



Town of Milton Planning Board
Town Hall Offices
525 Canton Avenue
Milton, MA 02186
617-696-5732

Reserved for the Office of the Town Clerk

FORM SPA

APPLICATION FOR APPROVAL OF A PROPOSED SITE PLAN

Date: Sept. 24, 2021

To the Planning Board of the Town of Milton:

The undersigned, being the applicant, hereby submits for approval a PROPOSED SITE PLAN ^{as amendment to 7.23.20 approved site plan} in accordance with Section VIII.D of the Rules & Regulations of the Milton Planning Board entitled:

"New Gooddard School 193 Central Avenue, Milton, Massachusetts"

Plans prepared by: Peter Brisdell CE William + Spangos Dated: 9.7.2021

Parcel(s) Street Address: 193 Central Avenue

The undersigned's title to said land is derived from: B 35749, P 199 Norfolk Registry

Milton Assessor's Map Number(s): E Parcel(s): 28-5 Zoning District: Res. B

Deed of Property Recorded in Norfolk County Registry Book number(s): 39091 page(s): 568

Registered in Norfolk County Registry District of the Land Court, Certificate of Title number(s): —

Number of Proposed Lots: 2 existing Total Acreage: 63,780 sf

Said land is current with regards to taxes and is free of encumbrances except for the following:

Owner: Verma Holdings LLC

Applicant: Verma Holdings LLC

Company: C/O Sunny + Simmi Verma

Company: C/O Sunny + Simmi Verma

Address: 21 Coach Rd.

Address: 21 Coach Rd.

N. Attleboro, MA 02760

N. Attleboro, MA

Phone: 508-736-1200

Phone: 508-736-1200

Signature of Owner: _____ Date: _____

Signature of Applicant (or Agent): Maurice V. McEthan Date: Sept. 24, 2021
Esg.

**APPLICATION TO AMEND SITE PLAN APPROVAL dated July 23, 2020
193 Central Avenue, Milton**

September 24, 2021

APPLICANT:	Verma Holdings LLC c/o Sunny and Simmi Verma 21 Coach Road North Attleboro, MA 02760
OWNER:	Verma Holdings LLC c/o Sunny and Simmi Verma 21 Coach Road North Attleboro, MA 02760
SITE ADDRESS:	193 Central Avenue, Milton
ASSESSORS No:	E-28-5
DEED dated 2.15.2021:	Book 39091, Page 568 Norfolk Registry of Deeds
ZONING DISTRICT:	Residence B
PREVIOUS PRE-EXISTING, NONCONFORMING USE:	Social Club
APPROVED JULY 23, 2020 SITE PLAN:	Pre-school and Daycare Use, Existing Building Renovation (allowed use)
AMENDMENT APPLICATION:	Application to Amend Site Plan for 193 Central Avenue, Milton (New building) dated 9.24.2021
PLAN REFERENCE:	"Plan of Land, 193 Central Avenue, Milton" Plan Book 94, Page 692 (lots A and B only)
SITE PLAN:	"Site Plan, The Goddard School, 193 Central Avenue, Milton, Massachusetts", by Williams & Sparages, 189 North Main Street, Suite 101, Middleton, MA 01949 dated 9.7.2021
CONCEPTUAL ARCHITECTURAL PLANS	Conceptual Building Plan Layout and Elevations by Joseph O'Sullivan Architects, Inc., Reading, MA dated 8.2.2021

SITE PLAN APPLICATION NARRATIVE

Introduction

On July 23, 2020, the Milton Planning Board approved the site plan for a new pre-school and day care facility at 193 Central Avenue in the former “Hoosic Club”. The applicants were Sunny and Simmi Verma who had a purchase and sale agreement with the previous owner, contingent upon receiving all approvals required, including a building permit. The inside of the building was to be totally renovated, the exterior was to remain substantially the same, and the site was to be substantially re-designed. Proposed work on the site for the approved site plan application included parking in front and on the rear right side, installation of stormwater drainage structures, a lighting locations and specifications, installation of playground facilities, fencing and landscaping around the building and in back of the rear parking.

The Verma’s were committed to this historic re-use project and spent many months working on interior and exterior designs, receiving final site plan approval from the Planning Board, after a public hearing process, on July 23, 2020. Then began a seven-month process of preparing and obtaining approval for the required building permits, in order to begin work.

The school was to be organized as a subchapter “S” corporation holding a franchise from The Goddard School, which has facilities in a number of Massachusetts communities including Watertown, Lexington, Medfield and Braintree.

On February 25, 2021, after a building permit issued, title to the property was conveyed to Verma Holdings, LLC for \$2,750,000.00.

Construction work on the location began immediately, including preparing the site, installing the drainage system and excavation.

One month later, on March 22, 2021, in the middle of the night, a devastating fire destroyed the building. Local and state fire officials and the Verma’s insurance company conducted investigations for several months. The site was released in July 2021, the cleanup process was initiated shortly after the release and cleanup was completed in early August 2021.

No replacement building plan could be developed until it was clear, with release of the site, that there would not be prolonged claims tying up the property. Upon release of the site in early August, the owners worked with their architect and engineer to come up with building design options. The building layout and parking design you see in this application is the result of feedback from the Building Commissioner to ensure that the building and site design conformed to zoning requirements, feedback from neighbors about the design of the front parking lot, the design of the parking entrance and exit ,and the location of the dumpster as

well as the applicant's requirements that the new building not be generic, but resemble, to the extent possible, the Hoosic building.

Because the Hoosic building was constructed prior to the adoption of the current Zoning Bylaw in 1938, it did not conform to zoning requirements including those for setbacks and parking. The applicant has followed the requirements of the Building Commissioner to design the new building so as to meet the dimensional requirements of the Zoning Bylaw.

These requirements apply for this new building for an allowed use, as long as they do not prevent the use, consistent with Massachusetts appellate decisions about the imposition of zoning requirements on the use exemption for daycare/preschool programs.

Therefore, the objectives for a replacement building and revised site plan are: 1) to provide design features similar to some of those in the Hoosic Building; 2) to locate the building, to the extent possible given zoning requirements, in a similar location to the original building; 3) to build a structure meeting Office for Early Childhood Education regulations for the same program and capacity as in the approved site plan; 4) to design the building and site so as to require no zoning relief.

The following list describes various components of the site plan approval and what changes to the site are requested in this application. Any changes to the Site Plan must be approved by the Planning Board as an Amendment to the July 23, 2020 Site Plan Approval Decision.

1. USE: (no change) Both site plans are designed for daycare/preschool up through the age when a child is ready for kindergarten. This type of use is allowed under M.G.L. Ch. 40A.
2. CAPACITY: (similar) The capacity of the school is expected to be similar or slightly smaller than 165 students. As explained last year, enrollment is never at capacity and fluctuates from year to year. The average enrollment after two years is expected to be around 100 – 120 children. Final center capacity is regulated by the state.
3. NUMBER OF CLASSROOMS: (similar) The number of classrooms is one less, 11 rather than 12.
4. SITE: the same, 63,780 sf site.
5. BUILDING FOOTPRINT: The footprint of the building is slightly larger compared to the approximately 11,400 sf footprint of the Hoosic Club
6. GROSS SQUARE FOOTAGE OF CLASSROOM AND ADMINISTRATIVE SPACE: New building has approximately 1,000 sf less.
7. CLASSROOM LAYOUT: in the new building classrooms are on the ground floor and there is no basement; the Hoosic building renovation plan required that classrooms be located

in the basement, which is not desirable, but was unavoidable in the Hoosic renovation plan. Because in a new building space can be more efficiently arranged, the total program space is less in the new building. There is some additional administrative and activity space on the second floor in the center of the building under the roof, which was also the case in the original plan.

8. THE BUILDING ORIENTATION: The new building is parallel to Central Avenue rather than the Hoosic Club's location which was at an oblique angle to Central Avenue. This orientation provides for conforming lot line setbacks for building and parking on this corner lot.
9. DESIGN: The building is designed to resemble the Club in front with lower wings and a higher portion in the middle, with the same type of shingles, and with some similar window and door designs. The footprint of the new building is shown on this revised site plan and the elevations are provided in the architectural elevation plans. Provided as Exhibit C is a diagram showing features of the Hoosic Building included in the new building design, including windows, doors and shingles.
10. APPEARANCE ON THE SITE: the applicant has provided a color rendering of the building with proposed parking and landscaping from Central Avenue as Exhibit D.
11. EXTERIOR FINISHES: The new building includes the same style of shingles and large ground floor windows which are design elements from the Hoosic building. The color palette is to be grey shingles with white trim.
12. MECHANICALS: As in the previous approved site plan, all mechanicals on the roof are shielded from view, as shown on the elevation plan.
13. PARKING: Last year's site plan had 30 on-site parking spaces, 15 in front facing Central Avenue in the existing parking area and 15 on the side at the rear, accessed by a driveway around the right side of the building. Additional trees and fencing were on last year's plan to shield that back parking lot and a wooded area was to be left as is in back of the parking area.

Because this plan is for a new building, parking must comply with parking setback requirements; the 15 side rear parking spaces must be moved to the front. The wooded area to the rear still remains as is. The front parking must now be set back 25 feet from the street and within that setback screening must be provided. The front parking area has 31 parking spaces including the required number of handicapped parking spaces.

14. PARKING ACCESS DESIGN: Last year the parking design called for the entrance and exit in one location, on the right as you face the building (with your back to Central Avenue). The circular driveway from Columbine Road remained as additional emergency access.

In this revised plan the applicant proposes a continuous parking area; the circular driveway is not included; and there is a separate entrance and exit for the parking area. This plan reverses an earlier plan after meeting with neighbors, so that now, cars enter closer to Columbine Road and exit on the other side. This layout locates the exit where there is no residence directly across the street.

This plan has been approved by the Fire Department as providing adequate emergency access.

15. ANALYSIS OF PROJECTED TRIP GENERATION: no change; this exhibit (G) for the approved site plan is included in these exhibits.
16. PERIMETER FENCING: same type of material and height as approved last year (6' vinyl but a higher quality type of fencing that looks more like wood). An example of the type of fencing is provided in Exhibit E; same example as last year. The perimeter of the site as required will still be surrounded by this fencing.
17. NEW STONE WALL ON COLUMBINE ROAD SIDE: A wall faced with stone is added to this side from the beginning of the side pathway to the back of the rear playground. This is a code requirement to protect children if a car loses control and goes off the roadway. The design is proposed to be faced with stone and to have fencing matching the perimeter fencing at the top of the wall. The wall will also shield the view and muffle sound towards Columbine Road. Exhibit F shows design suggestions.
18. LIGHTING PLAN: a new lighting plan, specifications, and photometrics have been provided as Exhibit L. The photometric plan showing lighting locations is also included as Sheet 10 in the site plan. As with last year's plan, the lighting is dark sky compliant and shields abutting properties from lighting overspill; all lighting will be on a timer to go off about an hour after school closes at 6 p.m.; and any light poles are no higher than 10 feet. As in the approved site plan, there will be security lighting with adjustable angles on the building for after closing that is activated by motion sensors. The angle of the security lighting can be adjusted to ensure that no lighting shines towards neighboring property.
19. STREET TREES: All new street trees approved last year are still on the plan. No additional trees will be removed from the existing site.
20. SITE LANDSCAPING: some trees were removed during site clearing in March, 2021, as shown on the site plan approved in July, 2020. There is no longer rear parking requiring a row of trees screening that parking. The wooded area at the rear remains as it is, as required last year. There is new screening landscaping 25' in width all along the front on Central Avenue between the entrance and exit, as well as existing rocks and trees that will remain. The front screening landscaping continues around the corner onto Columbine Road, to the end of the parking, as required by the Zoning Bylaw. There

are two new River Birch trees approved last year in front and two more located at the Columbine Road side of the parking area in front.

21. **PLAY AREAS:** The two larger rear play areas in the approved plan have been replaced with two smaller play areas designed for different age groups and play activities. Two small additional play areas, one of which is an outdoor exploration area, have been located on the right side of the building. This will limit the number of children in any play area at any one time. While the school closely manages playground behavior, and these are very young children, this design does reduce the numbers in each play area and provides more separate locations at any given time, so the play areas are not in use as long. This design is proposed to minimize any playground noise intrusion on neighbors.
22. **COLUMBINE ROAD OAK TREE:** The revised plan continues to protect the roots of a large oak tree remaining on Columbine Road, which will remain. On the side of the tree facing the new building some trimming of branches may be required. As noted on the plan any oak tree trimming will be reviewed with the STAC in advance.
23. **STORMWATER DRAINAGE:** a stormwater drainage structure is still shown as located under the land to the rear of the building. This revised stormwater drainage plan for this site plan adds additional structures under the front parking area and is under review by the Town Engineer. Stormwater structures as shown on this revised plan are designed to ensure that no additional stormwater will flow off the site. The Hoosic building had no on-site stormwater receptacles. One sheet in the Site plan depicts the location of stormwater management structures.

The Stormwater Drainage Analysis has been filed with the Town Engineer and must be approved by the Town Engineer.

In this plan, stormwater flow off the site will be reduced from existing conditions.
24. **UTILITIES:** connections to the new building are shown on the revised plan and are subject to approval by the Town Engineer.
25. **GRADING:** Grading is modified to accommodate the new building as shown on the Grading Plan Sheet.
26. **OWNERS OF PROPERTY and MANAGERS OF THE NEW SCHOOL:** no change, Sunny and Simmi Verma.
27. **FRANCHISE:** no change, oversight will continue to be provided by the Goddard Schools, a nationally recognized child care provider, with each location individually owned and operated.

28. ENROLLMENT OPTIONS: no change, the school will still offer half day, full day and part time weekday enrollment options and will provide a pre-school and child care program beginning with ages ranging from infancy until a child is ready for kindergarten.
29. EDUCATIONAL PHILOSOPHY: no change, each school develops its own statement of educational philosophy, consistent with the general Goddard School principles of play-based learning for cognitive and social development.
30. ENERGY EFFICIENCY: no information about energy efficiency was provided for the prior approved site plan. Because this is a new building, the school will meet the required energy conservation levels and will use high performance glazing and high wall and roof R-values.

Heating, cooling and water systems will use energy saving equipment. Flat roofs will have light colored surfaces to help reflect solar heat gain. Interior sensors will monitor air quality and carbon monoxide levels and fresh air to spaces using energy recovery units and heat exchangers. Interior and exterior lighting will be highly efficient LED lamps. Classrooms will be enabled with multiple light levels and occupancy sensors will be provided in all occupied spaces. All appliances will be high efficiency/low flow. Infrastructure for future use of photovoltaic panels will be installed although it appears that at this time there is too much shade cover for installation to be cost effective.

The new building will be more energy efficient than the prior proposed renovation.

31. STORAGE OF REFUSE: the refuse storage container is now located on the right side of the parking area (as you face the school) next to the school. This is similar to where the Hoosic Club stored its refuse although that dumpster was not enclosed. The securely covered container will be enclosed by walls higher than the container. Based on experience with similar schools, the applicants expect that there will be trash pick-up twice a week. Because children bring their own meals, there will be relatively little food waste generated in this program.

Pick-up will be as frequent as necessary to control any food odors.

32. SIGNS: signs must be approved separately by the Design Review Committee and the Building Department.
33. CONSTRUCTION MANAGEMENT PLAN: There was no plan submitted last year. We have included one in this amendment application as Exhibit K
34. DEVELOPMENT IMPACT, COMPARISON WITH PRIOR USE: As we explained last year, this use will have a very different impact from the prior club. Used by a social club, this site had large weeknight and weekend events, heavy on-street parking for those events, and

substantial noise from those events, in the evening and on weekends. Events also took place on weekdays.

The school closes at 6 pm weekdays and is not open on weekends. Evenings and weekends the school will generate no traffic.

The school housed in the new building will have no different impact than the school described in the approved plan last year. Estimated trip generation is the same. The student capacity is the same and there is one less classroom. There is as much parking on site as was provided on the approved plan, and the consolidated parking location in front will have significant additional screening to block the view from the street.

The program space is arranged more efficiently and is less than the prior proposal; the additional footprint replaces basement space in the prior design but is contained in a wing on one side to reduce the front width of the building. The building's design incorporates some of the features of the Hoosic building.

All conditions that are part of the Site Plan Approval dated July 23, 2020 shall remain in effect except for those specific amendments described in this application. That includes the requirement that six months after opening the school shall review actual trip distribution in an average week and report on how actual trips compare to the projected trips provided as part of the amended site plan application approved on July 23, 2020.

This application is submitted as an Amendment to the Site Plan Approval Decision by the Planning Board dated July 23, 2020.

While the site layout is subject to site plan review, the use is an allowed use under Massachusetts General Laws, Chapter 40A.

The applicant respectfully requests that the Planning Board approve the modifications to the approved site plan, as described in this application. These modifications to the site plan are reasonably necessary under the circumstances, following the catastrophic fire that destroyed the historic Hoosic Building.

With this application the applicant has provided a site plan by Williams and Sparages, dated September 7, 2021, and a building elevation plan and layout plan dated 8.2.2021 by Joseph Walsh, AIA, LEED AP BD+C, O'Sullivan Architects, Inc., 606 Main Street – Suite 3001, Reading, MA 01867. Separate sheets in the site plan show existing conditions, site layout, public sewer, water and utility connections, finished topography, playground equipment, photometrics from proposed lighting and landscaping. Also included as exhibits are architectural elevation and layout plans, a color rendering of the new building (Exhibit D) and a "lighting plan by "Illuminate" dated 8.24.2021, (Exhibit G) including photometrics, lighting locations, and specifications for lighting.

All documents referenced as part of the July 23, 2020 approved site plan are incorporated by reference into this application for amendment; some of those documents are included again in this application as Exhibits E, H, J, K and L

With this narrative including exhibits a completed Form SPA, a filing fee, and eight paper copies of the site plan, the front view renderings, and the conceptual architectural plans have been provided, for filing with the Town Clerk and the Planning Board.

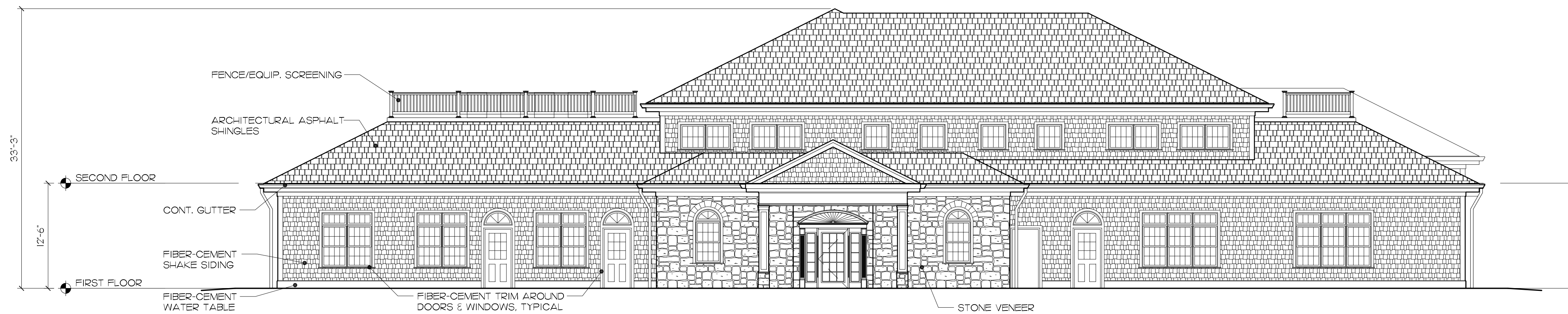
Exhibits:

- A. Site Plan on 13 pages dated 9.7.2021
- B. Conceptual Architectural Elevation and Layout plans dated 8.2.2021.
- C. Design Changes Due to fire
- D. Color Rendering of New Building, Parking and Landscaping from Central Avenue
- E. Fencing Specification (typical)
- F. Stone Wall Design Concept (design suggestions)
- G. Trip Projection Analysis
- H. Current Deed
- I. Copy of ANR Plan recorded in Plan Book 692, Page 64, Norfolk County Registry of Deeds
- J. GIS Map
- K. Construction Management Plan
- L. Photometric Plan and Specifications (typical)

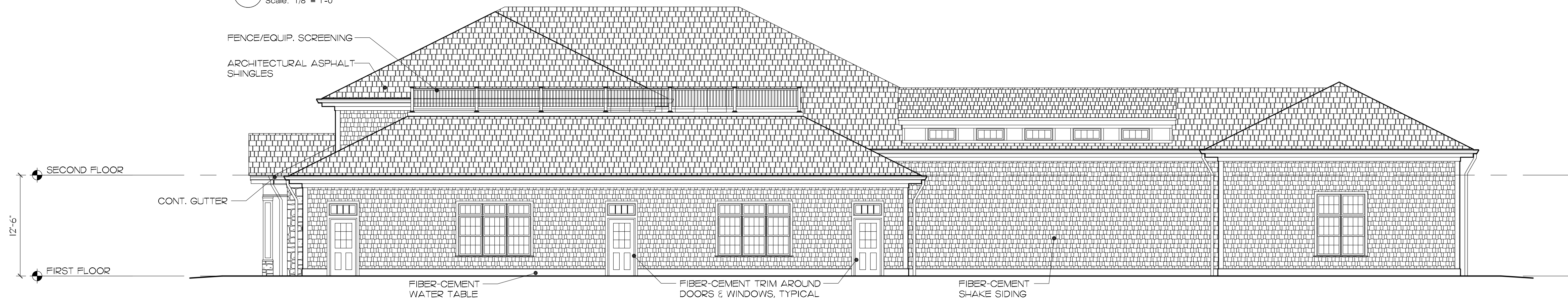
A Stormwater Drainage Report has been filed with the Town Engineer and must be approved or modified as required by the Town.

