



III. B.

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

Architectural Review Board Staff Report

Project Type: Site Development Section Plan

Meeting Date: December 10, 2015

From: Jessica Henry, AICP
Project Planner

CC: Aimee Nassif, Planning & Development Services Director

Location: South of Chesterfield Airport Road, west of its intersection with Spirit of St. Louis Boulevard.

Applicant: Stock and Associates, Inc., on the behalf of Green Street Properties.

Description: **Spirit of St. Louis Airpark (Brew Hub):** A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 6.896 acre tract of land zoned "M-3" Planned Industrial District located south of Chesterfield Airport Road, west of its intersection with Spirit of St. Louis Boulevard.

PROPOSAL SUMMARY

The request is for a 78,894 square foot building which will house offices, a restaurant and tasting room, and brewing operations for Brew Hub situated on a 6.896 acre site located south of Chesterfield Airport Road, west of its intersection with Spirit of St. Louis Boulevard. The subject site is zoned "M-3" Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance Number 1430. The exterior building materials will be comprised of tilt up panels, glass storefront, and aluminum metal canopy with a TPO (Thermoplastic Polyolefin) roofing system with precast panels and metal panel system for screening roof-top equipment.

HISTORY OF SUBJECT SITE

St. Louis County approved a rezoning from an "NU" Non-Urban District to an "M-3" Planned Industrial District for Spirit of St. Louis Airport via Ordinance 2212 prior to the incorporation of the City of Chesterfield. The ordinance was subsequently amended by St. Louis County Ordinance 9642, 11,768, 13,838, and 13,935 and City of Chesterfield Ordinance 656, 870, 1156, and 1312.

The ordinance amendments were to allow for additional uses, amend setbacks, and amend the boundaries of the “M3” Planned Industrial District. The current ordinance governing the site is City of Chesterfield Ordinance 1430.

Currently, only the southeastern corner of the 9.763 acre parcel has been developed and contains a Budget Rental Car. A Record Plat to create three new lots, one of which is the 6.896 acre subject site, is currently under review with Staff.



Figure 1 – Subject Site Aerial

STAFF ANALYSIS

General Requirements for Site Design:

A. Site Relationships

The subject site is bounded by Chesterfield Airport Road, Spirit of St. Louis Boulevard, and Wings of Hope Boulevard. While vehicular access to the site will be provided from Spirit of St. Louis and Wings of Hope Boulevards, the building has direct visibility from Chesterfield Airport Road. Although largely industrial in nature, the site has been designed to take advantage of this view and the main façade of the building that fronts on Chesterfield Airport Road incorporates architectural elements that minimize the industrial nature of the building. Additionally, the applicant is proposing a large accent wall in a prominent location, visible both from Chesterfield Airport Road and the main entrance drive into the development off of Spirit of St. Louis Boulevard. This accent wall matches the height of the building at 40 feet, and is intended to anchor the site and provide a highly visible presence for the Brew Hub development. The design of this feature will be discussed in detail in later portions of this report.

B. Circulation System and Access

There are currently no access points to the subject site and, as shown in the site layout below, the applicant is proposing three access points—one off of Spirit of St. Louis Boulevard and two off Wings of Hope Boulevard. The access off of Spirit of St. Louis Boulevard leads to a large parking area that is adjacent to the areas of the development that will be frequented by the public, namely, the tasting room and restaurant. The access points from Wings of Hope Boulevard leads to both a smaller parking area that is adjacent to the employee entrance and to the back loading and storage area. The dual access points on Wings of Hope Boulevard will permit commercial vehicles to enter and exit the site without crossing the more public northern and eastern internal drive areas. In addition to providing safer circulation patterns by separating traffic by type, this also serves to provide a use separation—the industrial uses are limited to the rear and commercial uses to the front of the site.

The front and rear of the site are connected via an internal drive, and cross access easements for future connection are provided for both the property to the west and the current Budget Rental Car site.

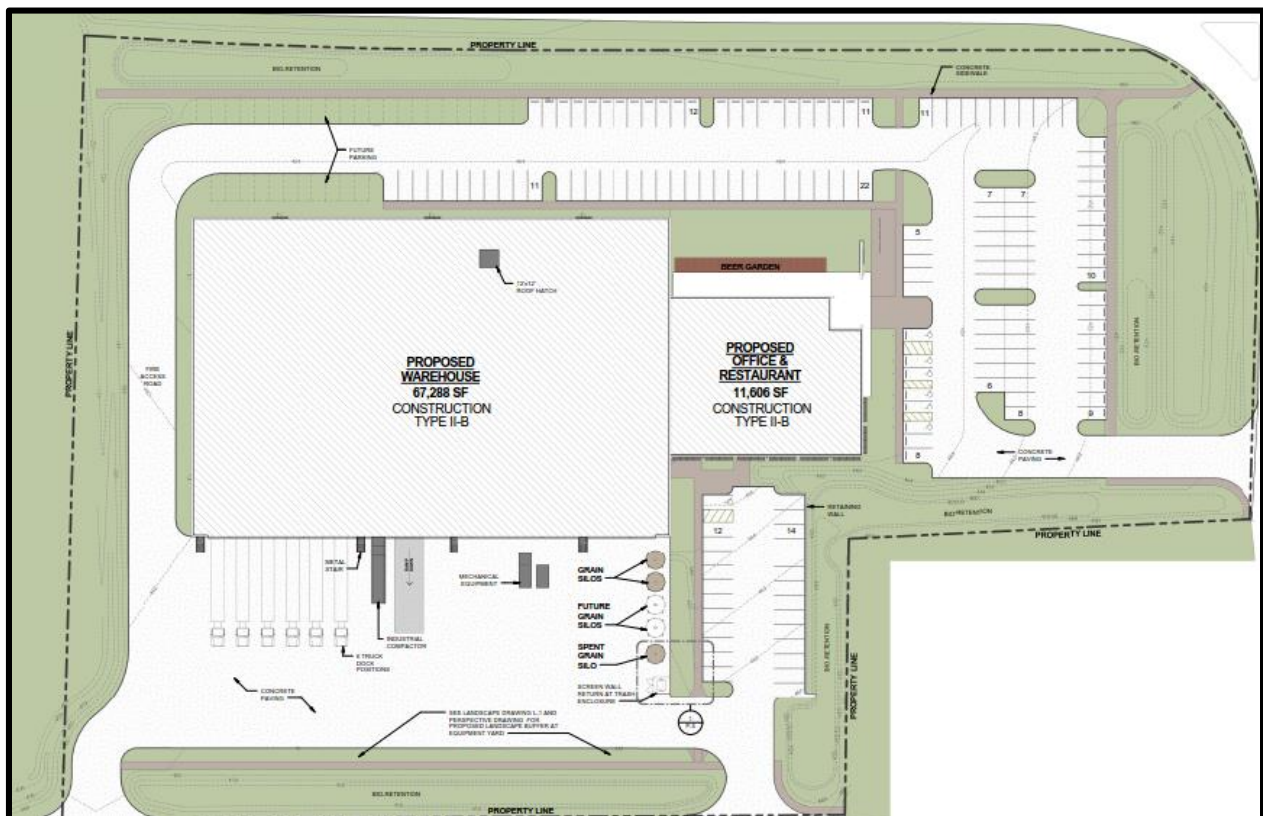


Figure 2 – Colored Site Plan

The proposal includes sidewalks along all roadway frontages and internal linkages provide pedestrians access to the site from all directions. Consideration was given to cyclists as well, with a prominent bicycle parking area placed in the plaza that leads to the main entry and beer garden patio area of the tasting room and restaurant portion of the building.

C. Topography

The site is nearly flat and minimal changes to the topography are proposed.

D. Retaining Walls

The proposal includes a retaining wall along the eastern perimeter of the smaller parking area that is accessed from Wings of Hope Boulevard. Additionally, a drive-in overhead door located on the rear elevation includes an elevated loading ramp that features retaining walls.

General Requirements for Building Design:

A. Scale

The applicant is proposing a single story building that is varied in height. The brewing operation portion of the building is approximately 40 feet in height and the office/restaurant/tasting room portion of the building is just over 24 feet in height. The contemporary design of the proposed building ties into the surrounding area architecture via the use of similar materials, such as large glass expanses and tilt up concrete panels.

In addition to being lower in height than the adjacent brewing operations portion of the building, the office/restaurant/tasting room portion of the building features windows on the three exposed elevations and an aluminum canopy over the entry plaza and beer garden areas. These elements, complemented by patio furniture and a see-through direct vent gas fire place in the beer garden area, bring a human scale to this area of the site.

The taller portion of the building that houses the brewing operations features full length windows on the north elevation which provide views of the stainless steel brew tanks. This adds visual interest and brings the brewing operations to those outside of the building. In the rear of the building, several grain silos that are 40 feet in height are proposed.

B. Design

The contemporary design of the building is achieved through the innovative use of color and materials. Although largely industrial in nature, architectural elements such as vertical and horizontal reveals, windows, and a comprehensive color and material palette result in a cohesive design that minimizes the appearance of an intensive, industrial use and site. As noted in the Architect's Statement of Design, the overall theme of the site can be summarized as "we make beer here!"

Corresponding to this theme, multiple elements of the beer brewing process are incorporated into the site design rather than shielded from the public view. These include the stainless steel brew tanks visible from the full length clerestory windows, the grain silos located on the rear of the site, and, most prominently, the 40 foot tall wooden accent wall that features negative space in the shape of a beer bottle. These elements are integrated into the design through intentional material and color choices that result in a designed—as opposed to a raw industrial—look for the entire site.

In order to break up the long northern front building elevation, tilt-up wood panels with wall sconces for accent lighting are employed. These panels complement the wood plank accent wall.

C. Materials and Color

The choice of materials for the building includes tilt-up concrete panels, pre-finished aluminum metal canopies, glass windows, tilt-up wood plank texture panels, functional grain silos, and a wood clad accent wall feature with a stone base. A neutral beige paint color has been selected for the tilt-up concrete panels and grain silos. The roof-top equipment will be screened by the parapet walls.



Figure 3 – Rendering

D. Landscape Design and Screening

As required by the City code, buffer plantings are provided along each roadway and trees are dispersed throughout the parking areas. Landscaping is proposed along the west elevation in order to break up the otherwise long and flat expanse. Bioretention basins are provided throughout the site. There will be 37% open space within this development.

The rear of the building is designed to meet the operational needs of a brewing facility, and in addition to the grain silos, there are multiple overhead doors, mechanical equipment, a trash dumpster, and an industrial compactor. A tilt-up concrete wall extends south from the brewery to provide screening of the trash dumpster and silo bases from the south and east. A vinyl coated chain link fence completes the dumpster enclosure; although the building will screen the dumpster from the north, the vinyl chain link fence gate is not opaque and the dumpster may be visible from the west. A dense row of landscaping is proposed along Wings of Hope Boulevard to provide screening of this rear loading area; however, this is an area that merits significant review in order to ensure that an adequate level of screening is provided.

E. Signage

Signage is not part of the proposal before Architectural Review Board and will be reviewed separately by Staff.

F. Lighting

Proposed site lighting includes pole-mounted parking lot light fixtures, two types of wall sconces, and canopy flush-mounted fixtures. Each of these fixtures is fully-shielded and full cut off as required by the Unified Development Code.



In addition to these fixtures, the applicant is proposing to utilize LED rope lighting to outline the negative space on the accent wall. This LED rope light is included on the architectural rendering, as shown in this image. Regarding this feature and the use of the LED accent lighting, the Architect’s Statement of Design states the following:

“This feature is a beacon that announces the brewery’s presence to those traveling along Chesterfield Airport Road from the east and the west, as well as those approaching from the north via Spirit of St. Louis Boulevard. At night the negative space is trimmed by the soft glow of an LED rope light, crisply framing the activity that is the soul of Brew Hub.”

Accent lighting utilized for architectural elements is reviewed in conjunction with the Site Development Section Plan packet, and, in addition to any information requested by the ARB, Staff will be requesting additional information from the applicant regarding maintenance, night appearance, and hours of operation for this lighting.

