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

Architectural Review Board Staff Report

Project Type: Site Development Plan

Meeting Date: February 13, 2014

From: Jessica Henry
Project Planner

Cc: Aimee Nassif, Planning & Development Services Director

Location: 18336 Edison Avenue

Applicant: ArchImages, on behalf of Firestream Worldwide

Description: **Spirit of St. Louis Airpark, Firestream Worldwide:** A Site Development Plan, Landscape Plan, Lighting Plan, Architectural Elevations and an Architect's Statement of Design for a 1.12 acre tract of land zoned "M3" Planned Industrial District located on the south side of Edison Avenue, west of Spirit of St. Louis Boulevard.

PROPOSAL SUMMARY

The request is for a 12,000 square foot aircraft storage and corporate office hangar building located within the Spirit of St. Louis Airpark development. The subject site is zoned "M3" Planned Industrial District and is governed under the terms and conditions of City of Chesterfield Ordinance 1430. The exterior building materials will be comprised of painted metal panel siding, EIFS, stone veneer, brick veneer, and tinted glass windows. The proposal includes a flat painted metal panel roof.

HISTORY OF SUBJECT SITE

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

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

The subject site has never been developed.



STAFF ANALYSIS

General Requirements for Site Design:

A. Site Relationships

The subject site is located near the terminus of Bell Avenue and is surrounded by other similar uses within the airport context. Additionally, the proposed building uses similar materials and design as other buildings constructed in the area.

The location of the proposed building is directly adjacent to the airport taxiways and the building entrance is facing the frontage along Edison Avenue, with the less articulated east and south elevations facing inward towards the airport taxiways and runways.

B. Circulation System and Access

The proposed entrance to the site is off of Bell Avenue on the northern portion of the site and visitor parking is provided at this entrance. Private parking for employees and pilots is provided at the southern portion of the site. This private parking is accessed through a gate with keypad at the end of Bell Avenue. The south elevation features an aircraft hangar door system and the paved parking area will connect to an existing taxiway located off of the property to the east. The circulation, including access to this taxiway, is governed by the Spirit of St. Louis Airport; however, the applicant will need to provide authorization from the adjacent property owner to make any off-site improvements pertaining to the pavement connection to the taxiway. Access to the taxiway will be restricted to the public.

Similar to vehicular traffic, the pedestrian traffic near the proposed building is strictly limited to the northern portion of the site fronting Edison Avenue due to the proximity of the building to the proposed taxiway. However, a sidewalk is proposed along Edison Avenue.

C. Topography

The existing grade of the property is nearly flat. Minimal changes to the existing topography are planned.

D. Retaining Walls

No retaining walls are proposed on the site.

General Requirements for Building Design:

A. Scale

The applicant is proposing a building of approximately twenty-five feet in height and 12, 000 square feet in size, which is comparable to the adjacent structures.

As noted in the Architect's Statement of Design, the north building elevation that fronts on Edison Avenue is designed to the human scale by providing a prominent entry canopy and window fenestration. The remaining elevations of the building are designed to a generic scale based upon aircraft clearance requirements.

B. Design

The proposed hangar is similar to other nearby hangars in both materials and design.

There are no roof parapets included in the design of the hangar and the applicant has confirmed that no rooftop equipment is proposed for this facility. The dumpster enclosure is located on the southern portion of the site is to be constructed of split face concrete masonry units with a cedar wood slat screen door.

The large green area shown on the colored Site Development Plan along the east elevation of the building will serve as the MSD Stormwater BMP areas. Additionally, pervious pavers are shown for the parking area located on the northern portion of the site.

C. Materials and Color

The building will be primarily comprised of painted metal siding—more specifically pre-engineered steel—which is typical for this building type. The design also includes expansive windows on the front elevation and the portions of the side elevations where the corporate office is to be located. The proposed materials and earth tone colors are chosen to match the existing buildings within the airport complex.

D. Landscape Design and Screening

Trees will be planted along Edison Avenue and throughout the site with the exception of a portion of the Bell Avenue frontage which falls within an Ameren utility easement. Landscape beds containing shrubs and grasses are proposed in this area. Landscape beds are also proposed along the portions of the building visible from Edison and Bell Avenues.

E. Signage

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

F. Lighting

The plan proposes one pole mounted light fixture and two different light fixtures attached to the proposed building. The pole mounted and one of wall mounted light fixtures, noted as W3 and S3-HS on the Lighting Plan are a flat lens metal halide fixtures. These fixtures will be mounted in a fixed position and are fully-shielded and full cut-off. The third fixture, shown as W4 on the Lighting Plan, is a full cut-off, flat lens architectural wallpack design. Two of these fixtures are proposed on the north façade of the building.

DEPARTMENTAL INPUT

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

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

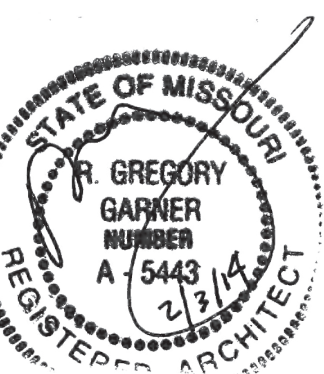
Attachments

1. Architectural Review Packet Submittal

Architectural Review Board Submittal

Chesterfield, Missouri [30 January 2014] Revised [03 February 2014]

Firestream Worldwide



R. Gregory Garner - Registered Architect
Missouri License No. 025443
Expires 11 December 2014

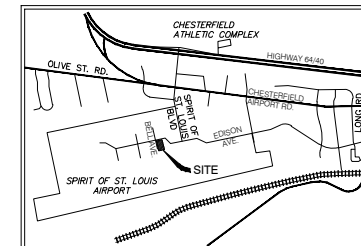
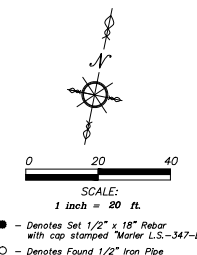


SITE DEVELOPMENT PLAN FIRESTREAM WORLDWIDE

A TRACT OF LAND IN ST. LOUIS AIR PARK, A SUBDIVISION IN ST. LOUIS COUNTY, MISSOURI, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 107 PAGE 42 OF THE ST. LOUIS COUNTY RECORDS, AND BEING PART OF U.S. SURVEY 102 TOWNSHIP 45 NORTH, RANGE 3 EAST, ST. LOUIS COUNTY, MISSOURI

WATER QUALITY NOTE

INFILTRATION AND POROUS PAVEMENT IS PROPOSED TO PROVIDE THE WATER QUALITY MEASURES REQUIRED FOR THE DISTURBED AREA. POROUS PAVEMENT IS PERMITTED AS A STAND ALONE WATER QUALITY BMP PER THE MSD MEMO DATED MARCH 16, 2012.



PROPERTY DATA

OWNER = BGR 18336, LLC
 ADDRESS = 18336 EDISON AVENUE
 LOCATOR NO. = 17V110430
 ACREAGE = 1.12 AC ±
 EXISTING ZONING = MUNICIPAL
 FIRE DISTRICT = MONARCH FIRE PROTECTION DISTRICT
 SCHOOL DISTRICT = ROCKWOOD R-6
 SEWER DISTRICT = METRO. ST. LOUIS SEWER DISTRICT
 WATER SHED = MISSOURI RIVER
 FEMA MAP = 29189C0120H, LOMR AUGUST 2, 1995
 ELECTRIC COMPANY = AMERENUE
 GAS COMPANY = LACLEDE GAS COMPANY
 PHONE COMPANY = SOUTHWESTERN BELL TELEPHONE
 WATER COMPANY = MISSOURI AMERICAN WATER COMPANY

GENERAL NOTES

- ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. THE CONTRACTOR SHALL BE ON RECORD WITH THE MISSOURI ONE CALL SYSTEM.
- ALL ELEVATIONS ARE BASED ON ST. LOUIS COUNTY HIGHWAY BENCHMARK.
- BOUNDARY AND TOPOGRAPHIC SURVEY PROVIDED BY CLIENT.
- ALL MATERIALS AND METHODS OF CONSTRUCTION TO MEET THE CURRENT STANDARDS AND SPECIFICATIONS OF THE DIRECTOR OF PUBLIC WORKS FOR THE CITY OF CHESTERFIELD AND THE SPECIFICATIONS OF THE CITY OF CHESTERFIELD.
- ALL GRADED AREAS SHALL BE PROTECTED FROM EROSION BY EROSION CONTROL DEVICES AND/OR SEEDING AND MULCHING AS REQUIRED BY THE CITY OF CHESTERFIELD.
- PRIOR TO BEGINNING ANY WORK ON THE SITE, THE CONTRACTOR SHALL CONTACT THE ENGINEER FOR SPECIFIC INSTRUCTIONS RELEVANT TO THE SEQUENCING OF WORK.
- GRADING CONTRACTOR SHALL INSTALL SILTATION CONTROL PRIOR TO STARTING THE GRADING. ADDITIONAL SILTATION CONTROL DEVICES SHALL BE INSTALLED AS DIRECTED BY THE CITY OF CHESTERFIELD.
- ALL FILLS AND BACKFILLS SHALL BE MADE OF SELECTED EARTH MATERIALS, FREE FROM BROKEN MASONRY, ROCK, FROZEN EARTH, RUBBISH, ORGANIC MATERIAL AND DEBRIS.
- GRADING CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAN OF MUD AND DEBRIS AT ALL TIMES.
- PROPOSED CONTOURS SHOWN ARE FINISHED ELEVATIONS ON PAVED AREAS.
- GRADING & STORM WATER PER M.S.D. STANDARD SPECIFICATIONS AND THE CITY OF CHESTERFIELD STANDARDS.
- DRIVE ENTRANCES ARE TO BE CONSTRUCTED IN ACCORDANCE WITH ST. LOUIS COUNTY STANDARDS.
- SEEDING, SODDING, MULCHING AND PLANTINGS FOR ALL DISTURBED AREAS SHALL BE SPECIFIED ON THE LANDSCAPE PLAN.
- SIDEWALKS ALONG THE ACCESSIBLE ROUTE SHALL NOT HAVE A SLOPE EXCEEDING 1:20. SLOPES GREATER THAN 1:20 MUST BE DESIGNED AS A RAMP.
- SIDEWALKS, CURB RAMPS, RAMPS AND ACCESSIBLE PARKING SPACES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT APPROVED AMERICANS WITH DISABILITIES ACT ACCESSIBILITY STANDARDS (ADAAC) ALONG WITH THE REQUIRED GRADES, CONSTRUCTION MATERIALS, SPECIFICATIONS AND SIGNAGE. IF ANY CONFLICT OCCURS BETWEEN THE ADAAC GUIDELINES AND THE INFORMATION ON THE PLANS, THE ADAAC GUIDELINES SHALL TAKE PRECEDENCE AND THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER PRIOR TO ANY CONSTRUCTION.
- PARKING CALCULATIONS

PARKING REQUIRED	
OFFICE: 3.5 per 1000 g.s.f. = 8,000 x 3.5 = 21 STALLS	
HANGAR: 1 per plane	
6 planes x 1	= 6 STALLS
Total = 27 STALLS	
PARKING PROVIDED	
9'x19' A.D.A. = 25 STALLS	
Total = 27 STALLS	
- SETBACKS PER ORDINANCE

BUILDING	FRONT	SIDE	REAR
NORTH	= 50'	= 0'	= 0'
WEST	= 25'	= 0'	= 0'
EAST	= 25'	= 0'	= 0'
SOUTH	= 25'	= 0'	= 0'
- DENSITY CALCULATIONS

Open space: 17,081 s.f. (green area + walkways) x 100 = 35%
F.A.R. 48,787 s.f. (total area) = 0.25
12,000 s.f. building
- SUBJECT PROPERTY WITHIN FLOOD ZONE "X" (AREAS OF 500-YEAR FLOOD; AREAS OF 100-YEAR FLOOD WITH AVERAGE DEPTHS OF LESS THAN ONE (1) FOOT, OR WITH DRAINAGE AREAS LESS THAN ONE (1) SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM THE 100-YEAR FLOOD). ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP DATED JANUARY 6, 1998 AND REVISED TO REFLECT LATEST DATA APRIL 17, 2000.
- NO ON-SITE ILLUMINATION SOURCE SHALL BE SO SITUATED THAT LIGHT IS CAST DIRECTLY ON ADJOINING PROPERTIES OR PUBLIC ROADWAYS. ILLUMINATION LEVELS SHALL COMPLY WITH THE PROVISIONS OF SECTION 1003.430 CITY OF CHESTERFIELD LIGHTING ORDINANCE. (ORDINANCE 2228)
- APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF SIGNAGE. SIGN APPROVAL IS A SEPARATE PROCESS.
- ALL PROPOSED UTILITIES SHALL BE PLACED UNDERGROUND.
- ROOF TOP EQUIPMENT SHALL BE SCREENED.
- NO SLOPES WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).
- A SPECIAL USE PERMIT ISSUANCE BY ST. LOUIS COUNTY WILL BE REQUIRED.

