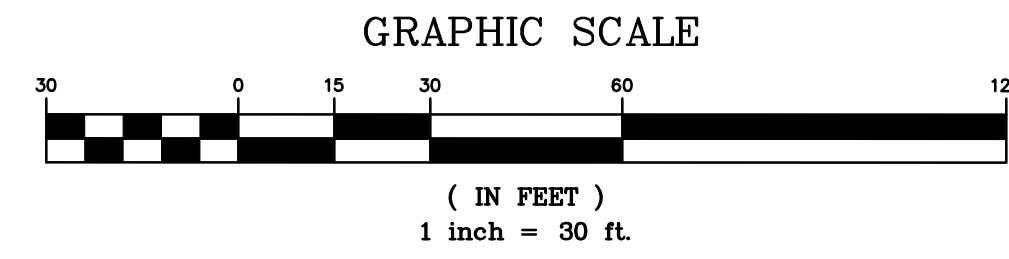


WaveLinx Wireless Outdoor Lighting Control Module (WOLC-7P-10A) The 7-pin wireless outdoor lighting control module enables WaveLinx to control outdoor area, site and flood lighting. WaveLinx controls outdoor lighting using schedules to provide ON, OFF and dimming controls based on astronomic or time schedules based on a 7 day week.

SITE DEVELOPMENT SECTION PLAN

FOR TUBULAR USA

A TRACT OF LAND BEING LOT 3 OF SPIRIT VALLEY BUSINESS PHASE 2 SUBDIVISION AS RECORDED IN PLAT BOOK , PAGE , LOCATED IN U.S. SURVEYS 1937 AND 133, TOWNSHIP 45 NORTH, RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI



LEGEND

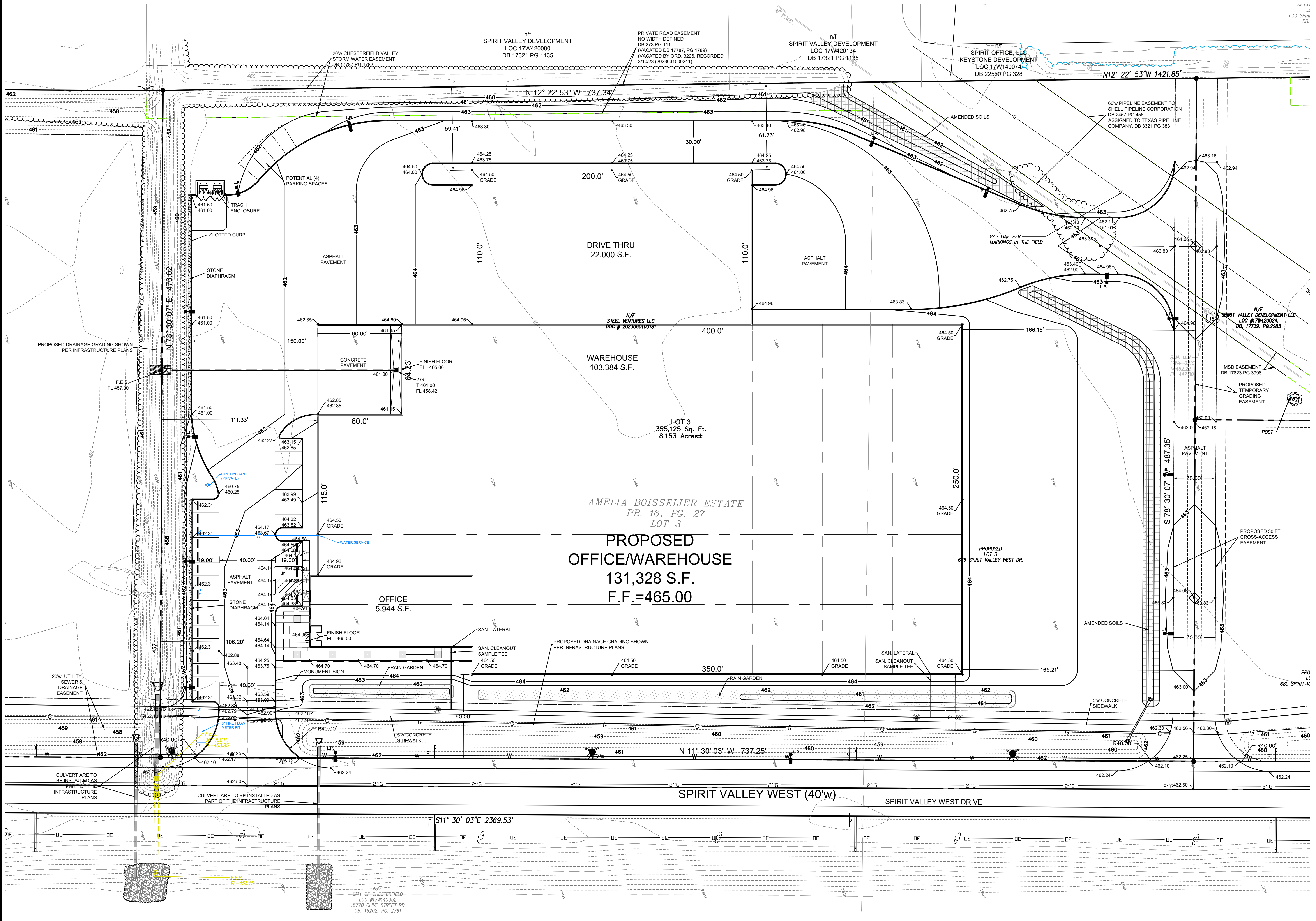
	BENCH MARK		FIRE HYDRANT
	FOUND IRON ROD		FIRE DEPARTMENT CONNECTION
	FOUND IRON PIPE		WATER MANHOLE
	RIGHT OF WAY MARKER		WATER METER
	UTILITY POLE		WATER VALVE
	SUPPORT POLE		POST INDICATOR VALVE
	UTILITY POLE WITH LIGHT		CLEAN OUT
	EX. LIGHT STANDARD		MANHOLE
	ELECTRIC METER		NOW OR FORMERLY
	ELECTRIC MANHOLE		PLAT BOOK
	ELECTRIC PEDESTAL		PAGE
	ELECTRIC SPlice BOX		P.V.C.
	GAS DROP		R.B.
	GAS METER		R.C.P.
	GAS VALVE		S.
	TELEPHONE MANHOLE		T.C.P.
	TELEPHONE PEDESTAL		W.
	TELEPHONE SPlice BOX		(86'W)
	CABLE TV PEDESTAL		

ABBREVIATIONS

C.O.	CLEANOUT
D.B.	DEED BOOK
E.	ELECTRIC
F.L.	FLOWLINE
F.T.	FEET
FND.	FOUND
G.	GAS
M.H.	MANHOLE
N.O.F.	NOW OR FORMERLY
P.B.	PLAT BOOK
P.C.	PAGE
P.V.C.	POLYVINYL CHLORIDE PIPE
R.B.	RADIAL BEARING
R.C.P.	REINFORCED CONCRETE PIPE
S.	SQUARE
T.C.P.	TELEPHONE CABLE
W.	WETTED CLAY PIPE
W.P.	WATER
(86'W)	RIGHT-OF-WAY WIDTH

PERTINENT DATA

SITE ACREAGE	= 8.153 ACRES
EXISTING ZONING	= "P-1" (ORD. #2413)
FIRE DISTRICT	= MONARCH
SCHOOL DISTRICT	= ROCKWOOD
SEWER DISTRICT	= METROPOLITAN ST. LOUIS SEWER DIST.
WATERSHED AREA	= MISSOURI RIVER
WATER SERVICE	= MISSOURI AMERICAN WATER CO.
GAS SERVICE	= SPIRE
ELECTRIC SERVICE	= AmerenUE
PHONE SERVICE	= AT&T



GENERAL NOTES:

- BOUNDARY AND TOPOGRAPHICAL SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. (BASIS OF BEARINGS: MISSOURI STATE PLANE, GRID NORTH)
- GRADING & STORM WATER PER THE CITY OF CHESTERFIELD, THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC AND MISSOURI STATE PLANE, GRID NORTH
- SUBJECT PROPERTY LIES WITHIN FLOOD ZONE "X" (AREAS WITH REDUCED FLOOD RISK DUE TO LEVEL) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP NUMBER 291890145K WITH EFFECTIVE DATE OF 02/04/2015.
- THE REGULATORY 100YR WATER SURFACE ELEVATION FOR SITE IS CONTROLLED BY THE CHESTERFIELD VALLEY STORM WATER MASTER PLAN MODEL. THE LOWEST FLOOR OF ANY BUILDING NEEDS TO BE AT LEAST 1 FOOT ABOVE THE ELEVATION OF THE 100YR WATER SURFACE OF ANY CHANNEL WITHIN 200 FEET OF THE BUILDING FOOTPRINT. THE 100YR HIGH WATER ELEVATION VARIES FROM 458.40 AT SOUTHWEST CORNER OF SITE TO 457.4 AT NORTHWEST CORNER OF SITE. 457.4 AT NORTHEAST CORNER OF SITE. FOR BUILDINGS ALONG WESTERN PORTION OF SITE, 458.4 WILL BE THE CONTROLLING ELEVATION. FOR BUILDINGS ALONG NORTHERN PORTION OF SITE, 457.4 WILL BE THE CONTROLLING ELEVATION.
- 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.
- ARCHITECTURAL ELEVATIONS, SITE LANDSCAPING PLANS, SITE LIGHTING PLANS AND SITE SIGNAGE PLANS SHALL BE SUBMITTED TO THE CITY OF CHESTERFIELD AS INDIVIDUAL LOTS ARE DEVELOPED ON THEIR SITE DEVELOPMENT SECTION PLAN.
- ON-SITE STORM WATER DRAINAGE REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CHESTERFIELD VALLEY MASTER STORM WATER DRAINAGE PLAN AND AS DIRECTED BY THE CITY OF CHESTERFIELD.
- OFF-SITE GRADING EASEMENTS, IF REQUIRED, SHALL BE EXECUTED AND RECORDED PRIOR TO THE COMMENCEMENT OF ANY OFF-SITE GRADING.
- CROSS-ACCESS EASEMENTS WHERE REQUIRED, SHALL BE EXECUTED AND RECORDED AS INDIVIDUAL LOTS ARE DEVELOPED.
- NO TREES AND LANDSCAPING MAY BE LOCATED WITHIN THE HIGH-WATER LIMITS OF THE CHESTERFIELD VALLEY MASTER STORM WATER DRAINAGE DITCHES.
- ALL BUILDINGS AND ROADWAYS SHALL BE ELEVATED A MINIMUM 1 FOOT ABOVE THE MAX. HIGH-WATER ELEVATION IN THE CHESTERFIELD MASTER MODEL.
- ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY, MO607 AND THE CITY OF CHESTERFIELD STANDARDS.
- ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE ST. LOUIS COUNTY, MO607 AND CITY OF CHESTERFIELD STANDARDS.
- STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- AN ELEVATION CERTIFICATE WILL NEED TO BE COMPLETED FOR ANY STRUCTURE LOCATED WITHIN THE SUPPLEMENTAL PROTECTION AREA (SPA) AS DEFINED BY SECTION 405.05, FLOOD DAMAGE PREVENTION, OF THE CITY CODE.
- A SIGN PACKAGE IS REQUIRED FOR THIS DEVELOPMENT AND MUST BE APPROVED BY THE PLANNING COMMISSION.
- SETBACKS:
 - 50 FEET FROM EASTERN SUBDIVISION BOUNDARY
 - 50 FEET FROM WESTERN SUBDIVISION BOUNDARY
 - FABRICATION SETBACKS:
 - 15 FEET FROM EASTERN BOUNDARY
 - 10 FEET FROM SOUTHERN BOUNDARY
 - 20 FEET FROM WESTERN BOUNDARY
 - 10 FEET FROM NORTHERN BOUNDARY
- LIGHT FIXTURES SHALL NOT EXCEED 20 FEET IN HEIGHT.
- PARKING CALCULATIONS:

OFFICE:	3.3 SPACES FOR EVERY 1000 SQUARE FEET
WAREHOUSE:	2 SPACES FOR EVERY 3 EMPLOYEES
TOTAL REQUIRED:	18 EMPLOYEES = 11 SPACES
	25 9'x19' SPACES PROVIDED
	2 ADA SPACES PROVIDED (1 VAN ACCESSIBLE)
	27 TOTAL SPACES PROVIDED
	4 POTENTIAL SPACES PROVIDED
- OPEN SPACE CALCULATION:

LOT AREA	= 355,125 S.F.
BUILDING	= 131,328 S.F. (36.98%)
PAVEMENT	= 92,461 S.F. (26.04%)
OPEN SPACE	= 131,316 S.F. (36.97%)
- FLOOR AREA RATIO:

TOTAL FLOOR SPACE/LOT AREA	= 131,328 S.F.
OFFICE/WAREHOUSE	= 131,328 S.F.
131,328 S.F./355,125 S.F.	= 0.37 F.A.R.

LEGEND

	EXISTING CONTOURS
	PROPOSED CONTOURS
	EXISTING SANITARY SEWERS
	EXISTING STORM SEWERS
	PROPOSED SANITARY SEWERS
	PROPOSED STORM SEWERS
	CENTERLINE
	EASEMENT
	PROPOSED SPOT ELEVATION

SHEET INDEX

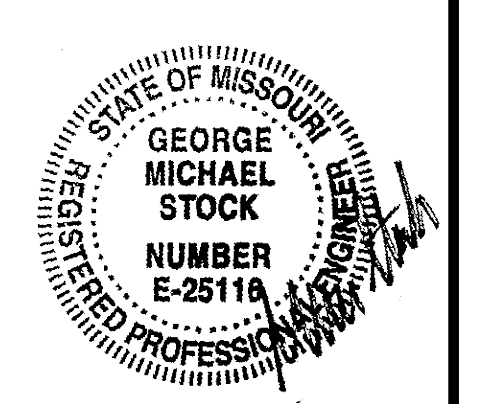
SD-1.0	SITE SECTION PLAN
SD-2.0	SITE SECTION PLAN
PH1	PHOTOMETRICS
L1.01	LANDSCAPE PLAN
A6.01	EXTERIOR ELEVATIONS



PREPARED FOR:
KEYSTONE
633 SPIRIT VALLEY CENTRAL DRIVE
CHESTERFIELD, MO 63305
ATTN: BILL HARDIE

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63005
PH: (636) 530-8000
FAX: (636) 530-8100
E-mail: general@stockinc.com
Web: www.stockinc.com

SITE DEVELOPMENT SECTION PLAN
TUBULAR USA
686 SPIRIT VALLEY WEST DRIVE
CHESTERFIELD, MISSOURI
63005



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

REVISIONS:

NO.	DESCRIPTION	DATE
1	City Comments	06/21/23

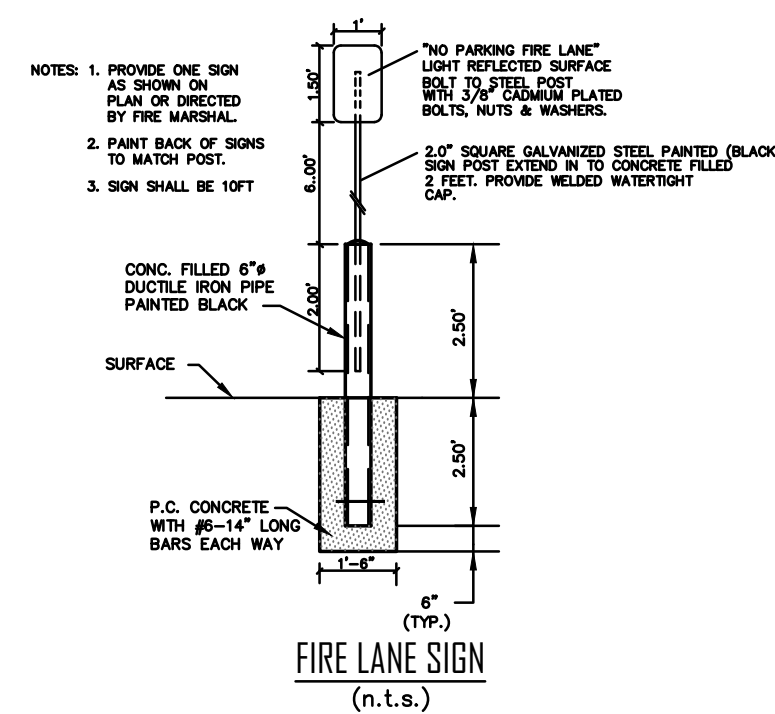
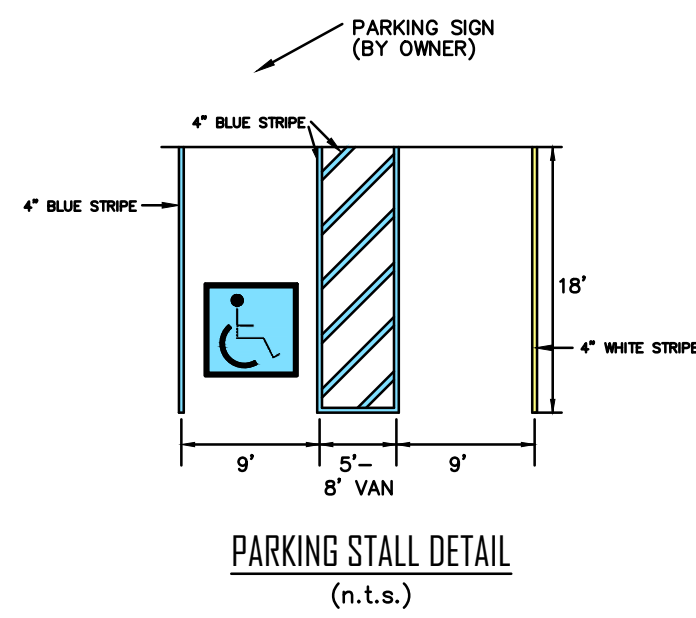
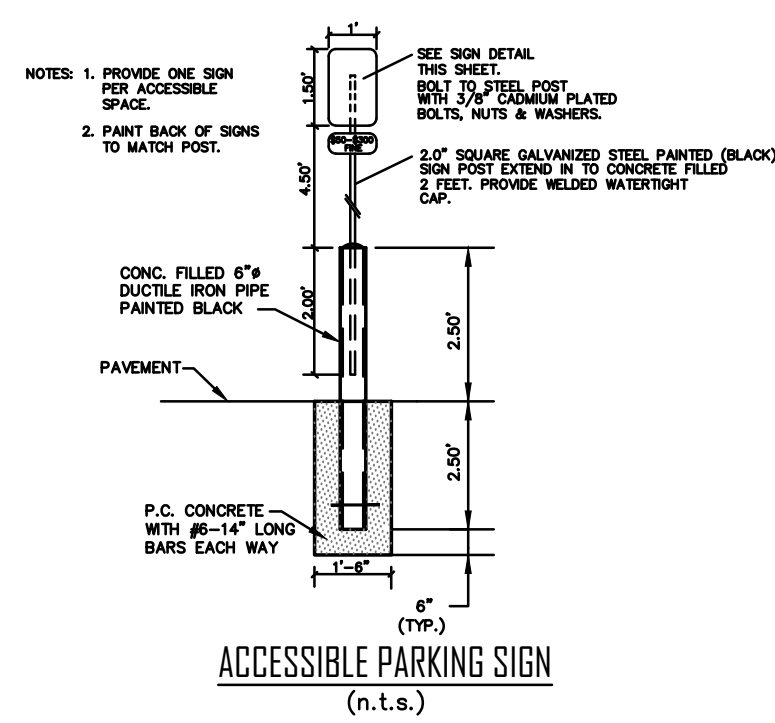
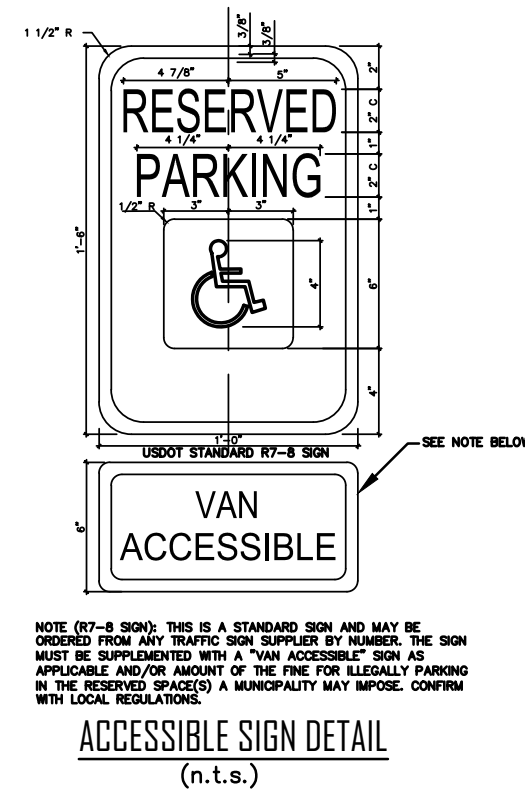
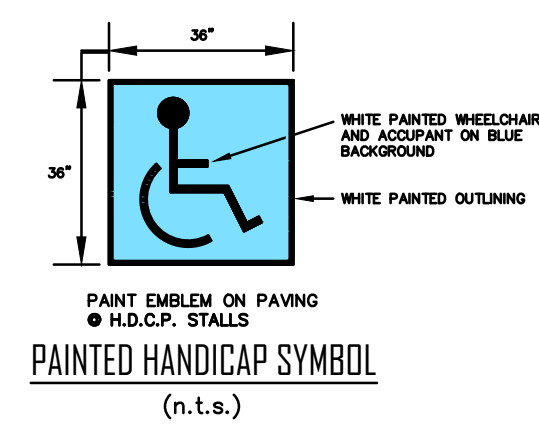
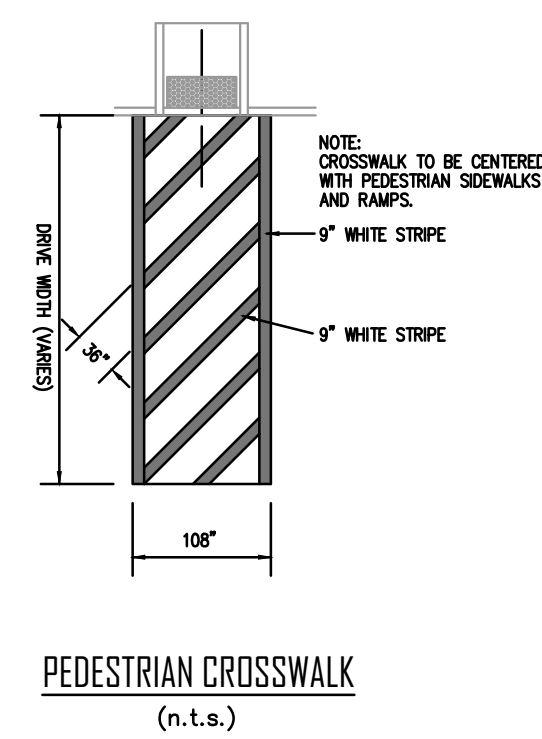
DATE:	5/26/2023	JOB NO.:	2022-7289
WSD. PR. #:		DATE W.P. #:	17W
S.L.C. REF. #:		REF. SUP. #:	
MDNR. #:			

SHEET TITLE:
SITE DEVELOPMENT SECTION PLAN

SHEET NO.:

SD-1.0

MO DOT LOCATE (314) 340-4100



IFC Section D103.6 Fire Lane Marking

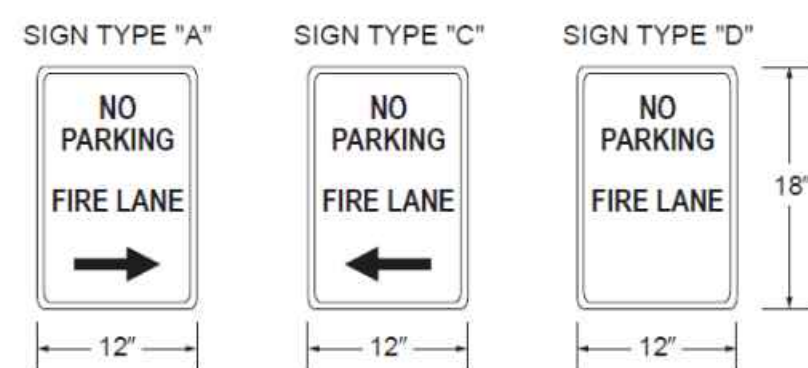
503.3 Marking. Where required by the fire code official, approved signs or other approved notices or markings that include the words NO PARKING—FIRE LANE shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. The means by which fire lanes are designated shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs complying with Figure D103.6. Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2. In addition to required signage, fire lanes shall be marked by one of the following methods on one or both sides of the fire apparatus road as required by Section D103.6.1 or D103.6.2.