Figure 4 – LED Accent Lighting

Specific Requirements for the Chesterfield Valley

Façades:

- The proposed building utilizes similar materials on the two primary north and east elevations; however, as discussed earlier, the south elevation is dedicated to the industrial functions of a brewery operation.
- Accent lighting, as opposed to flood lighting, is proposed for the primary north elevation that fronts on Chesterfield Airport Road.
- The trash enclosure is partially screened by a wall constructed from the same tilt-up concrete panels utilized on the building. The level of dumpster screening provided by the

vinyl coated chain linked closure gate, which will be visible from the west, needs further evaluation.

Storage: The site is not visible from I-64/US 40.

Utilities: All utilities to the building will be installed underground.

Parking: Parking is proposed on the front and rear of the building, with loading areas located in the rear. The applicant is proposing to screen the loading area with a row of dense landscaping along Wings of Hope Boulevard.

DEPARTMENTAL INPUT

Staff has reviewed the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design. Be advised, this project is still going through development review by City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the ARB will be included in Staff's report to the Planning Commission.

Staff requests action on the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Spirit of St. Louis Airpark (Brew Hub).

MOTION

The following options are provided to the Architectural Review Board for consideration relative to this application:

- 1) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Spirit of St. Louis Airpark (Brew Hub) as presented, with a recommendation for approval (or denial) to the Planning Commission."
- 2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for Spirit of St. Louis Airpark (Brew Hub) to the Planning Commission with the following recommendations..."

Attachments

1. Architectural Review Packet Submittal



ARCHITECTURAL REVIEW BOARD
Project Statistics and Checklist

Date of First Comment Letter Received from the City of Chesterfield 9.14.15

Project Title: BREW HUB Location: SOUTHWEST CORNER OF CHESTERFIELD AIRPORT RD. & SPIRIT OF ST. LOUIS BOULEVARD

Developer: GREEN STREET DEVELOPMENT GROUP, LLC Architect: HDA ARCHITECTS Engineer: STOCK & ASSOC.

PROJECT STATISTICS:

Size of site (in acres): 6.896 Total Square Footage: 78,894 Building Height: 40'-0"

Proposed Usage: BREWERY, DISTRIBUTION, OFFICE, RETAIL

Exterior Building Materials: CONCRETE, ALUMINUM, WOOD, GLASS, STONE

Roof Material & Design: FULLY ADHERED TPO - SINGLE SLOPE

Screening Material & Design: CONCRETE WALL PANELS AND LANDSCAPE BUFFERS

Description of art or architecturally significant features (if any): WOOD CLAD FEATURE WALL WITH NEGATIVE SPACE IN THE SHAPE OF A BEER BOTTLE - PERIMETER LED LIGHTS

ADDITIONAL PROJECT INFORMATION:

Checklist: Items to be provided in an 11" x 17" format

- Color Site Plan with contours, site location map, and identification of adjacent uses.
- Color elevations for all building faces.
- Color rendering or model reflecting proposed topography.
- Photos reflecting all views of adjacent uses and sites.
- Details of screening, retaining walls, etc.
- Section plans highlighting any building off-sets, etc. (as applicable)
- Architect's Statement of Design which clearly identifies how each section in the Standards has been addressed and the intent of the project.
- Landscape Plan.
- Lighting cut sheets for any proposed building lighting fixtures. (as applicable)
- Large exterior material samples. (to be brought to the ARB meeting)
- Any other exhibits which would aid understanding of the design proposal. (as applicable)
- Pdf files of each document required.



November 30, 2015

City of Chesterfield
690 Chesterfield Parkway West
Chesterfield, MO 63017-0760

Attention: Ms. Jessica Henry, Project Planner

Re: 807 Spirit of St. Louis Boulevard, Brew Hub Architect's Statement of Design

Brew Hub is 78,894sf brewery opening in Chesterfield, MO in 2016. Located at the corner of Chesterfield Airport Road and Spirit of St. Louis Boulevard, the tilt-up concrete and clear glazed building sits on a 6.9 acre site.

The iconic wood clad feature wall in the outdoor beer garden anchors the building to the site, with a negative space in the shape of the beer bottle that not only defines the building's presence on the corner, but also the function of the building itself: a state of the art brewery and tasting room. This feature is a beacon that announces the brewery's presence to those travelling along Chesterfield Airport Road from the east and the west, as well as those approaching the building from the north via Spirit of St. Louis Boulevard. At night the negative space is trimmed by the soft glow of an LED rope light, crisply framing the activity that is the soul of Brew Hub.

To the north of the tasting room is the beer garden, inviting patrons to enjoy the outdoors. This beer garden is partially covered by a canopy that engages both the tasting room and feature wall. A see-through indoor/outdoor fire place connects the interior with the exterior and invites visitors to gather around during the crisper weather of the spring and fall. Adjacent to the beer garden and the entry plaza, separate from the vehicular parking, is a large area dedicated to bicycle storage, providing a comfortable landing spot for many of west county's weekend cyclists to stop by as part of their day out. Pedestrians can access the site from all points north, east, west and south via generous sidewalks that provide accessible routes to both the main entry of the tasting room and the employee entrance.

The building is comprised of two volumes of different heights united by their rhythm and materials. The lower mass contains the tasting room and offices and is where the majority of human activity takes place. The larger mass contains the brew house, fermentation field, brite tanks, packaging, storage, and shipping and receiving. Large clear glass windows on the tasting room invite visitors into the space and provide those outside of the building a taste of the activity contained within. On the northeast corner of the brewery mass, expansive clear glass windows provide both patrons and passers by a glimpse of the large, stainless steel equipment through which the brewing process takes places. Clerestory windows on the east and north face of the brewery volume allow natural light to filter into the brewery. Vertical barnwood textured panels break up the north elevation along Chesterfield Airport Road and ties the brewery mass back to the wood clad feature wall through a shared texture. Horizontal reveals wrap the building on all sides.



Shipping and receiving and the brewery support yard are located along the south side of the building, hidden from the traffic of Chesterfield Airport Road and Spirit of St. Louis Boulevard. A tilt-up concrete screen wall extends south from the brewery mass to screen the base of the grain silos and the chillers, while simultaneously allowing the grain silos to peak out from around the corner of the brewery to announce: “we make beer here!” Generous landscaping along Wings of Hope Drive on the south side of the property screen the shipping and receiving and support areas from traffic passing by.

Thank you,

A handwritten signature in black ink, appearing to read 'Kyle Wilson'. The signature is fluid and stylized, with a large loop at the end.

Kyle Wilson, AIA, LEED AP BD+C
Senior Designer



Brew Hub STL

CHESTERFIELD, MO



11.30.2015



10



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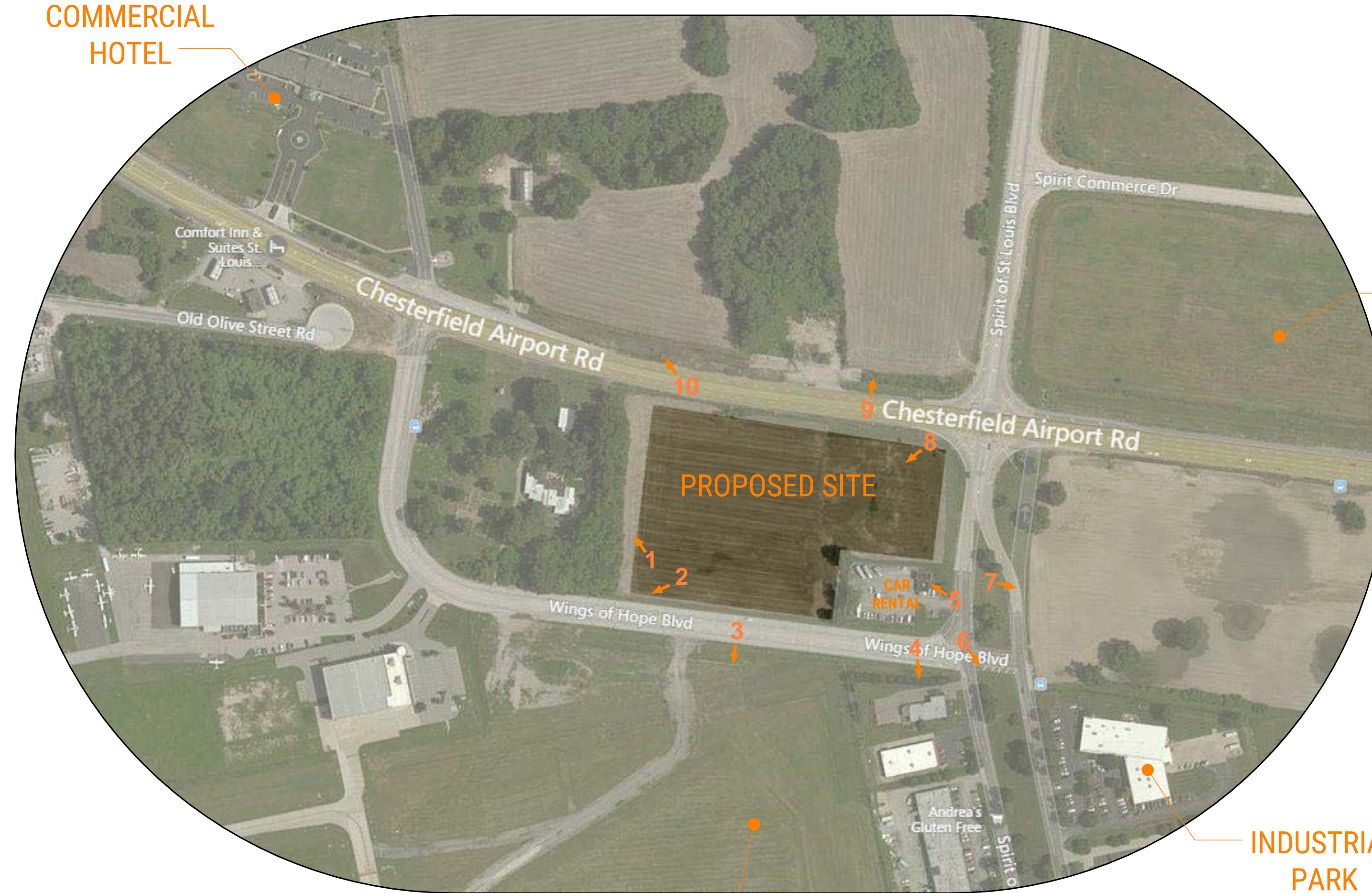
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7



