Attachment 5

DeTurk Winery Village
Donahue Street between 8th St and 9th St
Santa Rosa, CA 95401

Review of Proposed Project for Consistency with Preservation Ordinances

Federal: Secretary of the Interior's Standards and Guidelines
California: California Environmental Quality Act
California: California Code of Regulations. Section 15331, Article 19, Chapter 3
Santa Rosa: Design Review Guidelines, Section 4-7–Historic Districts, G. New Construction

Prepared for
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EXECUTIVE SUMMARY

Mr. Richard Deringer of Railroad Square, LLC. Is undertaking an adaptive reuse project which will convert the historically significant DeTurk Winery into residential dwellings. DeTurk Winery Village will consist of 185 units of attached apartments, 15 of which are affordable housing, and limited commercial development. According to the California Environmental Quality Act (CEQA), Section 15064.5 (b) (1) (2) (3) the project must be reviewed for its consistency with the *Secretary of Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (1995), Weeks and Grimmer. After analysis the proposed project does not reduce the level of significance of the DeTurk Winery, the DeTurk Round Barn or the West End Preservation District.

The industrial design and materials proposed for the new development are consistent with the historic winery. A previously approved project for the site was three stories, but the current proposal contains a fourth story over part of the project. The current design is no taller than the earlier approved plan. Additionally the roof line over the historic winery itself has been dropped to further differentiate the original building from the new construction. The building materials are consistent with the Secretary of the Interior's Guidelines. The DeTurk Round Barn provides a transition between the small residential dwellings of the West End Preservation District and the DeTurk Winery. The proposed project does not detract from the residential street scrapes.

Upon review of the plans by Kevin O'Malley of O'Malley, Wilson and Westphal, dated May 19, 2016, sheets A-1,A-2, A-3, A-4 and A-5, as well as subsequent updates, the project appears to be consistent with federal, state and local preservation ordinances

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REVIEW OF PROPOSED PROJECT FOR COMPATIBILITY WITH PRESERVATION ORDINANCES

Clark Historic Resources has prepared this report at the request of the Mr. Richard Deringer of Railroad Square Village, LLC., 808 Donahue Street, Santa Rosa, 95401, to assist with the planning of an adaptive reuse project proposed for the DeTurk Winery located in Santa Rosa. The winery complex is bounded by the Northwestern Pacific Railroad tracks on the east, Donahue Street on the west, West 9th Street on the north, and West 8th Street on the south (AN 010-091-001 and 010-091-007). Currently there are two historically significant buildings which are located in the project area and which make up the winery complex: the ca. 1879 DeTurk Winery and the U.S. Bonded Warehouse which was constructed between 1888 and 1992. Railroad Square Village, LLC. holds title to both of these buildings.

Railroad Square Village, LLC. is proposing the development of 185 units of attached dwelling units within and around the DeTurk Winery. Of these 15 will provide affordable housing. This development will consist of high density apartment units approximately 41' tall within the winery and 41' surrounding the winery on both ends. In order to accommodate new construction, it is necessary to remove the interior walls within the winery; however the original exterior walls will be preserved. In order to construct housing to the north of the winery, the current cement block building at 918 Donahue Street (APN 010-091-001) will also be removed. Railroad Square Village, LLC. is proposing an adaptive reuse project which will preserve the exterior of the DeTurk Winery complex (Winery and U.S. Bonded Warehouse) while developing residential units within the interior. The DeTurk Winery and U.S. Bonded Warehouse were documented in 2006 and were determined to be eligible for the California Register both individually and as a contributor to a designated local preservation district. This report addresses only the proposed exterior design of the building and does not address interior alterations.

The purpose of this report is to determine how the current (September 2016) proposed design addresses the following:

1.What are the character-defining elements that are specific to the historically significant winery building?

2.Will the proposed development adversely impact the level of significance of nearby historically significant buildings or the local preservation district structures?

3.Is the proposed design compatible with the Secretary of the Interior's Standards for the Rehabilitation and Guidelines for Rehabilitating Historic Buildings as mandated by the California Environmental Quality Act (CEQA)?

4.Table 1. Character-defining Elements of the DeTurk Winery Building

ELEMENT	DETAIL	CURRENT ALTERATIONS
Shape: Series of three horizontal box-like buildings	 Two stories (approx 41') Each building is separate and unique	
Projections: Brick pilasters String of headers (east, north and west elevations of southern section)	 Located along all elevations; Uniformly spaced; Ground to roof Three courses which project out across the top of wall and pilasters	
Materials: Fired brick Mortar	 Uniform in color; Smoothed faced; Common bond pattern (6th course composed of headers)	 Painted red; Blue stucco along bottom half of south elevation
Openings: Doors #1: Wide and Arched Doors #2: Narrow and Arched Windows #1: Tall, Narrow and Arched Windows #2: Small and Arched	 Segmented arch; approx 8' wide; Single, Double and Triple course arch Pedestrian entrance; approx 4' wide. Two course segmental arch Double course segmental arch; approx 3' x 6'; lintel with lug sill Double course segmental arch; approx 2' x 3'; lintel with lug sill	 Bricked in East elevation shutters removed Bricked in

Window #3: Porthole Window #4: Square	32" in circumference Western elevation of south building	Glass and bars
Roof and Related Features: Southern Bldg: Corrugated iron roof Central Bldg: Wooden hip roof Northern Bldg: Two wooden hip roofs Ties Downspouts Lighting	 Stepped parapet roof destroyed in 1906 earthquake Even spaced along western elevation	 Alterations to all roofs
Vegetation: Trees and Shrubbery	 Located to the south of the winery along Donahue Street	

Table 2. Character-defining Elements of the U.S. Bonded Warehouse

Shape: Two horizontal box-like buildings Projections: Brick Pilasters	 Single story; Approx 18' tall Line east, north and south elevations; approx 2' apart	
Materials: Fired Brick Mortar Openings: Door: Wide and Arched	 Uniform in color; Smooth faced; Common bond pattern, 6th course composed of headers. Three course segmental arch	 Painted red Bricked in
Roof and Related Features: Stepped parapet		
Details: Lighting Ties Downspouts		
Vegetation: Shrubbery	 Located along the west and south elevations	

CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

As an eligible historic resource the winery complex is protected by law as an important aspect of the environment. According to CEQA a project with an effect that may cause a substantial adverse change to the significance of an historical resource is a project that may have a significant effect on the environment. Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired. The significance of an historical resource is materially impaired when a project:

A. Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
B. Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
C. Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA. *[CEQA 15064.5(b)(2)A,B,C]*

The proposed project does not call for any of the above three conditions either as they affect the winery or the preservation district.

The California Code of Regulations, Chapter 3, Article 19, addresses projects that are categorically exempt from the preparation of environmental documents because the Secretary for Resources has determined that they do not have a significant effect on the environment. Section 15331 of the Article provides a Class 31 exemption for projects limited to maintenance, rehabilitation, restoration, preservation, or reconstruction of historic properties which meets the federal standards for the treatment of historic properties, i.e. the Secretary of the Interior's Standards and Guidelines.

SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES WITH GUIDELINES FOR PRESERVING, REHABILITATING, RESTORING AND RECONSTRUCTING HISTORIC BUILDINGS (Weeks and Grimmer, 1995)

The Secretary of the Interior's Standards presents the accepted guidelines for adaptive reuse projects. A project involving a new addition to a historic building is considered acceptable within the framework of the Secretary of the Interior's Standards if it: preserves significant historic materials and features; preserves the historic character of the building; and protects the historic significance by making a visual distinction between old and new. Generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties shall be considered as mitigated to an appropriate level, so that the impact on the historical resource is considered less than significant. *CEQA 15064.5 (b)(3)*

1: Historic Materials and Features are Preserved

Preservation of historic buildings is enhanced by avoiding all but minor changes to primary or public elevations. Features that distinguish the building and can be seen from the streets or sidewalks are significant ones. Significant features can include window patterns, window hoods, or shutters; porticoes, entrances, and doorways; roof shapes, cornices, and decorative moldings. Refer to Table 1 and 2 for a listing of character defining elements, which detail the shape, materials, openings, roof, projections, and details of the DeTurk Winery and the U.S. Bonded Warehouse. New additions to the historic building are to be constructed where loss of significant features is minimized, along the side and rear elevations.

In the case of the DeTurk Winery, the most significant elevations are located on the west (front) and south of the building. The segmental arched windows along the west elevation and the string of round windows along the south elevation are important character defining features and will remain visible from the street.

2: Historic Character of the Building is Preserved

The historic character of a building is embodied in its shape, its materials, its features, its setting and its interiors. Any new construction must be compatible with the size, scale, color, material, and character of the building to which it is attached or it particular neighborhood or district. The original materials will be maintained on the existing buildings. The character of the historic winery is further maintained by the use of heavy, industrial type materials in the new construction as opposed to the smaller, softer materials found throughout the historic residential neighborhood.

3: Distinguishes between Old and New

While the new construction should be harmonious with the old in scale, proportion, materials and color, the proposed addition should be readily distinguishable from the older building in order to protect the visual qualities that made the building eligible for listing as an historic resource. This project does not include any changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings.
New additions and adjacent or related new construction shall be undertaken in such a manner

that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

4: Preservation/Restoration of Historic Buildings

A number of alterations have been made to the DeTurk Winery, which are not consistent with its historic integrity: the bottom half of the south elevation has been covered with blue stucco, and the arched windows and doors have been bricked in. To preserve the character of the building, it is recommended that the stucco be removed from the exterior brick walls, and that, where applicable, the arched windows and doors be reopened.

In addition, research has been undertaken to determine if there is any deterioration to the masonry walls. Appropriate repairs should then be made to eliminate the source of any problems, such as cracking in the brick. Replacement in kind of extensively deteriorated or missing parts of features will be undertaken, especially along the west (front) and south elevations.

Roll up metal doors have been added to the south side of the winery building. Most of the doors will be removed and bricked in. Original round windows on the south elevation will be rebuilt.

SANTA ROSA'S DESIGN GUIDELINES
Section 4-7 – Historic Districts, G. New Construction

This section focuses on new construction which takes place in historic areas. There are three guidelines:

1. Design new construction so that the architectural character of the neighborhood is maintained,

2. Design new construction to be compatible in height and proportion with adjacent structures,

3. Use materials and designs similar to that found throughout the neighborhood.

1. The winery project maintains the industrial/commercial character of the original street scape. The rear (east) of the development faces the rail-right-of-way just as the once operating winery opened to the east to facilitate loading barrels of wine on rail cars for shipping.

2. The proposed development is compatible with height and proportion with adjacent structures. The closest building is the historic DeTurk Round Barn. The barn stands approximately 6' lower than the proposed fourth floor of the new construction. The Pullman Loft project 80 feet to the east of the DeTurk Winery is several feet higher than the proposed fourth story.

3. The hard materials and design proposed for the project reflect the industrial character of historic Donahue Street

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DETURK WINERY VILLAGE APARTMENTS

Review of the May 19, 2016, DeTurk Winery Village plans prepared by Kevin O'Malley of O'Malley, Wilson, Westphal Architects, finds that the proposed adaptive reuse of the DeTurk Winery is consistent with Secretary of the Interior's Standards for Rehabilitation. The plans for the DeTurk Winery Village reflect the guidelines recommended on the federal level in the Secretary of the Interior's Standards, on the California State level as outlined in CEQA and on the city level as written in the Santa Rosa Design Guidelines.

The most dramatic changes to the property will occur within the interior of the winery and to the ancillary building located to the north of the winery complex. In order to construct apartments within the walls of the winery, internal portions of the winery will be removed. In order to construct dwelling units to the north of the winery, the current cement block building at 918 Donahue Street (APN 010-091-001) will be demolished.

The DeTurk Winery Village will preserve the significant historic materials and features, and the historic industrial character of the winery. The simple red brick walls, without ornamentation or the intrusion of other materials, define the industrial character of the winery building. A few of the upper level openings have remnants of wooden shutters. It was determined that wood shutters were not a character-defining aspect and that they detract from the over-all historic appearance of the building, so they are not being reintroduced.

The rehabilitation plans call for appropriate exterior alterations to the winery in order to permit reuse of the building. New elements, such as the doors and windows which will be added along the west elevation, will be similar in style to the original arched windows and doors. These alterations have been justified in terms of their functionality for the proposed residential space. Newly added elements are compatible with but recognizably different from historic features. Such is the case with the new openings on the upper level. Each of the original upper openings has a two-course segmental arch. The proposed new openings will be the same size but will have a segmental arch of only one course.

<u>Building D.</u>

The new construction to the north of the winery is visually distinct from the historic buildings so that the historical significance of the DeTurk Winery is protected. There are several aspects of design which determine whether new construction is compatible with the design of the historic building. These include: scale, orientation, materials, roof lines, height, set-backs, and window patterns.

The proposed apartment buildings are compatible with the historic winery in terms of scale, materials, height, and set-backs. Their use of hard materials such as brick and stucco is compatible with the red brick of the winery. The scale, height and set-backs of the proposed high density apartments are similar to the winery. Space has been left between the old and new buildings so that key features, such as the round windows, are clearly visible from the street. The design of the proposed project was influenced by historic photographs of Santa Rosa. These dwellings are compatible with the size, scale, color, material, and character of the DeTurk Winery.

Residential development in the nearby West End Preservation District mostly consists of small single-family houses. They are generally one or one-and-a-half stories, wood-frame, and have either a gable or hip roof. Exterior siding is shingled or lapped wood and is painted. Basically they share no common design features with the winery building. Fortunately the neighborhood park and the DeTurk Round Barn provide a buffer between residential development and the winery and make it possible for there to be residential development which is compatible with the prominent winery.

Selected sources:

Mack, Robert C. and John P. Speweik. *Repointing Mortar Joints in Historic Masonry Buildings*. Preservation Brief 2. Washington, D.C.: Preservation Assistance Division, National Park Service U.S. Department of the Interior, 1998.

Railroad Square Village, LLC. Meeting Notes: Conceptual Design Review of Railroad Square/DeTurk Village Proposal. Joint Meeting of the Cultural Heritage Board and Design Review Board. Santa Rosa, March 2006

Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Washington, D.C.: Preservation Assistance Division, National Park Service U.S. Department of the Interior, 1995.

Weeks, Kay D. *New Exterior Additions to Historic Buildings: Preservation Concerns*. Preservation Brief 14. Washington, D.C.: Preservation Assistance Division, National Park Service U.S. Department of the Interior, 1986.

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AN ADDENDUM TO THE SEPTEMBER 2016 REPORT OF THE DETURK WINERY

There were questions regarding the September 2016 report on the DeTurk Winery report. They fell into two categories: those concerning the application of the Secretary of the Interior's Standards for Rehabilitation and those concerning the City of Santa Rosa Design Guidelines, Section 4.7 Historic Properties and Districts, I Goals and III Design Guidelines or Historic Properties and Districts, G. New Construction. This addendum is intended to address those questions.

