

Architectural Review Board Staff Report

Project Type:	Site Development Section Plan
Meeting Date:	January 09, 2020
From:	Mike Knight, Assistant City Planner <i>gmk</i>
Location:	A 1.6 acre tract of land located north of North Outer 40 Road and east of Boone's Crossing.
Description:	Summit-Topgolf, Lot C2 (iFLY) SDSP: A Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design for a 1.6 acre tract of land located north of North Outer 40 Road and east of Boone's Crossing (17T520116).

PROPOSAL SUMMARY

This proposal is to construct a 6,713 square foot indoor sky diving facility on Lot C2 of the Summit-Topgolf Subdivision. The building is 65' in height and has one shared access point with Lot C1 off of North Outer 40 Road. The Summit-Topgolf subdivision is zoned Planned Commercial District and governed under the rules and regulations of City of Chesterfield Ordinance 3039. The Summit-Topgolf subdivision is made up of 4 lots (A, B, C1 and C2). Lot A currently has an approved Site Development Section Plan to construct a Residence Inn, Lot B is directly to the east in which the Topgolf facility is under operation, and Lots C1 and C2 are currently undeveloped.



Figure 1: Aerial

HISTORY OF SUBJECT SITE

In January of 2017, the City Council approved Ordinance 2932 which consolidated two Planned Commercial districts (the Hardees Iceplex and Valley Gates Subdivision) into one new 22.2 acre Planned Commercial district.

The portion of the site from the Hardees Iceplex is approximately 14.5 acres and was governed by Ordinance 1564 until Ordinance 2932. Prior to this zoning, the site was zoned “NU” Non-Urban but had also been approved for a Conditional Use Permit (CUP #13) in 1993 for the operation of an indoor ice arena, sports pro shop, snack bar, game room, ancillary seating facilities, and offices.

The portion of the site from the Valley Gates Subdivision is approximately 7.7 acres and was vacant until the City approved a change of zoning from an “NU” Non-Urban designation to a “PC” Planned Commercial designation in 2005, which allowed for a number of recreational, retail, and other commercial uses. The site went through two subsequent amendments for various development standards including, but not limited to, building height and setbacks, which resulted in the site-specific Ordinance 2570.

In June of 2018, the City Council approved City of Chesterfield Ordinance 3012. This ordinance established a new “PC” Planned Commercial District. The sole change resulting of Ordinance 3012 was the increase in total building floor area within the Summit-Topgolf development from 150,000 square feet to not exceed 200,000 square feet.

In March of 2019, the City Council approved City of Chesterfield Ordinance 3039. This ordinance established a new “PC” Planned Commercial District. Ordinance 3039 had two purposes. The first purpose was to subdivide Lot C into two Lots on the Preliminary Development Plan, and the second purpose was to increase the maximum building height of the newly created Lot C2 from sixty to sixty-five feet.

STAFF ANALYSIS

Chesterfield Valley Design Policies: The City of Chesterfield’s Comprehensive Plan has a specific Chesterfield Valley Policies Element. The policies include commercial development with particular concern over the image presented by development along I-64. There are six specific policies of which four are applicable to the design of this project. Staff outlines the applicable policies below and how the Site Development Section Plan (SDSP) relates to those policies.

Policy 1: Facades of Buildings Along I-64 and Arterial Roadways – Care should be taken to make sure that any portion of a building is equally uniform in materials and attractiveness as the primary facade. The intent is to avoid projects having their view from I-64/US 40 or the roadways appear to be the rear or side of a development.

The sky diving facility is positioned that the front of the building faces west located similar to the both the hotel and Topgolf facility. The primary view of the facility would be from the south, east, and west as one would see the building driving east to west/ west to east along I-64.

Policy 2: Lighting of Buildings Along I-64/US 40 - The facades of buildings facing I-64 should be lighted to provide an attractive image at night for individuals traveling along I-64.

The lighting currently submitted consists of both decorative and utilitarian lighting. Lights that are not fully shielded flat lensed fixtures that enhance the architecture (decorative) will require approval from Planning Commission.

Policy 3: Automobile Parking for Buildings Along I-64 - Parking should be primarily located to the side or rear of any building façade facing I-64/US 40 or along North Outer 40.

Parking shown on the Site Development Section Plan is shown to the side and rear of the building.

Policy 4: Pedestrian Circulation - In order to promote pedestrian movement, each development is required to address pedestrian circulation within and between all developments. This pedestrian system shall be designed in an overall safe, clearly understood plan meeting ADA (American Disabilities Act) requirements.

A pedestrian connection within the Summit-Topgolf development is proposed connecting Lot B directly south of the Topgolf structure, through Lots C1 and C2, and extends to the eastern property line of the development.

General Requirements for Site Design:

The subject site is located north of North Outer 40 Road and east of Boone’s Crossing in what is classified as the Chesterfield Valley Area within the City’s Comprehensive Land Use Plan. Given that North Outer 40 Road is a minor arterial and given the site’s close proximity to I-64, the south, east, and west façades are highly visible. The site is also visible from the north from the Monarch Chesterfield Levee Trail.

A. Site Relationships

The Unified Development Code outlines specific desirable and undesirable practices within site relationships. This site contains one desirable practice and one undesirable practice. The table below outlines both practices and how the SDSP correlates to them.

Practice	UDC Description	Correlation to Site Development Section Plan
Desirable	Safe pedestrian movement between elements	A pedestrian sidewalk is proposed across Lots B, C1, C2 and connects to the property to the east.
Undesirable	Aboveground public utilities	Existing overhead power lines are scheduled to remain along the southern property line similar to Lots A and B.

Figure 2: Site Relationships

B. Circulation and Access

Vehicle circulation can be seen throughout the site with one access point off of North Outer 40 Road. This access point is in the same location as depicted on the recently approved Preliminary Development Plan. This is a shared access point between Lots C1 and C2 with an associated cross-access easement connecting Lots C1 and C2 from North Outer 40 to development to the west.

C. Topography

The site is relatively flat with a couple of feet of grade change. The existing topography gradually slopes from the north to the south. There is a large drainage channel along the southern edge of the site. The finish floor elevation of the building is 461'. For reference, the finish floor elevation for the neighboring Top Golf is at 462'. There are no retaining walls required or planned for this development.



Figure 3: Color Site Plan

General Requirements for Building Design:

This request is to allow for development of a 65' indoor sky diving facility. The building is 6,713 square feet. The total site area for Lot C2 is 71,357 square feet. This produces a Floor to Area ratio for Lot A at (.09).

A. Scale

The building will be a two-story structure with the overall height of the structure driven by the height requirements of the tunnel airflow systems and air flow path. The building consists of a low roof at 40' enclosing two occupiable floors of the building and high roof at 65' or 25' above the low roof to enclose the non-occupiable mechanical deck. The low roof is designed with a 6' parapet to screen roof top units. The adjacent Topgolf building has a height of 54' and the Residence Inn has an approved height of 45'.

B. Design

The architect's statement of design states "The aesthetic style of the exterior is meant to complement and accommodate the interior functions". It also states, "The iFLY building was designed to model this look with the use of ribbed metal panels to mimic a flying machine. The design of the facility incorporates a protective overhang at the front entrance for the customers".

C. Materials and Colors

The building will implement the use of ribbed and flat metal panels and contain three colors (gray, black, and red) outlined in the schedule below (Figure 4).

EXTERIOR MATERIAL FINISH SCHEDULE					
MARK	MATERIAL	LOCATION	MANUFACTURER	COLOR	DESCRIPTION
MP-1	Ribbed Metal Panel	Exterior Façade	MBCI	Slate Gray	MBCI 7.2 ribbed metal panel
MP-2	Ribbed Metal Panel	Exterior Façade	MBCI	Coal Black	MBCI 7.2 ribbed metal panel
MP-3	Flat Metal Panel	Exterior Façade	MBCI	Brite Red	MBCI Designer Series - Flat
MT-1	Metal Panel Trim	Exterior Façade Corners	MBCI	Slate Gray	MBCI Outside corner trim
MT-2	Metal Panel Trim	Exterior Façade Joints	MBCI	Slate Gray	MBCI metal flashing
MT-3	Metal Panel Trim	Exterior Façade Joints	MBCI	Coal Black	MBCI metal flashing

Figure 4: Exterior materials

D. Landscape Design and Screening

A Landscape Plan has been submitted and is currently under review with staff. There are street trees and parking area trees provided which are required by code. The canopy trees primarily consist of oak and hornbeam while the understory consists of dogwood and serviceberry. The refuge enclosure has screening of Keteleeri Juniper. The refuge enclosure itself will be constructed with CMU block with color to match the building.

E. Lighting

The parking lot lighting will consist of 20’ high poles with arm mounted fixtures. The building lighting will consist of up/down lighting positioned on the façade of the building. All exterior lighting will be white in color, and all the cut sheets have been included within the submittal. All non-fully shielded flat-lensed fixtures require approval by the City of Chesterfield Planning Commission. The UDC dictates that all facades of buildings facing I-64 should utilize accent lighting, as opposed to floodlighting. One of the fixtures submitted in this request is a flood-light.

F. Rendering

The rendering below (Figure 5) is of the west façade as one would enter the building. This is the primary view point of someone traveling by vehicle heading east on either North Outer 40 Road or Interstate 64.



Figure 5: Rendering – West Facade

DEPARTMENT INPUT

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 review and recommendation on this submittal for Summit-Topgolf, Lot C2 (iFLY).

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 Summit-Topgolf, Lot C2 (iFLY), as presented, with a recommendation for approval (or denial) to the Planning Commission."

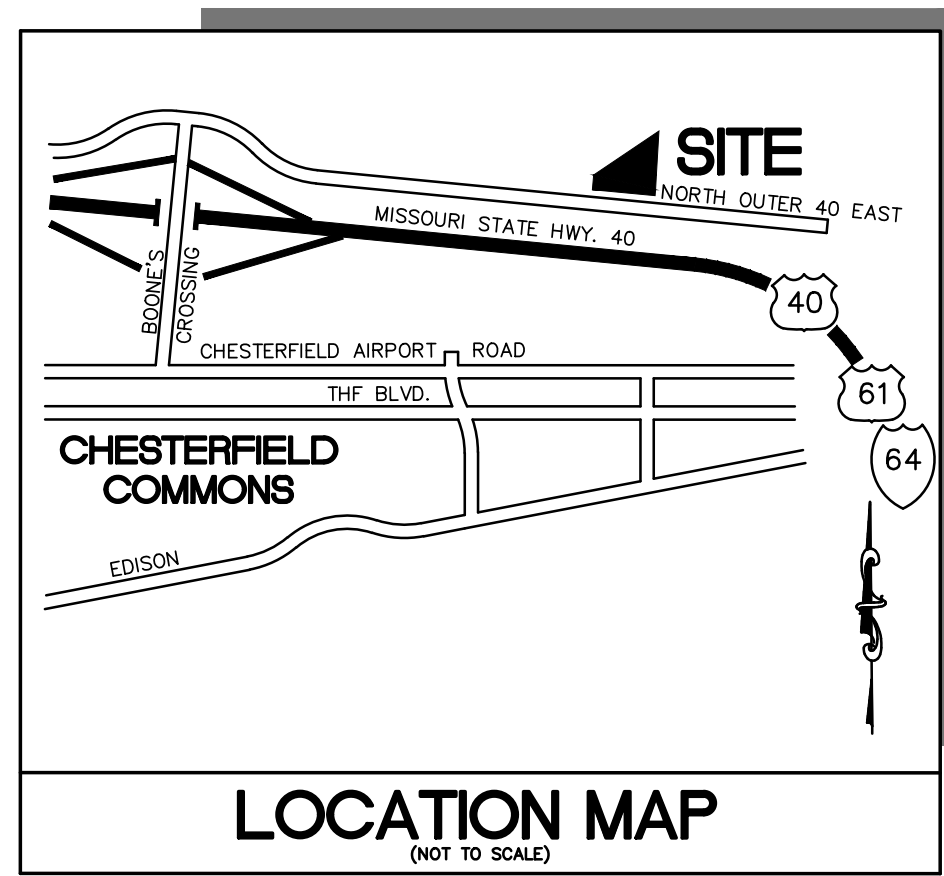
- 2) "I move to forward the Site Development Section Plan, Landscape Plan, Lighting Plan, Architectural Elevations and Architect's Statement of Design Summit-Topgolf, Lot C2 (iFLY) to the Planning Commission with the following recommendations..."

Attachments

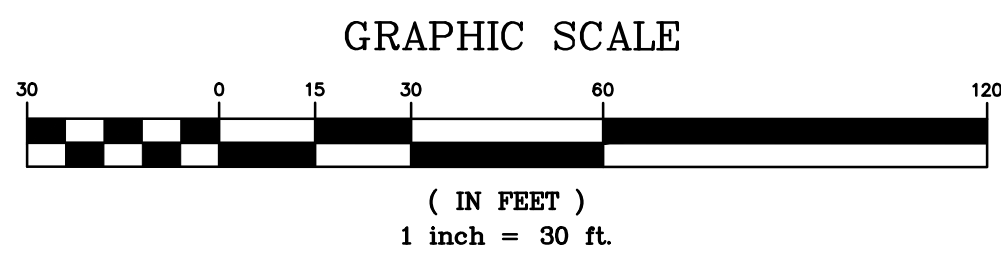
1. Architectural Review Packet Submittal



ABBREVIATIONS		LEGEND	
ATG	- ADJUST TO GRADE	ES	- EXISTING SANITARY SEWER
B.C.	- BACK OF CURB	ES	- EXISTING STORM SEWER
C.O.	- CLEANOUT	EX	- EXISTING TREE
DB	- DEED BOOK	E	- EXISTING BUILDING
E	- ELECTRIC	EX	- EXISTING CONTOUR
ELEV.	- ELEVATION	FL	- FLOWLINE
EX	- EXISTING	FL	- FOUND 1/2" IRON PIPE
F.C.	- FACE OF CURB	FT	- FEET
FL	- FLOWLINE	FND.	- FOUND
FT	- FEET	G	- GAS
FND.	- FOUND	H.W.	- HIGH WATER
G	- GAS	LFB	- LOW FLOW BLOCKED
H.W.	- HIGH WATER	M.H.	- MANHOLE
LFB	- LOW FLOW BLOCKED	N/F	- NOW OR FORMERLY
M.H.	- MANHOLE	PB	- PLAT BOOK
N/F	- NOW OR FORMERLY	PG	- PAGE
PB	- PLAT BOOK	PR	- PROPOSED
PG	- PAGE	P.V.C.	- POLYVINYL CHLORIDE PIPE
PR	- PROPOSED	R.C.P.	- REINFORCED CONCRETE PIPE
P.V.C.	- POLYVINYL CHLORIDE PIPE	R/W	- RIGHT-OF-WAY
R.C.P.	- REINFORCED CONCRETE PIPE	SQ.	- SQUARE
R/W	- RIGHT-OF-WAY	T	- TELEPHONE CABLE
SQ.	- SQUARE	T.B.A.	- TO BE ABANDONED
T	- TELEPHONE CABLE	T.B.R.	- TO BE REMOVED
T.B.A.	- TO BE ABANDONED	T.B.R.	- TO BE REMOVED
T.B.R.	- TO BE REMOVED	TYP.	- TYPICALLY
TYP.	- TYPICALLY	U.I.P.	- USE IN PLACE
U.I.P.	- USE IN PLACE	U.O.N.	- UNLESS OTHERWISE NOTED
U.O.N.	- UNLESS OTHERWISE NOTED	V.C.P.	- VITRIFIED CLAY PIPE
V.C.P.	- VITRIFIED CLAY PIPE	W	- WATER
W	- WATER	(86'W)	- RIGHT-OF-WAY WIDTH
(86'W)	- RIGHT-OF-WAY WIDTH		



FLOOD NOTE:
SUBJECT PROPERTY LIES WITHIN FLOOD ZONE "AH" (FLOOD DEPTHS OF 1 TO 3 FEET) (USUALLY AREAS OF PONDING) BASE FLOOD ELEVATION DETERMINED (ELEVATION 457 & 456) ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP FOR ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS. THE MAP IS IDENTIFIED AS MAP NO. 29166C0160K WITH AN EFFECTIVE DATE OF FEBRUARY 4, 2015.



LOT B
PB. 365 PGS. 300-301
ADDRESS: 16851 N OUTER 40 RD.

EX. TOPGOLF
66,300 Sq. Ft.
APPROVED SDSP:
P.B. 365, PGS. 271-273
ASDSP: P.B. 365, PG. 592
APPROVED SDSP: P.B. 365,
PGS.: 274-275

LOT C
PB. 365 PGS. 300-301
ADDRESS: 16839 N OUTER 40 RD.

LOT C1
2.16± ACRES

LOT C2
1.64± ACRES

NORTH OUTER 40 ROAD

GENERAL NOTES

- BOUNDARY AND TOPOGRAPHIC SURVEY BY STOCK & ASSOCIATES CONSULTING ENGINEERS, INC.
- 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.
- NO GRADE SHALL EXCEED 3:1 SLOPE.
- GRADING AND STORM WATER PER M.S.D., MODOT, ST. LOUIS COUNTY, THE CITY OF CHESTERFIELD AND THE MONARCH CHESTERFIELD LEVEE DISTRICT.
- STORMWATER SHALL BE DISCHARGED AT ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- ALL UTILITIES WILL BE INSTALLED UNDERGROUND.
- SITE DEVELOPMENT SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL EXPLORATION TITLED "GEOTECHNICAL EXPLORATION - MT JOB NO. 14687-IFLY CHESTERFIELD VALLEY-CHESTERFIELD, MISSOURI" DATED MARCH 11, 2019 AND ALL SUPPLEMENTAL PROVISIONS AND ADDENDUMS.
- THERE IS A MINIMUM OPEN SPACE OF 35% AS REQUIRED BY THE PC DISTRICT REGULATIONS.
- THERE IS A MAXIMUM F.A.R. OF 0.55 AS REQUIRED BY THE PC DISTRICT REGULATIONS.
- SIGNAGE APPROVAL IS A SEPARATE PROCESS
- OFFSITE EASEMENTS MUST BE PROVIDED PRIOR TO APPROVAL OF IMPROVEMENT PLANS.