1



COMMERICAL HOTEL

UNDEVELOPED LAND

INDUSTRIAL PARK

CHESTERFIELD AIRPORT



6



2



3



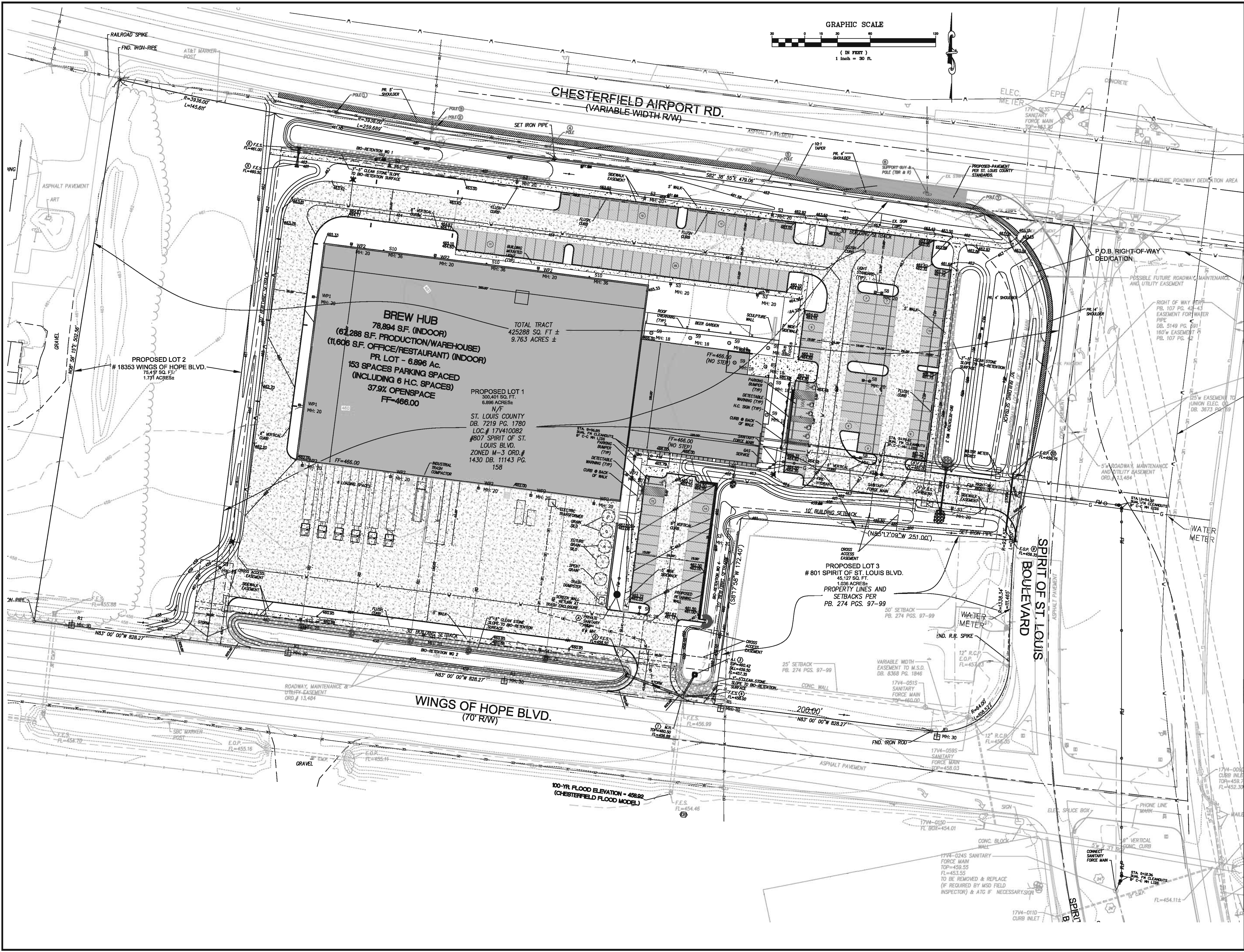
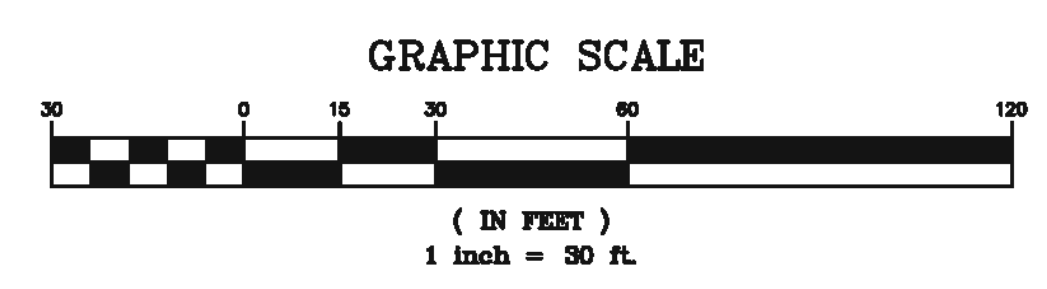
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5

Brew Hub STL

CHESTERFIELD, MO



SITE DEVELOPMENT SECTION PLAN FOR:

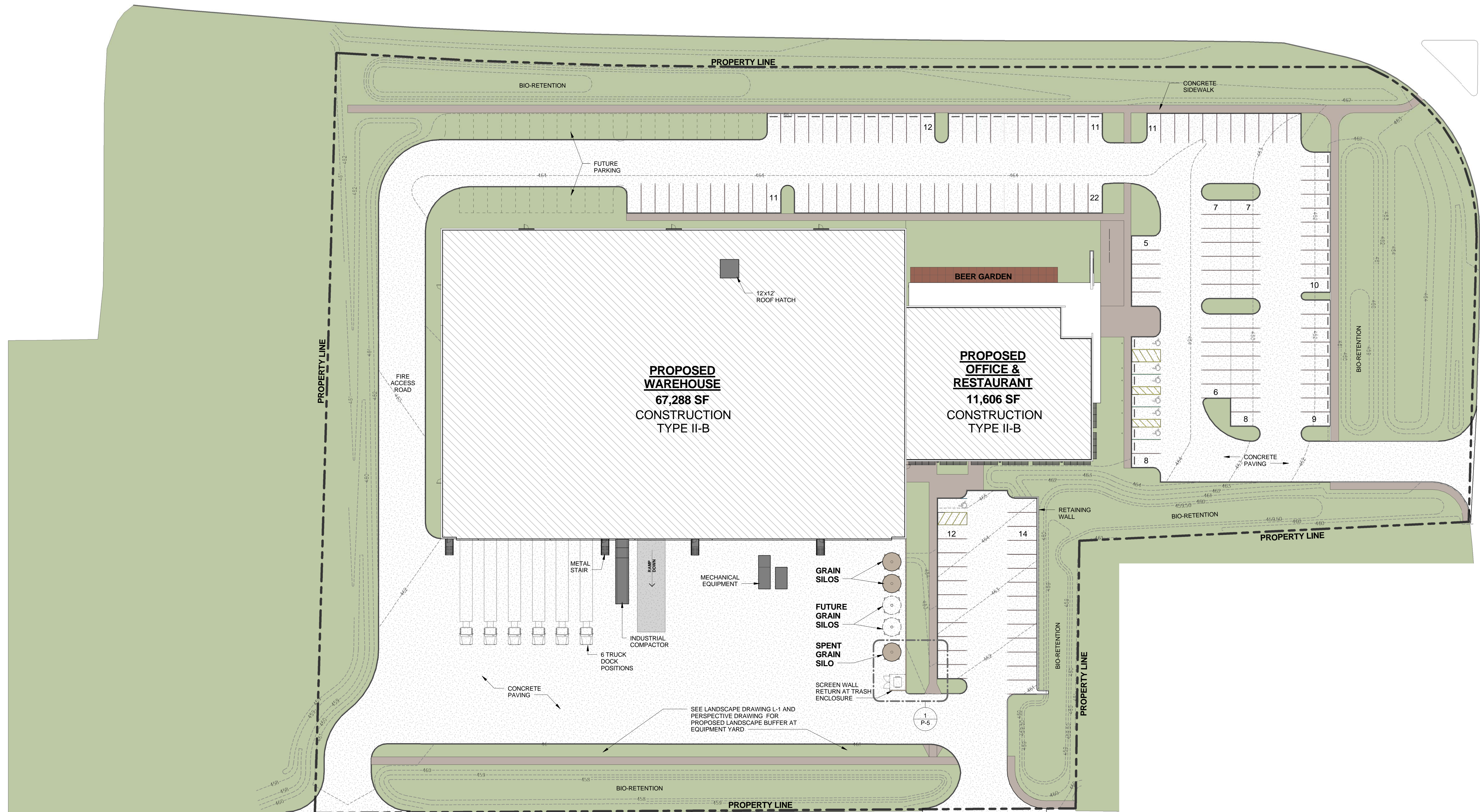
BREW HUB
 807 SPIRIT OF ST. LOUIS BOULEVARD
 CHESTERFIELD
 MISSOURI



REVISIONS:
 1. 2015/10/14 REVISED PER CITY & COUNTY COMMENTS
 2. 2015/11/16 REVISED PER CITY COMMENTS

DATE: 8/21/2015	JOB NO: 214-5310.2
SCALE: P-XXXX-XX	DATE PLOTTED: 11-17-15
SCALE: MAT # 3017	SCALE: MAT # 3017
DATE: 8/21/2015	JOB NO: 214-5310.2
SCALE: P-XXXX-XX	DATE PLOTTED: 11-17-15
SCALE: MAT # 3017	SCALE: MAT # 3017

CHESTERFIELD AIRPORT ROAD



SPRIT OF ST. LOUIS BLVD

ARCHITECTURAL SITE PLAN
1" = 30'-0"

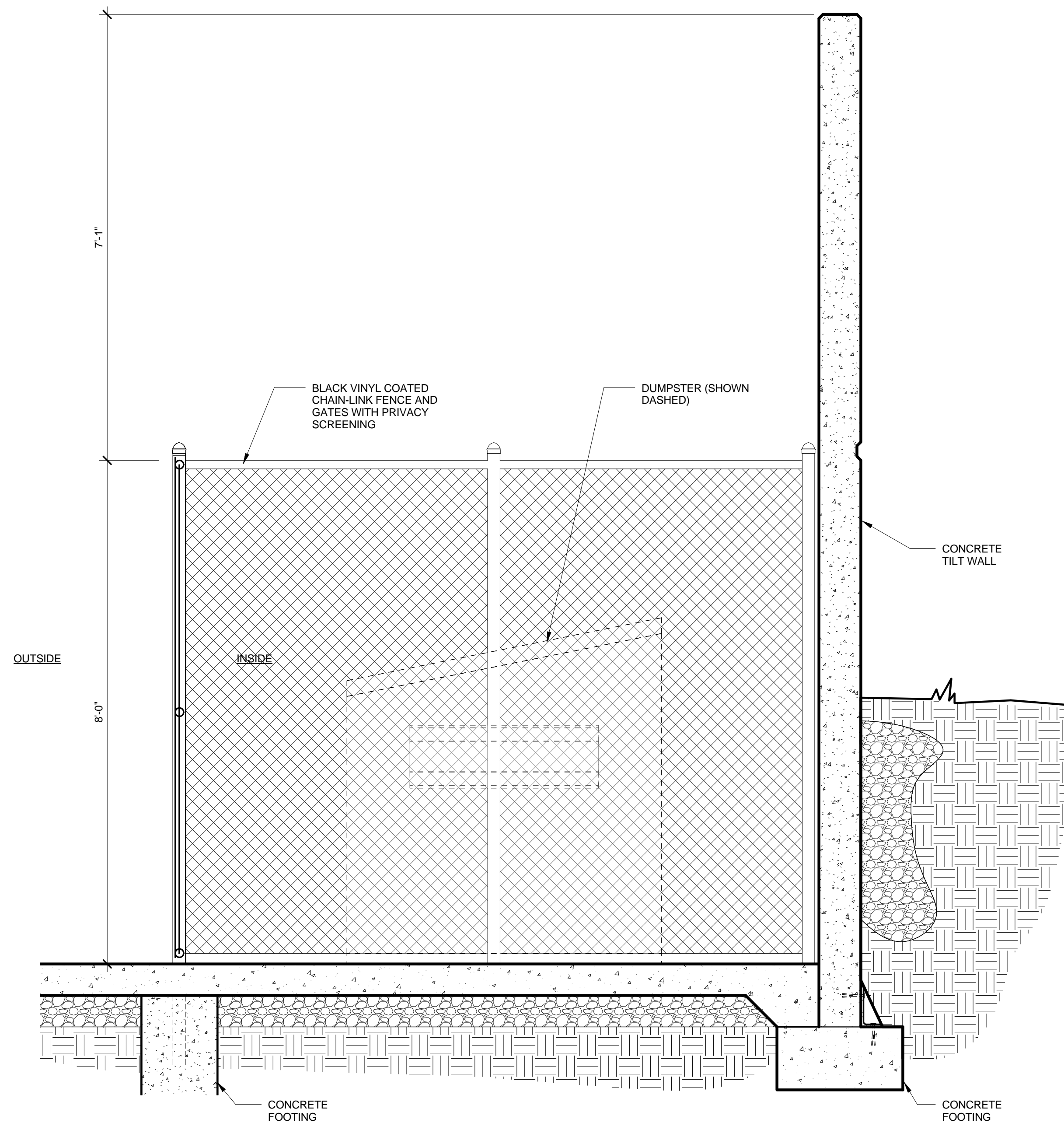
WINGS OF HOPE BLVD.