An Analysis of the proposed DeTurk Winery Village project and The Secretary of the Interior's Standards for Rehabilitation

1. A property shall be used for its intended historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.

The DeTurk Winery was constructed in the late 19th century as a facility to produce and ship wine. Isaac DeTurk who had the Winery constructed was a prominent local businessman and winemaker. He was also responsible for the construction of the round barn directly across Donahue Street from the winery building. The Winery has not functioned in a wine production and shipping business for almost a century. In recent decades the building was used to store stage props and costumes for a local theater group, gym, and moving van business. No project other than the currently proposed project has ever been proposed for the property which would insure its overall continued use maintenance. It is common knowledge that an unused building does not receive the necessary maintenance and attention as does a building in everyday use. Mr. Richard Deringer, its current owner, has been oficing in the building as he has awaited building permits to allow the rehabilitation of the Winery into a multi-residential project which will include some affordable housing units. Facilitating the construction of affordable housing units has been an ongoing stated goal of recent Santa Rosa City Councils.

The Santa Rosa General Plan would not permit the property to be used for winery production or storage. The currently permitted land use includes attached housing with no less than 75 units on the 3 ½ acre parcel. The proposed project calls for 185 dwelling units, including 15 affordable units.

If preservation of historically significant buildings is important to the City of Santa Rosa and if the construction of affordable housing is also important, this proposed rehabilitation of the DeTurk Winery and Bonded Warehouse is a project that furthers both of those objectives. .

2. The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.

The historic character of a building is embodied in its shape, its materials, its features, its setting and its interiors. The character-defining element s of the DeTurk Winery were identified in *DeTurk Winery Village, Review for Proposed Project for Consistency with Preservation Ordinances,* Susan Clark, September 2016, pages 3 and 4.

The current proposed project preserves the primary facade of the DeTurk Winery on Donahue Street. The alterations are minimal with several of the openings which have been closed off or altered being restored to their original appearance. The south elevation of the winery has had several alterations over the years, including installation of large roll up doors and closing off original windows. The proposed alterations on the south elevation call for removing some of the roll up doors and slightly raising a band of circular windows to provide light for the proposed apartments. The raising of the band of circular windows is necessary for the functioning of the new use. Left in their current location the round window s will only provide light into the apartments at floor level. The blue stucco which has been applied to the south elevation and obscures the original brick wall will also be removed.

The red brick exterior, series of three horizontal box-like structures, arched doorways, arched windows all make up the visual characteristics of the DeTurk Winery. These are to be retained and, in some cases, restored. Although there has been a loss of some of the interior walls, the project does not call for removal of any existing interior walls.

In the case of the DeTurk Winery, the most significant elevations are located on the west (front) and south of the building. The segmental arched windows along the west elevation and the common English bond pattern of exterior red bricks are important character-defining features that will be retained and should remain visible from the street.

The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (Weeks and Grimmer, 1995) provide for flexibility when interior and exterior alterations are necessary to assure continued use of a historic building. The following is found on page 65:

> "Some **exterior and interior alterations to a historic building are generally needed to assure its continued use**, but it is most important that such alterations do not radically change, obscure, or destroy character-defining spaces, materials, features, or finishes. **Alterations may include...cutting new entrances or windows on secondary elevations; inserting an additional floor**; installing an entirely new mechanical system; or creating an atrium or light well. Alteration may also include the selective removal of buildings or other features of the environment or building site that are intrusive and therefore detract from the overall historic character" (emphasis mine)

The acceptability of raising the string of round windows on a secondary elevation is permitted in the section quoted above. This proposed alteration is justified in terms of its functionality for the proposed residential space. It is absolutely essential to provide daylight for the future occupants of the proposed new apartments.

3. Each property shall be recognized as a physical record of its time, place and use. Changes that create a false sense of historic development, such as adding conjectural feature or architectural elements from other buildings, shall not be undertaken.

The proposed design for the rehabilitation of the DeTurk Winery includes NO conjectural features, architectural elements from other buildings or any false sense of historic development.

4. Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.

Over the historic period the Winery served two purposes: wine production and storage, storage of both alcoholic beverages and other types of storage. The only significant changes to the building were the addition of the large roll up doors on the south elevation and the replacement of some of the round windows with squared windows on the west elevation of the winery. The roll up doors speak more to the intensity of transporting product rather than change in property use. The replacing some of the round windows with squared ones possibly took place as early as 1906. The squared windows which face Donahue Street have been part of the visual character of the winery for over 100 years are to be retained.

5. Distinctive features, finishes and construction techniques or example of craftsmanship that characterizes a historic property shall be preserved.

The Character-defining Elements tables of the Winery and Bonded Warehouse were created so the distinctive features, finishes, and construction techniques could be identified up-front and protected in the rehabilitation design. Several of the elements that characterize the buildings have already been compromised. To the greatest extent possible, the original features will be restored.

The red brick exterior, massing and arched openings are perhaps the most distinctive of the building's finishes and construction techniques. The bricks are set in common English bond with one header row to five stretcher rows. The brickwork at the lower level of the south elevation has been covered by a layer of blue stucco. In order to restore the original south elevation appearance, the blue stucco is to be removed to reveal the original brickwork or replace it with same.

The winery had a 45' parapet when it was originally constructed. The parapet fell during the 1906 earthquake. It is the intent of the project to restore this element to the building.

6. Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.

There is ample documentary and pictorial evidence of the historic appearance, building materials and building techniques. Additionally Sanborn Fire Insurance maps show original roof line, locations of doors (now closed in), dimensions of structures on the property, building material and what activities took place in what areas of the buildings.

The brick exterior will require the majority of the repair and replace work. To the extent possible, bricks will be repaired. If some bricks are too damaged to repair, they will be replaced by identical bricks. The common English bond pattern will be preserved. Other exterior features, such as windows and doors, will be repaired using materials already in place or replaced with like materials.

7. Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.

The owner is aware of the fragility of the bricks and other original building materials. He has already begun research into discovering which methods of cleaning to preserve are suitable for his buildings.There will be no sandblasting or use of caustic or corrosive cleaning agents.

8. Significant archaeological resources affected by a project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be unertaken.

If any archaeological resources are found, work will stop until a professional archaeologist is consulted. In her Historic Property Survey Report for the City of Santa Rosa bike/pedestrian path along the Northwestern Pacific Railroad, Vicky Beard stated that the Winery did not meet Criterion D dealing with archaeological resources that could yield important analytical data relating to prehistory or history.

9. New Additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, and scale and architectural features to protect the historic integrity of the property and its environment.

The Secretary of the Interior's Guidelines pertaining to new additions to historic buildings which have been incorporated into this project include:

> Constructing a new addition so that there is the least possible loss of historic materials and so that the Character-defining features are not obscured, damaged, or destroyed.
>
> Designing a new addition in a manner that makes clear what is historic and what is new.
>
> Designing a rooftop addition when required for the new use, that is set back from the wall plane and as inconspicuous as possible when viewed from the street.

All new construction adjacent to the subject historic property has been designed to recognize and conform to size, bulk and massing and is not mimicking the historic character of the original building. The new construction is both compatible with and consistent as to design elements so to meet this provision.

10. New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

The new addition was designed with the condition that if the improvements were removed in the future these improvements will not impact the status of the existing building. If Building D (apartments), upper stories of the Winery, and Building A were removed, the property would look pretty much what it looks like today.