1. Curbs shall be painted red along the entire distance of the fire department access. Minimum 4-inch high white letters with a 1-inch stroke stating "NO PARKING-FIRE LANE" shall be stenciled on the curb at 25-foot intervals.
2. Rolled curbs or surfaces without curbs shall have a red 6-inch wide stripe painted on the rolled curb or edges of pavement extending the length of the designated fire lane. The surface adjacent to the stripe shall be marked with block lettering a minimum of 18 inches in height and with a minimum 3-inch brush stroke reading: "NO PARKING-FIRE LANE." Lettering shall be in white and spaced at no more than 50-foot intervals.

Exception: Approved areas designated for parking are not required to be marked with signage or painting.

The colors for marking curbs and pavement shall conform to standard highway colors. All signage and marking of fire lanes shall be maintained in a legible condition."



D103.6.1 Roads 20 to 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access roads that are 20 to 26 feet wide.

D103.6.2 Roads more than 26 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access roads more than 26 feet wide and less than 32 feet wide.

GEOTECHNICAL ENGINEER'S STATEMENT

Midwest Testing, at the request of Keystone Companies, has provided geotechnical services for the project proposed hereon. Geotechnical explorations were conducted for the buildings, pavements, grading, infrastructure, and slopes of the development. Our findings indicate that the earth-related aspects are suitable for the construction proposed hereon pursuant to the recommendations set forth in our December 8, 2022 report titled "Geotechnical Exploration- MT Job No. 15565 Tubular USA Warehouse Spirit Valley Business Park, Chesterfield, Missouri".

Daniel J. Barczykowski, P.E.
Date: 6/16/23



SURVEYOR CERTIFICATE

This is to certify that Stock & Associates Consulting Engineers, Inc. has prepared this Site Development Section Plan from an actual survey. The information shown is a correct representation of all existing and proposed land divisions. This Site Development Section Plan does not represent a boundary survey.

STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.
LC 222-D

By: Walter J. Pfeifer, Missouri P.L.S. No. 2008-000728



This Site Plan was approved and duly verified by the Director of Planning on the ____ day of _____, 2023 authorizing the recording of this Site Plan pursuant to Chesterfield Ordinance Number 200, as attested to by the Director of Planning and the City Clerk.

Justin Wys, AICP
Director of Planning
City of Chesterfield, Missouri

Vickie McGownd, City Clerk
City of Chesterfield, Missouri

PROPERTY DESCRIPTION

A tract of land being part of Lot 3 of Amelia Boisselier Estate, a subdivision according to the plat thereof as recorded in Plat Book 16, Page 27 of the St. Louis County records, located in US Surveys 368, 1937 and 133, Township 45, Range 3 East of the Fifth Principal Meridian, City of Chesterfield, St. Louis County, Missouri, being more particularly described as follows:

Commencing at intersection of the southern right-of-way line of Olive Street Road, 60 feet wide, and the west line of a tract of land conveyed to Peter Horbec by Deed Book 25102 Page 477, of said records; thence along said west line, South 11 degrees 25 minutes 45 seconds East, 767.00 feet, to the northwest corner of Lot 3 of Spirit Valley Business Park, as recorded in Plat Book 356 Page 177, of said records; thence along the west line of said Lot 3 of Spirit Valley Business Park, South 12 degrees 22 minutes 53 seconds East, 12.08 feet to the POINT OF BEGINNING of the herein described tract; thence continuing along last said west line, South 12 degrees 22 minutes 53 seconds East, 737.34 feet, thence departing said west line, South 78 degrees 30 minutes 07 second West, 487.35 feet to its intersection with the east right-of-way line of a proposed Forty (40) feet wide roadway; thence along said right-of-way line, North 11 degrees 30 minutes 03 seconds West, 737.25 feet; thence departing said right-of-way line, North 78 degrees 30 minutes 07 second East, 476.02 feet to the POINT OF BEGINNING.

Containing 355,125 square feet or 8.153 acres, more or less according to calculations performed by Stock & Associates Consulting Engineers, Inc during May 2023 rev

_____, the owner(s) of the property shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of Section 03, _____ of City of Chesterfield Unified Development Code, (applicable subsection) (present zoning) do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

(Signature): _____

(Name Typed): _____

State of _____)
) SS.
County of _____)

On this ____ day of _____, A.D., 2023, before me personally appeared _____, to me known, who, being by me sworn in, did say

(Officer of Corporation) that he/she is the _____ of _____ a _____ (Name of Corporation)

corporation in the State of _____, and that the seal affixed to the foregoing instruments is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said _____ (Officer of Corporation)

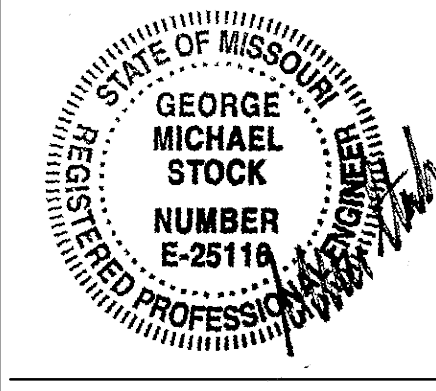
acknowledged said instrument to be the free act and deed of said corporation.

In Testimony Whereof, I have hereunto set my hand and affixed my Notarial Seal at my Office in _____, the day and year last above written.

(County and State)

My term expires _____.

(Notary Public)



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

REVISIONS:

-	City Comments	06/21/23
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DRAWN BY:	J.E.F.	CHECKED BY:	G.M.S.
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DATE:	5/26/2023	JOB NO.:	2022-7289
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SCALE:	AS SHOWN	DATE W.P. #	17W
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SCALE:	AS SHOWN	DATE SUP. #	
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SCALE:	AS SHOWN	DATE SUP. #	
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SHEET TITLE:
SITE DEVELOPMENT
SECTION PLAN