Brew Hub STL

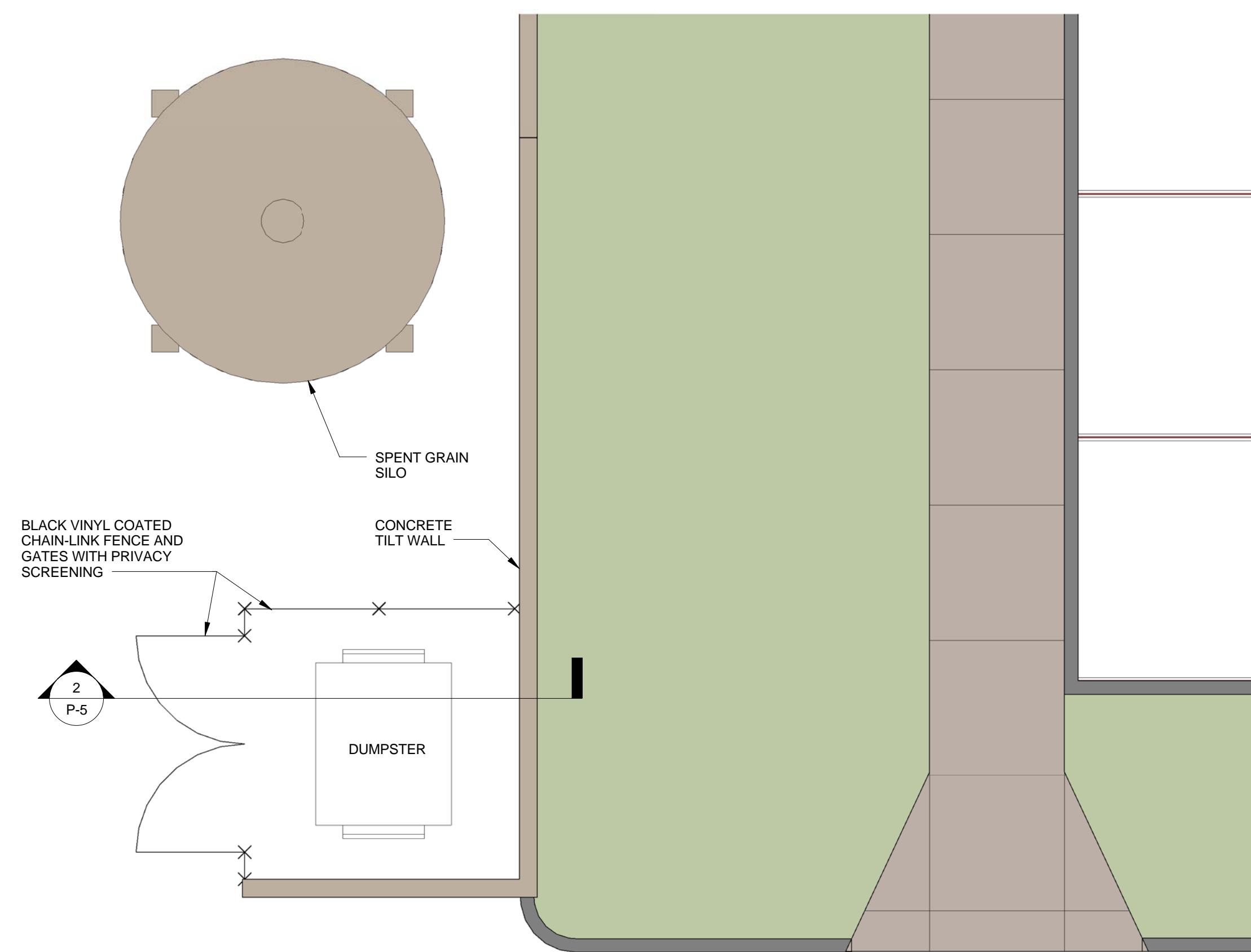
CHESTERFIELD, MO



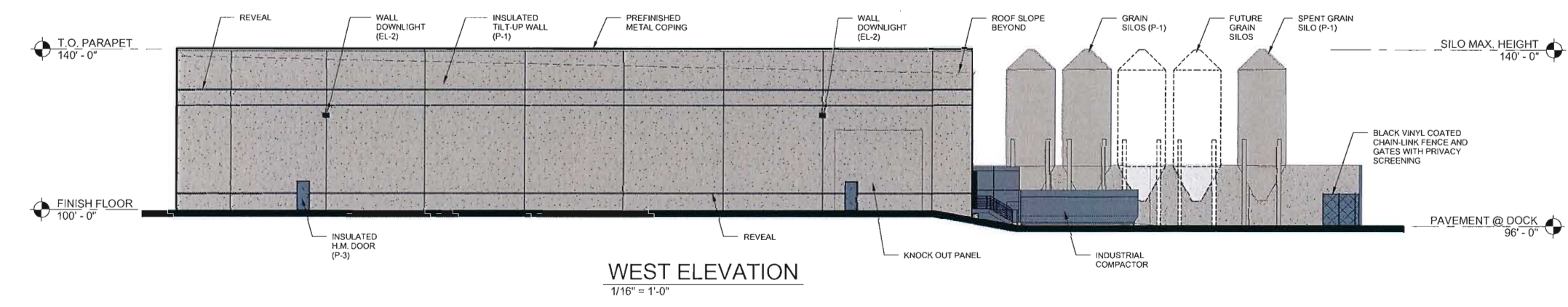
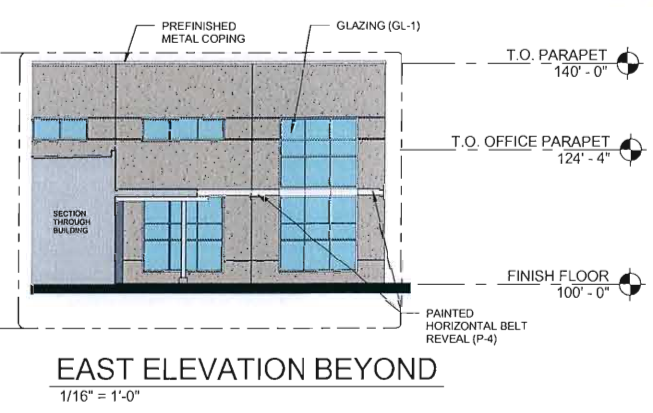
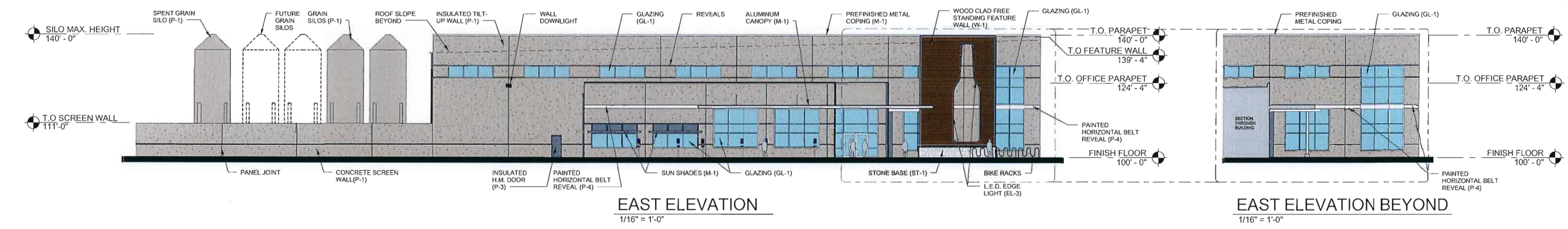
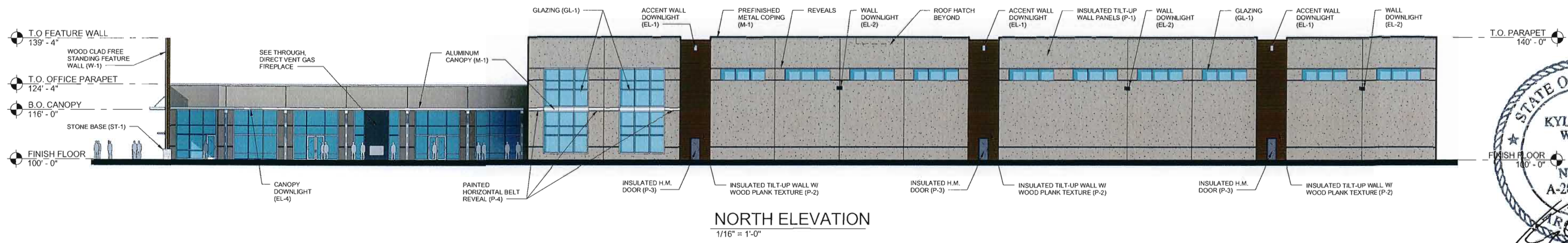
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2
P-5
ARB SCREEN SECTION AT FENCE & TILT WALL
3/4" = 1'-0"

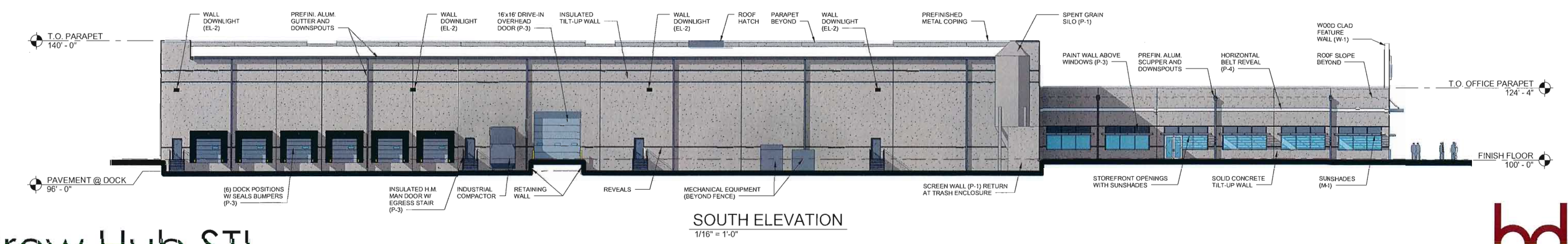


1
P-5
ENLARGED PLAN AT SCREEN WALLS
1/4" = 1'-0"



MATERIAL LEGEND:

PAINT	
P-1 (INSULATED TILT-UP WALL, SILOS)	SW 7037 BALANCED BEIGE
P-2 (INSULATED TILT-UP WALL W/ WOOD PLANK TEXTURE)	SW 6083 SABLE
P-3 (ACCENT PAINT ABOVE OFFICE WINDOWS / EXT. DOORS)	SW 7019 GAUNTLET GRAY
P-4 (PAINTED HORIZONTAL BELT REVEAL)	SW 7072 ONLINE
WOOD	
W-1 (MONUMENT SIGN) AND	RUSTIC GRAIN - RECLAIMED REFINISHED BARN WOOD
STONE	
ST-1 (FIREPLACE, MONUMENT SIGN BASE) TUMBLED	EARTHWORKS - EW GOLD MODULAR
GLAZING	
GL-1 (INSULATED GLASS)	PPG SLOARBAN 90(2) CLEAR + CLEAR
METAL	
M-1 (SUNSHADES, CANOPY, MULLIONS)	PAC CLAD - SILVER
EXTERIOR LIGHTING	
EL-1 (WOOD TEXTURED TILT-UP WALL DOWNLIGHT)	SEE LIGHTING CUTSHEETS
EL-2 (TILT-UP WALL DOWNLIGHT & PARKING LOT)	
EL-3 (L.E.D. EDGE LIGHT)	
EL-4 (CANOPY CEILING)	

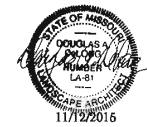


Brew Hub STL

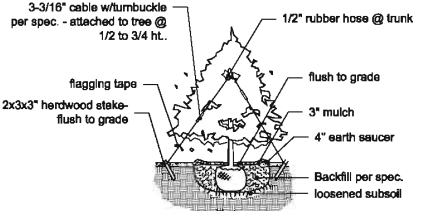
CHESTERFIELD, MO



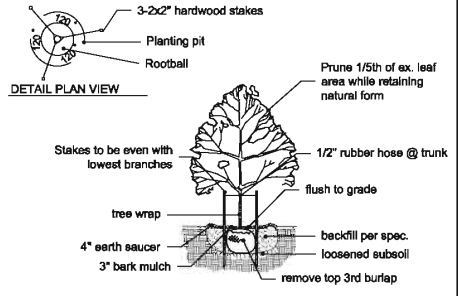
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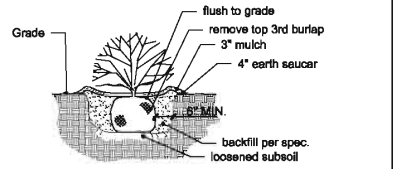
Douglas A. DeLong, Landscape Architect LA-R1
 Consultants:



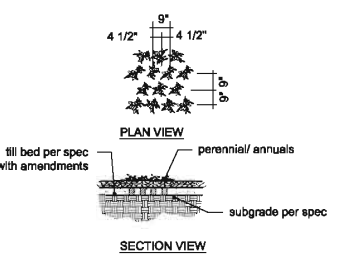
TYPICAL EVERGREEN PLANTING



CANOPY TREE PLANTING



TYPICAL SHRUB PLANTING



TYPICAL PERENNIAL PLANTING

Landscape Plan
 SCALE 1"=30'

GENERAL NOTES:

- 1) Openpace ratio is 37.9%. Total Site 300,401 SF/Open Space 113,943 SF
- 2) Street tree Req. - 975 lf/50 ft = 19.5 or 20 street trees
- 3) Street Trees-Wings of Hope - 465.96 lf/50 = 9.37 or 9 street trees
- 4) All street trees will be located at least 3' from proposed curb.
- 5) All street trees will be located at least 10' from all storm sewer structures.
- 6) All street trees will be located at least 25' from all street lights, signs, and intersections.
- 7) Street Trees along Spirit of St. Louis Boulevard moved behind proposed swale.
- 8) Street Trees along Chesterfield Airport Road to be small ornamental trees due to overhead electric lines.
- 9) All turf areas around building will be eodded balance of site will be seeded.
- 10) An In-ground Irrigation system will be provided.

