

Department of Planning and Zoning

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TO: Development Review Board
FROM: Scott Gustin & Mary O'Neil *msneil*
DATE: October 21, 2014
RE: 15-0338PD 112-114 Archibald Street
15-0341PD 27 Bright Street
15-0342PD 35-39 Bright Street
15-0343PD 47 Bright Street



Note: These are staff comments only; decisions on projects are made by the Development Review Board, which may approve, deny, table or modify any project. THE APPLICANT OR REPRESENTATIVE MUST ATTEND THE MEETING.

Zone: NMU, **Ward:** 2

Owner/Representative: Champlain Housing Trust / Michael Wisniewski

Request: Final plat review of major Planned Unit Development for 44 dwelling units and associated site infrastructure and demolition of existing buildings.

Applicable Regulations:

Article 3 (Applications and Reviews), Article 4 (Maps & Districts), Article 5 (Citywide General Regulations), Article 6 (Development Criteria & Guidelines), Article 8 (Parking), Article 9 (Inclusionary and Replacement Housing), Article 10 (Subdivision), and Article 11 (Planned Unit Development)

Background Information:

The applicant is seeking final plat approval for a major PUD involving several properties on Bright and Archibald Streets. Champlain Housing Trust, partnered with Housing Vermont, seeks to combine four parcels (58,977 sf) with 14 existing residential units; redevelop the site retaining one duplex (27 Bright Street) with construction of four new buildings providing 44 residential units, 42 of them new. Proposed for demolition are 114 Archibald St. (9 residential units), 35 Bright Street (1 unit) plus outbuildings, and 47 Bright Street (1 unit.) New development will include construction of 2 duplex townhouses, one triplex, and one three story, 35 unit structure within the interior. The development will provide a net gain of 31 new residential units. All parking is proposed within an enclosed underground parking structure, except for 2 surface parking spaces at the proposed Archibald duplex.

The application involves several properties, and therefore, includes several separate zoning permit applications. All are reviewed concurrently as a single project. Four parcels will be merged into one, but 27 Bright Street will remain a separate parcel.

This proposal underwent sketch plan review with the DRB August 6, 2013. Preliminary plat application was reviewed by the Conservation Board May 4, 2014. The Board applauded the applicant's efforts to infiltrate 100% of anticipated stormwater with no discharge into the city system. The Design Advisory Board reviewed the preliminary plat application May 13, 2014 and recommended preliminary plat approval. The Preliminary Plat was approved by the Development Review Board on July 1, 2014 with the following conditions:

1. This preliminary plat approval in no way grants or implies final plat approval. Final plat application shall be filed in accordance with Section 10.1.9, *Final Plat Approval Process*, of the CDO and per these Conditions of Approval.
2. Prior to final plat application, written acceptance of the adequacy of emergency vehicle access shall be obtained from the Fire Marshal.
3. Prior to final plat application, a boundary survey by a VT licensed land surveyor shall be provided and shall show all proposed boundary adjustments.
4. Final plat plans *should* include a project phasing schedule that calls out what project components will be built and when they will be built.
5. Final plat plans shall include an update on the remediation and "corrective action plan" for the site.
6. Final plat plans shall include proposed days and hours of construction.
7. Final plat plans shall include the final stormwater system design and shall also include the final details for the erosion prevention and sediment control plan.
8. Final plat plans shall include outdoor lighting details compliant with the standards of Sec. 5.5.2, *Outdoor Lighting*, particularly garage lighting and building entry lighting.
9. Final plat plans shall include bicycle parking details compliant with the Department of Public Works *Bicycle Parking Guidelines*.
10. Final plat plans shall include details as to the amount and extent of affordability of the proposed dwelling units per the requirements of Article 9, *Inclusionary Housing*.
11. Final plat plans shall include a plan for snow removal.

12. Final plat application shall include a final review letter from a preservation consultant with concurrence from the Vermont Division for Historic Preservation relative to project impacts.
13. Unless phased by request to the DRB, the time between demolition of the listed historic buildings and commencement of new construction generally shall not exceed six (6) months.

The final plat application addresses this conditions as noted below in these findings.

At their September 23, 2014 meeting, the DAB reviewed this final plat application and voted unanimously to recommend approval with the following conditions:

1. **Prior to release of the zoning permit**, written approval confirming compliance with Chapter 26, Wastewater, Stormwater and Pollution Control measures shall be received from the City Stormwater Engineering staff.
2. **Prior to release of the zoning permit**, confirmation that the parking garage lighting plan conforms to RP-20-98 as determined by their lighting design consultant, as required by Sec. 5.5.2 (f) 5 must be submitted to staff. Any garage lighting fixture visible from the exterior of the garage facility shall be shielded in a manner that prevents glare to be visible from the exterior of the parking garage.
3. Lighting at building entrances exceeds standards of the *Outdoor Lighting Manual for Vermont Municipalities*, Table 2, p. 10: *Building Entry – active use, 5 footcandles average maintained*. Measurements on the lighting plan illustrate entryway lighting between 5.1 fc (duplex 2 on Archibald Street) to 8.7 fc (Trinity east entrance.) All building entrances exceed the 5 footcandle limitation, and will require revision to meet these standards, or confirmation that the average maintained level meets the standard.
4. A Corrective Action Plan will be required by DEC for PAH impacted soils on the site prior to development. The applicant shall submit confirmation that all required site remediation has taken place and appropriate controls are in place; that the site is deemed acceptable for residential use.
5. Proposed design and construction details for any retaining walls over 3-feet in height shall be subject to review and written approval by the city engineer **prior to release of the zoning permit**.
6. If HVAC or rooftop equipment is proposed, the submission should be augmented with that information (including any additional height, which would apply toward overall building height limitation) with anticipated noise level (dB) of each unit.
7. A State Wastewater Permit will be required for water and sewer service. It is the obligation of the owner/applicant to seek this and any other required additional permits.
8. A plan for the barrier fence will need to be provided for staff review and approval.
9. An extension of the 6 month time limit between demolition and new construction is recommended due to the potential hazard of vacant buildings over winter months. That limit is recommended to be further defined by the DRB, but understood to be less than one year.
10. The applicant is encouraged to sell or reclaim structures and all historic building materials, or permit others to salvage them in reasonable manner that will not forfeit public health or safety.

The applicants are amenable to these conditions, and they will be forwarded on as conditions of final plat approval. Some of these conditions may be addressed with revised plans prior to final plat review by the Development Review Board.

The Conservation Board reviewed this final plat application on October 6, 2014. At that meeting, the Board unanimously recommended approval of the project, subject to final review and approval by the Stormwater Administrator. That final review is underway, and approval is anticipated shortly. The Board also recommended that the Corrective Action Plan be approved by the Vermont DEC prior to release of the zoning permit.

Previous zoning actions for the subject properties are as follows:

All subject properties:

- Preliminary plat review of major Planned Unit Development for 44 dwelling units and associated site infrastructure and demolition of existing buildings. Approved July 1, 2014.

112-114 Archibald Street

- 14-0026SP; 112-114 Archibald Street, Sketch Plan Review, August 6, 2013.
- Request to operate an automotive garage, body and fender service and used car sales at 114 ½ Archibald Street, **Denied**, September 1964. (Had been operating without a permit.) Front building identified as a fish market.

27 Bright Street

Not proposed to be altered.

35-39 Bright Street

- No zoning permits on file for this property.

47 Bright Street

- **Zoning Permit 98-475**; Installation of a stockade style fence across the front property line of the single family home. Approved May 1998.
- **Zoning Permit 97-593**; Construction of a single story attached rear shed, measuring 13'10" x 20' on existing concrete slab for the existing single family home. Materials to be T-111. Approved July 1997.

Recommendation: **Final plat approval** as per, and subject to, the following findings and conditions:

I. Findings

Article 3: Applications and Reviews

Part 5, Conditional Use & Major Impact Review:

Sec. 3.5.6, Review Criteria

(a) Conditional Use Review Standards

1. The capacity of existing or planned community facilities;

This proposal was reviewed by the Technical Review Committee (TRC) on July 11, 2013. No capacity concerns were expressed relative to water, wastewater, electricity, or traffic. A state wastewater permit will be required, and a capacity letter from the Department of Public Works will be needed. The applicant has provided communication with the Fire Marshal's Office relative to fire and emergency vehicle service access; see *Bright Street Cooperative, Final Plat Application to the City of Burlington* dated September 5, 2014; np. (**Affirmative finding as conditioned**)

2. The character of the area affected;

The development site is situated between Bright and Archibald Streets. There are a variety of commercial and residential uses within the neighborhood. Multi-family homes are common, as are moderately sized commercial businesses. The built environment exhibits an array of older historic buildings and more recent construction of widely varying scale. The proposed development includes one large central building with 35 dwelling units. Three smaller buildings will front along Bright Street and Archibald Street. The project is reasonably consistent with the character of the area. Care has been taken to limit the apparent scale and massing of the large center building by placing it in the center of the site with smaller buildings lining the periphery. The building itself has been broken into smaller distinct components. **(Affirmative finding)**

3. Traffic on roads and highways in the vicinity;

Traffic information has been provided. Not surprisingly, the net gain in housing units may be expected to result in an increase in traffic generation. Based on ITE data, the existing 11 units generate about 73 trip ends per day, 6 in the AM peak hour and 7 in the PM peak hour. The proposed development would generate an estimated 249 trip ends per day, 21 in the AM peak hour and 26 in the PM peak hour. While ITE data is the basis for most traffic analyses, actual trip generation associated with this development will likely be lower than suggested by ITE due to its urban location, existing transportation system, and the demonstrated history of low vehicle ownership rates of Champlain Housing Trust residents. The Department of Public Works traffic engineer provided the following comments, dated June 10, 2014:

I reviewed the plans and the traffic memorandum and I agree with the assessment from Dubois & King of the traffic impact of the development. The increment in traffic will be negligible in the local street network.

(Affirmative finding)

4. Bylaws then in effect;

As conditioned, the preliminary plat application is in full compliance with all applicable bylaws. **(Affirmative finding as conditioned)**

5. Utilization of renewable energy resources;

Rooftop solar panels may be included in the project development. Such inclusion is strongly recommended. **(Affirmative finding as conditioned)**

6. Cumulative impacts of the proposed use;

This criterion requires that cumulative impacts associated with residential development where it is permitted be deemed negligible. Such is the case here. **(Affirmative finding)**

7. Functional family;

Not applicable.

8. Vehicular access points;

See Sec. 6.2.2 (i).

9. Signs;

No signage is included in this proposal. Signs will require separate zoning permits.

10. Mitigation measures;

The proposed residential development is not expected to generate offsite noise or glare substantial enough to require mitigation. **(Affirmative finding)**

11. Time limits for construction;

The application anticipates project completion within the standard 2-year time frame for zoning permits, with project commencement in the spring of 2015 and completion within 12 months. The opportunity for a phasing schedule has been suggested to the applicants; however, they have declined to pursue a phasing plan. As a result, no occupancy may occur in any of the buildings until the project is complete. **(Affirmative finding)**

12. Hours of operation and construction;

Hours of operation need not be specified for this residential development. The final plat application proposes days and hours of construction 7:00 AM – 5:00 PM, Monday – Friday and 8:00 AM – 5:00 PM on weekends. The Monday – Friday hours are acceptable. Saturday construction from 8:00 AM – 5:00 PM is acceptable. No construction activity may take place on Sundays. **(Affirmative finding as conditioned)**

13. Future enlargement or alterations;

In the event of future enlargement or alteration, permits would be required and reviewed under the regulations then in effect.

14. Performance standards;

Performance standards relating to outdoor lighting and erosion control are addressed under Article 5 of these findings.

15. Conditions and safeguards;

See recommended conditions of approval.

(b) Major Impact Review Standards

1. Not result in undue water, air, or noise pollution;

The proposed stormwater management system will collect runoff from impervious surfaces and infiltrate it into the ground. The soils are sandy, and the water table is deep. This site is ideal for such a proposal. The proposed infiltration of stormwater will lessen impacts on the city's stormwater infrastructure. The Conservation Board reviewed and recommended approval of the proposed stormwater management system. Final review by the Stormwater Administrator is underway and approval is expected shortly. **(Affirmative finding as conditioned)**

2. Have sufficient water available for its needs;

See Sec. 3.5.6 (a) 1.

3. Not unreasonably burden the city's present or future water supply or distribution system;

See Sec. 3.5.6 (a) 1.

4. Not cause unreasonable soil erosion or reduction in the capacity of the land to hold water so that a dangerous or unhealthy condition may result;

An erosion prevention and sediment control plan in compliance with Chapter 26, Wastewater, Stormwater, & Pollution Control has been provided. The plan has been reviewed and approved by

the Conservation Board. Review and approval by the Stormwater Administrator is pending.
(Affirmative finding as conditioned)

5. Not cause unreasonable congestion or unsafe conditions on highways, streets, waterways, railways, bikeways, pedestrian pathways or other means of transportation, existing or proposed;
See Sec. 3.5.6 (a) 3.

6. Not cause an unreasonable burden on the city's ability to provide educational services;
The proposed development may attract families with school age children, particularly in the 3- and 4-bedroom units. No comments from the School Department have been received, and overall school impacts are expected to be relatively modest. Impact fees will be due to help offset any capital costs for additional children. **(Affirmative finding as conditioned)**

7. Not place an unreasonable burden on the city's ability to provide municipal services;
The proposed development will generate additional impacts on city services; however, those impacts are expected to be proportionately small. All affected City Departments (Parks & Recreation, Fire, Police, Electric, CEDO, Planning & Zoning, School, and Public Works) have been involved in the review of this project. Insofar as comments have been provided, they are noted in these findings. Impact fees for police, traffic, parks, and libraries will be assessed as part of final plat approval. **(Affirmative finding)**

8. Not have an undue adverse effect on rare, irreplaceable or significant natural areas, historic or archaeological sites, nor on the scenic or natural beauty of the area or any part of the city;
See Sec. 6.2.2.

9. Not have an undue adverse effect on the city's present or future growth patterns nor on the city's fiscal ability to accommodate such growth, nor on the city's investment in public services and facilities;
The proposed development will take place within the NMU zone, an area of the city targeted for increased density. This neighborhood in particular is identified as a center for growth and development in the Municipal Development Plan. The development will provide a mix of new housing types in a neighborhood in need of reinvestment. No adverse impacts on the city's growth patterns are anticipated. **(Affirmative finding)**

10. Be in substantial conformance with the city's municipal development plan;
The proposed development is compliant with the MDP in a number of ways.

The project is located within a neighborhood mixed use zone where higher density development is encouraged and will substantially upgrade housing opportunities from existing conditions (Sec. I, Land Use Policies and Sec. IX, Housing Plan Policies).

The proposed development is located within an identified growth area specifically targeted for additional housing (Sec. I, Neighborhood Activity Centers). It is also contained within the Old North End Enterprise Community and includes the kind of investment and redevelopment specifically called for in this area of the city (Sec. I, The Old North End Enterprise Community).

In light of the project's location and proximity to multiple transportation options, alternative means of transportation will be readily available to residents of the proposed housing (Sec. V, Stressing Other Modes of Travel).

The project will meet or exceed the city's current energy efficiency standards (Sec. VIII).