SITE BENCHMARK

#12-166
ELEV.=458.86
"STANDARD ALUMINUM DISK" STAMPED SL-32, 1990, DISK IS SET IN BETWEEN THE HWY I-64 NORTH OUTER ROAD AND THE WEST BOUND HWY. I-64, 19' SOUTH OF THE CENTERLINE OF THE NORTH BOUND LANE HWY. I-64, APPROXIMATELY 0.5 MILES EAST OF THE INTERSECTION OF BOONES CROSSING ROAD AND NORTH OUTER ROAD. (SL-32 WAS RESET FROM UNDERGROUND POSITION. THIS IS A NEW ELEVATION SET IN JULY 2002.) AS SHOWN HEREON

PREPARED FOR:
FLY ST. LOUIS HOLDINGS, LLC
ATTENTION: MR. JOHN MCNARY
221 CIRCLE DRIVE
MATLAND, FL 32751

ST. LOUIS COUNTY STANDARD NOTES

- ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY STANDARDS.
- NO SLOPES WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).
- STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- ALL PROPOSED ACCESS TO ST. LOUIS COUNTY ROADS SHALL MEET MINIMUM ST. LOUIS COUNTY SIGHT DISTANCE REQUIREMENTS.
- ALL GRADING AND DRAINAGE SHALL BE IN CONFORMANCE WITH ST. LOUIS COUNTY AND MSD STANDARDS.
- ALL HYDRANTS, POWER POLES OR OTHER POTENTIAL OBSTRUCTIONS WITHIN THE ST. LOUIS COUNTY ROAD RIGHT-OF-WAY SHALL HAVE A MINIMUM TWO (2) FOOT SETBACK FROM FACE OF CURB OR EDGE OF PAVEMENT, AS DIRECTED BY THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC.
- ANY ENTITY THAT PERFORMS WORK ON ST. LOUIS COUNTY MAINTAINED PROPERTY SHALL PROVIDE THE COUNTY WITH A CERTIFICATE OF INSURANCE EVIDENCING GENERAL LIABILITY COVERAGE (BODILY INJURY AND PROPERTY DAMAGE) IN THE AMOUNTS SPECIFIED AS THE LIMITS OF LIABILITY SET BY THE STATE FOR PUBLIC ENTITIES. SUCH CERTIFICATE SHALL INCLUDE "ST. LOUIS COUNTY" AS AN ADDITIONAL INSURED AND SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF ANY PERMIT. CERTIFICATE SHALL PROVIDE FOR A 30 DAY POLICY CANCELLATION NOTICE TO ST. LOUIS COUNTY. UPON REQUEST, THE COUNTY WILL PROVIDE THE SPECIFIC AMOUNTS FOR BOTH PER PERSON AND PER OCCURRENCE LIMITS.
- PRIOR TO SPECIAL USE PERMIT ISSUANCE BY THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC, A SPECIAL CASH ESCROW OR A SPECIAL ESCROW SUPPORTED BY AN IRREVOCABLE LETTER OF CREDIT, MAY BE REQUIRED TO BE ESTABLISHED WITH THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC TO GUARANTEE COMPLETION OF THE REQUIRED ROADWAY IMPROVEMENTS.

OPEN SPACE:

REQUIRED: 35.0% PER PC DISTRICT REGULATION
PROVIDED: 59.7% (42,606 SF/71,357 SF)

PARKING:

REQUIRED: PLEASE SEE UNIFIED DEVELOPMENT CODE SEC. 04-04 RECREATION FACILITY 3.3/1000 GFA MIN. 4.5/1000 GFA MAX.
TOTAL REQUIRED: 23 SPACES MIN. 30.2 SPACES MAX.
TOTAL PROVIDED: 36 SPACES (INCLUDES 2 ADA SPACES)

F.A.R. CALCULATION

F.A.R. = 6,713 S.F. / 71,357 S.F. = 0.09

BUILDING AND PARKING SETBACKS

SOUTH: 75' BUILDING AND 30' PARKING SETBACK
WEST: 5' BUILDING AND 0' PARKING SETBACK

PERTINENT DATA

LOT C2
OWNER: SUMMIT OUTER FORTY INVESTORS LLC
OWNER UNDER CONTRACT: FLY ST. LOUIS HOLDINGS, LLC
LOT C2 AREA: 1.64 Acres ±
EXISTING ZONING: "PC" PLANNED COMMERCIAL (ORD. #3039)
SITE ADDRESS: 16839 NORTH OUTER 40 ROAD CHESTERFIELD, MISSOURI 63005
LOCATOR NO: 177520116
WUNNERBERG'S: PG. 21, GRID 18FF
FIRE DISTRICT: MONARCH FIRE PROTECTION DISTRICT
SCHOOL DISTRICT: ROCKWOOD
SEWER DISTRICT: METROPOLITAN ST. LOUIS SEWER DIST.
WATER SHED: MISSOURI RIVER
FEMA MAP: 29189C0165K, FEB 4, 2015
ELECTRIC COMPANY: AMEREN UE
GAS COMPANY: SPIRE INC
PHONE COMPANY: AT&T
WATER COMPANY: MISSOURI AMERICAN WATER COMPANY

SHEET INDEX

- SDSP-1 - SITE DEVELOPMENT SECTION PLAN
- SDSP-2 - SKY EXPOSURE PLAN
- SDSP-3 - PHOTOMETRIC PLAN
- L-1 - LANDSCAPE PLAN
- A201-A202 - ARCHITECTURE ELEVATIONS

GEOTECHNICAL ENGINEER'S STATEMENT

Midwest Testing has performed a geotechnical exploration for the property of which the project proposed hereon is a part thereof. Our findings indicated that the earth related aspects are suitable for the development proposed hereon pursuant to the geotechnical recommendations and considerations set forth in our March 11, 2019 report, titled "Geotechnical Exploration - MT Job No. 14687 - IFLY-Chesterfield Valley - Chesterfield, Missouri".

Midwest Testing

Michael L. Hückmeister, P.E.



FLY ST. LOUIS HOLDINGS, LLC, the owner under contract of the property shown on this plan for and in consideration of being granted a permit to develop property under the provisions of Chapter _____, "PC" Planned Commercial (present zoning) of the City of Chesterfield Ordinance No. _____ 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 Planning Commission, or voided or vacated by order of ordinance of the City of Chesterfield City.

FLY ST. LOUIS HOLDINGS, L.L.C.

by: _____

STATE OF MISSOURI }
COUNTY OF ST. LOUIS } SS.

On this day of _____, 2019, before me personally appeared _____, who being by me duly sworn, did say he is the _____ of _____ and that said instrument was signed on behalf of said limited liability company, and that said _____ acknowledged said instrument to be the free act and deed of said limited liability company.

IN WITNESS WHEREOF, I have signed and sealed the foregoing the day and year first above written.

Notary Public

Print Name

My commission expires: _____

This Site Development Section Plan was approved by the City of Chesterfield Planning Commission and duly verified on the _____ day of _____, 2019, by the Chairperson of said Commission, authorizing the recording of this Site Development Section Plan pursuant to Chesterfield Ordinance No. 200, as attested to by the Planning and Development Services Director and the City Clerk.

By: Justin Wase, Director of Planning and Development Services

By: Vickie Hass, City Clerk

SURVEYOR'S CERTIFICATION

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

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

Walter J. Pfleger, Missouri L.S. No. 2008000728

PREPARED BY:



SITE DEVELOPMENT SECTION PLAN FOR:

LOT C2 SUMMIT-TOPGOLF SUB

CITY OF CHESTERFIELD, MISSOURI



10/09/19
GEORGE M. STOCK E-29116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

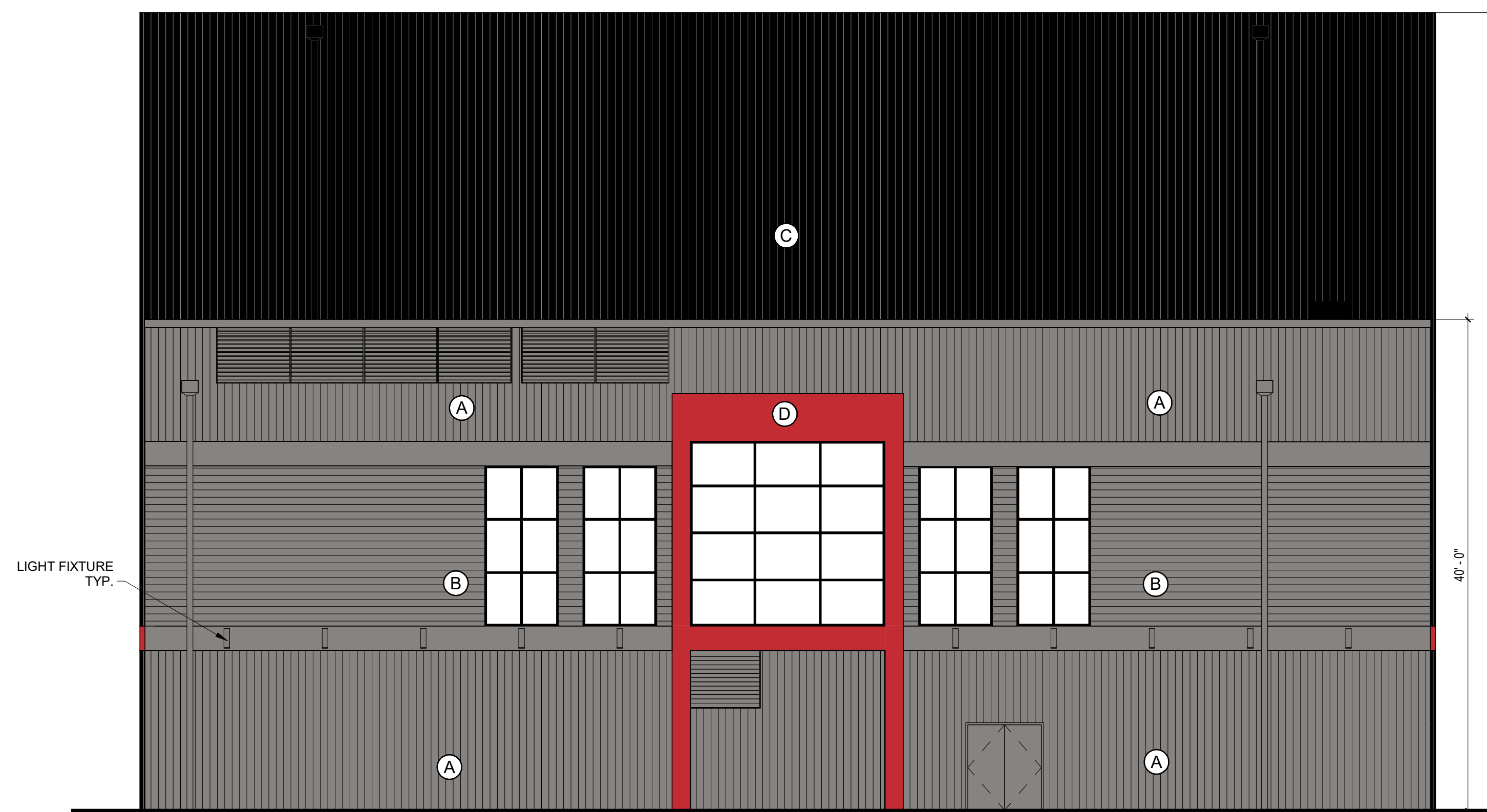
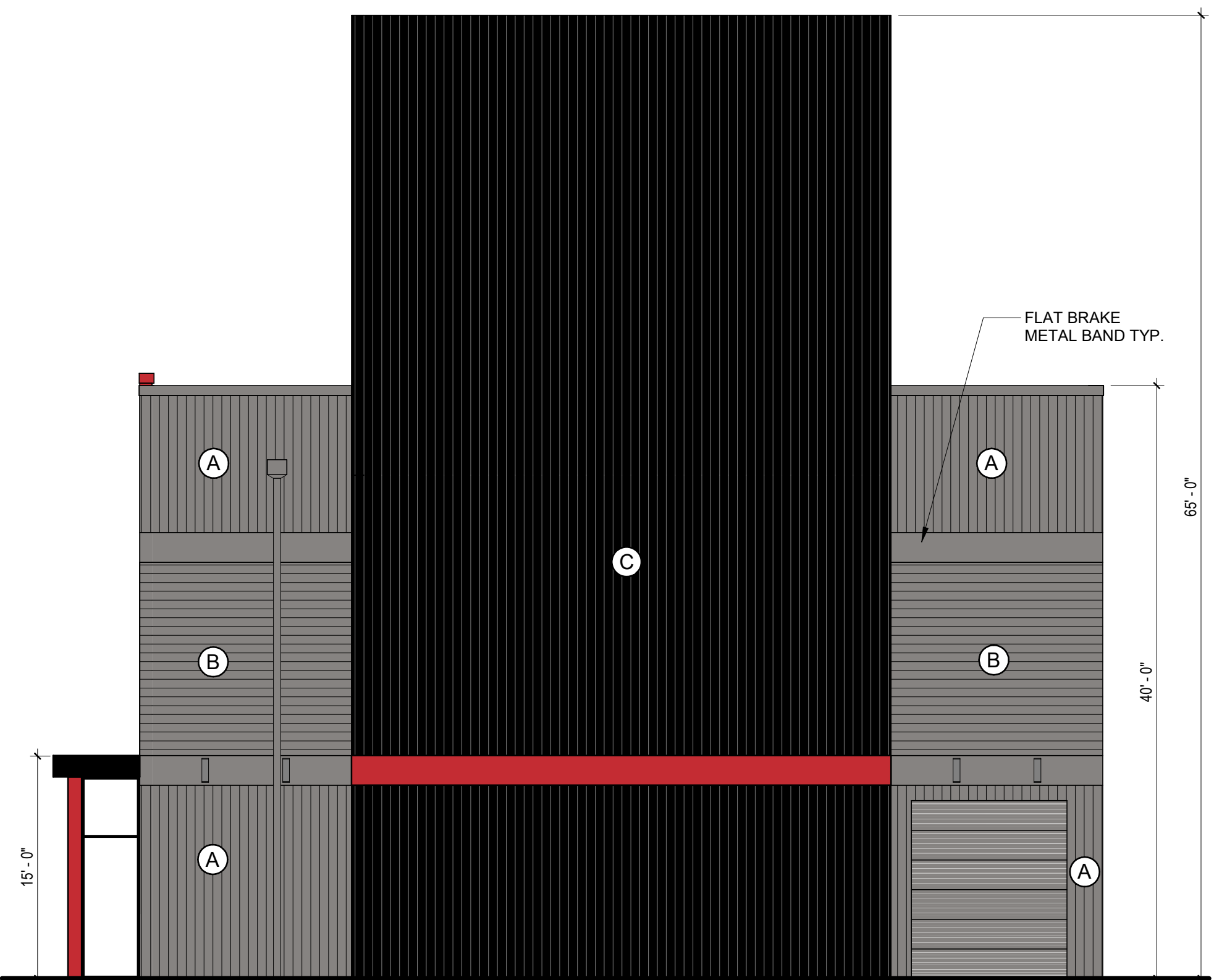
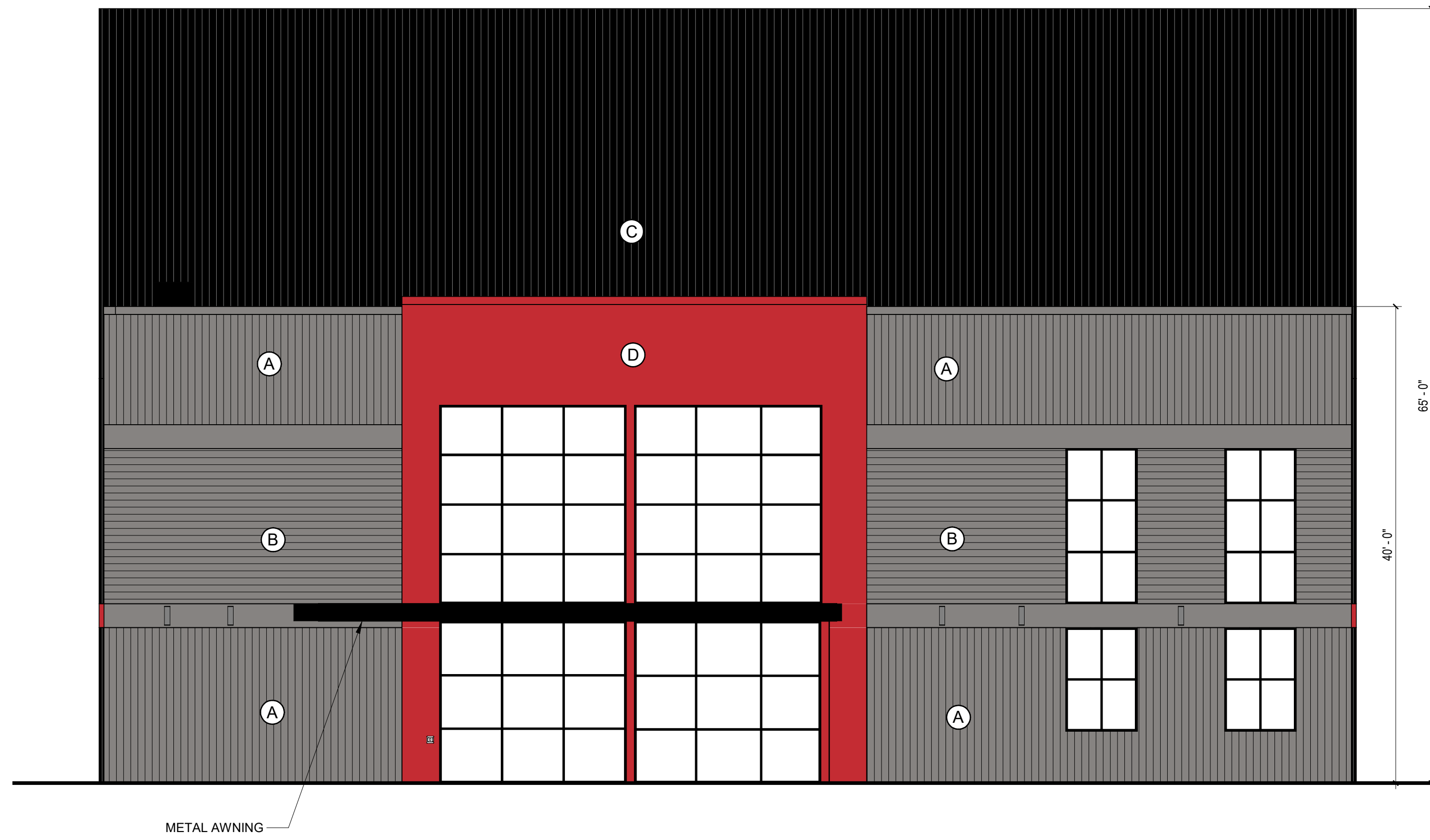
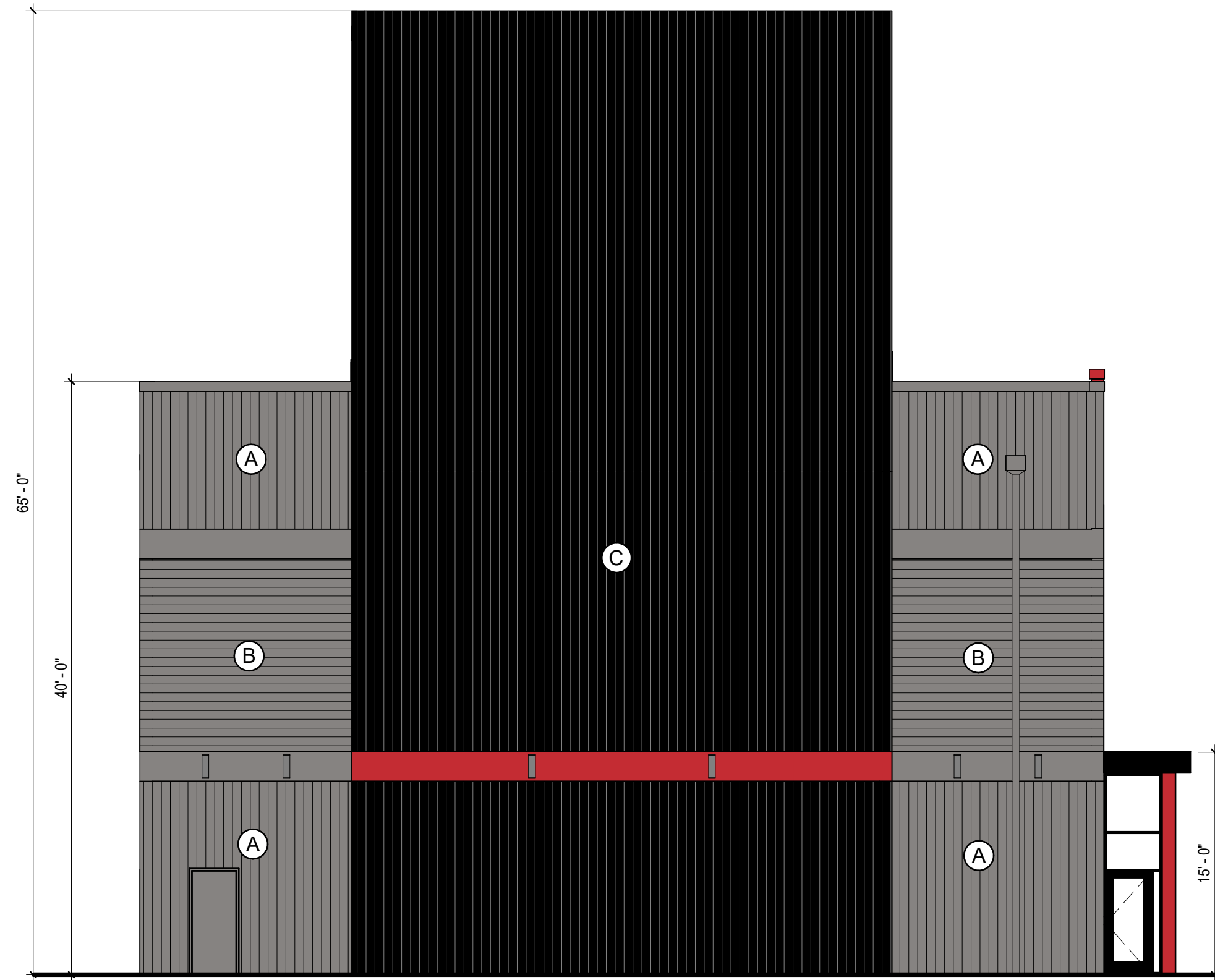
REVISIONS:

- | | |
|---|--|
| 1 | 4/03/19 REV. PER CITY LETTER DATED 3/26/19 |
| 2 | 10/09/19 REV. PER CLIENT |

DRAWN BY: C.A.H.	CHECKED BY: G.M.S.
DATE: 3/07/2019	JOB NO: 218-6414
SCALE: P-X0000-XX	BASE MAP: XX-X
S.L.C. MAP # XXXX	MAP SUP. # XX-XXX-XX
MDNR # MO-RAXXXXX	

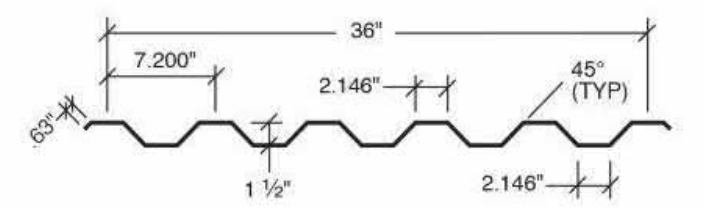
SHEET TITLE: SITE DEVELOPMENT SECTION PLAN

SHEET NO.: SDSP-1.0

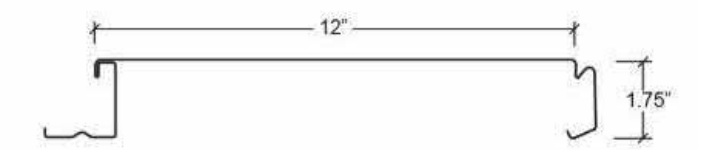
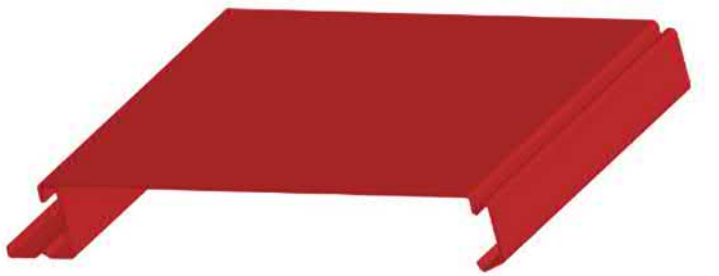


NOTE: LANDSCAPE SCREENING NOT SHOWN FOR CLARITY. REFER TO LANDSCAPE PLAN FOR SCREENING INFORMATION.

- SIDING KEYNOTES:
- (A) VERTICAL MBCI 7.2 PANEL - SLATE GRAY
 - (B) HORIZONTAL MBCI 7.2 PANEL - SLATE GRAY
 - (C) VERTICAL MBCI 7.2 PANEL - COAL BLACK
 - (D) MBCI DESIGNER SERIES FLAT PANEL - BRITE RED



MBCI 7.2 PANEL
SLATE GRAY
COAL BLACK



MBCI DESIGNER SERIES - FLAT
BRITE RED

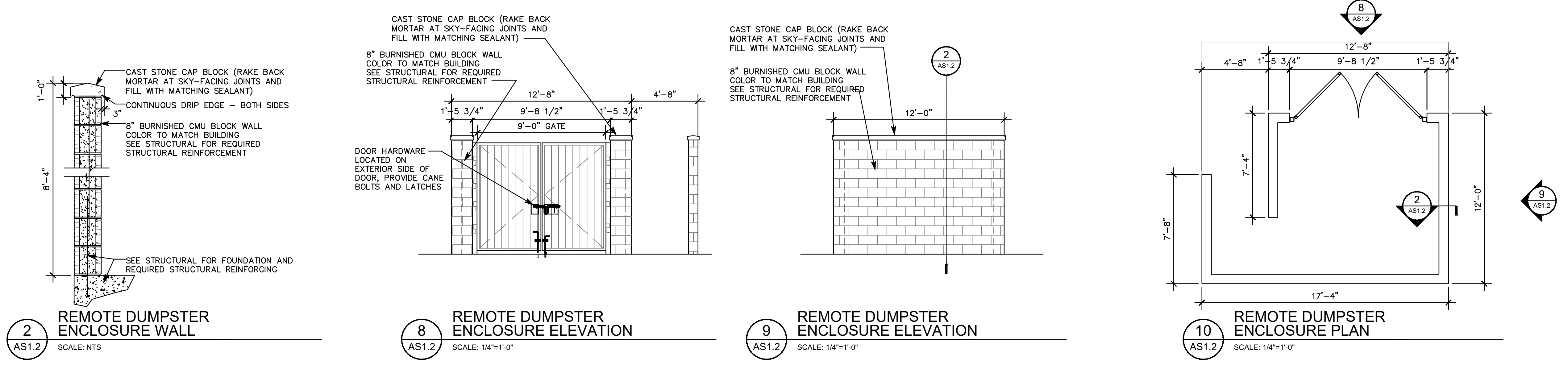


PREPARED BY:

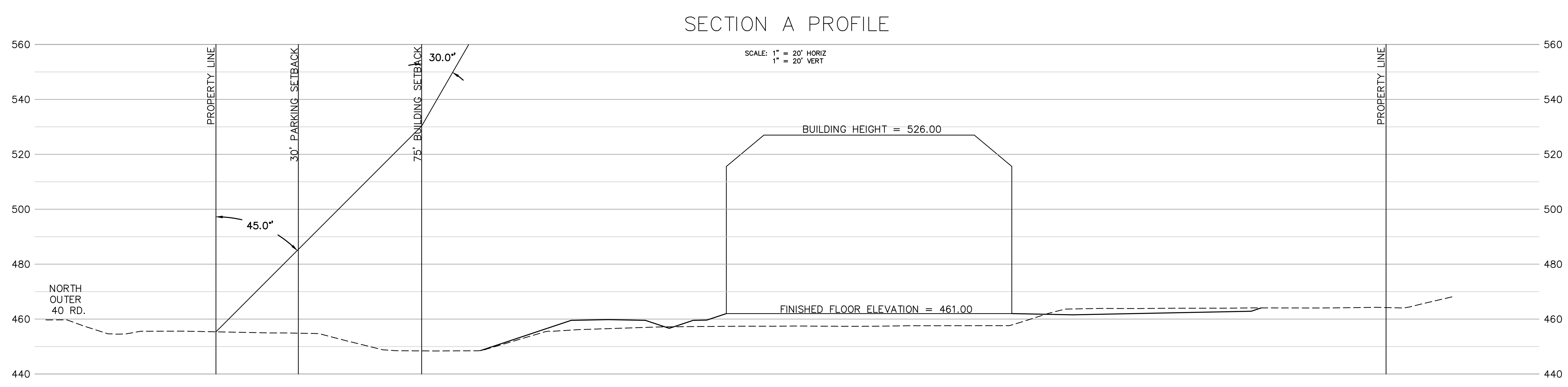
SITE DEVELOPMENT SECTION PLAN FOR:

LOT C2 SUMMIT-TOPGOLF SUB

CITY OF CHESTERFIELD, MISSOURI



REMOTE DUMPSTER ENCLOSURE DETAILS



12/31/19
 GEORGE M. STOCK E-25116
 CIVIL ENGINEER
 CERTIFICATE OF AUTHORITY
 NUMBER: 000996

REVISIONS:

1	4/03/19 REV. PER CITY LETTER DATED 3/26/19
2	10/09/19 REV. PER CLIENT
3	12/09/19 UPDATE SITE LIGHTING
4	12/31/19 REV. PER CITY LETTER DATED 12/12/19

DRAWN BY: C.A.H.	CHECKED BY: G.M.S.
DATE: 3/07/2019	JOB NO.: 215-6414
KEY: P # P-XXXX-XX	BASE MAP # XX-X
S.L.C. MAT # XXXX	MAT SUP. # XX-XXX-XX
M.D.N.R. # MO-RAXXXX	

SHEET TITLE:
 SKY EXPOSURE PLAN

SHEET NO.:
 SDSP-2.0







EAST VIEW



NORTH VIEW



WEST VIEW

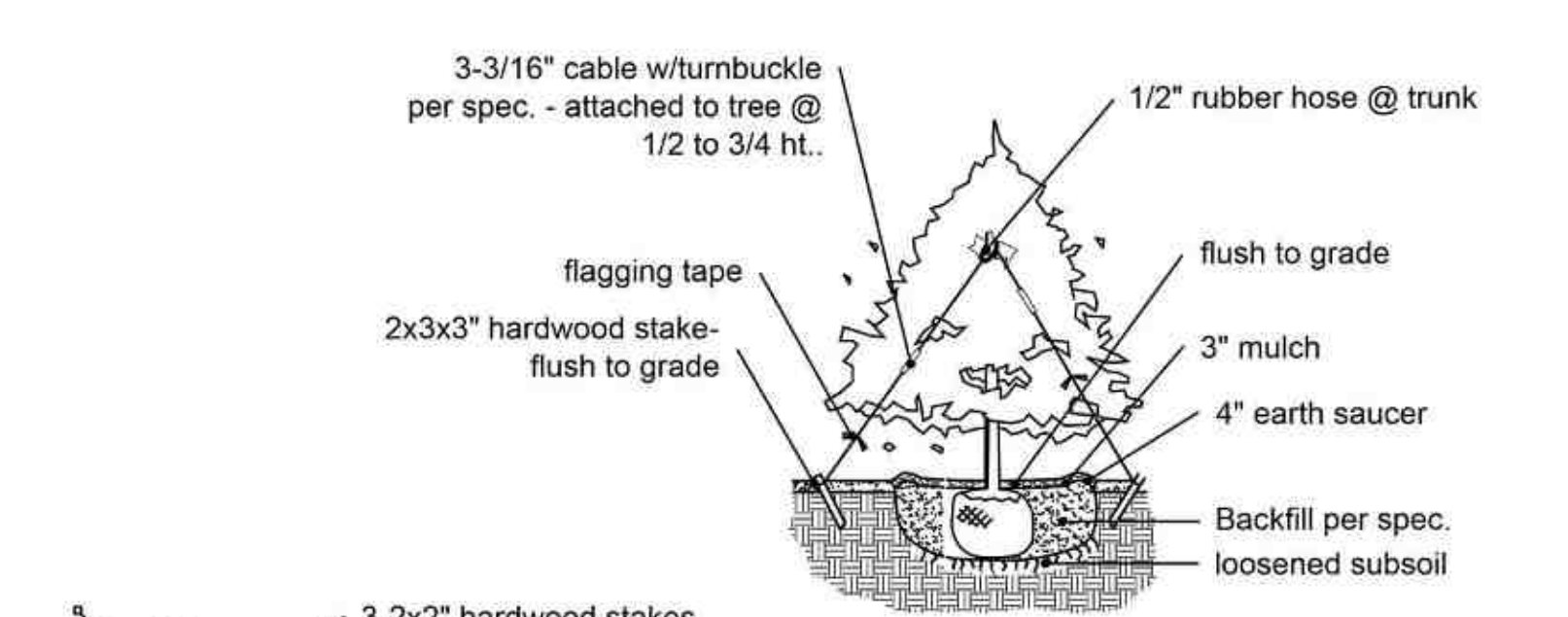


SOUTH VIEW

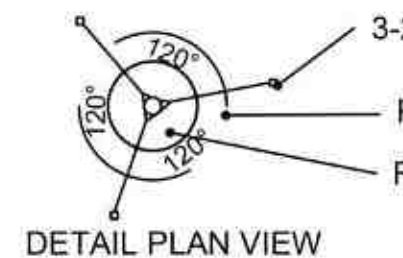




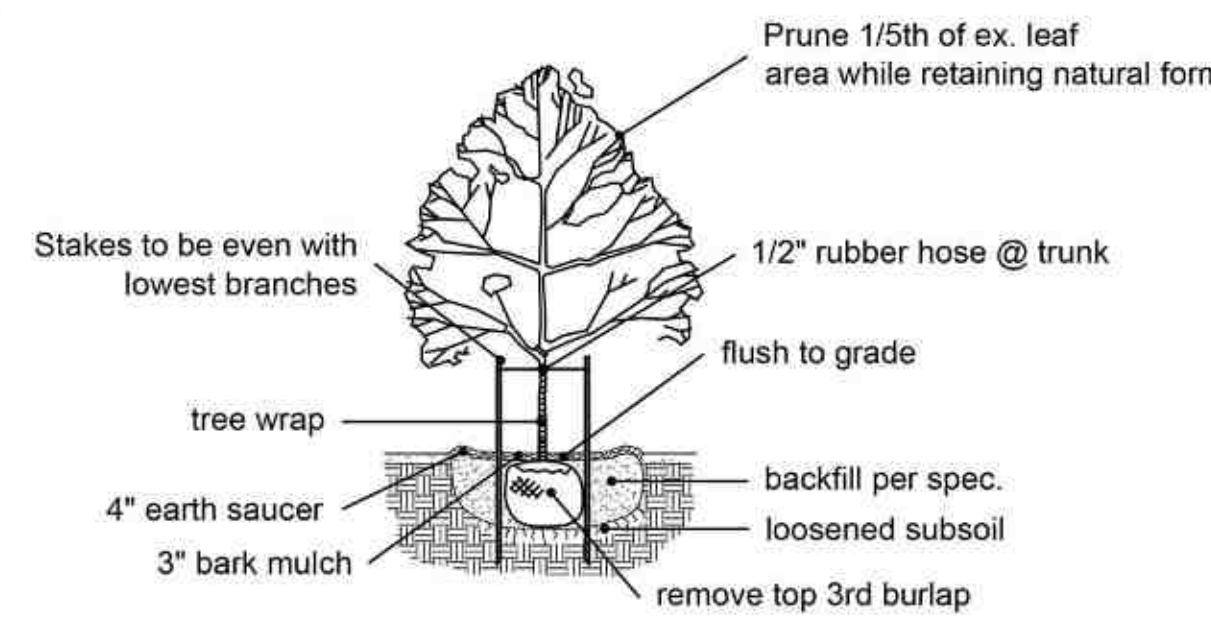
LANDSCAPE PLAN
SCALE 1"=30'