SYMBOL	QUANTITY	BOTANICAL NAME		COMMON NAME	SIZE	MATURE HEIGHT	TYPE
		SCIENTIFIC	COMMON				
A	11	<i>Pinus strobus</i>	White Pine		6-10'	45'+	Fast Growing
B	6	<i>Picea pungens</i>	Colorado Spruce		6-10'	30-40'	Medium Growing
C	20	<i>Acer rubrum</i> 'Red Sunset'	Red Sunset Red Maple		2 1/2'	45'+	Fast Growing
D	13	<i>Gleditsia triacanthos</i> 'Shademaster'	Shademaster Honeylocust		2 1/2'	45'+	Fast Growing
E	9	<i>Tilia americana</i> 'Redmond'	Redmond Linden		2 1/2'	45'+	Medium Growing
F	4	<i>Quercus bicolor</i>	Swamp White Oak		2 1/2'	45'+	Medium Growing
G	6	<i>Texodium dictichum</i>	Bald Cypress		6-10'	45'+	Medium Growing
H	4	<i>Cercle canadense</i> 'Merlot'	Merlot Red Bud		2 1/2'	25'+	Fast Growing
J	6	<i>Crataegus laevigata</i> 'Superba'	Crimson cloud Hawthorn		2 1/2'	25'+	Medium Growing
K	6	<i>Ostrya virginiana</i>	Hophornbeam		2 1/2'	30'+	Slow Growing
L	7	<i>Carpinus caroliniana</i>	American Hornbeam		2 1/2'	20'+	Medium Growing
M	56	<i>Thuja Green Giant</i>	Green Giant Arborvitae		6-8'	20'+	Medium Growing
a	15	<i>Thuja occidentalis</i> 'Emerald'	Emerald Arborvitae		4-6'	4' O.C.	
b	47	<i>Ilex X 'Meoog'</i> 'China Girl'	China Girl Holly		16-24'	3' O.C.	
c	50	<i>Itea virginica</i> 'Henry's Garnet'	Henry's Garnet Sweetgum		16-24'	3' O.C.	
d	33	<i>Juniperus sabinna</i> 'Broadmoor'	Broadmoor Juniper		16-24'	4' O.C.	
e	31	<i>Ceanothus americanus</i>	New Jersey Tea		16-24'	3' O.C.	
f	21	<i>Euonymus alatus</i> 'Compata'	Dwarf Burning Bush		24-30'	4' O.C.	
g	24	<i>Viburnum x juddii</i>	Judd Viburnum		24-30'	4' O.C.	
h	16	<i>Berberis thunbergii</i> s. 'Rose Glow'	Rose Glow Barberry		16-24'	30' O.C.	
			Perennials to be selected		1 qt	16' O.C.	
			Water quality plantings to be selected per MSD requirements				

Revisions:

Date	Description	No.
9/25/16	Site Revisions	1
10/15/16	Site Revisions	2
11/7/2016	Site Revisions	3

Drawn: DAD
 Checked: BAD

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

Sheet Title: Landscape Plan
 Sheet No: L-1
 Date: 8/21/2015
 Job #: 114.012



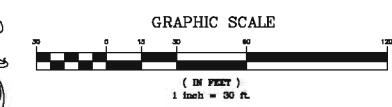
PERSPECTIVE VIEW FROM WINGS OF HOPE BLVD. LOOKING NORTHWEST
NOT TO SCALE

Brew Hub STL

CHESTERFIELD, MO

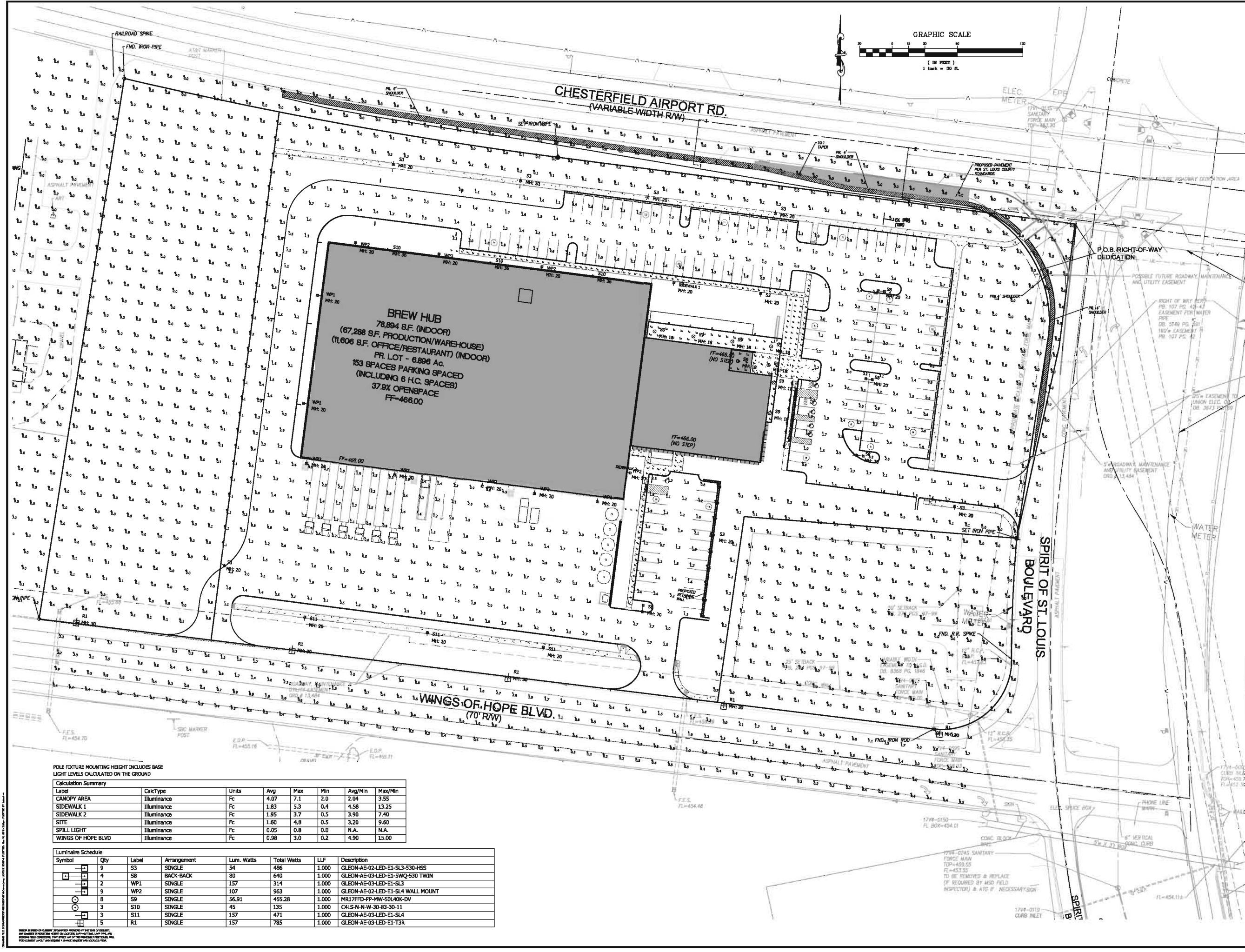
hda
architects

11.30.2015



257 Chesterfield Business Parkway
St. Louis, MO 63105 PA (658)
SDSP-300 FAX (658) 530-1800
www.stockandassociates.com
info@stockandassociates.com

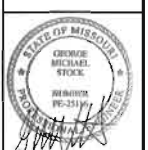
STOCK & ASSOCIATES
Consulting Engineers, Inc.



PREPARED BY: **STOCK & ASSOCIATES** Consulting Engineers, Inc.

SITE DEVELOPMENT SECTION PLAN FOR:

BREW HUB
807 SPIRIT OF ST. LOUIS BOULEVARD
CHESTERFIELD MISSOURI



GEORGE M. STOCK C-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000998

REVISIONS:
1. 2015/10/14 REVISED PER CITY & COUNTY COMMENTS
2. 2015/11/16 REVISED PER CITY COMMENTS

POLE FIXTURE MOUNTING HEIGHT INCLUDES BASE LIGHT LEVELS CALCULATED ON THE GROUND

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CANOPY AREA	Illuminance	Fc	4.07	7.1	2.0	2.04	3.55
SIDEWALK 1	Illuminance	Fc	1.83	5.3	0.4	4.58	13.25
SIDEWALK 2	Illuminance	Fc	1.95	3.7	0.5	3.90	7.40
SITE	Illuminance	Fc	1.60	4.8	0.5	3.20	9.60
SPILL LIGHT	Illuminance	Fc	0.05	0.8	0.0	N.A.	N.A.
WINGS OF HOPE BLVD	Illuminance	Fc	0.98	3.0	0.2	4.90	15.00

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
□	9	S3	SINGLE	54	486	1.000	GLEON-AE-02-LED-E1-SL3-530-HSS
□	4	S8	BACK-BACK	80	640	1.000	GLEON-AE-03-LED-E1-SWQ-530 TWIN
□	2	WP1	SINGLE	157	314	1.000	GLEON-AE-03-LED-E1-SL3
□	9	WP2	SINGLE	107	963	1.000	GLEON-AE-02-LED-E1-SL4 WALL MOUNT
○	8	S9	SINGLE	56.91	455.28	1.000	MRL7FFD-PP-MW-SOL40K-DV
○	3	S10	SINGLE	45	135	1.000	C4LS-N-W-30-83-30-11
○	3	S11	SINGLE	157	471	1.000	GLEON-AE-03-LED-E1-SL4
□	5	R1	SINGLE	157	785	1.000	GLEON-AE-03-LED-E1-T3R

DRWN BY: J.E.B./K.M.S. CHECKED BY: G.M.S.
DATE: 8/21/2015 JOB NO: 214-5310-2
SCALE: P-XXXX-XX BANK SWP # 17-V
S.L.C. INT # 3017 INT SWP # XXX-XXX-XX
WDA # MD-0000XX

NOTE: VLS
SITE PHOTOMETRIC PLAN

SHEET NO. **SDSP-3**

PROJECT

Job _____	Notes
Type _____	
Part # _____	

SPECIFICATIONS

- Source Xicato XTM LED module - up to 5000 lumens
- C.C.T. 2700K, 3000K, 3500K or 4000K
- Color Consistency 1x2 SDCM (MacAdam) along BBL, CCT +/- 40K to 70K, Duv +/- .001
- CRI (Ra) 83 or 98
- Driver / Location Included / Internal with remote or deep canopy options
- Dimming 0-10V or phase dimming to 10% standard; DALI, DMX and 1% dimming available
- Input Voltage 100 to 277VAC, phase dimmable versions are 120VAC only
- Power Up to 57 watts max, depending on LED module / driver
- Reflector 11°, 25°, 41°, 51°, or 83° - field replaceable without tools
- Material CNC machined aluminum with stainless steel hardware
- Finish Powder coat - TGIC polyester for exterior and interior use
- Weight 8.5 lb. [3.9 kg]
- Location Listed for Wet & Damp locations
- Approvals ETL Listed to UL 1598, 2108, 8750 and CSA C22.2# 9 & #250.0
- L80 Life > 50,000 hours at 80% lumen maintenance based on IESNA LM-80-08
- Warranty Lifetime Limited Warranty - see warranty for details
- IES Files LM-79-08 IES files available at www.v2LightingGroup.com/downloads
- Modifications Any modification or customization is possible - consult factory



LED

INDOOR
OUTDOOR

WET
LOCATION

DIMMABLE

LIGHTSOURCE BY

XICATO®

MADE IN
 U. S. A.