NOTE: CIVIL ENGINEERING DESIGN CONSULTANTS, INC. AND THE UNDERSIGNED ENGINEER HAVE NO RESPONSIBILITY FOR SERVICES PROVIDED BY OTHERS TO IMPLEMENT THE IMPROVEMENTS SHOWN ON THIS PLAN AND ALL OTHER DRAWINGS WHERE THE UNDERSIGNED ENGINEER'S SEAL APPEARS. THE CONSTRUCTION MEANS, METHODS & MATERIALS ARE THE SOLE RESPONSIBILITY OF THE OWNER AND CONTRACTOR. CIVIL ENGINEERING DESIGN CONSULTANTS, INC. HAS NO RESPONSIBILITY TO VERIFY FINAL IMPROVEMENTS AS SHOWN ON THIS PLAN UNLESS SPECIFICALLY ENGAGED AND AUTHORIZED TO DO SO BY THE OWNER OR CONTRACTOR.

UTILITY NOTE:
 UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES HAVE BEEN PLOTTED FROM AVAILABLE SURVEYS, RECORDS AND INFORMATION, AND THEREFORE DO NOT NECESSARILY REFLECT THE ACTUAL EXISTENCE, NON-EXISTENCE, SIZE, TYPE, NUMBER, OR LOCATION OF THESE FACILITIES, STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ALL UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS. THE UNDERGROUND FACILITIES, STRUCTURES, AND UTILITIES SHALL BE LOCATED IN THE FIELD PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS. THESE PROVISIONS SHALL IN NO WAY ABSOLVE ANY PARTY FROM COMPLYING WITH THE UNDERGROUND FACILITY SAFETY AND DAMAGE PREVENTION ACT, CHAPTER 319 RSMo.

NOTE TO CONTRACTOR:
 CONTRACTOR/SUBCONTRACTOR SHALL INVESTIGATE, ASCERTAIN AND CONFORM TO ANY AND ALL PERMIT REQUIREMENTS OF THE (AND) VARIOUS AFFECTED UTILITY COMPANIES AND/OR REGULATORY AGENCIES WITH REGARD TO MAKING CONNECTIONS TO OR CROSSINGS OF THEIR FACILITIES, WORKING WITHIN THEIR RIGHT-OF-WAY OR EASEMENTS, INSPECTIONS AND ASSOCIATED MONETARY CHARGES; AND/OR SPECIAL BACKFILL REQUIREMENTS. SUCH INVESTIGATION TO INCLUDE BUT NOT LIMITED TO THE MAKING OF NECESSARY APPLICATIONS AND PAYMENTS OF ALL REQUIRED FEES.

THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS OR PROFILES ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR/SUBCONTRACTOR TO VERIFY THE FIELD LOCATIONS, ANTICIPATED CLEARANCES AND THE EXISTENCE OF ANY FACILITIES NOT SHOWN HEREIN, AS PART OF THE INVESTIGATIONS IN THE PARAGRAPH ABOVE.

LEGEND	SYMBOLS	ABBREVIATIONS
EXISTING CONTOURS	--- 433 ---	N NORTH
PROPOSED CONTOURS	--- 433 ---	S SOUTH
EXISTING STORM SEWER	====	E EAST
PROPOSED STORM SEWER	====	W WEST
EXISTING SANITARY SEWER	====	CONC CONCRETE
PROPOSED SANITARY SEWER	====	ASPH ASPHALT
RIGHT-OF-WAY	====	DB DEED BOOK
EASEMENT	====	PG PAGE
CENTERLINE	====	STM SQUARE FEET
EXISTING TREE	(Symbol)	AC ACRES
EXISTING SPOT ELEVATION	433.28	ELEV ELEVATION
PROPOSED SPOT ELEVATION	433.28	FF FINISH FLOOR
SWALE/DRAINAGE PATH	(Symbol)	PVC POLYVINYL CHLORIDE PIPE
TO BE REMOVED	(Symbol)	RCP REINFORCED CONCRETE PIPE
TO BE REMOVED & RELOCATED	(Symbol)	SAN SANITARY
TO BE USED IN PLACE	(Symbol)	S SAVE
TO BE ADJUSTED	(Symbol)	R REMOVE
BACK OF CURB	(Symbol)	
FACE OF CURB	(Symbol)	
WATER MAIN	(Symbol)	
GAS MAIN	(Symbol)	
UNDERGROUND TELEPHONE	(Symbol)	
OVERHEAD WIRE	(Symbol)	
UNDERGROUND ELECTRIC	(Symbol)	
FIRE HYDRANT	(Symbol)	
POWER POLE	(Symbol)	
WATER VALVE	(Symbol)	

I, the owner(s) of the property shown on this plan for and in consideration of being granted a permit to develop property under the provisions of Chapter 1003... of the City of Chesterfield Ordinance... 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 voted or approved by order of ordinance of the City of Chesterfield Council.

(Signature):
 State of Missouri
 County of St. Louis

On this day of A.D. 20 before me personally appeared to me known, who, being by me sworn in, did say that he/she is the of a Limited Liability Company in the State of Missouri, and the said acknowledged said instrument to be the free act and deed of said Corporation.

This Site Development Section Plan was approved by the City of Chesterfield Planning Commission and duly verified on the day of 20 by the Chairperson of said Commission, authorizing the recording of this Site Plan pursuant to Chesterfield Ordinance Number 200, as amended, by the Director of Planning and the City Clerk.

Planning and Development Services Director
 City Clerk

GEOTECHNICAL ENGINEER'S NOTE

Neither XXXXXX nor the undersigned was involved in the preparation of any part of these plans. The signature and seal of the undersigned professional engineer are intended to confirm that the undersigned has reviewed this Sheet relative to geotechnical considerations only, through the data given below. It is the professional opinion of the undersigned engineer that the improvements shown on these sheets are compatible with the soil and geologic conditions of the site as anticipated from our Geotechnical Exploration Report for the project dated XXXXXXXX.

Conditions may vary from those encountered during the exploration or can change due to construction activities, weather, or other conditions. Therefore, the undersigned geotechnical engineer must be involved during the construction of this project to observe the actual subsurface conditions and implementation of recommendations relative to construction. Construction means and methods shall be left to the Contractor.

LEGAL DESCRIPTION

LAND DESCRIPTION
 A TRACT OF LAND IN ST. LOUIS AIR PARK, A SUBDIVISION IN ST. LOUIS COUNTY, MISSOURI, AS PER PLAT THEREOF RECORDED IN PLAT BOOK 107 PAGE 42 OF THE ST. LOUIS COUNTY RECORDS, AND BEING PART OF U.S. SURVEY 102 TOWNSHIP 45 NORTH, RANGE 3 EAST, ST. LOUIS COUNTY, MISSOURI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: BEGINNING AT A POINT WHICH IS DISTANT SOUTH 78 DEGREES 21 MINUTES 0 SECONDS WEST 216.78 FEET FROM THE SOUTHWEST CORNER OF A TRACT OF LAND CONVEYED TO DONALD J. THOMAS ACCORDING TO DEED RECORDED IN BOOK 6450 PAGE 1791 OF THE ST. LOUIS COUNTY RECORDS, AND DISTANT NORTH 11 DEGREES 39 MINUTES 0 SECONDS WEST 7.85 FEET TO THE POINT OF BEGINNING; THENCE NORTH 11 DEGREES 39 MINUTES 0 SECONDS WEST 220 FEET TO A POINT IN THE SOUTH LINE OF EDISON AVENUE 60 FEET WIDE AS ESTABLISHED BY DEED RECORDED AS DAILY 103 ON MARCH 31, 1972, THENCE SOUTH 78 DEGREES 21 MINUTE 45 SECONDS WEST ALONG THE SOUTH LINE OF EDISON AVENUE 80 FEET WIDE 363 FEET TO A POINT; THENCE SOUTH 11 DEGREES 39 MINUTES 0 SECONDS WEST 200 FEET TO A POINT; THENCE NORTH 78 DEGREES 21 MINUTES EAST 363 FEET TO A POINT; THENCE NORTH 11 DEGREES 39 MINUTES 0 SECONDS WEST 80 FEET TO THE POINT OF BEGINNING; EXCEPTING THEREFROM THAT PORTION OF THE ABOVE DESCRIBED PROPERTY DEEDED TO EAGLE CATCHER, LLC BY INSTRUMENT RECORDED IN BOOK 15649 PAGE 2208 OF THE ST. LOUIS COUNTY RECORDS.

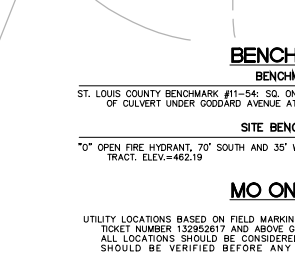
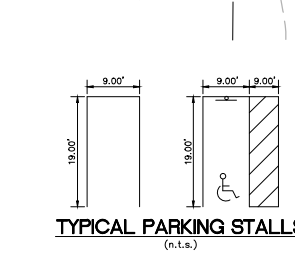
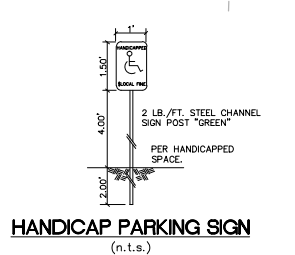
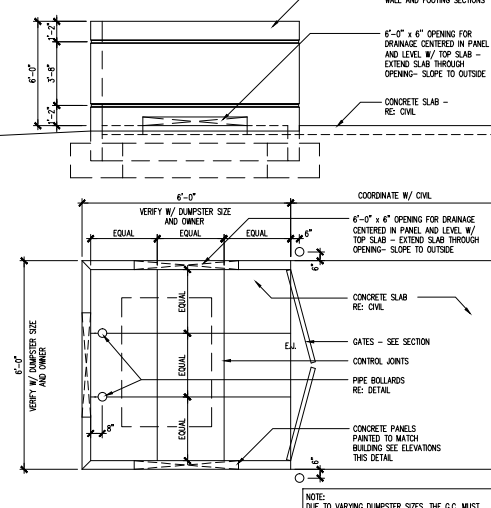
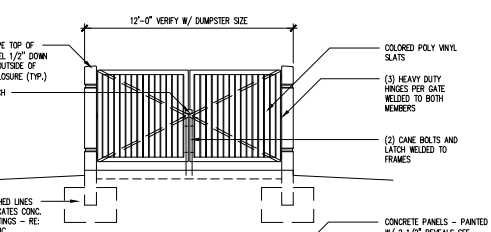
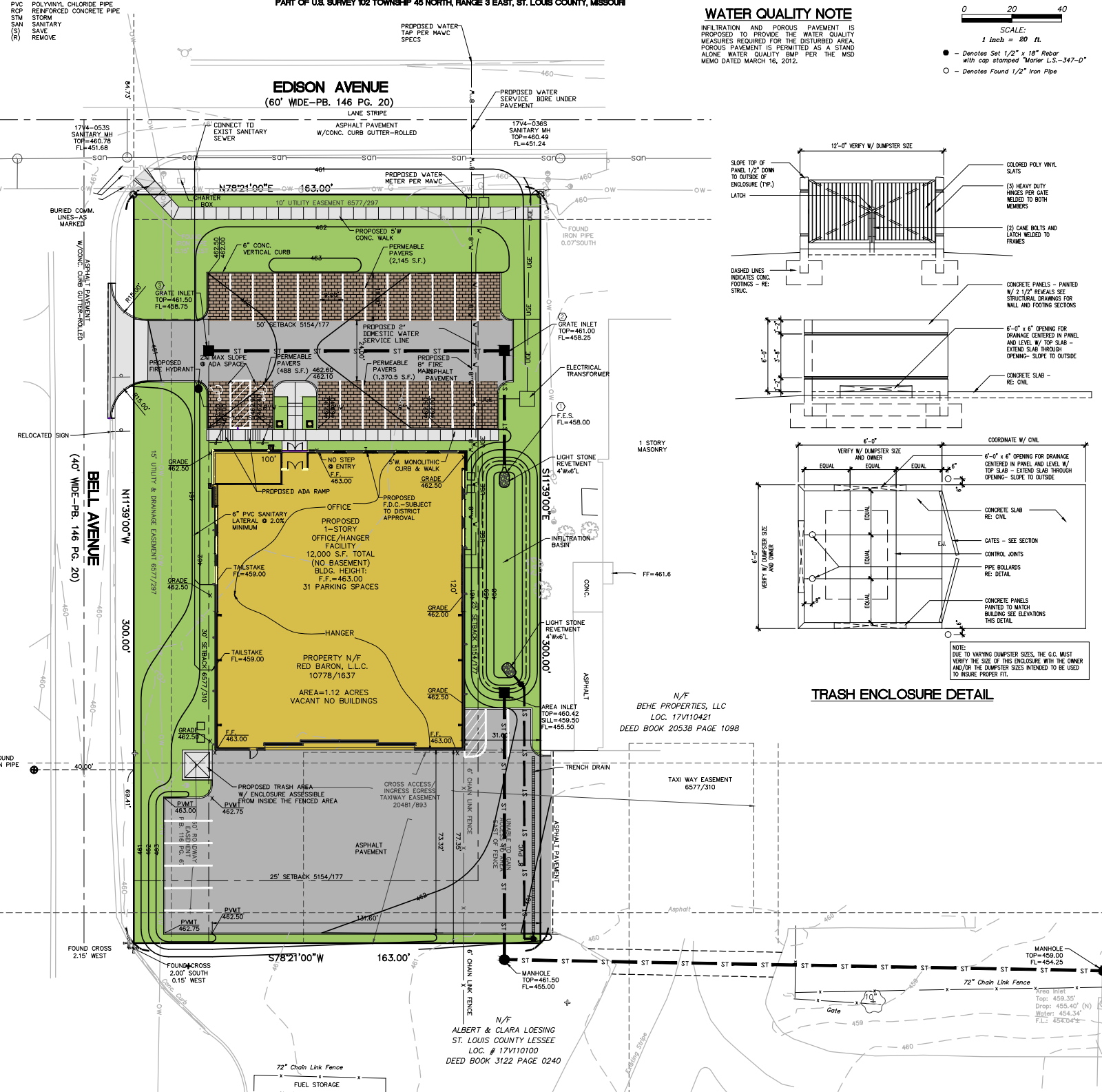
SURVEYOR'S CERTIFICATION