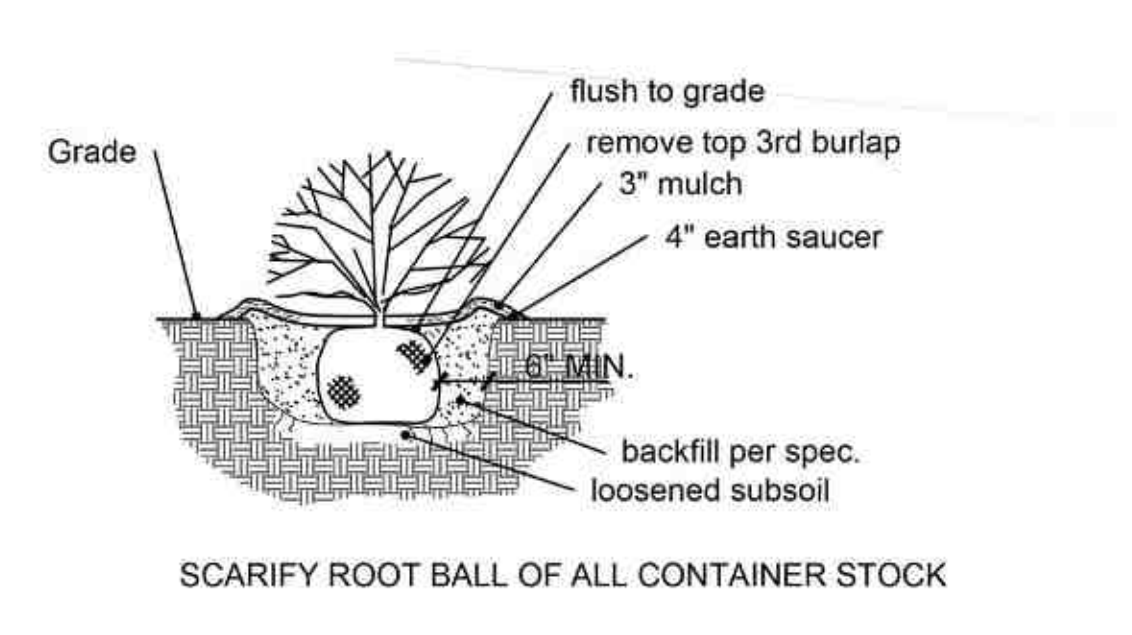
TYPICAL EVERGREEN PLANTING



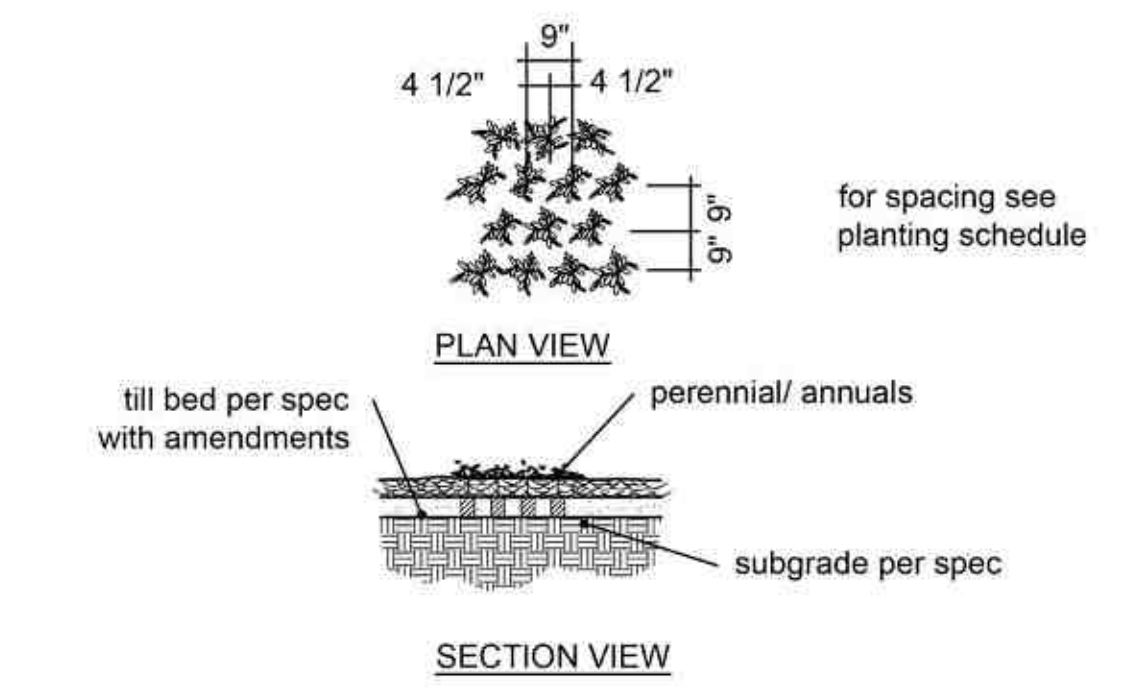
DETAIL PLAN VIEW



CANOPY TREE PLANTING



TYPICAL SHRUB PLANTING



TYPICAL PERENNIAL PLANTING

SYMBOL		QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	SIZE CLASS TYPE	GROWTH RATE	MATURE SIZE
CANOPY TREES								
A	3		<i>Carpinus betula</i>	European Hornbeam	2.5'cal	Medium;Canopy	Slow/Medium	35-40'
E	5		<i>Carpinus caroliniana</i>	American Hornbeam	2.5'cal	Small;Street Tree	Medium	20-35'
K	6		<i>Quercus rubra</i>	Red Oak	2.5'cal	Large;Canopy	Medium/Fast	45'+
L	7		<i>Quercus bicolor</i>	Swamp White Oak	2.5'cal	Large;Canopy	Medium	45'+
UNDERSTORY TREES								
M	1		<i>Cornus florida f. rubra</i>	Pink Flowering Dogwood	2.5'cal	Small;Ornamental	Slow/Medium	15-25'
N	5		<i>Amelanchier grandiflora 'Autumn Brilliance'</i>	Autumn Brilliance Serviceberry	2.5'cal	Medium;Ornamental	Slow/Medium	25-30'
EVERGREEN TREES								
S	4		<i>Picea abies</i>	Norway Spruce	6'h	Med/Large;Evergreen	Medium/Fast	40-60'
T	3		<i>Pinus strobus</i>	White Pine	6'h	Large;Evergreen	Fast	45+
W	9		<i>Thuja 'Green Giant'</i>	Green Giant Arborvitae	6'h	Large;Evergreen	Fast	40-60'
X	18		<i>Juniperus chinensis 'Keteleeri'</i>	Keteleeri Juniper	6'h	Small;Evergreen	Fast	15-20'
SHRUBS AND LARGE GRASSES								
a	24		<i>Buxus sinica var. insularis 'Wintergreen'</i>	Wintergreen Boxwood	18-24"			
b	21		<i>Physocarpus opulifolius 'Seward'</i>	Summer Wine Ninebark	24"			
c	7		<i>Juniperus virginiana 'Grey Owl'</i>	Grey Owl Juniper	24"			
d	7		<i>Viburnum x rhytidophyllum</i>	Leatherleaf Viburnum	24"			
e	14		<i>Hydrangea paniculata 'Jane'</i>	Little Lime Hydrangea	24"			
f	15		<i>Juniperus x pfitzeriana 'Kallay's Compact'</i>	Kallay's Compact Pfitzer Juniper	24"			
g	7		<i>Panicum virgatum 'Heavy Metal'</i>	Heavy Metal Switchgrass	3 gal.			
PERENNIALS AND ANNUALS								
aa	200sf		Ornamental perennials	To be selected	1 gal.			
bb	333sf		Bioretention Plantings per MSD Requirements	To be selected	DCP			

NOTES:
 1. MULCH TO BE DOUBLE GROUND BARK MULCH.
 2. ALL 3:1 OR STEEPER SLOPES SHALL BE SEEDED AND HAVE EROSION CONTROL BLANKET. ALL OTHER AREAS TO BE SODDED WITH TURF-TYPE TALL FESCUE.
 3. TOPSOIL IN ALL DISTURBED LAWN AREAS AT 6" DEPTH.
 4. SOIL MIX IN ALL SHRUB BEDS AT 8" DEPTH.
 5. ALL NEW LANDSCAPE SHALL BE IRRIGATED WITH AN AUTOMATIC UNDERGROUND IRRIGATION SYSTEM PER THE CITY OF CHESTERFIELD UNIFIED CODE SECTION 04-02. CONTRACTOR TO PROVIDE DESIGN-BUILD DRAWINGS FOR REVIEW BY LANDSCAPE ARCHITECT.

CALCULATIONS:
 1. PERCENTAGE OF TREES WITH SLOW TO MEDIUM GROWTH RATE:
 21 TREES WITH SLOW TO MED GROWTH RATE + 61 TOTAL TREES = 34.4% (MIN. 30% REQUIRED)
 2. MAXIMUM OF 20% OF ONE SPECIES MAY BE UTILIZED FOR STREET TREES: THE 20% STREET TREE REQUIREMENT IS MET ON THE CONCEPT LANDSCAPE PLAN. SEE SHEET CL1.0.
 3. OPEN SPACE PERCENTAGE:
 42,806sf + 71,357sf = 59.7%

Jerald Saunders - Landscape Architect
 MO License # LA-007
 Consultants:

LOT C2 SUMMIT - TOPGOLF SUB
 CITY OF CHESTERFIELD, MISSOURI

Revisions:

Date	Description	No.
4/5/19	Plan Revision	1
10/10/19	Plan Revision	2

Drawn: LWH
 Checked: JAS

Ioomis Associates
 landscape architects/planners
 2025 West 47th Street
 St. Louis, Missouri 63055-1194
 Phone: 314.991.9928
 Email: info@ioomis-associates.com

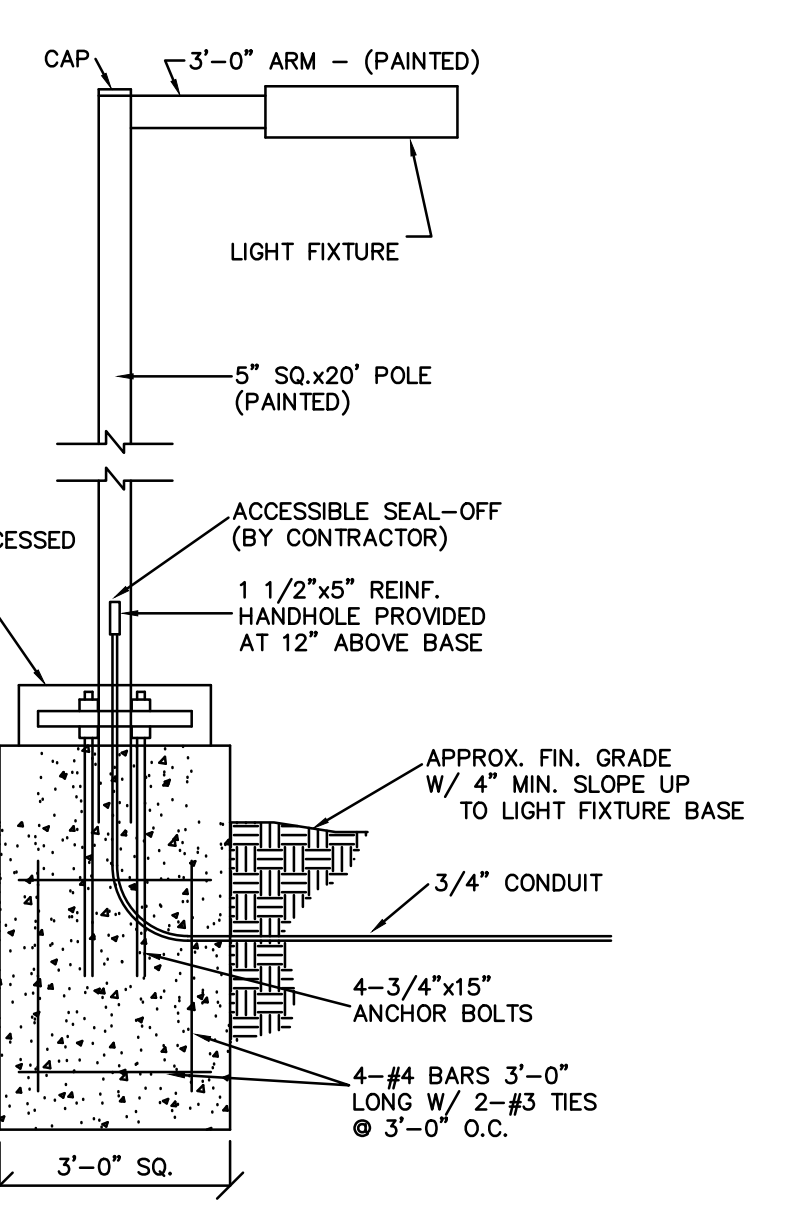
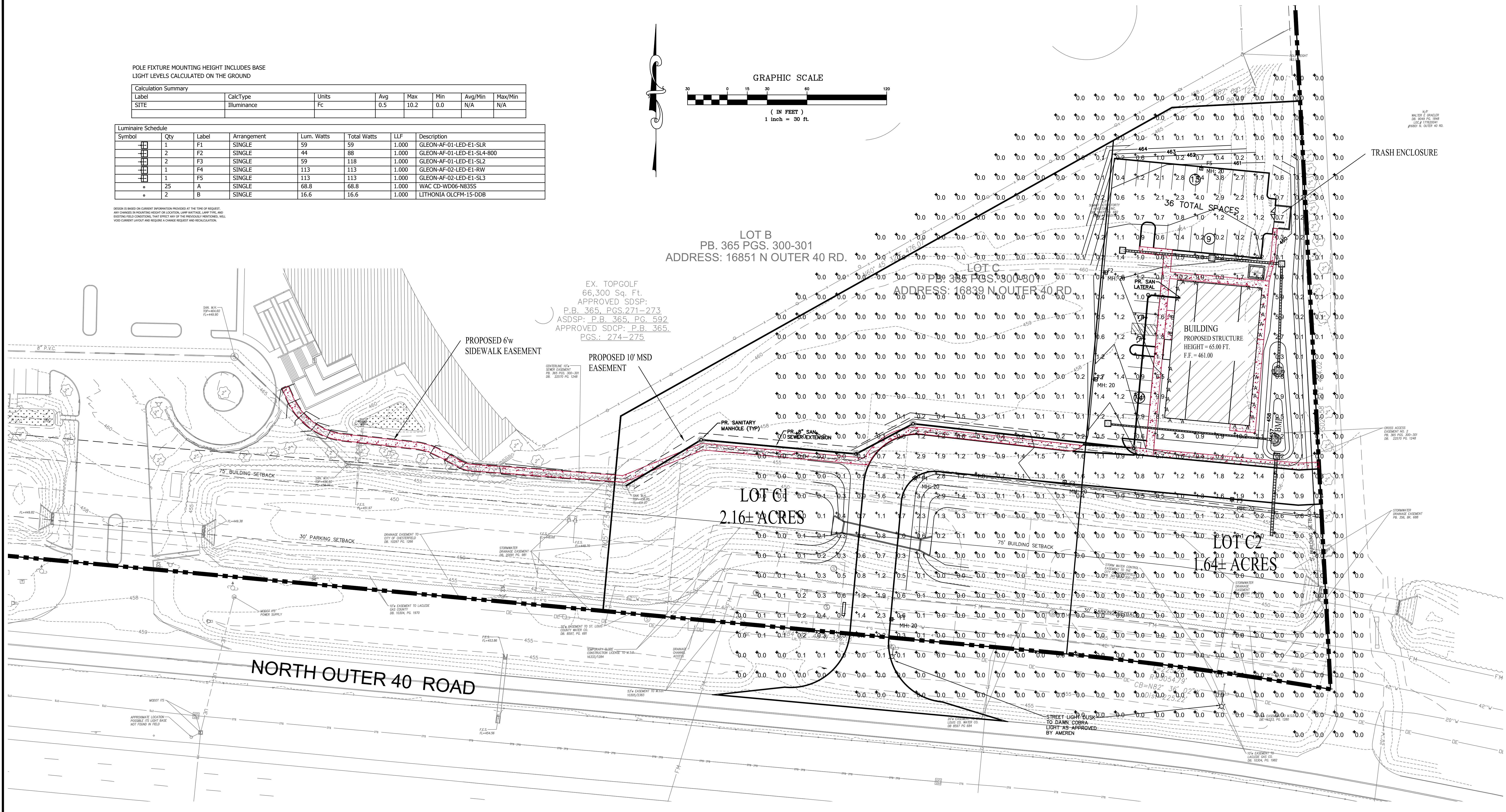
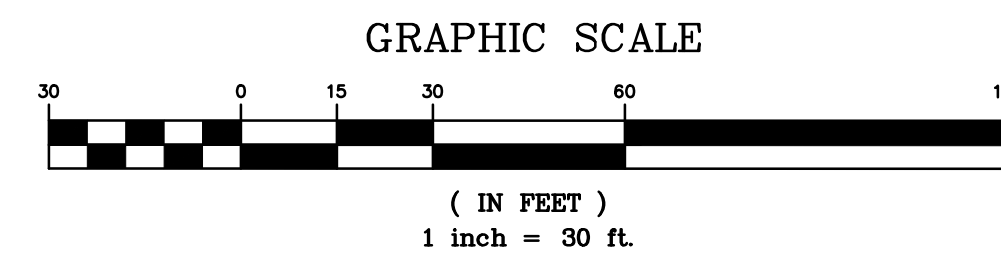
Sheet Title: Section Landscape Plan
 Sheet No: **L1.0**
 Date: 03/05/19
 Job #: 1007.001

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

Calculation Summary		Units	Avg	Max	Min	Avg/Min	Max/Min
Label	CalcType	Fc	0.5	10.2	0.0	N/A	N/A
SITE	Illuminance						

Symbol	Qty	Label	Arrangement	Lum. Watts	Total Watts	LLF	Description
□	1	F1	SINGLE	59	59	1.000	GLEON-AF-01-LED-E1-SLR
□	2	F2	SINGLE	44	88	1.000	GLEON-AF-01-LED-E1-SL4-800
□	2	F3	SINGLE	59	118	1.000	GLEON-AF-01-LED-E1-SL2
□	1	F4	SINGLE	113	113	1.000	GLEON-AF-02-LED-E1-RW
□	1	F5	SINGLE	113	113	1.000	GLEON-AF-02-LED-E1-SL3
•	25	A	SINGLE	68.8	68.8	1.000	WAC CD-WD06-N835S
•	2	B	SINGLE	16.6	16.6	1.000	LITHONIA OLCFM-15-DOB

DESIGN IS BASED ON DOCUMENT INFORMATION PROVIDED AT THE TIME OF REQUEST.
ANY CHANGES IN MOUNTING HEIGHT OR LOCATION SHALL BE NOTED. LIGHT FIXTURES SHALL BE INSTALLED UNDER THE BEST OF AVAILABLE LIGHTING CONDITIONS. THAT EFFECT ANY OF THE PREVIOUSLY MENTIONED, WILL BE SOON CORRECTED AND WILL BE RECORDED AND RECALCULATED.



NOTE:
PARKING LIGHTING WILL NOT BE LOWER THAN 10 FEET ABOVE GRADE AND MOUNTING HEIGHTS OF LIGHTING FIXTURES SHALL NOT EXCEED 20 FEET.

PREPARED BY:
STOCK & ASSOCIATES
Consulting Engineers, Inc.
257 Chesterfield Business Parkway
St. Louis, MO 63105
PH: (636) 536-9100
FAX: (636) 536-9100
e-mail: general@stockinc.com
Web: www.stockinc.com

SITE DEVELOPMENT SECTION PLAN FOR:
LOT C2 SUMMIT-TOPGOLF SUB
CITY OF CHESTERFIELD, MISSOURI



10/09/19
GEORGE M. STOCK E-25116
CIVIL ENGINEER
CERTIFICATE OF AUTHORITY
NUMBER: 000996

REVISIONS:

1	4/03/19 REV. PER CITY LETTER DATED 3/26/19
2	10/09/19 REV. PER CLIENT
3	12/09/19 UPDATE SITE LIGHTING

DRAWN BY: C.A.H.	CHECKED BY: G.M.S.
DATE: 3/07/2019	JOB NO.: 215-6414
KEY: P P-XXXX-XX	BASE MAP: XX-X
S.L.C. MAT # XXXX	MAT SUP. XX-XXX-XX
M.D.N.R. # MO-RAXXXX	

SHEET TITLE:
PHOTOMETRIC PLAN
SHEET NO.:
SDSP-3.0



**ARCHITECTURAL REVIEW BOARD
Project Statistics and Checklist**

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

Project Title: iFLY Indoor Skydiving **Location:** 16839 North Outer 40 Road
Summit Real Estate
Developer: Group **Architect:** EVstudio **Engineer:** Stock and Associates

PROJECT STATISTICS:

Size of site (in acres): 1.64 **Total Square Footage:** 6,500 SF **Building Height:** 65 FT

Proposed Usage: Commercial entertainment

Exterior Building Materials: Combination of ribbed and flat metal panels

Roof Material & Design: TPO roof membrane sloping to scupper and downspouts

Screening Material & Design: Metal panels to match building

Description of art or architecturally significant features (if any): None planned at this time

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.**

January 2nd, 2020

City of Chesterfield

Planning and Development Services Division

Attn: Mr. Mike Knight

690 Chesterfield Pkwy W.

Chesterfield, MO 63017

Project: iFLY Indoor Skydiving Chesterfield (Proposed Lot C2)

Location: 16839 North Outer 40 Road

The following statements address how each item in “Article 04: Development Requirements and Design Standards, Sec. 31-04-01 Architectural Review Design Standards” has been addressed.