TITLE
24
COMPLIANT

C
 US
Intertek
4001580

ORDERING LOGIC

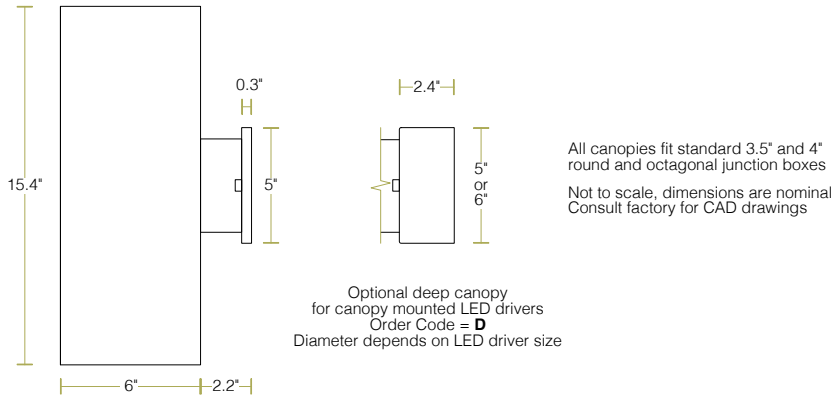
Driver		Mounting		Output	CRI *	C.C.T.	Reflector	Shell Color	Options
Model	Location	Dimming	Location						
C4LS	-	-	-	-	-	-	-	-	-
	N =Internal	N =None	D =Damp	07 =700 lm	83 =83	27 =2700K	11 =11°	GW =Gloss White	
	R =Remote	P =Phase	W =Wet	10 =950 lm	98 =98*	30 =3000K	25 =25°	TW =Textured Matte White	
	D =Deep	V =0-10V		13 =1300 lm		35 =3500K	41 =41°	GB =Gloss Black	
	Canopy	Z =Other		20 =2000 lm		40 =4000K	51 =51°	TB =Textured Matte Black	
				30 =3000 lm			83 =83°	GM =Silver Gray Metallic	
				40 =4000 lm				BM =Bronze Metallic	
				50 =5000 lm				ZZ =Custom	

* 98 CRI not available in 4000 or 5000 lm

Example Part Number: **C4LS-NND-13832741-GW**

CORE 400 LX Sconce - Internal Driver, No Dimming, Damp Location - 2000 lm, 83 CRI, 2700K, 41° Reflector - Gloss White

DIMENSIONS



LED OPTIONS

Reflector Option	LED Specifications				
	LES ¹	CRI	Lumens ^{2,3}	Wattage ⁴ (W)	Efficacy ⁵ (lm/W)
11°, 25°, 41°, 51° & 83°	19mm	Ra = 83 ±3	700	5.6	129
			950	8.2	118
			1300	11.7	111
			2000	19.5	102
			3000	29.3	102
			4000	39.1	102
	Ra = 98 R9 ≥ 90 R15 ≥ 95	700	7.4	97	
		950	10.9	89	
		1300	15.6	83	
		2000	26.4	76	
		3000	34.1	88	

¹ LES: Light Emitting Surface diameter

² ±10%

³ Source lumens - see photometrics on page 3 for LOR to calculate delivered lumens

⁴ Maximum luminaire wattage including LED driver = LED wattage x 1.2

⁵ Higher efficacies are available via lower drive currents - consult factory

CONTROL OPTIONS

Standard LED Drivers* (included in base price)	Order Code V = 0-10V dimming to 10%
	Order Code P = Phase dimming to 10% Compatible with both forward and reverse phase dimmers
Optional LED Drivers*	eldoLED 0-10V, DALI, or DMX dimming to 0% Lutron EcoSystem or forward phase dimming to 1%

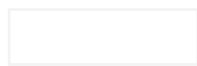
* Standard LED drivers are suitable for Wet Location

* Optional LED drivers are suitable for Damp Location

* For EM applications:

All LED drivers may be used with 3rd party inverter style systems

POWDER COAT OPTIONS



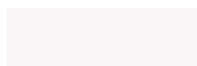
Gloss White
Order Code = **GW**



Gloss Black
Order Code = **GB**



Silver Grey Metallic
Order Code = **GM**



Matte White
Order Code = **TW**



Matte Black
Order Code = **TB**



Bronze Metallic
Order Code = **BM**

The complete range of powder coat colors from Tiger Drylac is available - consult factory
Custom match powder coat colors are available - consult factory
Printed or on-screen colors are only approximations - consult chip set before specifying

PHOTOMETRICS

LM-79-08 IES files available at www.v2LightingGroup.com/downloads

Beam Angle	Order Code	Intensity Plot (cd) (3000lm)	Polar Plot (cd) (3000lm)	Cone Diagram (3000lm)	Description
11°	11			<p>Beam Diameter</p> <p>Illuminance at Center</p> <p>5' 1178 fc 1.0'</p> <p>10' 295 fc 1.9'</p> <p>15' 131 fc 2.9'</p> <p>20' 74 fc 3.8'</p>	<p>CBCP = 29,547 cd</p> <p>Beam Angle = 11°</p> <p>Field Angle = 23°</p> <p>LOR = 89.1 %</p> <p>Beam = full width @ 50%</p> <p>Field = full width @ 90%</p>
25°	25			<p>Beam Diameter</p> <p>Illuminance at Center</p> <p>5' 311 fc 2.2'</p> <p>10' 78 fc 4.5'</p> <p>15' 35 fc 6.7'</p> <p>20' 19 fc 8.9'</p>	<p>CBCP = 7,785 cd</p> <p>Beam Angle = 25°</p> <p>Field Angle = 59°</p> <p>LOR = 87.5 %</p> <p>Beam = full width @ 50%</p> <p>Field = full width @ 90%</p>
41°	41			<p>Beam Diameter</p> <p>Illuminance at Center</p> <p>5' 205 fc 3.7'</p> <p>10' 51 fc 7.4'</p> <p>15' 23 fc 11.1'</p> <p>20' 13 fc 14.8'</p>	<p>CBCP = 5,127 cd</p> <p>Beam Angle = 41°</p> <p>Field Angle = 62°</p> <p>LOR = 82.4 %</p> <p>Beam = full width @ 50%</p> <p>Field = full width @ 90%</p>
51°	51			<p>Beam Diameter</p> <p>Illuminance at Center</p> <p>5' 143 fc 4.8'</p> <p>10' 36 fc 9.6'</p> <p>15' 16 fc 14.4'</p> <p>20' 9 fc 19.1'</p>	<p>CBCP = 3,564 cd</p> <p>Beam Angle = 51°</p> <p>Field Angle = 76°</p> <p>LOR = 83.0 %</p> <p>Beam = full width @ 50%</p> <p>Field = full width @ 90%</p>
83°	83			<p>Beam Diameter</p> <p>Illuminance at Center</p> <p>5' 72 fc 8.9'</p> <p>10' 18 fc 17.8'</p> <p>15' 8 fc 26.7'</p> <p>20' 5 fc 35.6'</p>	<p>CBCP = 1,802 cd</p> <p>Beam Angle = 83°</p> <p>Field Angle = 96°</p> <p>LOR = 84.8 %</p> <p>Beam = full width @ 50%</p> <p>Field = full width @ 90%</p>

Beam Shaping Options

Add the order code shown below to the options box at the end of the part number:

Order Code	Description
-HL	Honeycomb Louver
-DF	Diffusion Lens
-SF	Satin finish on any standard reflector
-LS	Linear Spread Lens (60° x 1°)
-WW	Wall Wash Lens (shifts beam 20° from vertical)

DESCRIPTION

The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated.

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Construction

Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy-wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Choice of 16 patented, high-efficiency AccuLED Optics. The optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics create consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI. Optional 6000K CCT and 3000K CCT. For the ultimate level of spill light control, an optional house side shield accessory can be field or factory installed. The

house side shield is designed to seamlessly integrate with the SL2, SL3, SL4 or AFL optics.

Electrical

LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 530mA and 700mA drive currents.

Mounting

Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during

assembly. Designed for pole or wall mounting. When mounting two or more luminaires at 90° or 120° apart, the EA extended arm may be required. Refer to the arm mounting requirement table on page 3. Round pole top adapter included. For wall mounting, specify wall mount bracket option. 3G vibration rated.

Finish

Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available. Consult the McGraw-Edison Architectural Colors brochure for the complete selection.

Warranty

Five-year warranty.



GLEON GALLEON LED

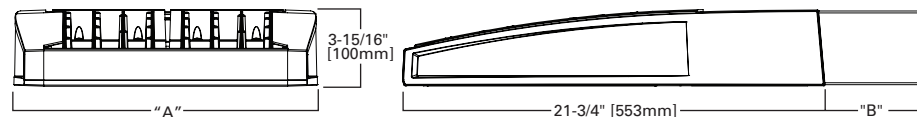
1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE

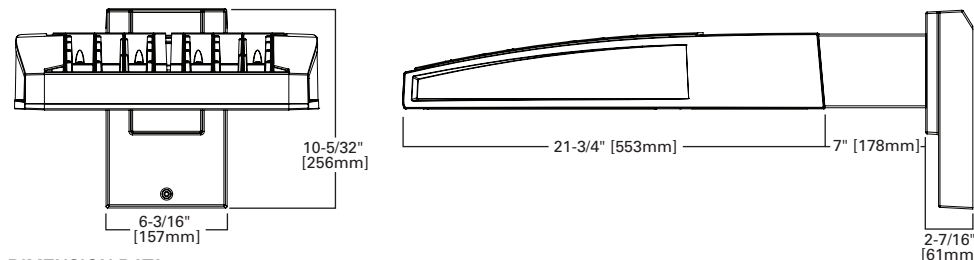
EL-2

DIMENSIONS

POLE MOUNT



WALL MOUNT



DIMENSION DATA

Number of Light Squares	"A" Width	"B" Standard Arm Length	"B" Optional Arm Length ¹	Weight with Arm (lbs.)	EPA with Arm ² (Sq. Ft.)
1-4	15-1/2" (394mm)	7" (178mm)	10" (254mm)	33 (15.0 kgs.)	0.96
5-6	21-5/8" (549mm)	7" (178mm)	10" (254mm)	44 (20.0 kgs.)	1.00
7-8	27-5/8" (702mm)	7" (178mm)	13" (330mm)	54 (24.5 kgs.)	1.07
9-10	33-3/4" (857mm)	7" (178mm)	16" (406mm)	63 (28.6 kgs.)	1.12

NOTES: 1 Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. 2 EPA calculated with optional arm length.