The proposed development can be found to be in conformance with the City's MDP.
(Affirmative finding)

11. Not have an undue adverse impact on the present or projected housing needs of the city in terms of amount, type, affordability and location;

The proposal will provide a mix of new housing units in a neighborhood with scant recent development. All of the dwelling units will be affordable. **(Affirmative finding)**

12. Not have an undue adverse impact on the present or projected park and recreation needs of the city.

Modest impacts on the city's park and recreation facilities may result. Payment of impact fees will help offset such impacts. Comments from the Department of Parks & Recreation note that these impact fees will be directed towards improvements to the nearby Roosevelt Park. **(Affirmative finding)**

Article 4: Maps & Districts

Sec. 4.4.2, Neighborhood Mixed Use Districts:

(a) Purpose

(2) Neighborhood Mixed Use (NMU)

The NMU zone is intended to provide a compact variety of commercial uses within the city's older neighborhoods. It also provides for higher residential density than the nearby residential zones.

The proposed development is consistent with these goals.

The existing parcel at 47 Bright Street was previously zoned RM; however, per zoning amendment ZA-14-05, it has become NMU like the rest of the development site. This amendment was adopted by City Council July 14, 2014. **(Affirmative finding)**

(b) Dimensional Standards & Density

FAR in the NMU is limited to 2.0. The proposed development has a FAR of 1.1 (64,450 sf building area w/in 59,720 sf property).

Only two setbacks apply to the NMU portion of the proposed development: 1) a 10' setback from the street curb and a 15' district setback along the NMU/RM boundary. The site plans depict acceptable street curb setbacks and also depict the 15' district boundary setback along the NMU/RM boundary to the north.

Lot coverage will increase from an existing 21.1% to 58.5%. The maximum permissible is 80%.

Building height will vary among the structures. The center building is tallest at 34'. This height remains below the 35' height limit. All structures comply with the 20', 2-story height minimum.
(Affirmative finding)

(c) Permitted & Conditional Uses

The proposed multi-family housing is permitted in the NMU zone. The two new duplexes proposed are generally not permitted in the NMU; however, they may be permitted as part of this PUD (which affords flexibility in housing types). The DRB found the inclusion of duplexes to be acceptable during sketch plan review. (**Affirmative finding**)

(d) District Specific Regulations

1. Ground Floor Residential Uses Restricted

Not applicable.

2. Exception to Minimum Height in NAC District

Not applicable.

3. Exception to Maximum Lot Coverage in NAC District

Not applicable.

4. Development Bonuses/Additional Allowances

Not applicable. No bonuses sought.

Article 5: Citywide General Regulations

Sec. 5.2.3, Lot Coverage Requirements

See Sec. 4.4.2 (b) above.

Sec. 5.2.4, Buildable Area Calculation

Not applicable.

Sec. 5.2.5, Setbacks

See Sec. 4.4.2 (b) above.

Sec. 5.2.6, Building Height Limits

No exceptions to building height limits are requested.

Sec. 5.2.7, Density and Intensity of Development Calculations

See Sec. 4.4.2 (b) above.

Part 4, Special Use Regulations

Sec. 5.4.8, Historic Buildings and Sites

Two buildings within the project area are listed on the Vermont State Register of Historic Resources. Both are proposed to be demolished. A consultant's report has been included with the submission materials for Preliminary Plat and a final communication for Final Plat review. See comments under Sec. 6.2.3 (b), above. In general the report and subsequent letter of confirmation reflect the acceptability of the new housing as mitigation for the loss of a group of buildings with marginal historic integrity; understanding the greater public benefit of the prospect of newer, cleaner, safer, affordable housing in the neighborhood.

Herein are the standards for review:

(d) Demolition of Historic Buildings:

The purpose of this subsection is:

- To discourage the demolition of a historic building, and allow full consideration of alternatives to demolition, including rehabilitation, adaptive reuse, resale, or relocation;*
- Provide a procedure and criteria regarding the consideration of a proposal for the demolition of a historic building; and,*
- To ensure that the community is compensated for the permanent loss of a historic resource by a redevelopment of clear and substantial benefit to the community, region or state.*

1. Application for Demolition.

For demolition applications involving a historic building, the applicant shall submit the following materials in addition to the submission requirements specified in Art. 3:

A. A report from a licensed engineer or architect who is experienced in rehabilitation of historic structures regarding the soundness of the structure and its suitability for rehabilitation;

This was included with the Preliminary Plat submission documents.

B. A statement addressing compliance with each applicable review standard for demolition;

C. Where a case for economic hardship is claimed, an economic feasibility report prepared by an architect, developer, or appraiser, or other person experienced in the rehabilitation and adaptive reuse of historic structures that addresses:

(i) the estimated market value of the property on which the structure lies, both before and after demolition or removal; and,

(ii) the feasibility of rehabilitation or reuse of the structure proposed for demolition or partial demolition;

Both the structural engineer and the 36-CFR certified preservation consultant concurred that the poor condition of both buildings, coupled with the loss of integrity and level of alteration make rehabilitation economically unviable. All concur that the best solution would be to remove the structures and allow redevelopment to occur, conditioned upon compatibility with the context of the neighborhood.

D. A redevelopment plan for the site, and a statement of the effect of the proposed redevelopment on the architectural and historical qualities of other structures and the character of the neighborhood around the sites;

This application proposes redevelopment of the site.

and,

E. Elevations, drawings, plans, statements, and other materials which satisfy the submission requirements specified in Art. 3, for any replacement structure or structures to be erected or constructed pursuant to a development plan.

Attached.

2. Standards for Review of Demolition.

Demolition of a historic structure shall only be approved by the DRB pursuant to the provisions of Art. 3, Part 5 for Conditional Use Review and in accordance with the following standards:

A. The structure proposed for demolition is structurally unsound despite ongoing efforts by the owner to properly maintain the structure; or,

B. The structure cannot be rehabilitated or reused on site as part of any economically beneficial use of the property in conformance with the intent and requirements of the

underlying zoning district; and, the structure cannot be practicably moved to another site within the district; or,

C. The proposed redevelopment of the site will provide a substantial community-wide benefit that outweighs the historic or architectural significance of the building proposed for demolition.

And all of the following:

D. The demolition and redevelopment proposal mitigates to the greatest extent practical any impact to the historical importance of other structures located on the property and adjacent properties;

E. All historically and architecturally important design, features, construction techniques, examples of craftsmanship and materials have been properly documented using the applicable standards of the Historic American Building Survey (HABS) and made available to historians, architectural historians and others interested in Burlington's architectural history; and,

F. The applicant has agreed to redevelop the site after demolition pursuant to an approved redevelopment plan which provides for a replacement structure(s).

(i) Such a plan shall be compatible with the historical integrity and enhances the architectural character of the immediate area, neighborhood, and district;

(ii) Such plans must include an acceptable timetable and guarantees which may include performance bonds/letters of credit for demolition and completion of the project; and,

(iii) The time between demolition and commencement of new construction generally shall not exceed six (6) months.

This requirement may be waived if the applicant agrees to deed restrict the property to provide for open space or recreational uses where such a restriction constitutes a greater benefit to the community than the property's redevelopment.

The applicants have not offered to deed restrict the property. However as a public housing project, a substantial and long lasting community benefit would be realized by the redevelopment of the subject parcels, providing 44 residential units (42 in four new buildings, and 31 of them new.)

Due to the scale and ambitious breadth of the project, the applicant has asked for a rational extension of time in which to replace the buildings post demolition. This standard (iii) notes *the time between demolition and construction generally shall not exceed six months.* See applicant's discussion under *Bright Street Cooperative* cover letter, item #13. The dual factors of the potential of a vacant building at 114 Archibald Street and the onset of winter weather, an early demolition of that structure with spring construction would allow a reasoned and understandable flexibility of that standard.

3. Deconstruction: Salvage and Reuse of Historic Building Materials.

The applicant shall be encouraged to sell or reclaim a structure and all historic building materials, or permit others to salvage them and to provide an opportunity for others to purchase or reclaim the building or its materials for future use. An applicant may be required to advertise the availability of the structure and materials for sale or salvage in a local newspaper on at least three (3) occasions prior to demolition.

As noted. (Affirmative finding as conditioned)

Sec. 5.5.1, Nuisance Regulations

An allowance for a greater time period between demolition of the historic buildings and reconstruction will eliminate a potential nuisance/public safety concern, as noted above. Nothing else in the proposal appears to constitute a nuisance under this criterion. **(Affirmative finding as conditioned)**

Sec. 5.5.2, Outdoor Lighting

Light specs, a photometric, and lighting plan have been submitted. Lighting is proposed to be full cut-off and building-mounted. The duplex and triplex front porches have recessed can lights to be controlled by occupants. All other lights are proposed to be controlled by photo-sensors and timers. All lighting is low cutoff LED; there are no pole mounted lights.

Lighting at building entrances has been revised downward; however, illumination levels at several building entries exceed the 5.0 footcandle maximum noted in the *Outdoor Lighting Manual for Vermont Municipalities*, Table 2, p. 10: *Building Entry – active use, 5 footcandles average maintained*. Entryway lighting must be revised so as to not exceed this 5.0 footcandle maximum

Walkway lighting meets the applicable standards.

Lighting levels within the parking garage have been provided, and appear to be in compliance with Sec. 5.5.2 (f) 5. **(Affirmative finding as conditioned)**

Sec. 5.5.3, Stormwater and Erosion Control

A comprehensive stormwater management plan has been provided. As noted previously, the system will capture stormwater runoff and infiltrate it into the ground onsite. There will be no direct discharge of runoff into the city system. Final review and approval of the proposed stormwater management plan is pending with the Stormwater Administrator. **(Affirmative finding as conditioned)**

Article 6: Development Review Standards:

Part 1: Land Division Standards

The Bright Street Cooperative neighborhood will combine the four parcels owned by Champlain Housing Trust. 27 Bright Street will be retained as a separate lot, yet continue to be operated by CHT as part of the overall project.

Section 6.1.2 Review Standards

(a) Protection of important natural features:

There are no watercourses, wetlands, steep slopes, rock outcroppings, and wildlife habitat or travel corridors within the review area. **(Affirmative finding)**

(b) Block size and arrangement

No new blocks are proposed. Street frontages for existing parcels will be supported with new construction to “complete” the street edge. **(Affirmative finding)**

(c) Arrangement of lots

No new lots will be created. The project will join four existing lots. Through development, the existing street pattern will be perpetuated by location of new structures that support the street face. **(Affirmative finding)**

(d) Connectivity of Streets within the city street grid:
No change.

(e) Connectivity of sidewalks, trails and natural systems:
All public sidewalks will be re-established; interior sidewalks will support continued ease of pedestrian mobility within the interior of the site and to the overall public sidewalk flow.
(Affirmative finding)

Part 2: Site Plan Design Standards
Sec. 6.2.2, Review Standards

(a) Protection of important natural features:
There are no important natural features on the subject properties. Green space is generally open grassy area with scattered trees. Plan L1.0 defines the removal of 15 trees located within the site and possibly some around the perimeter near foundation excavation locations. See plan L1.0 as revised for tree and fencing demo diagram. A landscaping/planting plan has been submitted (see Plan L2.0.) The species proposed within the greenbelt on Bright Street was recommended for revision by the city arborist. The replacement species has been guided by his recommendation.
(Affirmative finding)

(b) Topographical alterations
The site slopes slightly downward from east to west. Slight modification to the grade will be required to facilitate the development. Due to the parking garage ramp and entrance off of Archibald Street, in combination with the first floor pedestrian entrance to the 35-plex off of Bright Street, existing grades will be modified. **(Affirmative finding)**

(c) Protection of important public views
There are no significant public views from or through the property. Not applicable.

(d) Protection of important cultural resources
Two properties are currently listed on the Vermont State Register of Historic Resources. See Section 5.4.8, below.

(e) Supporting the use of alternative energy
The roof of the 35-plex is designed for photo-voltaic panels, but it is not known until further build-out if funding will allow their inclusion. In any event, they are encouraged. **(Affirmative finding)**

(f) Brownfield sites
The property is included on the Vermont DEC Hazardous Site List as a brownfield with PAH contamination. The development is enrolled in the BRELLA program (formerly the RCPP or Redevelopment of Contaminated Properties Program) and CHT is pursuing an EPA brownfield clean-up grant. A Corrective Action Plan will be required by DEC for PAH impacted soils on the site prior to development. With updated submission materials, the applicant defines procurement of a CAP as currently in progress. This remains a condition of approval. **(Affirmative finding as conditioned)**

(g) Provide for nature's events

The project will use infiltration chambers to infiltrate the 1 year storm event. Almost all of the impervious runoff will be directed to those chambers. The driveway to the parking garage and minor sidewalk runoff are the only areas that do not make it to the infiltration chambers. City engineers have reviewed the plans.

The Conservation Board reviewed the recommended approval of the stormwater design at their October 6, 2014 meeting.

Snow on the garage entrance ramp will be handled with an integrated melting system. Removal from walkways will be blown into adjacent green belts and larger amounts will be stored at adjacent patio areas.

There are several open porches that will provide respite from inclement weather for building residents. **(Affirmative finding)**

(h) Building location and orientation

Street front buildings along the periphery of the development line up with adjacent structures and reinforce the existing streetscape. The large 35-unit center building is located in the interior behind these new street front buildings. This location avoids disruption of the existing street edge and mitigates the mass of this building as perceived from the street. **(Affirmative finding)**

(i) Vehicular access

One vehicular access point, from Archibald Street, will be provided into the site. 27 Bright Street will remain as an independent parcel, and retain its own driveway. A curb cut and driveway exist under current conditions but will be modified to accommodate the proposed development. Adequate access for emergency vehicles and fire apparatus has been considered and addressed; see submission material dated April 1, 2014 and confirmation April 7, 2014 between the applicant and the Burlington fire marshal's office. **(Affirmative finding)**

(j) Pedestrian access

All of the new street edge buildings have front walkways that connect to the public sidewalk system. The interior building will connect to the public sidewalk system via new interior walkways and a wide promenade west to Bright Street. Trinity and Duplex 1 will have their own pedestrian walkway; Duplex 2 will enjoy access from the walkway that connects the public sidewalk to the interior of the site, patio and gardens. **(Affirmative finding)**

(k) Accessibility for the handicapped

The submission narrative states that the design will meet applicable state and federal handicapped accessibility requirements for both site and units. All units in the 35-plex meet FHA requirements and 5% will meet UFAS and be fully accessible. Two identified handicap parking spaces are illustrated on the parking level plan (5.3). The building inspector will require compliance with ADA standards. **(Affirmative finding)**

(l) Parking and circulation

All new parking will be located under the central building. Two surface parking spaces are proposed behind the duplex at 112-114 Archibald Street; there are four existing parking spaces at 27 Bright Street. Plan 5.3 defines the parking level, with one compact parking space, 2 handicapped parking spaces for a total of 42 parking spaces. Two additional surface spaces are

located behind 112-114 Archibald duplex 2. The four existing parking spaces at 27 Bright will remain unchanged. **(Affirmative finding)**

(m) Landscaping and fences

Ample garden space will be provided in the form of raised beds throughout the project site. A detailed landscaping plan has been submitted with preliminary and final plat plans. See plan L1.0 for existing tree and fencing demo diagram, and plan L2.0 for a proposed planting plan. Existing fencing will be retained and gaps filled in with wood fencing around 27 and 31 Bright Street. Existing fencing will be reset at some property lines where the survey has corrected those boundaries. A wood and metal privacy fence and safety barrier will be installed near the garage entrance ramp. The graduated grade of the entrance ramp is proposed to be supported with steel sheet piling similar to what is adjacent to the parking garage entrance off College Street near South Champlain Street. The grade changes are reflecting in contour lines from 238 to 228 as the parking access ramp descends; the barrier wall to be approximately 7' in height at the garage opening location. A walkway parallels that descent. The proposed retaining wall will require review and approval by the city engineer. A plan for the barrier fence will need to be provided for staff review and approval. **(Affirmative finding as conditioned)**

(n) Public plazas and open space

No public plazas are proposed, however substantial outside area is planned for the use of the residents. A significant courtyard is proposed near Bright Street, with ample eastern and southern exposure to the sun with shading provided by new trees and neighboring buildings. The garden beds, patios, and walkways accessed from the Archibald Street sidewalk will provide pleasant grounds for resident enjoyment and passive activity. Several clotheslines and play areas are also identified on the plan (See L2.0.) Much opportunity is afforded for residential pleasure on the grounds of the newly developed site. **(Affirmative finding)**

(o) Outdoor lighting

See Sec. 5.5.2.