GENERAL REQUIREMENTS FOR SITE DESIGN:

Site Relationship:

The new iFLY site will be located on lot C2 of the overall Summit-TopGolf development. The Lot C2 project site is located east of both the Residence Inn on Lot A and the TopGolf on Lot B. The project site is also bordered on the south by North Outer 40 Road. The front entrance of the iFLY faces west towards the TopGolf and Residence Inn with the back of the building facing towards Chesterfield Valley Nursery. The South elevation of the building is visible from North Outer 40 Road with the North elevation facing towards the Monarch Chesterfield Levee. However, the front entrance has been given special design attention to draw and direct customers to the front of the building.

Circulation System and Access:

The site access has been coordinated with the overall Summit-TopGolf Development with access being from North Outer 40 Road and along a shared access drive with Lot C1. Customer and accessible parking is provided on the West and North of the building. Traffic circulate into the parking lot around the West of the building and then to the North parking lot where customers will park are turn around for exit.

Pedestrian circulation is provided by means of a sidewalk built to the City of Chesterfield standards. With sidewalk access coming from Lots A and B and connecting with the iFLY site sidewalks around the perimeter of the building. The iFLY site sidewalks will serve as access from Lots A and B to the iFLY parking lot and building.

Topography:

The existing topography gradually slopes from North to South. The site will slope towards the existing drainage channel on the South edge of the property.

Retaining Walls:

No retaining walls are required for this development.

GENERAL REQUIREMENTS FOR BUILDING DESIGN:

Scale:

The iFLY building scale will be a two-story facility with a non-occupiable mechanical deck housing the required tunnel equipment. The overall height of the building is sixty-five feet (65’) and is driven by the height requirements of the tunnel airflow systems and air flow path. The building consists of a low roof at forty feet (40’) enclosing the two occupiable floors of the building and a high roof at sixty-five feet (65’) or twenty-five feet (25’) above the low roof to enclose the non-occupiable mechanical deck. The low roof is designed with a six-foot (6’) parapet to screen roof top units. The adjacent TopGolf has a height of fifty-four feet (54’) and the Residence Inn has an estimated height of forty-five feet (45’). Despite the overall height of the building being slightly taller than the adjacent facilities this will likely be unnoticeable due to the site elevation being lower than the adjacent TopGolf.

While the doors, windows, millwork and canopies help define the human scale of the elements, iFLY being that it is an Indoor Skydiving attraction has decided to accentuate the height of the space to add to the customer experience.

Design:

The exterior design accentuates height as the catalyst of experiencing flight. All the exterior elements draw the customer’s eyes up to foster intrigue and excitement associated with flight. The exterior form of the building is derived by the interior functionality of the flight systems. The aesthetic style of the exterior is meant to compliment and accommodate the interior function, none of the design elements portray a corporate image. Due to the harmonic frequencies created by the mechanical flight systems the building façade needed to be designed with a durable and versatile system to help reduce the affects these frequencies could potentially have on the building façade. The metal panel façade was specifically chosen to properly accommodate the frequencies produced by the buildings flight systems.

Most associate flight with the modern airplane, which is made of streamlined metal. The iFLY building was designed to model this look with the use of ribbed metal panels to mimic a flying machine. The design of the facility incorporates a protective overhang at the front entrance for our customers. The “hard surface’ of the building is broken up by glass windows to provide relief to the façade while adding natural light to the interior.

Materials and Colors:

The iFLY building will implement the use of ribbed and flat metal panels and three main colors as outlined in the schedule below. All exterior doors and frames shall be hollow metal, painted to match adjacent material color with the exception of the storefront door which is to be an all glass door.

EXTERIOR MATERIAL FINISH SCHEDULE					
MARK	MATERIAL	LOCATION	MANUFACTURER	COLOR	DESCRIPTION
MP-1	Ribbed Metal Panel	Exterior Façade	MBCI	Slate Gray	MBCI 7.2 ribbed metal panel
MP-2	Ribbed Metal Panel	Exterior Façade	MBCI	Coal Black	MBCI 7.2 ribbed metal panel
MP-3	Flat Metal Panel	Exterior Façade	MBCI	Brite Red	MBCI Designer Series - Flat
MT-1	Metal Panel Trim	Exterior Façade Corners	MBCI	Slate Gray	MBCI Outside corner trim
MT-2	Metal Panel Trim	Exterior Façade Joints	MBCI	Slate Gray	MBCI metal flashing
MT-3	Metal Panel Trim	Exterior Façade Joints	MBCI	Coal Black	MBCI metal flashing
MT-4	Metal Canopy	Front Entrance	Omega	Black	Front entrance canopy
W-1	Insulated Glazing System	All exterior windows	Krawneer	Tinted	Tinted, Low-E glazing system

Landscape Design and Screening:

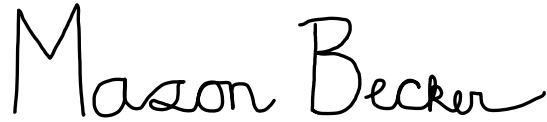
A landscape plan has been submitted along with this letter. The iFLY landscape design not only illustrates jurisdictional requirements but also compliments the iFLY facility and surrounding buildings. The screening of our refuge enclosure will be constructed with metal panels to match the look and feel of the building.

Lighting:

The parking lot lighting will consist of twenty foot (20') high poles with arm mounted fixtures. The fixture cut sheets are provided with this letter and comply with the City of Chesterfield's Unified Development Code.

The building lighting will consist of up/down lights positioned on the façade of the building. The fixture cut sheets are provided with this letter and comply with the City of Chesterfield's Unified Development Code.

Sincerely,



Mason Becker

Design Project Manager

FIXTURE F2 AND F5 - PARKING LOT LIGHTING

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 and UL/cUL Listed for wet locations.

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 and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics

Patented, high-efficiency injection-molded AccuLED Optics technology. 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 70 CRI. Optional 3000K, 5000K and 6000K CCT.

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 600mA, 800mA and 1200mA drive currents (nominal).

Mounting

STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

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 housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty

Five-year warranty.



GLEON GALLEON LED

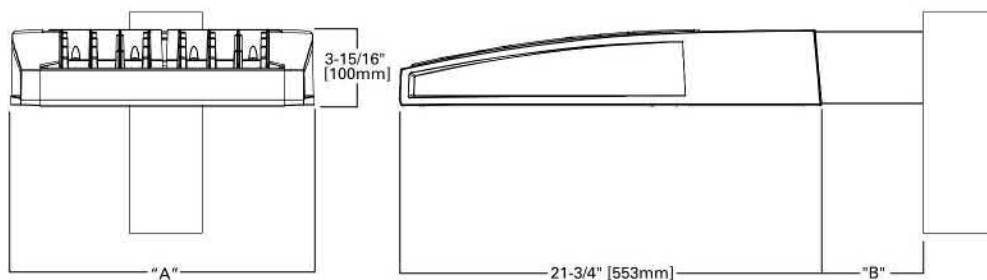
1-10 Light Squares
Solid State LED

AREA/SITE LUMINAIRE



LumenSafe Technology
[CLICK HERE](#)

DIMENSIONS

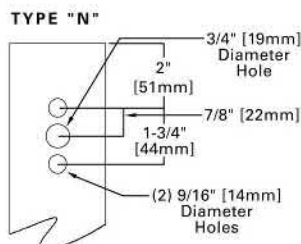


DIMENSION DATA

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. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.

DRILLING PATTERN



CERTIFICATION DATA

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

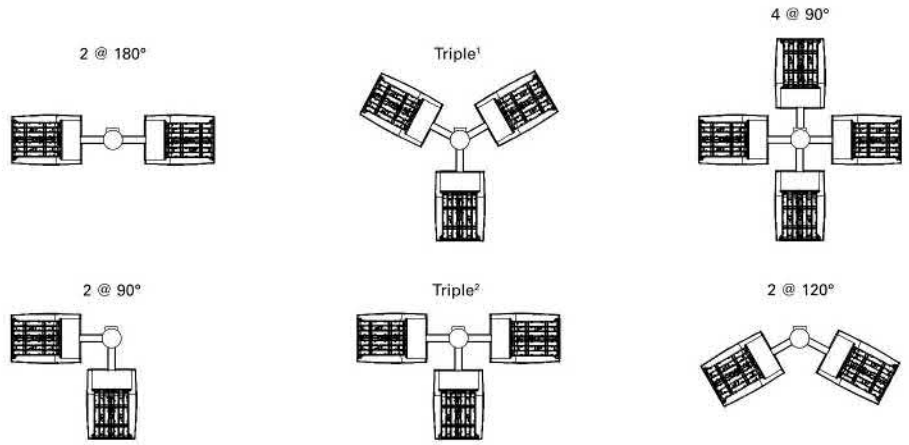
ENERGY DATA

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)

FIXTURE F2 AND F5 - PARKING LOT LIGHTING

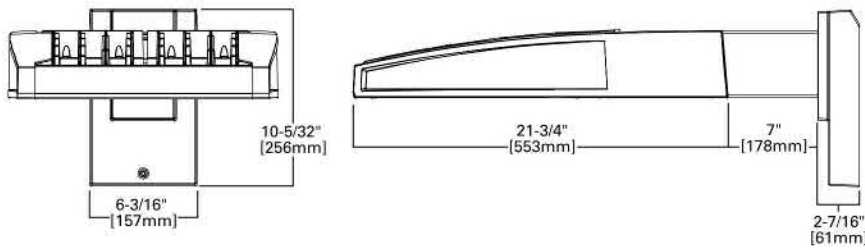
ARM MOUNTING REQUIREMENTS

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

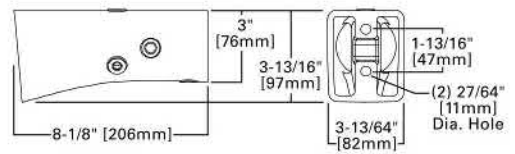


NOTES: 1 Round poles are 3 @ 120°. Square poles are 3 @ 90°. 2 Round poles are 3 @ 90°.

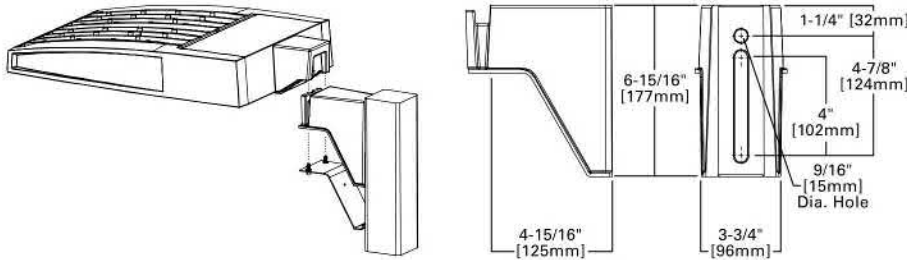
STANDARD WALL MOUNT



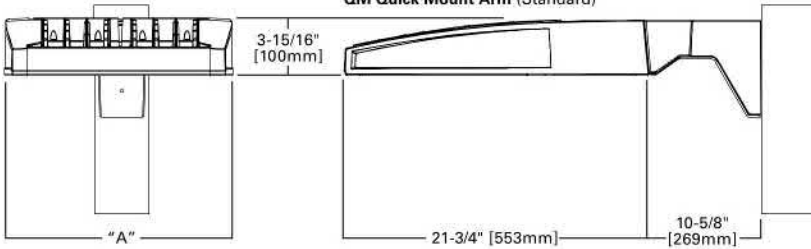
MAST ARM MOUNT



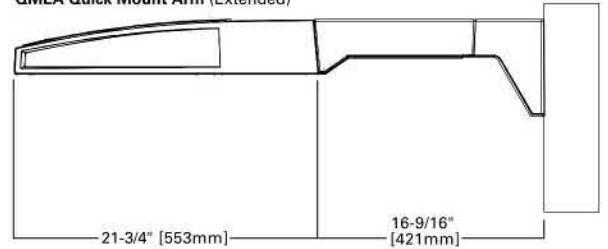
QUICK MOUNT ARM (INCLUDES FIXTURE ADAPTER)



QM Quick Mount Arm (Standard)



QMEA Quick Mount Arm (Extended)

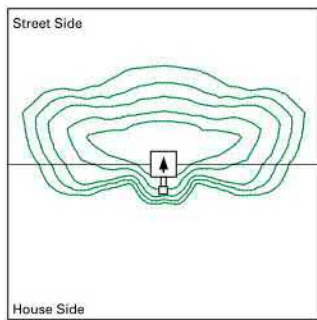


QUICK MOUNT ARM DATA

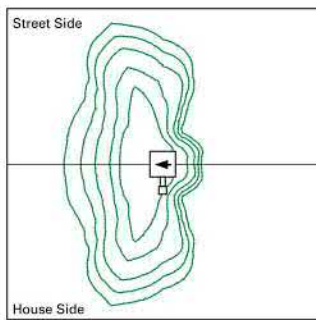
Number of Light Squares 1,2	"A" Width	Weight with QM Arm (lbs.)	Weight with QMEA Arm (lbs.)	EPA (Sq. Ft.)
1-4	15-1/2" (394mm)	35 (15.91 kgs.)	38 (17.27 kgs.)	1.11
5-6 3	21-5/8" (549mm)	46 (20.91 kgs.)	49 (22.27 kgs.)	
7-8	27-5/8" (702mm)	56 (25.45 kgs.)	59 (26.82 kgs.)	

NOTES: 1 QM option available with 1-8 light square configurations. 2 QMEA option available with 1-6 light square configurations. 3 QMEA arm to be used when mounting two fixtures at 90° on a single pole.

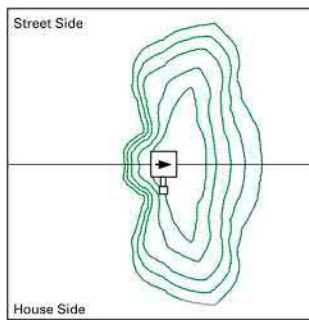
OPTIC ORIENTATION



Standard



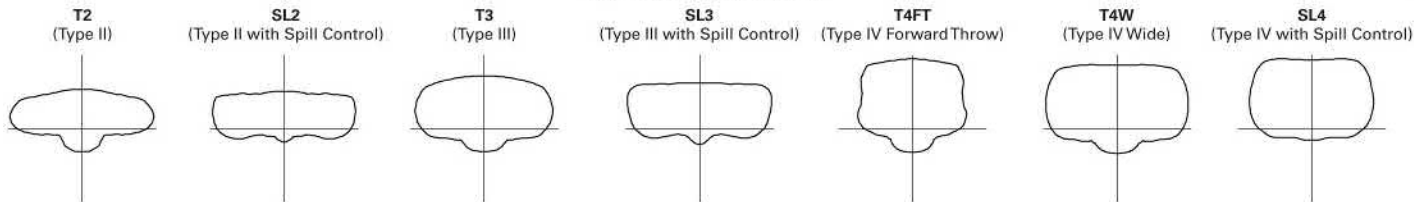
Optics Rotated Left @ 90° [L90]



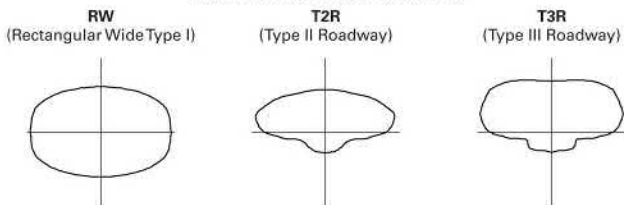
Optics Rotated Right @ 90° [R90]