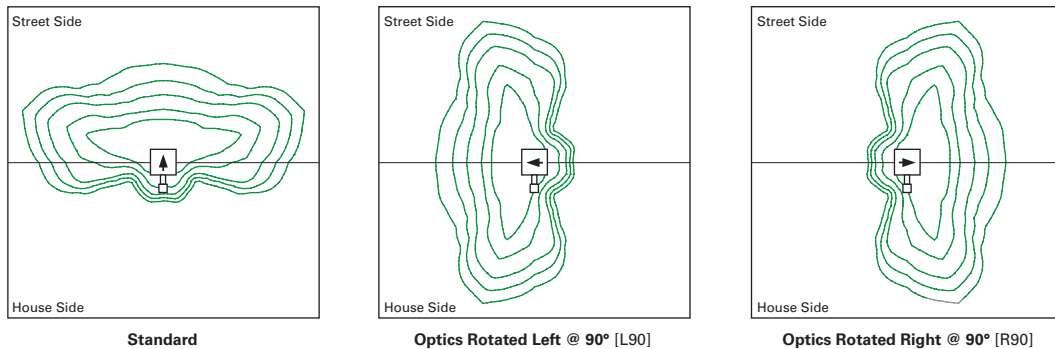
CERTIFICATION DATA

UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium™ Qualified*

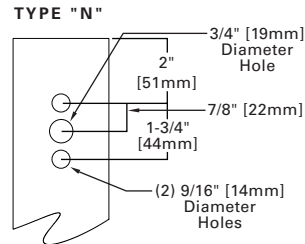
ENERGY DATA

Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V-277V 50/60Hz
347V & 480V 60Hz
-40°C Min. Temperature
40°C Max. Temperature
50°C Max. Temperature (HA Option)

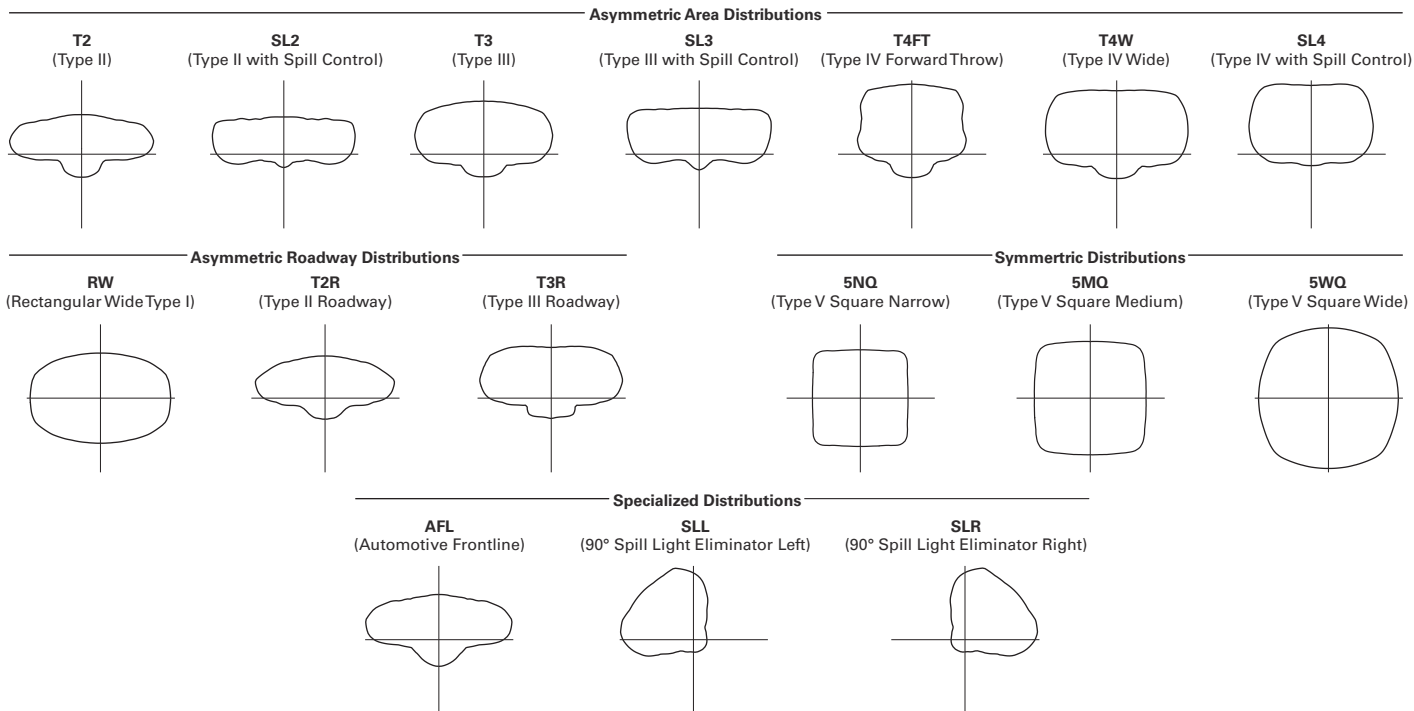
OPTIC ORIENTATION



DRILLING PATTERN

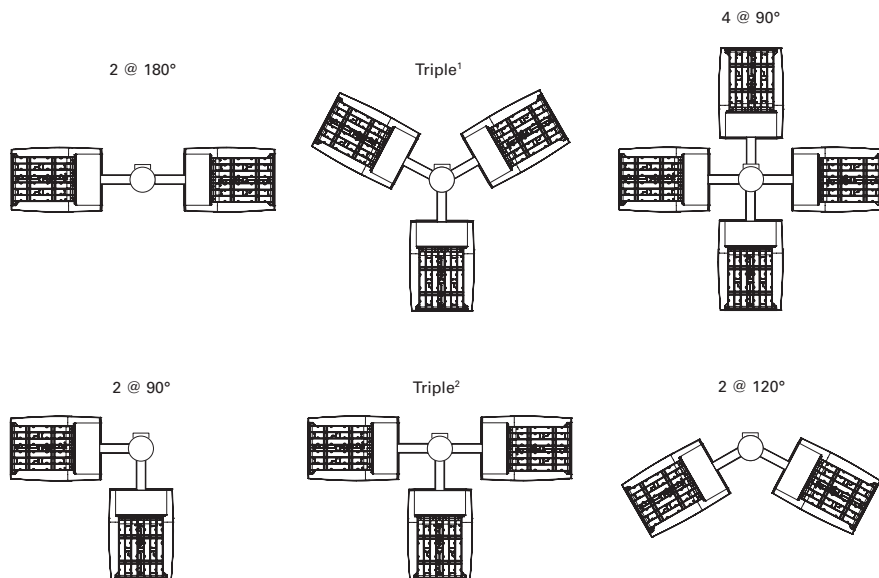


OPTICAL DISTRIBUTIONS



ARM MOUNTING REQUIREMENTS

Configuration	90° Apart	120° Apart
GLEON-AE-01	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-02	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-03	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-04	7" Arm (Standard)	7" Arm (Standard)
GLEON-AE-05	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AE-06	10" Extended Arm (Required)	7" Arm (Standard)
GLEON-AE-07	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AE-08	13" Extended Arm (Required)	13" Extended Arm (Required)
GLEON-AE-09	16" Extended Arm (Required)	16" Extended Arm (Required)
GLEON-AE-10	16" Extended Arm (Required)	16" Extended Arm (Required)

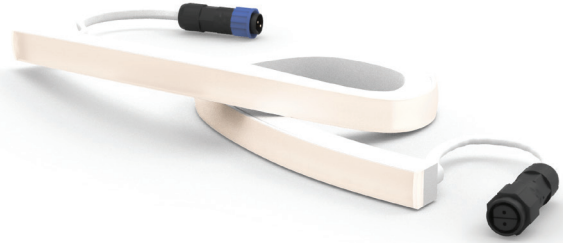


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

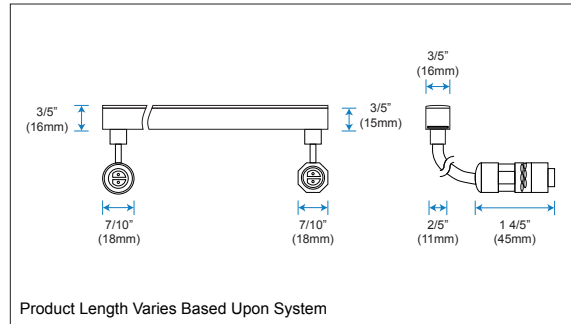
SPECIFICATION

Create Unlimited Runs of Continuous Solid Lines of Light:

Complete lighting solution that offers a low profile and easily bends along it's line of light (opposite bend to Super Neon X Dome & Flat). Ultra flexible, bends easily, free from any form of shape memory. Create endless contours, forms, lines, curves and shapes of powerful solid light. Transparent ends allows for unlimited run lengths, combined with integral "No Tool" connectors and simple leader/jumper cables. UV protected IP67 Wet Location Rated.



Dimensions:

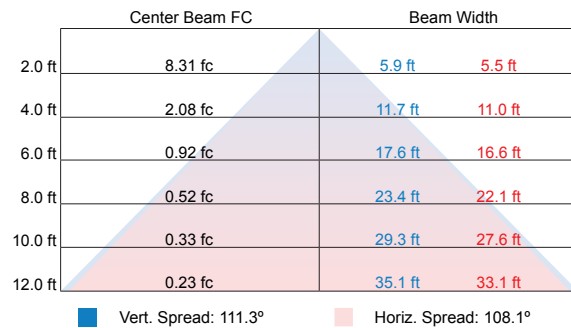


Output:

Delivered Lumens	182.77 lm / ft
CCT	4500k
Chromaticity Ordinates	x: 0.3710 y: 0.3900 u: 0.2139 v: 0.5059
Color Bin Tolerance	+ 3% / - 3%
Efficacy (lm/w)	71.79
CRI	88
Lumen Maintenance	70,000 Hours L70 @ 25°C : 90,000 Hours L50 @ 25°C 50,000 Hours L70 @ 50°C : 70,000 Hours L50 @ 50°C
Testing Data	Light Data LM-79-08 & LM-80-08

Illuminance at a Distance: Data Shown for 115°

(For lux multiply fc by 10.7)

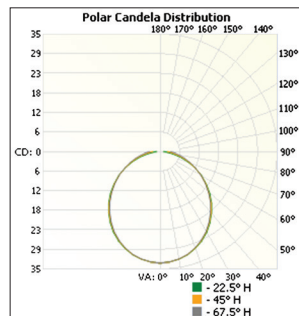


Electrical:

Input Voltage	24v DC
Power Consumption	3.38w / ft (0.14A)
Power Factor	≤ 1
Dimming	100-277v 0-10v & Magnetic Low Voltage
Emergency	N/A

Polar Candela Distribution:

Data Shown for 115°



Lumens per Zone:

Zone	Lumens	% Total
0-10	3.24	1.77%
10-20	9.30	5.09%
20-30	14.33	7.84%
30-40	17.95	9.82%
40-50	20.10	11.00%
50-60	20.65	11.30%
60-70	19.70	10.78%
70-80	17.64	9.65%
80-90	15.01	8.21%
90-100	12.45	6.81%

Physical:

Applications	Accent Linear / Curved Surfaces, Architectural Highlights
Dimensions	Length 1FT - 1 1 1/10" (334mm), 4FT - 4' 1/10" (1.22m), 8FT - 8' 3/10" (2.44m), 30FT - 29' 10 7/10" (9.11m) Width 3/5" (16mm) Height 3/5" (15mm)
Weight	4.8 oz (136g) Per Foot
Construction	UV Resistant Tough White Flexible PVC
Thermal Management	Cool to Touch, Free Air Convection
Optics	N/A
Fixture Connections	Male & Female Barrel Connectors
Operating Temperature	-4°F ~ 113°F (-20°C ~ 45°C)
Storage Temperature	-40°F ~ 176°F (-40°C ~ 80°C)
Humidity	0-95% Non Condensing

Project Name:	
Notes:	

SPECIFICATION

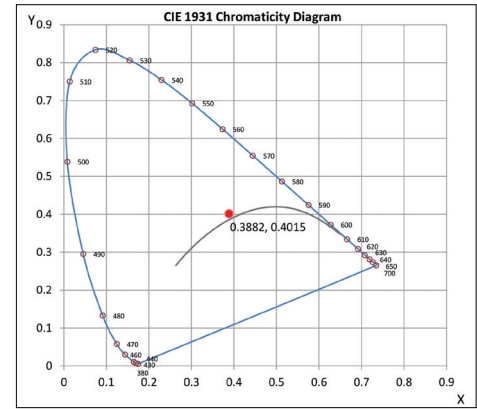
Zonal Lumen Summary:

Zone	Lumens	% Lamp	% Fixt
0-30	26.87	N.A.	14.70%
0-40	44.78	N.A.	24.50%
0-60	85.54	N.A.	46.80%
60-80	37.29	N.A.	20.40%
0-90	137.99	N.A.	75.50%
90-180	44.78	N.A.	24.50%
0-180	182.77	N.A.	100%