(p) Integrate infrastructure into the design

Utility lines are proposed to be undergrounded from existing municipal services in the street. The Archibald duplex (2) will have a trash/recycling/storage closet in the adjacent garden shed, and residents will be responsible for curbside.

The 35-plex has a separate room to the right of the main entry and the trash removal company will bring the totes curbside for removal.

The Bright Street duplex (1) will utilize the 35-plex common trash/recycling room.

At the Trinity building (Bright St. Triplex), each unit will have a closet off their back deck and either tote their trash curbside or they may choose to use the common room in 35-plex and just use the closet for storage.

No exterior mechanical equipment is proposed. **(Affirmative finding)**

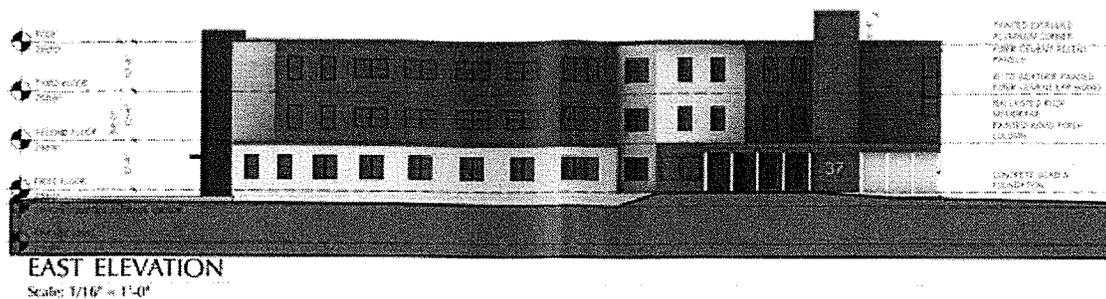
Part 3, Architectural Design Standards
Section 6.3.2 Review Standards

(a) Relate development to its environment:

The smaller buildings proposed to front Archibald and Bright Street are of a scale and character that may successfully be integrated into the existing streetscape. With individual front porches on the duplex and triplex, these buildings relate to the existing neighborhood personality. With the location of the larger building on the interior of the parcel, coupled with underground parking, the building mass is diminished, and the site retains a substantial amount of green space for resident use. **(Affirmative finding)**

1. Massing, Height and Scale:

With the proposed duplex and triplex fronting Archibald and Bright Streets, the building mass remains consistent along both streetscapes. The larger (35-plex) building, situated in the center of the proposed parcel, will be less apparent due to the location; however its height is not without precedent in the neighborhood. Immediately across the street from the Archibald Street frontage exists the Thelma Maple Housing Co-op, a newer three story residential structure fronting the street. This plan, however, minimizes the building mass as perceived from the public ROW. The 35-plex has an elongated, winding footprint which will be visually available as glimpsed through other properties and not in its entirety. Planar changes break up the building mass where each of the three wings join and provide visual interest. **(Affirmative finding)**



2. Roofs and Rooflines.

The duplexes are proposed to have compound gabled roofs, while the triplex and the 35-plex are to have flat roofs. Both are familiar and available within the immediate block. **(Affirmative finding)**

3. Building Openings

The duplexes and the triplex will have easily identifiable entrances to at least on unit fronting on the public street. Additional entrances are provided off pedestrian paths (or courtyard) on which they front. Both the south elevation (Archibald Street) and the east elevation (Bright Street) of the 35-plex have clearly identifiable entrances off pedestrian walkways.

Window openings maintain consistent patterns and proportions appropriate to the proposed residential use. The window pattern is varied, as broken up between wings of the 35-plex, and provides interest to the architecture. No awnings or canopies have been identified that may encroach into the public right-of-way, which would require an encroachment permit issued by the Dept. of Public Works. Canopies on the rear 35-plex are within the project development area. The buildings are set back from the property line, so no restriction on window or door openings is anticipated to be required to fire safety code restrictions. **(Affirmative finding)**

(b) Protection of Important Architectural Resources:

The applicant engaged preservation consultant Liz Pritchett to assess the area of potential impact, any historic properties involved, and to determine the impact on each. Her report was attached in the Preliminary Plat review. A subsequent communication, dated August 6, 2014 is enclosed as part of the Final Plat review.

From that letter:

I reviewed this undertaking in my Historic Buildings Evaluation Report dated October 2013. On January 8, 2014, the State Historic Preservation Officer concurred with my determination that the proposed demolition of the house at 39 Bright Street, a dwelling that is in poor condition but appears marginally eligible for listing in the National Register of Historic Places, would result in an adverse effect. The SHPO also agreed with the proposed mitigation measure to handle the adverse effect, which called for new construction that will be compatible with the surrounding historic resources in this neighborhood in the Old North End, and for the opportunity to review plans and elevations of the proposed new buildings on the site. I have recently reviewed updated plans and elevations dated 7.16.2014, and also a 3-D rendering of the proposed buildings....

In my professional opinion, the proposed designs for the Bright Street Cooperative comply with The Secretary of the Interior’s Standards for new construction in a historic neighborhood, and meet the mitigation measure for this project for new designs that are compatible with the historic character of Bright Street and surrounding resources.

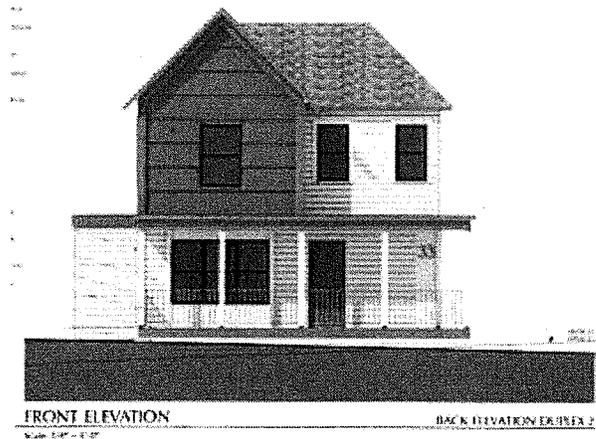
[Signature of SHPO provided as concurrence.] **(Affirmative finding)**

(c) Protection of Important Public Views:

There are no public views from these parcels. Not applicable.

(d) Provide an active and inviting street edge:

Duplex 1 and 2 both provide engaging street fronts, with triple windows at the first floor street level and wrap around porches slightly off grade. Windows are regularly spaces, and indicative of interior use. The buildings actually have 2 building fronts as designed, because rear facades serve the second unit, and open to public courtyards and interior lot common spaces.



The 35-plex, although not immediately fronting the street, has attractively designed facades facing both street fronts, albeit setback substantially from the street. Visual interest is provided by material placement, alteration to the cornice line, siding changes, rhythm of window placement, window sizes, and articulated porches. The elevator shaft provides an interesting design element distinctive to the plan. Revised images illustrate the street address has been lowered to meet sign placement requirements of the ordinance. **(Affirmative finding)**

(e) Quality of materials:

Proposed materials are fiber cement siding and trim; sloped roofs to be shingles; flat roofs membrane. Colors will be chosen from either the James Hardie or Certainteed Color palette.

Windows will be fiberglass double hung with some awning and casement. Porch railings are proposed to be painted metal; porch posts painted wood. All have been deemed to be of reasonable durability, meeting this standard. **(Affirmative finding)**

(f) Reduce energy utilization:

The narrative defines the plan for highly energy efficient buildings designs. The development will be required to meet all energy efficiency standards as defined by Burlington Electric, and will be available for incentives.

The 35-plex roof will be designed to incorporate solar panels, although preliminary development plans cannot assure that solar will be incorporated immediately.

The smaller building sizes fronting Archibald and Bright Street do not suggest the need for shadow studies. The interior location (and spatial separation from neighboring building) of the 35-plex do not raise immediate concern about shadow cast. Ample opportunity remains here, and at adjoining building sites, for the utilization of passive and active solar utility. **(Affirmative finding)**

(g) Make advertising features complementary to the site:

The street identification number ("37") has been lowered on final elevation plans to meet the requirements of the ordinance. Sign installation height in the NMU is limited to 14', or the ceiling height of the first floor. All outdoor signs are subject to a separate zoning permit. **(Affirmative finding as conditioned)**

(h) Integrate infrastructure into the building design:

See Section 6.2.2. (p), above.

(i) Make spaces secure and safe:

The proposed buildings will be sprinklered. Development will be required to meet all applicable building and life safety code as defined by the building inspector and the fire marshal. For this multi-unit building, an intercom system is recommended for residential safety. **(Affirmative finding as conditioned)**

Article 8: Parking

Sec. 8.1.8, Minimum Off-Street Parking Requirements

The subject property is located in the Shared Use Parking District. As a result, each dwelling unit requires 1 parking space for a total of 44 spaces. All but two of these parking spaces will be provided underneath the proposed center building. Two surface parking spaces will be provided behind the Archibald Street duplex. **(Affirmative finding)**

Sec. 8.2.5, Bicycle Parking Requirements

The 42 new dwelling units will require 11 long term spaces (1 per 4 units) and 4 short term spaces (1 per 10 units). The final plat submission materials include numbers and details of the proposed bicycle parking. Exterior bicycle parking is illustrated on plan L2.0. The preliminary plan defined 12 exterior bike parking spaces, and 11 interior. The final plat plans add an additional 5 spaces, with likelihood to increase that number. Interior bicycle parking is shown (behind the elevator) with 12 spaces identified, and on the parking level (plan 5.3) providing 16 spaces in the northwest corner. A multi-unit building is required to provide the following:

- Long Term Bike Parking: 1 per every 4 units
- Short Term Bike Parking: 1/10 units

For the total of 44 units, the requirement will be:

- **11 long term bike parking spaces** (44/4) and
- **4 short term bike parking spaces** (44/10).

As submitted, the plan meets the bicycle parking requirement and appear to be compliant with the Department of Public Works' Bicycle Parking Guidelines. **(Affirmative finding)**

Article 9: Inclusionary and Replacement Housing

Sec. 9.1.5, Applicability

As the proposed development includes more than 5 new dwelling units, it is subject to the inclusionary housing provisions of this Article. Fifteen percent of the net gain in units must be inclusionary (42 units are proposed, but the net gain in light of demolition is just 31 units). The applicant has provided that there will be three tiers of income targeting – 14 will be affordable to households earning less than 50% of Area Median Income (AMI); 22 will be targeted to households earning less than 60% of AMI and the remaining six units will be market-rate units available for rent without a maximum income limit. As proposed, the development meets the minimum fifteen percent requirement. Written confirmation of acceptability from the City Housing Manager (of the Housing Trust Fund) is required. **(Affirmative finding as conditioned)**

Article 10: Subdivision

There is no subdivision of land included in this proposal. Four parcels will be merged into one. As required, a boundary survey by a VT licensed land surveyor has been provided with the final plat plans. **(Affirmative finding)**

Article 11: Planned Unit Development

Sec. 11.1.6, Approval Requirements

(a) Lot coverage requirements of the district shall be met

Lot coverage is acceptable as noted in Article 4 above. **(Affirmative finding)**

(b) The minimum setbacks required for the district shall be met

As noted previously, setbacks are compliant. **(Affirmative finding)**

(c) The minimum parcel size shall be met if the project is located in a RL or RL-W district

Not applicable.

(d) The project shall be subject to design review and site plan review of Article 3, Part 4

See Article 3 above.

(e) The project shall meet the requirements of Article 10 for subdivision review

See Article 10 above.

(f) All other dimensional, density, and use requirements of the underlying zoning district shall be met as calculated across the entire property

All other dimensional, density, and use requirements appear to be acceptable. **(Affirmative finding)**

(g) Open space or common land shall be assured and maintained in accordance with the conditions as prescribed by the DRB

The development will operate as a cooperative managed in large part by the residents. Management of open space and common lands will be included in this arrangement. **(Affirmative finding)**

(h) The development plan shall specify reasonable periods within which development of each phase of the planned unit development may be started and shall be completed. Deviation from the required amount of usable open space per dwelling unit may be allowed provided such deviation shall be provided for in other sections of the planned unit development.

The applicants have not pursued a phasing schedule, but have determined that the project can be completed with the standard 2 year life of the zoning permit. **(Affirmative finding as conditioned)**

(i) The intent as defined in Sec. 11.1.1 is met in a way not detrimental to the city's interests
Sec. 11.1.1, Intent

(a) Promote the most appropriate use of land through flexibility of design and development of land;

The proposal amounts to a moderately dense residential development, largely on interior land that would otherwise be unavailable for new construction. The flexibility of design afforded by way of the PUD process allows for substantial reinvestment in a neighborhood that would otherwise not be possible. **(Affirmative finding)**

(b) Facilitate the adequate and economical provision of streets and utilities;

Multiple residences will be served by existing shared streets and new utilities. The compact development will afford economical provision of infrastructure to support the new residences. **(Affirmative finding)**

(c) Preserve the natural and scenic qualities of open space;

Open space will remain. Much of it will contain raised garden beds and open area for resident enjoyment. **(Affirmative finding)**

(d) Provide for a variety of housing types;

The proposal includes a variety of housing types –

12 one bedroom units

24 two bedroom units

5 three bedroom units, and

1 four bedroom unit. **(Affirmative finding)**

(e) Provide a method of development for existing parcels which because of physical, topographical, or geological conditions could not otherwise be developed; and,

As noted above, much of the land to be developed is interior space without direct road frontage. The PUD process enables a comprehensive development package to take place on this site. **(Affirmative finding)**

(f) Achieve a high level of design qualities and amenities.

The Design Advisory Board found the proposed design acceptable and recommended final plat approval. Residents will enjoy amenities of significant open space, garden areas, covered parking, playgrounds, and outdoor gathering areas. **(Affirmative finding)**

(j) *The proposed development shall be consistent with the Municipal Development Plan*
See Sec. 3.5.6 (b) 10.