EXHIBIT B

ELEVATIONS AND LAYOUT



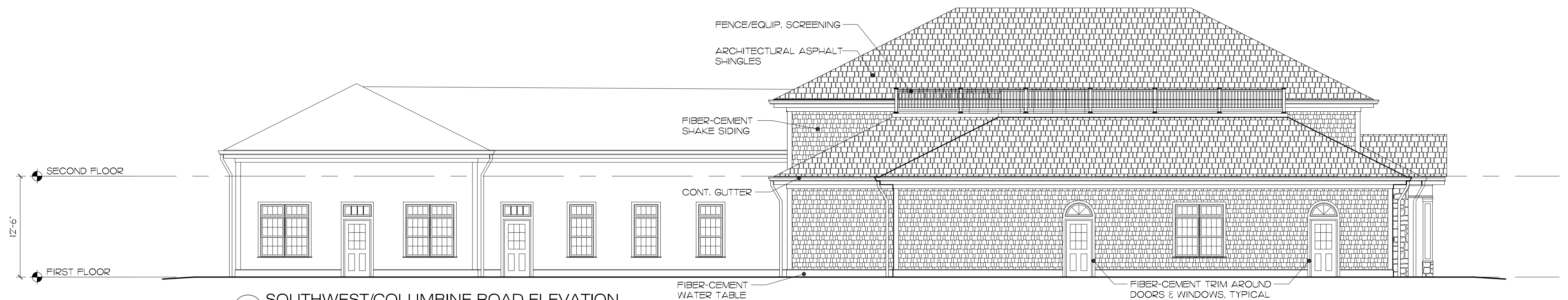
1 SOUTHEAST/CENTRAL AVENUE ELEVATION
Scale: 1/8" = 1'-0"



2 NORTHEAST/RIGHT SIDE ELEVATION
Scale: 1/8" = 1'-0"



3 NORTHWEST/REAR ELEVATION
Scale: 1/8" = 1'-0"

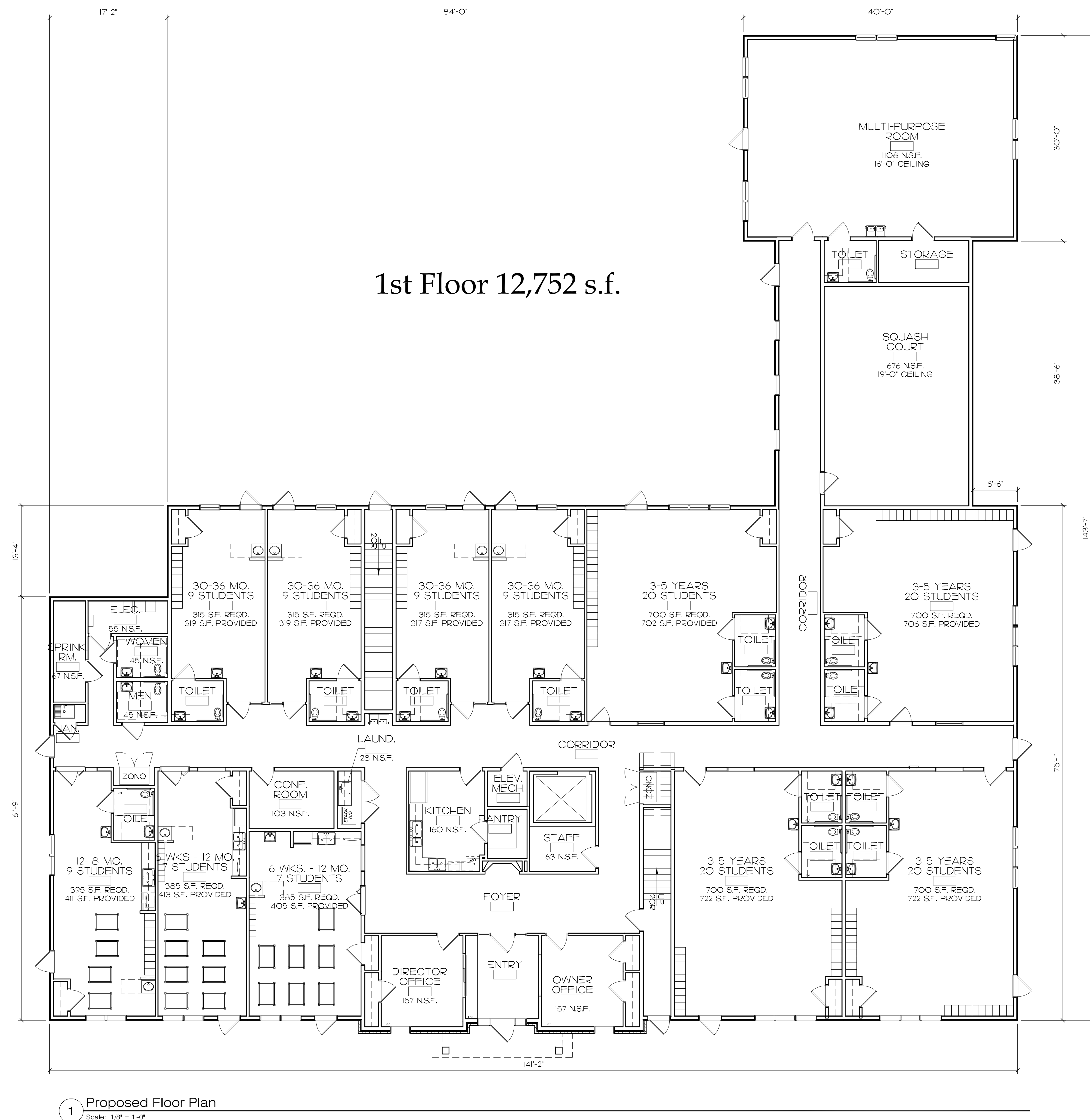


4 SOUTHWEST/COLUMBINE ROAD ELEVATION
Scale: 1/8" = 1'-0"

The Goddard School
Central Avenue - Milton, MA

 O'SULLIVAN ARCHITECTS, INC.
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606 MAIN STREET, SUITE 3001 • READING, MA 01867
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ISSUED August 2, 2021	SHEET NUMBER 3
REVISED / REVISED BY	
	JOB NO: 21008



1 Proposed Floor Plan
Scale: 1/8" = 1'-0"

The Goddard School
Central Avenue - Milton, MA

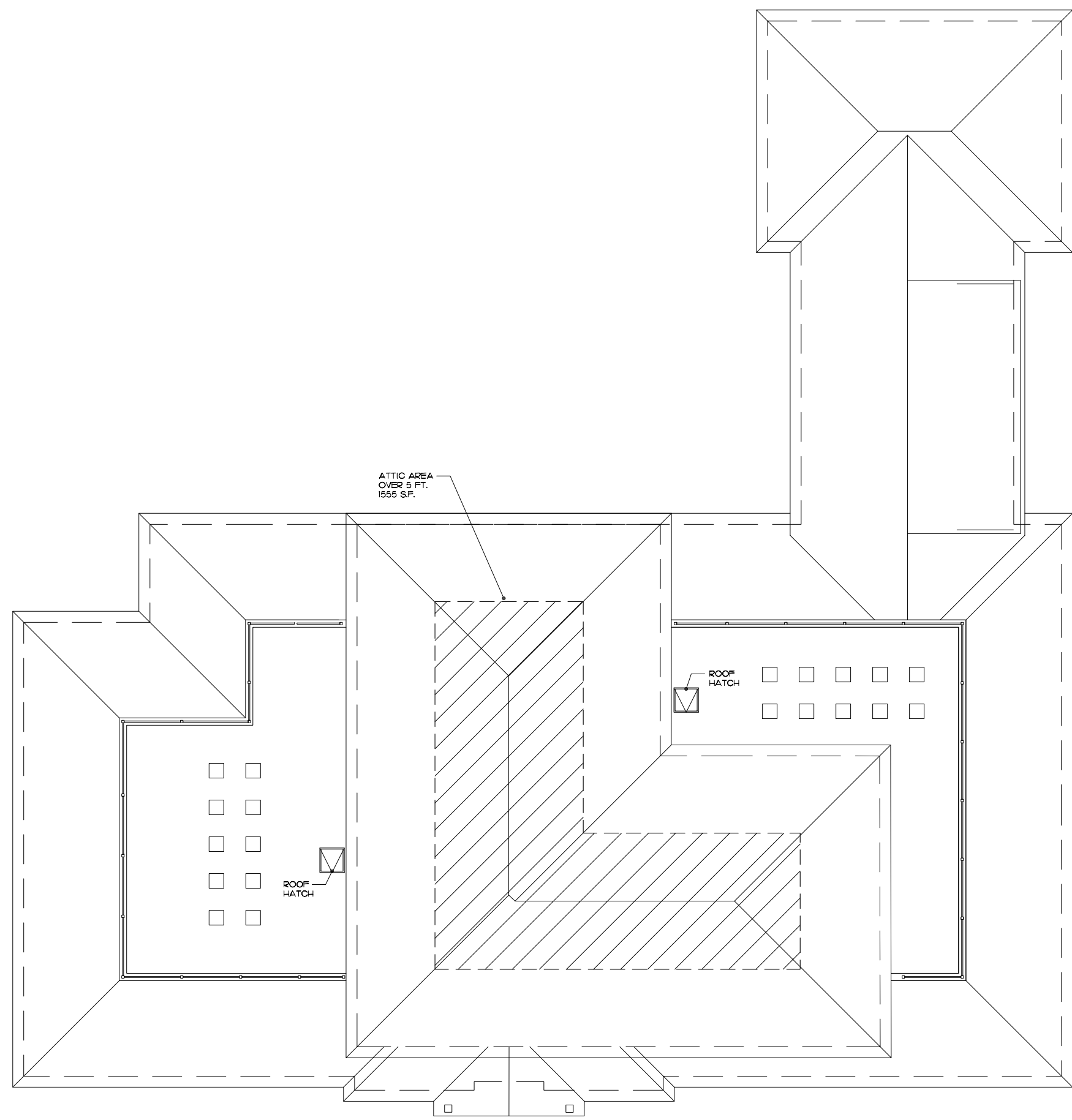


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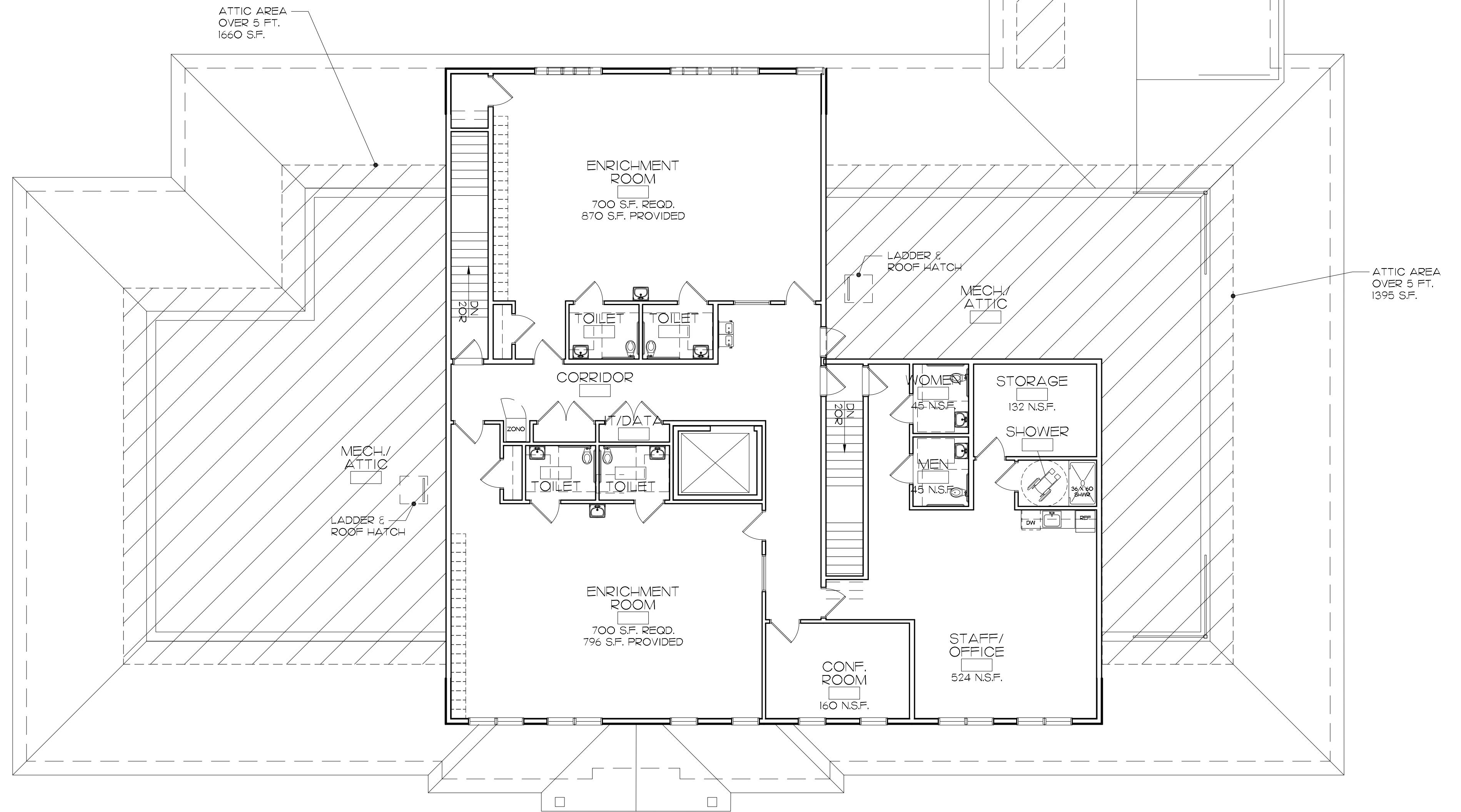
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ISSUED	SHEET NUMBER 1
August 2, 2021	
REVISED / REVISED BY	JOB NO: 21008



4,114 s.f. Finished 2nd Floor
 5,055 s.f. Unfinished Attic over 5 ft. high
 9,169 s.f. Total over 5 ft. high



2 Proposed Second Floor/Attic Plan
 Scale: 1/8" = 1'-0"

3 Proposed Roof Plan
 Scale: 1/8" = 1'-0"

The Goddard School
 Central Avenue - Milton, MA

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ISSUED August 2, 2021	SHEET NUMBER 2
REVISED / REVISED BY	JOB NO: 21008

EXHIBIT C

DESIGN CHANGES



Key Facts and Figures

- The old Hoosic Club fire was a devastating loss for the town, neighborhood and us personally
- Construction for Goddard School Milton kicked off end of February 2021 and the building was totally destroyed on 3-23-21
- The loss has put us in a financial hole of approx. \$2M after the insurance settlement
- The school was scheduled to open in October 2021
- The project will see close to a year in delay



Summary of Design Changes due to the fire

Design Feature	Old Building*	New Building	Comment
Footprint	11,400 SF	12,752 SF	We added an indoor toddler playroom
Floor	2.5	1.5	No basement in new design
Parking Location	Front and side	Front	Old building had parking in the front only; rear parking was to be added to meet zoning requirements
Parking Spaces	30	31	Old design parking includes spaces added on the side
Classrooms	12	11 + enrichment in attic	Capacity is similar
Landscaping	Per town/tree commission	Same plus front parking	Added landscaping to front to mask parking/cars visibility
Access	From Central Ave only	From Central Ave only	Better traffic flow

* Per approved site and design plan of the previously designed school



The new school design is not like typical Goddard Buildings

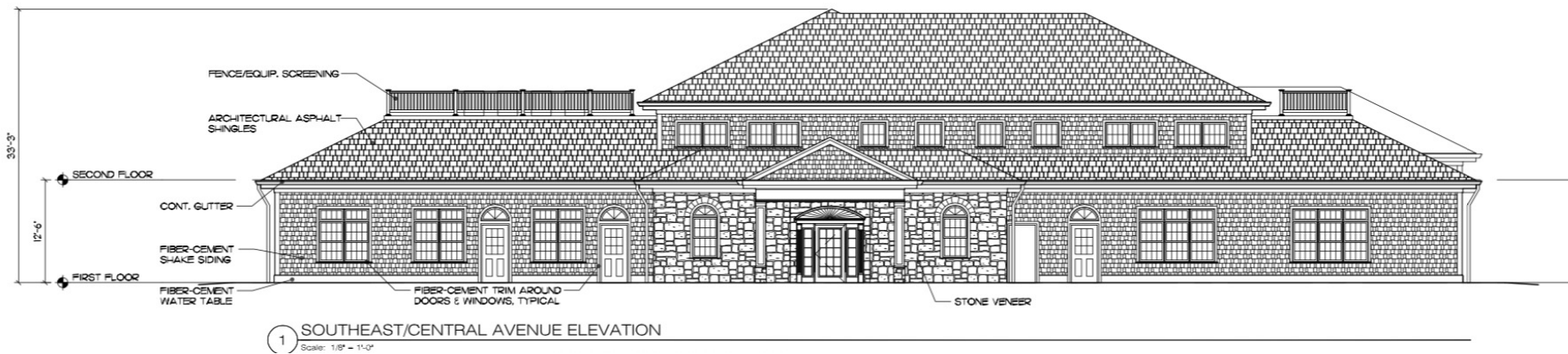


EXHIBIT D

BUILDING FRONT VIEW RENDERING



EXHIBIT E

FENCING

COLOR OPTIONS

GRAND ILLUSIONS

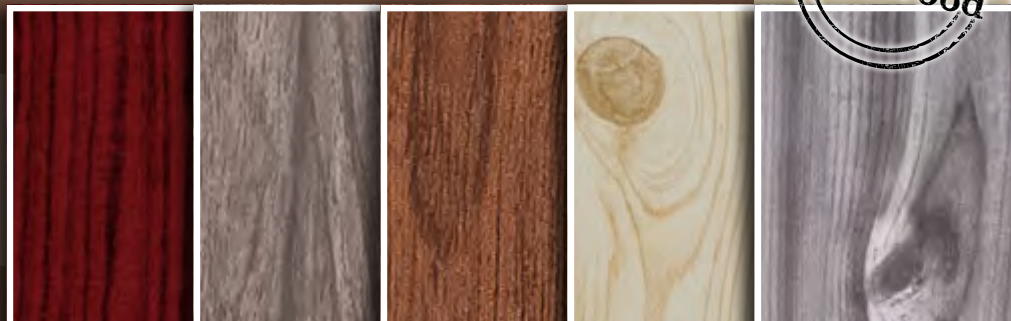


The Most Authentic Vinyl Woodgrain in the Fence Industry!

"No other product even comes close..."

With the unmatched detail of real wood and the low maintenance advantage of vinyl, you are sure to fall in love with Grand Illusions Vinyl Woodbond woodgrain vinyl fence. It looks just like 5 gorgeous flavors of pre-stained wood fence with a low gloss matte finish. Your friends will be knocking on it asking if it's real.

You can even Mix 'n' Match™ Grand Illusions Vinyl WoodBond with any other Grand Illusions colors or woodgrains to create your own unique fencing creations. No other product even comes close to this versatility.



Mahogany

Walnut

Rosewood

Eastern
White Cedar

Driftwood



All Grand Illusions Vinyl WoodBond Grains
Are Available in V300-6 **QuickShip**

ALL COLOR SWATCHES SHOWN ARE APPROXIMATE. SEE PHYSICAL SAMPLE FOR ACTUAL COLOR.

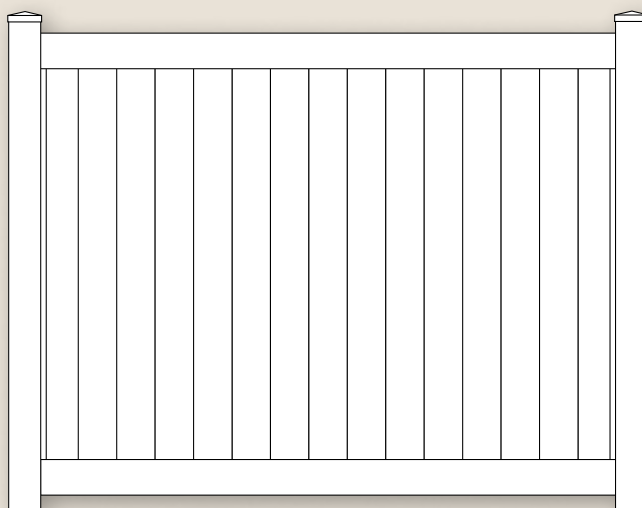
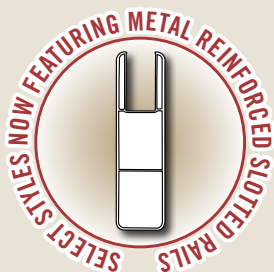
QuickShip V300-6 6' Height shown in Grand Illusions Vinyl WoodBond Eastern White Cedar with French Gothic (V55FG) post caps

www.illusionsfence.com 15

Solid Privacy Fence

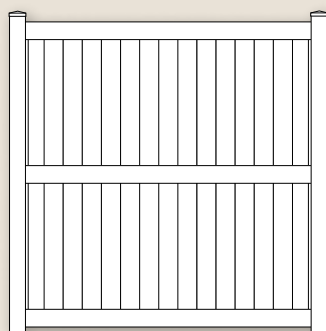


"The most popular fence in the industry." Illusions tongue and groove privacy fence panels have 7/8" x 6" boards, 1-1/2" x 5-1/2" top and bottom horizontal rails, a metal reinforcement channel in the bottom rail, and 7/8" x 1" U-Channel edgings to add a unique and attractive aesthetic.



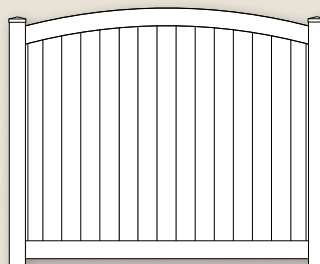
V300

Tongue & Groove Privacy Fence



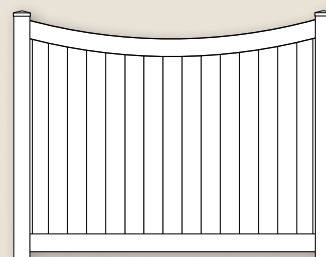
V300-8

8' High T&G Privacy Fence
(7' high and up have mid-rail)



VBF300

Tongue & Groove Privacy Fence
With Crowned "F" Rail



VBG300

Tongue & Groove Privacy Fence
With Scalloped "G" Rail



www.illusionsfence.com

V300 SERIES **QuickShip** STYLES AVAILABLE: Classic White V300-4, Classic White V300-5, Classic White V300-6, Classic White V300-8, Classic Beige V300-6BG, Classic Gray V300-6GY, Classic Beige Boards with Classic White Rails V300-6BW, Classic Gray Boards with Classic White Rails V300-6GW, Black V300-6, Brown V300-6, Hunter Green V300-6, Slate Gray V300-6, Mahogany V300-6, Walnut V300-6, Rosewood V300-6, Eastern White Cedar V300-6, and Driftwood V300-6. All with matching 4' and 5' wide gates.

Illusions®

Vinyl Fence



Cap Options



FLAT



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FRENCH GOTHIC



PALACE SOLAR



SOLAR



BALL



COACHMAN



TEARDROP

QuickShip V300-6 "The most popular fence in the industry." Illusions Classic White tongue and groove privacy panels have 7/8" x 6" boards, 1-1/2" x 5-1/2" top and bottom horizontal rails, a metal reinforcement channel in the bottom rail, and 7/8" x 1" U-Channel edgings to add a unique and attractive aesthetic. Shown with a VBG4-46SQ crowned square lattice topped gate.



V300 Privacy Fence

A tongue and groove pool-friendly good-neighbor fence style that is available in all colors and wood grains.

SEE MORE GREAT IMAGES AT WWW.ILLUSIONSFENCE.COM



QuickShip V300-6 6' height vinyl privacy fence with 6" wide tongue and groove boards and 1-1/2" x 5-1/2" top and bottom rails. Shown in Grand Illusions Vinyl WoodBond Rosewood.

EXHIBIT F

STONE WALL CONCEPT

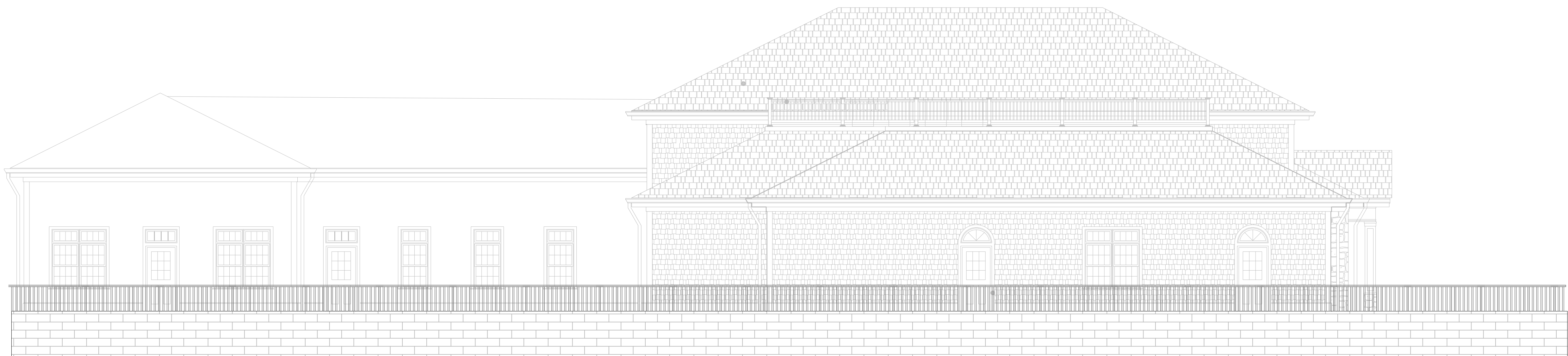
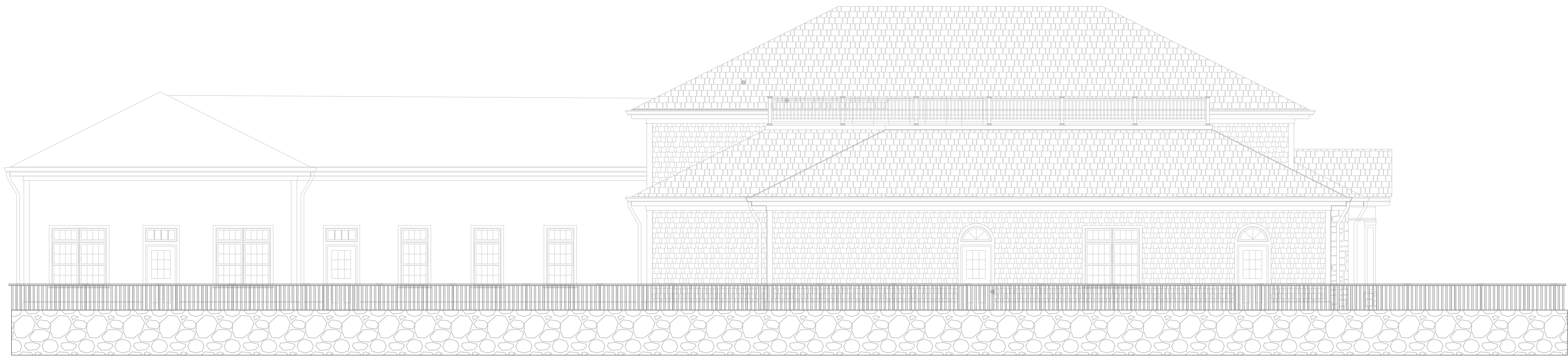


EXHIBIT G

TRIP PROJECTION ANALYSIS

Marion V. McEttrick

Attorney at Law

10 Crown Street

Milton, MA 02186

617-696-5569

Fax 617-696-0552

mmcettrick@gmail.com

TO: Milton Planning Board
FROM: Marion McEttrick *MM*
RE: Goddard School Milton - Trip Generation and Traffic
DATE: July 8, 2020

In the Site Plan Application for the Goddard School I provided a table showing the distribution of morning trips at four Goddard Schools ranging in size from 127 students to 157 students. In order to provide a more complete profile of the frequency of trips to and from this school, we requested trip generation tables for a full day, from Goddard corporate, for other Goddard Schools. With this memo I have provide the four tables from Erin Witt, Site Development Manager for Goddard Systems, Inc., two from schools in Massachusetts, and two from schools in other states. The tables show the number of trips in ten minute intervals during morning and evening rush hours and longer intervals in between. These are actual statistics, from a pre-COVID day, not a holiday, for each of the four schools, all of which are larger than the anticipated enrollment for this school.