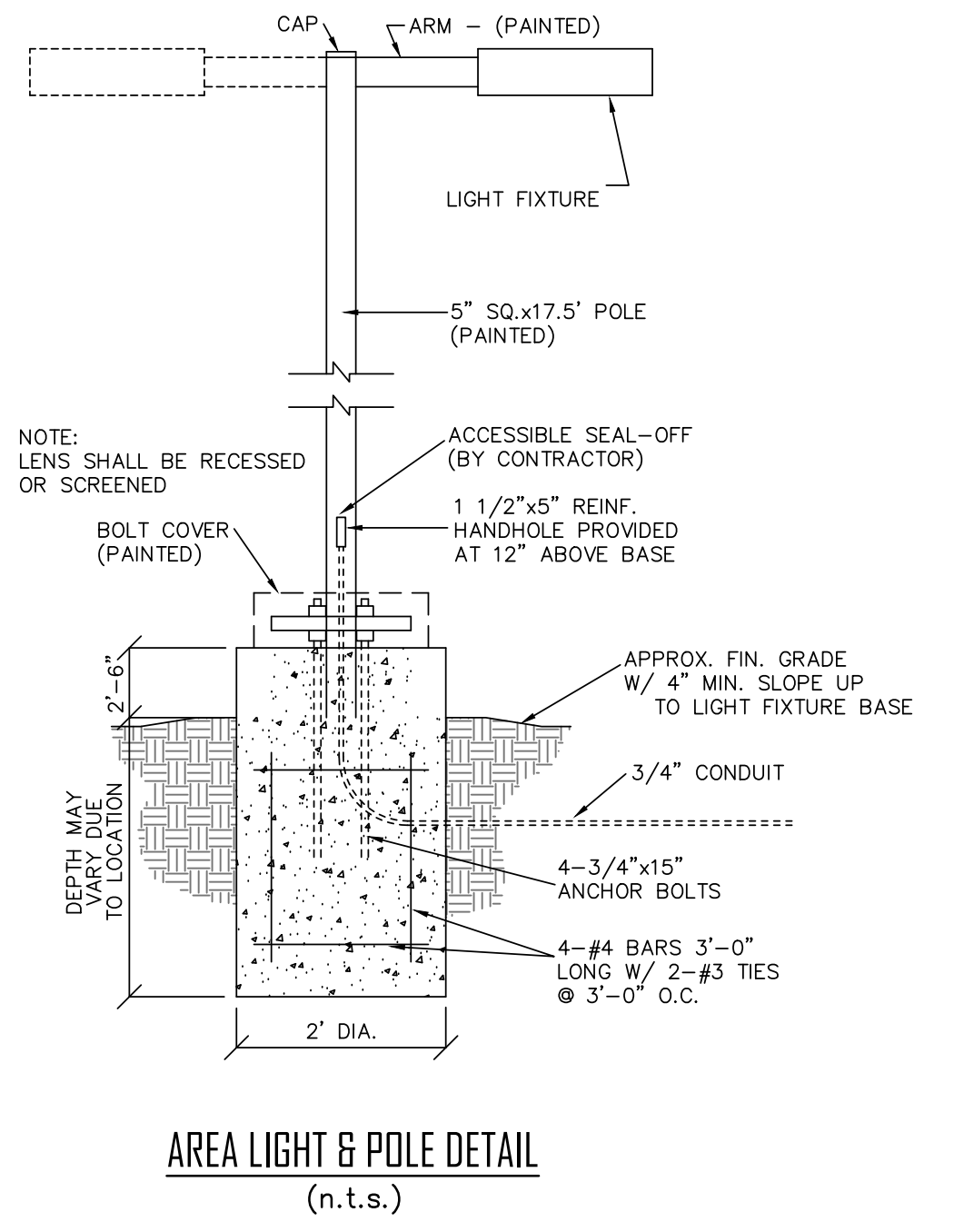
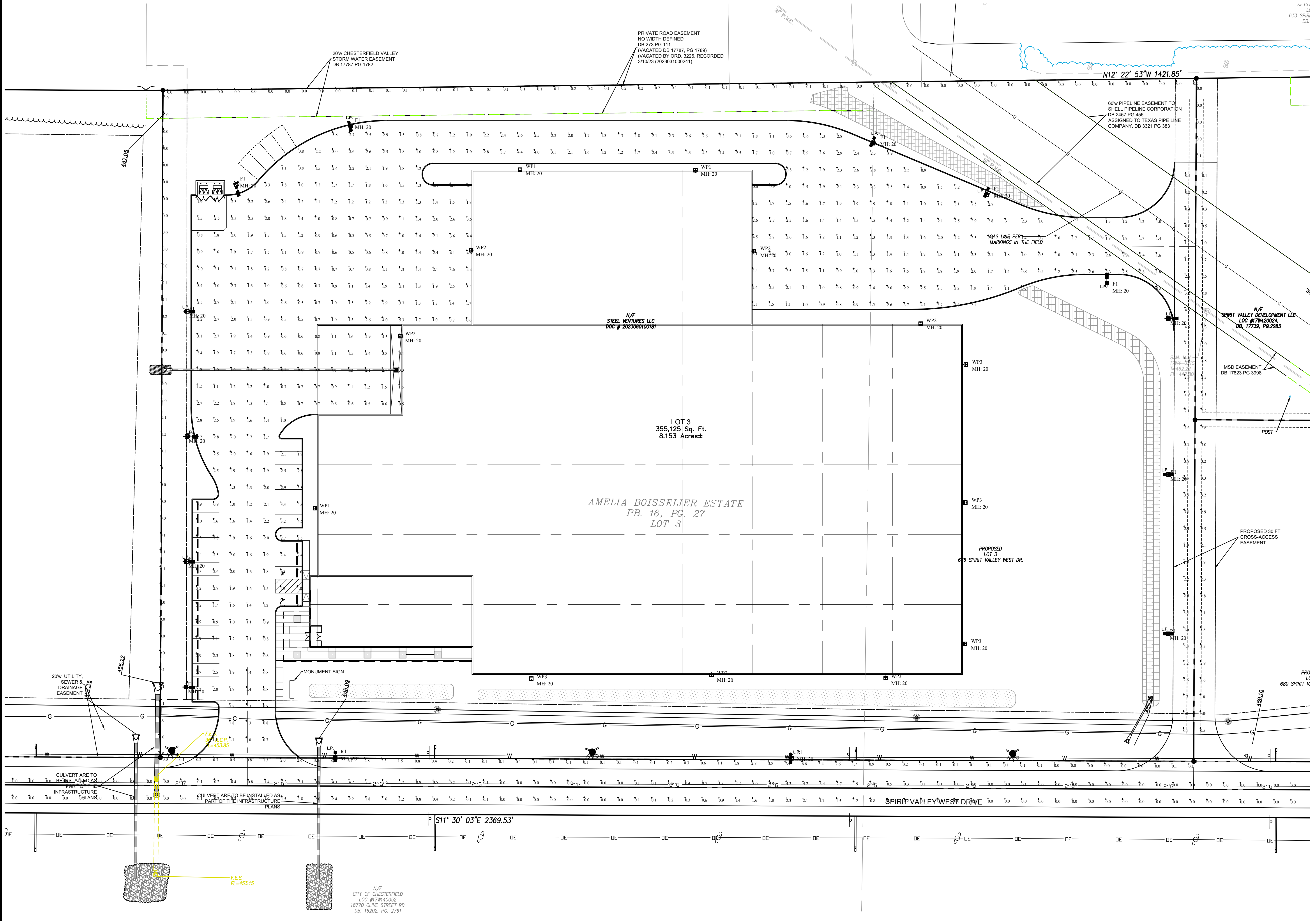
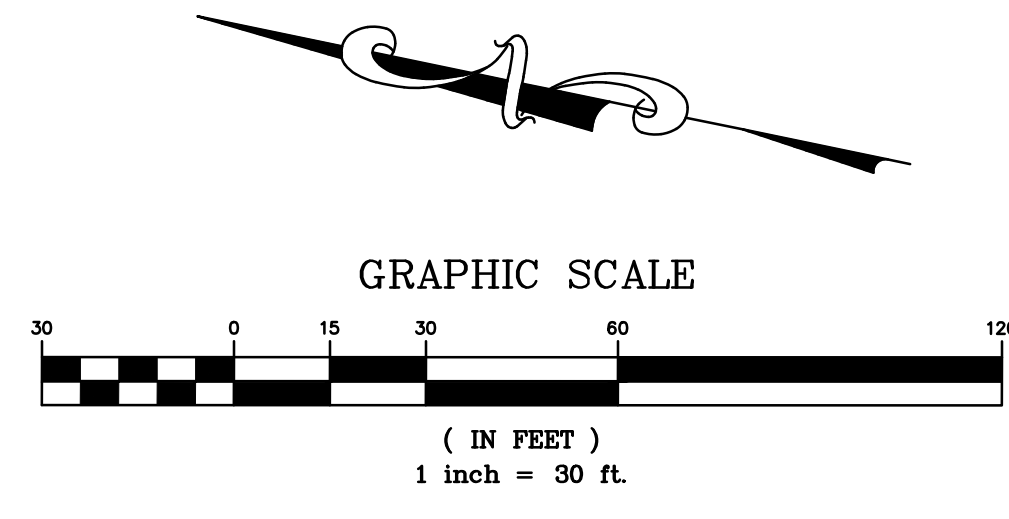
SHEET NO.:

LIGHT PHOTOMETRICS DESIGNED BY LIGHTING ASSOCIATES, LLC.
POLE FIXTURES MOUNTED 20' ABOVE GRADE INCLUDING BASE
LIGHT LEVELS CALCULATED ON THE GROUND

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PROPERTY LINE	ILLUMINANCE	Fc	0.44	8.2	0.0	N.A.	N.A.
ROADWAY	ILLUMINANCE	Fc	0.59	4.3	0.0	N.A.	N.A.
SHARED DRIVE	ILLUMINANCE	Fc	2.38	4.7	0.1	23.8	47.0
SITE	ILLUMINANCE	Fc	1.79	6.1	0.5	3.6	12.2

Symbol	Qty	Label	Arrangement	LLF	Lum. Watts	Total Watts	Description
	9	F1	Single	1.000	108	972	GALN-SA2C-740-U-T4FT-HSS
	5	R1	Single	1.000	108	540	GALN-SA2C-740-U-SL2
	3	WP1	Single	1.000	113	339	GWC-SA2C-740-U-SL3
	4	WP2	Single	1.000	113	452	GWC-SA2C-740-U-T4FT
	6	WP3	Single	1.000	59	354	GWC-SA1C-740-U-SL3

DESIGN IS BASED ON CURRENT INFORMATION PROVIDED AT THE TIME OF REQUEST. ANY CHANGES IN MOUNTING HEIGHT OR LOCATION, LAMP WATTAGE, LAMP TYPE, AND EXISTING FIELD CONDITIONS, THAT AFFECT ANY OF THE PREVIOUSLY MENTIONED, WILL VOID CURRENT LAYOUT AND REQUIRE A CHANGE REQUEST AND RE-CALCULATION.



PREPARED BY:

SITE DEVELOPMENT SECTION PLAN

TUBULAR USA

686 SPIRIT VALLEY WEST DRIVE
CHESTERFIELD, MISSOURI
63005

GEORGE M. STOCK, PE 6-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

- City Comments 06/21/23

DRAWN BY: J.E.F. CHECKED BY: G.M.S.