II. Conditions of Approval:

1. Within 180 days of the date of final approval, the property plat mylar, with all applicable endorsement signatures, shall be filed with the City Clerk per Sec. 10.1.11 of the Comprehensive Development Ordinance. Failure to do so shall render void the final plat approval.
2. **Prior to release of the zoning permit**, written confirmation from the City's Housing Trust Manager shall be included in the zoning file concurring with IZ compliance.
3. **Prior to release of the zoning permit**, the applicant shall obtain written approval of the Erosion Prevention and Sediment Control Plan from the Stormwater Administrator.
4. **Prior to the release of the zoning permit**, the applicant shall obtain the written approval of the Stormwater Management Plan from the Stormwater Administrator.
5. **Prior to release of the zoning permit**, a revised photometric plan shall be submitted that depicts illumination levels of 5.0 footcandles or less at all building entries (not including the underground garage), subject to staff review and approval.
6. **Prior to release of the zoning permit**, a plan for the barrier fence will need to be provided for staff review and approval.
7. **Prior to release of the zoning permit**, the Corrective Action Plan shall be approved by the VT Department of Environmental Conservation.
8. **Prior to issuance of a certificate of occupancy**, the project engineer must certify in writing that, among other things, the project EPSC plan as approved by the Department of Public Works has been complied with and final site stabilization has occurred. This certification shall be filed with the Department of Planning & Zoning.
9. **At least 7 days prior to issuance of a certificate of occupancy**, impact fees calculated on the net new square footage of the development shall be paid to the Department of Planning & Zoning. Impact fees may be reduced as determined by the manager of the City's Housing Trust Fund for the provision of inclusionary housing units.
10. Proposed design and construction details for any retaining walls over 3-feet in height shall be subject to review and written approval by the city engineer.
11. Days and hours of construction shall be Monday-Friday 7:00 am – 5:00 pm; Saturdays 8:00 AM – 5:00 PM. No construction on Sunday.
12. Snow removal shall occur as outlined in *Bright Street Cooperative* final plat submission material, page 1, #11.
13. If HVAC or rooftop equipment is proposed, the submission should be augmented with that information (including any additional height, which would apply toward overall building height limitation) with anticipated noise level (dB) of each unit.
14. A State Wastewater Permit will be required for water and sewer service. It is the obligation of the owner/applicant to seek this and any other required additional permits.
15. An extension of the 6 month time limit between demolition and new construction is acceptable due to the potential hazard of vacant buildings over winter months.
16. The applicant is encouraged to sell or reclaim structures and all historic building materials, or permit others to salvage them in reasonable manner that will not forfeit public health or safety.
17. Standard Permit Conditions 1-15, unless herein altered.

Bright Street Co-Op Project

Environmental Considerations and Corrective Action

The Bright Street Co-Op properties are comprised of four separate contiguous parcels (27 Bright Street, 35-39 Bright Street, 47 Bright Street, and 112 Archibald Street). The properties are currently blighted residential housing and are located adjacent to several Brownfields Sites and an historic ravine that was used as a neighborhood landfill. The location of this property in an urban setting resulted in soil contamination, which Champlain Housing Trust is addressing through the EPA Brownfields program and the State of Vermont's BRELLA Program (Brownfields Reuse and Environmental Liability Limitation Act).

In 2012 and 2013 a Phase I Environmental Site Assessment (ESA) and a Phase II ESA were performed. This work documented the presence of various contaminants, including polynuclear aromatic hydrocarbons (PAH), and metals (arsenic) in shallow soils and tetrachloroethylene (PCE) in the soil gas on the properties. A Corrective Action Plan (CAP) and an Analysis of Brownfields Cleanup Alternative (ABCA) is currently being prepared to specify how the contamination on the properties will be isolated from human contact.

Essentially the contaminated soils will be isolated from human contact via isolation capping using clean soils, pavement and building foundations. Excess soils generated from excavations for utility trenches, building foundations, and stormwater improvements will be disposed of at a certified landfill in accordance with State and Federal regulations. A "warning material" consisting of a geotextile membrane will be placed over the contaminated soil to separate clean fill from the contaminated soil.

A passive vapor mitigation system will be installed in each of the new buildings and the existing building at 27 Bright Street with the option to convert them to active mitigation systems in the future if necessary. These systems will remove unwanted vapors before they enter the structures and will mitigate the inhalation risk posed by PCE in the soil gas in the vicinity of the properties.

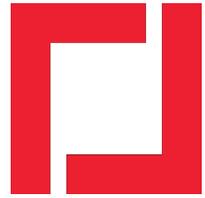
Since contamination will be managed on-site an institutional control will be necessary to document the presence of residual contamination. This control document will be approved by the State of Vermont's Agency of Natural Resources and will be properly recorded with the City of Burlington Clerk's office.

Bright Street Cooperative

Prepared for: The City of Burlington DRB

Prepared by: Duncan Wisniewski Architecture (Taryn Barrett and Michael Wisniewski)

October 10, 2014



cover letter

The following items are responses to the DAB Final Plat Memorandum Sept. 23, 2014:

(Note: Items required prior to release of the zoning permit that are not available at this time will be provided at a later date.)

2. Garage lighting plan is stamped and signed by Engineering Services of Vermont, it is found to be in compliance with the parking garage lighting ordinance and IESNA document RP-20-98.
3. The building entrance lighting has been dimmed and all averages have been noted to comply with the Outdoor Lighting Manual for Vermont Municipalities.
5. Proposed design and construction details for retaining walls and associated guardrails (Item 8) will be provided prior to the release of the permit.
6. The HVAC equipment proposed for the rooftop of the 35-Plex will be two ERU units to be located behind the stair tower and the elevator tower as shown in plan on sheet 1.0 Architectural Site Plan and in 5.1 & 5.2 35-Plex elevations revised and attached.

We look forward to presenting to the DRB Tuesday October 21st, 2014.

Sincerely,

Taryn Barrett

revised drawings

 (notes indicate drawing changes for coordination and to address DAB staff comments)

- 1.0 ARCHITECTURAL SITE PLAN 1:20 (revised to match L2.0 planting plan and playground area)
- 2.0 AERIAL PERSPECTIVE (revised to show lowered address number and ERUs)
- 5.1 35-PLEX ELEVATIONS (revised to include ERUs)
- 5.2 35-PLEX ELEVATIONS (revised to include ERUs)
- RAB SITE LIGHTING PLAN (revised to lower lighting levels at entries)
- RAB WALKWAY LIGHTING PLANS (revised to lower lighting levels at entries)
- RAB GARAGE LIGHTING PLANS (added engineer stamp for compliance with zoning standards)

BRIGHT STREET COOPERATIVE

Final Plat Application
to the City of Burlington



APPLICANT: CHAMPLAIN HOUSING TRUST

September 05, 2014



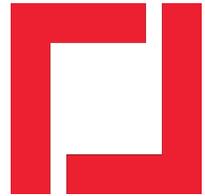
Duncan Wisniewski Architecture

Bright Street Cooperative

Prepared for: The City of Burlington DRB

Prepared by: Duncan Wisniewski Architecture (Taryn Barrett and Michael Wisniewski)

September 5, 2014



cover letter

The Champlain Housing Trust (CHT), partnered with Housing Vermont (HVT), has the honor of presenting the Bright Street Cooperative final plat application to the City of Burlington Development Review Board. This application includes new items listed in the Index on the next page along with all of the original drawings. For the project overview and narrative, section 106 historic buildings evaluation report, structural assessment report, and the traffic evaluation see the appendix from the preliminary plat application.

The following items are responses to items listed in the Preliminary Plat Approval Comments:

2. See attached Fire Marshall's email agreeing with accuracy of minutes when we collaborated to define emergency vehicle access to the site.
3. Boundary Survey attached.
4. There are no proposed phases to this project. Plans are to begin construction in the spring of 2015 and finish approximately 12 months after.
5. Corrective Action Plan is currently a work in progress.
6. Proposed construction hours 7am-5pm weekdays and 8am-5pm weekends.
7. This project will use infiltration chambers to infiltrate the 1 year storm event. Almost all of the impervious runoff will be directed to the chambers. The driveway to the parking garage and minor sidewalk runoff are the only areas that do not make it to the infiltrators. Megan Moir and Steve Roy have reviewed the design. Final details are shown on the detail sheets.
8. See attached RAB drawings for outdoor lighting including the added garage lighting plan and the revised entry & walkway lighting plan.
9. The original bike parking called for 12 exterior spaces and 11 interior spaces. We would like to add 5 additional spaces (likely inside), probably more. See attached details.
10. Affordability: There will be three tiers of income targeting – 14 will be affordable to households earning less than 50% of Area Median Income (AMI); 22 will be targeted to households earning less than 60% of AMI and the remaining six units will be market-rate units available for rent without a maximum income limit.
11. Snow on the garage entrance ramp will be handled with an integrated melting system. Removal from walkways will be blown into adjacent green belts and larger amounts will be stored at adjacent patios.
12. See the attached sign-off from the Vermont Division of Historic Preservation.
13. CHT, HVT, & DWA would like to request a waiver to the 6 mo. period between demolition and the commencement of new construction. We hope to demolish 114 Archibald St in November 2014 because it will be vacant and potentially become a threat to public safety. Although we expect to begin construction in May, a slightly later start would be outside of the 6 mo. window.

Sincerely

Michael Wisniewski

INDEX

forms (Attached)

- ZONING PERMIT APPLICATION FORM
APPLICATION FEE: ECC \$6.9 Million = \$14,010 Fee.
 - \$10 Filing Fee +
 - \$300 per lot or unit = \$12,600 or,
 - \$200 + \$2/\$1,000 ECC = \$14,000 or,
 - \$.10/sq. ft. = \$6,433.
- Development Review Fee: (due prior to release of DRB approval)
 - \$3/\$1,000 ECC = \$20,700 or,
 - \$0.20/sq. ft. = \$12,865.

text

- MEETING MINUTES: FIRE MARSHALL OFFICE AND DWA (AGREES W/ SITE ACCESS CONDITIONS AS DESIGNED)
- DIVISION OF HISTORIC PRESERVATION SIGN-OFF

appendix

- REVISED RAB LIGHTING CUT SHEETS
- BIKE PARKING CUT SHEETS

drawings (Bound Separately)

- 1.0 ARCHITECTURAL SITE PLAN 1:20
- 2.0 AERIAL PERSPECTIVE
- 3.0 STREET PERSPECTIVE
- 4.0 CONTEXT PHOTOGRAPHS
- 5.1 35-PLEX ELEVATIONS (minor revisions)
- 5.2 35-PLEX ELEVATIONS (minor revisions)
- 5.3 35-PLEX GARAGE PLAN (minor revisions)
- 6.0 TRINITY ELEVATIONS (minor revisions)
- 7.0 DUPLEX ELEVATIONS (minor revisions)
- 8.0 ARCHITECTURAL WALL CROSS SECTIONS
- L1.0 EXISTING TREE AND FENCING DEMO DIAGRAM
- L2.0 PLANTING PLAN
- RAB SITE LIGHTING PLAN (revised)
- RAB WALKWAY LIGHTING PLANS (revised)
- RAB GARAGE LIGHTING PLANS (added)
- RAB SITE LIGHTING SCHEDULES (revised)
- EX-1 EXISTING CONDITIONS PLAN
- SP-1 SITE PLAN
- SP-2 SITE DEMOLITION PLAN
- CD-1 CIVIL DETAILS
- CD-2 CIVIL DETAILS
- CD-3 CIVIL DETAILS
- CD-4 CIVIL DETAILS
- CD-5 CIVIL DETAILS
- CD-6 CIVIL DETAILS
- CD-7 EROSION PREVENTION & SEDIMENT CONTROL
- BOUNDARY SURVEY, LANDS OF CHAMPLAIN HOUSING TRUST (added)



Department of Planning and Zoning

149 Church Street, City Hall
Burlington, VT 05401-8415
Phone: (802) 865-7188
Fax: (802) 865-7195

www.burlingtonvt.gov/pz

Zoning Permit Application

Use this form for ALL zoning permit applications. See the relevant checklist for specific requirements.

PROJECT LOCATION ADDRESS: 112-114 ARCHIBALD; 27, 35-39, 47 BRIGHT STREET

PROPERTY OWNER*: c/o AMY DEMETROWITZ

*If condominium unit, written approval from the Association is also required

APPLICANT: C/O MICHAEL WISNIEWSKI

POSTAL ADDRESS: 88 KING STREET

CITY, ST, ZIP: BURLINGTON, VT 05401

DAY PHONE: 802-862-6244

EMAIL: AMY.DEMETROWITZ@CHAMPLAINHOUSINGTRUST.ORG

SIGNATURE:

I am the owner. In addition, I duly authorize the applicant (if noted) to act on my behalf for all matters pertaining to this zoning permit application.

POSTAL ADDRESS: 255 SOUTH CHAMPLAIN ST

CITY, ST, ZIP: BURLINGTON, VT 05401

DAY PHONE: 802-864-6693

EMAIL: MICHAELW@DUNCANWISNIEWSKI.COM

SIGNATURE:

Description of Proposed Project: DEVELOP 42 NEW HOUSING UNITS TO FORM A P.U.D. AS A HOUSING COOPERATIVE. THE MAIN PEDESTRIAN ACCESS IS FROM BRIGHT STREET AND VEHICULAR ACCESS IS OFF OF ARCHIBALD STREET. THE PROJECT HAS A MIX OF UNIT TYPES, OUTDOOR SPACES, AND UNDERGROUND PARKING.

Existing Use of Property: Single Family Multi Family: # 14 Units Other: _____

Proposed Use of Property: Single Family Multi Family: # 44 Units Other: _____

Will 400 sq ft or more of land be disturbed, exposed and/or developed? Yes No
(If yes, you will need to provide the 'Erosion Prevention and Sediment Control Plan' questionnaire with a site plan)

For Single Family & Duplex, will total impervious area be 2500 sq ft or more? Yes No
(If yes, you will need to provide the 'Stormwater Management Plan' questionnaire with a site plan)

Are you proposing any work within or above the public right of way? Yes No
(If yes, you will need to receive prior approval from the Department of Public Works)

Estimated Construction Cost (value)*: \$ 6,900,000.00

(*Estimated cost a typical contractor would charge for all materials and labor, regardless of who physically completes the work)

- Within 30 days of submission, the permit application will be reviewed for completeness, and, if complete, will be processed administratively or referred to a board for review. All permit approvals or denials are subject to an appeal period (15 days for administrative permit; 30 days for board permit).
- A building (and/or electrical, mechanical, plumbing, curb cut) permit will also be required. Contact the Department of Public Works at 802-863-9094 to inquire.
- Please ask for assistance if you have any questions about filling out this form. Call the Planning and Zoning at 802-865-7188, or visit the office in the lower level of City Hall, 149 Church Street.