In addition to these actual trip generation tables, which are better information than standard trip generation table from a manual, the applicants have experience at their Watertown School which is also a bit larger this one. It has been their experience that at most ten parents will be parked at any one time during the busiest intervals. At the Watertown school, only a few parents pick up as late as six p.m.; most prefer to pick up between 4 and 5:30 p.m.

The updated, reduced capacity and expected average enrollment and the information in this memo and in these tables supports the conclusion that the school traffic will be manageable at this location, because the trips are spread out over a two hour+ period, in the morning and afternoon, the numbers are further reduced by the fact that some cars carry multiple students (siblings), and traffic entering and leaving the site will come from and exit in predictable directions dictated by how heavy the traffic is.

Attached is a letter from Erin Witt, the Site Development Manager for The Goddard School Corporation, describing the trip patterns generally for Goddard Schools which all are operated with the drop off systems described in her letter, and which will apply to the school at 193

Central Avenue. Typical time for drop off is ten minutes. Parents must park and walk into the school with their children.

The program at this school will be available beginning at 7 a.m. There is no set start time for students at this school. Parents bring their children to the school, according to their own schedules. The four bar graphs illustrate the pattern, showing that – and arrivals are distributed, allowing a parking space to be used quite a few times between 7 a.m. and 10 a.m., and again between 4 p.m. and 6 p.m. when the school will close.

This school will not add traffic to the street, since parents generally drop off their children on the way to work. They are already on the road. During the busiest times there will be multiple turns into and out of the site. Even without turn restrictions, parents will quickly learn the more convenient approach and exit direction to use, so that they do not have to wait a long time to try to cross a lane of traffic.

Parents exiting this site will always find it easier to turn right rather than crossing a lane of traffic. When traffic in the opposing lane is light, they may be able to cross, but during the heaviest commuter AM times, they are going to want to turn right. This turn will be relatively easy to make, although there will be more waiting time in the PM when the flow may be heavier towards Brook Road. This turn should be relatively easy to make, and there are many ways after turning right, for parents to set off in the direction of their travels.

The Traffic Commission could recommend to the Select Board that a “right turn only during certain hours” sign should be installed at the school entrance/exit. The school could decide to install its own sign on their site, if necessary. After opening, this school will have maintain trip statistics, as is required at all Goddard Schools, and any such measures can be implemented if they are recommended by the police department.

Parents entering the site will find it easier to do so from the same side of the street, for the same reasons, and will choose an access route that puts them on the right side of Central Avenue towards Brook Road. Parents from the Columbine neighborhood will find it best to choose a route that puts them on Central Avenue towards and on the same side as the school. The circular driveway entrance on Columbine Road will not be open to parents.

In meeting with neighbors, a concern was expressed that in general commuters are parking on Central Avenue all day, away from the Eliot Street intersection and beyond the two hour parking restricted areas, and then walking to the MBTA stop. The Traffic Commission could recommend restricting parking further along on Central Avenue, if residents who live in those locations do not object.

The entrance and exit area on the site plan is wide enough to allow passage in two directions with proper turning widths. The traffic flow, morning and evening, as illustrated by the bar graphs, is spread out over a three hour period.

The school does intend to provide incentives for employees to use public transportation, walk or ride a bike, and could do so for parents. It is expected that after the COVID restrictions are lifted, more parents may be able to work from home than previously, and in that case, walking or biking children to the school from the immediate neighborhood may be preferred because those parents are not rushing to get going on their commute. These trends could further reduce the number of car trips to the school.

Finally, as stated in the Site Plan Application, Central Avenue is a wide street where, if necessary, parents could park for brief periods of time, on the same side as the school. This is not preferred by The Goddard School because it is safer for parents to park on site, and walk into the school in a protected area. But while subject to significant commuter traffic like all main routes in Milton, this street does have space for a car to park if absolutely necessary. For many years, when the building was an event facility, many cars would park on Central Avenue for every event.



Goddard Systems, Inc., 1016 West Ninth Avenue, King of Prussia, PA 19406 | 610-265-8510 • Fax: 610-265-8867 | GoddardSystems.com

To whom it may concern:

The Goddard Schools nationally see a peak volume from 7-9:30am for student drop off, and then it is spread across 2-6pm for student pickup. This is because the Goddard Schools do not have a “start” time for the day rather it is when the parents find it convenient to drop off/pickup and align to their individual work schedules. Our drop off lasts approximately 5-10 minutes and this is because each parent is required to walk their child inside and sign them in to the school. They then walk them to their individual classroom and then the parents can leave. Pickup is handled in much the same way; the parent picks their child up from their classroom and signs them out of the school. This process is much safer to practice as parents pickup children directly from the classroom vs. kids waiting in the parking lot or by the sidewalk.

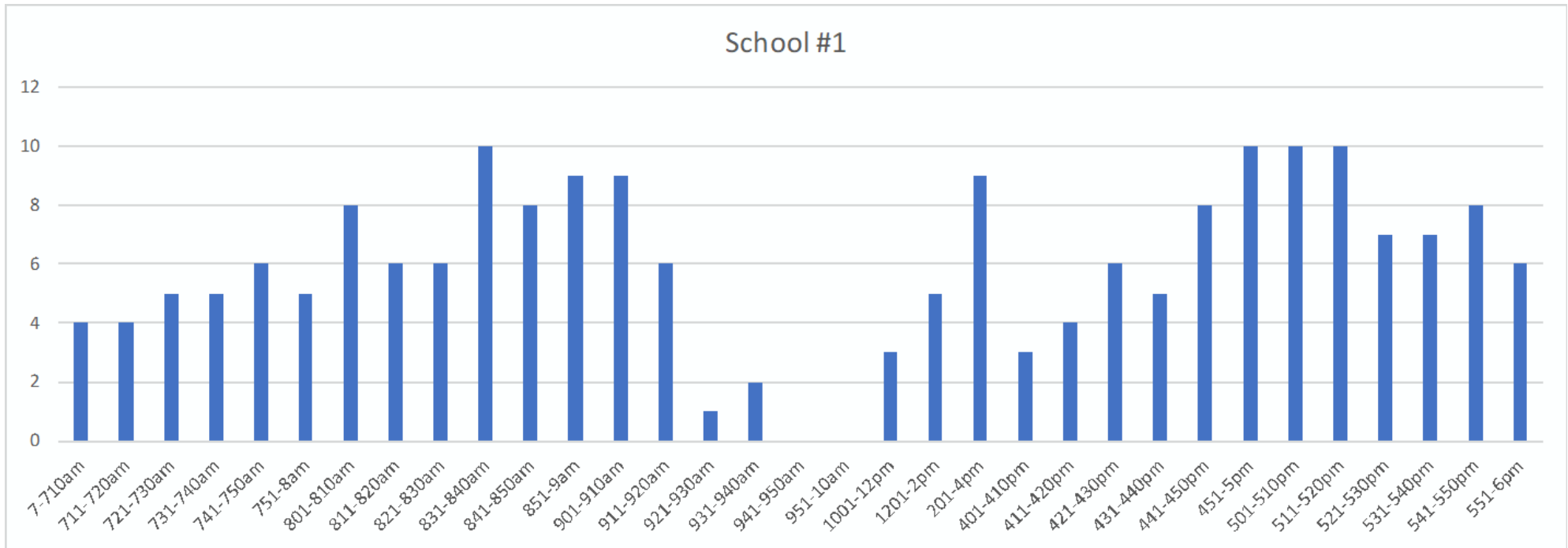
Our teachers arrive in staggered schedules, depending on need within the school. The highest peak of teachers is from approximately 10am-4pm. The staff coming to support the school for lunch coverage will come between 11-3. Teachers will be required to use parking spaces further away from the building entrance, leaving those spaces for parent drop-off and pickup.

We also know that with our schools across the country, approximately 10-25% of our teachers will take public transportation or get dropped off by someone else.

If you have any further questions regarding our national parking averages or our required procedures for drop off and pickup, please feel free to contact me.

Sincerely,

Erin Witt
Site Development Manager



School #1 Information:

Total cars during morning drop off: 97

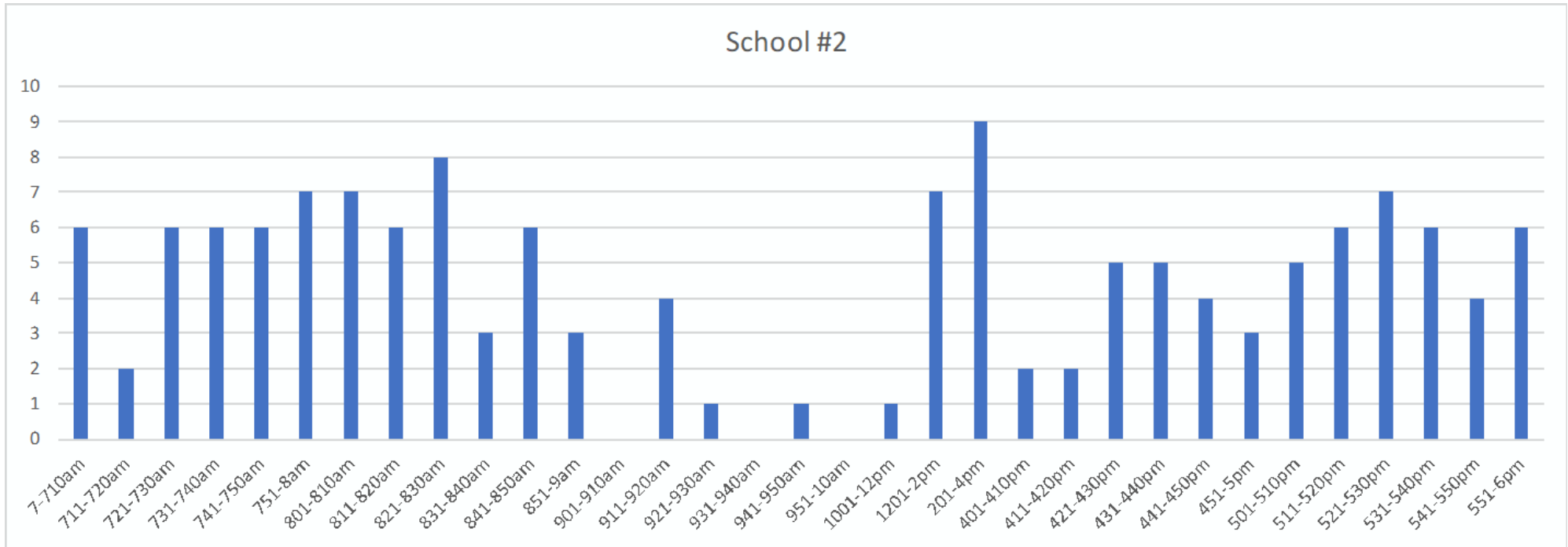
Total cars during afternoon pickup: 98

Total number of children enrolled in school: 180

Number of sets of siblings: 48

Number of children absent: 34

Maximum number of staff: 24



School #2 Information:

Total cars during morning drop off: 73

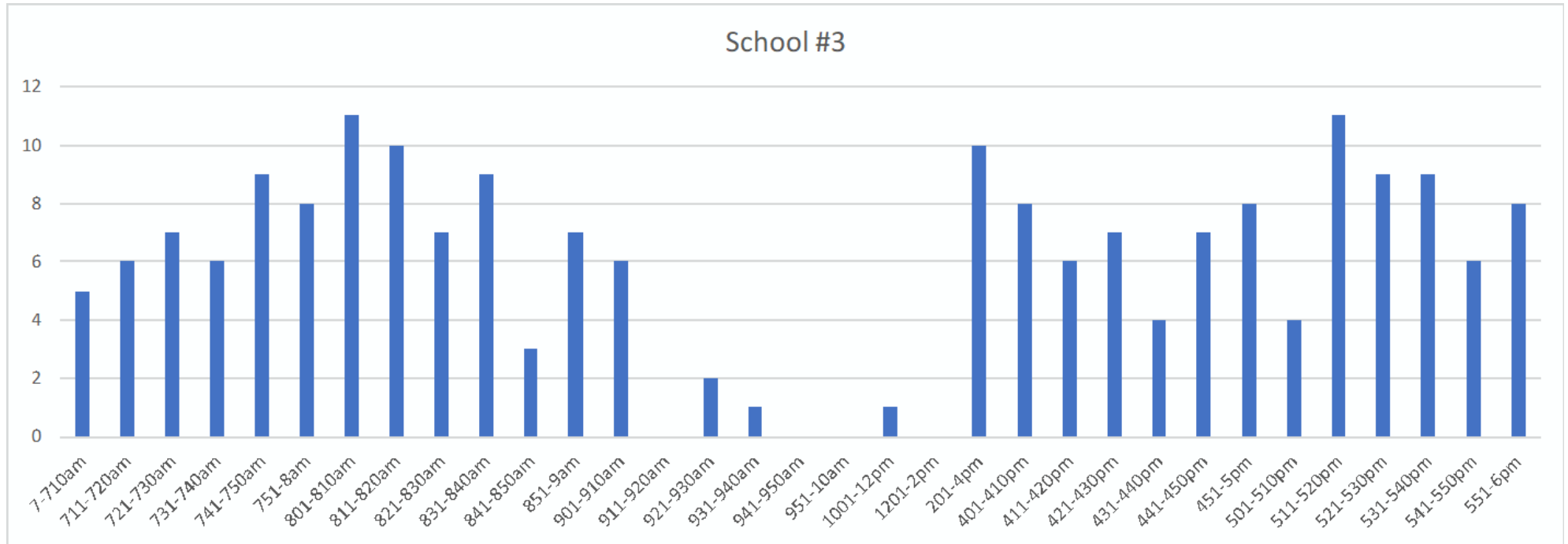
Total cars during afternoon pickup: 71

Total number of children enrolled in school: 128

Number of sets of siblings: 28

Number of children absent: 28

Maximum number of staff: 21



School #3 Information:

Total cars during morning drop off: 98

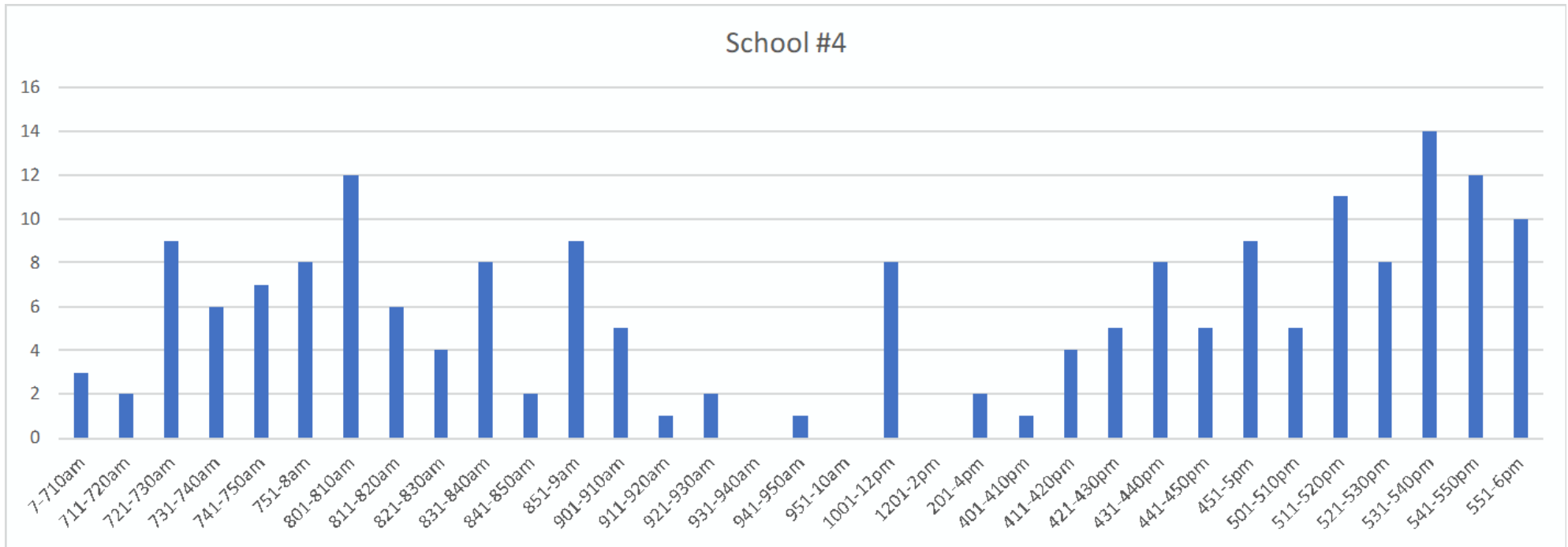
Total cars during afternoon pickup: 97

Total number of children enrolled in school: 163

Number of sets of siblings: 38

Number of children absent: 26

Maximum number of staff: 24



School #4 Information:

Total cars during morning drop off: 93

Total cars during afternoon pickup: 94

Total number of children enrolled in school: 137

Number of sets of siblings: 19

Number of children absent: 20

Maximum number of staff: 21

EXHIBIT H

DEED

Quitclaim Deed

Kelly Trust, LLC, a Massachusetts limited liability company, with a principal address of 11 Maitland Street, Milton, Massachusetts,

for consideration paid, and in full consideration of Two Million Seven Hundred Fifty Thousand and 00/100 dollars (\$2,750,000.00)

grants to Verma Holdings, LLC, a Massachusetts Company with a principal address of 21 Coach Road, North Attleboro, Massachusetts,

with **QUITCLAIM COVENANTS**

Lot A and Lot B as shown on a "Plan of Land, 193 Central Avenue, Milton, Massachusetts 02186 prepared for Kelly Trust LLC, 193 Central Avenue, Milton, MA by DeCelle-Burke-Sale & Associates, Inc dated June 10, 2020 and recorded at the Norfolk County Registry of Deeds at Plan Book 692, Page 64 on June 11, 2020.

Grantor certifies that Grantor is not treated as a corporation for federal income tax purposes.

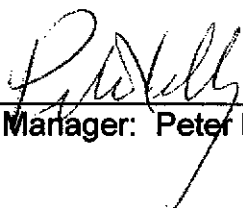
Being a portion of the premises conveyed to the Grantor by Deed recorded at the Norfolk County Registry of Deeds at Book 35749, Page 199.

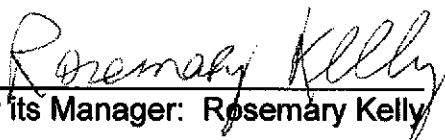
SIGNATURE PAGE TO FOLLOW

WITNESS our hand and seal this 25 day of February, 2021.

Kelly Trust LLC

Kelly Trust LLC

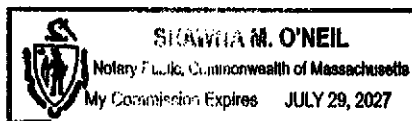

By its Manager: Peter Kelly

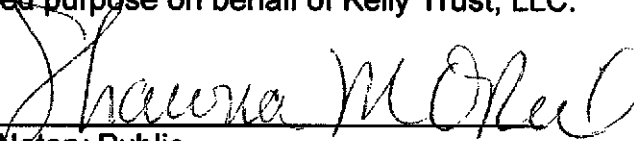

By its Manager: Rosemary Kelly

COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss

On this 25 day of February, 2021, before me, the undersigned notary public, personally appeared Peter Kelly, Manager as aforesaid, and proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the foregoing document, and acknowledged to me that he signed it voluntarily for its stated purpose on behalf of Kelly Trust, LLC.




Notary Public
My Commission Expires:

COMMONWEALTH OF MASSACHUSETTS

Norfolk, ss

On this 25 day of February, 2021, before me, the undersigned notary public, personally appeared Rosemary Kelly, Manager as aforesaid, and proved to me through satisfactory evidence of identification, which was personal knowledge, to be the person whose name is signed on the foregoing document, and acknowledged to me that he signed it voluntarily for its stated purpose on behalf of Kelly Trust, LLC.



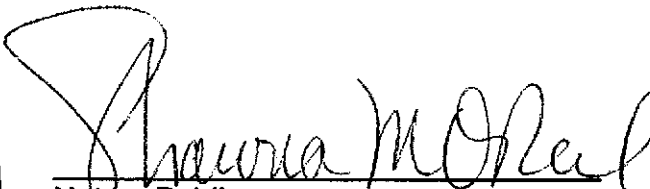
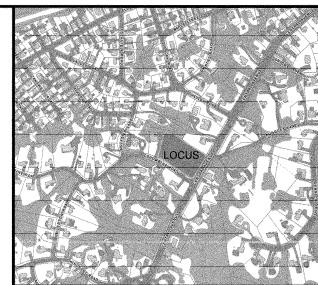
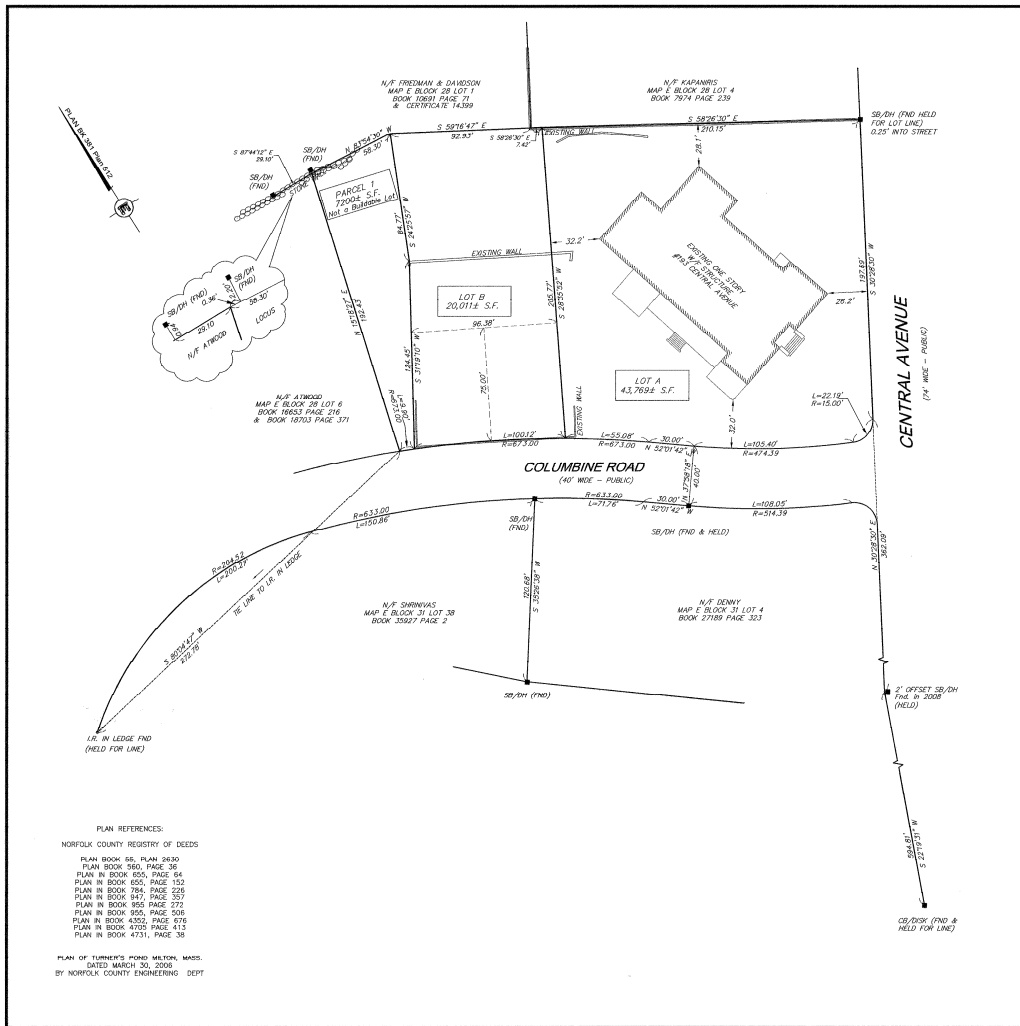

Notary Public
My Commission Expires:

EXHIBIT I

ANR PLAN



LOCUS MAP

Norfolk Registry of Deeds
 Boston, Mass.
 Received June 11, 2020
 With _____
 For REGISTRY USE ONLY
 Attest: *William P. Claff*
 Register

I CERTIFY THAT THIS PLAN CONFORMS WITH THE RULES AND REGULATIONS OF THE REGISTRAR OF DEEDS IN THE COMMONWEALTH OF MASSACHUSETTS

William P. Claff 6/10/2020
 REGISTERED LAND SURVEYOR DATE

APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED

For the
Town of Milton
Planning Board

William P. Claff
 6-10-2020
 MILTON PLANNING BOARD DATE

Planning Board Endorsement does not reflect compliance with applicable zoning requirements. No determination of wetlands has been made or intended by Planning Board endorsement.