This is to certify that the Plat is a correct representation of all existing and proposed land divisions.
 By XXXX
 XXXX, R.L.S.

PREPARED FOR:
 Mr. Bill Hardie
 President
 Keystone Construction
 732 Spirit 40 Park Drive
 Chesterfield, Missouri 63005

PREPARED BY:

 11402 Gravois Road
 Suite 100
 Saint Louis, Missouri 63126
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 Fax: 314.729.1404
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Professional Engineer
 BRANDON A. HARR, P.E. E-28650
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CEDC
 CIVIL ENGINEERING
 DESIGN CONSULTANTS

Site Development Plan
FIRESTREAM WORLDWIDE
 18336 Edison Avenue
 Chesterfield, Missouri 63005

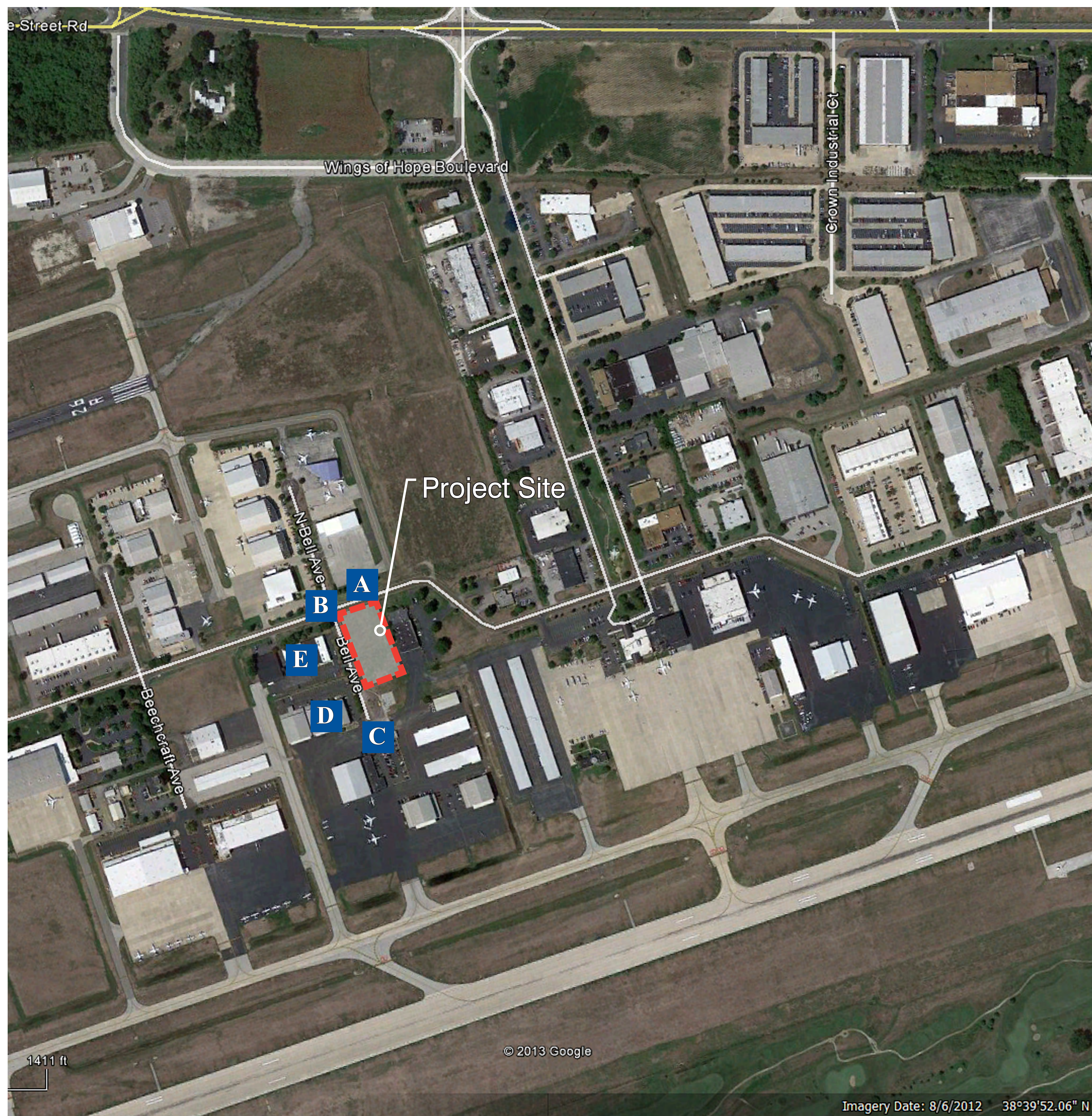
Proj. # 1341

No.	Description	Date
1	City Submittal	01/03/14

Site Development Plan

C1

ST. LOUIS CO. HT # XXXX
 OF 1



Aerial Key Map for Contextual Images

Architectural Narrative

Introduction

The Firestream Worldwide project is located at 18336 Edison Avenue at the Spirit of St. Louis Airport in Chesterfield, Missouri. The site is comprised of approximately ± 1.12 acres with an approximately twenty-five foot tall, 11,990 s.f. structure. This facility will house both the corporate office and an aircraft storage hangar for both corporate and private use.

Site Relationship

The proposed project is situated deep within the airport confines at the intersection of Bell and Edison Avenue, and is not highly visible from public roadways. The scale and fenestration of the proposed structure is compatible with neighboring use groups and surrounding buildings. Pedestrian movement is minimal due to security concerns and type of business conducted on the premises. Furthermore, parking for business patrons is provided adjacent to the public access side of the building.

The building is oriented with the most articulate facades and public accessible portions of the building addressing the two primary streets. As designed, this project does not impair or interfere with any surrounding properties or developments.

Circulation System and Access

- Bicycle circulation is not addressed.
- Public Vehicular circulation to the front, private parking for pilots in the rear of the building.
- Landscaped buffer is provided between building and parking in order to provide landscaped foreground for building.
- Pedestrian orientation is addressed by providing concrete walkways and a building canopy defining the entry access point.
- No outdoor dining or seating areas provided due to aircraft noise.
- No on-site connections to public transportation provided on site.

Topography

Due to FAA requirements pertaining to minimizing obstructions of sight lines and the flat nature of this site, we have not utilized the topography for screening or buffering purposes. However, we have implemented smaller scale landscaping to assist in some screening and buffering scenarios around the dumpster enclosure and ground mounted mechanical equipment.

General Requirements Addressing Building Design

A. Scale:

- Building Scale: Building height is consistent with adjacent and neighboring properties.
- Human Scale: Achieved by the window fenestration and entry canopy.
- Generic Scale: Based upon adjacent structures and aircraft clearance requirements.

B. Design:

The scale of this project is appropriate and consistent with the adjacent building and surrounding area. The orientation and most articulate fenestration of the public portion of the building addresses the primary intersection. Similar building materials of adjacent structures are incorporated and utilized to maintain a contextual balance with the neighboring architecture.

C. Colors:

- Building colors are earth tone so as to remain neutral within its context.

D. Landscape design and screening:

- All new landscaping will compliment the site. FAA regulations restrict certain types of plants to be incorporated into the design due to height limitations.
- Building landscape buffers are introduced in limited areas.
- Parking landscaping utilized per city requirements.
- Textured masonry dumpster enclosure screen wall has landscape buffer to minimize visual acuity.
- Landscape buffer used to screen ground mounted mechanical equipment.

E. Signage:

- Wall mounted Signage will be located on the northwest exterior wall. All signage will be designed and approved under a separate review process.

F. Lighting:

- New pole mounted and wall pack mounted lighting will be incorporated in the design and be located on exterior walls of the building for safety as well as for site lighting. -Refer to site lighting plans.

Specific Requirements for the Chesterfield Valley:

Facades:

- All facades have been designed to an equal level of detail and quality of the nearest adjacent structure based upon functionality.

Storage:

- Not Applicable.

Utilities:

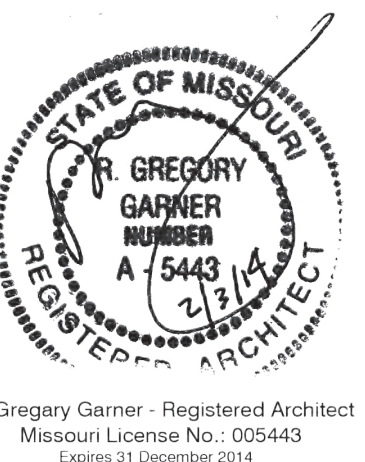
- New utility services are underground.

Parking:

- Property not adjacent or along I-64 corridor.