Office Use Only: Zone: _____ Eligible for Design Review? _____ Age of House _____ Lot Size _____

Type: SN ___ AW ___ FC ___ BA ___ COA 1 ___ COA 2 ___ COA 3 ___ CU ___ MA ___ VR ___ HO ___ SP ___ DT ___ MP ___

Check No. _____ Amount Paid _____ Zoning Permit # _____

BRIGHT STREET COOPERATIVE PUD

NUMBER OF UNITS	COVERAGE CALC. TABLE
35-PLEX 42 LOWER LEVEL PARKING SPACES 12 = 1 BR DWELLING UNITS 20 = 2 BR DWELLING UNITS 3 = 3 BR DWELLING UNITS	53,970 SF LOT SIZE
TRINITY 2 = 3 BR DWELLING UNITS 1 = 4 BR DWELLING UNITS	EXISTING COVERAGE 3061 SF 112-114 ARCHIBALD ST 1401 SF 35-39 BRIGHT ST 943 SF 47 BRIGHT ST 950 SF MISC. FOUNDATIONS 4,934 SF VEHICULAR HARDSCAPE 87 SF PEDESTRIAN HARDSCAPE 11,376 SF TOTAL AREA 21.1 % PERCENTAGE COVERED
DUPLEX 1 2 = 2 BR DWELLING UNITS	PROPOSED COVERAGE 14,950 SF 35-PLEX 2,486 SF TRINITY 1,442 SF DUPLEX 1 1,442 SF DUPLEX 2 148 SF SHED 4,570 SF VEHICULAR HARDSCAPE 2,400 SF PEDESTRIAN HARDSCAPE 27,438 SF TOTAL AREA 50.8 % PERCENTAGE COVERED
DUPLEX 2 2 SURFACE PARKING SPACES 2 = 2 BR DWELLING UNITS	
PARKING 42 PARKING GARAGE 2 SURFACE SPACES 44 TOTAL	

27 BRIGHT STREET

1 EX'G DUPLEX (2 UNITS)	5,750 SF PROPOSED LOT
4+/- EX'G PARKING SPACES	2,774 SF EXISTING LOT COVERED
	48.2% PERCENTAGE COVERED

NOTES

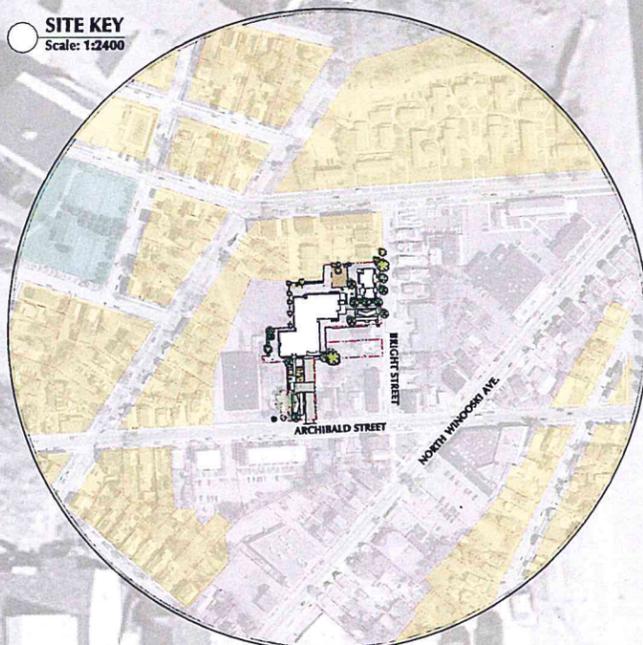
- BUILDING HTS. ARE BASED OFF AVERAGE GRADE AROUND FOUNDATION.
- THIS PROPERTY FALLS INTO THE DESIGN REVIEW OVERLAY DISTRICT.

KEY

-  EXISTING TREE
-  PROPOSED TREE
-  PROPOSED BUSH

SITE KEY

Scale: 1:2400



PROPOSED SITE PLAN

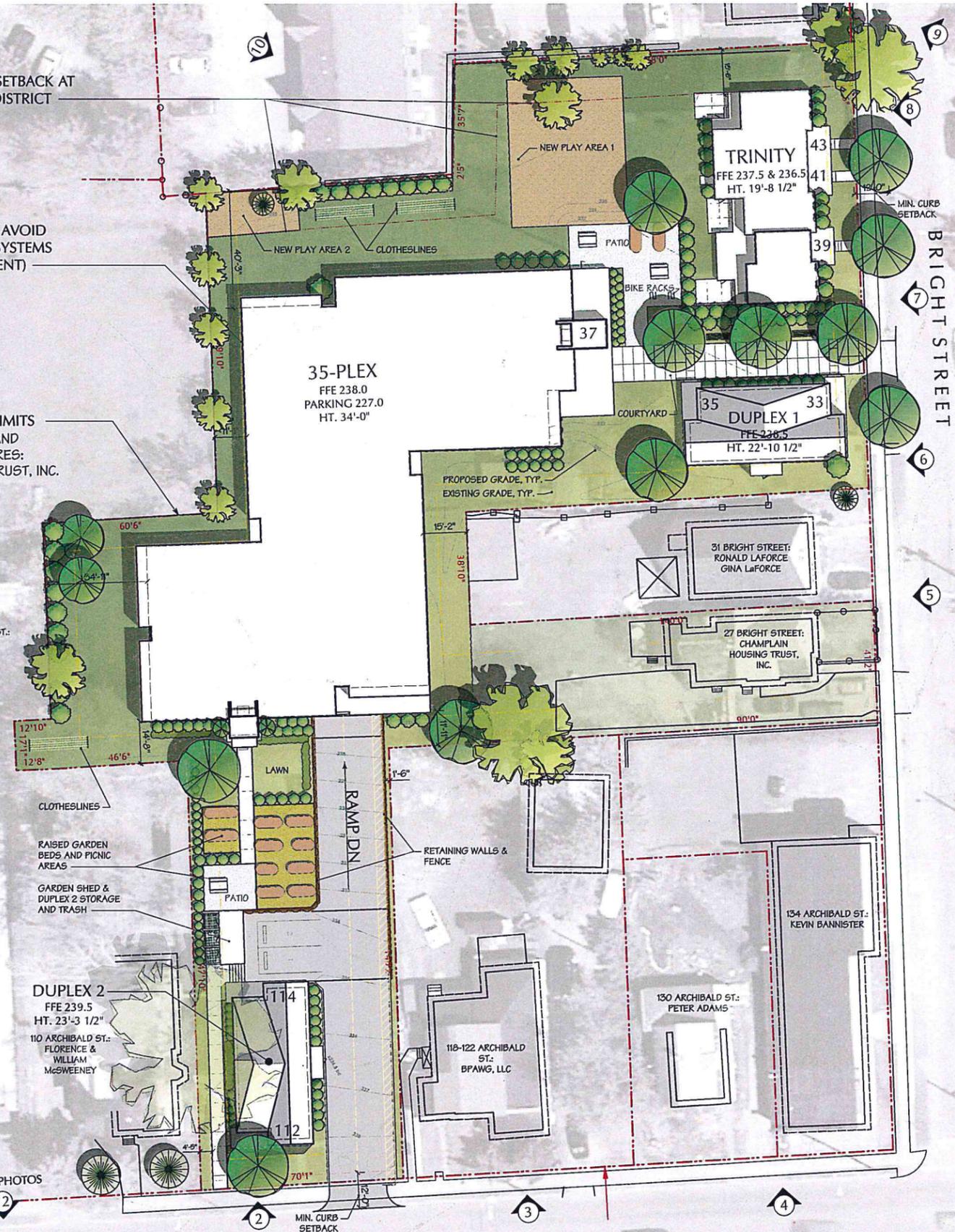
Scale: 1" = 20 ft

15'-0" REQUIRED SETBACK AT BORDERING RM DISTRICT

10'-0" SETBACK TO AVOID FIRE RATED WALL SYSTEMS (NOT A REQUIREMENT)

PUD BOUNDARY LIMITS
4 PARCELS OF LAND
TOTALING 1.37 ACRES:
CHAMPLAIN HOUSING TRUST, INC.

1 SEE PAGE 4.0 FOR PHOTOS



BRIGHT STREET COOPERATIVE

BURLINGTON, VT

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DUNCAN - WISNIEWSKI ARCHITECTURE
A Professional Corporation

FINAL PLAT

Duncan Wisniewski ARCHITECTURE

255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693



DATE: 10.10.14

1.0



BRIGHT STREET COOPERATIVE

BURLINGTON, VT

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A Professional Corporation

FINAL PLAT

**Duncan
Wisniewski** 
ARCHITECTURE

255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

DATE: 10.10.14

2.0



EAST ELEVATION

Scale: 1/16" = 1'-0"



SOUTH ELEVATION

Scale: 1/16" = 1'-0"



NOTE: COLORS SHOWN INDICATE LIGHTNESS AND DARKNESS ONLY, HUE AND SATURATION TO BE DETERMINED.

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BURLINGTON, VERMONT 05401
T: 802.864.6693

35-PLEX

DATE: 10.10.14

5.1



WEST ELEVATION

Scale: 1/16" = 1'-0"



NORTH ELEVATION

Scale: 1/16" = 1'-0"



NOTE: COLORS SHOWN INDICATE LIGHTNESS AND DARKNESS ONLY, HUE AND SATURATION TO BE DETERMINED.

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FINAL PLAT

**Duncan
Wisniewski** 
ARCHITECTURE

255 SOUTH CHAMPLAIN STREET
BURLINGTON, VERMONT 05401
T: 802.864.6693

35-PLEX

DATE: 10.10.14

5.2

From: Barry Simays BSimays@burlingtonvt.gov
Subject: RE: Bright Meeting 04_Fire Department
Date: April 7, 2014 at 12:14 PM
To: Michael Wisniewski michaelw@duncanwisniewski.com, Demetrowitz Amy amy.demetrowitz@champlainhousingtrust.org, Cobb Sue Sue@hvt.org, Nedde Bill Bill.Nedde@krebsandlansing.com, Joseph Keenan JKeenan@burlingtonvt.gov, Jeff Hodgson jhodgson@wagnerhodgson.com, Bonnie Kirn Donahue bkirn@wagnerhodgson.com, Taryn Barrett tarynb@duncanwisniewski.com

Michael,

Thank you for providing this summary. The content accurately represents our discussion at this office on 4/1/2014. As stated during the meeting, this office will require a standpipe system in the 35-plex based on significant firefighter access concerns presented by building position, and the excessive hose-lays that would otherwise be required to fight a fire in a remote unit on the top floor.

Thank you again,

BC Barry Simays, CFI
Fire Marshal
Burlington Fire Department
132 North Avenue
Burlington, VT 05401
(802) 864-5577
(802) 658-7665 (Fax)
bsimays@burlingtonvt.gov

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From: Michael Wisniewski [michaelw@duncanwisniewski.com]
Sent: Wednesday, April 02, 2014 20:06
To: Demetrowitz Amy; Cobb Sue; Nedde Bill; Joseph Keenan; Barry Simays; Jeff Hodgson; Bonnie Kirn Donahue; Taryn Barrett
Subject: Bright Meeting 04_Fire Department

Hi All,

Here are the notes from our meeting with Fire Department yesterday.

Michael

Michael Wisniewski
Duncan • Wisniewski Architecture
255 South Champlain St.
Burlington, VT 05401
802.864.6693 ext. 2#
michaelw@duncanwisniewski.com

DATE 04.01.14

FROM Michael Wisniewski & Taryn Barrett, Duncan • Wisniewski Architecture

TO Amy Demetrowitz - CHT
Sue Cobb - HVT
Jeff Hodgson, Bonnie Kirn Donahue - WH
Bill Nedde - KL
Joe Keenan, Barry Simays - BFD

RE **BRIGHT STREET - Fire Department Access/Requirements Review**

GENERAL

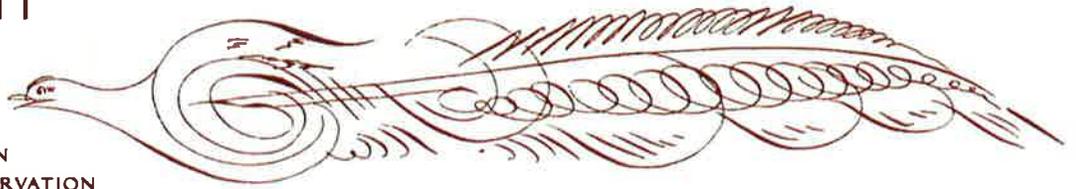
- We reviewed the latest drawing presented by DWA, showing all revisions to date including many changes since the last BFD input during technical review.
- BFD would like to access the 35-Plex aerially with either Engine 2 or 4 along the ramp at the Archibald entrance. In the original design the duplex was built over this ramp precluding fire truck access. This ramp starts out at 5.4%, decreases to 5% at the 2 parking spaces, then continues down to the parking garage at a maximum 10.2% slope. These 'straight stick' aerials can reach up to 60' with their ladders, which would park them partially on the 10.2% slope and partially along the 5% slope. The maximum allowed for these engines is 12%. The width of the ramp is adequate at 23 feet, with 20 feet designated towards the drive aisle and 3 feet for pedestrians or bikers. However, when an engine is parked here it will limit vehicle access from the garage to the street. This is not atypical for emergency vehicles to block civilian traffic.
- The ramp will be designed to carry the tower weight even though it is unlikely to be utilized.
- BFD requests a Fire Department Connection (FDC) closer to the street than the entry point of the 35-Plex, either on the Trinity or Duplex 1. The purpose is to reduce the length of 4" lines from the engine parked on Bright Street to the sprinkler system in the building which requires personal that may be needed to perform other tasks. It was determined that the best location may be along the courtyard on Duplex 1, where it can rise up through the slab under a stair and elbow out the wall. This remote FDC must be labeled according to the NFPA lettering requirements indicating that it does not serve the building for which it is located on, and that it does serve the 35-Plex. An outdoor horn/strobe shall be located over the FDC that will be activated with the 35-Plex system. The FDC must be within 100 feet of the closest hydrant, which Bill is locating along Bright Street proximate to the NE corner of the Trinity.
- Riverside Ave has a 10 inch water line that meets an old 6 inch water line on Bright Street, servicing an existing hydrant at the northern end of the street. The water flow calculations done last fall by DPW and coordinated by KL were presented and are very strong for this existing hydrant. All parties agree to minimize the use of the existing 6 inch line and to tap into the water as close as possible to the existing hydrant, run a new 6 inch line south to a

new hydrant. Bill will contact Rob Green and Adam at the water department about the construction and location of this hydrant.

- Due to the reduced access to the 35-Plex and the length of the building the BFD will require a standpipe in each of the two stairwells for water supply in an emergency.
- The southern pedestrian entry is required to have a horn/strobe, annunciator panel, and a Knox box.
- The Trinity does not require a sprinkler system by code, Michael will verify this with Ned Holt.
- Based on all of the above the original requirement of an open courtyard at the main entry off Bright St. being designed for fire truck access is no longer required given that they will access the building off Archibald. We will still provide a 9' curb cut and a 12' wide paved access for small emergency and service vehicles.

LIZ PRITCHETT
ASSOCIATES

HISTORIC PRESERVATION
ARCHITECTURAL CONSERVATION



August 6, 2014

James Duggan, Environmental Review Coordinator
Vermont Division for Historic Preservation
1 National Life Drive, 6th Floor
Montpelier, Vermont 05620

Re: Bright Street Cooperative, Burlington, VT
14 Archibald Street, 35-39 Bright Street, 47 Bright Street, Burlington, VT
Section 106 Review - HOME funds: Final Review Letter

Dear James;

I have conducted review of the above-referenced undertaking in accordance with the standards set forth in 36 C.F.R. 800, regulations established by the Advisory Council on Historic Preservation to implement Section 106 of the National Historic Preservation Act. Project review consists of identifying the project's potential impacts to historic buildings, structures, historic districts, historic landscapes and settings, and known or potential archeological resources.

I reviewed this undertaking in my Historic Buildings Evaluation Report dated October 2013. On January 8, 2014, the State Historic Preservation Officer (SHPO) concurred with my determination that the proposed demolition of the house at 39 Bright Street, a dwelling that is in poor condition but appears marginally eligible for listing in the National Register of Historic Places, would result in an adverse effect. The SHPO also agreed with the proposed mitigation measure to handle the adverse effect, which called for new construction that will be compatible with the surrounding historic resources in this neighborhood in the Old North End, and for the opportunity to review plans and elevations of the proposed new buildings on the site. I have recently reviewed updated plans and elevations dated 7/16/14: #s 5.1, 5.2, 6.1, 7.1, and also a 3-D rendering of the proposed buildings on the site, a conceptual streetscape view of Bright Street with the new housing structures, and a site plan. Copies of these plans have been forwarded to the SHPO for review and concurrence.

In my professional opinion, the proposed designs for the Bright Street Cooperative comply with *The Secretary of the Interior's Standards* for new construction in a historic neighborhood, and meet the mitigation measure for this project for new designs that are compatible with the historic character of Bright Street and surrounding resources. If the SHPO concurs with this determination, please sign on the line provided below.

Sincerely yours,

Liz Pritchett, Historic Preservation Consultant

Concur:

Vermont State Historic Preservation Officer

8/8/14

Date

cc: Amy Demetrowitz, Champlain Housing Trust

SLIM12Y

12, 18 and 26 Watt SLIM wallpacks are ultra efficient and deliver impressive light distribution with a compact low-profile design that's super easy to install as a downlight or uplight.