DeCELLE-BURKE-SALA



& Associates, Inc.
 1286 Farnham Street, Suite 101, Cambridge, MA 02148
 (617) 405-1100 (C) (617) 405-5101 (F)



Claudio Pala
 CLAUDIO PALA, P.E.

GENERAL NOTES:

- LOCUS: ASSESSORS D E - 25 - 5
- RECORD OWNER: KELLY TRUST, LLC
 1993 REFERENCE: BOOK 504, PAGE 199
 PLAN REFERENCE: BOOK 300, PAGE 272
 BOOK: LOT: PAGE: 154
- THIS PLAN IS THE RESULT OF AN ON THE GROUND SURVEY PERFORMED BY TWO OFFICE SURVEYORS IN 2017. EXISTING UTILITIES WERE SHOWN IN THE SURVEYS. ARE FROM SURFACE OBSERVATION AND RECORD INFORMATION AND SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY LOCATING AND CORRECTING THE PROPOSED CONSTRUCTION ACTIVITY WITH 10'-SAFE AND THE APPROPRIATE UTILITY COMPANIES AND MAINTAINING THE EXISTING UTILITY SYSTEM IN SERVICE. DIS-SAVE SHALL BE NOTED FOR THE STATE OF MASSACHUSETTS. EXISTING UTILITIES ARE SHOWN AND AT CURBLINE THEIR ACCURACY OF THE ALL UTILITIES AND EXISTING UTILITIES ARE SHOWN. LOCATIONS AND ELEVATIONS OF UNDERGROUND UTILITIES WERE TAKEN FROM RECORD PLANS. THE CONTRACTOR SHALL VERIFY SOIL, LOCATION, AND AVOIDS OF UTILITIES AND SURVEYING AS REQUIRED PRIOR TO THE START OF CONSTRUCTION.
- THE LOT SHOWN DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE AS DETERMINED OR FROM 2500000000, DATED 6/8/14.
- PARCEL IS ZONED RESIDENCE B:
 MIN. LOT AREA = 20,000 S.F.
 MIN. FRONTING = 100 FT.
 MIN. FRONT YARD = 25 FT.
 MIN. SIDE YARD = 10 FT.
 MIN. REAR YARD = 30 FT.
 MAX. STORIES = 3.5
- PARCEL 1 IS TO BE COMBINED WITH LAND OF ARMOOD AND IS NOT TO BE CONSIDERED A BUILDING LOT.

PROJECT TITLE & LOCATION:

PLAN OF LAND
 193 CENTRAL AVE
 MILTON, MA 02186

PLAN TITLE:

REDIVISION OF LAND

PREPARED FOR:

KELLY TRUST, LLC
 173 CENTRAL AVENUE
 MILTON, MA 02186

DATE: FEBRUARY 8, 2019

REVISION:

JOB NUMBER: 17-07

SHEET 1 OF 1

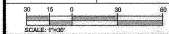


EXHIBIT J

GIS MAP



EXHIBIT K

CONSTRUCTION MANAGEMENT PLAN

Construction Management Plan

for

193 Central Avenue

Prepared for:

Milton Planning Board

Amendment to July 23, 2020 Site Plan Approval

193 Central Avenue (Goddard School)

DRAFT

Date: August 12, 2021

General

This Construction Management Plan ("CMP") has been prepared for the construction of a new building, site grading, installation of drainage, parking area, play areas and landscaping at 193 Central Avenue.

Site clearing from a fire which destroyed the Hoosic Club building on this site is underway.

The components of the project are site preparation including grading, installation of utilities, preparation of parking area and sidewalks, and building construction. The building will not have a basement and will consist of ground floor classroom and second floor administrative space and some program space.

The site contains 63,780 sf of land and is located in a Residence B District. It abuts residential lots on Columbine road and on Central Avenue.

The order of work will be: site preparation of grading including any required removal of trees; installation of drainage structures; construction of building foundation, preparation of front parking area and sidewalks and pavement binder; framing of building; finishing interior and exterior of building, finish landscaping and second coat of pavement.

The construction is expected to take approximately one year.

The Applicant and any successors in interest, the site contractor and individual subcontractors shall be required to adhere to the following requirements as they pertain to all aspects of construction activities to be performed at the site. These requirements shall be implemented for the duration of site construction and building.

Construction of this project shall be managed so as to minimize as much as reasonably possible impacts to the community, abutting property owners and local resource areas. The project will be subject to and adhere to the requirements of the approved site plan as well as any other applicable laws and regulations including the Town of Milton bylaw governing new construction.

This construction management plan is part of the terms of the site plan approval decision by the Milton Planning Board.

1. Responsible Person

While construction is underway the applicant shall be the contact, or shall designate an agent or employee with authority to issue any necessary directives to construction workers regarding construction activities. The Town's Building Commissioner shall have

contact information with respect to that responsible person. That representative shall be generally responsible for all construction activities, whether underway, or contemplated and shall be Applicant's liaison to the Town and to abutting property owners. The name and contact information of the representative shall be made available to the Building Commissioner, to the Town Planner, the Town's DPW Director, the Town Engineer and the Police Department. The representative shall deal promptly with any complaints with respect to these construction activities.

Applicant's representative shall notify the Town Planner of the expected start date for work.

The owner is Verma Holdings LLC whose manager is Sunny Verma.

The owner's project contractor shall be readily available by phone and this contact information will be provided on the Planning Board website and to the Town Departments listed above.

2. Start Work Notice

48 hours prior to the commencement of construction, the contractor shall provide written notice of the approximate start date to the Town's Building Department, Engineering and Public Works Departments and Town Planner and such notice shall be posted on the Town website so as to provide notice to abutters and other members of the public. Every two months during the construction process the owner will provide reports on progress and next steps which will be sent to the Town Planner to be posted on the Town website and will also be distributed by the owner via the email list of 193 Central Avenue neighbors .

3. Construction Hours

Hours of construction shall be Monday – Friday, 7:00 am – 6:00 pm and Saturday 8:00 am – 5:00 pm. Work will not take place on Sundays and legal holidays excepting holidays on which the stock market is open. Work is prohibited within the Central Avenue or Columbine Road right of way during weekends and legal holidays. There shall be no idling of construction vehicles before 7 a.m. Any exception to these hours of work shall be made only for emergency, or only if the Building Commissioner has approved the reasons for out of hours work in advance.

Construction truck traffic during morning and afternoon peak traffic times shall be minimized. Queuing and idling trucks shall not occur offsite unless unavoidable, and any on site queuing or idling shall be only for good cause.

There shall be no construction truck traffic before 7 a.m. Reasonable effective steps shall be taken to concentrate construction truck traffic during late morning/early afternoon hours on weekdays.

4. Parking

Construction parking shall be on site under the control of Applicant or his agent. No workers, contractors or other subcontractors shall be permitted to park on public roadways surrounding the development or other than on-site once site access has been established. Satellite parking at a private parking facility shall be permissible. Effective measures shall be taken to maintain employee parking areas and the parking access route in as dust-free a condition as reasonably possible during dry conditions and in conveniently passable condition in wet and snow conditions. Parking areas shall be remote from dwellings of abutters to the extent possible. Any exceptions to these parking rules shall be only for good cause with the approval of the Building Commissioner. At the beginning of the project while access on site is prepared, parking in front of the property on Central Avenue is allowed. Overnight parking on the street shall not be allowed without permission from the Town, given in accordance with the usual procedures.

Construction vehicles not in use shall be turned off. Workers shall not congregate or loiter on Central Avenue or Columbine Road.

5. Controllable Noise and Pollution

The Applicant shall institute effective measures to control unnecessary noise and pollution during construction activities. Workers, contractors and subcontractors shall be prohibited from playing music or third party talk at levels not reasonably necessary for individual use. Noisy construction equipment used on-site shall be turned off when not in use or about to be used. Loud speakers shall not be used on site. Traffic controls shall be established to eliminate unnecessary backing movements and use of back-up horns. Priority shall be given to respecting residents' rights to the quiet enjoyment of their properties.

Although construction will unavoidably increase noise levels in the area, the contractors shall use all reasonable efforts to minimize the impact of noise during construction, including the following.

- a. When feasible, equipment that is not in use shall be turned off.
- b. Noise-creating equipment shall be located as far as possible from occupied residences.
- c. Engine housing panels on all equipment shall be kept closed.
- d. Electricity shall be obtained from the electric grid as soon as feasible to reduce the use portable generators.
- e. Construction vehicles and equipment shall not be turned on for the purpose of being warmed up until their use is imminent.

6. Rock Removal

If any rock must be removed for this project methods other than blasting shall be used, and the least intrusive methods possible shall be employed.

The hours of such work will be limited to 9 a.m. to 4 p.m.

7. Street Closings/Construction within Public Right of Way

Central Avenue and Columbine Road shall remain open and operational at all times during construction. If temporary closures are required, the contractor shall obtain prior approval from the Town in accordance with usual procedures and shall comply with all conditions imposed by the Town with respect to the closing, including the use of police details/flagmen, as appropriate. Trench excavations associated with tie-ins to water lines shall be patched with bituminous pavement. Roadway plates shall be used when trenches must remain open either overnight or over a weekend before trenches are able to be filled.

8. Site Safety/Access

Prior to the start of construction activities, the contractor shall install and maintain construction fencing for roadway access points. Access to the site shall be from Central Avenue, not from Columbine Road. At the end of each day, access gates in the fences around these areas shall be closed and secured with lock and chain.

The project will comply with state law on trench excavation articulated in 520CMR 14: "Excavation and Trench Safety".

9. Erosion and Sediment Control Measures

The project shall comply with the erosion and sediment control measures in the Town's Stormwater Bylaw and the requirements of any other applicable state or federal laws or regulations.

10. Dust and Wind Controls

Dust control shall be implemented on site as necessary. Repetitive treatment shall be applied when needed to accomplish control when dust conditions exist. If field observations by the owner, his agent or the Building Commissioner indicate that additional protection from wind erosion (in addition to, or in place of watering) is necessary, additional dust suppressant measures shall be implemented forthwith. The following list of control measures may be implemented on site to limit the generation of dust as needed:

- Watering
- Establishment of Vegetative Cover
- Mulch or Spray-On Soil Treatments
- Tillage – Stone

Street cleaning shall also be used as necessary to control dust. Paved areas that have soil or dust on them from the construction site shall be cleaned as needed.

11. Materials Storage and earth stockpiling to block noise

The project shall comply with the stockpiling requirements in the Town's Stormwater Bylaw.

No earth stockpiling, material and equipment storage or parking shall be allowed within the drip line of existing trees to remain on the site.

12. Clearing of Site

Site clearing has taken place following the release of the site after the building was destroyed by fire.

13. Installation of Stormwater Drainage System

The rear portion of the lot is to be graded first and then drainage structures are to be installed in the rear portion of the lot, all as shown on the Site Plan. If possible, the perimeter fencing along the Atwood lot line proposed for the back of the site shall be installed before beginning this work, or as soon as possible after work begins.

14. Grading and underground utility work as shown on the Site Plan shall be completed next.

Grading work shall comply with the Town's Stormwater Bylaw.

15. Tree Protection Areas for Trees to Remain, on the perimeter of the work area

Temporary fencing shall be installed along the drip line (outer perimeter branches) of trees to remain, in locations bordering or within the work areas. If fencing is not possible then roots shall be protected by protective matting or a double layer of plywood.

No construction materials shall be stored in these protection areas.

Trees and stumps that are not going to be re-used shall be removed from the site. No burning is permitted on site.

17. Construction Period Solid Waste and Recycling

Any demolition activity shall comply with local, state and federal permit requirements. To the extent that excavated materials such as trees and roots require disposal off site, these materials shall be segregated on site for disposal. Materials that can be recycled will be placed in dumpsters and removed to a recycling facility for processing. Other materials shall be placed in dumpsters and transported and disposed of at an approved solid waste facility.

18. Utilities

Site utilities, including any temporary service connections, shall be constructed in a coordinated fashion so as not to impede or interrupt services, including storm drainage, to residents. Applicant's representative shall coordinate the efficient installation of all water installations as well as all private utility services (gas, telephone, cable, electric, etc.).

19. Building Construction

This project is for the construction of a single building and completion of site improvements including parking, sidewalks and playgrounds. Work may take place simultaneously on the site and the building. The building construction will follow a general construction sequence of foundation, framing, exterior and interior finishes, similar to single. Home construction.

19. Schedule

The following is a *tentative* schedule, which is subject to change based on weather and other conditions as well as when a building permit issues:

Mobilization: fall, 2021

Set up erosion control and temporary fencing:

Site Clearing and Grading:

Install Building Foundation and begin building construction:

Construct parking area, driveways and sidewalks:

Install pavement binder:

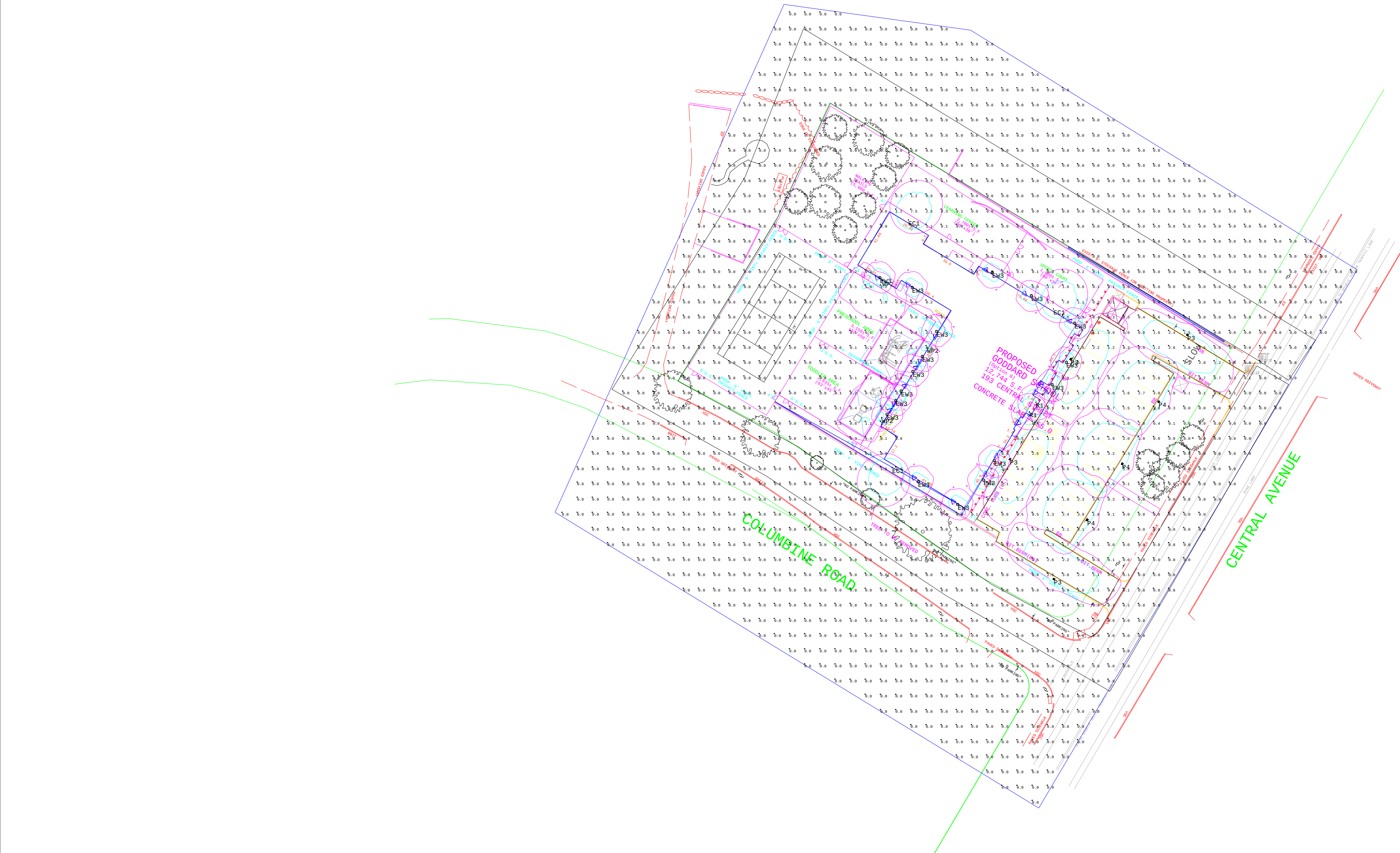
Complete building construction:

Complete site work including all landscaping: end of summer, 2022

Target date for completion of all work: September, 2022

EXHIBIT L

PHOTOMETRIC PLAN AND LIGHTING SPECIFICATIONS



Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description
	4	P3	SINGLE	N.A.	0.500	BEACON VP-S-24L-39-3K7-4-BC CD UNV A BLS/SSA-B-10-40-A-1-B3-BLS
	3	P4	SINGLE	N.A.	0.500	BEACON VP-S-24L-39-3K7-4-BC CD UNV A BLS/SSA-B-10-40-A-1-B3-BLS
	3	WP2	SINGLE	N.A.	1.000	HUBBELL LNC-5LU-3K-4 BLT PCU
	2	R1	SINGLE	N.A.	1.000	LITON LCMPD5RW-UE-D10 T30
	17	EW3	SINGLE	466.23	1.000	MODERN FORMSWS-28516-BK
	3	EC1	SINGLE	N.A.	2.000	HUBBELL ML-2L3K-1 WH

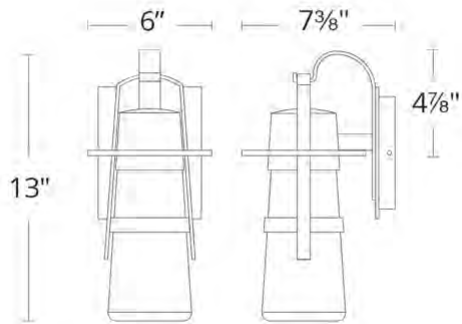
Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Object_1_Planar	Illuminance	Fc	0.21	7.5	0.0	N.A.	N.A.
Driveway and parking	Illuminance	Fc	1.48	5.0	0.1	14.80	50.00
Spill	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.



Revisions			
#	Date	Comments	

Drawn By:RK	Checked By:	Date:8/24/2021	Scale:
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GODDARD SCHOOL	PARKING
----------------	---------



WS-W28514

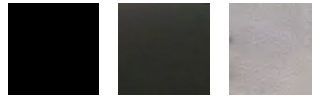
Project:

Location:

Fixture Type:

Catalog Number:

AVAILABLE FINISHES:



Balthus

WS-W28514

PRODUCT DESCRIPTION

Vintage inspiration meets modern technology on this refined transitional sconce, perfect for lighting the path to your reception hall, residence or restaurant. High-performance LEDs stationed inside emit powerful, energy-efficient light through clear, hammered glass for a shimmering visual effect the eponymous painter would be proud of

FEATURES

- ACLED driverless technology
- Clear mouth-blown hammered glass
- 277V options available for 21" only; not available for 14" or 16"
- IDA Dark Sky compliant

SPECIFICATIONS

Rated Life	54000 Hours
Standards	ETL, cETL, Wet Location Listed, IP65, Title 24 JA8: 2019 Compliant, Dark Sky Friendly
Input	120 VAC, 50/60Hz
Dimming	ELV
Color Temp	3000K
CRI	90
Construction	Aluminum hardware, Clear hammered mouth-blown glass

Model & Size	Color Temp	Finish	LED Watts	LED Lumens	Delivered Lumens
WS-W28514 13"	3000K 3000K	BK Black ORB Oil Rubbed Bronze	10.6W 10.6W	440 440	431 431

Example: **WS-W28514-ORB**

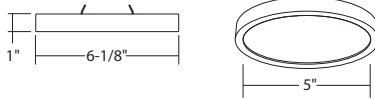
For custom requests please contact customs@modernforms.com


 TYPE
 CATALOG#

PROJECT

LCMPD5R - 5" LUMENPAD ROUND LED DOWNLIGHT, SURFACE MOUNT, 1000LM (11W)

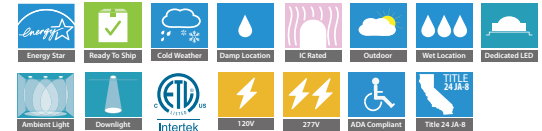
- Easily mounts to standard octagonal J-Box.
- Super Slim 3/4" thick design.
- No-glare side lit illumination.
- Die-cast aluminum frame.
- Suitable for temperature down to -4°F/-20°C
- WET LOCATION – For covered ceiling mount only
- 5-Year Warranty
- New Bronze finish
- California Title 24/JA8 Compliant⁴



ORDERING – Example: LCMPD5RW-T30

LCMPD5R

Fixture Finish Dimming Color Temperature Material



Finish³

 White **W**
 Black **B**
 Silver **S**
 Bronze **BZ**

Dimming

 ELV Dimming (120V)
 0-10V Dimming (120V/277V)

Blank²
UE-D10⁴

Color Temperature

 2700K **-T27**
 3000K **-T30²**
 3500K **-T35**
 4000K **-T40**
 ColorSelect **-TS354²**
 3000K/3500K/4000K

Material

 Die-Cast Aluminum **Blank**
 Non-Conductive **-PC¹**
 Polycarbonate

¹Special Order for PC.

³Field paintable ring options available. Consult factory.

⁴(UE-D10) dimming option is not California Title 24/JA8 compliant.

Consult Factory for Remote Emergency Battery Back Up Option.

SPECIFICATION

Application

5" Architectural Surface Mount Downlight is perfect for Retrofit, New Construction and Remodel Applications in low to medium height ceilings. Super thin profile is unobtrusive in design and has low glare. Lens is a polycarbonate frosted white lens. Suitable for closet installation.

Housing

Die-cast aluminum frame. Optional (-PC) Non-Conductive Polycarbonate is available to minimize the risk of electrical shock from housing.

Mounting

Universal mounting hardware allows mounting to all standard octagonal electrical junction boxes. 277V 0-10V Dimming Driver (UE-D10) has external 2-1/8" by 7/8" Driver. WET LOCATION – For covered ceiling mount only.

Lumen Maintenance

Minimum 50,000 hours L70 life based on ANSI TM-21 calculations from LM80 standardized test results.

Electrical Components

Thermal Management - Effective thermal dissipation facilitated by integral heat sink design for maximum heat rejection to provide long LED life.

Temperature Rating - Maximum temperature 90°C. Minimum temperature, -20°C.

Driver - Standard dimming option. Smoothly dims down to 5% with standard Low Voltage dimmers. Works with standard electronic low voltage (ELV) dimmers. Factory qualified for use with Lutron brand dimmers: SELV300P, DVELV-300P, MAELV-600 and NELV-450.

Color Temperature - Available in 2700K, 3000K, 3500K, 4000K, and ColorSelect 3000K/3500K/4000K, 90 CRI (Color Rendering Index). LED's binned according to ANSI C78 377A for color temperature and chromaticity ranges.

Finishes

High quality powder coat finish for maximum durability. Available in White, Black, Silver and Bronze.

Certifications and Listings

ETL/cETL listed. Suitable for Wet Location Installations (Covered Ceiling Mount). Suitable for use in closets, compliant with NFPA® 70, NEC® Section 410.16 (A)(3) and 410.16 (C)(5).

Caution

Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

Warranty

Covered by a 5-Year Warranty to be free of defects in materials and craftsmanship. Recommended for applications where ambient temperatures do not exceed 35°C. installations exceeding this temperature will result in reduced LED lamp life and avoided warranty.