DATE: 5/26/2023 JOB NO: 2022-7289

MSD # - BASE MAP # 17W

SLC REF # - PART SUP. # -

MDR # -

SHEET TITLE:
PHOTOMETRIC
PLAN

SHEET NO.:

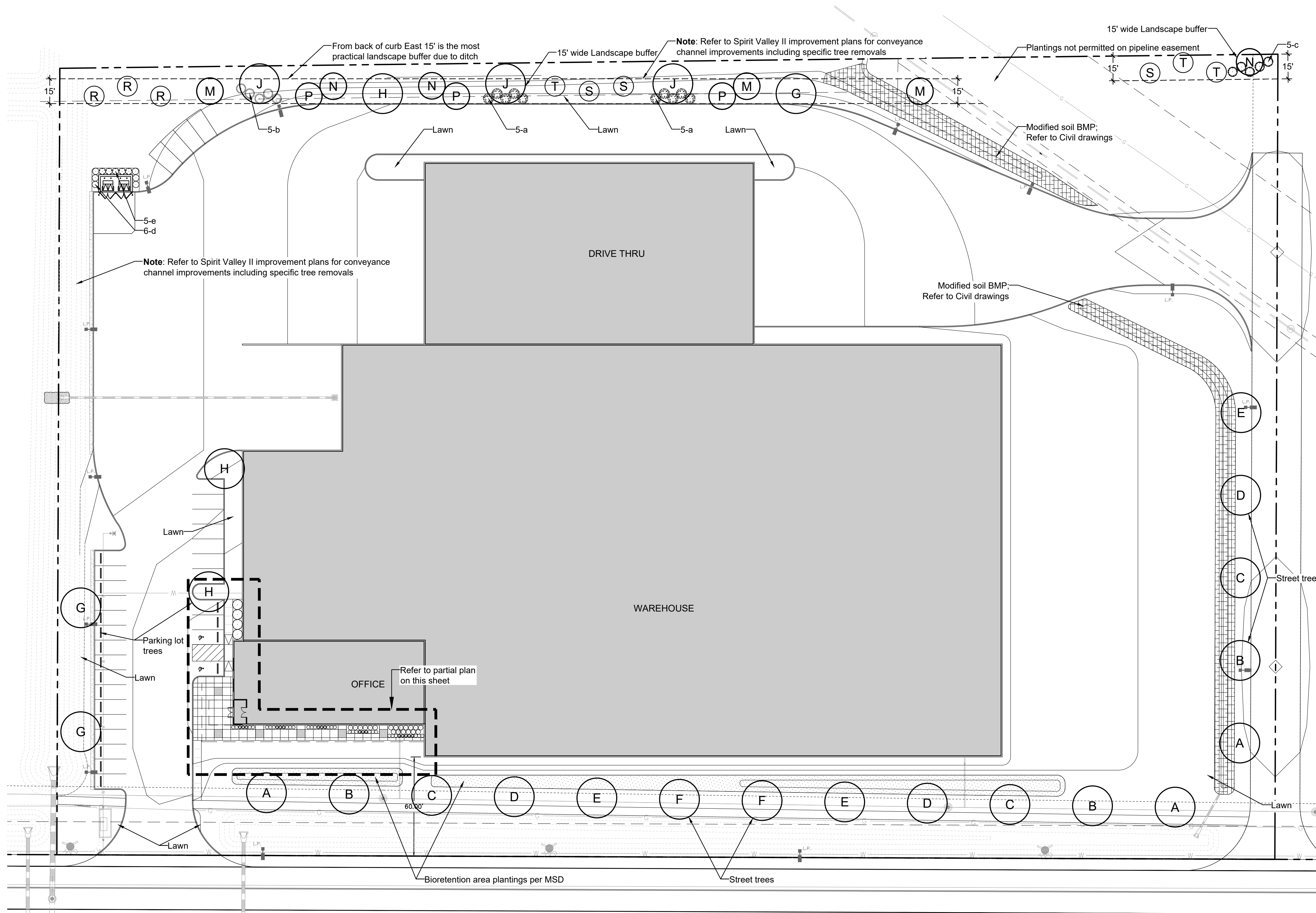
PH-1



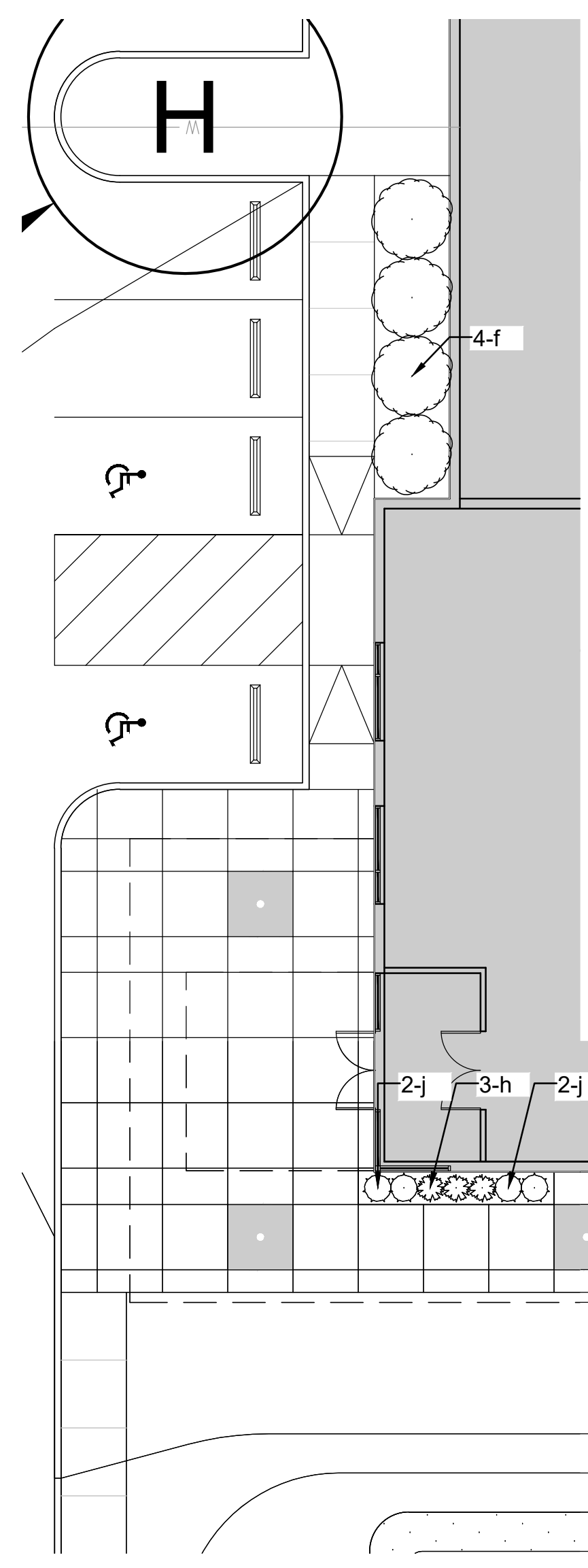
MoDOT LOCATE (314) 340-4100

257 Chesterfield Business Parkway
St. Louis, MO 63005
PH: (636) 530-8000
FAX: (636) 530-8000
E-mail: general@stockandassociates.com
Web: www.stockandassociates.com

STOCK & ASSOCIATES
Consulting Engineers, Inc.