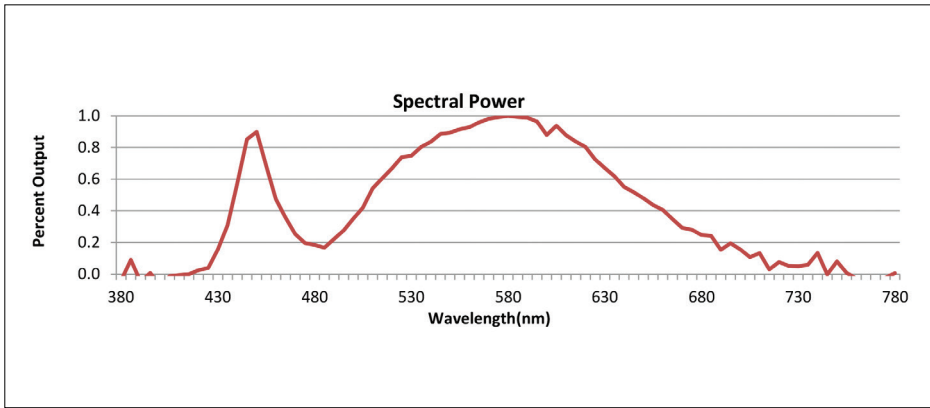
Luminance Data (cd/sq.m):

Angle in Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	4854	3617	3598
55	4571	3477	3520
65	4156	3382	3475
75	3738	3375	3516
85	3308	3525	3634

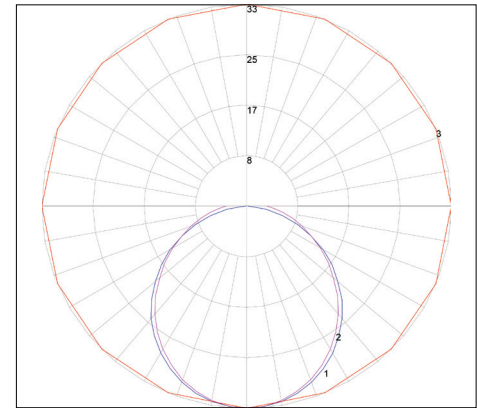
CIE 1931 Chromaticity Diagram:



Spectral Power:



Polar Graph: Data Shown for 115°



Accessories:

SN-LDR-CBL-10FT	SN-JMP-CBL-1FT	SN-T	SNE-CLP-2IN	SNE-XTR-1F	SNE-XTR-4F	MP17 24v DC 150w	MP19 24v DC 100w	MP83 24v DC 150w	MP83-277v 24v DC 150w
10FT Leader Cable for SUPER NEON X	1FT Jumper Cable for SUPER NEON EDGE	Terminator for SUPER NEON EDGE	Aluminum Mounting Clip for SUPER NEON EDGE	1' Aluminum Extrusion for SUPER NEON EDGE	4' Aluminum Extrusion for SUPER NEON EDGE	Wet Location LED Power Supply	0-10v Dimming LED Power Supply	MLV Dimming LED Power Supply	MLV Dimming LED Power Supply
Connector Dim. L: 1 4/5" (45mm) W: 7/10" (14mm) H: 7/10" (14mm)	Connector Dim. L: 1 4/5" (45mm) W: 7/10" (14mm) H: 7/10" (14mm)	L: 1 4/5" (45mm) W: 7/10" (14mm) H: 7/10" (14mm)	L: 2" (50mm) W: 7/10" (21mm) H: 9/10" (24mm)	L: 1' (305mm) W: 7/10" (21mm) H: 9/10" (24mm)	L: 4' (1.22m) W: 7/10" (21mm) H: 9/10" (24mm)	Non-Dimmable			

Options:

Product Name	Power Feed	Color Temp	Length
SNE	BF - Bottom Feed	4500K - Natural White	1FT - 1' 1 1/10" System 4FT - 4' 1/10" System 8FT - 8' 3/10" System 30FT - 29' 10 7/10" System

Standards and Certifications:

Certification	Tested to UL & CSA by ETL For Use in USA & CANADA, Complies with California Title 24 Requirements, Lighting Facts. Exceeds ANSI C78.377A, CE & RoHS Compliant.
Class	Class 3
Environment	Wet Location - IP67
Warranty	5 Year Limited Warranty

Ordering:

SKU:	SNE-BF-4500K-1FT
------	------------------



MODA Products are protected under Worldwide Patents. Minimum order quantity may apply. Due to continuous improvements and innovations, specifications may change without notice. Please refer to our website for current technical data. These figures are provided as a guideline only and may vary with differing power supplies and installations. All rights reserved. E. & O.E.

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MILLENIUM EDGE™

MR13/MR17 SERIES – FLAT FACE DEEP PROFILE HOUSING

PRODUCT FEATURES:

- » Surface mount – ceiling or wall;
13" Dia. x 5"D (MR13FFD), 17" Dia. x 6" D (MR17FFD)
- » Peace of Mind Guarantee® against breakage available
- » Dust and water protected to IP64 standards
- » Full cut-off for IDA-Approved™ Dark Sky installations -
Ceiling Mount only.



EL-4

SPECIFICATIONS:

HOUSING: Marine grade die-cast aluminum. Rib reinforced construction. Integral heat sinks. Housing flange interlocks and wraps around lens base producing maximum moisture deflection and resistance to prying. Housing provided with four-point mounting holes, one wireway hole and temporary junction box mounting drill points. Standard black or white exterior TGIC polyester powder coat – 5-step pre-treatment. Dark bronze optional finish.

REFLECTOR: Compact Fluorescent and LED: Full reflector/wire cover – 90% reflectivity. HID: Full reflector/wire cover. High efficiency aluminum.

LENS: UV-stabilized, high impact resistant, virgin injection molded polycarbonate. Close tolerance push/turn/lock-in-place mating of injection molded lens and lens base. Lens and lens base secured with one concealed captive Torx® with center pin fastener.

LENS BASE: Lens base shields lamp from viewing angles. High impact resistant, injection molded opaque black, bronze or white polycarbonate.

GASKETING: Die-cut, closed cell neoprene self adhesive gasket seals housing to mounting surface. Closed cell, silicone "O" ring gaskets positioned and friction secured in gasket channels of lens base and housing.

HARDWARE: One stainless steel Torx® with center pin fastener.

ELECTRICAL: Fluorescent magnetic ballasts – 120V/277V power factor corrected, fluorescent electronic 120/277/347 and dual voltage ballasts high power factor (<10% THD), HID ballasts high power factor. Metal halide lamps utilize pulse start technology. Shock absorbing, medium base lamp sockets provided for HID lamps. Replaceable high-brightness ANSI 3500K (80 CRI min.), 4000K (70 CRI min.), or 5000K (70 CRI min.) white LED array. 120-277VAC, high power factor electronic driver. LED dimming capability controlled through compatible 0-10V dimmer (supplied by others); 10-100% dimming range. See options for higher CRI lamp availability.

INSTALLATION: For wall mount installation, mount lamp base up on all HID lamp sources.

PHOTOMETRICS: Photometry tested to the IESNA LM-79-08 standard by an ILAC/ISO17025 accredited laboratory. For additional photometric information, go to www.kenall.com.

WARRANTY: One (1) year warranty against defects in materials and workmanship. Five (5) year warranty on LED lamps and driver for defects resulting in a fixture lumen depreciation of 30% or greater.

LISTINGS: Luminaire is certified to UL Standards by either Underwriters Laboratory or Intertek Testing Laboratory for wet location (listing includes Emergency Battery Pack "EL" option). UL certified IP64 per IEC 60598. IESNA-designated full cut-off. IDA-Approved™ Dark-Sky Friendly Fixture - Ceiling Mount only.



Ceiling Mount only

ORDERING INFORMATION (Ex: MR13FFD-PP-DB-50L57K-1-DV)

Model	Lens Type	Finish	Lamp Type	Lamp Qty	Voltage	Options	Accessories
PP							
Model	Lamp Type (Qty/Ballast/Voltage/Starting Temp) cont.			Options			
MR13FFD 13" Dia.	7 7 Watt Twin (1,2/MB/120,277/0°F)			EL* One-Lamp WL Emergency Pack (32°F) (n/a with Twin Lamping or LED)			
MR17FFD 17" Dia.	13 13 Watt Twin (1,2/MB/120,277/32°F)			10KV IEEE C62.41.2 C High Surge Protector (LED only)			
Lens Type	13Q 13 Watt Quad (1,2,3/RS/120,277,347/0°F)			BPC Photo Control – Shielded Button Type (120 or 277V only)			
PP Pearlescent Polycarbonate	18Q 18 Watt Quad (1,2,3/RS/120,277,347/0°F)			FS Single Fuse & Holder			
Finish	26Q 26 Watt Quad (1,2,3/RS/120,277,347/0°F)			NAT Natatorium Environment Option			
DB Dark Bronze	32P** 32 Watt PLT (1,2/RS/120,277,347/0°F)			QR Quartz restrike system for maximum 75-Watt for MR13FFD (see C-0796), 100-Watt (see 9009) for MR17FFD DC bay quartz			
MB Matte Black	35S 35 Watt HPS (1/HPF/120/-40°F) (MR13FFD only)			QRC Hot/Cold Quartz restrike (n/a with 35S lamp)			
MW Matte White	42P 42 Watt PLT (1,2/RS/120,277,347/0°F) (MR17FFD only)			QS Quartz socket only			
Lamp Type (Qty/Ballast/Voltage/Starting Temp)	50S 50 Watt HPS (1/HPF/120,277/-40°F)			R80 Minimum 80 CRI (4000K LED only)			
50L35K 50 Watt 3500K LED (1/DCC/120-277V/-40°F) MR17FFD only	70S 70 Watt HPS (1/HPF/120,277,347/-40°F) (MR17FFD only)			Accessories			
50L40K 50 Watt 4000K LED (1/DCC/120-277V/-40°F) MR17FFD only	50M† 50 Watt MH (1/HPF/120,277,347/-20°F)			C-0796 75 Watt DC Bay Quartz Lamp (MR13FFD only)			
50L50K 50 Watt 5000K LED (1/DCC/120-277V/-40°F) MR17FFD only	70M† 70 Watt MH (1/HPF/120,277,347/-20°F) (MR17FFD only)			9009 100 Watt DC Bay Quartz Lamp (MR17FFD only)			
50L57K 50 Watt 5700K LED (1/DCC/120-277V/-40°F) MR17FFD only	Lamp Quantity (See Lamp Type for availability)			9500 Torx® Screwdriver			
	1 One Lamp			† UV shielding lamp supplied			
	2 Two Lamps			* Max. 18 total system watts for MR13FFD or 36 total system watts for MR17FFD			
	3 Three Lamps (MR17FFD only)			** One lamp only with MR13FFD			
	Voltage (See Lamp Type for availability)			▲ n/a with BPC			
	120 120 Volts						
	277 277 Volts						
	347▲ 347 Volts						
	DV▲ 120-277 Volts, electronic ballasts & LED driver only						



www.kenall.com

P: 800-4-Kenall

F: 262-891-9701

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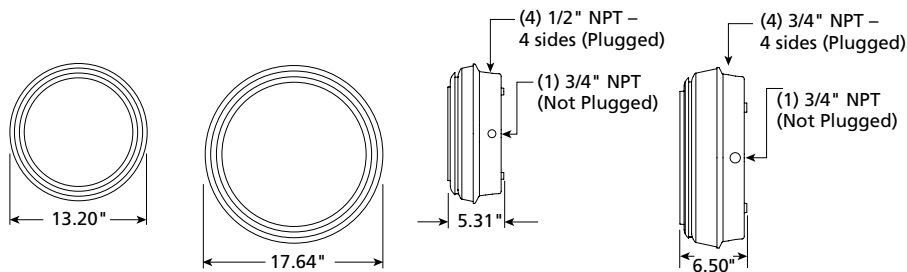
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MILLENIUM EDGE™

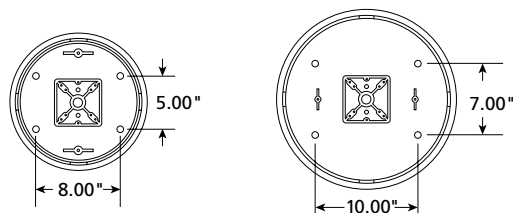
MR13/MR17 SERIES – FLAT FACE DEEP PROFILE HOUSING

DIMENSIONAL DATA

CROSS SECTION



BACK MOUNTING



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