Title 24/JA8 Compliant

LCMPD5R-T27
LCMPD5R-T30
LCMPD5R-T35
LCMPD5R-T40
LCMPD5R-TS354

Energy Star Qualified

LCMPD5RW-T27
LCMPD5RW-T30
LCMPD5RW-T35
LCMPD5RW-T40

Ready to Ship Items

LCMPD5RW-T30
LCMPD5RW-T35
LCMPD5RW-T40

LCMPD5RW-T30-PC
LCMPD5RW-T35-PC
LCMPD5RW-T40-PC

LCMPD5RWUE-D10-T30
LCMPD5RWUE-D10-T35
LCMPD5RWUE-D10-T40

LCMPD5RWUE-D10-T30-PC
LCMPD5RWUE-D10-T30-PC
LCMPD5RWUE-D10-T30-PC



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER S

SMALL VIPER LUMINAIRE

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations



*3000K and warmer CCTs only



See Certification Specifications

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Manufactured with die cast aluminum
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3,000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- External hardware is corrosion resistant

OPTICS

- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Ambient operating temperature -40°C to 25°C

ELECTRICAL (CONTINUED)

- Power factor is $\geq .90$ at full load
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components
- Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Surge protection: 20kA
- Lifeshield™ Circuit ([see Electrical Data](#))

CONTROLS

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration
- Available with [Energeni](#) for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night

OPTICS
STRIKE



RELATED PRODUCTS

[Viper Large](#)

CONTROLS (CONTINUED)

- In addition, Viper can be specified with [SiteSync™ wireless control system](#) for reduction in energy and maintenance costs while optimizing light quality 24/7
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

CERTIFICATIONS

- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 8750
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Commercial and Industrial Outdoor Lighting Warranty](#) for additional information

KEY DATA	
Lumen Range	4,045–16,216
Wattage Range	39–136
Efficacy Range (LPW)	100–124
Reported Life (Hours)	L70>60,000
Input Current Range (Amps)	0.1–1.1

VIPER S

SMALL VIPER LUMINAIRE

ORDERING GUIDE

Example: VPS-24L-55-4K7-4W-UNV-A-DBT-TL-GENI-04-BC

CATALOG #

VPS	LED Engine	CCT/CRI ⁷	Distribution	Rotation	Voltage
Series					
VPS Viper Small	24L-39 39W, LED array	3K7 3000K, 70 CRI	FR Type 1/Front Row	Blank No rotation	UNV 120-277V
	24L-55 55W, LED array	4K7 4000K, 70 CRI	2 Type 2	L Optic rotation left ⁵	347 347V
	36L-65 65W, LED array	5K7 5000K, 70 CRI	3 Type 3	R Optic rotation right ⁵	480 480V
	36L-80 80W, LED array		4F (formerly 4) Type 4		
	48L-110 110W, LED array		4W Type 4 Wide		
	60L-136 136W, LED array		5QM Type 5QM		
			5R Type 5R (rectangular)		
			5W Type 5W (round wide)		
			TC Tennis Court		
			CR Corner Right		
			CL Corner Left		

Mounting	Color	Network Control Options	Options
A Rectangular Arm (formerly RA) for square or round pole	BLT Black Matte Textured	NXWE NX Wireless Enabled (module + radio)	BC Backshield (available for FR, 2, 3, 4, 4W Optics)
MAF Mast Arm Fitter (formerly SF2) for 2 3/8" OD horizontal arm	BLS Black Gloss Smooth	NXSPW_F Nx Wireless, PIR Occ. Sensor, Daylight Harvesting ⁷	CD Continuous Dimming
K Knuckle (formerly PK2) limit to 30° tilt or 2 3/8" OD horizontal arm or vertical tenon	DBT Dark Bronze Matte Textured	WIR Wireless Controls, wiSCAPE	F Fusing
WB Wall Bracket	DBS Dark Bronze Gloss Smooth	SWP SiteSync Pre-Commission ^{1,4}	TB Terminal Block
AD Universal Arm for square pole	GTT Graphite Matte Textured	SWPM_F SiteSync Pre-Commission w/ Sensor ^{1,2,4}	
AD3 Adapter for 2.4"-4.1" round pole	LGS Light Grey Gloss Smooth	Control Options	
AD4 Adapter for 4.2"-5.3" round pole	PSS Platinum Silver Smooth	GENI-XX ENERGENI ³	
AD5 Adapter for 5.5"-5.9" round pole	WHT White Matte Textured	7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others)	
AD6 Adapter for 6.0"-6.5" round pole	WHS White Gloss Smooth	7PR-SC 7-Pin Receptacle w/Shorting Cap	
	VGTT Verde Green Textured	7PR-TL 7-Pin Receptacle w/Twist-Lock® photo control	
	Color Option	Sensors	
	CC Custom Color	BTS_F Bluetooth Programmable, PIR Occupancy/Daylight Sensor, 360° lens ⁷	
		BTSO_F Bluetooth Programmable, PIR Occupancy/Daylight Sensor, 360° lens, up to 12' mounting height ⁸	
		NXSP_F NX, PIR Occ. Sensor, Daylight Harvesting ⁷	
		SCP_F Programmable Occupancy Sensor w/ daylight control ^{1,2,6}	

House Side Shield Accessories

- ☐ HSS/VP-S/90-FB/XXX 90° shield front or back
- ☐ HSS/VP-S/90-LR/XXX 90° shield left or right
- ☐ HSS/VP-S/270-FB/XXX 270° shield front or back
- ☐ HSS/VP-S/270-LR/XXX 270° shield left or right
- ☐ HSS/VP-S/360/XXX Full shield

Replace XXX with notation for desired finish color. Refer to page 8 for shield images.

Mounting Accessories

- ☐ VPL-AD-RPA3 2.4"-4.1" Round Pole Adapter for AD arm
- ☐ VPL-AD-RPA4 4.2"-5.3" Round Pole Adapter for AD arm
- ☐ VPL-AD-RPA5 5.5"-5.9" Round Pole Adapter for AD arm
- ☐ VPL-AD-RPA6 6.0"-6.5" Round Pole Adapter for AD arm

Notes:

- Not available with other wireless control or sensor options
- Specify mounting height; 8 = 8' or less, 40 = 14' to 30'
- Specify routine setting code (example GENI-04). See [ENERGENI brochure](#) and [instructions](#) for setting table and options. Not available with sensor or SiteSync options
- Specify group and zone at time of order. See [www.hubbelllighting.com/sitesync](#) for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
- Only available with FR, 2, 3, 4, 4W and 5R distributions
- Specify mounting height; 8=8'; 30=30'
- Replace "_" with "14" for up to 14' mounting height, "40F" for 15-40' mounting height
- Replace "_" with "12" for up to 12' mounting height

Accessories and Services (Ordered Separately)

- ☐ SCP-REMOTE Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor
- ☐ SWUSB* SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
- ☐ SWTAB* Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node
- ☐ SWBRG SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested
- ☐ SW7PR+ SiteSync 7-Pin on fixture module On/Off/Dim, Daylight Sensor 120-480VAC
- ☐ BIRD-SPIKE-3 Bird Spikes

* When ordering SiteSync at least one of these two interface options must be ordered per project.
+ Available as a SiteSync retrofit solution for fixtures with an existing 7-pin receptacle.

Hubbell Control Solutions — Accessories (Sold Separately)

NX Distributed Intelligence™

- ☐ NXOFM-1R1D-UNV On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC

wiSCAPE® Lighting Control

- ☐ WIR-RME-L On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110-480VAC

For additional information related to these accessories please visit [www.hubbellcontrolsolutions.com](#). Options provided for use with integrated sensor; please view specification sheet ordering information table for details.

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER S

SMALL VIPER LUMINAIRE

CONTROLS

SiteSync — Precommissioned Ordering Information:

When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit [the SiteSync family page on our website](#) or contact Hubbell Lighting tech support at 864-678-1000.



SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-L/80L-235/4K7/3/UNV/A/DB/SWP/
VP-L/80L-235/4K7/3/UNV/A/DB/SWPM-40F/

SiteSync only
SiteSync with Motion Control

SiteSync 7-Pin Module:

- SiteSync features in a new form
- Available as an accessory for new construction or retrofit applications (with existing 7-Pin receptacle)
- Does not interface with occupancy sensors



SW7PR

NX Distributed Intelligence™ Lighting Controls:

Supports both indoor and outdoor applications in a variety of deployment options: wired, wireless and hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync Color Tuning Technology.



NX Integrated Controls Reference								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wireless								
NXOFM-1R1D-UNV	SCLNX	Yes	Yes	Yes	Yes	Yes	Yes	Yes, Bluetooth App

wiSCAPE™:

Supports remote management, monitoring and metering of outdoor wireless lighting applications such as smart campuses, smart cities, parking lots, parking lots and roadways.



wiSCAPE Reference								
wiSCAPE Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0–10V Dimming	On/off Control	Bluetooth® App Programming
Networked – Wireless								
WIR-RME-L	WIR-RME-L	Yes	Yes	No	Yes	Yes	Yes	wiSCAPE Gateway

VIPER S

SMALL VIPER LUMINAIRE

DELIVERED LUMENS

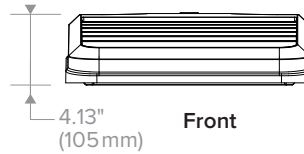
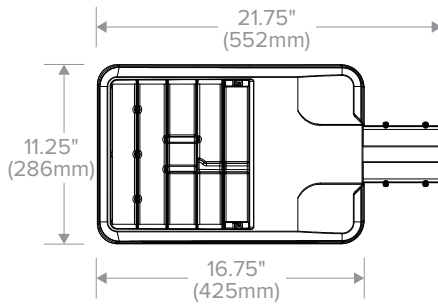
# of LEDs	DRIVE CURRENT (mA)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
24	500mA	39W	FR	4689	120	1	0	0	4665	120	1	0	0	4432	114	1	0	0
			2	4523	116	1	0	1	4500	115	1	0	1	4275	110	1	0	1
			3	4436	114	1	0	1	4414	113	1	0	1	4194	108	1	0	1
			4F	4362	112	1	0	2	4340	111	1	0	2	4123	106	0	0	2
			4W	4280	110	1	0	2	4258	109	1	0	2	4045	104	1	0	2
			5QM	4442	114	2	0	1	4420	113	2	0	1	4199	108	2	0	0
			5R	4472	115	2	0	2	4450	114	2	0	2	4227	108	2	0	2
			5W	4335	112	3	0	1	4336	111	3	0	1	4114	105	3	0	1
			TC	4561	117	1	0	1	4538	116	1	0	1	4311	111	1	0	1
			CL	4758	122	1	0	2	4758	122	1	0	2	4329	111	1	0	1
24	700 mA	55W	CR	4773	122	1	0	2	4773	122	1	0	2	4361	112	1	0	1
			FR	6357	118	1	0	1	6486	120	1	0	1	5804	107	1	0	1
			2	6132	114	1	0	1	6257	116	1	0	2	5599	104	1	0	1
			3	6015	111	1	0	2	6137	114	1	0	2	5492	102	1	0	2
			4F	5921	110	1	0	2	6034	112	1	0	2	5400	100	1	0	2
			4W	5793	108	1	0	2	5909	110	1	0	2	5272	98	1	0	2
			5QM	6022	112	2	0	1	6145	114	2	0	1	5499	102	2	0	1
			5R	6063	112	3	0	3	6187	115	3	0	3	5536	103	3	0	3
			5W	5908	109	3	0	1	6028	112	3	0	1	5908	102	3	0	1
			TC	6183	113	1	0	1	6309	118	1	0	1	5645	105	1	0	1
36	560 mA	65W	CL	6707	122	1	0	2	6707	122	1	0	2	6117	111	1	0	2
			CR	6729	122	1	0	2	6729	122	1	0	2	6143	112	1	0	2
			FR	7864	121	1	0	1	8041	124	1	0	1	7189	111	1	0	1
			2	7586	117	1	0	2	7757	119	1	0	2	6934	107	1	0	2
			3	7441	114	1	0	2	7609	117	1	0	2	6802	105	1	0	2
			4F	7317	110	1	0	2	7482	112	1	0	2	6688	100	1	0	2
			4W	8690	108	1	0	2	8864	110	1	0	2	7908	98	1	0	2
			5QM	7450	115	3	0	1	7618	117	3	0	1	6810	105	3	0	1
			5R	7501	115	3	0	3	7670	118	3	0	3	6857	105	3	0	3
			5W	7309	112	3	0	2	7473	115	3	0	2	6681	103	3	0	1
36	700 mA	80W	TC	7540	116	1	0	1	7694	118	1	0	1	7694	122	1	0	2
			CL	8179	126	2	0	2	8179	126	2	0	2	7467	115	1	0	2
			CR	8205	126	2	0	2	8205	126	2	0	2	7492	115	1	0	2
			FR	9535	118	1	0	1	9730	120	1	0	1	8706	107	1	0	1
			2	9197	114	1	0	2	9385	116	1	0	2	8398	104	1	0	2
			3	9022	111	1	0	2	9206	114	1	0	2	8238	102	1	0	2
			4F	8871	110	1	0	2	9052	112	1	0	2	8100	100	1	0	2
			4W	11587	108	1	0	3	11819	110	1	0	3	10544	98	1	0	3
			5QM	9033	112	3	0	1	9217	114	3	0	1	8248	102	3	0	1
			5R	9095	112	3	0	3	9280	115	3	0	3	8304	103	3	0	3
48	700 mA	110W	5W	8861	109	3	0	2	9043	112	3	0	2	8092	100	3	0	2
			TC	9275	115	1	0	1	9464	118	1	0	1	8468	105	1	0	1
			CL	10060	126	2	0	2	10060	126	2	0	2	9184	115	2	0	2
			CR	10093	126	2	0	2	10093	126	2	0	2	9215	115	2	0	2
			FR	12713	118	1	0	1	12973	120	2	0	1	11608	107	1	0	1
			2	12263	114	2	0	2	12513	116	2	0	2	11197	104	2	0	2
			3	12029	111	2	0	2	12275	114	2	0	2	10984	102	1	0	2
			4F	11828	110	1	0	3	12069	112	1	0	3	10800	100	1	0	2
			4W	11609	108	1	0	3	11841	110	1	0	3	10564	98	1	0	3
			5QM	12044	112	3	0	2	12290	114	3	0	2	10997	102	3	0	1
60	700 mA	136W	5R	12126	112	3	0	3	12374	115	3	0	3	11072	103	3	0	3
			5W	12126	109	4	0	2	12057	112	4	0	2	10789	100	4	0	2
			RC	12366	115	1	0	2	12619	118	1	0	1	11290	105	1	0	2
			CL	13414	122	2	0	3	13414	122	2	0	3	12246	111	2	0	2
			CR	13458	122	2	0	3	13458	122	2	0	3	12287	112	2	0	2
			FR	15891	117	2	0	2	16216	120	2	0	2	14511	107	2	0	1
			2	15329	113	2	0	2	15642	116	2	0	2	13997	103	2	0	2
			3	15037	111	2	0	3	15344	113	2	0	3	13730	101	2	0	3
			4F	14784	109	1	0	3	15086	111	1	0	3	13500	100	1	0	3
			4W	14802	109	2	0	3	15104	112	2	0	3	13515	100	2	0	3

VIPER S

SMALL VIPER LUMINAIRE

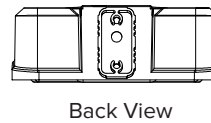
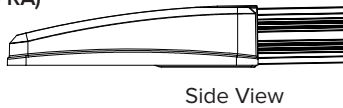
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

DIMENSIONS

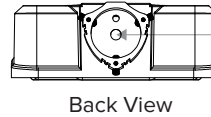
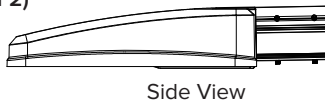


Weight	15.0 lbs (6.8 kg)
EPA	.67 ft ²

A Arm (formerly RA)

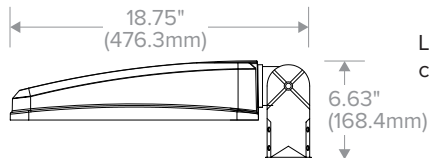


MAF (formerly SF2)



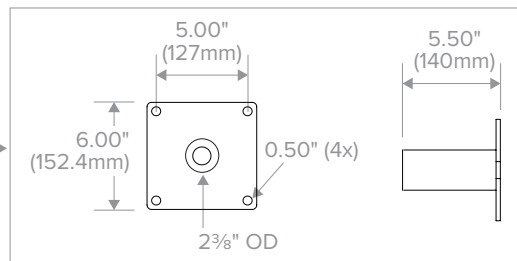
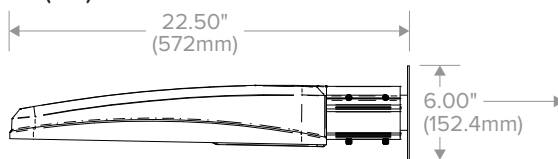
Accepts 2 3/8" OD tenon, min 5" long.

2 3/8" Adjustable Knuckle (K) (formerly PK2)

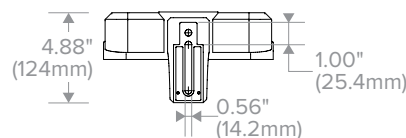
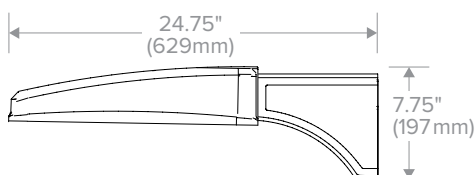


Limit to 30° tilt. Sensor, photocell and wireless controls should not be tilted above horizontal.

Wall Bracket (WB)



AD Decorative Arm



See [page 9](#) for mounting details.

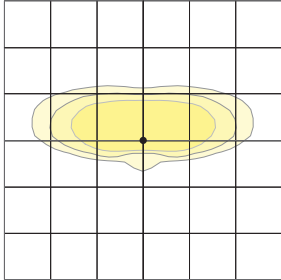
VIPER S

SMALL VIPER LUMINAIRE

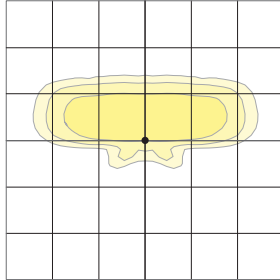
PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

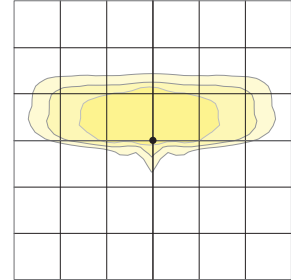
Type FR – Front Row/Auto Optic



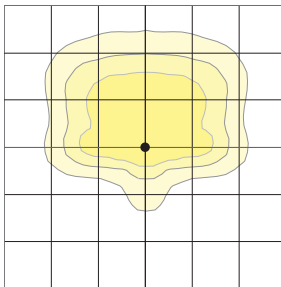
Type 2



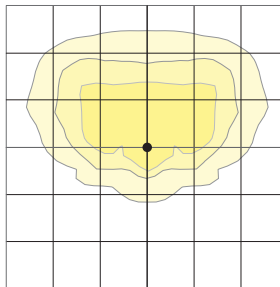
Type 3



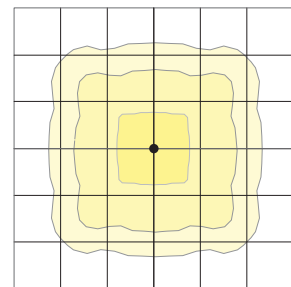
Type 4



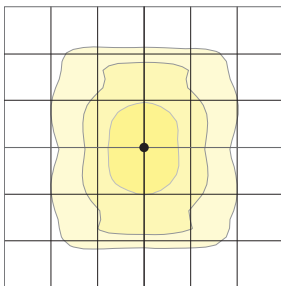
Type 4 Wide



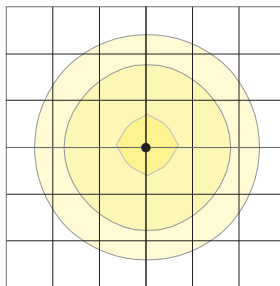
Type 5QM



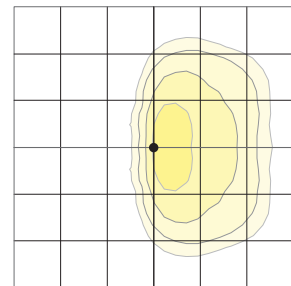
Type 5R (rectangular)



Type 5W (round wide)



Type TC



VIPER S

SMALL VIPER LUMINAIRE

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
24	1	500 mA	120	39	0.33
			277		0.14
			347		0.11
			480		0.08
24	1	700 mA	120	55	0.5
			277		0.2
			347		0.2
			480		0.1
36	1	525 mA	120	65	0.65
			277		0.28
			347		0.22
			480		0.16
		700 mA	120	80	0.7
			277		0.3
			347		0.2
			480		0.2
48	1	700 mA	120	110	0.9
			277		0.4
			347		0.3
			480		0.2
60	1	700 mA	120	136	1.1
			277		0.5
			347		0.4
			480		0.3

PROJECTED LUMEN MAINTENANCE						
Ambient Temp.	0	25,000	50,000	TM-21-11 60,000 ¹	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.97	0.95	0.95	0.92	>377,000

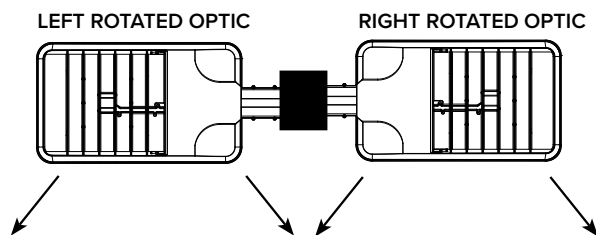
¹ Projected per IESNA TM-21-11.
 Data references the extrapolated performance projections for the 60 LED base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

LIFESHIELD™ CIRCUIT

Protects luminaire from excessive temperature. The device activates at a specific, factory-preset temperature and progressively reduces power over a finite temperature range. Operation is smooth and undetectable to the eye. Thermal circuit is designed to “fail on”, allowing the luminaire to revert to full power in the event of an interruption of its power supply or faulty wiring connection to the drivers. The device can co-exist with other 0–10V control devices (occupancy sensors, external dimmers, etc.)