OPTICAL DISTRIBUTIONS

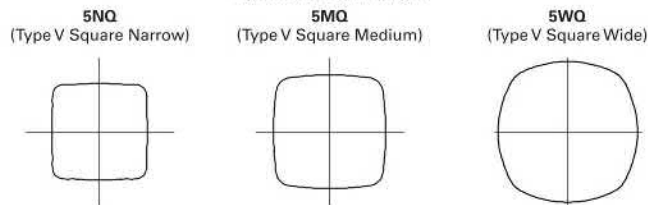
Asymmetric Area Distributions



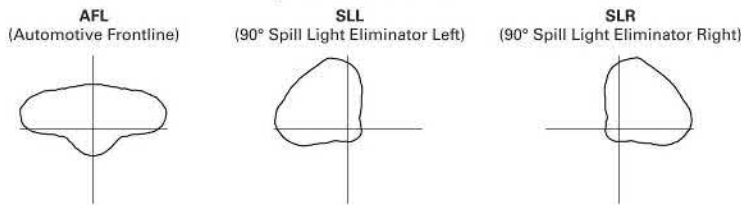
Asymmetric Roadway Distributions



Symmetric Distributions



Specialized Distributions

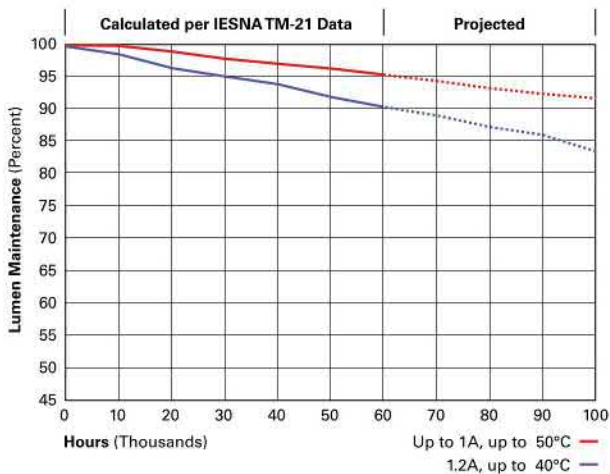


LUMEN MAINTENANCE

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

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



NOMINAL POWER LUMENS (1.2A)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Nominal Power (Watts)	67	129	191	258	320	382	448	511	575	640	
Input Current @ 120V (A)	0.58	1.16	1.78	2.31	2.94	3.56	4.09	4.71	5.34	5.87	
Input Current @ 208V (A)	0.33	0.63	0.93	1.27	1.57	1.87	2.22	2.52	2.8	3.14	
Input Current @ 240V (A)	0.29	0.55	0.80	1.10	1.35	1.61	1.93	2.18	2.41	2.71	
Input Current @ 277V (A)	0.25	0.48	0.70	0.96	1.18	1.39	1.69	1.90	2.09	2.36	
Input Current @ 347V (A)	0.20	0.39	0.57	0.78	0.96	1.15	1.36	1.54	1.72	1.92	
Input Current @ 480V (A)	0.15	0.30	0.43	0.60	0.73	0.85	1.03	1.16	1.28	1.45	
Optics											
T2	4000K/5000K Lumens	6,709	13,111	19,562	25,848	32,026	38,325	45,324	51,355	57,286	63,424
	3000K Lumens	5,939	11,606	17,316	22,881	28,349	33,925	40,121	45,459	50,710	56,143
	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	B4-U0-G5
T2R	4000K/5000K Lumens	7,122	13,919	20,769	27,442	34,000	40,687	48,117	54,519	60,816	67,333
	3000K Lumens	5,939	11,606	17,316	22,881	28,349	33,925	40,121	45,459	50,710	56,143
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,838	13,363	19,939	26,346	32,642	39,062	46,196	52,343	58,388	64,646
	3000K Lumens	6,053	11,829	17,650	23,321	28,895	34,578	40,893	46,334	51,685	57,225
	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	B4-U0-G5
T3R	4000K/5000K Lumens	6,990	13,660	20,382	26,931	33,368	39,930	47,223	53,506	59,686	66,081
	3000K Lumens	6,188	12,092	18,042	23,839	29,537	35,346	41,802	47,364	52,834	58,495
	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	B4-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,878	13,440	20,055	26,499	32,832	39,289	46,464	52,646	58,726	65,020
	3000K Lumens	6,088	11,897	17,753	23,457	29,063	34,779	41,130	46,602	51,984	57,556
	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	B4-U0-G5
T4W	4000K/5000K Lumens	6,789	13,267	19,795	26,156	32,408	38,781	45,864	51,967	57,968	64,180
	3000K Lumens	6,010	11,744	17,523	23,153	28,688	34,329	40,599	46,001	51,313	56,812
	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	B4-U0-G5
SL2	4000K/5000K Lumens	6,697	13,088	19,529	25,804	31,970	38,259	45,245	51,267	57,186	63,315
	3000K Lumens	5,928	11,585	17,287	22,842	28,300	33,867	40,051	45,382	50,621	56,046
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,837	13,361	19,936	26,342	32,639	39,057	46,189	52,336	58,380	64,636
	3000K Lumens	6,052	11,827	17,647	23,318	28,892	34,573	40,887	46,328	51,678	57,216
	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	B4-U0-G5
SL4	4000K/5000K Lumens	6,496	12,695	18,943	25,029	31,011	37,110	43,886	49,727	55,470	61,414
	3000K Lumens	5,750	11,238	16,768	22,156	27,451	32,850	38,848	44,018	49,102	54,364
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	7,052	13,781	20,564	27,171	33,664	40,285	47,641	53,981	60,215	66,669
	3000K Lumens	6,242	12,199	18,203	24,052	29,799	35,660	42,172	47,784	53,302	59,015
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	7,182	14,034	20,942	27,671	34,284	41,027	48,518	54,975	61,323	67,896
	3000K Lumens	6,358	12,423	18,538	24,494	30,348	36,317	42,948	48,664	54,283	60,102
	BUG Rating	B3-U0-G1	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5
5WQ	4000K/5000K Lumens	7,201	14,073	20,998	27,744	34,375	41,136	48,648	55,121	61,487	68,077
	3000K Lumens	6,374	12,457	18,587	24,559	30,429	36,414	43,063	48,793	54,428	60,262
	BUG Rating	B3-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4	B5-U0-G5	B5-U0-G5	B5-U0-G5	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	6,009	11,741	17,519	23,148	28,681	34,321	40,589	45,990	51,301	56,798
	3000K Lumens	5,319	10,393	15,508	20,491	25,388	30,381	35,929	40,710	45,412	50,278
	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	B4-U0-G5
RW	4000K/5000K Lumens	6,989	13,657	20,378	26,925	33,360	39,921	47,211	53,494	59,672	66,066
	3000K Lumens	6,187	12,089	18,039	23,834	29,530	35,338	41,791	47,353	52,822	58,482
	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	B5-U0-G4
AFL	4000K/5000K Lumens	7,014	13,706	20,452	27,023	33,481	40,066	47,383	53,688	59,888	66,306
	3000K Lumens	6,209	12,133	18,104	23,921	29,637	35,466	41,943	47,525	53,013	58,694
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (1A)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Nominal Power (Watts)	59	113	166	225	279	333	391	445	501	558	
Input Current @ 120V (A)	0.51	1.02	1.53	2.03	2.55	3.06	3.56	4.08	4.6	5.07	
Input Current @ 208V (A)	0.29	0.56	0.82	1.11	1.37	1.64	1.93	2.19	2.46	2.75	
Input Current @ 240V (A)	0.26	0.48	0.71	0.96	1.19	1.41	1.67	1.89	2.12	2.39	
Input Current @ 277V (A)	0.23	0.42	0.61	0.83	1.03	1.23	1.45	1.65	1.84	2.09	
Input Current @ 347V (A)	0.17	0.32	0.50	0.64	0.82	1.00	1.14	1.32	1.50	1.68	
Input Current @ 480V (A)	0.14	0.24	0.37	0.48	0.61	0.75	0.91	0.99	1.12	1.28	
Optics											
T2	4000K/5000K Lumens	6,116	11,951	17,833	23,563	29,195	34,937	41,317	46,814	52,221	57,817
	3000K Lumens	5,414	10,579	15,786	20,858	25,843	30,926	36,574	41,440	46,226	51,180
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
T2R	4000K/5000K Lumens	6,493	12,688	18,932	25,015	30,994	37,090	43,863	49,699	55,439	61,380
	3000K Lumens	5,748	11,231	16,759	22,143	27,436	32,832	38,828	43,994	49,075	54,334
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5
T3	4000K/5000K Lumens	6,234	12,181	18,176	24,017	29,756	35,609	42,111	47,715	53,225	58,930
	3000K Lumens	5,518	10,783	16,089	21,260	26,340	31,521	37,277	42,237	47,115	52,165
	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	B4-U0-G5
T3R	4000K/5000K Lumens	6,372	12,453	18,580	24,550	30,418	36,400	43,048	48,776	54,409	60,239
	3000K Lumens	5,640	11,023	16,447	21,732	26,926	32,221	38,106	43,177	48,163	53,324
	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	B3-U0-G5	B4-U0-G5
T4FT	4000K/5000K Lumens	6,270	12,252	18,282	24,156	29,929	35,815	42,356	47,992	53,534	59,271
	3000K Lumens	5,550	10,845	16,183	21,383	26,493	31,703	37,494	42,483	47,388	52,467
	BUG Rating	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5
T4W	4000K/5000K Lumens	6,189	12,094	18,045	23,844	29,543	35,352	41,809	47,372	52,843	58,506
	3000K Lumens	5,479	10,706	15,973	21,107	26,151	31,294	37,009	41,934	46,777	51,790
	BUG Rating	B1-U0-G2	B2-U0-G2	B3-U0-G3	B3-U0-G4	B3-U0-G5	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL2	4000K/5000K Lumens	6,105	11,931	17,803	23,522	29,144	34,877	41,245	46,734	52,130	57,717
	3000K Lumens	5,404	10,561	15,759	20,822	25,798	30,873	36,510	41,369	46,145	51,091
	BUG Rating	B1-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5	B4-U0-G5
SL3	4000K/5000K Lumens	6,233	12,180	18,174	24,013	29,753	35,604	42,106	47,708	53,218	58,921
	3000K Lumens	5,517	10,782	16,088	21,256	26,337	31,517	37,272	42,231	47,109	52,157
	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	B4-U0-G5	B4-U0-G5
SL4	4000K/5000K Lumens	5,922	11,572	17,268	22,816	28,269	33,829	40,006	45,330	50,566	55,984
	3000K Lumens	5,242	10,244	15,286	20,197	25,024	29,945	35,413	40,126	44,761	49,557
	BUG Rating	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	6,429	12,563	18,746	24,768	30,688	36,723	43,429	49,208	54,891	60,775
	3000K Lumens	5,691	11,121	16,594	21,925	27,165	32,507	38,443	43,559	48,590	53,798
	BUG Rating	B2-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4
5MQ	4000K/5000K Lumens	6,547	12,794	19,090	25,224	31,253	37,400	44,228	50,114	55,902	61,893
	3000K Lumens	5,795	11,325	16,898	22,328	27,665	33,106	39,151	44,361	49,484	54,788
	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	B5-U0-G5
5WQ	4000K/5000K Lumens	6,564	12,828	19,141	25,291	31,336	37,499	44,347	50,248	56,051	62,058
	3000K Lumens	5,810	11,355	16,944	22,388	27,739	33,194	39,256	44,480	49,616	54,934
	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	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	5,478	10,703	15,970	21,102	26,145	31,286	37,001	41,924	46,765	51,777
	3000K Lumens	4,849	9,474	14,137	18,679	23,144	27,694	32,753	37,111	41,396	45,833
	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	B3-U0-G5
RW	4000K/5000K Lumens	6,371	12,449	18,576	24,544	30,411	36,392	43,037	48,764	54,396	60,225
	3000K Lumens	5,640	11,020	16,443	21,726	26,920	32,214	38,096	43,166	48,151	53,311
	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	B5-U0-G4
AFL	4000K/5000K Lumens	6,394	12,494	18,644	24,634	30,521	36,524	43,194	48,942	54,593	60,444
	3000K Lumens	5,660	11,060	16,504	21,806	27,017	32,331	38,235	43,323	48,326	53,505
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B4-U0-G4	B4-U0-G4

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (800MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Nominal Power (Watts)	44	85	124	171	210	249	295	334	374	419	
Input Current @ 120V (A)	0.39	0.77	1.13	1.54	1.90	2.26	2.67	3.03	3.39	3.80	
Input Current @ 208V (A)	0.22	0.44	0.62	0.88	1.06	1.24	1.50	1.68	1.87	2.12	
Input Current @ 240V (A)	0.19	0.38	0.54	0.76	0.92	1.08	1.30	1.46	1.62	1.84	
Input Current @ 277V (A)	0.17	0.36	0.47	0.72	0.83	0.95	1.19	1.31	1.42	1.67	
Input Current @ 347V (A)	0.15	0.24	0.38	0.49	0.63	0.77	0.87	1.01	1.15	1.52	
Input Current @ 480V (A)	0.11	0.18	0.29	0.37	0.48	0.59	0.66	0.77	0.88	0.96	
Optics											
T2	4000K/5000K Lumens	4,941	9,656	14,408	19,038	23,588	28,227	33,382	37,823	42,191	46,713
	3000K Lumens	4,374	8,547	12,754	16,852	20,880	24,987	29,550	33,481	37,347	41,350
	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-G5	B4-U0-G5
T2R	4000K/5000K Lumens	5,246	10,251	15,296	20,211	25,041	29,966	35,439	40,154	44,791	49,592
	3000K Lumens	4,644	9,074	13,540	17,891	22,166	26,526	31,371	35,544	39,649	43,899
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5
T3	4000K/5000K Lumens	5,037	9,842	14,685	19,404	24,041	28,770	34,024	38,551	43,003	47,612
	3000K Lumens	4,459	8,712	12,999	17,176	21,281	25,467	30,118	34,125	38,066	42,146
	BUG Rating	B1-U0-G1	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B4-U0-G5
T3R	4000K/5000K Lumens	5,148	10,061	15,011	19,835	24,576	29,409	34,780	39,408	43,959	48,669
	3000K Lumens	4,557	8,906	13,288	17,558	21,755	26,033	30,787	34,884	38,913	43,082
	BUG Rating	B1-U0-G2	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
T4FT	4000K/5000K Lumens	5,066	9,899	14,770	19,516	24,181	28,936	34,221	38,774	43,252	47,888
	3000K Lumens	4,484	8,763	13,074	17,276	21,405	25,614	30,292	34,323	38,287	42,390
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	5,000	9,771	14,579	19,264	23,869	28,562	33,779	38,274	42,694	47,269
	3000K Lumens	4,426	8,649	12,905	17,052	21,129	25,283	29,901	33,880	37,793	41,843
	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	B4-U0-G5
SL2	4000K/5000K Lumens	4,933	9,639	14,383	19,005	23,547	28,178	33,324	37,758	42,118	46,632
	3000K Lumens	4,367	8,532	12,732	16,823	20,844	24,943	29,498	33,423	37,283	41,279
	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	B4-U0-G5
SL3	4000K/5000K Lumens	5,036	9,841	14,683	19,401	24,039	28,766	34,019	38,546	42,997	47,605
	3000K Lumens	4,458	8,711	12,997	17,174	21,279	25,464	30,114	34,121	38,061	42,140
	BUG Rating	B1-U0-G2	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
SL4	4000K/5000K Lumens	4,784	9,350	13,951	18,434	22,840	27,332	32,323	36,624	40,854	45,232
	3000K Lumens	4,235	8,277	12,349	16,318	20,218	24,194	28,612	32,420	36,164	40,039
	BUG Rating	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G5	B2-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	5,194	10,150	15,145	20,011	24,794	29,670	35,088	39,757	44,349	49,102
	3000K Lumens	4,598	8,985	13,406	17,714	21,948	26,264	31,060	35,193	39,258	43,465
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	5,290	10,337	15,424	20,380	25,250	30,217	35,734	40,489	45,165	50,006
	3000K Lumens	4,683	9,150	13,653	18,040	22,351	26,748	31,632	35,841	39,980	44,265
	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	B5-U0-G4
5WQ	4000K/5000K Lumens	5,304	10,365	15,465	20,434	25,318	30,297	35,830	40,597	45,286	50,139
	3000K Lumens	4,695	9,175	13,690	18,088	22,411	26,819	31,717	35,936	40,087	44,383
	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	B5-U0-G5
SLL/SLR	4000K/5000K Lumens	4,426	8,648	12,903	17,049	21,124	25,278	29,894	33,872	37,784	41,832
	3000K Lumens	3,918	7,655	11,422	15,092	18,699	22,376	26,462	29,983	33,446	37,030
	BUG Rating	B1-U0-G2	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	5,147	10,058	15,009	19,830	24,570	29,402	34,771	39,399	43,949	48,658
	3000K Lumens	4,556	8,903	13,286	17,554	21,749	26,027	30,779	34,876	38,904	43,072
	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	B5-U0-G4
AFL	4000K/5000K Lumens	5,166	10,095	15,063	19,903	24,659	29,509	34,898	39,542	44,108	48,835
	3000K Lumens	4,573	8,936	13,334	17,618	21,828	26,121	30,892	35,003	39,044	43,229
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

NOMINAL POWER LUMENS (600MA)

Number of Light Squares	1	2	3	4	5	6	7	8	9	10	
Nominal Power (Watts)	34	66	96	129	162	193	226	257	290	323	
Input Current @ 120V (A)	0.30	0.58	0.86	1.16	1.44	1.73	2.03	2.33	2.59	2.89	
Input Current @ 208V (A)	0.17	0.34	0.49	0.65	0.84	0.99	1.14	1.30	1.48	1.63	
Input Current @ 240V (A)	0.15	0.30	0.43	0.56	0.74	0.87	1.00	1.13	1.30	1.43	
Input Current @ 277V (A)	0.14	0.28	0.41	0.52	0.69	0.81	0.93	1.04	1.22	1.33	
Input Current @ 347V (A)	0.11	0.19	0.30	0.39	0.49	0.60	0.69	0.77	0.90	0.99	
Input Current @ 480V (A)	0.08	0.15	0.24	0.30	0.38	0.48	0.53	0.59	0.71	0.77	
Optics											
T2	4000K/5000K Lumens	4,029	7,874	11,749	15,525	19,235	23,019	27,222	30,844	34,406	38,093
	3000K Lumens	3,566	6,970	10,400	13,743	17,027	20,376	24,097	27,303	30,456	33,720
	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	B3-U0-G4
T2R	4000K/5000K Lumens	4,278	8,360	12,474	16,482	20,421	24,437	28,900	32,745	36,527	40,441
	3000K Lumens	3,787	7,400	11,042	14,590	18,077	21,632	25,582	28,986	32,334	35,798
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4
T3	4000K/5000K Lumens	4,107	8,026	11,976	15,824	19,605	23,461	27,746	31,438	35,068	38,827
	3000K Lumens	3,636	7,105	10,601	14,007	17,354	20,768	24,561	27,829	31,042	34,370
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T3R	4000K/5000K Lumens	4,198	8,205	12,242	16,175	20,041	23,982	28,363	32,137	35,848	39,689
	3000K Lumens	3,716	7,263	10,837	14,318	17,740	21,229	25,107	28,448	31,733	35,133
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
T4FT	4000K/5000K Lumens	4,131	8,072	12,045	15,915	19,719	23,597	27,907	31,620	35,272	39,052
	3000K Lumens	3,657	7,145	10,662	14,088	17,455	20,888	24,703	27,990	31,223	34,569
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G2	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5	B3-U0-G5
T4W	4000K/5000K Lumens	4,077	7,968	11,889	15,710	19,465	23,292	27,546	31,212	34,816	38,547
	3000K Lumens	3,609	7,053	10,524	13,906	17,230	20,618	24,384	27,629	30,819	34,122
	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	B3-U0-G5
SL2	4000K/5000K Lumens	4,022	7,861	11,729	15,498	19,202	22,979	27,175	30,791	34,347	38,028
	3000K Lumens	3,560	6,959	10,383	13,719	16,998	20,341	24,055	27,256	30,404	33,662
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B3-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL3	4000K/5000K Lumens	4,106	8,025	11,974	15,821	19,603	23,458	27,742	31,433	35,064	38,821
	3000K Lumens	3,635	7,104	10,599	14,005	17,353	20,765	24,557	27,824	31,039	34,364
	BUG Rating	B1-U0-G1	B1-U0-G2	B2-U0-G3	B2-U0-G3	B2-U0-G3	B3-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
SL4	4000K/5000K Lumens	3,902	7,624	11,377	15,033	18,626	22,289	26,359	29,867	33,316	36,886
	3000K Lumens	3,454	6,749	10,071	13,307	16,488	19,730	23,333	26,438	29,491	32,651
	BUG Rating	B1-U0-G2	B1-U0-G2	B1-U0-G3	B1-U0-G3	B2-U0-G4	B2-U0-G4	B2-U0-G4	B2-U0-G5	B3-U0-G5	B3-U0-G5
5NQ	4000K/5000K Lumens	4,236	8,277	12,351	16,319	20,219	24,196	28,614	32,422	36,166	40,042
	3000K Lumens	3,750	7,327	10,933	14,446	17,898	21,418	25,329	28,700	32,014	35,445
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G2	B5-U0-G3	B5-U0-G3
5MQ	4000K/5000K Lumens	4,314	8,429	12,578	16,619	20,591	24,641	29,141	33,019	36,832	40,779
	3000K Lumens	3,819	7,461	11,134	14,711	18,227	21,812	25,796	29,228	32,604	36,098
	BUG Rating	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G4	B5-U0-G4	B5-U0-G4
5WQ	4000K/5000K Lumens	4,325	8,452	12,611	16,664	20,646	24,707	29,219	33,106	36,930	40,888
	3000K Lumens	3,828	7,482	11,163	14,751	18,276	21,871	25,865	29,305	32,690	36,194
	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	B5-U0-G4
SLL/SLR	4000K/5000K Lumens	3,609	7,052	10,522	13,903	17,226	20,613	24,378	27,622	30,812	34,114
	3000K Lumens	3,195	6,242	9,314	12,307	15,248	18,247	21,579	24,451	27,275	30,198
	BUG Rating	B1-U0-G1	B1-U0-G2	B1-U0-G3	B2-U0-G3	B2-U0-G3	B2-U0-G4	B3-U0-G4	B3-U0-G4	B3-U0-G5	B3-U0-G5
RW	4000K/5000K Lumens	4,197	8,202	12,239	16,171	20,036	23,977	28,356	32,129	35,839	39,680
	3000K Lumens	3,715	7,260	10,834	14,315	17,736	21,224	25,101	28,441	31,725	35,125
	BUG Rating	B2-U0-G1	B3-U0-G1	B3-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B4-U0-G2	B5-U0-G3	B5-U0-G3	B5-U0-G3
AFL	4000K/5000K Lumens	4,213	8,232	12,284	16,230	20,109	24,064	28,459	32,246	35,969	39,824
	3000K Lumens	3,729	7,287	10,874	14,367	17,800	21,301	25,192	28,544	31,840	35,252
	BUG Rating	B1-U0-G1	B1-U0-G1	B2-U0-G2	B2-U0-G2	B2-U0-G2	B3-U0-G2	B3-U0-G3	B3-U0-G3	B3-U0-G3	B3-U0-G3

* Nominal data for 70 CRI.