Exterior Perspective View



A Corporate Office and Aircraft Storage Hangar for:
Firestream Worldwide
Chesterfield Missouri



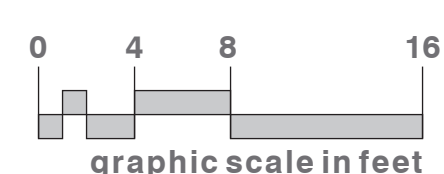
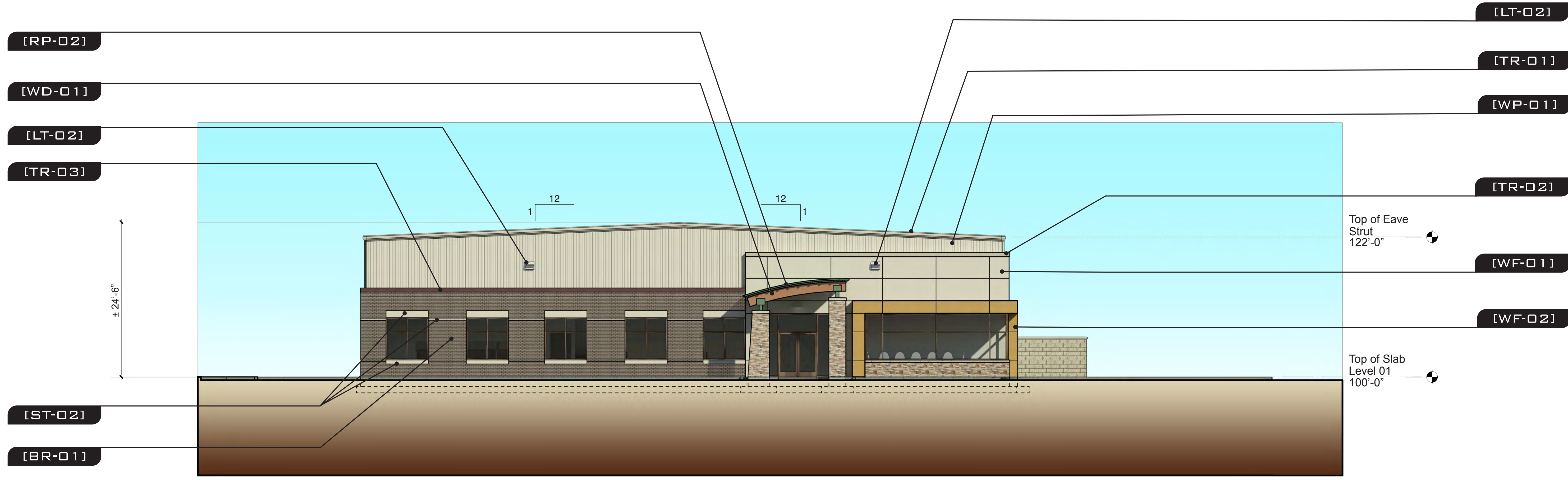
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Legend

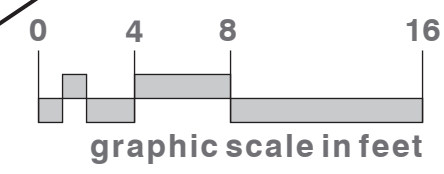
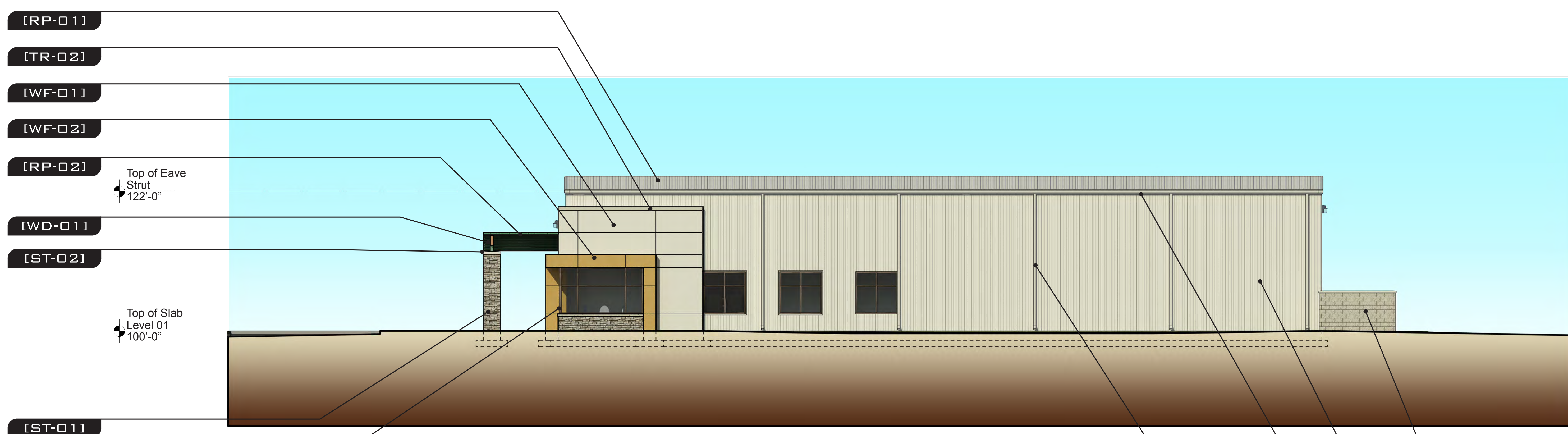
- [BR-01] Face brick veneer
- CMU-01] Masonry screen wall - split face concrete masonry units.
- [CO-01] Exposed concrete ramp, stair an/or foundation wall.
- [DR-01] Insulated hollow metal door. Paint to match (WP-01) exterior metal building wall panel color.
- [DR-02] Mechanically operated 16'-0" tall (northern style) prefabricated (4) leaf aircraft hangar door system, with Light Stone [WP-01] wall panels, exterior by pre-engineered metal building manufacturer.
- [DS-01] Pre-finished/prefabricated (WP-01) metal downspout.
- [GU-01] Pre-finished/prefabricated (WP-01) metal gutter.
- [LT-01] Exterior wall mounted light fixture "Type-W-3". -See applicable drawings and electrical documentation.
- [LT-02] Exterior wall mounted light fixture "Type-W-4". -See applicable drawings and electrical documentation.
- [LT-03] Omit.
- [ME-01] Metal Mechanical Exhaust fan with operable louvers. Paint (WP-01) to match exterior metal building panel color. Size and location to be determined.
- [RP-01] Pre-finished (Color 03) exterior metal building roof panel .
- [RP-02] Pre-finished (Color 04) curved exterior metal standing seam roof panel .
- [SF-01] 2" X 4 1/2" medium bronze anodized storefront framing and/or entry system with 1" insulated glazing tinted Green (Center Set).
- [ST-01] Full bed depth dry stacked Cultured stone veneer.
- [ST-02] Masonry cast stone coping, sill or lintel.
- [TR-01] Pre-finished ((WP-01) fascia and/or gable trim by pre-engineered metal building manufacturer.
- [TR-02] Prefabricated Metal Coping-01: Permasnap Coping with custom color to match EIFS wall finish.
- [TR-03] Prefabricated Metal Coping-01: Permasnap Mansard Brown Metal Coping.
- [WD-01] Pre-engineered/pre-fabricated glulam wood beam with stained finish.
- [WD-02] Gate Screen: Cedar wood screen with stained finish.
- [WF-01] Exterior Insulation and Finish System, Class PB moisture drainage system and water resistive barrier behind insulation board. Custom Color 01.
- [WF-02] Exterior Insulation and Finish System, Class PB moisture drainage system and water resistive barrier behind insulation board. Custom Color 02.
- [WP-01] Pre-finished (Color 03) exterior metal building panel.



R. Gregory Garner - Registered Architect
Missouri License No. 005443
Expires 31 December 2014



North Exterior Building Elevation



West Exterior Building Elevation



A Corporate Office and Aircraft Storage Hangar for:
Firestream Worldwide
Chesterfield Missouri

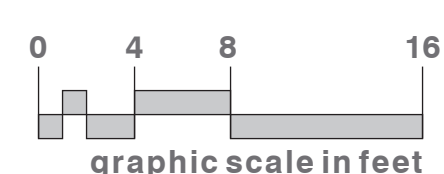
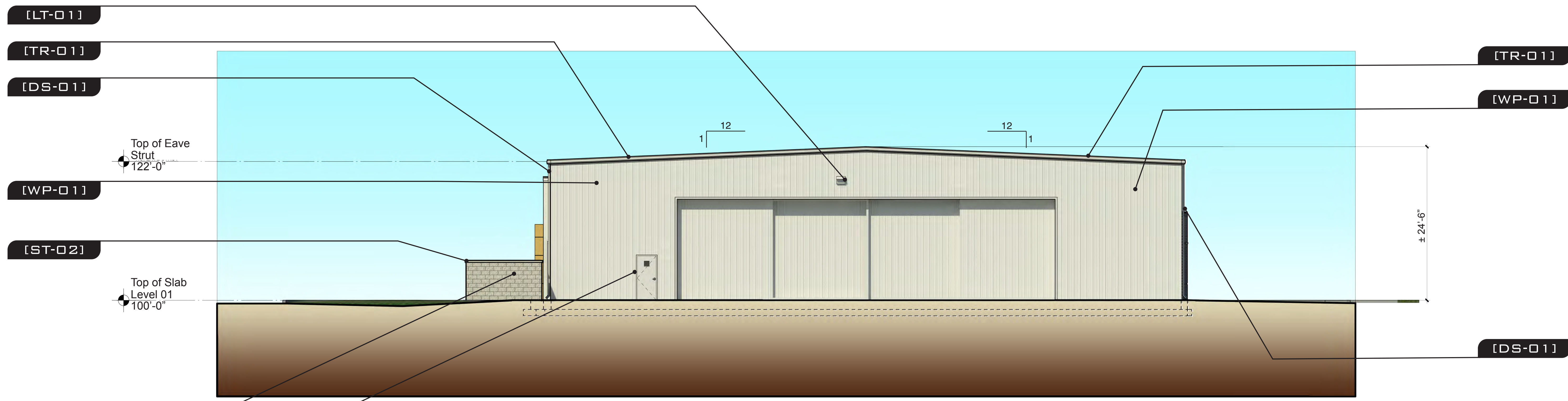


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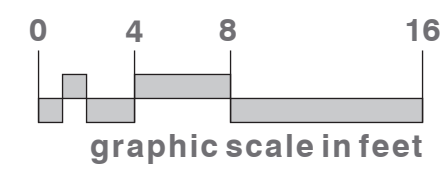
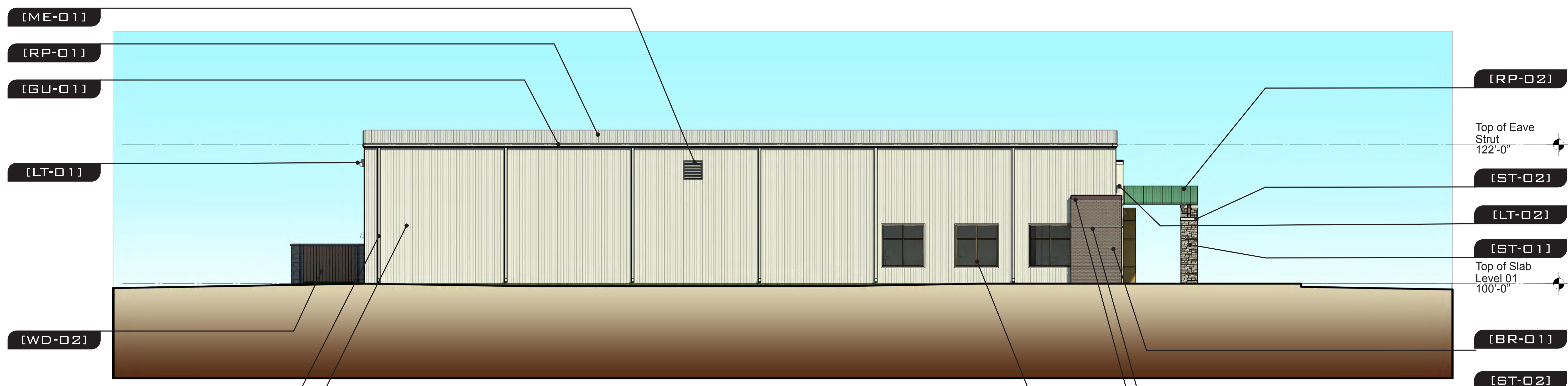
- [BR-01] Face brick veneer
- CMU-01] Masonry screen wall - split face concrete masonry units.
- [CO-01] Exposed concrete ramp, stair an/or foundation wall.
- [DR-01] Insulated hollow metal door. Paint to match (WP-01) exterior metal building wall panel color.
- [DR-02] Mechanically operated 16'-0" tall (northern style) prefabricated (4) leaf aircraft hangar door system, with Light Stone [WP-01] wall panels, exterior by pre-engineered metal building manufacturer.
- [DS-01] Pre-finished/prefabricated (WP-01) metal downspout.
- [GU-01] Pre-finished/prefabricated (WP-01) metal gutter.
- [LT-01] Exterior wall mounted light fixture "Type-W-3". -See applicable drawings and electrical documentation.
- [LT-02] Exterior wall mounted light fixture "Type-W-4". -See applicable drawings and electrical documentation.
- [LT-03] Omit.
- [ME-01] Metal Mechanical Exhaust fan with operable louvers. Paint (WP-01) to match exterior metal building panel color. Size and location to be determined.
- [RP-01] Pre-finished (Color 03) exterior metal building roof panel .
- [RP-02] Pre-finished (Color 04) curved exterior metal standing seam roof panel .
- [SF-01] 2" X 4 1/2" medium bronze anodized storefront framing and/or entry system with 1" insulated glazing tinted Green (Center Set).
- [ST-01] Full bed depth dry stacked Cultured stone veneer.
- [ST-02] Masonry cast stone coping, sill or lintel.
- [TR-01] Pre-finished ((WP-01) fascia and/or gable trim by pre-engineered metal building manufacturer.
- [TR-02] Prefabricated Metal Coping-01: Permasnap Coping with custom color to match EIFS wall finish.
- [TR-03] Prefabricated Metal Coping-01: Permasnap Mansard Brown Metal Coping.
- [WD-01] Pre-engineered/pre-fabricated glulam wood beam with stained finish.
- [WD-02] Gate Screen: Cedar wood screen with stained finish.
- [WF-01] Exterior Insulation and Finish System, Class PB moisture drainage system and water resistive barrier behind insulation board. Custom Color 01.
- [WF-02] Exterior Insulation and Finish System, Class PB moisture drainage system and water resistive barrier behind insulation board. Custom Color 02.
- [WP-01] Pre-finished (Color 03) exterior metal building wall panel.