ADDITIONAL INFORMATION

ROTATION OPTIONS



VIPER S

SMALL VIPER LUMINAIRE

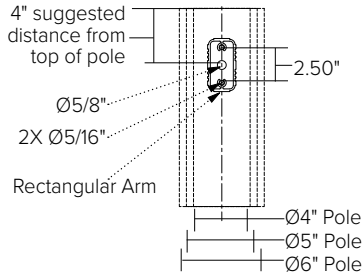
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

ADDITIONAL INFORMATION (CONTINUED)

DRILL PATTERN

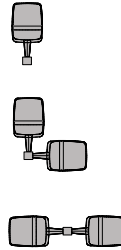
RECTANGULAR ARM (A)

Compatible with Pole drill pattern B3

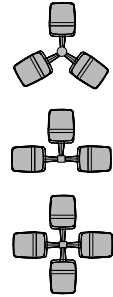


EPA

Config.	EPA
1	.67
2 @ 90°	1.06
2 @ 180°	1.34



Config.	EPA
3 @ 120°	1.68
3 @ 90°	1.73
4 @ 90°	2.12



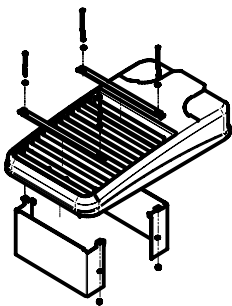
TENON TOP POLE BRACKET ACCESSORIES (ORDER SEPARATELY)

(2 3/8" OD tenon)

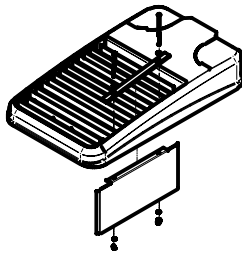
TENON TOP POLE BRACKET ACCESSORIES (Order Separately)

- ☐ **SETAVP-XX** Square tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **RETAVP-XX** Round tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **SETA2XX** Square tenon adapter (4 at 90°) for AD - Universal Arm mounting option only
- ☐ **RETA2XX** Round tenon adapter (4 at 90°) for AD3 - Universal Arm mounting option only

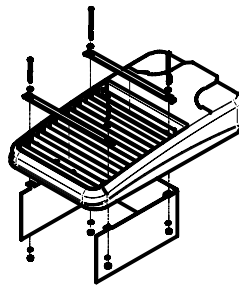
HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



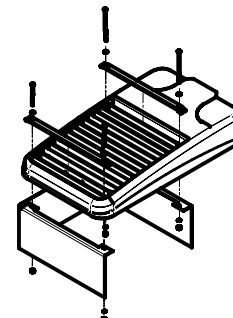
HSS/VP-S/90-FB/XXX
90° shield front or back
(2 shields shown)



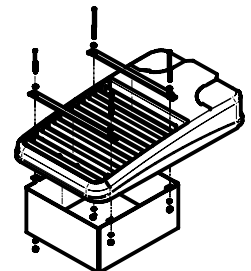
HSS/VP-S/90-LR/XXX
90° shield left or right
(1 shield shown in left orientation)



HSS/VP-S/270-FB/XXX
270° shield front or back
(1 shield shown in back orientation)



HSS/VP-S/270-LR/XXX
270° shield left or right
(1 shield shown in right orientation)



HSS/VP-S/360/XXX
Full shield
(1 shield shown)

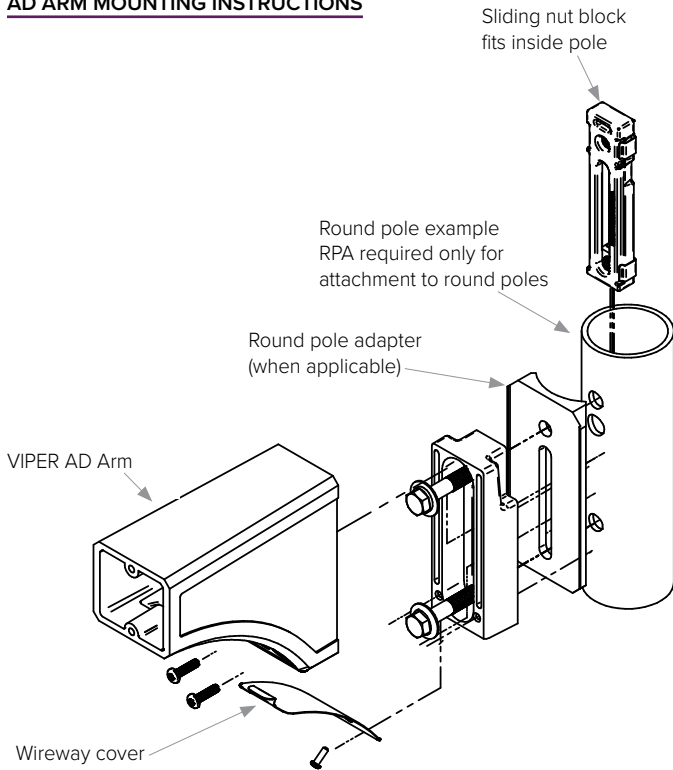
VIPER S

SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

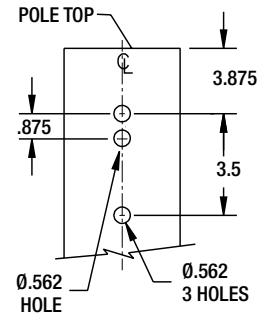
ADDITIONAL INFORMATION (CONTINUED)

AD ARM MOUNTING INSTRUCTIONS



DECORATIVE ARM (AD)

Compatible with pole drill pattern S2



SSA-B SERIES POLES

SQUARE STRAIGHT ALUMINUM

Cat.#

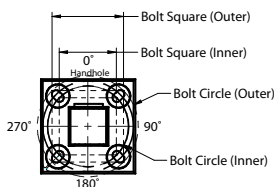
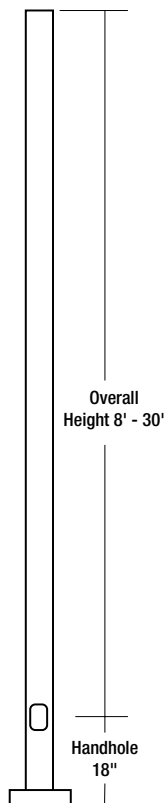
Job

Type

Approvals



BEACON
design . performance . technology



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

CONSTRUCTION

- SHAFT:** One-piece straight aluminum with square cross section, flat sides and minimum radius on all corners; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum.
- BASE COVER:** Four (4) individual bolt covers provided, painted to match pole and base finish.
- POLE CAP:** Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE:** Rectangular 3x5 aluminum hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

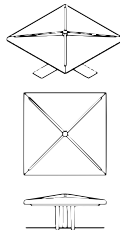
Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38

1 x 36 x 4 — TAB-36-M38

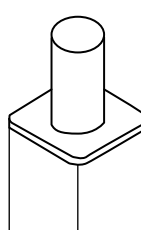
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint finish coat available in 12 standard colors; Custom colors available; RAL number preferable.

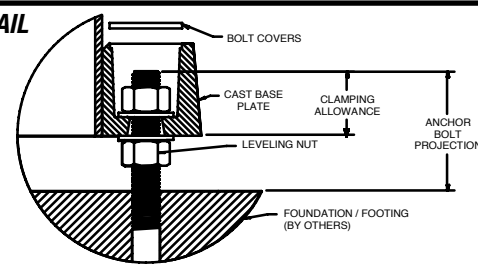
POLE CAP



TENON



BASE DETAIL



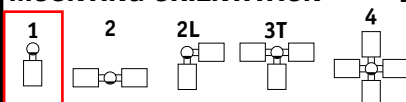
ORDERING EXAMPLE:

SSA-B - **20** - **40** - **A/B/C** - **2L** - **B3** - **DBT** - **VM2**

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	FINISH	OPTIONS
SSA-B Square Straight Aluminum Pole Beacon	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	1 Single arm mount 2 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 90° TA Tenon (2.375" OD) TB Tenon (2.875" OD) OT Open top (includes pole cap)	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured Color Option CC Custom Color	GFI¹ 20 Amp GFCI Receptacle and Cover EHH¹ Extra Handhole C05¹ .5" Coupling C07¹ .75" Coupling C20¹ 2" Coupling VM1² Mode vibration damper VM2 2nd mode vibration damper LAB Less Anchor Bolts

MOUNTING ORIENTATION

Denotes handhole location



- Specify option location using logic found on page 2 (**Option Orientation**)
- VM1 recommended on poles 20' and taller with EPA of less than 1.

ACCESSORIES- Order Separately

Catalog Number	Description
VM1²	1st mode vibration damper
VM2SXX	2nd mode vibration damper

DRILL PATTERN

- B1** Cruiser, "AM" arm
- B3** 2 bolt (2-1/2" spacing), Viper "A" arm
- S2** 2 bolt (3-1/2" spacing), Viper "AD" arm



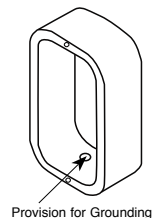
HUBBELL
Lighting

ORDERING INFORMATION Cont.

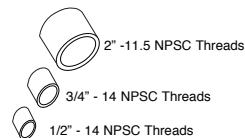
Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Anchor bolt size	Bolt Projection	Pole weight (lbs)
	Feet	Meters									
SSA-B-08-40-A	8	2.4	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	32
SSA-B-10-40-A	10	3.0	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	37
SSA-B-12-40-A	12	3.7	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	42
SSA-B-14-40-A	14	4.3	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	47
SSA-B-16-40-A	16	4.9	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	52
SSA-B-18-40-A	18	5.5	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	57
SSA-B-20-40-A	20	6.1	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	62
SSA-B-16-40-B	16	4.9	4" Square	.188"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	74
SSA-B-18-40-B	18	5.5	4" Square	.188"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	80
SSA-B-20-40-B	20	6.1	4" Square	.188"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	85
SSA-B-18-50-B	18	5.5	5" Square	.188"	10.5"	10.5" - 11.5"	7.42" - 8.13"	10.44 x 2.5"	3/4 x 30 x 3"	3.5"	91
SSA-B-20-50-B	20	6.1	5" Square	.188"	10.5"	10.5" - 11.5"	7.42" - 8.13"	10.44 x 2.5"	3/4 x 30 x 3"	3.5"	107
SSA-B-25-50-B	25	7.6	5" Square	.188"	10.5"	10.5" - 11.5"	7.42" - 8.13"	10.44 x 2.5"	3/4 x 30 x 3"	3.5"	130
SSA-B-16-60-B	16	4.9	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	105
SSA-B-18-60-B	18	5.5	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	130
SSA-B-20-60-B	20	6.1	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	155
SSA-B-25-60-B	25	7.6	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	180
SSA-B-30-60-B	30	9.1	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	210
SSA-B-16-60-C	16	4.9	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	121
SSA-B-18-60-C	18	5.5	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	144
SSA-B-20-60-C	20	6.1	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	166
SSA-B-25-60-C	25	7.6	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	224
SSA-B-30-60-C	30	9.1	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	258

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.

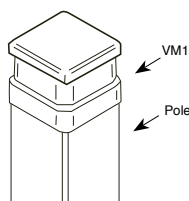
EHH - EXTRA HANDHOLE



C05 - C07 - C20 - COUPLING

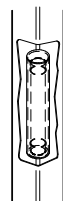


VM1 - VIBRATION DAMPER 1ST MODE



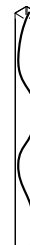
Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is required for pole systems 20' and taller with a total EPA of 1.0 or less.

VM2 - VIBRATION DAMPER 2ND MODE



Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

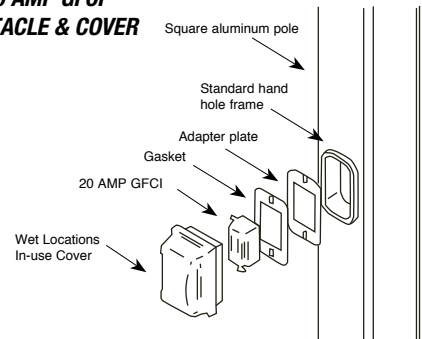
VM2SXX - VIBRATION DAMPER 2ND MODE



VM2S08 - 8'
VM2S12 - 12'
VM2S16 - 16'
VM2S20 - 20'
VM2S24 - 24'

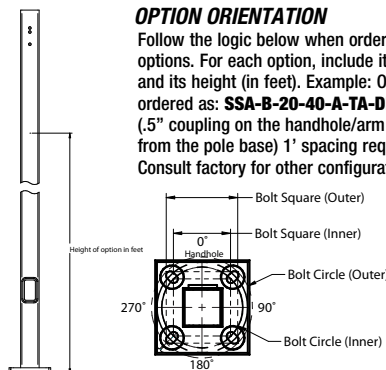
Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI - 20 AMP GFCI RECEPTACLE & COVER



OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: **SSA-B-20-40-A-TA-DB-C05-0-15** (.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.



For more information about pole vibration and vibration dampers, please consult:

https://hubbellcdn.com/ohwassets/HL/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HLOI0022.pdf

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



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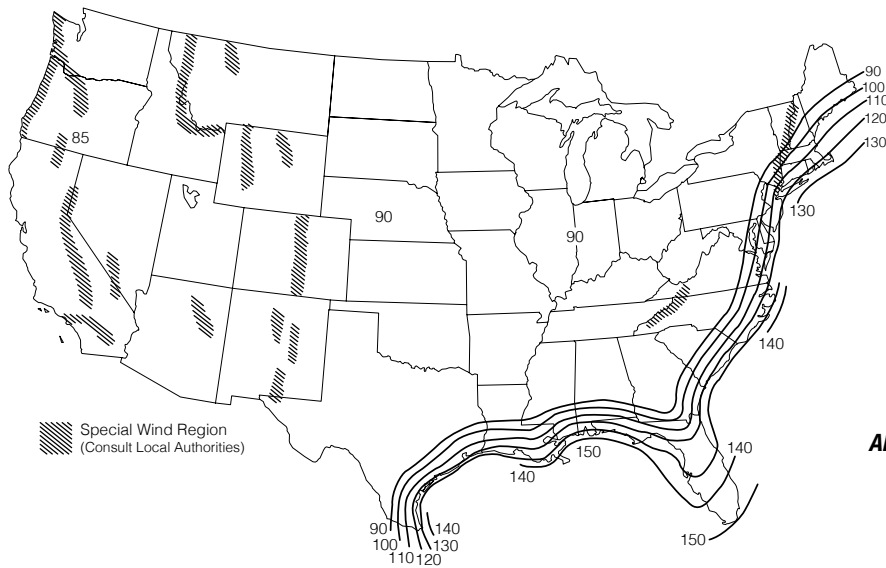
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HUBBELL
Lighting

SSA-B POLES-SPEC

FEBRUARY 24, 2020 3:58 PM

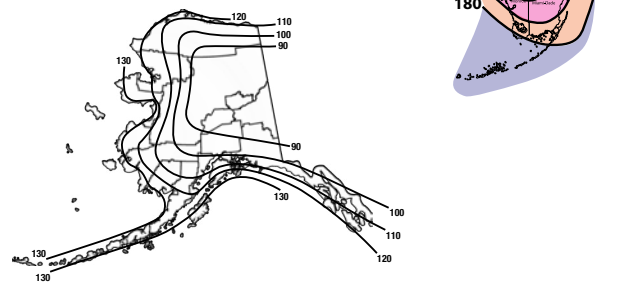


HAWAII – 105 mph
PUERTO RICO – 145 mph

*PRINTED WITH PERMISSION FROM ASCE

- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP



ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds										
Catalog Number	85	90	100	105	110	120	130	140	145	150
SSA-B-08-40-A	17.3	15.2	12.0	10.7	9.6	7.7	6.2	5.0	4.5	4.0
SSA-B-10-40-A	12.6	11.0	8.4	7.4	6.5	4.9	3.7	2.8	2.4	2.0
SSA-B-12-40-A	9.3	7.9	5.8	4.9	4.2	2.9	1.9	1.1	0.8	0.5
SSA-B-14-40-A	6.7	5.6	3.8	3.0	2.4	1.3	NR	NR	NR	NR
SSA-B-16-40-A	4.7	3.7	2.1	1.4	0.9	NR	NR	NR	NR	NR
SSA-B-18-40-A	2.9	2.1	0.6	NR	NR	NR	NR	NR	NR	NR
SSA-B-20-40-A	1.4	0.6	NR	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-40-B	9.2	7.7	5.4	4.5	3.7	2.3	1.2	NR	NR	NR
SSA-B-18-40-B	6.8	5.6	3.6	2.7	2.0	0.8	NR	NR	NR	NR
SSA-B-20-40-B	4.8	3.7	1.9	1.2	0.6	NR	NR	NR	NR	NR
SSA-B-18-50-B	12.9	10.9	7.6	6.3	5.1	3.2	1.7	0.5	NR	NR
SSA-B-20-50-B	9.8	8.1	5.2	4.0	3.0	1.3	NR	NR	NR	NR
SSA-B-25-50-B	4.0	2.7	0.5	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-60-B	25.0	22.3	16.9	14.7	12.7	9.6	7.0	5.0	4.2	3.4
SSA-B-18-60-B	20.7	17.7	13.0	11.0	9.3	6.5	4.3	2.6	1.8	1.1
SSA-B-20-60-B	16.4	13.8	9.6	7.9	6.4	3.9	2.0	NR	NR	NR
SSA-B-25-60-B	8.3	6.3	3.1	1.8	0.7	NR	NR	NR	NR	NR
SSA-B-30-60-B	2.5	0.8	NR	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-60-C	25.0	25.0	24.5	21.5	19.0	14.9	11.6	9.0	7.9	6.8
SSA-B-18-60-C	25.0	25.0	19.5	17.1	14.9	11.2	8.3	6.0	5.1	4.2
SSA-B-20-60-C	24.2	20.9	15.4	13.2	11.2	8.0	5.5	3.5	2.6	1.8
SSA-B-25-60-C	14.2	11.6	7.5	5.8	4.3	1.9	NR	NR	NR	NR
SSA-B-30-60-C	7.1	5.0	1.7	NR	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds								
Catalog Number	115	120	130	140	150	160	170	180
SSA-B-08-40-A	14.8	13.4	11	9.1	7.6	6.3	5.3	4.4
SSA-B-10-40-A	10.9	9.8	7.9	6.3	5.1	4.1	3.2	2.5
SSA-B-12-40-A	7.9	7.0	5.4	4.1	3.0	2.2	1.5	0.9
SSA-B-14-40-A	5.6	4.8	3.4	2.3	1.4	0.6	NR	NR
SSA-B-16-40-A	3.6	2.9	1.7	0.7	NR	NR	NR	NR
SSA-B-18-40-A	1.8	1.2	NR	NR	NR	NR	NR	NR
SSA-B-20-40-A	NR	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-40-B	7.7	6.7	4.9	3.5	2.4	1.5	0.7	NR
SSA-B-18-40-B	5.4	4.5	3	1.8	0.8	NR	NR	NR
SSA-B-20-40-B	3.5	2.7	1.3	NR	NR	NR	NR	NR
SSA-B-18-50-B	10.6	9.2	6.8	4.9	3.3	2	1	NR
SSA-B-20-50-B	7.8	6.5	4.4	2.7	1.3	NR	NR	NR
SSA-B-25-50-B	2.2	1.2	NR	NR	NR	NR	NR	NR
SSA-B-16-60-B	22	19.6	15.5	12.4	9.8	7.7	5.9	4.4
SSA-B-18-60-B	17.2	15.2	11.7	8.9	6.6	4.8	3.3	2
SSA-B-20-60-B	13.4	11.5	8.4	6.4	4	2.4	1	NR
SSA-B-25-60-B	5.7	4.4	2	NR	NR	NR	NR	NR
SSA-B-30-60-B	NR	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-60-C	25	25	22.8	18.6	15.2	12.5	10.1	8.2
SSA-B-18-60-C	25	22.5	18	14.3	11.3	9	7	5.3
SSA-B-20-60-C	20.4	18	14	10.8	8.2	6	4.3	2.8
SSA-B-25-60-C	11.2	9.3	6.2	3.8	1.8	NR	NR	NR
SSA-B-30-60-C	4.3	2.9	NR	NR	NR	NR	NR	NR

NOTES

Wind-speed Website disclaimer:

Hubbell Lighting has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Hubbell Lighting has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Hubbell Lighting Inc. does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. <http://windspeed.atcouncil.org>

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings. Consult Hubbell Lighting's Pole Vibration Application Guide for environmental risk factors and design considerations. https://hubbellcdn.com/ohwassets/HLL/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HL010022.pdf
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

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



DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

VIPER S

SMALL VIPER LUMINAIRE

FEATURES

- Small size companion to Viper Large
- Wide choice of different LED wattage configurations
- Nine optical distributions
- Designed to replace HID lighting up to 400W MH or HPS
- Suitable for wet locations



*3000K and warmer CCTs only



See Certification Specifications

CONTROL TECHNOLOGY



SPECIFICATIONS

CONSTRUCTION

- Manufactured with die cast aluminum
- Coated with a polyester finish that meets ASTM B117 corrosion test requirements and ASTM D522 cracking and loss of adhesion test requirements
- IFS polyester powder-coat electrostatically applied and thermocured. IFS finish consists of a five stage pretreatment regimen with a polymer primer sealer and top coated with a thermoset super TGIC polyester powder coat finish
- The finish meets the AAMA 2604 performance specification which includes passing a 3,000-hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds
- External hardware is corrosion resistant

OPTICS

- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one-piece optical system
- One-piece silicone gasket ensures a weatherproof seal around each individual optic
- One-piece optical cartridge system consisting of an LED engine, optics, gasket and stainless steel bezel

INSTALLATION

- Mounting options for horizontal arm, vertical tenon or traditional arm mounting available. Mounting hardware included

ELECTRICAL

- Luminaire accepts 100V through 277V, 347V or 480V input 50 Hz to 60 Hz (UNV)
- Ambient operating temperature -40°C to 25°C

ELECTRICAL (CONTINUED)

- Power factor is $\geq .90$ at full load
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is certified by UL for use at 600VAC at 90°C or higher
- Plug disconnects are certified by UL for use at 600 VAC, 13A or higher. 13A rating applies to primary (AC) side only
- Fixture electrical compartment contains all LED driver components
- Optional 7-pin ANSI C136.41-2013 Twist-Lock® photo control receptacle available. Compatible with ANSI C136.41 external wireless control devices
- Surge protection: 20kA
- Lifeshield™ Circuit ([see Electrical Data](#))

CONTROLS

- Available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the motion response system reduces the wattage to factory preset level, reducing the light level accordingly. When motion is detected by the PIR sensor, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from standard configuration
- Available with [Energeni](#) for optional set dimming, timed dimming with simple delay, or timed dimming based on time of night

OPTICS
STRIKE



RELATED PRODUCTS

[Viper Large](#)

CONTROLS (CONTINUED)

- In addition, Viper can be specified with [SiteSync™ wireless control system](#) for reduction in energy and maintenance costs while optimizing light quality 24/7
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

CERTIFICATIONS

- DLC® (DesignLights Consortium) Qualified. Please refer to the DLC website for specific product qualifications at www.designlights.org
- Certified to UL 1598 and UL 8750
- 3G rated for ANSI C136.31 high vibration applications with MAF mounting
- IDA approved
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See [Buy American Solutions](#).

WARRANTY

- 5 year warranty
- See [HLI Commercial and Industrial Outdoor Lighting Warranty](#) for additional information

KEY DATA	
Lumen Range	4,045–16,216
Wattage Range	39–136
Efficacy Range (LPW)	100–124
Reported Life (Hours)	L70>60,000
Input Current Range (Amps)	0.1–1.1

VIPER S

SMALL VIPER LUMINAIRE

ORDERING GUIDE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

Example: VPS-24L-55-4K7-4W-UNV-A-DBT-TL-GENI-04-BC

CATALOG #

VPS	LED Engine	CCT/CRI ⁷	Distribution	Rotation	Voltage
Series					
VPS Viper Small	24L-39 39W, LED array	3K7 3000K, 70 CRI	FR Type 1/Front Row	Blank No rotation	UNV 120-277V
	24L-55 55W, LED array	4K7 4000K, 70 CRI	2 Type 2	L Optic rotation left ⁵	347 347V
	36L-65 65W, LED array	5K7 5000K, 70 CRI	3 Type 3	R Optic rotation right ⁵	480 480V
	36L-80 80W, LED array		4F (formerly 4) Type 4		
	48L-110 110W, LED array		4W Type 4 Wide		
	60L-136 136W, LED array		5QM Type 5QM		
			5R Type 5R (rectangular)		
			5W Type 5W (round wide)		
			TC Tennis Court		
			CR Corner Right		
			CL Corner Left		

Mounting	Color	Network Control Options	Options
A Rectangular Arm (formerly RA) for square or round pole	BLT Black Matte Textured	NXWE NX Wireless Enabled (module + radio)	BC Backshield (available for FR, 2, 3, 4, 4W Optics)
MAF Mast Arm Fitter (formerly SF2) for 2 3/8" OD horizontal arm	BLS Black Gloss Smooth	NXSPW_F Nx Wireless, PIR Occ. Sensor, Daylight Harvesting ⁷	CD Continuous Dimming
K Knuckle (formerly PK2) limit to 30° tilt or 2 3/8" OD horizontal arm or vertical tenon	DBT Dark Bronze Matte Textured	WIR Wireless Controls, wiSCAPE	F Fusing
WB Wall Bracket	DBS Dark Bronze Gloss Smooth	SWP SiteSync Pre-Commission ^{1,4}	TB Terminal Block
AD Universal Arm for square pole	GTT Graphite Matte Textured	SWPM_F SiteSync Pre-Commission w/ Sensor ^{1,2,4}	
AD3 Adapter for 2.4"-4.1" round pole	LGS Light Grey Gloss Smooth	Control Options	
AD4 Adapter for 4.2"-5.3" round pole	PSS Platinum Silver Smooth	GENI-XX ENERGENI ³	
AD5 Adapter for 5.5"-5.9" round pole	WHT White Matte Textured	7PR 7-Pin Receptacle only (shorting cap, photo control, or wireless control provided by others)	
AD6 Adapter for 6.0"-6.5" round pole	WHS White Gloss Smooth	7PR-SC 7-Pin Receptacle w/Shorting Cap	
	VG Verde Green Textured	7PR-TL 7-Pin Receptacle w/Twist-Lock® photo control	
	Color Option	Sensors	
	CC Custom Color	BTS_F Bluetooth Programmable, PIR Occupancy/Daylight Sensor, 360° lens ⁷	
		BTSO_F Bluetooth Programmable, PIR Occupancy/Daylight Sensor, 360° lens, up to 12' mounting height ⁸	
		NXSP_F NX, PIR Occ. Sensor, Daylight Harvesting ⁷	
		SCP_F Programmable Occupancy Sensor w/ daylight control ^{1,2,6}	

House Side Shield Accessories

- ☐ **HSS/VP-S/90-FB/XXX** 90° shield front or back
- ☐ **HSS/VP-S/90-LR/XXX** 90° shield left or right
- ☐ **HSS/VP-S/270-FB/XXX** 270° shield front or back
- ☐ **HSS/VP-S/270-LR/XXX** 270° shield left or right
- ☐ **HSS/VP-S/360/XXX** Full shield

Replace XXX with notation for desired finish color. Refer to page 8 for shield images.