Actually if the new additions were removed in the future, the Winery would be closer to its original appearance than it is today. Some of the original windows will have been restored, two big roll up doors will have been removed and the blue stucco lower level of the south elevation will have been removed.

The project as proposed is consistent with the Secretary of the Interior's Standards and will not adversely affect or decrease the significance of the historic DeTurk Winery.

Questions relating to the City of Santa Rosa's Design Guidelines, Historic Properties and Districts, section 4.7

1. Goals

A. To preserve Santa Rosa's historic heritage.
B. To encourage maintenance and retention of historic structures and districts.
C. To ensure that alterations to historic buildings are compatible with the character of the structure and he neighborhood.
D. To discourage the demolition of significant historic structures.
E. To assist property owners and designers in developing plans for historic properties and to encourage the compatibility of new structures in historic districts, and having those plans approved by the City.

The proposed project will rehabilitate the historic DeTurk Winery for a new purpose which addresses one of the goals of City Counsel which is not addressed here – to increase the housing stock in Santa Rosa, especially affordable housing. By rehabilitation the historic building will be preserved and will be maintained for the residents occupying the new units.

The West End Preservation District is comprise of small residential buildings, very unlike the more industrial appearing Winery. Yet when the district was formed in the 1990s in order to offer some protection to the Winery from demolition or inappropriate alterations, the building was included in the West End Preservation District. The Winery has never reflected the character of the neighborhood of small, wood-frame houses. The building was constructed as an industrial building to house the production and storage of wine.

The historic resource survey conducted by Anne Bloomfield in 1989 identified the Winery as a contributor to a proposed North Railroad Square Preservation District. The proposed preservation district was to be made up of commercial and industrial buildings. Bloomfield identified the buildings at 415 Davis, 410, 422, 504, 510, 512, 514, 600, 610, 618, 620, 625, 700, 701, 708, 716, 717, 726 and 732 Wilson as potential contributors to the North Railroad Square Preservation District. The City of Santa Rosa has never pursued formation of the North Railroad Square Preservation District. The district is not listed among the preservation districts listed in II HISTORIC LANDMARKS AND PRESERVATION DISTRICTS.

Anne Bloomfield's survey was included in the Santa Rosa Cultural Heritage Survey which was submitted in 1990 to the California Office of Historic Preservation. The properties listed on the survey enjoy protections from demolition and inappropriate alterations as do those in preservation districts which were formally established by local jurisdictions. Contrary to the report dated September 2016, they are listed on the California Register of Historic Resources. Proposed alteration and rehabilitation plans are reviewed by the local jurisdiction for consistency with the Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.

Santa Rosa's Design Guidelines addresses new construction in Historic Districts in Section III, G. New Construction. There are three points in this section.

1. Design new construction so that the architectural character of the neighborhood is maintained.

The architectural of the district does not apply to Donahue Street. The street scape was never one of small wood-frame residences as is the rest of the preservation district.

2. Design new construction to be compatible in height and proportion with adjacent structures

The proposed alteration to the Winery is compatible in height with the historic Winery and the nearby Bonded Warehouse. As mentioned above, the Winery's inclusion in the West End Preservation District composed of small residences rather than the proposed North Railroad Square District made up of larger commercial and industrial buildings is awkward. The proportion and height is compatible with the DeTurk Round Barn across Donahue Street from the Winery. The height of the original building is 34-35 feet; the height of the proposed new construction is 34 feet plus the fourth storey roof garden and apartments. The proposed fourth storey raises the overall height to 40 feet, which is still 2-3 feet lower than a tentative map for this project which was approved in 2007. Additionally, the fourth floor is less visible from the street since it is set back 12-15 feet from the front wall of the rest of the building. The Winery has always been of greater height and proportion than the small residences that make up the West End Preservation District. The addition of a fourth storey will not appreciably change the street scapes in the area.

This project addresses the City goal of providing affordable dwelling units. The proportion and height ass proposed are necessary to provide housing for low and moderate income households. To reduce height and proportion to that of nearby structures would result in fewer apartment units. The costs per unit to be greater and, therefore, the rent would not be affordable to low and moderate income families.

3. Use materials and designs similar to that found throughout the neighborhood.

This guideline brings us back to the problem of having the Winery located in the West End Preservation District rather than the proposed North Railroad Square Preservation District. There simply are no other large, industrial red brick buildings in the surrounding neighborhood. The nearby buildings are wood-frame and wood exterior and residential design. The Winery is simply of another design and built from materials not found nearby.

Susan M. Clark

Susan M. Clark, MA
Architectural historian

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code: 3B

Other Listings Contributing element in the West End Preservation District
Review Code _____ Reviewer _____ Date _____

Page 1 **of** 19 ***Resource Name or #:** (Assigned by recorder) De Turk Winery
P1. Other Identifier: Santa Rosa Winery

***P2. Location:** ☐ **Not for Publication** ☒ **Unrestricted**
- ***a. County** Sonoma **and** (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)
- ***b. USGS 7.5' Quad** Santa Rosa **Date** 1954 (photorevised 1980)
  T 7N; **R** 8W; __ ¼ **of** ___ ¼ **of Sec** __; MDM **B.M.**
- c. Address 700, 722, 730, 816, 820 Donahue St. City Santa Rosa Zip 95401
- d. UTM: (Give more than one for large and/or linear resources) Zone __, _____ mE/ _____ mN
- e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, decimal degrees, etc., as appropriate)

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

The DeTurk Winery complex is situated on two long rectangular parcels which are located to the west of the Northwestern Pacific Railroad tracks, east of Donahue Street, north of West 8th, and south of West 9th Street. The complex is located to the east of the DeTurk Round Barn and is surrounded by residential, commercial, and industrial buildings. The property is approximately 3 acres, and consists of the three section winery at 722-820 Donahue Street (APN 010-091-001), and the U.S. Bonded Warehouse at 700 Donahue Street (APN 010-091-007). (See continuation sheet, pg. 2)

***P3b. Resource Attributes:** (List attributes and codes) HP8: Industrial Building
P4. Resources Present: ☒ Building ☐ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: (view, date, accession #): View of the west and south elevations, June 2016
***P6. Date Constructed/Age and Source:**
☒ Historic ☐ Prehistoric ☐ Both
1879, per *Sonoma Democrat* and Sonoma County Tax Rolls
***P7. Owner and Address:**
Railroad Square Village, LLC.
PO BOX 706
Tiburon, CA 94920
***P8. Recorded by:** (Name, affiliation, and address
Susan M. Clark, MA
Clark Historic Resources
P.O. Box 198
111 Hares Tail Close
Sea Ranch, CA 95404
(707) 785-2725
***P9. Date Recorded:** May, 2016
***P10. Survey Type:** (Describe)
Intensive; project-related

***P11. Report Citation:** (Cite survey report and other sources, or enter "none. "A CEQA Evaluation for the Isaac DeTurk Winery, 700, 722, 730, 816, 820 Donahue Street, Santa Rosa, CA 95401."

***Attachments:** ☐NONE ☒Location Map ☒Continuation Sheet ☒Building, Structure, and Object Record
☐Archaeological Record ☐District Record ☐Linear Feature Record ☐Milling Station Record ☐Rock Art Record
☐Artifact Record ☐Photograph Record ☒ Other (List): Historic Photographs and Sanborn Insurance Maps

The three-section winery forms a U-shape which consists of one large cellar as the south arm, a truss-roofed slightly setback middle section, and the north arm with two party wall sections that separated the grape crushers on the west side of the building from the wine pressing and fermenting tanks along the east wall. The winery is 35'-45' high, and clad in smooth faced brick arranged in a common bond pattern with the sixth course composed of headers. Brick pilasters on 18'-20' centers line all elevations. The exterior has been painted red. The building rests on a brick foundation, and has cement flooring.