R. Gregory Garner - Registered Architect
Missouri License No. 005443
Expires 02/13/2014



South Exterior Building Elevation

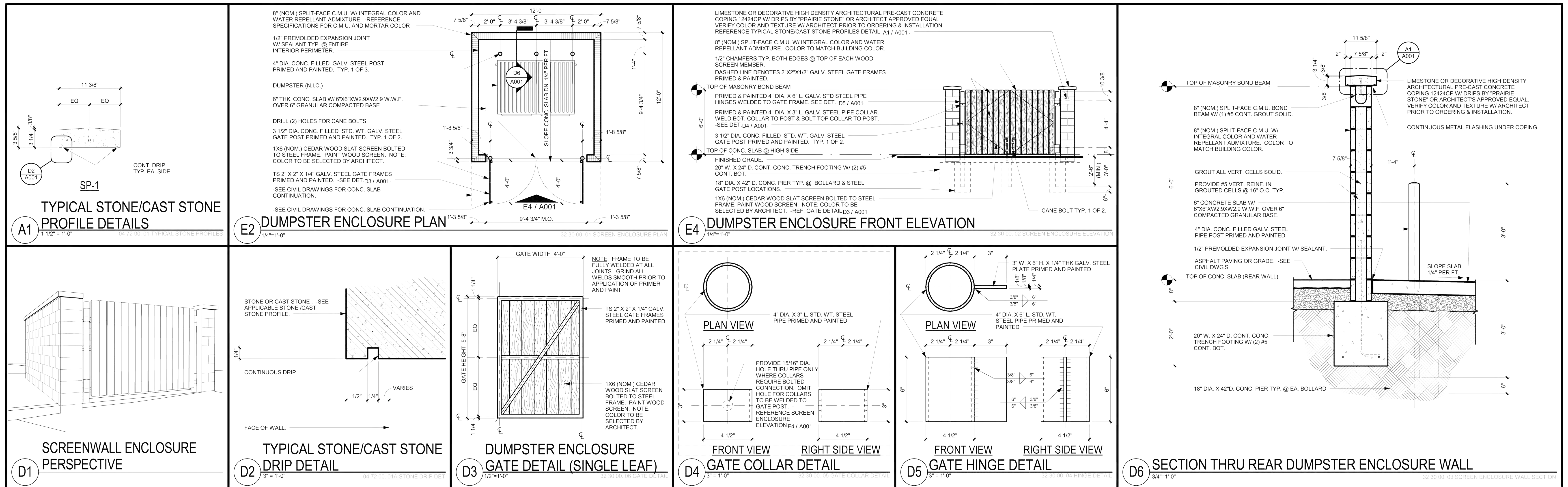


East Exterior Building Elevation



A Corporate Office and Aircraft Storage Hangar for:
Firestream Worldwide
Chesterfield Missouri





Dumpster Screenwall Enclosure Details



A Corporate Office and Aircraft Storage Hangar for:
Firestream Worldwide
 Chesterfield Missouri





World Saunders - Landscape Architect
MO License # LA-002

Consultants:

Firestream Worldwide
Chesterfield, MO

Revisions:

Date	Description	No.
01/05/14	City Comments	1

Drawn: **BAR**
Checked: **JAB**

loomisAssociates

landscape architects/planners

207 West 40th Street, Suite 205
Chesterfield, Missouri 63005
636-636-6363 Fax: 636-636-0369
www.loomisassociates.com

Loomis Associates Inc.
Missouri State Certified of Authority # LAC 400004

Sheet Title: **Landscape Plan**

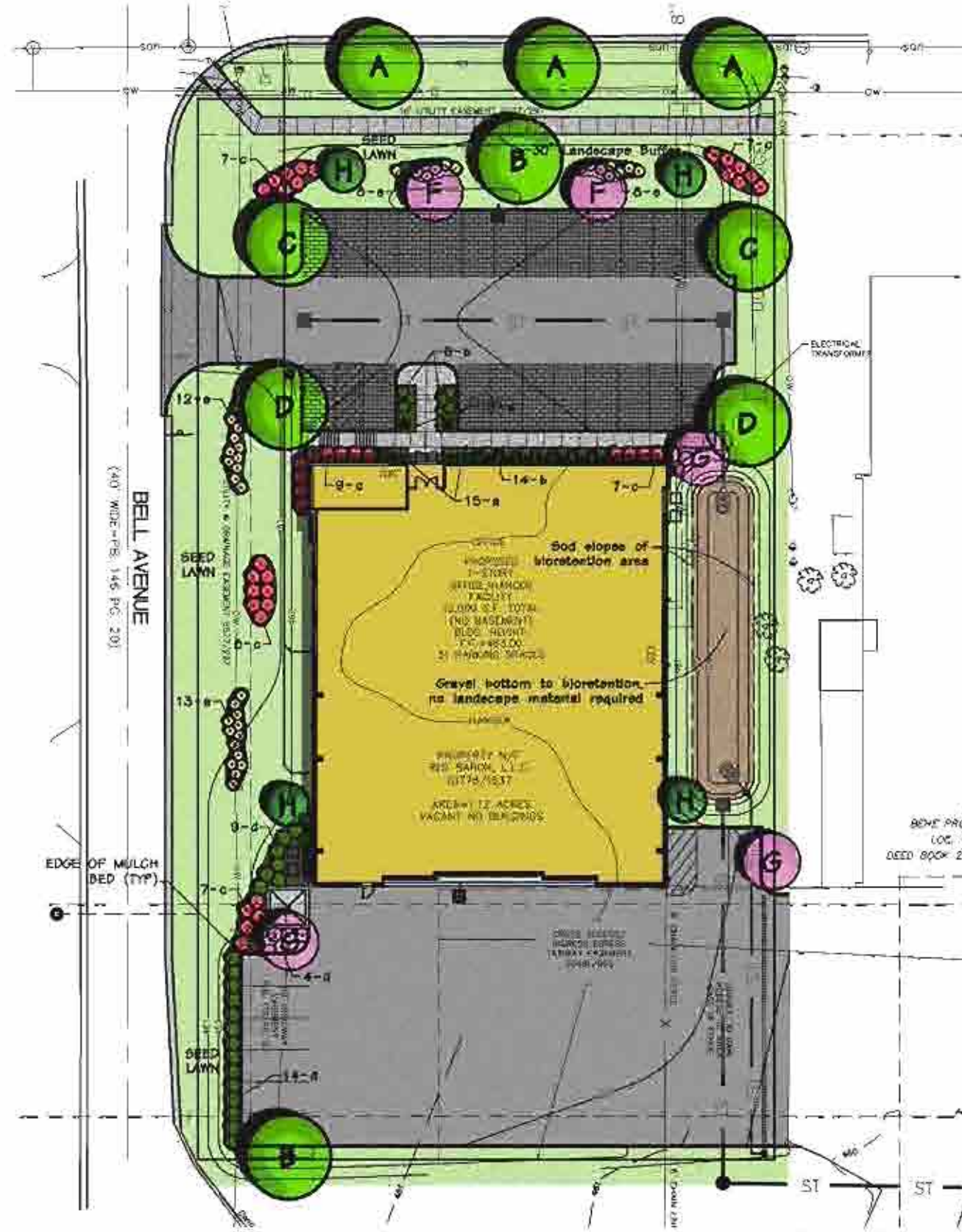
Sheet No: **L-1**

Date: **01/05/14**
Job #: **504,014**

Prepared For
Client Name:
Address:
Telephone Number:

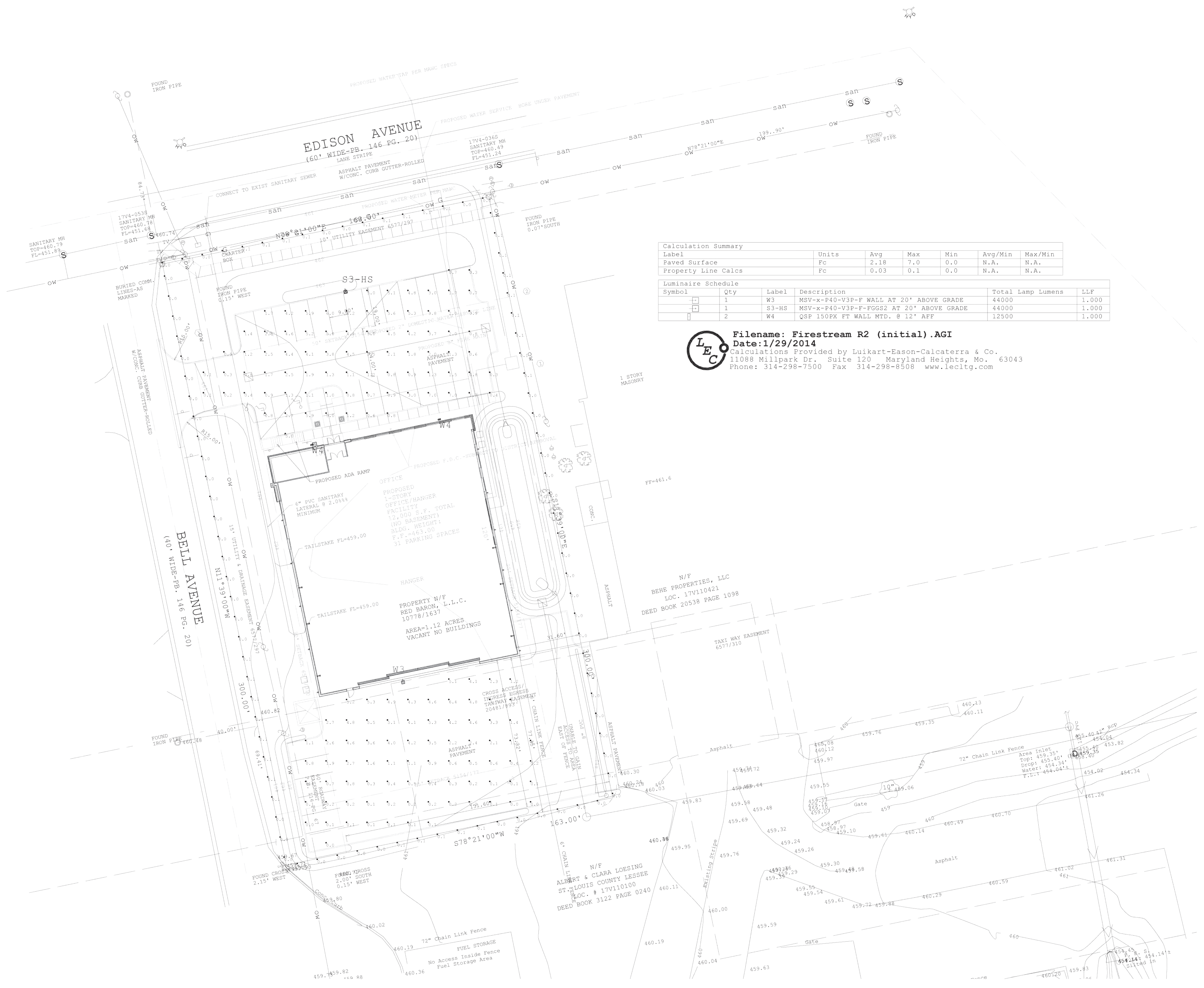
PLANTING SCHEDULE						
SYMBOL	QUANTITY	FORMAL NAME	COMMON NAME	SIZE	SPACING	SPRINT
TREES						
A	3	Acer rubrum 'Frankared'	Red Sunset Maple	2 1/2'	B&B	FAST 45'+
B	2	Platanus acerifolia	London Planetree	2 1/2'	B&B	FAST 45'+
C	2	Acer saccharum 'Green Mountain'	Green Mountain Sugar Maple	2 1/2'	B&B	SL/MED 45'+
D	2	Quercus bicolor	Swamp White Oak	2 1/2'	B&B	MED. 45'+
F	2	Cercis canadensis	Redbud	2 1/2'	B&B	FAST 25-30'
G	2	Prunus argentea 'Columnaris'	Columnar Sargent Cherry	2 1/2'	B&B	MED. 30-40'
H	4	Picea glauca	White Spruce	6-8'	B&B	MED. 30-40'
SHRUBS & LARGE GRASSES						
a	25	Rhus aromatica 'Gro-Low'	Gro-Low Sumac	3 gal.		
b	20	Juniperus x pfitzeriana 'Sea Green'	Sea Green Juniper	5 gal.		
c	43	Rosa 'Radrizz'	Knockout Rose	5 gal.		
d	27	Ilex 'Meeg/Meedob'	China Girl/Boy Holly	7 gal.		
e	41	Calamagrostis x soufflora 'Karl Foerster'	Foerster Feather Reed Grass	5 gal.		