Mounting Accessories

- ☐ **VPL-AD-RPA3** 2.4"-4.1" Round Pole Adapter for AD arm
- ☐ **VPL-AD-RPA4** 4.2"-5.3" Round Pole Adapter for AD arm
- ☐ **VPL-AD-RPA5** 5.5"-5.9" Round Pole Adapter for AD arm
- ☐ **VPL-AD-RPA6** 6.0"-6.5" Round Pole Adapter for AD arm

Notes:

- Not available with other wireless control or sensor options
- Specify mounting height; 8 = 8" or less, 40 = 14" to 30"
- Specify routine setting code (example GENI-04). See [ENERGENI brochure](#) and [instructions](#) for setting table and options. Not available with sensor or SiteSync options
- Specify group and zone at time of order. See [www.hubbelllighting.com/sitesync](#) for further details. Order at least one SiteSync interface accessory SWUSB or SWTAB. Each option contains SiteSync License, GUI, and Bridge Node
- Only available with FR, 2, 3, 4, 4W and 5R distributions
- Specify mounting height; 8=8", 30=30"
- Replace "_" with "14" for up to 14' mounting height, "40F" for 15-40' mounting height
- Replace "_" with "12" for up to 12' mounting height

Accessories and Services (Ordered Separately)

- ☐ **SCP-REMOTE** Remote Control for SCP/_F option. Order at least one per project to program and control the occupancy sensor
- ☐ **SWUSB*** SiteSync interface software loaded on USB flash drive for use with owner supplied PC (Windows based only). Includes SiteSync license, software and USB radio bridge node
- ☐ **SWTAB*** Windows tablet and SiteSync interface software. Includes tablet with preloaded software, SiteSync license and USB radio bridge node
- ☐ **SWBRG** SiteSync USB radio bridge node only. Order if a replacement is required or if an extra bridge node is requested
- ☐ **SW7PR+** SiteSync 7-Pin on fixture module On/Off/Dim, Daylight Sensor 120-480VAC
- ☐ **BIRD-SPIKE-3** Bird Spikes

* When ordering SiteSync at least one of these two interface options must be ordered per project.
+ Available as a SiteSync retrofit solution for fixtures with an existing 7-pin receptacle.

Hubbell Control Solutions — Accessories (Sold Separately)

NX Distributed Intelligence™

- ☐ **NXOFM-1R1D-UNV** On-fixture Module (7-pin), On / Off / Dim, Daylight Sensor with HubbNET Radio and Bluetooth® Radio, 120-480VAC

wiSCAPE® Lighting Control

- ☐ **WIR-RME-L** On-fixture Module (7-pin or 5-pin), On / Off / Dim, Daylight Sensor with wiSCAPE Radio, 110-480VAC

For additional information related to these accessories please visit [www.hubbellcontrolsolutions.com](#). Options provided for use with integrated sensor; please view specification sheet ordering information table for details.

VIPER S

SMALL VIPER LUMINAIRE

CONTROLS

SiteSync — Precommissioned Ordering Information:

When ordering a fixture with the SiteSync lighting control option, additional information will be required to complete the order. The SiteSync Commissioning Form or alternate schedule information must be completed. This form includes Project location, Group information, and Operating schedules. For more detailed information please visit [the SiteSync family page on our website](#) or contact Hubbell Lighting tech support at 864-678-1000.



SiteSync fixtures with Motion control (SWPM) require the mounting height of the fixture for selection of the lens.

Examples: VP-L/80L-235/4K7/3/UNV/A/DB/SWP/
VP-L/80L-235/4K7/3/UNV/A/DB/SWPM-40F/

SiteSync only
SiteSync with Motion Control

SiteSync 7-Pin Module:

- SiteSync features in a new form
- Available as an accessory for new construction or retrofit applications (with existing 7-Pin receptacle)
- Does not interface with occupancy sensors



SW7PR

NX Distributed Intelligence™ Lighting Controls:

Supports both indoor and outdoor applications in a variety of deployment options: wired, wireless and hybrid. Integrates with and enables a wide array of luminaires including those with SpectraSync Color Tuning Technology.



NX Integrated Controls Reference								
NX Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0-10V Dimming	On/off Control	Bluetooth® App Programming
NX Networked – Wireless								
NXOFM-1R1D-UNV	SCLNX	Yes	Yes	Yes	Yes	Yes	Yes	Yes, Bluetooth App

wiSCAPE™:

Supports remote management, monitoring and metering of outdoor wireless lighting applications such as smart campuses, smart cities, parking lots, parking lots and roadways.



wiSCAPE Reference								
wiSCAPE Option	Sensor	Networkable	Scheduling	Occupancy	Daylight Harvesting	0-10V Dimming	On/off Control	Bluetooth® App Programming
Networked – Wireless								
WIR-RME-L	WIR-RME-L	Yes	Yes	No	Yes	Yes	Yes	wiSCAPE Gateway

VIPER S

SMALL VIPER LUMINAIRE

DELIVERED LUMENS

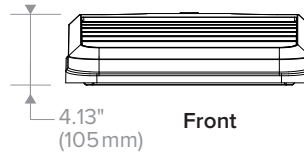
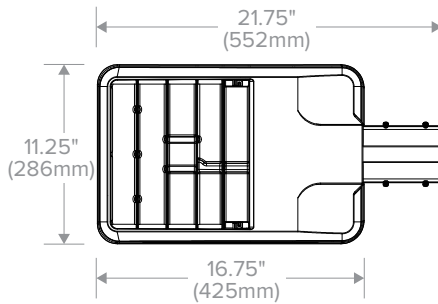
# of LEDs	DRIVE CURRENT (mA)	SYSTEM WATTS	DISTRIBUTION TYPE	5K (5000K nominal, 70 CRI)					4K (4000K nominal, 70 CRI)					3K (3000K nominal, 70 CRI)				
				LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G	LUMENS	LPW	B	U	G
24	500mA	39W	FR	4689	120	1	0	0	4665	120	1	0	0	4432	114	1	0	0
			2	4523	116	1	0	1	4500	115	1	0	1	4275	110	1	0	1
			3	4436	114	1	0	1	4414	113	1	0	1	4194	108	1	0	1
			4F	4362	112	1	0	2	4340	111	1	0	2	4123	106	0	0	2
			4W	4280	110	1	0	2	4258	109	1	0	2	4045	104	1	0	2
			5QM	4442	114	2	0	1	4420	113	2	0	1	4199	108	2	0	0
			5R	4472	115	2	0	2	4450	114	2	0	2	4227	108	2	0	2
			5W	4335	112	3	0	1	4336	111	3	0	1	4114	105	3	0	1
			TC	4561	117	1	0	1	4538	116	1	0	1	4311	111	1	0	1
			CL	4758	122	1	0	2	4758	122	1	0	2	4329	111	1	0	1
24	700 mA	55W	CR	4773	122	1	0	2	4773	122	1	0	2	4361	112	1	0	1
			FR	6357	118	1	0	1	6486	120	1	0	1	5804	107	1	0	1
			2	6132	114	1	0	1	6257	116	1	0	2	5599	104	1	0	1
			3	6015	111	1	0	2	6137	114	1	0	2	5492	102	1	0	2
			4F	5921	110	1	0	2	6034	112	1	0	2	5400	100	1	0	2
			4W	5793	108	1	0	2	5909	110	1	0	2	5272	98	1	0	2
			5QM	6022	112	2	0	1	6145	114	2	0	1	5499	102	2	0	1
			5R	6063	112	3	0	3	6187	115	3	0	3	5536	103	3	0	3
			5W	5908	109	3	0	1	6028	112	3	0	1	5908	102	3	0	1
			TC	6183	113	1	0	1	6309	118	1	0	1	5645	105	1	0	1
36	560 mA	65W	CL	6707	122	1	0	2	6707	122	1	0	2	6117	111	1	0	2
			CR	6729	122	1	0	2	6729	122	1	0	2	6143	112	1	0	2
			FR	7864	121	1	0	1	8041	124	1	0	1	7189	111	1	0	1
			2	7586	117	1	0	2	7757	119	1	0	2	6934	107	1	0	2
			3	7441	114	1	0	2	7609	117	1	0	2	6802	105	1	0	2
			4F	7317	110	1	0	2	7482	112	1	0	2	6688	100	1	0	2
			4W	8690	108	1	0	2	8864	110	1	0	2	7908	98	1	0	2
			5QM	7450	115	3	0	1	7618	117	3	0	1	6810	105	3	0	1
			5R	7501	115	3	0	3	7670	118	3	0	3	6857	105	3	0	3
			5W	7309	112	3	0	2	7473	115	3	0	2	6681	103	3	0	1
36	700 mA	80W	TC	7540	116	1	0	1	7694	118	1	0	1	7694	122	1	0	2
			CL	8179	126	2	0	2	8179	126	2	0	2	7467	115	1	0	2
			CR	8205	126	2	0	2	8205	126	2	0	2	7492	115	1	0	2
			FR	9535	118	1	0	1	9730	120	1	0	1	8706	107	1	0	1
			2	9197	114	1	0	2	9385	116	1	0	2	8398	104	1	0	2
			3	9022	111	1	0	2	9206	114	1	0	2	8238	102	1	0	2
			4F	8871	110	1	0	2	9052	112	1	0	2	8100	100	1	0	2
			4W	11587	108	1	0	3	11819	110	1	0	3	10544	98	1	0	3
			5QM	9033	112	3	0	1	9217	114	3	0	1	8248	102	3	0	1
			5R	9095	112	3	0	3	9280	115	3	0	3	8304	103	3	0	3
48	700 mA	110W	5W	8861	109	3	0	2	9043	112	3	0	2	8092	100	3	0	2
			TC	9275	115	1	0	1	9464	118	1	0	1	8468	105	1	0	1
			CL	10060	126	2	0	2	10060	126	2	0	2	9184	115	2	0	2
			CR	10093	126	2	0	2	10093	126	2	0	2	9215	115	2	0	2
			FR	12713	118	1	0	1	12973	120	2	0	1	11608	107	1	0	1
			2	12263	114	2	0	2	12513	116	2	0	2	11197	104	2	0	2
			3	12029	111	2	0	2	12275	114	2	0	2	10984	102	1	0	2
			4F	11828	110	1	0	3	12069	112	1	0	3	10800	100	1	0	2
			4W	11609	108	1	0	3	11841	110	1	0	3	10564	98	1	0	3
			5QM	12044	112	3	0	2	12290	114	3	0	2	10997	102	3	0	1
60	700 mA	136W	5R	12126	112	3	0	3	12374	115	3	0	3	11072	103	3	0	3
			5W	12126	109	4	0	2	12057	112	4	0	2	10789	100	4	0	2
			RC	12366	115	1	0	2	12619	118	1	0	1	11290	105	1	0	2
			CL	13414	122	2	0	3	13414	122	2	0	3	12246	111	2	0	2
			CR	13458	122	2	0	3	13458	122	2	0	3	12287	112	2	0	2
			FR	15891	117	2	0	2	16216	120	2	0	2	14511	107	2	0	1
			2	15329	113	2	0	2	15642	116	2	0	2	13997	103	2	0	2
			3	15037	111	2	0	3	15344	113	2	0	3	13730	101	2	0	3
			4F	14784	109	1	0	3	15086	111	1	0	3	13500	100	1	0	3
			4W	14802	109	2	0	3	15104	112	2	0	3	13515	100	2	0	3
60	700 mA	136W	5QM	15055	111	3	0	2	15362	114	3	0	2	13747	102	3	0	2
			5R	15158	112	4	0	4	15469	114	4	0	4	13841	102	4	0	4
			5W	14781	109	4	0	2	15083	111	4	0	2	13495	100	4	0	2
			TC	15458	115	1	0	2	15834	118	1	0	2	14113	105	1	0	2
			CL	16768	123	3	0	3	16768	123	3	0	3	15309	113	2	0	3
			CR	16823	124	3	0	3	16823	124	3	0	3	15359	113	2	0	3

VIPER S

SMALL VIPER LUMINAIRE

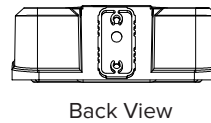
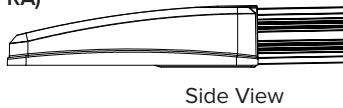
DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

DIMENSIONS

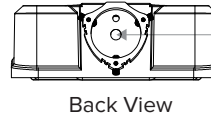
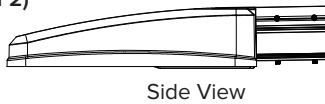


Weight	15.0 lbs (6.8 kg)
EPA	.67 ft ²

A Arm (formerly RA)

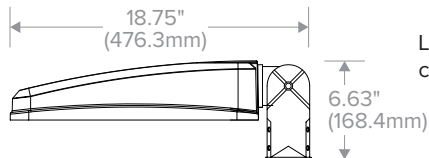


MAF (formerly SF2)



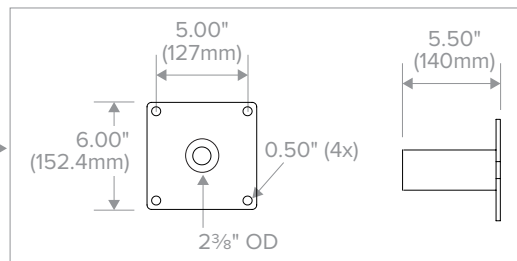
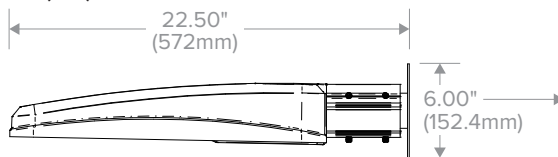
Accepts 2 3/8" OD tenon, min 5" long.

2 3/8" Adjustable Knuckle (K) (formerly PK2)

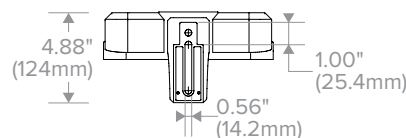
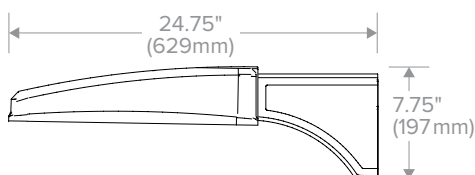


Limit to 30° tilt. Sensor, photocell and wireless controls should not be tilted above horizontal.

Wall Bracket (WB)



AD Decorative Arm



See [page 9](#) for mounting details.

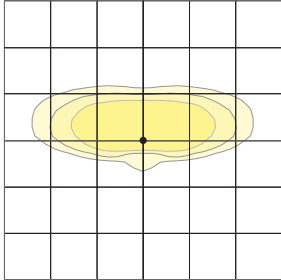
VIPER S

SMALL VIPER LUMINAIRE

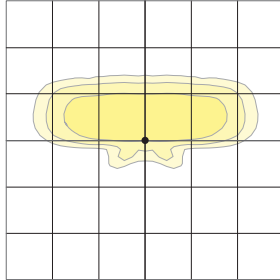
PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

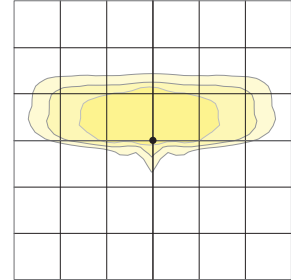
Type FR – Front Row/Auto Optic



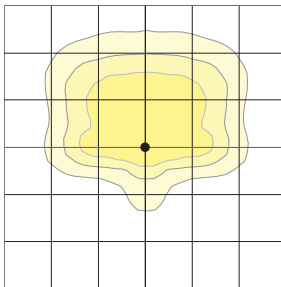
Type 2



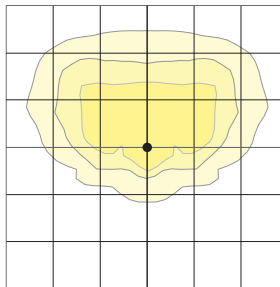
Type 3



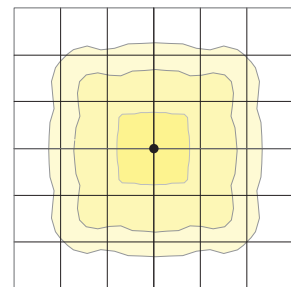
Type 4



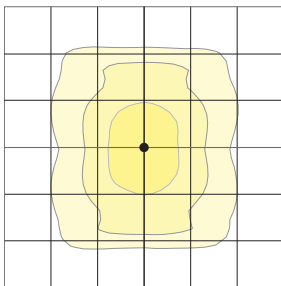
Type 4 Wide



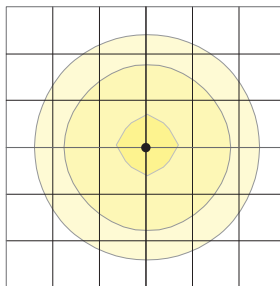
Type 5QM



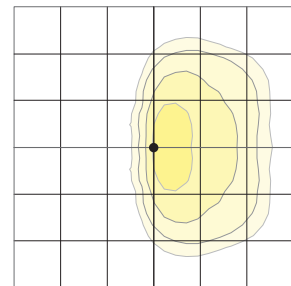
Type 5R (rectangular)



Type 5W (round wide)



Type TC



VIPER S

SMALL VIPER LUMINAIRE

ELECTRICAL DATA

# OF LEDS	NUMBER OF DRIVERS	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
24	1	500 mA	120	39	0.33
			277		0.14
			347		0.11
			480		0.08
24	1	700 mA	120	55	0.5
			277		0.2
			347		0.2
			480		0.1
36	1	525 mA	120	65	0.65
			277		0.28
			347		0.22
			480		0.16
		700 mA	120	80	0.7
			277		0.3
			347		0.2
			480		0.2
48	1	700 mA	120	110	0.9
			277		0.4
			347		0.3
			480		0.2
60	1	700 mA	120	136	1.1
			277		0.5
			347		0.4
			480		0.3

PROJECTED LUMEN MAINTENANCE						
Ambient Temp.	0	25,000	50,000	TM-21-11 60,000 ¹	100,000	Calculated L70 (HOURS)
25°C / 77°C	1	0.97	0.95	0.95	0.92	>377,000

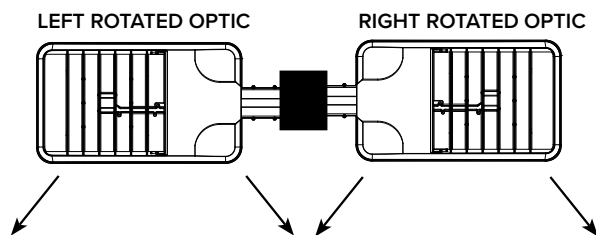
¹ Projected per IESNA TM-21-11.
Data references the extrapolated performance projections for the 60 LED base model in a 25°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.

LIFESHIELD™ CIRCUIT

Protects luminaire from excessive temperature. The device activates at a specific, factory-preset temperature and progressively reduces power over a finite temperature range. Operation is smooth and undetectable to the eye. Thermal circuit is designed to “fail on”, allowing the luminaire to revert to full power in the event of an interruption of its power supply or faulty wiring connection to the drivers. The device can co-exist with other 0–10V control devices (occupancy sensors, external dimmers, etc.)

ADDITIONAL INFORMATION

ROTATION OPTIONS



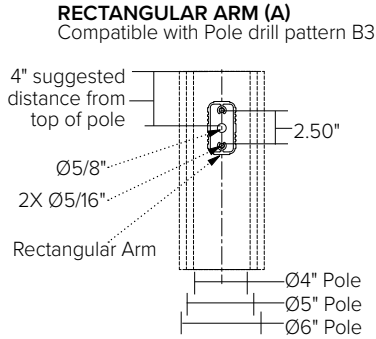
VIPER S

SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

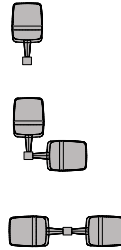
ADDITIONAL INFORMATION (CONTINUED)

DRILL PATTERN

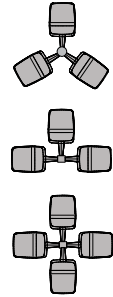


EPA

Config.	EPA
1	.67
2 @ 90°	1.06
2 @ 180°	1.34



Config.	EPA
3 @ 120°	1.68
3 @ 90°	1.73
4 @ 90°	2.12



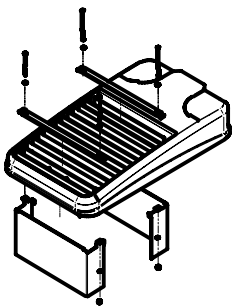
TENON TOP POLE BRACKET ACCESSORIES (ORDER SEPARATELY)

(2 3/8" OD tenon)

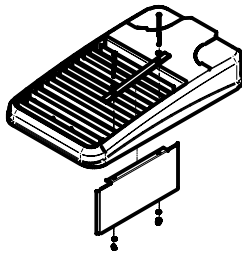
TENON TOP POLE BRACKET ACCESSORIES (Order Separately)

- ☐ **SETAVP-XX** Square tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **RETAVP-XX** Round tenon adapter (4 at 90°) for A - Rectangular Arm mounting option only
- ☐ **SETA2XX** Square tenon adapter (4 at 90°) for AD - Universal Arm mounting option only
- ☐ **RETA2XX** Round tenon adapter (4 at 90°) for AD3 - Universal Arm mounting option only

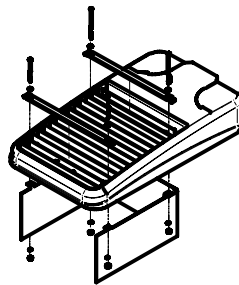
HOUSE SIDE SHIELD FIELD INSTALL ACCESSORIES



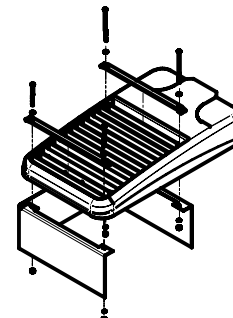
HSS/VP-S/90-FB/XXX
90° shield front or back
(2 shields shown)



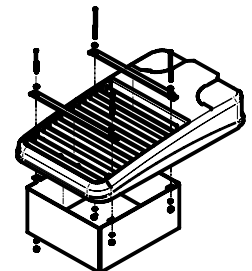
HSS/VP-S/90-LR/XXX
90° shield left or right
(1 shield shown in left orientation)



HSS/VP-S/270-FB/XXX
270° shield front or back
(1 shield shown in back orientation)



HSS/VP-S/270-LR/XXX
270° shield left or right
(1 shield shown in right orientation)



HSS/VP-S/360/XXX
Full shield
(1 shield shown)

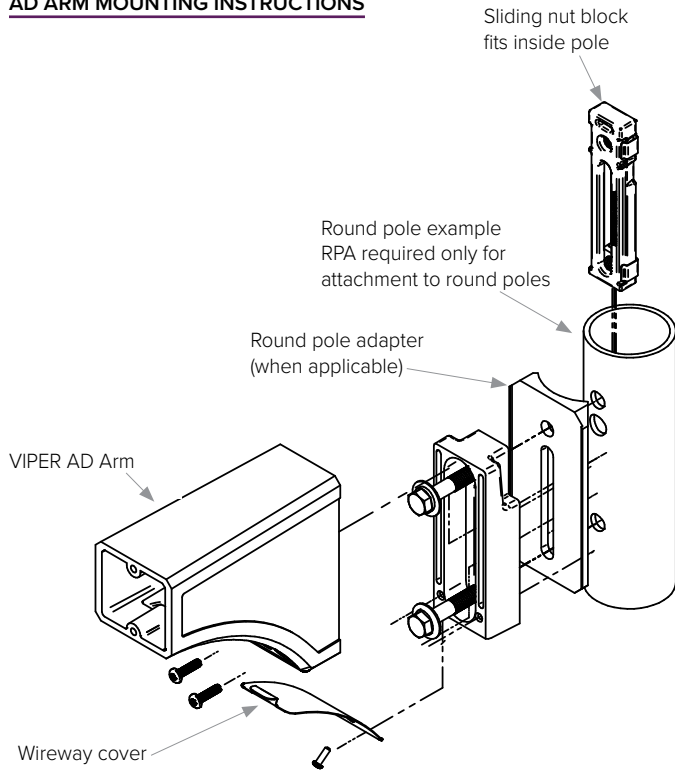
VIPER S

SMALL VIPER LUMINAIRE

DATE:	LOCATION:
TYPE:	PROJECT:
CATALOG #:	

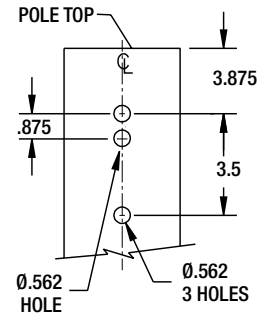
ADDITIONAL INFORMATION (CONTINUED)

AD ARM MOUNTING INSTRUCTIONS



DECORATIVE ARM (AD)

Compatible with pole drill pattern S2



SSA-B SERIES POLES

SQUARE STRAIGHT ALUMINUM

Cat.#

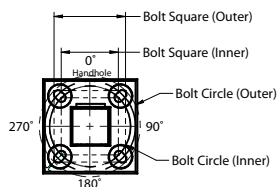
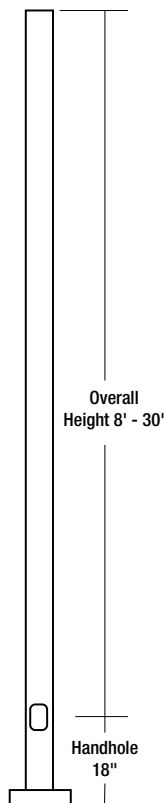
Job

Type

Approvals



BEACON
design . performance . technology



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

CONSTRUCTION

- SHAFT:** One-piece straight aluminum with square cross section, flat sides and minimum radius on all corners; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum.
- BASE COVER:** Four (4) individual bolt covers provided, painted to match pole and base finish.
- POLE CAP:** Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE:** Rectangular 3x5 aluminum hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS:** Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for leveling

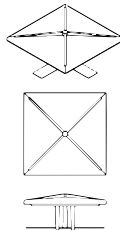
Anchor bolt part numbers: 3/4 x 30 x 3 — TAB-30-M38

1 x 36 x 4 — TAB-36-M38

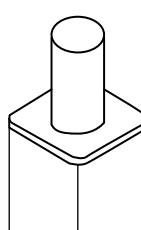
FINISH

- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint finish coat available in 12 standard colors; Custom colors available; RAL number preferable.