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 (P, R and PER7)

Optional button-type photocontrol (P) and photocontrol receptacles (R and PER7) 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 PER7 receptacle.

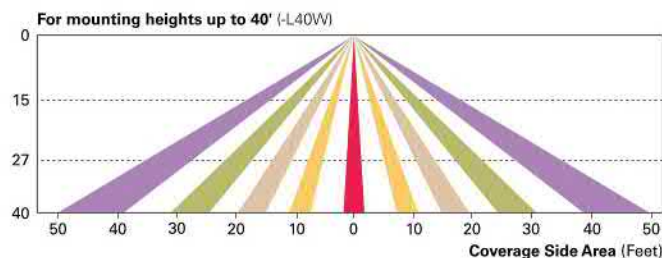
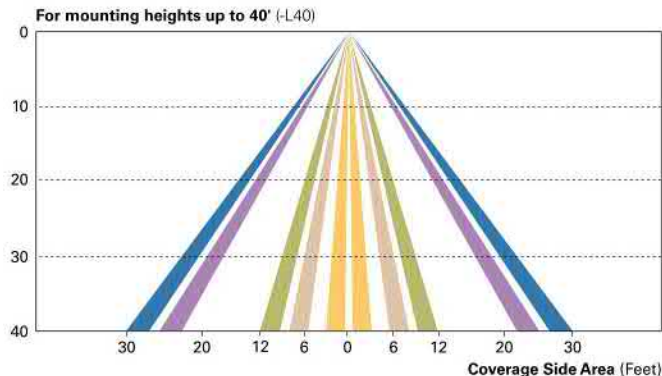
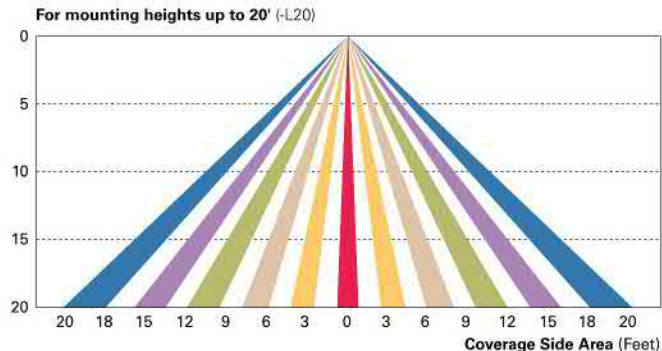
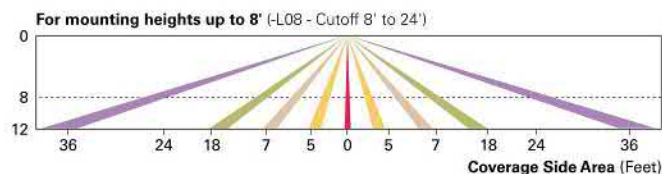
After Hours Dim (AHD)

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 (MS/DIM-LXX, MS/X-LXX and MS-LXX)

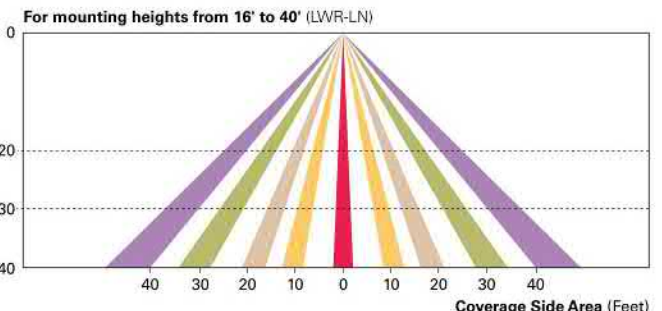
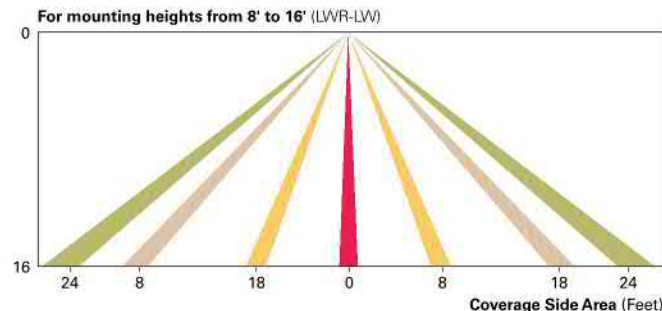
These sensors are factory installed in the luminaire housing. When the MS/DIM-LXX sensor option is selected, the occupancy sensor is connected to a dimming driver and the entire luminaire dims when there is no activity detected. When activity is detected, the luminaire returns to full light output. The 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. The MS/X-LXX is also preset for five minutes and only controls the specified number of light engines to maintain steady output from the remaining light engines.

These occupancy sensors includes an integral photocell that can be activated with the FSIR-100 accessory for "dusk-to-dawn" control or daylight harvesting - the factory preset is OFF. The FSIR-100 is a wireless tool utilized for changing the dimming level, time delay, sensitivity and other parameters. A variety of sensor lens are available to optimize the coverage pattern for mounting heights from 8'-40'.



LumaWatt Pro Wireless Control and Monitoring System (LWR-LW and LWR-LN)

The Eaton's LumaWatt Pro powered by Enlighted is a connected lighting solution that combines a broad selection of energy-efficient LED luminaires with a powerful integrated wireless sensor system. The sensor controls the lighting system in compliance with the latest energy codes and collects valuable data about building performance and use. Software applications turn the granular data into information through energy dashboards and specialized apps that make it simple and help optimize the use of building 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 astronomical or time schedules based on a 7 day week.

LumenSafe Integrated Network Security Camera (LD)

Eaton 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.

ORDERING INFORMATION


Sample Number: GLEON-AF-04-LED-E1-T3-GM-QM

Product Family ^{1,2}	Light Engine	Number of Light Squares ³	Lamp Type	Voltage	Distribution	Color	Mounting
GLEON=Galleon	AF=1A Drive Current	01=1 02=2 03=3 04=4 05=5 ⁴ 06=6 07=7 ⁵ 08=8 ⁵ 09=9 ⁶ 10=10 ⁶	LED=Solid State Light Emitting Diodes	E1=120-277V 347=347V ⁷ 480=480V ^{7,8}	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	AP=Grey BZ=Bronze BK=Black DP=Dark Platinum GM=Graphite Metallic WH=White	[Blank]=Arm for Round or Square Pole EA=Extended Arm ⁹ MA=Mast Arm Adapter ¹⁰ WM=Wall Mount QM=Quick Mount Arm (Standard Length) ¹¹ QMEA=Quick Mount Arm (Extended Length) ¹²

Options (Add as Suffix)	Accessories (Order Separately)
<p>7030=70 CRI 3000K¹³ 8030=80 CRI 3000K¹⁴ 7050=70 CRI 5000K¹³ 7060=70 CRI 6000K¹³ 600=Drive Current Factory Set to Nominal 600mA¹⁵ 800=Drive Current Factory Set to Nominal 800mA¹⁵ 1200=Drive Current Factory Set to Nominal 1200mA^{15,16} F=Single Fuse (120, 277 or 347V. Must Specify Voltage) FF=Double Fuse (208, 240 or 480V. Must Specify Voltage) 2L=Two Circuits^{17,18} DIM=External 0-10V Dimming Leads^{19,20} P=Button Type Photocontrol (120, 208, 240 or 277V. Must Specify Voltage)²¹ PER7=NEMA 7-PIN Twistlock Photocontrol Receptacle²¹ R=NEMA Twistlock Photocontrol Receptacle²¹ AHD145=After Hours Dim, 5 Hours²² AHD245=After Hours Dim, 6 Hours²² AHD255=After Hours Dim, 7 Hours²² AHD355=After Hours Dim, 8 Hours²² HA=50°C High Ambient²³ MS/DIM-L08=Motion Sensor for Dimming Operation, Maximum 8' Mounting Height^{24,25} MS/DIM-L20=Motion Sensor for Dimming Operation, 9' - 20' Mounting Height^{24,26} MS/DIM-L40=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height^{24,27} MS/DIM-L40W=Motion Sensor for Dimming Operation, 21' - 40' Mounting Height (Wide Range)^{24,28} MS/X-L08=Bi-Level Motion Sensor, Maximum 8' Mounting Height^{24,25,29} MS/X-L20=Bi-Level Motion Sensor, 9' - 20' Mounting Height^{24,26,29} MS/X-L40=Bi-Level Motion Sensor, 21' - 40' Mounting Height^{22,27,29} MS/X-L40W=Bi-Level Motion Sensor, 21' - 40' Mounting Height (Wide Range)^{24,28,29} MS-L08=Motion Sensor for ON/OFF Operation, Maximum 8' Mounting Height^{24,25} MS-L20=Motion Sensor for ON/OFF Operation, 9' - 20' Mounting Height^{24,26} MS-L40=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height^{24,27} MS-L40W=Motion Sensor for ON/OFF Operation, 21' - 40' Mounting Height (Wide Range)^{24,28} LWR-LW=LumaWatt Pro Wireless Sensor, Wide Lens for 8' - 16' Mounting Height^{30,(A)} LWR-LN=LumaWatt Pro Wireless Sensor, Narrow Lens for 16' - 40' Mounting Height^{30,(A)} WOLC-7P-10A=WaveLinX Wireless Outdoor Lighting Control Module^(B) L90=Optics Rotated 90° Left R90=Optics Rotated 90° Right MT=Factory Installed Mesh Top TH=Tool-less Door Hardware LCF=Light Square Trim Plate Painted to Match Housing³¹ HSS=Factory Installed House Side Shield³² CE=CE Marking³³</p>	<p>OA/RA1016=NEMA Photocontrol Multi-Tap - 105-285V OA/RA1027=NEMA Photocontrol - 480V OA/RA1201=NEMA Photocontrol - 347V OA/RA1013=Photocontrol Shorting Cap OA/RA1014=120V Photocontrol 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 FSIR-100=Wireless Configuration Tool for Occupancy Sensor³⁴ GLEON-MT1=Field Installed Mesh Top for 1-4 Light Squares GLEON-MT2=Field Installed Mesh Top for 5-6 Light Squares GLEON-MT3=Field Installed Mesh Top for 7-8 Light Squares GLEON-MT4=Field Installed Mesh Top for 9-10 Light Squares GLEON-QM=Quick Mount Arm Kit¹⁰ GLEON-QMEA=Quick Mount Extended Arm Kit¹¹ LS/HSS=Field Installed House Side Shield^{32,33} WOLC-7P-10A=WaveLinX Outdoor Control Module (7-pin)^{35,(B)}</p>

NOTES:
 1 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. 2 DesignLights Consortium[®] Qualified. Refer to www.designlights.org Qualified Products List under Family Models for details. 3 Standard 4000K CCT and minimum 70 CRI. 4 Not compatible with MS/4-LXX or MS/1-LXX sensors. 5 Not compatible with extended quick mount arm (QMEA). 6 Not compatible with standard quick mount arm (QM) or extended quick mount arm (QMEA). 7 Requires the use of an internal step down transformer when combined with sensor options. Not available with sensor at 1200mA. Not available in combination with the HA high ambient and sensor options at 1A. 8 Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems). 9 May be required when two or more luminaires are oriented on a 90° or 120° drilling pattern. Refer to arm mounting requirement table. 10 Factory installed. 11 Maximum 6 light squares. 12 Maximum 6 light squares. 13 Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 14 Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 6000K when performing layouts. These files are published on the Galleon luminaire product page on the website. 15 1 Amp standard. Use dedicated IES files for 600mA, 800mA and 1200mA when performing layouts. These files are published on the Galleon luminaire product page on the website. 16 Not available with HA option. 17 2L is not available with MS, MS/X or MS/DIM at 347V or 480V. 2L in AF-02 through AF-04 requires a larger housing, normally used for AF-05 or AF-06. Extended arm option may be required when mounting two or more fixtures per pole at 90° or 120°. Refer to arm mounting requirement table. 18 Not available with LumaWatt Pro wireless sensors. 19 Cannot be used with other control options. 20 Low voltage control lead brought out 18" outside fixture. 21 Not available if any "MS" sensor is selected. Motion sensor has an integral photocell. 22 Requires the use of P photocontrol or the PER7 or R photocontrol receptacle with photocontrol accessory. See After Hours Dim supplemental guide for additional information. 23 50°C lumen maintenance data applies to 600mA, 800mA and 1A drive currents. 24 The FSIR-100 configuration tool is required to adjust parameters including high and low modes, sensitivity, time delay, cutoff and more. Consult your lighting representative at Eaton for more information. 25 Approximately 22' detection diameter at 8' mounting height. 26 Approximately 40' detection diameter at 20' mounting height. 27 Approximately 60' detection diameter at 40' mounting height. 28 Approximately 100' detection diameter at 40' mounting height. 29 Replace X with number of Light Squares operating in low output mode. 30 LumaWatt Pro wireless sensors are factory installed only requiring network components LWP-EM-1, LWP-GW-1 and LWP-PoE8 in appropriate quantities. See www.eaton.com/lighting for LumaWatt Pro application information. 31 Not available with house side shield (HSS). 32 Only for use with SL2, SL3, SL4 and AFL distributions. The Light Square trim plate is painted black when the HSS option is selected. 33 CE is not available with the LWR, MS, MS/X, MS/DIM, P, R or PER7 options. Available in 120-277V only. 34 One required for each Light Square. 35 Requires 7-pin NEMA twistlock photocontrol receptacle.

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

Product Family	Camera Type	Data Backhaul
L=LumenSafe Technology [®] 	D=Dome Camera	<p>C=Cellular, Customer Installed SIM Card A=Cellular, Factory Installed AT&T SIM Card V=Cellular, Factory Installed Verizon SIM Card S=Cellular, Factory Installed Sprint SIM Card</p> <p>R=Cellular, Factory Installed Rogers SIM Card W=Wi-Fi Networking w/ Omni-Directional Antenna E=Ethernet Networking</p>

*Consult LumenSafe system pages for additional details and compatibility. Not available with 9-10 light square housing. Not available with 347V, 480V or high ambient options.

DESCRIPTION

Combining value and performance in a compact, robust design, the Night Falcon low wattage LED floodlight luminaire delivers superior uniformity and excellent illumination to the targeted application. The rugged, die-cast housing is IP66 rated for exceptional durability and long term reliability. Available in several mounting configurations and weighing less than 14 pounds, this fixture provides you with design flexibility while simplifying installation. The low wattage LED floodlight can be wall, ground, or pole mounted, making it ideal for all commercial, industrial, and residential low wattage floodlighting applications.

Catalog #		Type	
Project		BLACK	
Comments		Date	
Prepared by			

SPECIFICATION FEATURES

Construction

Heavy-duty, die-cast aluminum housing, driver compartment and driver housing door. The housing, driver compartment and optical chamber are IP66 rated. Access to the driver for maintenance is achieved with a removable driver door using pan head screws. A one-piece silicone gasket seals the door to the fixture housing. Suitable for mounting within 4' (1.2m) of the ground.

Optics

The LED chamber incorporates a vacuum metalized reflector that provides high-efficiency illumination. Optics are precisely designed to shape the wide NEMA type 6H x 6V distribution, maximizing efficiency and application spacing. A 3H x 3V distribution is available for lighting tall, narrow surfaces. Clear glass tempered lens with full circumference form-in-place silicone gasket protects the optics from damage. Offered standard in 4000K (+/- 275K) CCT and minimum 70 CRI optional. Optional 5700K CCT, 3000K CCT, 5000K CCT minimum 70 CRI are available.

Electrical

LED driver is mounted to the removable die-cast aluminum door

for optimal heat sinking and ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. Integral 3kV surge is standard. 10kV MOV surge protection is available. 0-10V dimming driver is standard. Button photocontrols are available in 120V and 208-277V. Suitable for ambient temperatures from -40°C to 40°C. Optional 50°C HA (high ambient) available. 93% lumen maintenance greater than 50,000 hours per IESNA TM-21.

Accessories

Heavy-duty steel top and side visors control glare and spill light. 1/8" thick UV stabilized vandal guard shields glass lens from impact when mounted at low levels. Easy to install wire guard features a heavy-gauge welded construction with corrosion resistant polyester powder coat finish to protect glass from projected objects.