NOTE: An Inground Irrigation system will be provided for all landscape areas.



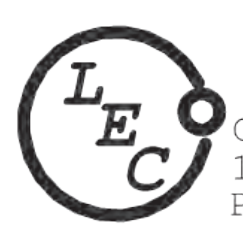
LANDSCAPE PLAN
SCALE 1" = 40'

NOTE: Open space percentage = 35.0%



Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
Paved Surface	Fc	2.18	7.0	0.0	N.A.	N.A.
Property Line Calcs	Fc	0.03	0.1	0.0	N.A.	N.A.

Luminaire Schedule					
Symbol	Qty	Label	Description	Total Lamp Lumens	LLF
W3	1	W3	MSV-x-P40-V3P-F WALL AT 20' ABOVE GRADE	44000	1.000
S3-HS	1	S3-HS	MSV-x-P40-V3P-F-PGGS2 AT 20' ABOVE GRADE	44000	1.000
W4	2	W4	QSF 150PX FT WALL MTD. @ 12' AFF	12500	1.000


Filename: Firestream R2 (initial).AGI
Date: 1/29/2014
 Calculations Provided by Luikart-Eason-Calcaterra & Co.
 11088 Millpark Dr. Suite 120 Maryland Heights, Mo. 63043
 Phone: 314-298-7500 Fax 314-298-8508 www.lecltg.com

Site Lighting Plan



A Corporate Office and Aircraft Storage Hangar for:
Firestream Worldwide
 Chesterfield Missouri



Archimages
 architecture | interiors



Job Name:
FIRESTREAM

Catalog Number:
MSV-WB-P40-V3P-F-Q-DB-L

Type:
W3

Notes:

MSV SERIES
MSV
M - P U L S I V E ®

Cat. #		Approvals
Job	Type	

SPAULDING
LIGHTING

APPLICATIONS

- Malls, retail complexes, industrial sites or any large area lighting project where superior performance, design flexibility, and value are a must

SPECIFICATIONS

- Lightweight, rugged, one-piece formed and welded aluminum for smooth wall construction and weatherproofing. Pre-drilled for arm mounting. Decorative embossed band and reveal colors available
- Extruded aluminum door frame with rigid corner bracing and die cast zinc latches for tool-free entry (flat glass lens). Formed aluminum doorframe (convex lens) with stainless steel, knurled head thumb screw design for tool-free entry. Quality high temperature rated extruded silicone gasket seals out insects, dirt and moisture. Tempered flat glass lens provides impact and thermal shock resistance and a sharp full cutoff classification. Impact and thermal shock resistant convex lens provides improved light level uniformity and broadened luminaire spacing

- Vertical and horizontal lamp orientations available: IES types I, II, III, IV, and V distributions. V1P, V3P, V5P and H5P reflectors are fully segmented. V4 and H4 reflectors are multi-piece design. H3 and H5 reflectors are hydroformed. All reflectors are rotatable
- Spider mount has four twin-tube arms attaching housing to pole top fitter. Yoke mount has two square arms securing housing to pole top fitter
- Extruded aluminum arms in 4" and 10" lengths along with multiple adapters provide mounting flexibility.
- Mogul porcelain socket, pulse rated, with spring-loaded, nickel-plated center contact and reinforced lamp grip screw shell
- CWA type, HPF ballast, starting rated at -20°F (-40°F for HPS)
- Durable Lektrocote® TGIC thermoset polyester powder coat paint finish assures long life and maintenance-free service

LISTINGS/CERTIFICATIONS

- Listed to UL1598 for use in wet locations
- IDA fixture seal of approval.

	FLAT GLASS		CONVEX GLASS			
	A	B	C	EPA	Weight	
FLAT	15"	21"	N/A	2.8 ft.**	68 lbs	
	381 mm	533 mm		0.35m ²	30.6 kg	
CONVEX	14 1/2"	21" sq.	12"	2.4 ft. ²	63 lbs	
	368 mm	533 mm	374 mm	0.2m ²	28.6 kg	

NOTE: EPA and weight values do not include mounting arm

* With the 4" arm the EPA is 2.8ft².

	SPIDER MOUNT		YOKE MOUNT			
	C	D	Flat	EPA	Weight	
SPIDER	33 11/16"	36 1/2"	0.5 ft. ²	9 lbs		
	856 mm	928 mm	0.15m ²	4.1 kg		
YOKE	35 3/16"	33 11/16"	1.6 ft. ²	11 lbs		
	894 mm	856 mm	0.49m ²	5.0kg		



ORDERING EXAMPLE: MSV-A4-P1K-V5P-F-5-DB-RPA4

ORDERING INFORMATION

MSV - [] - [] - [] - [] - [] - [] - [] - []

SERIES	SOURCE/WATTAGE	LAMP ORIENT./DISTR.	LENS	COLOR	OPTIONS
MSV M-Pulsive	METAL HALIDE H1K ¹⁴ 1000w (BT-37) SUPER METAL HALIDE MS1K ¹⁴ 1000w (BT-37)	V1P Vert. I - segmented V3P Vert. III - segmented V4 ⁶ Vert. IV - multi-piece V5P Vert. V (square) - segmented H3 ^{2,12,13} Horiz. III - hydroformed H4 ² Horiz. IV - multi-piece H5 ^{2,12,13} Horiz. V (square) - hydroformed H5P ² Horiz. V (square) - segmented	F Flat glass C ⁸ Convex glass	DB Dark Bronze (textured) BL Black (textured) WH White (textured) GR Gray (textured) PS Platinum Silver (smooth) RD Red (smooth) (premium color) FG Forest Green (textured, premium color) CC Custom Color (consult factory)	F(X) ⁶ Fusing (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347) PR(X) ¹² Photo cell receptacle (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 5-480, 6-347) P(X) ^{4,5} Photo button (replace X with voltage: 1-120, 2-208, 3-240, 4-277, 6-347) RPA2 Round pole adapter (2 3/4 - 3 1/8") RPA3 Round pole adapter (3 1/4 - 3 3/4") RPA4 Round pole adapter (3 7/8 - 4 1/2") RPA5 Round pole adapter (5") RPA6 Round pole adapter (6") QZ ⁵ Quartz RS with lamp VG Polycarbonate vandal guard R(XX) ⁷ Reveal (EB option must be chosen also); Replace XX with color
MOUNT	HIGH PRESSURE SODIUM S25 250w (ED-18) S40 400w (ED-18) S60 ¹ 600w (T-14) S75 ¹ 750w (BT-37) S1K 1000w (ED-37)	VOLTAGE 1 ¹⁰ 120V 2 ¹⁰ 208V 3 ¹⁰ 240V 4 ¹⁰ 277V F ¹⁰ 347V Q ³ Quad-Tap® 120/208/240/277V 5 480V T ³ Tri-Tap® 120/277/347V E 50Hz 220/240V V ^{3,9} Five-Tap 120/208/240/277/480V 0 No Ballast	WB Wall bracket (arm not required or included) WBA4 Wall bracket with 4" rigid arm WBA10 Wall bracket with 10" rigid arm 0 No arm or wall bracket (only order without arm or wall bracket when they are ordered as an accessory) ST Spider mount (2 3/8" tenon) YT Yoke mount (2 3/8" tenon)	EB Embossed band L Lamp	

1 Must specify Q, 5, or T voltage. Available voltage tap on ballast may vary from catalog. **Must specify wiring prep with options**
 2 Flat lens configurations only for horizontal lamp orientation
 3 Factory wired for highest voltage unless specified
 4 400w maximum
 5 Not available with 50 Hz ballast, 600w and 750w HPS, and convex lens with 1000w HPS
 6 Not available with convex lens and 1000w HPS or 1000w with yoke or spider mount
 7 Reveal selection requires EB - embossed band option
 8 Vertical lamp only
 9 Only available with 400w, 350w, 320w, and 250w
 10 Only available with 1000w PSMH, 600w HPS, and 750w HPS
 11 Required for 90° and 120° configurations
 12 Not available with 1000w yoke or spider mount
 13 Not available with 1000w H1K, MS1K, P1K, S1K
 14 GE or Sylvania BT37 lamps recommended for horizontal distributions

NOTE: All poles to be drilled with #2 pattern



SPECIFICATIONS

HOUSING Die-formed rectilinear housing to have continuous corner welds creating a seamless one-piece enclosure. Housing material to be heavy gauge low copper aluminum alloy. Door assembly to recess completely within luminaire housing creating evenly spaced reveal and floating door appearance.

DOOR/LENS FLAT LENS DESIGN: Extruded aluminum doorframe for tempered flat glass lens design to have 45° miter cut corners with internal corner key brackets for rigid support. Finish to be anodized with natural aluminum color. Tool-free entry design provided by corrosion-resistant, spring-loaded die cast zinc thumb latches (one per corner). Extruded silicone gasket profile to positively seal tempered glass lens to doorframe and doorframe to luminaire housing ensuring a contaminant free environment. Complete removal of the door assembly is achievable without tools. CONVEX LENS DESIGN: Die formed aluminum doorframe with impact and thermal-shock resistant convex lens, vulcanized one-piece extruded silicone gasket, and tool-free entry with two Knurled head stainless steel screws. Two additional corrosion-resistant treated screws provide door hinging and two additional points of attachment for equal gasket compression. Matching TGIC thermoset polyester powder paint finish to match the luminaire housing color.

MOUNTING The luminaire housing shall attach to all mounting hardware via two 1/2" diameter bolts/rods. Mounting options to include rigid arm assemblies, knuckled arm assemblies for flat surfaces, knuckled arm assemblies for 2 3/8" OD tenon, wall bracket adapter, and round pole adapters ensuring maximum luminaire versatility. All mounting accessories should include gasket between the housing and accessory.

OPTICS The luminaire should be available in both vertical and horizontal lamp orientations. All optical assemblies are to be field rotatable in 90° increments. All flat glass configurations are to be IES – Full Cutoff classified. Internal house side shielding to be available with horizontal Type III distribution and field installable.

ELECTRICAL Available HID wattage range of 250 to 1000 watts from Metal Halide, Pulse Start Metal Halide, High Output Super Metal Halide, and High Pressure Sodium sources. Additional options include fusing, photocell cell control, and quartz restrike lamp.

FINISH TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness. Prior to painting all luminaires and mounting accessories should be thoroughly cleaned with acid and alkaline cleaners followed by the application of a chromate conversion coating.