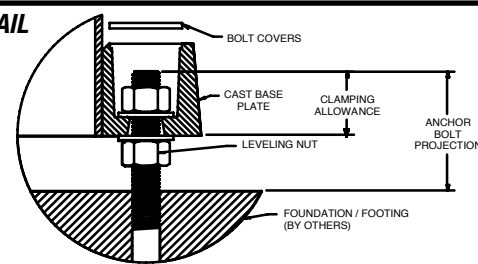
POLE CAP



TENON



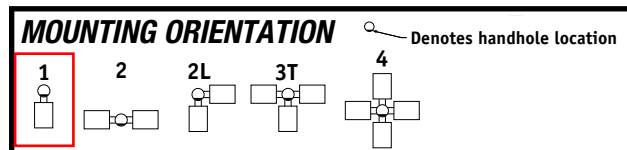
BASE DETAIL



ORDERING EXAMPLE:

SSA-B - **20** - **40** - **A/B/C** - **2L** - **B3** - **DBT** - **VM2**

SERIES	HEIGHT	SHAFT	THICKNESS	MOUNTING	FINISH	OPTIONS
SSA-B Square Straight Aluminum Pole Beacon	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	1 Single arm mount 2 Two fixtures at 180° 2L Two fixtures at 90° 3T Three fixtures at 90° 4 Four fixtures at 90° TA Tenon (2.375" OD) TB Tenon (2.875" OD) OT Open top (includes pole cap)	BLT Black Matte Textured BLS Black Gloss Smooth DBT Dark Bronze Matte Textured DBS Dark Bronze Gloss Smooth GTT Graphite Matte Textured LGS Light Grey Gloss Smooth PSS Platinum Silver Smooth WHT White Matte Textured WHS White Gloss Smooth VGT Verde Green Textured Color Option CC Custom Color	GFI¹ 20 Amp GFCI Receptacle and Cover EHH¹ Extra Handhole C05¹ .5" Coupling C07¹ .75" Coupling C20¹ 2" Coupling VM1² Mode vibration damper VM2 2nd mode vibration damper LAB Less Anchor Bolts



1 Specify option location using logic found on page 2 (**Option Orientation**)
 2 VM1 recommended on poles 20' and taller with EPA of less than 1.

ACCESSORIES- Order Separately

Catalog Number	Description
VM1²	1st mode vibration damper
VM2SXX	2nd mode vibration damper

DRILL PATTERN

- B1** Cruiser, "AM" arm
B3 2 bolt (2-1/2" spacing), Viper "A" arm
S2 2 bolt (3-1/2" spacing), Viper "AD" arm

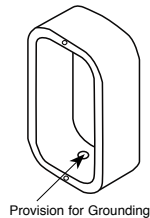


ORDERING INFORMATION Cont.

Catalog Number	Height		Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Bolt Square (range)	Base Plate Square	Anchor bolt size	Bolt Projection	Pole weight (lbs)
	Feet	Meters									
SSA-B-08-40-A	8	2.4	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	32
SSA-B-10-40-A	10	3.0	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	37
SSA-B-12-40-A	12	3.7	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	42
SSA-B-14-40-A	14	4.3	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	47
SSA-B-16-40-A	16	4.9	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	52
SSA-B-18-40-A	18	5.5	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	57
SSA-B-20-40-A	20	6.1	4" Square	.125"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	62
SSA-B-16-40-B	16	4.9	4" Square	.188"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	74
SSA-B-18-40-B	18	5.5	4" Square	.188"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	80
SSA-B-20-40-B	20	6.1	4" Square	.188"	8.5"	8.5" - 9.5"	6.01" - 6.72"	9.88 x 2"	3/4 x 30 x 3"	3"	85
SSA-B-18-50-B	18	5.5	5" Square	.188"	10.5"	10.5" - 11.5"	7.42" - 8.13"	10.44 x 2.5"	3/4 x 30 x 3"	3.5"	91
SSA-B-20-50-B	20	6.1	5" Square	.188"	10.5"	10.5" - 11.5"	7.42" - 8.13"	10.44 x 2.5"	3/4 x 30 x 3"	3.5"	107
SSA-B-25-50-B	25	7.6	5" Square	.188"	10.5"	10.5" - 11.5"	7.42" - 8.13"	10.44 x 2.5"	3/4 x 30 x 3"	3.5"	130
SSA-B-16-60-B	16	4.9	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	105
SSA-B-18-60-B	18	5.5	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	130
SSA-B-20-60-B	20	6.1	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	155
SSA-B-25-60-B	25	7.6	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	180
SSA-B-30-60-B	30	9.1	6" Square	.188"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	210
SSA-B-16-60-C	16	4.9	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	121
SSA-B-18-60-C	18	5.5	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	144
SSA-B-20-60-C	20	6.1	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	166
SSA-B-25-60-C	25	7.6	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	224
SSA-B-30-60-C	30	9.1	6" Square	.250"	12"	12" - 13"	8.49" - 9.19"	11.96 x 2.75"	1 x 36 x 4"	3.75"	258

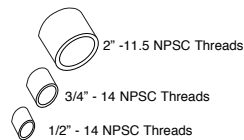
NOTE Factory supplied template must be used when setting anchor bolts. Hubbell Lighting will deny any claim for incorrect anchorage placement resulting from failure to use factory supplied template and anchor bolts.

EHH - EXTRA HANDHOLE



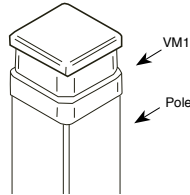
Provision for Grounding

C05 - C07 - C20 - COUPLING



2" - 11.5 NPSC Threads
3/4" - 14 NPSC Threads
1/2" - 14 NPSC Threads

VM1 - VIBRATION DAMPER 1ST MODE



Field Installed Pole Top damper designed to reduce pole top deflection or sway. VM1 is required for pole systems 20' and taller with a total EPA of 1.0 or less.

VM2 - VIBRATION DAMPER 2ND MODE



Factory installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

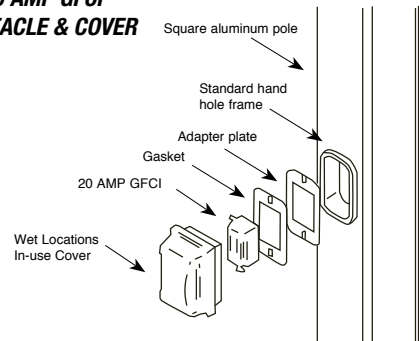
VM2SXX - VIBRATION DAMPER 2ND MODE



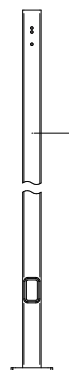
VM2S08 - 8'
VM2S12 - 12'
VM2S16 - 16'
VM2S20 - 20'
VM2S24 - 24'

Field installed, internal damper designed to alter pole resonance to reduce movement and material fatigue caused by 2nd mode vibration.

GFI - 20 AMP GFCI RECEPTACLE & COVER

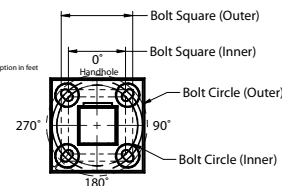


Wet Locations In-use Cover



OPTION ORIENTATION

Follow the logic below when ordering location specific options. For each option, include its orientation (in degrees) and its height (in feet). Example: Option C07 should be ordered as: **SSA-B-20-40-A-TA-DB-C05-0-15** (.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.



For more information about pole vibration and vibration dampers, please consult:

https://hubbellcdn.com/ohwassets/HL/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HLOI0022.pdf

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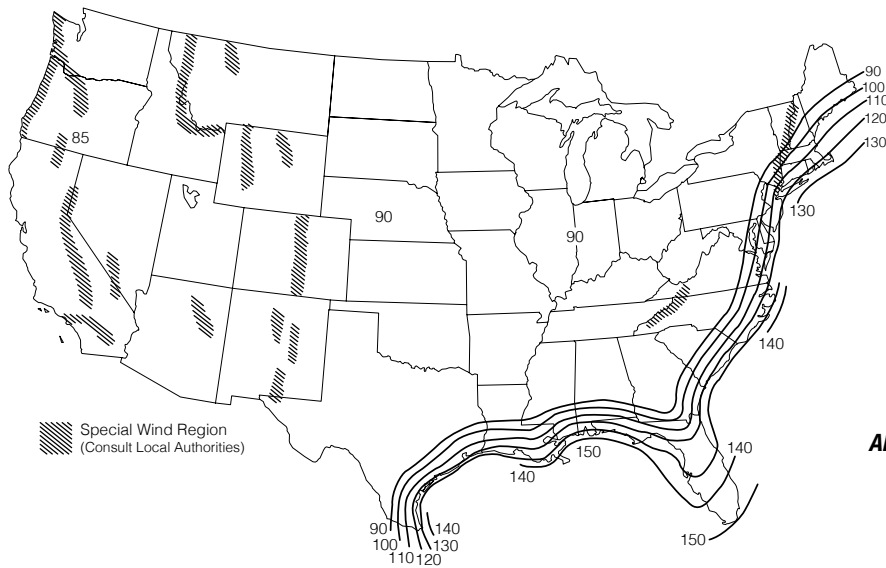
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HUBBELL
Lighting

SSA-B POLES-SPEC

FEBRUARY 24, 2020 3:58 PM

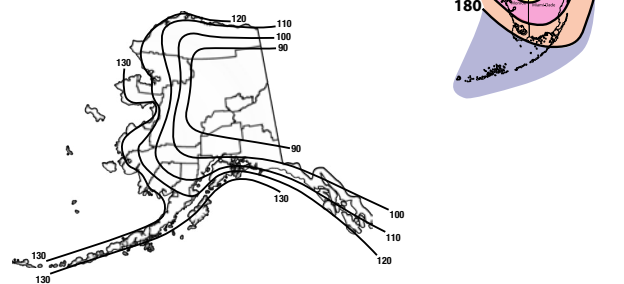


HAWAII – 105 mph
PUERTO RICO – 145 mph

*PRINTED WITH PERMISSION FROM ASCE

- Florida region wind map above is based upon 3-second gust winds and the 2017 Florida Building Code

ALASKA REGION WIND MAP



ASCE 7-05 wind map EPA Load Rating - 3 second gust wind speeds										
Catalog Number	85	90	100	105	110	120	130	140	145	150
SSA-B-08-40-A	17.3	15.2	12.0	10.7	9.6	7.7	6.2	5.0	4.5	4.0
SSA-B-10-40-A	12.6	11.0	8.4	7.4	6.5	4.9	3.7	2.8	2.4	2.0
SSA-B-12-40-A	9.3	7.9	5.8	4.9	4.2	2.9	1.9	1.1	0.8	0.5
SSA-B-14-40-A	6.7	5.6	3.8	3.0	2.4	1.3	NR	NR	NR	NR
SSA-B-16-40-A	4.7	3.7	2.1	1.4	0.9	NR	NR	NR	NR	NR
SSA-B-18-40-A	2.9	2.1	0.6	NR	NR	NR	NR	NR	NR	NR
SSA-B-20-40-A	1.4	0.6	NR	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-40-B	9.2	7.7	5.4	4.5	3.7	2.3	1.2	NR	NR	NR
SSA-B-18-40-B	6.8	5.6	3.6	2.7	2.0	0.8	NR	NR	NR	NR
SSA-B-20-40-B	4.8	3.7	1.9	1.2	0.6	NR	NR	NR	NR	NR
SSA-B-18-50-B	12.9	10.9	7.6	6.3	5.1	3.2	1.7	0.5	NR	NR
SSA-B-20-50-B	9.8	8.1	5.2	4.0	3.0	1.3	NR	NR	NR	NR
SSA-B-25-50-B	4.0	2.7	0.5	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-60-B	25.0	22.3	16.9	14.7	12.7	9.6	7.0	5.0	4.2	3.4
SSA-B-18-60-B	20.7	17.7	13.0	11.0	9.3	6.5	4.3	2.6	1.8	1.1
SSA-B-20-60-B	16.4	13.8	9.6	7.9	6.4	3.9	2.0	NR	NR	NR
SSA-B-25-60-B	8.3	6.3	3.1	1.8	0.7	NR	NR	NR	NR	NR
SSA-B-30-60-B	2.5	0.8	NR	NR	NR	NR	NR	NR	NR	NR
SSA-B-16-60-C	25.0	25.0	24.5	21.5	19.0	14.9	11.6	9.0	7.9	6.8
SSA-B-18-60-C	25.0	25.0	19.5	17.1	14.9	11.2	8.3	6.0	5.1	4.2
SSA-B-20-60-C	24.2	20.9	15.4	13.2	11.2	8.0	5.5	3.5	2.6	1.8
SSA-B-25-60-C	14.2	11.6	7.5	5.8	4.3	1.9	NR	NR	NR	NR
SSA-B-30-60-C	7.1	5.0	1.7	NR	NR	NR	NR	NR	NR	NR

Florida Building Code 2017 EPA Load Rating - 3 second gust wind speeds									
Catalog Number	115	120	130	140	150	160	170	180	
SSA-B-08-40-A	14.8	13.4	11	9.1	7.6	6.3	5.3	4.4	
SSA-B-10-40-A	10.9	9.8	7.9	6.3	5.1	4.1	3.2	2.5	
SSA-B-12-40-A	7.9	7.0	5.4	4.1	3.0	2.2	1.5	0.9	
SSA-B-14-40-A	5.6	4.8	3.4	2.3	1.4	0.6	NR	NR	
SSA-B-16-40-A	3.6	2.9	1.7	0.7	NR	NR	NR	NR	
SSA-B-18-40-A	1.8	1.2	NR	NR	NR	NR	NR	NR	
SSA-B-20-40-A	NR	NR	NR	NR	NR	NR	NR	NR	
SSA-B-16-40-B	7.7	6.7	4.9	3.5	2.4	1.5	0.7	NR	
SSA-B-18-40-B	5.4	4.5	3	1.8	0.8	NR	NR	NR	
SSA-B-20-40-B	3.5	2.7	1.3	NR	NR	NR	NR	NR	
SSA-B-18-50-B	10.6	9.2	6.8	4.9	3.3	2	1	NR	
SSA-B-20-50-B	7.8	6.5	4.4	2.7	1.3	NR	NR	NR	
SSA-B-25-50-B	2.2	1.2	NR	NR	NR	NR	NR	NR	
SSA-B-16-60-B	22	19.6	15.5	12.4	9.8	7.7	5.9	4.4	
SSA-B-18-60-B	17.2	15.2	11.7	8.9	6.6	4.8	3.3	2	
SSA-B-20-60-B	13.4	11.5	8.4	6.4	4	2.4	1	NR	
SSA-B-25-60-B	5.7	4.4	2	NR	NR	NR	NR	NR	
SSA-B-30-60-B	NR	NR	NR	NR	NR	NR	NR	NR	
SSA-B-16-60-C	25	25	22.8	18.6	15.2	12.5	10.1	8.2	
SSA-B-18-60-C	25	22.5	18	14.3	11.3	9	7	5.3	
SSA-B-20-60-C	20.4	18	14	10.8	8.2	6	4.3	2.8	
SSA-B-25-60-C	11.2	9.3	6.2	3.8	1.8	NR	NR	NR	
SSA-B-30-60-C	4.3	2.9	NR	NR	NR	NR	NR	NR	

NOTES

Wind-speed Website disclaimer:

Hubbell Lighting has no connection to the linked website and makes no representations as to its accuracy. While the information presented on this third-party website provides a useful starting point for analyzing wind conditions, Hubbell Lighting has not verified any of the information on this third party website and assumes no responsibility or liability for its accuracy. The material presented in the windspeed website should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. Hubbell Lighting Inc. does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the windspeed report provided by this website. Users of the information from this third party website assume all liability arising from such use. Use of the output of these referenced websites do not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the windspeed report. <http://windspeed.atcouncil.org>

- Allowable EPA, to determine max pole loading weight, multiply allowable EPA by 30 lbs.
- The tables for allowable pole EPA are based on the ASCE 7-05 Wind Map or the Florida Region Wind Map for the 2010 Florida Building Code. The Wind Maps are intended only as a general guide and cannot be used in conjunction with other maps. Always consult local authorities to determine maximum wind velocities, gusting and unique wind conditions for each specific application
- Allowable pole EPA for jobsite wind conditions must be equal to or greater than the total EPA for fixtures, arms, and accessories to be assembled to the pole. Responsibility lies with the specifier for correct pole selection. Installation of poles without luminaires or attachment of any unauthorized accessories to poles is discouraged and shall void the manufacturer's warranty
- Wind speeds and listed EPAs are for ground mounted installations. Poles mounted on structures (such as bridges and buildings) must consider vibration and coefficient of height factors beyond this general guide; Consult local and federal standards
- Wind Induced Vibration brought on by steady, unidirectional winds and other unpredictable aerodynamic forces are not included in wind velocity ratings. Consult Hubbell Lighting's Pole Vibration Application Guide for environmental risk factors and design considerations. https://hubbellcdn.com/ohwassets/HLI/outdoor/resources/literature/files/Pole_Wind_Induced_Flyer_HL010022.pdf
- Extreme Wind Events like, Hurricanes, Typhoons, Cyclones, or Tornadoes may expose poles to flying debris, wind shear or other detrimental effects not included in wind velocity ratings

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

MARSHAL LED TWIN

MOTION SENSOR KIT

FEATURES

- Attractive security floodlight improves safety and replaces bulky outdated fixtures
- Powerful LED system saves energy and maintenance over traditional lighting sources
- Includes adjustable settings for time, sensitivity, and distance
- Aimable PIR occupancy sensor has 180° coverage, perfect for outdoor applications
- CSA listed to UL1598 for use in wet locations



SPECIFICATIONS

CONSTRUCTION

- Die cast aluminum heads and mounting plate
- Mounting plate has 1/2" threaded hubs
- Tempered glass lenses
- UV resistant occupancy sensor
- 2 adjustable 1000 lumen LED heads
- Available in Dark Bronze or White finish

OPTICS

- Replaces twin 150w incandescent lamps
- Each floodlight head has a 6x6 distribution

INSTALLATION

- Mounts to 4" junction box and includes a gasket to seal electrical connections

• INSTALLATION (CONTINUED)

- Easy 4 step installation and wiring
- Two 1/2" threaded conduit hubs for surface conduit provided

ELECTRICAL

- 120V/60Hz LED

CONTROLS

- Adjustable PIR occupancy sensor
- PIR occupancy sensor has 180 degree coverage
- Programmable settings include time, sensitivity, distance

tradeSELECT®



RELATED PRODUCTS

Ratio Family

FSL Factor

Colt Flood

CERTIFICATIONS

- CSA listed to UL1598 for use in wet locations
- Heads NEMA 3R

WARRANTY

- 5 year warranty
- See [HLI Standard Warranty](#) for additional information

KEY DATA	
Lumen Range	2104
Wattage Range	26.6W
Efficacy Range (LPW)	79
Fixture Projected Life (Hours)	L70>125K
Weights lbs. (kg)	2.2 (1)

STOCK ORDERING INFORMATION

Catalog Number	Mount	Color	Beam Pattern	Wattage	Voltage	CCT/CRI	Lumens	LPW	Weight lbs. (kg)
ML-2L3K-1-DB	Ceiling/Wall	Dark Bronze	General	26.6w	120V	3000K/83	2104	79	2.2 (1)
ML-2L3K-1-WH	Ceiling/Wall	White	General	26.6w	120V	3000K/83	2104	79	2.2 (1)

ACCESSORIES

Accessories		
☐	MS-DB	.5" threaded, Dark bronze, Occupancy sensor only, 180° and adjustable settings
☐	MS-WH	.5" threaded, White, Occupancy sensor only, 180° and adjustable settings



MS-DB

MS-WH

MARSHAL LED TWIN

MOTION SENSOR KIT

PERFORMANCE DATA

			3K (3000K nominal, 80 CRI)	
# of LEDs	Drive Current	System Watts	Lumens	LPW ¹
2	0.22	26.6	2090	80.2

¹ Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application

ELECTRICAL DATA

# OF LEDS	Drive Current (mA)	Input Voltage (V)	Oper. Current (Amps)	System Power (Watts)
2	0.22	120	0.994	26.6

PROJECTED LUMEN MAINTENANCE

Ambient Temp.	Operating Hours					L70 (hours)
	0	25,000	TM-21-111 L90 36,000	50,000	100,000	
25°C / 77°F	1.00	0.93	0.90	0.86	0.75	> 125,000
40°C / 104°F	0.99	0.90	0.86	0.81	0.67	> 88,000

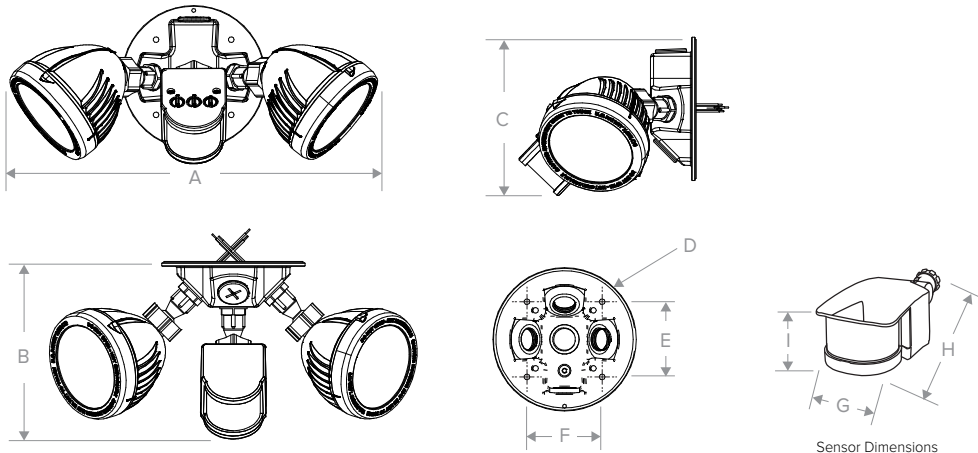
¹ Projected per IESNA TM-21-11 (*Cree XP-L, 2100A, 105°C Ts, 6,000hrs)

LUMINAIRE AMBIENT TEMPERATURE FACTOR (LATF)

AMBIENT TEMPERATURE		LUMEN MULTIPLIER
0° C	32° F	1.06
10° C	50° F	1.03
20° C	68° F	1.01
25° C	77° F	1.00
30° C	86° F	0.99
40° C	104° F	0.97
50° C	122° F	0.94

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

DIMENSIONS



A	B	C	D	E	F	Weight	G	H	I
12.75" 323 mm	6.5" 165 mm	5.00" 127 mm	4.81" 122 mm	2.52" 64 mm	2.52" 64 mm	2.2 lbs. 1 kg	0.25" 60 mm	6" 152 mm	0.25" 47 mm

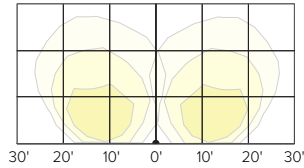
MARSHAL LED TWIN

MOTION SENSOR KIT

PHOTOMETRY

The following diagrams represent the general distribution options offered for this product. For detailed information on specific product configurations, see [website photometric test reports](#).

Marshal – Mounting Height: 10ft



ADDITIONAL INFORMATION

SENSOR ADJUSTMENTS



Includes adjustable settings and photo control

- Time
- Sensitivity
- Distance

SHIPPING INFORMATION

Catalog Number	G.W(kg)/CTN	Carton Dimensions		
		Length Inch (cm)	Width Inch (cm)	Height Inch (cm)
ML-2L	3.4 lbs (1.5)	10.75" (27.3)	7.75" (20.7)	6.5" (16.5)
MS	0.4 lbs (0.2)	2.38" (6.0)	2.13" (5.4)	5.88" (14.9)