Color: Bronze

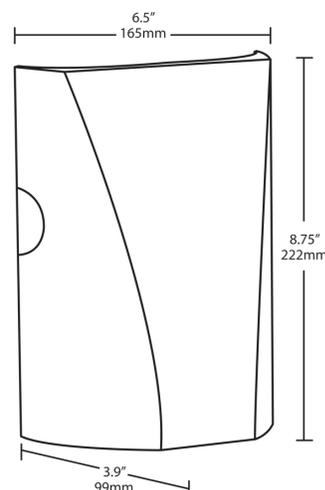
Weight: 4.5 lbs

LED Info

Watts: 12W
 Color Temp: 3000K (Warm)
 Color Accuracy: 82
 L70 Lifespan: 100000
 LM79 Lumens: 1,019
 Efficacy: 72 LPW

Driver Info

Type: Constant Current
 120V: 0.12A
 208V: 0.08A
 240V: 0.07A
 277V: 0.06A
 Input Watts: 14W
 Efficiency: 85%



Technical Specifications

UL Listing:

Suitable for wet locations. Suitable for mounting within 1.2m (4ft) of the ground.

IP Rating:

Ingress Protection rating of IP66 for dust and water.

LED:

Multi-chip, long-life LED.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

Driver:

Constant Current, Class 2, 100-277V, 50/60 Hz., 4KV surge protection, 350mA, 100-240VAC 0.3-0.15 Amps, 277VAC 0.15Amps, Power Factor 99%.

THD:

10.4% at 120V

Input Watts:

14W.

Output Lumens:

1,019.

Color Accuracy (CRI):

82 CRI

Correlated Color Temp. (Nominal CCT):

3000K

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures.

Thermal Management:

Superior heat sinking with internal Air-Flow fins.

Housing:

Precision die-cast aluminum housing.

Mounting:

Heavy-duty mounting bracket with hinged housing for easy installation.

Recommended Mounting Height:

Up to 8 ft.

HID Replacement Range:

The SLIM12 can be used to replace 70W MH based on delivered lumens.

Lens:

Tempered glass lens.

Reflector:

Specular thermoplastic.

Gaskets:

High-temperature silicone.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

ADA Compliant:

SLIM™ is ADA Compliant.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

SLIM12Y - continued

Dark Sky Approved:

The International Dark Sky Association has approved this product as a full cutoff, fully shielded luminaire.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines for the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Green Technology:

Mercury and UV free, and RoHS compliant.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

Patents:

The design of the SLIM™ is protected by patents in U.S. Pat D681,864, and pending patents in Canada, China, Taiwan and Mexico.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

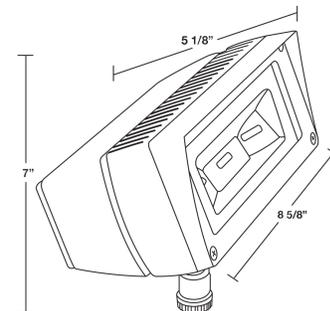


FFLED18Y

Rectangular shaped LED floodlight designed to replace 70W Metal Halide. Patent Pending airflow technology ensures long LED and driver lifespan. Use for building facade lighting, sign lighting, LED landscape lighting and instant-on security lighting.

Color: Bronze

Weight: 4.8 lbs



LED Info

Watts: 18W
 Color Temp: 3000K (Warm)
 Color Accuracy: 84
 L70 Lifespan: 100000
 LM79 Lumens: 1,422
 Efficacy: 64 LPW

Driver Info

Type: Constant Current
 120V: 0.2A
 208V: 0.15A
 240V: 0.13A
 277V: 0.11A
 Input Watts: 22W
 Efficiency: 81%

Technical Specifications

Lumen Maintenance:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

IP Rating:

Ingress Protection rating of IP65 for dust and water.

NEMA Type:

7H x 6V Beam Spread.

Airflow:

Patent pending Airflow technology heat sink for superior cooling.

LEDs:

18 Watt high performance LEDs.

Driver:

Constant Current, Class 2, 100 - 277V, 50 - 60 Hz, 100 - 277VAC 0.4 Amps.

THD:

10.6% at 120V

Surge Protection:

6kV

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Thermal Management Housing:

Die-cast aluminum housing, lens frame and mounting arm.

Mounting:

Heavy-duty mounting arm with O ring seal & stainless steel screw.

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for (SSL) Products, ANSI C78.377-2008.

Equivalency:

The FFLED18 is Equivalent in delivered lumens to a 70W Metal Halide.

Reflector:

Semi-specular anodized aluminum.

Gaskets:

High-temperature silicone gaskets.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Green Technology:

Mercury and UV free.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy Lighting Facts label.



FFLED18Y - continued

California Title 24:

FFLED18 complies with California Title 24 building and electrical codes.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Patents:

The FFLED design is protected by U.S. Pat. D643,147, Canada Pat. 140798, China Pat. ZL201130171304.1, Mexico Pat. 36757 and pending patent in Taiwan.

UL Listing:

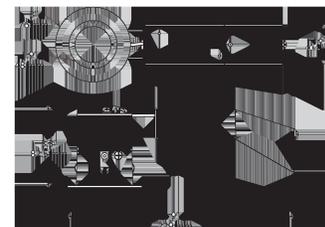
Suitable For Wet Locations. Suitable for mounting within 1.2M(4FT) of the ground.

RDLED2R8-WY-TW

Clean, unobtrusive design delivers smooth and abundant light from an aperture just over 1 inch wide. Available in flush trim for a trimless look without the mess left behind from ceiling finishing work.

Color: White trim

Weight: 1.5 lbs



LED Info

Watts: 8W
 Color Temp: 3000K
 Color Accuracy: 83
 L70 Lifespan: 100000
 LM79 Lumens: 582
 Efficacy: 65 LPW

Driver Info

Type: Constant Current
 120V: 0.08A
 208V: N/A
 240V: N/A
 277V: N/A
 Input Watts: 9W
 Efficiency: 90%

Technical Specifications

UL Listing:

Suitable for wet locations in a covered ceiling

IC Rating:

Suitable for direct contact with insulation

Trim Component:

This component can be ordered with New Construction housing in order to make a complete fixture.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LED:

High-output, long-life LED with 2-step binning and integrated driver technology

Driver:

Constant Current, Class 2, 120VAC Only, 50/60Hz, 200mA, 0.07A

Ambient Temperature:

Suitable for use in 55°C ambient temperatures

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C

Dimming Driver:

TRIAC compatible dimmer as low as 10%.

Lens:

Nanostructure lens eliminates "hot spots", and helps provide smooth, uniform light and higher efficiency

Housing:

Specification-grade, die-cast aluminum construction

Installation:

Torsion springs easily install into ceiling collar (remodeler) or rough-in (new construction)

Optics:

Wall wash optics engineered for wide lateral distribution and smooth soft light from ceiling to floor.

Trim Ring:

White powder coated die cast 1/2" trim ring.

Spacing Criteria:

0-180° (along): 0.92
 90-270° (across): 1.28
 diagonal: 1.06

Equivalency:

RDLED 8W is equivalent to 50W MR16

Color Consistency:

2-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period

Green Technology:

Mercury and UV free, and RoHS compliant

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contain no VOC or toxic heavy metals.

IESNA LM79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

California Title 24:

RDLED2R8 complies with 2013 California Title 24 building and electrical codes as a commercial indoor fixture for general spaces when used with a vacancy sensor and TRIAC dimming control. Select a vacancy sensor using catalog number LVS800. TRIAC dimmer provided by others.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of ten (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010)

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

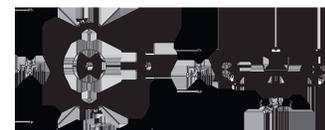
Suitable in accordance with FAR Subpart 25.4

ND2T

Easy to install 2" new construction rough-in for use with RDLED2 trims. The Remodeler Trim component must be ordered with the New Construction Housing in order to make a complete fixture. Available in flush trim for a trimless look without the mess left behind from ceiling finishing work.

Color: Natural

Weight: 1.6 lbs



LED Info

Watts: 0W
 Color Temp: Sold Separately
 Color Accuracy: N/A
 L70 Lifespan: N/A
 LM79 Lumens: 0
 Efficacy: N/A

Driver Info

Type: N/A
 120V: N/A
 208V: N/A
 240V: N/A
 277V: N/A
 Input Watts: 0W
 Efficiency: N/A

Technical Specifications

UL Listed:

Suitable for wet locations in a covered ceiling

IC Rating:

Suitable for direct contact with insulation

Housing Component:

This component must be ordered with the 2 inch downlights trim in order to make a complete fixture.

[See here for Square 2" Trims](//productLines.php?majorGroup=REMODELE_R_2INCH_SQUARE)

Housing:

Professional-grade, heavy-gauge steel construction with 1/2" trim.

Butterfly Brackets:

The Butterfly bracket allows to mount with the following 1/4 x 1/2" bar stock, C Channel, 1/2" conduit, or nailer bars.

Easy Installation:

Ceiling clamps install quickly and hold housing securely. Clamp ceilings from 1/2" to 2 1/2" thick, with course and fine adjustments.

Trim:

1/2" trim

California Title 24:

ND2T complies with 2013 California Title 24 building and electrical codes as a commercial indoor fixture for general spaces when used with a RAB 2 inch LED downlight, a vacancy sensor and TRIAC dimming control. Select a vacancy sensor using catalog number LVS800. TRIAC dimmer provided by others.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of ten (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010)

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

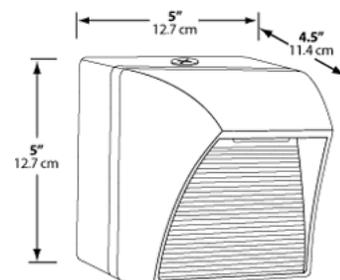
Suitable in accordance with FAR Subpart 25.4

WPLED5Y

LED 5W Wallpacks. 3 cutoff options. Patent Pending thermal management system. 100,000 hour L70 lifespan. 5 Year Warranty.

Color: Bronze

Weight: 2.0 lbs



LED Info

Watts: 5W
 Color Temp: 3000K (Warm)
 Color Accuracy: 88
 L70 Lifespan: 100000
 LM79 Lumens: 128
 Efficacy: 24 LPW

Driver Info

Type: Constant Current
 120V: 0.18A
 208V: 0.18A
 240V: 0.18A
 277V: N/A
 Input Watts: 5W
 Efficiency: 94%

Technical Specifications

UL Listing:

Suitable for wet locations in downlight position only.
 Suitable for mounting within 1.2m (4ft) of the ground.

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

IP Rating:

Ingress Protection rating of IP66 for dust and water.

Patents:

The WPLED design is protected by patents pending in the U.S., Canada, China, Taiwan and Mexico.

LEDs:

5W, high-output, long-life LED.

Drivers:

Constant current, Class 2, 100 - 240VAC, 50 - 60 Hz, 0.18 Amps.

Fixture Efficacy:

24 Lumens per Watt

Ambient Temperature:

Suitable for use in 40°C ambient temperatures.

Surge Protection:

1 KV

Cold Weather Starting:

The minimum starting temperature is -40°F/-40°C.

Thermal Management:

Integral cast aluminum mounting pad for optimum heat sinking to ensure cool operation with maximum LED life and light output.

Housing:

Precision die cast aluminum housing and mounting plate. 1 1/2" backbox with three 1/2" conduit entry points.

Gaskets:

High temperature silicone gaskets.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

Color Accuracy:

88 CRI

Color Temperature (Nominal CCT):

3000K

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warranted to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated color temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2008.

Equivalency:

The WPLED5 is Equivalent in delivered lumens to a 13W CFL or 60W incandescent.

Green Technology:

Mercury and UV free.



WPLED5Y - continued

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and 80, and have received the Department of Energy "Lighting Facts" label.

California Title 24:

WPLED5 complies with California Title 24 building and electrical codes.

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish.

Country of Origin:

Designed by RAB in New Jersey and assembled in the USA by RAB's IBEW Local 3 workers.

Buy American Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Buy American Act.

Recovery Act (ARRA) Compliant:

This product complies with the 52.225-21 "Required Use of American Iron, Steel, and Manufactured Goods-- Buy American Act-- Construction Materials (October 2010).

Trade Agreements Act Compliant:

This product is a COTS item manufactured in the United States, and is compliant with the Trade Agreements Act.

GSA Schedule:

Suitable in accordance with FAR Subpart 25.4.

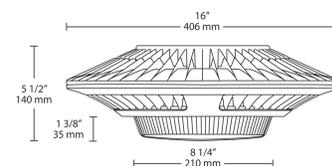


GLEED78

78 Watts of energy efficient LED garage lighting replaces 250 Watt Metal Halide. 100,000 hour LED lifespan. 5 year warranty. High-performance output maximizes spacing criterion.

Color: Bronze

Weight: 18.2 lbs



LED Info

Watts: 78W
 Color Temp: 5100K (Cool)
 Color Accuracy: 68
 L70 Lifespan: 100000
 LM79 Lumens: 7,053
 Efficacy: 80 LPW

Driver Info

Type: Constant Current
 120V: 0.74A
 208V: 0.47A
 240V: 0.41A
 277V: 0.35A
 Input Watts: 88W
 Efficiency: 88%

Technical Specifications

UL Listing:

Suitable for Wet Locations. Covered Ceiling Mount Only.

Lumen Maintenance:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations.

LEDs:

6x13W high-output, long-life LEDs.

Drivers:

3x26W Driver, Constant Current, Class 2, 100V-277V, 50/60 Hz, 6kv Surge Protection, 720mA, 100-277VAC 0.4 Amps.

Power Factor:

99.4% at 120V, 90.8% 277V

THD:

8.0% at 120V, 10.7% at 277V

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F).

Ambient Temperature:

Suitable for use in 40°C (104°F) ambient temperatures.

Thermal Management:

Superior heat sinking with integrated air-flow fins.

Housing:

Precision die-cast aluminum housing and door frame.

Mounting:

Easy hanging plate with hooks for ceiling mount.

Lens:

Prismatic polycarbonate lens.

Reflector:

Specular vacuum-metallized polycarbonate

Gaskets:

High-temperature silicone.

Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color, and contains no VOC or toxic heavy metals.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities.

Color Consistency:

7-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color.

Color Stability:

LED color temperature is warrantied to shift no more than 200K in CCT over a 5 year period.

Color Uniformity:

RAB's range of CCT (Correlated Color Temperature) follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2011.

Equivalency:

The GLEED78 is Equivalent in delivered lumens to 250W Metal Halide.

Green Technology:

Mercury and UV Free, and RoHS compliant.

GLED78 - continued

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80, and have received the Department of Energy "Lighting Facts" label.

California Title 24:

See GLED78BB/BL or GLED52/D10 for a 2013 California Title 24 compliant product. Any additional component requirements will be listed in the Title 24 section under technical specifications on the product page.