LISTINGS/CERTIFICATION UL1598 approved and CSA certified for outdoor use in wet locations

MSV EPA VALUES

Mounting Logic for Pole	Configuration	Flat Lens w/ 4" Arm	Flat Lens w/ 10" Arm	Convex Lens w/ 4" Arm	Convex Lens w/ 10" Arm
A	SINGLE	2.8	3	2.5	2.7
B	TWIN AT 90°	N/A	5.3	N/A	4.7
C	TWIN AT 180°	5.6	6	5	5.4
D	TRIPLE AT 90°	N/A	8.6	N/A	7.5
E	TRIPLE AT 120°	N/A	8.4	7.1	7.3
F	QUAD AT 90°	N/A	8.8	N/A	7.7

ACCESSORIES

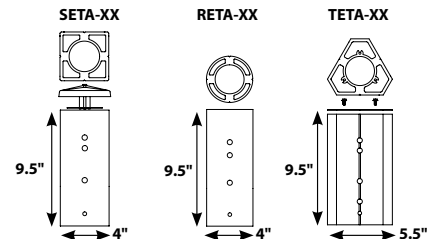
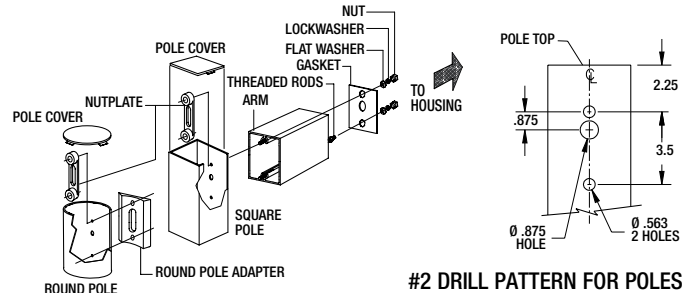
(Must be ordered separately. For field installation.)

Catalog #	Description
MSV-FGGS-2	Extreme Glare Shield for flat glass units only (mounts to housing); restricts lighting to any one side of fixture; black finish standard
MSV-GS	Glare Shield for sag glass units only; restricts light to any one side of fixture, black finish standard
MSV-PVG	Polycarbonate Vandal Guard
FDMLH	Flush Mount Kit - direct mount luminaire hardware kit
F-RPA2-XX^{1,2}	Round Pole Adapter (2 3/4 - 3 1/8")
F-RPA3-XX^{1,2}	Round Pole Adapter (3 1/4 - 3 3/4")
F-RPA4-XX^{1,2}	Round Pole Adapter (3 7/8 - 4 1/2")
F-RPA5-XX^{1,2}	Round Pole Adapter (5")
F-RPA6-XX^{1,2}	Round Pole Adapter (6")
WB-CR-XX¹	Wall Bracket
ARM-F-K-TA-XX¹	Tenon Arm (single) adjustable (2 3/8" O.D. tenon)
ARM-F-TK-TA-XX¹	Tenon Arm (double 180°) adjustable (2 3/8" O.D. tenon)
ARM-F-K-S-XX^{1,2}	Adjustable Arm
ARM-F-4-S-XX^{1,2}	4" Rigid Straight Arm
ARM-F-10-S-XX^{1,2}	10" Rigid Straight Arm
SETA-XX^{1,2}	4" Square Pole Tenon Adapter (4 @ 90°) (2 3/8" OD tenon)
RETA-XX^{1,2}	4" Round Pole Tenon Adapter (4 @ 90°) (2 3/8" OD tenon)
TETA-XX^{1,2}	Three sided Pole Tenon Adapter (3 @ 120°)

1 Replace **XX** with color choice, eg.: **DB** for Dark Bronze.
 2 When ordering poles, specify Pole Drill Pattern #2.

PHOTOCONTROL EQUIPMENT

CATALOG #	DESCRIPTION
PTL-1	Photocontrol - Twist-Lock Cell (120V)
PTL-8	Photocontrol - Twist-Lock Cell (120-277V)
PTL-5	Photocontrol - Twist-Lock Cell (480V)
PTL-6	Photocontrol - Twist-Lock Cell (347V)
PSC	Shorting Cap - Twist-Lock



Due to our continued efforts to improve our products, product specifications are subject to change without notice.


Job Name:
FIRESTREAM
Catalog Number:
MSV-A4-P40-V3P-F-Q-DB-L-MSV-FGGS2
Notes:
Type:
S3-HS

SPECIFICATIONS

HOUSING Die-formed rectilinear housing to have continuous corner welds creating a seamless one-piece enclosure. Housing material to be heavy gauge low copper aluminum alloy. Door assembly to recess completely within luminaire housing creating evenly spaced reveal and floating door appearance.

DOOR/LENS FLAT LENS DESIGN: Extruded aluminum doorframe for tempered flat glass lens design to have 45° miter cut corners with internal corner key brackets for rigid support. Finish to be anodized with natural aluminum color. Tool-free entry design provided by corrosion-resistant, spring-loaded die cast zinc thumb latches (one per corner). Extruded silicone gasket profile to positively seal tempered glass lens to doorframe and doorframe to luminaire housing ensuring a contaminant free environment. Complete removal of the door assembly is achievable without tools. CONVEX LENS DESIGN: Die formed aluminum doorframe with impact and thermal-shock resistant convex lens, vulcanized one-piece extruded silicone gasket, and tool-free entry with two Knurled head stainless steel screws. Two additional corrosion-resistant treated screws provide door hinging and two additional points of attachment for equal gasket compression. Matching TGIC thermoset polyester powder paint finish to match the luminaire housing color.

MOUNTING The luminaire housing shall attach to all mounting hardware via two 1/2" diameter bolts/rods. Mounting options to include rigid arm assemblies, knuckled arm assemblies for flat surfaces, knuckled arm assemblies for 2 3/8" OD tenon, wall bracket adapter, and round pole adapters ensuring maximum luminaire versatility. All mounting accessories should include gasket between the housing and accessory.

OPTICS The luminaire should be available in both vertical and horizontal lamp orientations. All optical assemblies are to be field rotatable in 90° increments. All flat glass configurations are to be IES – Full Cutoff classified. Internal house side shielding to be available with horizontal Type III distribution and field installable.

ELECTRICAL Available HID wattage range of 250 to 1000 watts from Metal Halide, Pulse Start Metal Halide, High Output Super Metal Halide, and High Pressure Sodium sources. Additional options include fusing, photocell cell control, and quartz restrike lamp.

FINISH TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness. Prior to painting all luminaires and mounting accessories should be thoroughly cleaned with acid and alkaline cleaners followed by the application of a chromate conversion coating.

LISTINGS/CERTIFICATION UL1598 approved and CSA certified for outdoor use in wet locations

MSV EPA VALUES

Mounting Logic for Pole	Configuration	Flat Lens w/ 4" Arm	Flat Lens w/ 10" Arm	Convex Lens w/ 4" Arm	Convex Lens w/ 10" Arm
A	SINGLE	2.8	3	2.5	2.7
B	TWIN AT 90°	N/A	5.3	N/A	4.7
C	TWIN AT 180°	5.6	6	5	5.4
D	TRIPLE AT 90°	N/A	8.6	N/A	7.5
E	TRIPLE AT 120°	N/A	8.4	7.1	7.3
F	QUAD AT 90°	N/A	8.8	N/A	7.7

ACCESSORIES

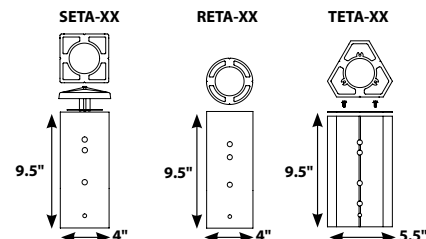
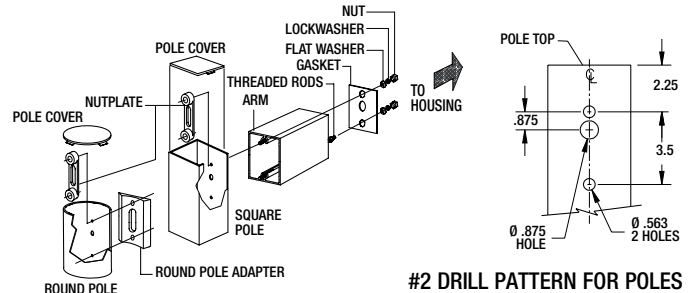
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Catalog #	Description
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F-RPA4-XX^{1,2}	Round Pole Adapter (3 7/8 - 4 1/2")
F-RPA5-XX^{1,2}	Round Pole Adapter (5")
F-RPA6-XX^{1,2}	Round Pole Adapter (6")
WB-CR-XX¹	Wall Bracket
ARM-F-K-TA-XX¹	Tenon Arm (single) adjustable (2 3/8" O.D. tenon)
ARM-F-TK-TA-XX¹	Tenon Arm (double 180°) adjustable (2 3/8" O.D. tenon)
ARM-F-K-S-XX^{1,2}	Adjustable Arm
ARM-F-4-S-XX^{1,2}	4" Rigid Straight Arm
ARM-F-10-S-XX^{1,2}	10" Rigid Straight Arm
SETA-XX^{1,2}	4" Square Pole Tenon Adapter (4 @ 90°) (2 3/8" OD tenon)
RETA-XX^{1,2}	4" Round Pole Tenon Adapter (4 @ 90°) (2 3/8" OD tenon)
TETA-XX^{1,2}	Three sided Pole Tenon Adapter (3 @ 120°)

1 Replace **XX** with color choice, eg.: **DB** for Dark Bronze.
 2 When ordering poles, specify Pole Drill Pattern #2.

PHOTOCONTROL EQUIPMENT

CATALOG #	DESCRIPTION
PTL-1	Photocontrol - Twist-Lock Cell (120V)
PTL-8	Photocontrol - Twist-Lock Cell (120-277V)
PTL-5	Photocontrol - Twist-Lock Cell (480V)
PTL-6	Photocontrol - Twist-Lock Cell (347V)
PSC	Shorting Cap - Twist-Lock



Due to our continued efforts to improve our products, product specifications are subject to change without notice.

SPAULDING
LIGHTING

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Job Name:
FIRESTREAM

Catalog Number:
SSS-18-40-1-A2-DB

Type:
POLE

Notes:

**SSS SERIES
POLES**
SQUARE STRAIGHT STEEL

Cat. #		Approvals
Job	Type	

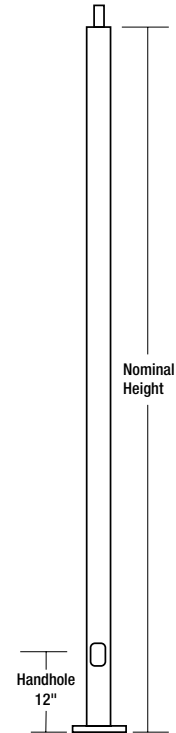
**SPAULDING
LIGHTING**

APPLICATIONS

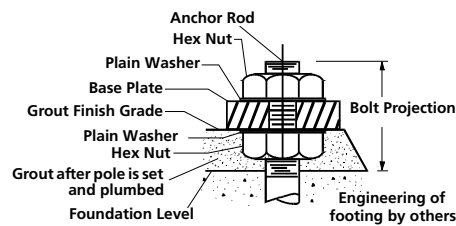
- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location.

FEATURES

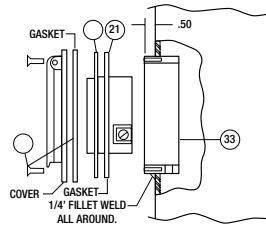
- SHAFT:** One-piece straight steel with square cross section, flat sides and minimum 0.36" radius on all corners. Minimum yield of 46,000 psi (ASTM-A500, Grade B). Longitudinal weld seam to appear flush with shaft side wall. Steel base plate with axial bolt circle slots welded flush to pole shaft having minimum yield of 36,000 psi (ATM-A36).
- BASE COVER:** Two-piece square aluminum base cover included standard.
- POLE CAP:** Pole shaft covered with removable non-metallic cover when applicable. Tenon and post-top configurations also available.
- HAND HOLE:** Rectangular steel-reinforced hand hole (2.5" x 4.5"). Pole grounding lug located behind gasketed cover.
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (modified ASTM-A36). Galvanized hardware with two washers/nuts per bolt for leveling meet or exceed bolt strength.
- FINISH:** Durable Lektrocote® TGIC thermoset polyester powder coat paint finish with nominal 3.0 mil thickness. Zinc-rich powder paint prime applied over "white metal" steel substrate cleaned via mechanical shot blast method. Decorative finish coat available in seven standard colors. Custom colors available. RAL number preferable. Internal protective coating available.