According to the 1885 Sanborn Insurance Map, the southern section housed the wine vaults, the central building was the wine ware room, and the northern section housed the wine cellar and fermenting room. For the sake of clarity, these three buildings will be discussed separately. Refer to Appendix I for photographs.

Winery Vaults/Main Cellar at 722 and 730 Donahue:

The cellar is square in shape and measures approximately 175'x160.' Three courses of headers project out across the top of the north and west elevations. The existing roof is covered in composition shingles and has been altered considerably from its original shape. Historical photographs (donated to the Healdsburg Wine Library by a relative of DeTurk's wine maker, Henry Meese) which date to the late 1800s indicate that there was originally a stepped parapet roof on this building. According to the 1888 Sanborn Map, the flat corrugated iron roof was obscured by parapets located along the eastern and western elevations. The parapets were destroyed in the 1906 earthquake. Today portions of the parapets can be seen along the west elevation.

Segmental arched windows and doors lined all elevations, although most have been bricked in. Iron hinges are located around many of the windows, mainly along the east elevation. At one time, these windows were protected by wooden shutters. Along the west elevation, large arched windows are located over smaller arched windows. The small segmental arched windows measure approximately 2'x3'. The long rectangular windows located on every other bay are approximately 3'x6'. Historical photographs indicate that a string of circular windows once lined every bay along the west elevation. The arched windows were added at a later date, but are similar in style to the original arched windows which were located along other elevations. Three doors were cut into the central section of the western elevation, and three square windows were cut into the southern end of the western elevation.

Along the west end of the south elevation is a string of four round windows, which measure 32" in diameter. The late 19th Century Sanborn Maps indicate that round windows were located on every bay, except the eighth bay from Donahue Street, where there was a large segmental arch door. Five industrial roll-up doors, which are covered by blue canopies and one pedestrian entrance, have been added along this elevation. The bottom half of the south elevation has been coated in blue stucco.

The cellar is made up of four rooms. The brick walls have been coated in poured cement and sheathed in redwood boards. Steel trusses support the roof, and the ceiling is also sheathed in redwood. An internal alley extends along the back side of the northern party wall, which connects the cellar to the central section of the winery, known as the wine ware room.

Wine Ware Room:

The two-story wine ware room is rectangular in shape and measures approximately 120'x60.' The flat roof has been altered considerably. According to the 1888 Sanborn Map, the wine ware room had a medium slope gabled roof. The building consists of one large room. The interior walls have been coated in spray foam insulation. A second story office is located above the internal alley. A kitchen and bathroom have been added to this office

Fermenting Room and Cellar at 820 and 816 Donahue Street:

The northernmost building of the warehouse measures approximately 150'x100.' According to the 1888 Sanborn Map, two party wall sections separated the grape crushers on the west side of the building from the wine pressing and fermenting tanks on the east side of the room. This section of the winery is topped by a flat built up roof; however, this is not the original ca. 1879 roof. Originally this section of the winery had two medium-sloped hipped roofs- one roof covered the east half of the building and the other covered the west half. All of the arched windows and doors along this section of the winery have been bricked in.

Historical photographs from the late 1800s indicate that there were arched windows and doors along this section of the winery. Arched windows with wooden shutters were located on every other bay along the west elevation. The cinder block addition was constructed along the north elevation of the brick winery, which obstructed all of the original openings along the northernmost elevation; this addition is discussed as an ancillary building on the next page. An inspection of the northernmost wall, which would have been the northernmost elevation of the winery, but is now the southernmost interior wall of the ca. 1947 concrete block addition, has a series of bricked in segmental arched windows and doors. Located on this wall were three 10'x10' arched doors, three small arched windows were located between these doors, and there was one arched pedestrian entryway. The number of doors along this wall indicates that this was a main industrial entrance into the facility. A rectangular doorway has been cut into the center of this wall to the link the cinder block addition to the other sections of the winery.

Inside, steel trusses support the roof. The interior brick walls are coated in white wash with pilasters approximately 2' thick spaced 15' apart. The southern wall has been coated in poured concrete. Wood posts, added more recently during the retrofitting of the building, are spaced approximately 16'-18' apart, and line the perimeter and center of the room.

The overall condition of the three-section winery is good. Also included as part of the DeTurk Winery complex are the U.S. Bonded Warehouse and a number of ancillary buildings.

U.S. Bonded Warehouse at 700 Donahue Street

The U.S. Bonded Warehouse, located in the southwest corner of the project area (APN 010-091-007), is square in shape and measures approximately 100'x100.' The building was constructed in two rectangular single-story sections. The southern section was completed by 1888 and the northern section was completed by 1893. The building is roughly 25' in height, and is clad in brick organized in a common bond pattern with the sixth course composed of headers. The building rests on a brick foundation and the floors are made of concrete and wood. Parapets located on the east and west elevations obscure a flat corrugated iron roof.

An enclosed loading dock and overhang roof extends approximately 18' off the east elevation of the warehouse. The original segmental arched doors have been bricked in, and two roll-up doors have been added to the west elevation. The outside of the building has been painted red.

Many of the internal exposed brick walls have large cracks. The roof is supported by heavy wood trusses. The overall condition of the U.S. Bonded Warehouse is fair.

Ancillary Buildings

DeTurk Winery Complex:

According to the 1885 Sanborn Map, there were seven buildings located to the south of the winery and to the west of the U.S. Bonded Warehouse: a cobblers shop, the superintendent's house, and five sheds. These buildings were removed before 1950. Sometime between 1885 and 1888, a distillery building was constructed to the north of the winery. This building was removed before 1930. An office and shed were located along the northern elevation of the cellar, and to the west of the Wine Ware Building; these buildings were removed after 1950.

Warehouse at 918 Donahue Street, and 6 and 8 West 9th Street:

A two-story cinder block building (APN 010-091-001), which extends from the northern elevation of the DeTurk Winery to West 9th Street, was constructed circa 1947. The building is rectangular in shape, and measures approximately 262'x130.' It rests on a cement foundation, and has a flat slightly built up roof. The building consists of a two-story office, located at the corner of West 9th and Donahue streets (#6 and #8 West 9th Street), and two large warehouse rooms, which share a common wall with the northern elevation of the DeTurk Winery. The building is tan in color with a red cap along the roof line.

The main entrance is located along the north elevation, which fronts West 9th Street. The entrance to #9 is to the right of center. Two fixed square windows are located to the right of the door, and one fixed rectangular window is located to the left of the door. This window pattern is repeated on the second-story of the elevation. This section of the building is devoted to business activities, and consists of nine offices, two bathrooms and a kitchen on the first floor. On the second floor are five offices, a bathroom, and a kitchen.

Along the north end of the west elevation are large fixed square windows. A string of eight smaller fixed square windows line the second-story of the west elevation. Below this string of windows are four metal doors. The east elevation is lower in height than the rest of the building, and consists of three large roll-up metal doors, which are spaced along every other bay. This section of the building consists of warehouse space.

Shrubbery, planted in brick boxes, lines the north elevation of the two-story cinder block building. The overall condition of this building is good.