Mounting

Heavy-gauge steel trunnion-mount utilizes interlocking slide adjustment and is supplied with 3 feet of pre-wired SOW, wet location rated cord. Trunnion base can be lag bolted to any surface and is 3G vibration rated (ANSI C136.31). Heavy-duty, die-cast aluminum knuckle base utilizes

tooth-lock adjustment with visual 5° adjustment indicators that allow for 180° rotation of the luminaire. Knuckle fits 1/2" NPT available mounting junction box cover (supplied by others) and is secured with supplied locking nut and is 1.5G vibration rated. A die-cast aluminum slipfitter with a tooth lock adjustment that can be adjusted in 5° increments is available and is 1.5G vibration rated.

Finish

Housing and cast parts finished in five-stage super TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard color is carbon bronze. Additional colors available in summit white, white, grey, bronze, black, dark platinum and graphite metallic. Consult your lighting representative at Eaton for a complete selection of standard colors.

Warranty

Five-year warranty.



NFFLD-S NIGHT FALCON SMALL

Solid State LED

FLOODLIGHT



CERTIFICATION DATA

UL/cUL Wet Location Listed
IP66 Fixture and Optical Chamber
LM79/LM80 Compliant
1.5G Vibration Rated - Knuckle Mount
3.0G Vibration Rated - Slipfitter Mount
3.0G Vibration Rated - Trunnion Mount
RoHS Compliant
DesignLights Consortium® Qualified*

ENERGY DATA

Electronic LED Driver
> 0.9 Power Factor
< 20% Total Harmonic Distortion
120V 50/60Hz, 347V/60Hz and 480V/60Hz
-40°C Min. Ambient Temperature Rating
+40°C Max. Ambient Temperature Rating

EPA

Effective Projected Area (Sq. Ft.): 0.55

SHIPPING DATA

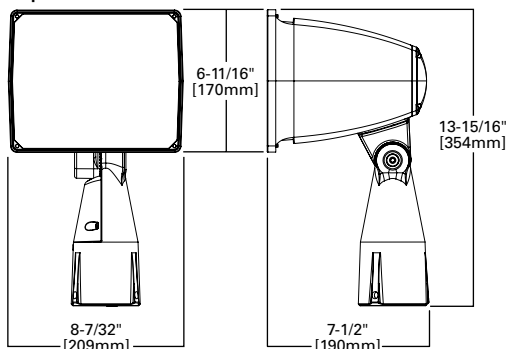
Approximate Net Weight:
13 lbs. (6 kgs.)



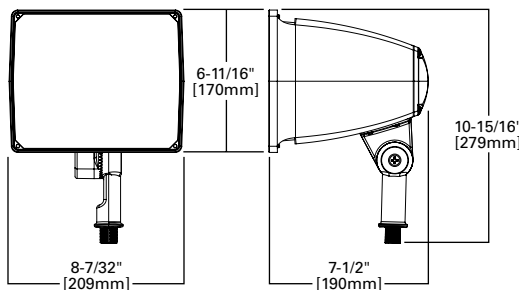
TD506011EN
April 5, 2018 8:20 AM

DIMENSIONS

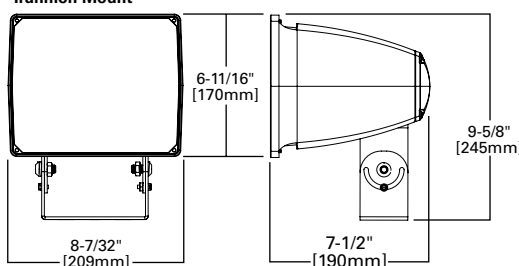
Slipfitter Mount



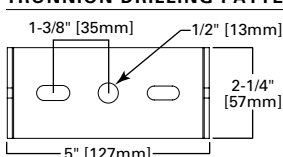
Knuckle Mount



Trunnion Mount



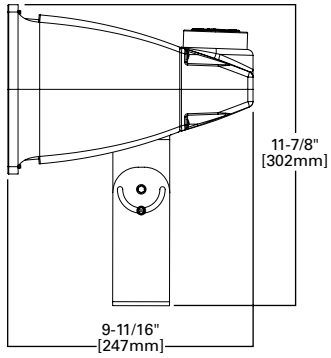
TRUNNION DRILLING PATTERN



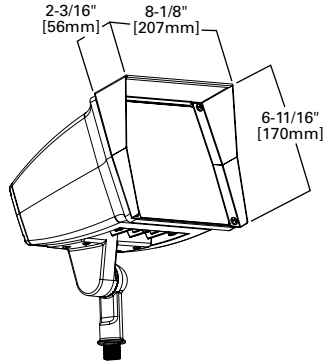
OPTION

ACCESSORIES

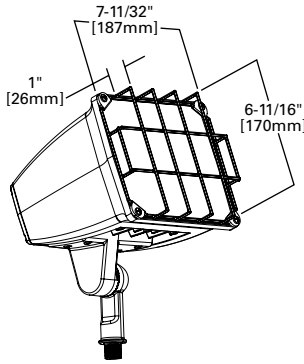
NEMA Twistlock Photocontrol Receptacle



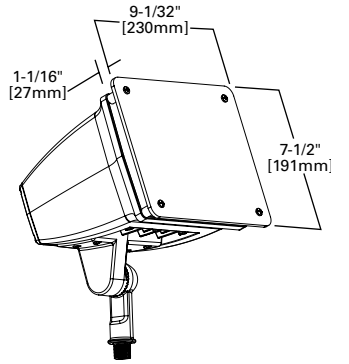
Top and Side Visors



Wire Guard



Vandal Shield



POWER AND LUMENS

	6 x 6				3 x 3			
	NFFLD-S-C70	NFFLD-S-C70-7060	NFFLD-S-C70-7050	NFFLD-S-C70-7030	NFFLD-S-C70	NFFLD-S-C70-7060	NFFLD-S-C70-7050	NFFLD-S-C70-7030
C70 LED								
Delivered Lumens	2,682	2,656	2,760	2,632	2,883	2,824	2,935	2,799
CCT (Kelvin)	4000K	5700K	5000K	3000K	4000K	5700K	5000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70	70	70
NEMA Distribution (H x V)	6H x 6V	6H x 6V	6H x 6V	6H x 6V	3H x 3V	3H x 3V	3H x 3V	3H x 3V
Power Consumption (Watts)	20	20	20	20	26	26	26	26
C15 LED								
Delivered Lumens	5,797	5,741	6,066	5,785	5,499	5,386	5,596	5,337
CCT (Kelvin)	4000K	5700K	5000K	3000K	4000K	5700K	5000K	3000K
CRI (Color Rendering Index)	70	70	70	70	70	70	70	70
NEMA Distribution (H x V)	6H x 6V	6H x 6V	6H x 6V	6H x 6V	3H x 3V	3H x 3V	3H x 3V	3H x 3V
Power Consumption (Watts)	51	51	51	51	52	52	52	52

LUMEN MAINTENANCE

Ambient Temperature	TM-21 Lumen Maintenance (50,000 Hours)	Theoretical L70 (Hours)
NFFLD-S-C15-33 (3 x 3 Spot)		
25°C	> 94.74%	> 336,000
40°C	> 93.37%	> 264,000
NFFLD-S-C15-66 (6 x 6 Wide)		
25°C	> 95.53%	> 399,000
40°C	> 95.10%	> 362,000
50°C	> 94.60%	> 324,000

CURRENT DRAW

Voltage (V)	6 x 6		3 x 3	
	NFFLD-S-C70	NFFLD-S-C15	NFFLD-S-C70	NFFLD-S-C15
	Current (A)	Current (A)	Current (A)	Current (A)
120V	0.15	0.45	0.21	0.46
208V	0.09	0.25	0.13	0.26
240V	0.08	0.22	0.11	0.23
277V	0.07	0.19	0.10	0.20
347V	0.06	0.16	0.10	0.21
480V	0.05	0.13	0.07	0.22

LUMEN MULTIPLIER

Ambient Temperature	Lumen Multiplier
10°C	1.03
15°C	1.02
25°C	1.00
40°C	0.97
50°C	0.96

FIXTURE L2 - BUILDING LIGHTING LIGHTING

ORDERING INFORMATION

Sample Number: NFFLD-S-C15-D-UNV-66-S-CB-PC1

Product Family ¹	Light Engine ²	Driver ³	Voltage	Distribution	Mounting	Color
NFFLD-S=Night Falcon Small	C70=2,700 Nominal Lumens C15=5,900 Nominal Lumens	D=Dimming (0-10V)	UNV=Universal 120-277V 347=347V ⁴ 480=480V ^{3,5}	33=NEMA 3H x 3V ⁶ 66=NEMA 6H x 6V Wide	S=Slipfitter ⁷ T=Trunnion KNC=Knuckle	CB=Carbon Bronze (Standard) BK=Black BZ=Bronze AP=Grey WH=White WHT=Summit White DP=Dark Platinum GM=Graphite Metallic
Options (Add as Suffix)				Accessories (Order Separately) ¹³		
7030=70 CRI / 3000K ⁸ 7050=70 CRI / 5000K ⁸ 7060=70 CRI / 5700K ⁸ 10MSP=10kV MOV Surge Protection HA=50°C High Ambient Temperature ⁹ PC1=Button Type Photocontrol - 120V ¹⁰ PC2=Button Type Photocontrol - 208-277V ¹⁰ PER= 3-PIN Twistlock Photocontrol Receptacle ¹¹ PER7=7-PIN Twistlock Photocontrol Receptacle ^{11,12}				RAB-XX=Right Angle Pipe Bracket for Slipfitter SAB-XX=Steel Angle Bracket for Trunnion TS2LW-NFFLD-XX=Top and Side Visors ¹⁴ VSLW-NFFLD=Vandal Shield ¹⁴ WGLW-NFFLD=Wire Guard ¹⁴		

- NOTES:**
- DesignLights Consortium* Qualified and classified for both DLC Standard and DLC Premium, refer to www.designlights.org for details.
 - Standard 4000K CCT and minimum 70 CRI. Consult IES file for actual lumen output.
 - Consult factory for driver surge protection values.
 - 347V only available with PC2.
 - Only for use with 480V Wye systems. Per NEC, not for use with ungrounded systems, impedance grounded systems or corner grounded systems (commonly known as Three Phase Three Wire Delta, Three Phase High Leg Delta and Three Phase Corner Grounded Delta systems).
 - Nominal lumen values are lower for the spot optic distribution see lumen table.
 - Fits 2-3/8" O.D. tenon, wire leads runs through bottom of slipfitter.
 - Extended lead times apply. Use dedicated IES files for 3000K, 5000K and 5700K when performing layouts. These files are published on the Night Falcon Small luminaire product page on the website.
 - HA option not available with 3x3 configurations.
 - Cannot order button photocontrol with C15 lumen package and 480V (PC1 or PC2).
 - Requires extended back box.
 - Require 0-10V dimming driver.
 - Replace XX with color designation. Additional brackets and adaptors available on the poles product page on the website.
 - Cannot combine TS2LW (Top and Side Visor), VSLW (Vandal Shield), or WGLW (Wire Guard), limited to one external guard per fixture.

STOCK ORDERING INFORMATION

Stock Sample Number: NFFLD-S-C15-T-UNV

Series	Light Engine	Mounting	Voltage	Options (Add as Suffix)
NFFLD-S=Night Falcon Small	C70=2,700 Nominal Lumens C15=5,900 Nominal Lumens	T=Trunnion KNC=Knuckle	UNV=Universal 120-277V 347=347V	PC1=Button Type Photocontrol - 120V PC2=Button Photocontrol - 207-277V

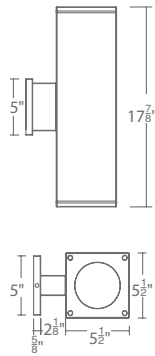
NOTES: Options not available with stock products. Order accessories as separate items for field installation. Refer to standard ordering information to add options. Refer to In-Stock Guide for availability. Stock fixture is 4000K, dimming, 6x6 distribution, 120-277V or 347V, carbon bronze only. 347V only available with PC2.

FIXTURE A - BUILDING LIGHTING

CUBE ARCHITECTURAL DC-WD06

WAC LIGHTING

LED Wall Mounts



Fixture Type:

Catalog Number:

Project:

Location:

PRODUCT DESCRIPTION

The latest energy efficient LED technology in an appealing cubical profile delivers accent and wall wash lighting. Comes in various light distribution and beam angle options.

FEATURES

- High performance exterior rated LED wall mount light
- Fixture can install upside down to alter light distribution
- Solid aluminum construction
- 5 year warranty

SPECIFICATIONS

Input: Universal voltage 120V - 277VAC, 50/60Hz
Dimming: Electronic low voltage (ELV) : 100% - 5%
 0-10V: 100% - 1%
Light Source: High output 3 Step Mac Adam Ellipse COB
 Rated life of 60,000 hours at L70
Finish: Electrostatically powder coated, white, black, bronze and graphite
Standards: IP65 rated, UL & cUL wet location listed
 Title 24 JA8-2016 Compliant
Operating Temp: -13°F to 122°F (-25°C to 50°C)

ORDERING NUMBER

Diameter	Watt	Beam	Beam Angle	Color Temp	CRI	Reference Output ¹			Light Distribution	Finish	
						Lumen	CBCP	Efficacy (lm/w)			
DC-WD06	35W x 2	S Straight up and down	16°	927S	2700K	90	2820 x 2	18842 x 2	81 x 2		
				827S	2700K	85	3385 x 2	22608 x 2	97 x 2		
				930S	3000K	90	2925 x 2	19543 x 2	84 x 2		
				830S	3000K	85	3535 x 2	23632 x 2	101 x 2		
				835S	3500K	85	3630 x 2	24255 x 2	104 x 2		
				840S	4000K	85	3665 x 2	24490 x 2	105 x 2		
	35W x 2	N Straight up and down	28°	927S	2700K	90	2800 x 2	7992 x 2	80 x 2		
				827S	2700K	85	3360 x 2	9589 x 2	96 x 2		
				930S	3000K	90	2900 x 2	8290 x 2	83 x 2		
				830S	3000K	85	3510 x 2	10024 x 2	100 x 2		
				835S	3500K	85	3600 x 2	10288 x 2	103 x 2		
				840S	4000K	85	3635 x 2	10388 x 2	104 x 2		
	35W x 2	F Straight up and down	38°	927S	2700K	90	2825 x 2	5451 x 2	81 x 2		
				827S	2700K	85	3390 x 2	6540 x 2	97 x 2		
				930S	3000K	90	2930 x 2	5654 x 2	84 x 2		
				830S	3000K	85	3545 x 2	6836 x 2	101 x 2		
				835S	3500K	85	3640 x 2	7017 x 2	104 x 2		
				840S	4000K	85	3675 x 2	7085 x 2	105 x 2		
	22W x 2	F Away from the wall	N/A	927A	2700K	90	2860 x 2		82 x 2		
				827A	2700K	85	3435 x 2	N/A	98 x 2		
930A				3000K	90	2970 x 2		85 x 2			
830A				3000K	85	3590 x 2		103 x 2			
835A				3500K	85	3685 x 2		105 x 2			
840A				4000K	85	3720 x 2		106 x 2			
22W x 2	F Towards the wall	N/A	927B	2700K	90	2860 x 2		82 x 2			
			827B	2700K	85	3435 x 2	N/A	98 x 2			
			930B	3000K	90	2970 x 2		85 x 2			
			830B	3000K	85	3590 x 2		103 x 2			
			835B	3500K	85	3685 x 2		105 x 2			
			840B	4000K	85	3720 x 2		106 x 2			
22W x 2	F One side each	N/A	927C	2700K	90	2860 x 2		82 x 2			
			827C	2700K	85	3435 x 2		98 x 2			
			930C	3000K	90	2970 x 2	N/A	85 x 2			
			830C	3000K	85	3590 x 2		103 x 2			
			835C	3500K	85	3685 x 2		105 x 2			
			840C	4000K	85	3720 x 2		106 x 2			

BK	Black	
WT	White	
BZ	Bronze	
GH	Graphite	

DC-WD06- _____ - _____ Example: **DC-WD06-F930A-WT** ¹Reference output shows 35W output. Multiply by 0.7 to determine output for 22W combinations.

wacighting.com
 Phone (800) 526.2588
 Fax (800) 526.2585

Headquarters/Eastern Distribution Center
 44 Harbor Park Drive
 Port Washington, NY 11050

Central Distribution Center
 1600 Distribution Ct
 Lithia Springs, GA 30122

Western Distribution Center
 1750 Archibald Avenue
 Ontario, CA 91760



Catalog Number
Notes
Type

FEATURES & SPECIFICATIONS

INTENDED USE — The OLCFM provides years of maintenance-free general illumination for residential and commercial outdoor applications such as porches, covered walkways and store entrances.

CONSTRUCTION — Rugged cast-aluminum top-plate and outer-ring are protected by a thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling.

Polycarbonate LED lens/cover protects LEDs.

Fixture weight = 2.98 lbs.

OPTICS — 96 high-performance LEDs produces up to 1077 lumens and maintain 70% of light output at 50,000 hours of service.

(LED lifespan based on IESNA LM-80-08 results and calculated per IESNA TM-21-11 methodology.)

White acrylic diffuser provides a soft white light at 4000K CCT

See Lighting Facts Labels for specific fixture performance.

ELECTRICAL — Fixture operates at 120 volts, 60 Hz.

Standard input = 16.6 watts

Operating temperature -40°C to 40°C.

Amps @ 120V = .131.

Surge protection = 2.5kV.

INSTALLATION — Mounts easily to existing junction box (by others).

LISTINGS — UL Listed to U.S. and Canadian safety standards for wet locations.

Designed for ceiling or wall mounting more than 4' above the ground.

Tested in accordance with IESNA LM-79 and LM-80 standards.

WARRANTY — 5-year limited warranty. Complete warranty terms located at www.acuitybrands.com/CustomerResources/Terms_and_conditions.aspx

Actual performance may differ as a result of end-user environment and application.

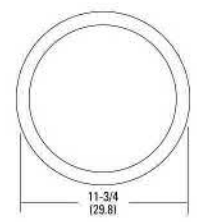
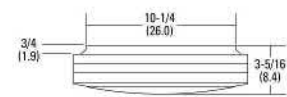
All values are design or typical values, measured under laboratory conditions at 25 °C.

Note: Specifications subject to change without notice.

Outdoor General Purpose

OLCFM

OUTDOOR LED CAST FLUSH MOUNT



All dimensions are inches (centimeters) unless otherwise indicated.

ORDERING INFORMATION

All configurations of this product are considered "standard" and have short lead times.

Example: OLCFM 15 DDB

Series	Light Engine	Color Temperature (CCT) ¹	Voltage	Finish
OLCFM	15	(blank) 4000K	(blank) 120V	DDB Dark bronze WH White

Notes

1 Nominal Correlated Color Temperature (CCT) per ANSI C78.377-2008.

PHOTOMETRIC DIAGRAMS

To see complete photometric reports or download .ies files for this product, visit www.Lithonia.com. Tested in accordance with IESNA LM79 and LM80 standards.