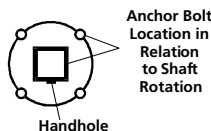
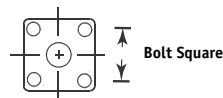
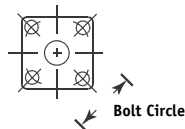
BASE DETAIL



**15 AMP GFCI
RECEPTACLE & COVER**



Q18 OPTION





Job Name:
FIRESTREAM

Catalog Number:
SSS-18-40-1-A2-DB

Type:
POLE

Notes:

ORDERING INFORMATION

S - S - S - 25 - 40 - 1 - TA - DB

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Cross Section Style Material Nominal Length Nominal Shaft Dia. Shaft Thickness Mounting Type Finish

Catalog Number	Pole Ht.		Nominal Shaft Dim.	Wind Load Rating ¹					Wall Thick.	Bolt Circle (Sug.)	Bolt Circle	Bolt Sq.	Base Plate (sq.)	Anchor Bolt Size	Bolt Proj.	Pole Wt (lbs)
	ft	m		70 MPH	80 MPH	90 MPH	100 MPH	120 MPH								
SSS-10-40-1-XX-XX	10	3.0	4"	25	25	22	17	11.8	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	91
SSS-10-50-1-XX-XX	10	3.0	5"	25	25	25	23	15	.119"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	106
SSS-12-40-1-XX-XX	12	3.7	4"	25	21	16	13.0	8.8	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	104
SSS-12-50-1-XX-XX	12	3.7	5"	25	25	23	18	11.8	.119"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	122
SSS-14-40-1-XX-XX	14	4.3	4"	24	18	14.2	11.0	6.8	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	116
SSS-14-40-7-XX-XX	14	4.3	4"	25	25	23	18	12.2	.179"	11"	8 1/2 - 12"	6 - 8.4"	11 x 1"	3/4 x 30 x 3"	4"	158
SSS-14-50-1-XX-XX	14	4.3	5"	25	24	19	14.4	9.0	.119"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	138
SSS-16-40-1-XX-XX	16	4.9	4"	16	12.2	9.0	6.8	3.8	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	128
SSS-16-40-7-XX-XX	16	4.9	4"	25	20	15	12.2	7.6	.179"	11"	8 1/2 - 12"	6 - 8.4"	11 x 1"	3/4 x 30 x 3"	4"	176
SSS-16-50-1-XX-XX	16	4.9	5"	22	16	12.2	9.2	5.2	.119"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	153
SSS-16-50-7-XX-XX	16	4.9	5"	25	25	24	19	12.4	.179"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	214
SSS-18-40-1-XX-XX	18	5.5	4"	13.8	10.0	7.2	5.2	2.4	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	147
SSS-18-40-7-XX-XX	18	5.5	4"	23	17	13.0	10.0	6.0	.179"	11"	10 - 13.5"	7.1 - 9.5"	11 x 1"	3/4 x 30 x 3"	4"	201
SSS-18-50-1-XX-XX	18	5.5	5"	18	13.2	9.6	7.0	3.4	.119"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	175
SSS-18-50-7-XX-XX	18	5.5	5"	25	25	20	16	9.8	.179"	11"	8 1/2 - 12"	6 - 8.4"	12 x 1"	3/4 x 30 x 3"	4"	243
SSS-20-40-1-XX-XX	20	6.1	4"	11.4	8.0	5.6	3.8	1.4	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	160
SSS-20-40-7-XX-XX	20	6.1	4"	19	14.6	10.8	8.0	4.4	.179"	11"	8 1/2 - 12"	6 - 8.4"	11 x 1"	3/4 x 30 x 3"	4"	225
SSS-20-50-1-XX-XX	20	6.1	5"	15	10.8	7.6	5.2	2.0	.179"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	191
SSS-20-50-7-XX-XX	20	6.1	5"	25	23	17	13.2	7.6	.179"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	3/4 x 30 x 3"	4"	266
SSS-20-60-7-XX-XX	20	6.1	6"	25	25	24	18	11.2	.179"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1 x 36 x 4"	4"	312
SSS-25-40-1-XX-XX	25	7.6	4"	7.0	4.2	2.2	NR	NR	.119"	11"	8 - 11"	5.6 - 7.8"	10.25 x 0.75"	3/4 x 30 x 3"	4"	190
SSS-25-40-7-XX-XX	25	7.6	4"	13.4	9.4	6.4	4.2	1.4	.179"	11"	8.5 - 12"	6 - 8.4"	11 x 1"	3/4 x 30 x 3"	4"	266
SSS-25-50-1-XX-XX	25	7.6	5"	9.6	6.0	3.4	1.4	NR	.119"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	1 x 36 x 4"	4"	231
SSS-25-50-7-XX-XX	25	7.6	5"	22	15	11.2	7.8	3.4	.179"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	1 x 36 x 4"	4"	324
SSS-25-50-3-XX-XX	25	7.6	5"	25	22	16	12.4	6.6	.250"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	1 x 36 x 4"	4"	437
SSS-25-60-7-XX-XX	25	7.6	6"	25	22	16	11.6	5.6	.179"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1 x 36 x 4"	4"	404
SSS-27-40-7-XX-XX	27	8.2	4"	11.4	7.8	5.0	3.0	NR	.179"	11"	8.5 - 12"	6 - 8.4"	11 x 1"	1 x 36 x 4"	4"	290
SSS-30-40-7-XX-XX	30	9.1	4"	8.2	5.0	2.8	1.2	NR	.179"	11"	8.5 - 12"	6 - 8.4"	11 x 1"	1 x 36 x 4"	4"	313
SSS-30-50-7-XX-XX	30	9.1	5"	14.2	9.4	6.0	3.4	NR	.179"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	1 x 36 x 4"	4"	398
SSS-30-50-3-XX-XX	30	9.1	5"	20	14.6	10.2	6.8	2.4	.250"	11"	10 - 13.5"	7.1 - 9.5"	12 x 1"	1 x 36 x 4"	4"	537
SSS-30-60-7-XX-XX	30	9.1	6"	20	13.8	9.2	5.8	1.2	.179"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1 x 36 x 4"	4"	467
SSS-30-60-3-XX-XX	30	9.1	6"	25	24	17	12.8	6.2	.250"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1.25 x 42 x 6"	4"	630
SSS-35-60-7-XX-XX	35	10.7	6"	14.2	8.4	4.6	1.6	NR	.179"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1 x 36 x 4"	4"	538
SSS-35-60-3-XX-XX	35	10.7	6"	25	17	11.6	7.4	1.8	.250"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1.25 x 42 x 6"	4"	726
SSS-40-60-7-XX-XX	40	12.2	6"	9.0	4.0	NR	NR	NR	.179"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1 x 36 x 4"	4"	614
SSS-40-60-3-XX-XX	40	12.2	6"	18	11.8	6.8	3.2	NR	.250"	12"	11 - 13.5"	7.8 - 9.5"	12 x 1"	1.25 x 42 x 6"	4"	802

¹ Allowable EPA with 1.3 gust factor. To determine max. pole loading weight, multiply allowable EPA by 30 lbs.
NOTE: Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

COMPLETE PART NUMBER REQUIRES SHAFT ABOVE PLUS MOUNTING TYPE, FINISH & APPROPRIATE OPTIONS BELOW

OPTION ORIENTATION

MOUNTING TYPE

- AX'** Side - Single
- BX'** Side - Double at 90°
- CX'** Side - Double at 180°
- DX'** Side - Triple at 90°
- FX'** Side - Quad at 90°
- P1** Pad Mount - Spider Type
- P2** Pad Mount - Yoke Type
- P3** Pad Mount - Yoke Type (Proformer XL only)
- TA** Tenon (2.375" OD)
- TB** Tenon (2.875" OD)
- TR²** Removable Tenon (2.375 x 4.25)
- CD** Concord Luminaire
- OT** No drilling (includes pole cap)

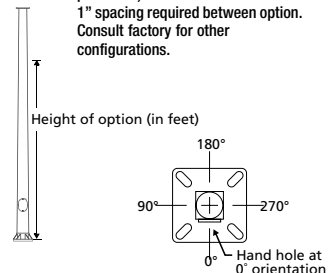
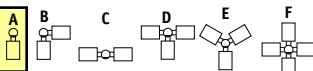
FINISH

- DB** Dark Bronze
- BL** Black
- WH** White
- GR** Gray
- PS** Platinum Silver
- RD** Red (Premium Color)
- FG** Forest Green (Premium Color)
- CC** Custom Color (Consult Factory)
- PR** Primer Only

OPTIONS

- Q55** Internal Coating (Hubbell Seal)
- Q18³** 15 Amp GFCI Receptacle and Cover
- Q22³** Extra Handhole
- Q26³** .5" Coupling
- Q27³** .75" Coupling
- Q30³** 2" Coupling
- Q32³** Mid-pole Luminaire Bracket
- Q40** Vibration Damper
- LAB** Less Anchor Bolts
- CSA** CSA Certified (consult factory)

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option Q26 should be ordered as: **SSS-20-40-1-TA-DB-Q26-0-15** (.5" coupling on the handhole/arm side of pole, 15 feet up from the pole base) 1" spacing required between option. Consult factory for other configurations.



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For more information visit our web site: www.spauldinglighting.com



Job Name:
FIRESTREAM

Catalog Number:
QSP 150P8 FT BZ

Type:

W4

Notes:

**QSP
SPHERE**
ARCHITECTURAL WALLPACK

Cat.#		Approvals
Job	Type	

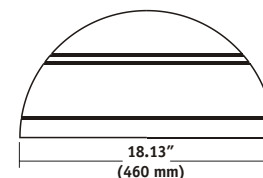
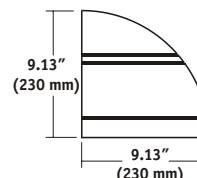


APPLICATIONS

- Architectural wallpack stylish quarter-sphere shape with molded lines to accentuate building architecture. Provides excellent illumination in two distributions as well as safety with Egress option

SPECIFICATIONS

- Full cut-off, dark sky, neighbor friendly
- Die cast aluminum housing and door
- Tempered, impact-resistant, clear glass lens
- Energy-saving LED, Pulse Start Metal Halide and Electronic Fluorescent systems
- Three distributions: (see below for restrictions) FT - forward throw for area lighting and WT - wide lateral throw for maximum spacing
- Five powder coat standard finishes
- Egress options for 120V or 12V remote power (by others)
- LED color temperature 5000K
- CFL lamps color temperature 3500K
- HID lamps are medium base



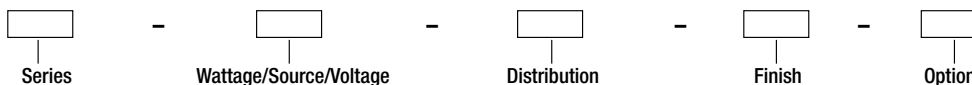
LISTINGS

- UL 1598 listed for use in wet locations



ORDERING INFORMATION

ORDERING EXAMPLE: QSP-150P8-FT-BZ-EM



SERIES	WATTAGE/SOURCE/VOLTAGE	DISTRIBUTION	FINISH	OPTIONS
QSP Quarter Sphere	LED	FT Forward Throw	BZ Bronze	QST ³ Time delay quartz standby system energizes quartz socket when main lamp does not strike (HID only)
	50L8-5K ^{2,4} 47.5w LED 120-277V	WT Wide Throw	BL Black	EM Double contact bayonet socket only for use with 120V remote power (generator by others)
	Pulse Start ¹		GR Gray	EM12 Two-pin 12V socket for MR11/MR16 lamps (backup power by others)
	150P8 150w PS Quad		WH White	PC(X) Button photocontrol. Specify voltage 1-120V, 2-208V, 3-240V, 4-277V
	100P8 100w PS Quad		PL Platinum	BOC(X) 0°C battery backup for one CFL lamp provides 90 minutes backup power specify 1-120V or 4-277V
	70P8 70w PS Quad			
	50P9 50w PS 120/277V			
	CFL ¹			
	26F8 42 CFL Quad			
	32F8 32 CFL Quad			
	42F8 42 CFL Quad			
	52F8 ² 2x26 CFL Quad			
	64F8 ² 2x32 CFL Quad			
	84F8 ² 2x42 CFL Quad			

1 Lamp(s) included, all units are Quad-Tap® (120/208/240/277V)
 2 Available in WT distribution only.
 3 100Watt D.C. bayonet lamp included.
 4 PC is only option.
 Color Temperature: CFL lamps 3500K, LED 5000K