Patents:

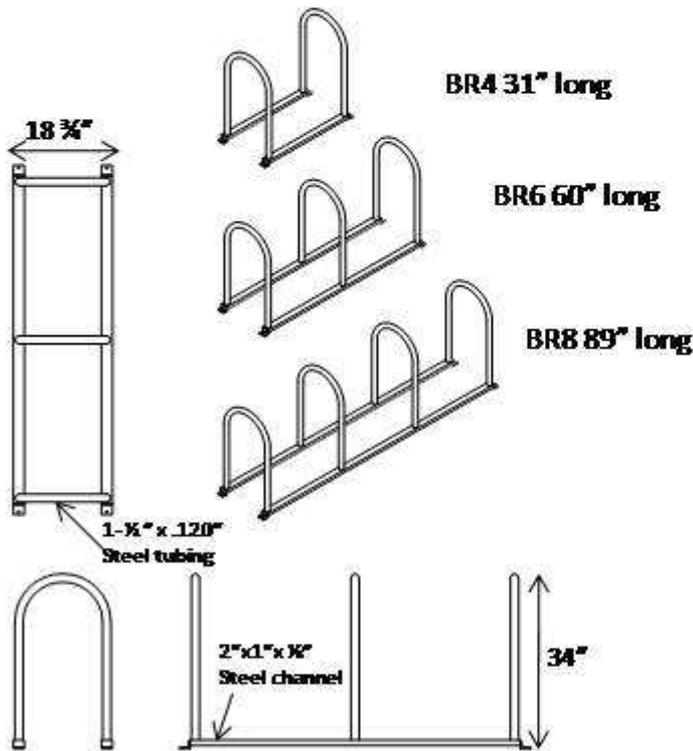
The design of GLED78 is protected by patents pending in US, Canada, China, Taiwan and Mexico.



Data Sheet

The Bike Rib® Rack

Stable, secure, easy to use, no-nonsense bike parking. The Rib Rack has been an industry standard for the last 20 years, replacing the old wheel bender racks in schoolyards, playgrounds and city streets throughout the USA.



Finish Options

Galvanized

Hot-dipped after fabrication

Powder Coat Paint

With optional zinc rich prime coat

Thermo-plastic Coating

With optional zinc rich prime coat

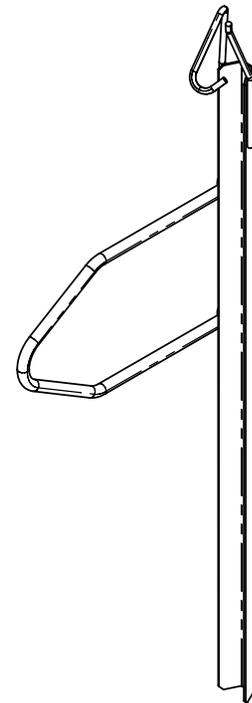
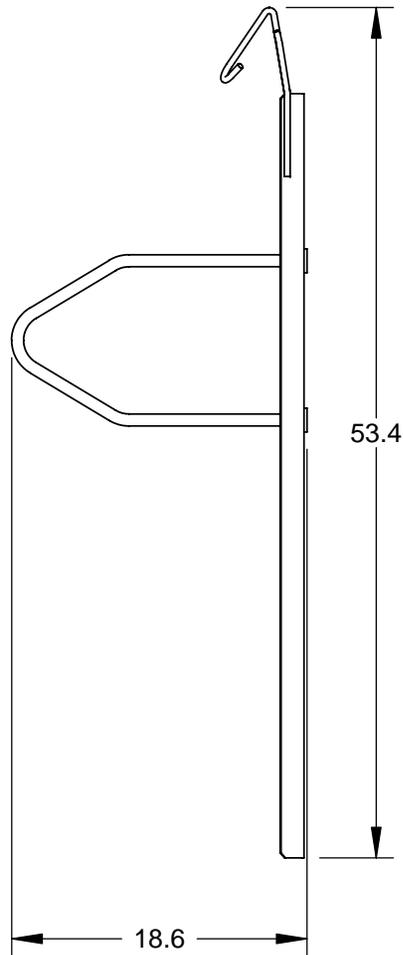
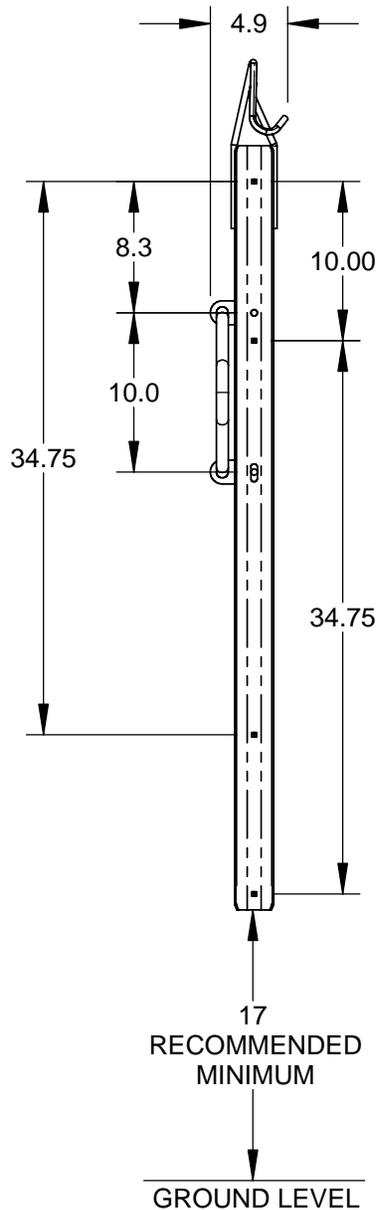
Only available in surface mount (shown in photos)

Function First, Inc. 3935 N. Country Club Rd. #25 Tucson, AZ 85716

<http://www.bikerack.com> - bikeribs@yahoo.com

1.888.BIKE.RIB 1.888(245.3742)

FAX 1.520.844.1110



NOTE:

1. DO NOT SCALE DRAWING.
2. INTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.



WE BRING CYCLING TO LIFE

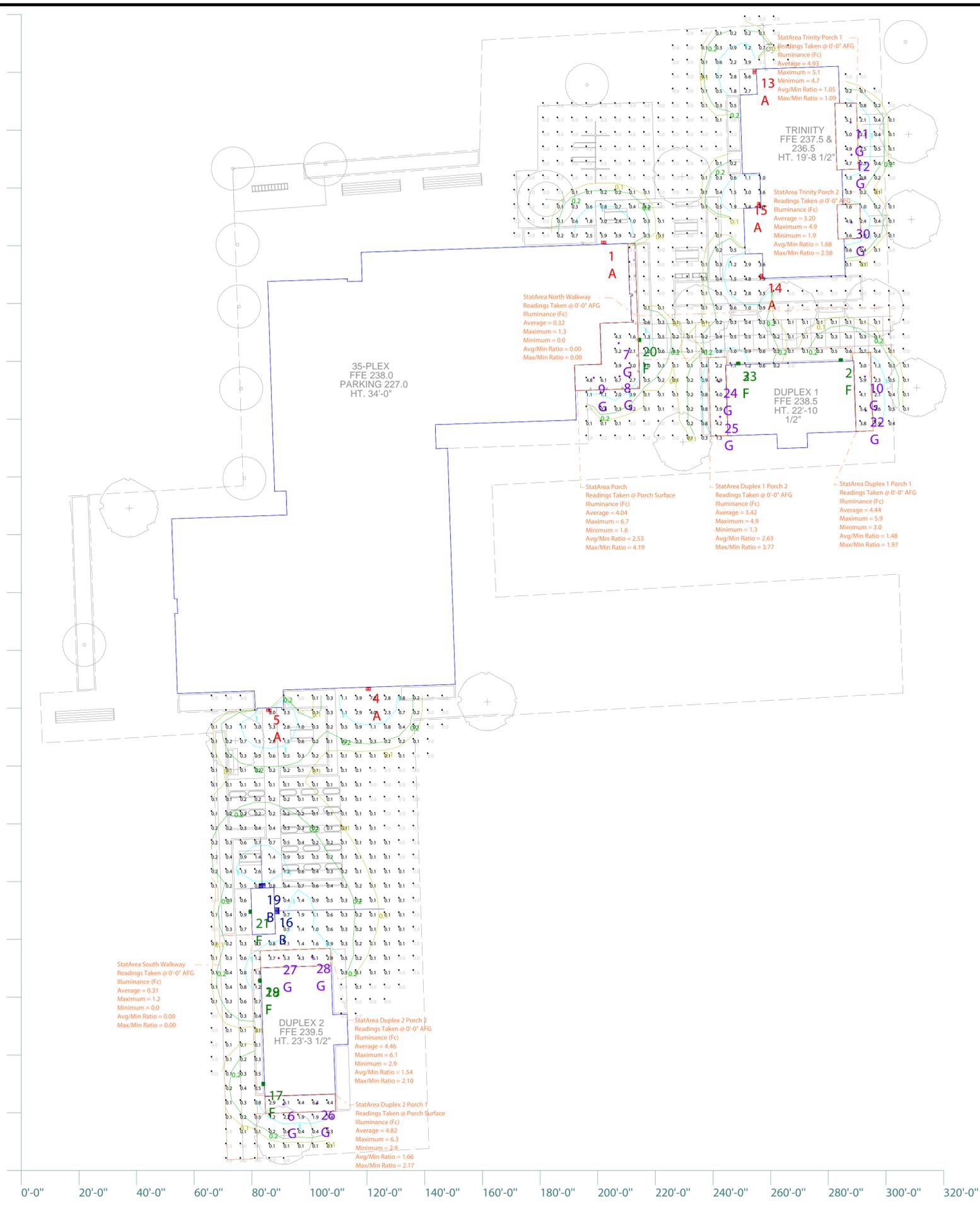
SARIS CYCLING GROUP

5253 VERONA RD., MADISON WI. 53711
1-800-783-7257 / 1-608-274-1702
WWW.SARISPARKING.COM

THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SARIS CYCLING GROUP ANY REPRODUCTION IN PART OR WHOLE WITHOUT THE WRITTEN PERMISSION OF SARIS CYCLING GROUP IS PROHIBITED.

TITLE:
6006 - LOCKING VERTICAL RACK

400'-0"
380'-0"
360'-0"
340'-0"
320'-0"
300'-0"
280'-0"
260'-0"
240'-0"
220'-0"
200'-0"
180'-0"
160'-0"
140'-0"
120'-0"
100'-0"
80'-0"
60'-0"
40'-0"
20'-0"
0'-0"



0'-0" 20'-0" 40'-0" 60'-0" 80'-0" 100'-0" 120'-0" 140'-0" 160'-0" 180'-0" 200'-0" 220'-0" 240'-0" 260'-0" 280'-0" 300'-0" 320'-0"

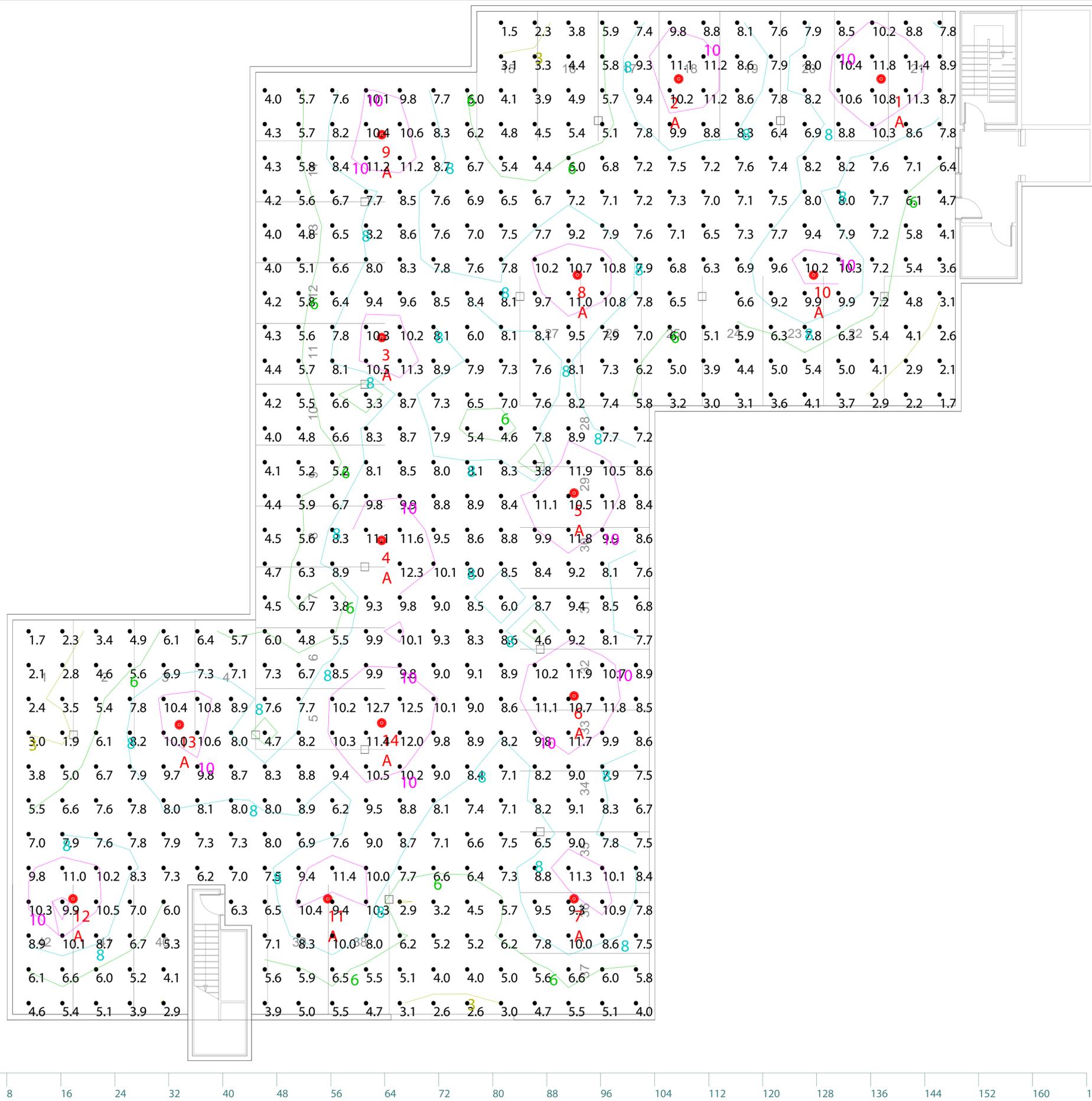
Scale: 1 inch= 20 Ft.

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<p>Scale: as noted</p> <p>Date: 9/29/2014</p> <p>Drawn By: BEL</p>	<p>Job Name: Bright Street Cooperative Burlington, VT Lighting Layout Version F</p>	<p>Prepared For: Holbrook Associated 35 Reservoir Park Drive Rockland, MA 02370 Tel: 888-839-1578</p>	<p>RAB Lighting 170 Ludlow Avenue Northvale, NJ 07647 Tel: (888) 722-1000 Fax: (888) 722-1232 WWW.RABWEB.COM</p>
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Filename: C:\Users\brittany.jynch\Desktop\Bright Street Cooperative Layout 040114F.AGI

152
144
136
128
120
112
104
96
88
80
72
64
56
48
40
32
24
16
8
0



Scale: 1 inch= 8 Ft.

These calculations have been reviewed and found to be in compliance with the City of Burlington, Vermont Comprehensive Development Ordinance, Article 5 "Citywide General Standards", Part 5.5.2 Outdoor Lighting, paragraph 5, Parking Garage Lighting.

A. Calculated light levels do not exceed the minimums recommended in IESNA document RP-20-98.

B. The luminaires are not cut-off style luminaires, however, in our opinion, due to luminaire placement inside the parking garage, they will not be visible from the exterior.