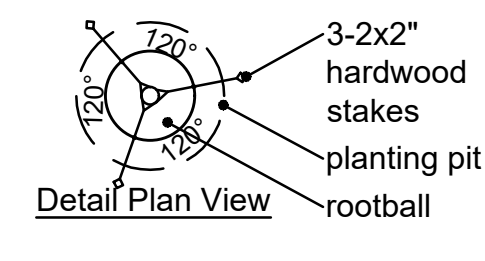
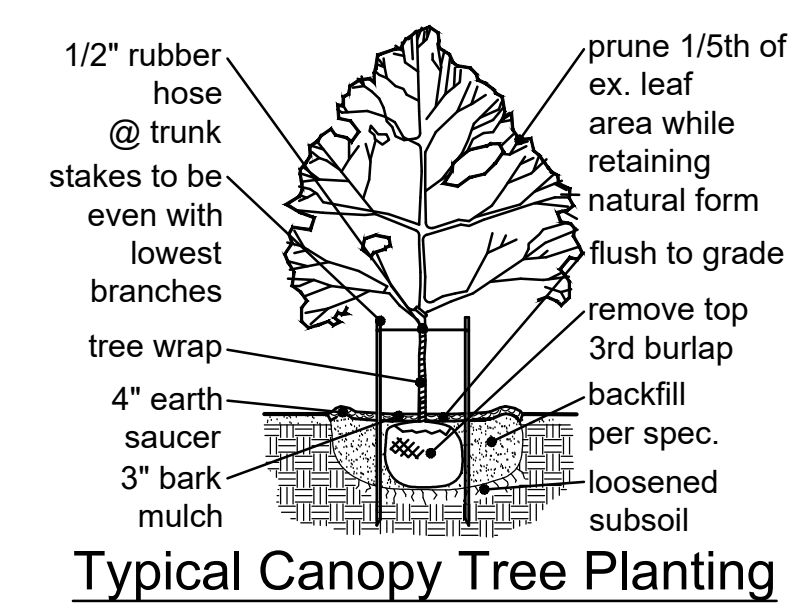
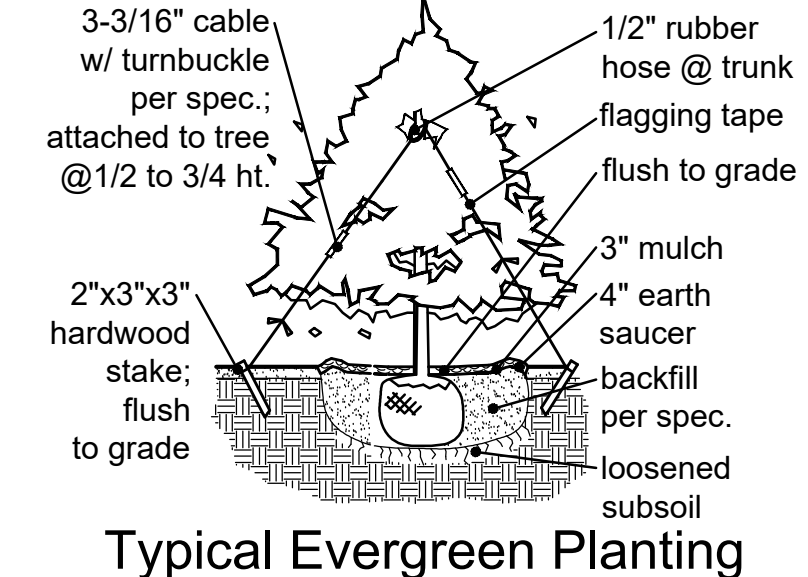
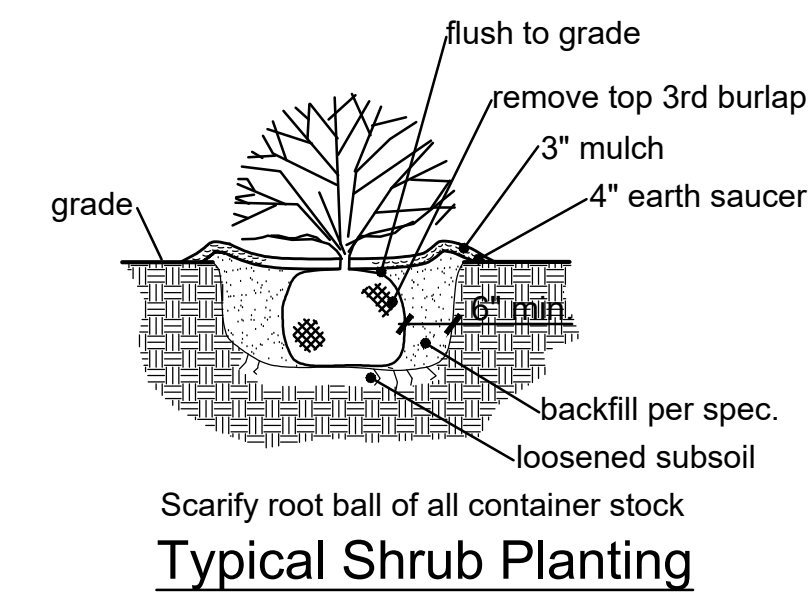
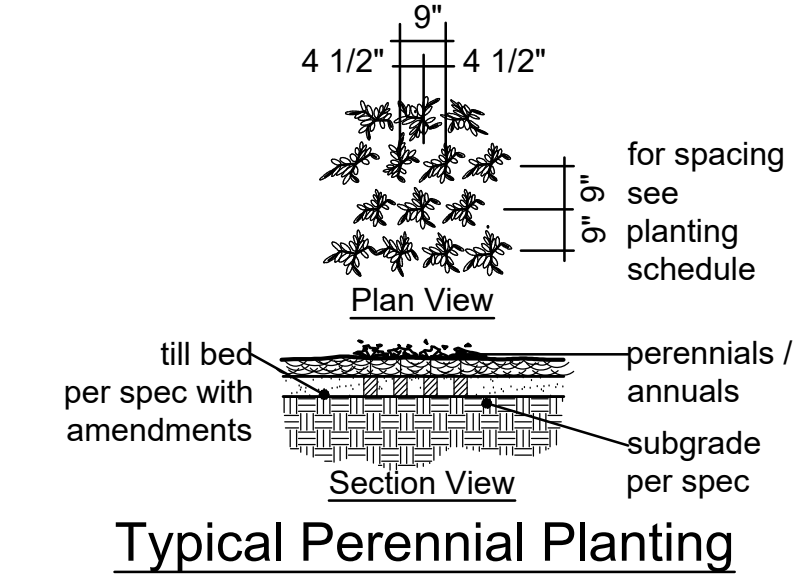


Landscape Plan
SCALE 1"=30'



Partial Landscape Plan
SCALE 1"=10'

- General Notes:**
- 1) No proposed street trees shall be planted closer than three (3) feet to any curb per UDC.
 - 2) No proposed street trees shall be planted closer than twenty-five (25) feet of streetlights, street signs, and intersections per UDC.
 - 3) No street trees shall be planted within ten (10) feet of street inlets or manholes per UDC.
- Landscape Notes:**
- 1) Lawn areas shall be turf-type Tall Fescue Grass or approved equivalent. All 3:1 or steeper slopes shall be seeded and have erosion control blanket.
 - 2) Topsoil in all disturbed lawn areas at 6" depth.
 - 3) Soil mix in all shrub beds at 8" depth.
 - 4) All mulch to be double ground bark mulch.
 - 5) Bed edges to be spade cut.
 - 6) All new landscape shall be irrigated with an automatic underground sprinkler system per the City of Chesterfield Unified Code Section 04-02. Contractor to provide design-build drawings for review by Landscape Architect. Zone lawns independent of shrub beds.



PLANTING SCHEDULE									
SYMBOL	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	SIZE/GROWTH RATE	BLOWMEDIUM	MATURE HEIGHT	(SEE FEET)
CANOPY-SHADE (STREET) TREES									
A	3	Quercus rubra	Red Oak	2.5" cal.	B&B	Lg/M-Fast		45+	
B	3	Quercus shumardii	Shumard Oak	2.5" cal.	B&B	Lg/M-Fast		45+	
C	3	Quercus coccinea	Scarlet Oak	2.5" cal.	B&B	Lg/M-Fast		45+	
D	3	Quercus robur	English Oak	2.5" cal.	B&B	Lg/Medium	6.8 %	45+	
E	3	Quercus muehlenbergii	Chinkapin Oak	2.5" cal.	B&B	Lg/Medium	6.8 %	45+	
F	2	Quercus bicolor	Swamp White Oak	2.5" cal.	B&B	Lg/Medium	4.5 %	45+	
CANOPY-SHADE (PARKING LOT AND BUFFER) TREES									
G	3	Tilia cordata	Littleleaf Linden	2.5" cal.	B&B	Lg/Slow-M	6.8 %	45+	
H	3	Gleditsia triacanthos f. inermis	Honeylocust (thornless)	2.5" cal.	B&B	Lg/Fast		45+	
J	3	Liriodendron tulipifera	Tuliptree	2.5" cal.	B&B	Lg/Fast		45+	
UNDERSTORY - FLOWERING (BUFFER) TREES									
M	3	Carpinus betulus	Common Hornbeam	2.5" cal.	B&B	Med/Slow-M	6.8 %	30-40	
N	3	Carpinus caroliniana	American Hornbeam	2.5" cal.	B&B	Small/Med	6.8 %	20-35	
P	3	Magnolia x soulangiana	Saucer Magnolia	2.5" cal.	B&B	Med/Slow-M	6.8 %	20-30	
EVERGREEN (BUFFER) TREES									
R	3	Picea pungens	Colorado Blue Spruce	6" h.	B&B	Med/Med	6.8 %	30-40	
S	3	Picea abies	Norway Spruce	6" h.	B&B	Lg/Med	6.8 %	30-40	
T	3	Picea glauca	White Spruce	6" h.	B&B	Med/Med	6.8 %	30-40	
SHRUBS-GRASSES-PERENNIALS-ANNUALS-GROUNDCOVER									
a	10	Ilex glabra	Inkberry	18"		72" o.c.			
b	5	Viburnum dentatum	Arrowwood Viburnum	18"		72" o.c.			
c	5	Hydrangea quercifolia	Oakleaf Hydrangea	18"		72" o.c.			
d	6	Ilex x meserveae 'Heckenstar'	Castle Wall Blue Holly (male)	18"		48" o.c.			
e	5	Ilex x meserveae 'Hachfee'	Castle Spire Blue Holly (female)	18"		48" o.c.			
f	4	Physocarpus opulifolius 'SMNPOTW'	Tiny Wine Gold Ninebark	18"		72" o.c.			
g	19	Ilex glabra 'SMNIGAB17'	Gem Box Inkberry Holly	18"		36" o.c.			
h	17	Thuja occidentalis 'Anna van Vloten'	Anna's Magic Ball Arborvitae	18"		24" o.c.			
j	28	Spiraea japonica 'Yan'	Double Play Gold Spirea	18"		24" o.c.			
							Total	65.7 %	