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
Primary #
HRI#

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** (Assigned by recorder) DeTurk Winery ***NRHP Status Code** 3B
Page 5 **of** 19

B1. Historic Name: DeTurk Winery
B2. Common Name: Santa Rosa Winery
B3. Original Use: Winery B4. Present Use: Warehouse
***B5. Architectural Style:** 19th century brick winery
***B6. Construction History:** (Construction date, alterations, and date of alterations)

The three section masonry winery was constructed in 1879, and the U.S. Bonded Warehouse was constructed between 1888 and 1892. Numerous alterations have been made to the exterior and interior of these buildings.

***B7. Moved?** ☒No ☐Yes ☐Unknown **Date:** _____ **Original Location:** _____
***B8. Related Features:**
Included in the project area is the U.S. Bonded Warehouse (APN 010-091-007) at 700 Donahue Street, which was a part of the DeTurk Winery complex.

B9a. Architect: Thomas J. Ludwig b. Builder: Thomas J. Ludwig
***B10. Significance: Theme** Industrial development **Area** Santa Rosa, Sonoma County
Period of Significance 1870-1946 **Property Type** Brick Winery Complex
Applicable Criteria Criteria 1,2,3
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The DeTurk Winery is a manifestation of the historical linkage between industry and agriculture in Santa Rosa. The city's industrial life began when the first railroad arrived in the 1870s, and like many industrial facilities, the DeTurk Winery was constructed along the Northwestern Pacific Railroad tracks, west of the commercial downtown area. Between 1880 and 1925, commercial and industrial operations which relied on rail transportation constructed brick warehouses adjacent to the railroad tracks. The DeTurk Winery was the only brick winery in Santa Rosa, and one of two wineries in operation in Santa Rosa during the late 1800s; the other winery was at Fountaingrove. Most of the masonry buildings in Santa Rosa were destroyed in the 1906 earthquake. Buildings which survived the earthquake included the warehouse on West 6th Street, the Western Hotel on 4th Street, the Northwestern Pacific Depot on Wilson between 4th and 5th streets, and the DeTurk Winery. The winery is associated with Isaac DeTurk—grape grower, wine maker, and businessman—and Thomas J. Ludwig—local developer and builder. **(See Continuation Sheet pg. 8)**

B11. Additional Resource Attributes: (List attributes and codes) HP8: Industrial Buildings
***B12. References:** See Continuation Sheet pg. 16 and 17

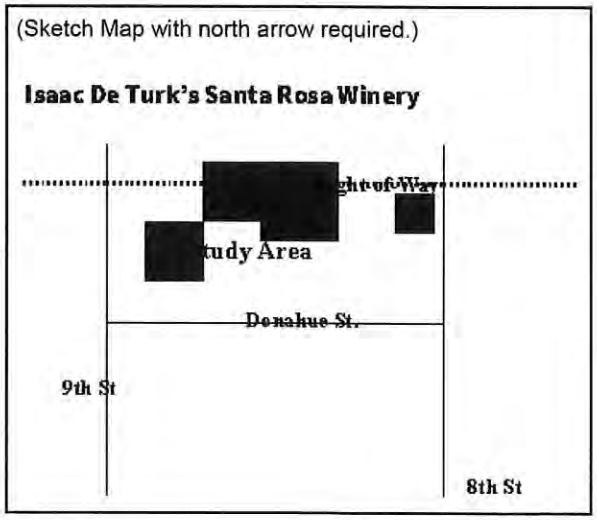
B13. Remarks: The project area is a contributing element in the City of Santa Rosa West End Preservation District. It was recorded by Dan Peterson in 1977 and Anne Bloomfield in 1989.

***B14. Evaluator:** Susan M. Clark, MA
Clark Historic Resource Consultants
P.O. Box 198, 111 Hares Tail Close
Sea Ranch, CA 95497
(707) 785-2725

***Date of Evaluation:** May 2016

(This space reserved for official comments.)

(Sketch Map with north arrow required.)



Wine grapes were an early cash crop, and wine-making has been an important contribution to Sonoma County's economy for some 125 years. According to LeBaron and Mitchell in Santa Rosa: a Twentieth Century Town, there were two levels of Sonoma County viticulture. First were the prestigious wines that were produced by Fountaingrove, the Italian Swiss Colony, Santa Rosa's DeTurk Winery, Korbel Champagne Cellars in Guerneville, and the Buena Vista Winery in the Sonoma Valley; and the second was the barrel wine produced by the many small wineries. Both were vital links to the county's agricultural economy. Isaac DeTurk grew grapes and purchased grapes from local farmers, which were processed into wines, sherries, and brandies and then bottled at his winery. DeTurk wines were sent to San Francisco, Chicago, St. Louis and New York.

Isaac DeTurk was born in Pennsylvania in 1843 and raised in Indiana. He came to California in 1858 and settled in Sonoma County a year later. He first settled in Bennett Valley, six miles southeast of Santa Rosa where he founded the Belle Mount Winery. In 1862 he had 30 acres planted, and in 1867 produced 15,000 gallons of wine at Belle Mount. To save costs of shipping grapes to Bennett Valley, DeTurk obtained two wineries in 1878—one located in Cloverdale and the other in Santa Rosa.

In 1874 the Santa Rosa Wine Company purchased blocks 5, 6, and 12 of Boyces' Addition to the City of Santa Rosa, where they constructed the Santa Rosa Winery. The Santa Rosa Winery was located on the long block from West 8th and West 9th streets. The winery was then sold to the firm of Lachman and Jacobi in 1878. The firm owned the building for less than one year before a fire destroyed most of the building and the machinery. Lachman and Jacobi decided not to rebuild, instead opting to sell their property to DeTurk.

In 1879 DeTurk hired local builder and contractor, Thomas J. Ludwig, to construct a new winery of brick at the site of the old Santa Rosa Winery. Ludwig came to Santa Rosa in 1874. After John Ingram, the first contractor in Santa Rosa died in 1877, Ludwig became the leading builder. According to historian Gaye LeBaron et al. in *Santa Rosa: a Nineteeth Century Town*, Ludwig was credited with building 430 structures in his 19 years in Santa Rosa, including most of the substantial business blocks in the town's center. He constructed many commercial and industrial buildings, including City Hall and the Anthaena Theater, as well as the residences of many prominent Santa Rosa citizens. He established himself as a businessman, and operated a planing mill and lumber yard on Wilson Street—directly across the railroad tracks from the DeTurk Winery—and was engaged in the manufacture of bricks. According to the *1889 Illustrated History of Sonoma County*:

> The citizens of Santa Rosa…feel a pride in [Ludwig's] accomplishments, and as they look along Fourth street from City Hall and the Santa Rosa Bank…down along to the depot, and recollect that every brick building on both sides of the street with a single exception of the Occidental Hotel, was all his work, they cannot help a feeling of elation at the tremendous energy of one man, who has almost built a city.

The DeTurk Winery was a massive brick structure, which occupied roughly three-quarters of an acre. According to 1878-1879 articles in the Sonoma Democrat, the building excelled anything of similar character in the State, greatly enhanced the interest of grape growers in the Sonoma Valley, and provided a visible monument of the public spirit and enterprise of DeTurk. The main building fronted the railroad and had a cellar capacity of 500,000 gallons. Red Zinfandel, Riesling, white wines from foreign grapes, red and white Mission, sherry and port were manufactured at the winery. By 1885 the winery complex covered over an acre of ground, which included the yard, offices, distillery, and cooper's shop.