Claus Bartenstein, P.E.
Engineering Services of Vermont, LLC
2014-10-07



<p>RAB LIGHTING</p> <p>170 Ludlow Avenue Northvale, NJ 07647 Tel: (888) 722-1000 Fax: (888) 722-1232 WWW.RABWEB.COM</p>		<p>Prepared For: Holbrook Associated P.O. Box 401 Rockland, MA 02370 Tel: 800-322-9641 Fax: 781-871-2956</p>	<p>Job Name: Bright Street Garage Burlington, VT Lighting Layout Version B</p>	<p>Scale: as noted Date: 7/1/2014 Drawn By: BEL</p>
<p>Lighting Design Disclaimer The Lighting Analysis, Layout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measurements may vary from the actual conditions. RAB recommends that design parameters be field verified to actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design. RAB neither warrants, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design in compliance with any applicable regulatory code requirements with the exception of those specifically stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational purposes and is not intended for construction nor as being part of a project's construction documentation package.</p> <p>Filename: C:\Users\brittany.jynch\Desktop\Bright Street Garage\AGI files\Bright Street Garage Layout 070114B.AGI</p>				

Luminaire Schedule											
Symbol	Tag	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Lum. Watts	Arr. Watts	Total Watts	Filename
	A	14	GLED78	SINGLE	7053	1.000	LED Garage Ceiling Mount 78W Cool	88.3	88.3	1236.2	GLED78 - Cool - ITL79965.IES

Calculation Summary											
Label	Description	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	PtSpcLr	PtSpcTb	
CalcPts Parking Garage	Readings Taken @ 0'-0" AFF	Illuminance	Fc	7.37	12.7	1.5	4.91	8.47	5	5	

Expanded Luminaire Location Summary					
LumNo	Tag	Label	X	Y	Z
1	A	GLED78	133.5	147	8.15
2	A	GLED78	103.5	147	8.15
3	A	GLED78	59.5	108.75	8.15
4	A	GLED78	59.5	78.75	8.15
5	A	GLED78	88	85.75	8.15
6	A	GLED78	88	55.75	8.15
7	A	GLED78	88	25.75	8.15
8	A	GLED78	88.5	118	8.15
9	A	GLED78	59.5	138.75	8.15
10	A	GLED78	123.5	118	8.15
11	A	GLED78	51.5	25.75	8.15
12	A	GLED78	13.75	25.75	8.15
13	A	GLED78	29.5	51.5	8.15
14	A	GLED78	59.5	51.75	8.15

Total Quantity: 14

NOTES:

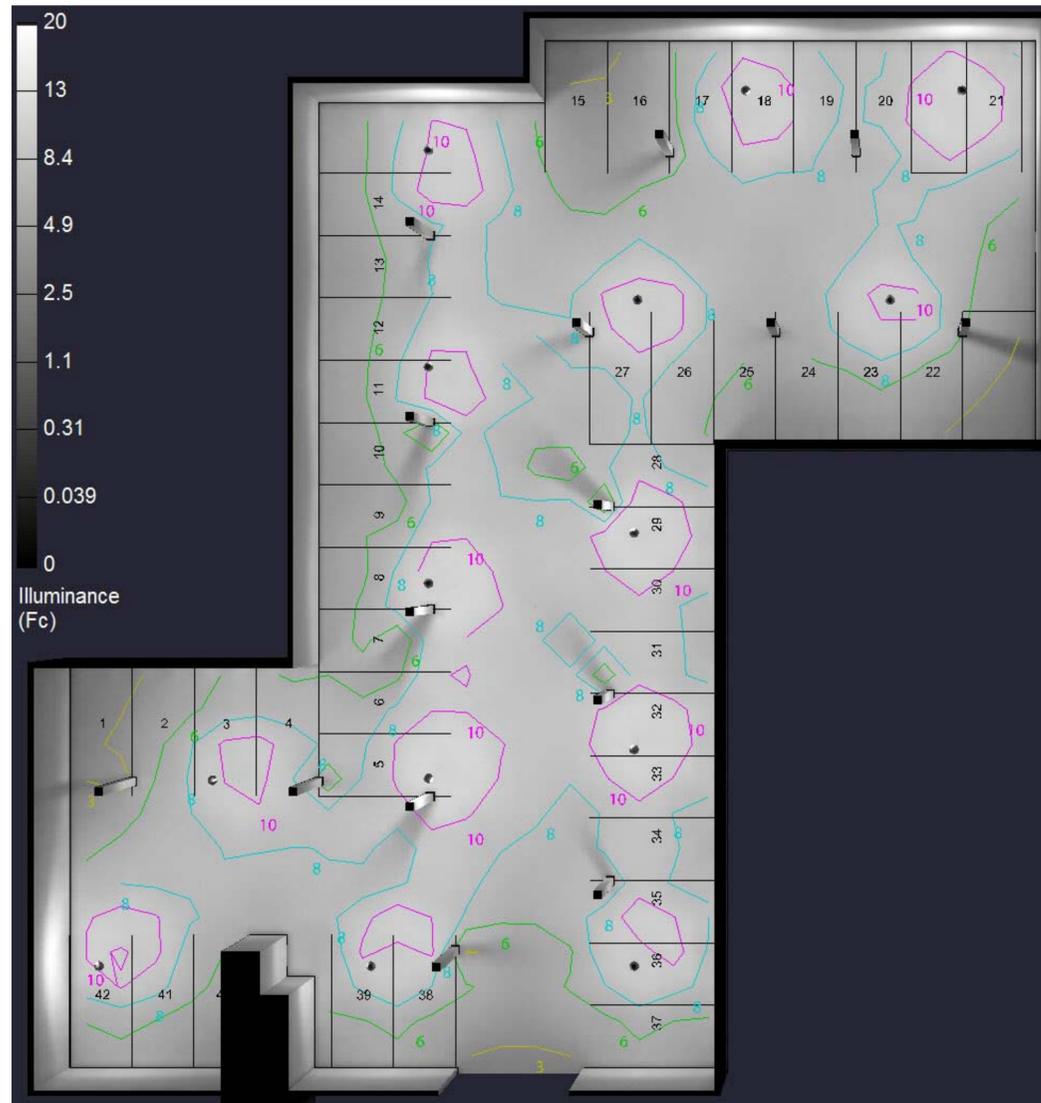
* The light loss factor (LLF) is a product of many variables, only lamp lumen depreciation (LLD) has been applied to the calculated results unless otherwise noted. The LLF is the result (quotient) of mean lumens / initial lumens per lamp manufacturers' specifications.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting, Inc.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending apply.



Top View



Interior View



A : GLED78

These calculations have been reviewed and found to be in compliance with the City of Burlington, Vermont Comprehensive Development Ordinance, Article 5 "Citywide General Standards", Part 5.5.2 Outdoor Lighting, paragraph 5, Parking Garage Lighting.

A. Calculated light levels do not exceed the minimums recommended in IESNA document RP-20-98.

B. The luminaires are not cut-off style luminaires, however, in our opinion, due to luminaire placement inside the parking garage, they will not be visible from the exterior.

Claus Bartenstein, P.E.
Engineering Services of Vermont, LLC
2014-10-07



EXPIRES 2016-07-31

RAB
L I G H T I N G

Lighting Design Disclaimer

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Scale: as noted

Date: 7/1/2014

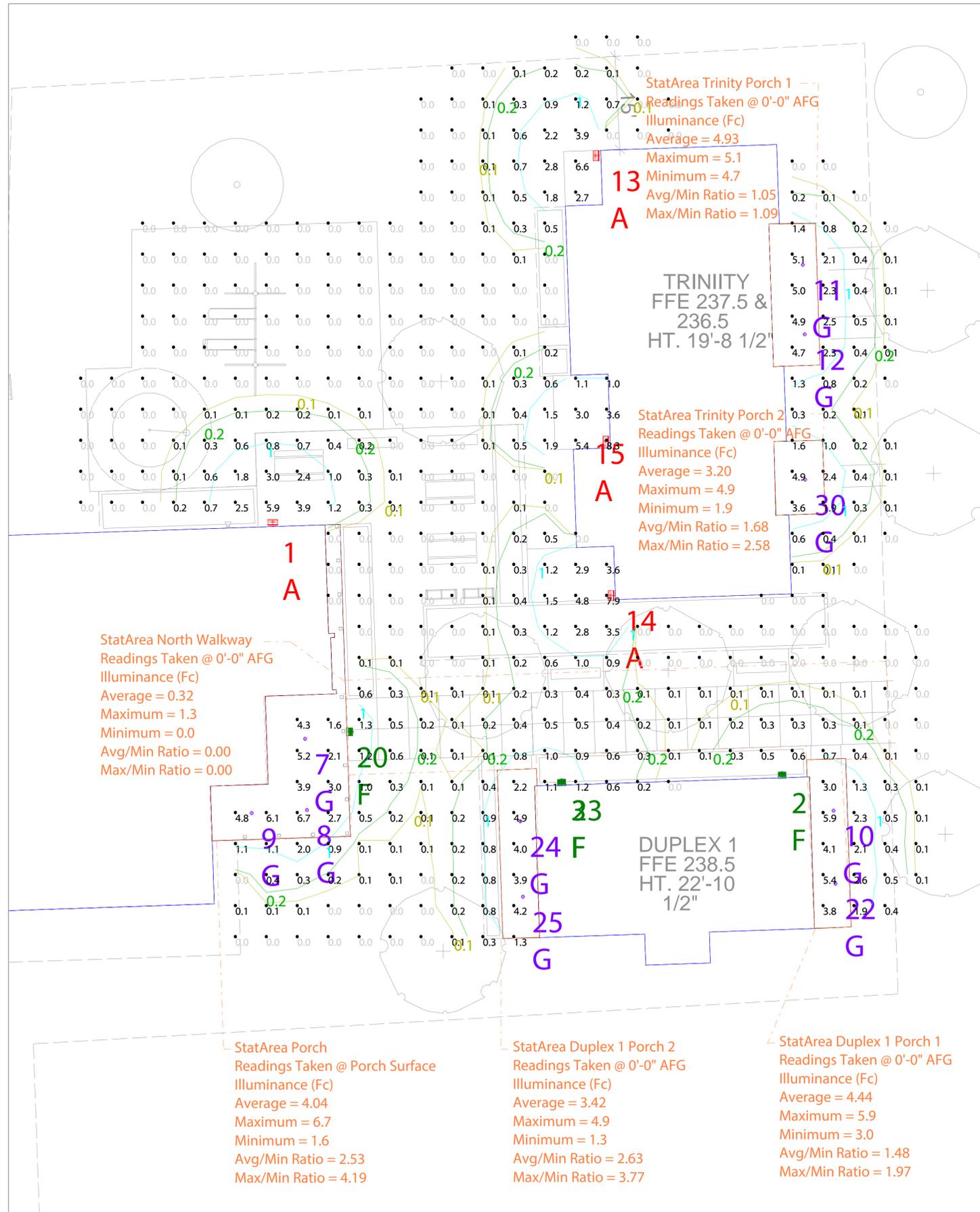
Drawn By: BEL

Job Name:
Bright Street Garage
Burlington, VT
Lighting Layout
Version B

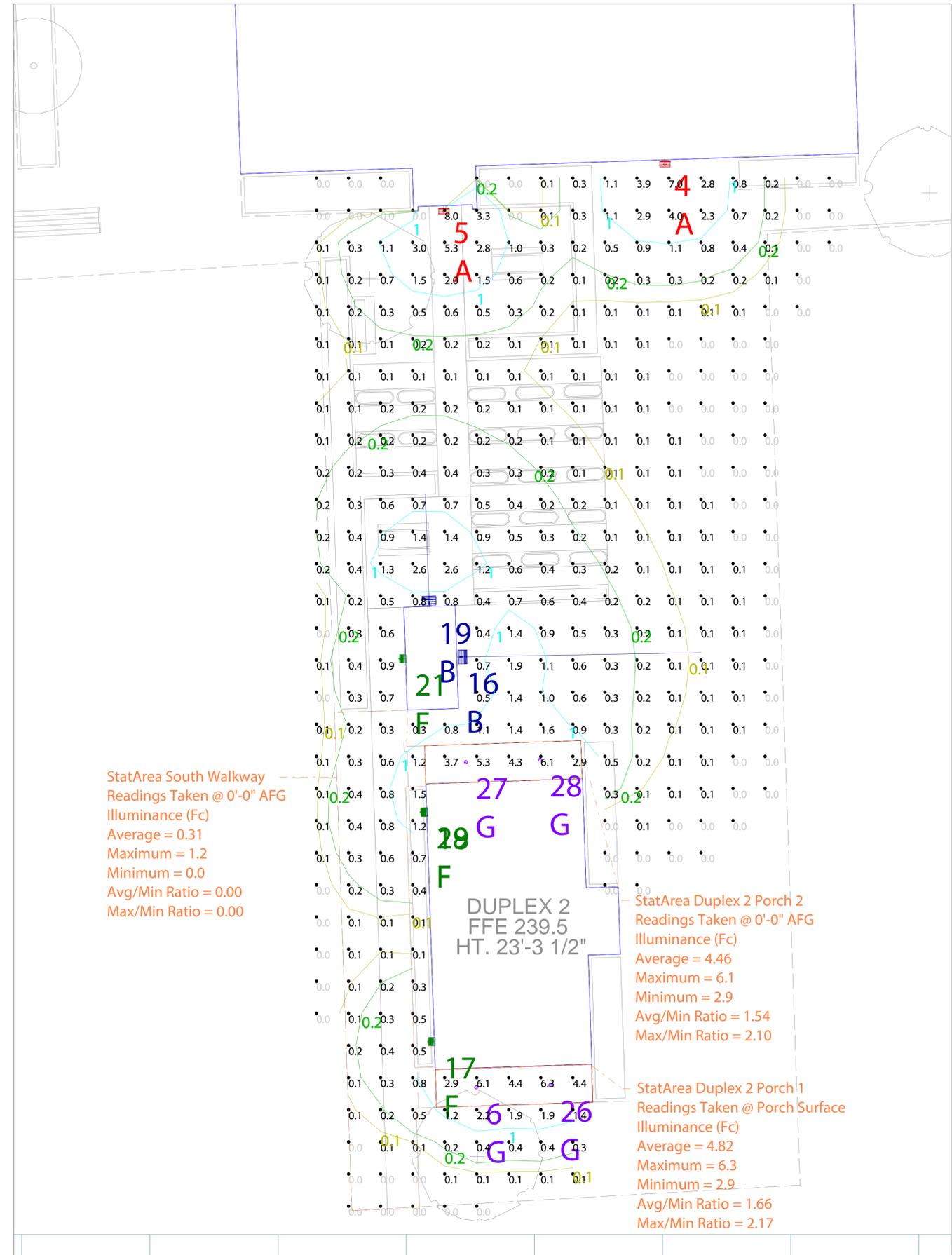
Prepared For:
Holbrook Associated
P.O. Box 401
Rockland, MA 02370
Tel: 800-322-9641
Fax: 781-871-2956

RAB Lighting
170 Ludlow Avenue
Northvale, NJ 07647
Tel: (888) 722-1000
Fax: (888) 722-1232
WWW.RABWEB.COM

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Scale: 1 inch= 10 Ft.



Scale: 1 inch= 10 Ft.

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Scale: as noted
Date: 9/29/2014
Drawn By: BEL

Job Name:
Bright Street Cooperative
Burlington, VT
Lighting Layout
Version F

Prepared For:
Hob Brook Associated
35 Reservoir Park Drive
Rockland, MA 02370
Tel: 888-839-1578

RAB Lighting
170 Ludlow Avenue
Northvale, NJ 07647
Tel: (888) 722-1000
Fax: (888) 722-1232
WWW.RABWEB.COM

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