Jerald Saunders - Landscape Architect
MO License # LA-007

Consultants:

TUBULAR USA
686 Spirit Valley West Drive
Chesterfield, Missouri 63005

Revisions:

Date	Description	No.
6/21/23	City Comments	1

Drawn: KP
Checked: RS

Loomis Associates Inc.
Missouri State Certificate of Authority #LAC #000119

Sheet Title: Landscape Plan
Sheet No: L1.01
Date: 5/31/23
Job #: 660.075

EXTERIOR FINISH LEGEND

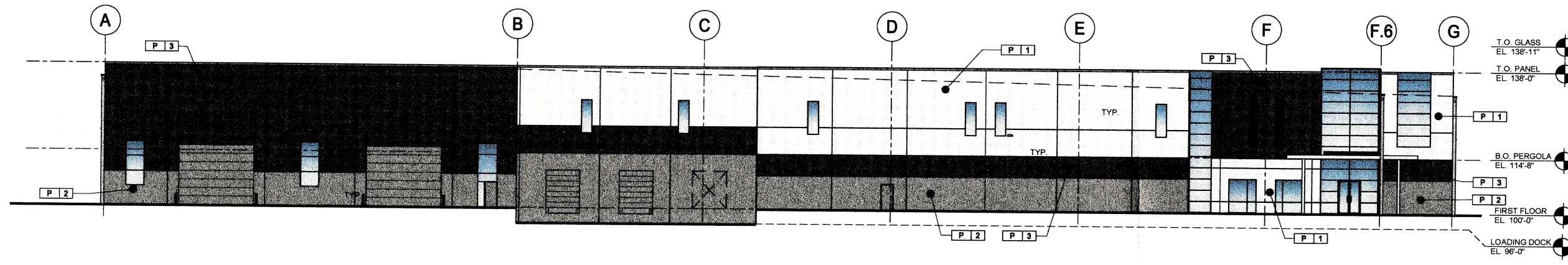
PAINT	
	P 1 COLOR: HIGH REFLECTIVE WHITE MANUF: SHERWIN-WILLIAMS CODE: SW775
	P 2 COLOR: DORMAN GRAY MANUF: SHERWIN-WILLIAMS CODE: SW2017
	P 3 COLOR: DOVETAIL MANUF: SHERWIN-WILLIAMS CODE: SW7018

NOTE
ONCE TILT-UP PANELS ARE ERECTED, PREP TILT-UP SECTION IN DIRECT SUNLIGHT FOR FIELD VERIFICATION FOR FINAL PAINT SELECTION.

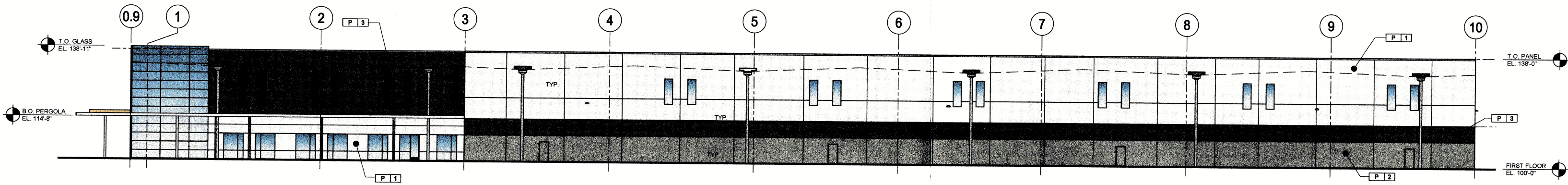
- MISC.**
- PIPE BOLLARDS: PAINT
 - CONDUCTOR HEADS + DOWNSPOUTS: PRE-FINISHED METAL - COLOR TO MATCH P-2
 - DOWNSPOUT BOOTS: GALVANIZED CAST IRON TO MATCH P-2
 - HOLLOW METAL DOORS: PAINTED TO MATCH P-2

GLASS SPECIFICATION:

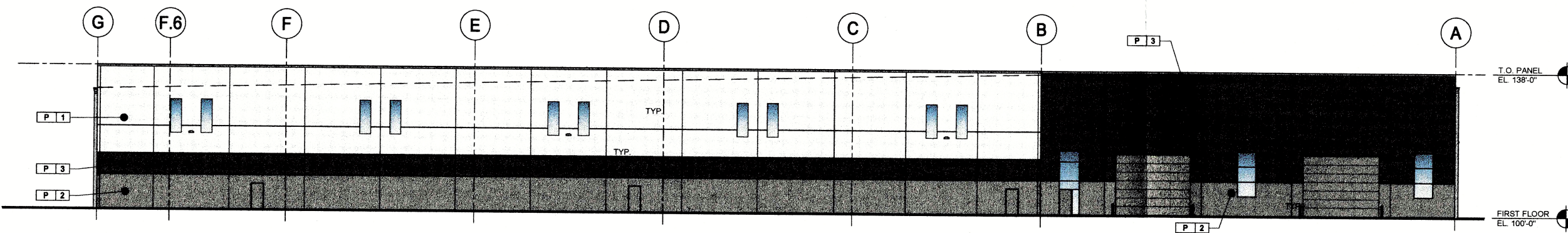
1" INSULATED UNIT: 1/4" CLEAR, 1/2" AIRSPACE, 1/4" SOLARBAN 70 SOLARGRAY
SPANDREL GLASS: TO MATCH INSULATED GLASS UNIT



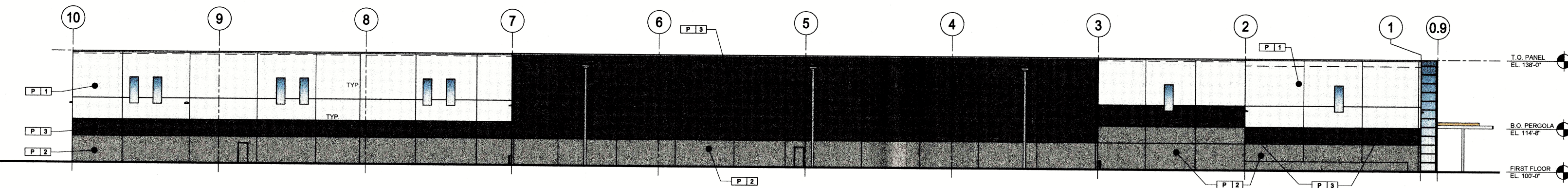
1 NORTH ELEVATION
A1 SCALE: 1/16" = 1'-0"



6 WEST ELEVATION
A1 SCALE: 1/16" = 1'-0"



11 SOUTH ELEVATION
A1 SCALE: 1/16" = 1'-0"



16 EAST ELEVATION
A1 SCALE: 1/16" = 1'-0"

GRAY DESIGN GROUP

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Construction Documents For:
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Spirit Valley Drive
Chesterfield, MO 63005

KEYSTONE
QUALITY DESIGN-BUILD CONSTRUCTION

STATE OF MISSOURI
LAWRENCE
COURT
RECORDS
08/04/23

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Job: 27122391.00
A1