In 1888, after the Bonded Warehouse Law was passed, the U.S. Bonded Warehouse at 802 Donahue was constructed. The building was constructed in two parts between 1888 and 1893: the south half of the building was completed in 1888 and the north half by 1893. Taxed liquor, mainly brandy, was processed here—brandy was the 19th century solution to overproduction of wine. Under the Bonded Warehouse Law, liquor had to be stored a federally bonded warehouse for four years before bottling and must meet certain requirements—legally-defined straight, distilled in a single season by a single distillery and that it is 100 proof—in order to get the government seal of quality on every bottle. Luther W. Burris,

the cashier of the Santa Rosa Bank, was the proprietor of the U.S. Bonded Warehouse. The warehouse was owned by the DeTurk Winery.

By the late 1880s, DeTurk was producing from three to four hundred thousand gallons of wine and 15,000 gallons of brandy annually. The winery was one of the largest operations in the state, and one of four Sonoma County marketing giants which shipped bottled wines across the United States, the others being Fountaingrove, Korbel, and the Italian Swiss Colony. After the Buena Vista Winery collapsed, the DeTurk Winery was the largest in the region. It was one of the largest California producers. By the late 1880s it was second only to Leland Stanford's winery in the Sacramento Valley.

The winery was operated by five men. The superintendent of the winery was George Dohn. Dohn and his family lived in a cottage to the south of the winery, on the corner of West 8th and Donahue streets. Dohn was born in Germany, and worked as a wine maker in his native country before immigrating to California. Henry Meese, also from Germany, was employed as the wine maker and later became the foreman. The winery also employed a cooper and three other men who assisted in the daily maintenance and operation of the facility. During the busy season when the grapes were crushed twelve to fourteen men were hired.

After the winery was constructed, DeTurk sold his 140 acre Bennett Valley ranch and his winery in Cloverdale. He bought 1200 acres of the Los Guilicos Rancho east of Kenwood. By 1890 he had 100 acres planted in Riesling, Petit Pinot, Alicante Bouschet, and Gutedel. In 1891 DeTurk purchased additional acreage adjoining the winery in the Boyce Addition.

Isaac DeTurk was a significant figure in the history of Santa Rosa. In addition to the winery, he built an early fruit dryer, was part of the consortium of Santa Rosa businessmen who commissioned the construct of the Athenaeum (built by Ludwig), was the State Viticultural Commissioner for the Sonoma District in the 1890s, and formed part of the consortium that bought and developed the racing track now at the County Fairgrounds. He served, along with T.J. Ludwig, on the Board of Directors of the Sonoma County Stock Breeders Association. DeTurk was a noted horse fancier and breeder. He owned one of Santa Rosa's two round barns. The DeTurk Round Barn, listed on the National Register of Historic Places in 2004, was built by Thomas J. Ludwig in 1892 across the street from the winery.

After DeTurk's death in 1896, the Santa Rosa Bank entrusted the management of the winery to Clarence M. Mann. Mann had been DeTurk's agent in San Francisco since 1889. In 1902 the DeTurk Winery was operated by B.W. Paxton, President, and L.W. Burris, Secretary. In 1907 the bank turned the winery over to William Hoelscher Company of San Francisco who continued to use the I. DeTurk label. The Scheibel Wine Company, who succeeded Hoelscher, also used the DeTurk label. In 1912 the California Wine Association (CWA) purchased the plant of $50,000 and operated it until prohibition; CWA operated some 51 wineries, carrying such famous names at Brun and Chaix, Las Palmas, Greyson, and Madrone.

In 1929 Grace Brothers Inc. purchased the property. During prohibition the Grace Brothers Brewery was closed, and the company concentrated on ice and cold storage, creamery products, farming and bottling of carbonated beverages. During prohibition the DeTurk Winery was known as the DeTurk Plant, and was listed as a warehouse and storage facility within local directories.

addition constructed 1947

In 1944 Grace Brothers Inc. sold the winery to the New York wine firm, W.A. Taylor and Company. Under the leadership of Hiram Walker, W.A. Taylor and Company purchased two wineries in Santa Rosa: the DeTurk Winery and the Martini Winery, which was later known as Martini and Prati. W.A. Taylor and Company constructed the cement * block addition, which extends from the north elevation of the winery to West 9th Street, by 1947. The 1947 Santa Rosa Directory lists W.A. Taylor and Company at 8 West 9th Street–the address for the cement block addition. Santa Rosa Ice and Cold Storage, owned by Grace Brothers Inc., continued to occupy the U.S. Bonded Warehouse. Hiram Walker and Sons Inc., a subsidiary of W.A. Taylor, sold the winery to the Trombetta family in 1961. The Trombetta family used the facility for the storage of beer and liquor. In 1998 the Trombetta family sold the property to

Western Farm Supply. Western Farm Supply's retail facility is located to the south of the project area, between West 8th and West 7th streets. In 2005 Western Farm sold the property to Railroad Square Village LLC.

HISTORIC RESOURCE INVENTORIES AND PRESERVATION DISTRICTS

In 1977 Architect Dan Peterson prepared an historic resource survey for the city of Santa Rosa. He created different districts based upon geographical and architectural histories. The DeTurk Winery was included in his proposed Westside District, which was rectangular in shape and extended from Dutton Avenue east to the railroad tracks, and was bounded on the north and south by West 9th and West 8th streets. Peterson attributed the winery's significance to the architectural and industrial history of Santa Rosa.

Anne Bloomfield updated the historical architectural survey of Santa Rosa in 1989. Bloomfield, like Peterson, described an historical linkage between industry and agriculture in Santa Rosa, the link being most significant between the canneries, wineries and fruit drying plants that employed residents of Santa Rosa around 1900. In developing an historical context for industrial development in Santa Rosa during the period, 1870-1946, Bloomfield characterized the historical and architectural elements of a locally significant property type: the winery complex. The DeTurk Winery, constructed around 1879 was a major industrial wine making complex, and exemplifies the characteristics described in this category. According to Bloomfield:

> A historic winery complex usually consists of several buildings related functionally but not necessarily architecturally. The largest is a wine cellar for the storage and aging of the wine; it is usually of masonry construction without windows in order to maintain an even, rather cool temperature throughout the year; ceilings are high for efficient storage of wooden barrels on racks. Grape crushing and wine fermentation may have taken place inside the cellar building, or in a separate structure. The complex may also contain a distillery for converting wine into brandy; this is often masonry, and it contained a furnace for the distillation process. There may be a sherry house for aging sherry wine in the solera process where barrels are stacked in a reverse pyramid so that, as wine evaporates or is drawn from the lower barrels, they are refilled from the barrels above which contain only partially aged wine, and the newest crush is placed only in the top row of barrels. Such a sherry house usually is also of masonry construction, with high ceilings and no windows. There may be additional buildings of frame construction, such as an office, blacksmith shop, and various barns. Ornamentation, if any, is minimal, usually inherent in the materials and construction themselves, such as framing around openings.

Bloomfield included the DeTurk Winery in her proposed North Railroad District. This district was defined by industrial buildings, which lined the railroad tracks to the north of the Rail Road Square Preservation District.

In 1996 the locally designated West End Preservation District was created by the Santa Rosa City Council in response to residents of the West End. The district extends from Dutton Avenue east to the railroad tracks and from West 9th Street south to West 8th Street. The DeTurk Winery was included as a contributing element within the West End Preservation District. The winery is considerably different architecturally and historically from the predominantly residential buildings in the West End. The district is associated with the settlement of Santa Rosa, and architecturally defined by bungalows, colonial cottages, Italianates, Queen Anne cottages, saltboxes, 19th century vernaculars, and 1930s-50s houses. The DeTurk Round Barn, located to the west of the winery, is effectively a buffer between the larger residential area and the DeTurk Winery complex.

REGULATORY CONTEXT FOR CULTURAL RESOURCES

The California Environmental Quality Act (CEQA) requires that cultural resources be considered during the environmental review process, even if such resources have already been determined to be significant in past studies. To evaluate the significance of an historical resource and its integrity—the ability of a property to convey that significance—a building is evaluated according to established guidelines. Section 15064.5(a)(1) of the California Environmental Quality Act establishes the California Register of Historical Resources Criteria for Evaluation as the standards to be used for historical and architectural evaluations of properties. The California Register Criteria for Evaluation are based on the National Register Criteria for Evaluation. If a property does not meet the California Register requirements for state significance, it will not meet the federal requirements for significance at the National Register level. According to the guidelines of the California Register Criteria for Evaluation, a building, structure or object is considered to be an historically significant resource if it is at least 50 years old, has integrity, and meets one or more of the following criteria:

1. Is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States; or

2. Is associated with the productive lives of individuals significant in local or regional history or the cultural heritage of California or the United States; or

3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values; or

4. Has yielded or may be likely to yield information important to prehistory or history. (While this criterion is generally applied to archaeological resources, it applies to any building, structure, or object whose physical fabric itself can be considered an artifact.)

The seven aspects of integrity to be considered are: location, setting, feeling, design, materials, workmanship, and association. Integrity speaks to whether the essential architectural character of a building has been preserved. Character defining elements include: the overall shape of the building, its materials, craftsmanship, decorative details, interior spaces and features. A building must possess sufficient character and integrity to convey its significant historical associations.

EVALUATION OF SIGNIFICANCE

The DeTurk Winery is a significant historic resource as defined by CEQA. The complex is eligible for the California Register under Criterion 1, 2 and 3:

This property is judged to be eligible for inclusion in the CRHR as an historical resource according to criterion 1. The DeTurk Winery is associated with events that have made a significant contribution to the broad patterns of local Santa Rosa and Sonoma County history. Wine-making has been an important contribution to Sonoma County's economy for approximately 125 years. The DeTurk Winery was part of the early industrial development of Santa Rosa; this development linked peripheral agricultural areas to the commercial and industrial center, the city of Santa Rosa.

The winery meets the requirements outlined in criterion 2. The DeTurk Winery is association with the lives of individuals significant in local or regional history. Isaac DeTurk was a prominent early settler in the region who participated in the development of local agriculture and industry, and contributed to the development of the California wine industry through his role in the State Viticultural Association.

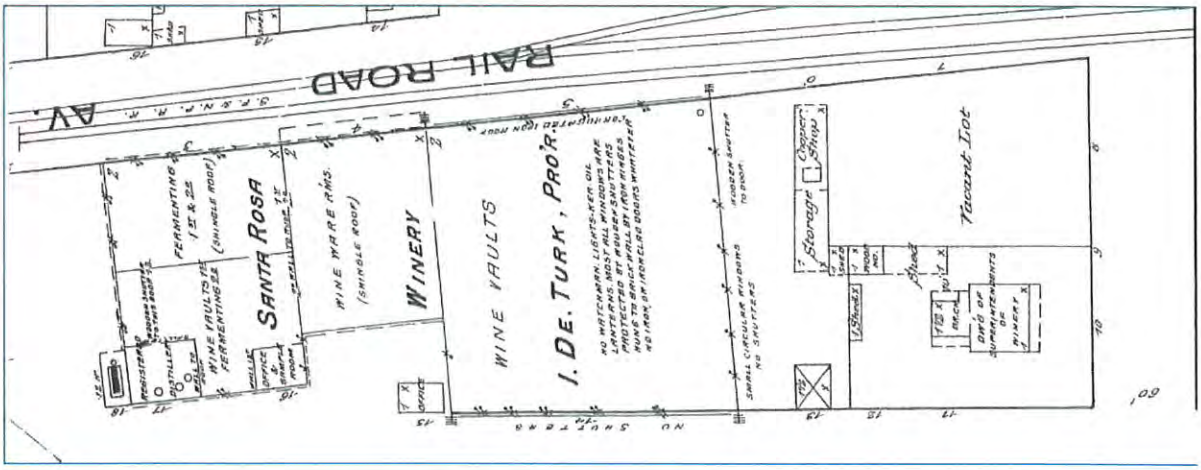
In addition, the winery is associated with prominent builder and contractor Thomas J. Ludwig. Ludwig constructed many of the brick buildings in the downtown area including City Hall, the Anthaena Theater, and the private residences of many prominent citizens. Many of these buildings were destroyed in the 1906 earthquake.

The DeTurk Winery also meets the requirements outlined in criterion 3. The winery represents a distinctive type and period of construction. From approximately 1874 -1893 Ludwig was responsible for many of the masonry buildings constructed in Santa Rosa, including the DeTurk Winery. The winery was the only brick winery in Santa Rosa, and it is one of two brick wineries in Sonoma County–the other is the Korbel Champagne Cellar in the Russian River Valley. As noted above, most of the brick buildings in Santa Rosa were destroyed in the 1906 earthquake. The winery is one of four buildings located along the railroad tracks which survived the earthquake; the others were the Western Hotel, the Pacific Northwestern Railroad depot, and the California Packing Association warehouse.

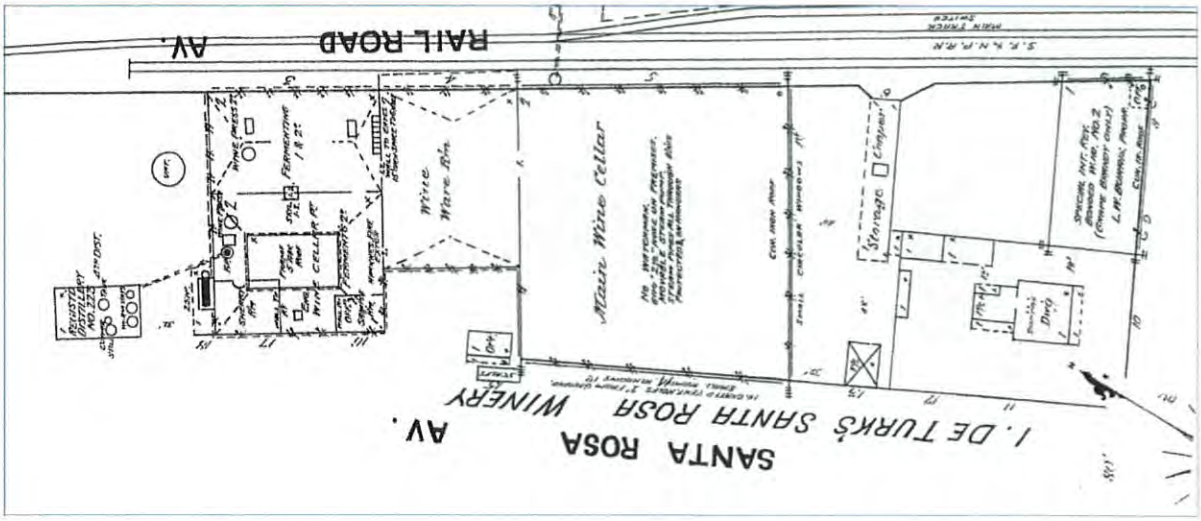
The DeTurk Winery complex (Winery and U.S. Bonded Warehouse) also meets other conditions for eligibility. The winery was constructed in 1879 and the U.S. Bonded Warehouse was constructed between 1888 and 1892; therefore, the buildings which make up the complex are more than 50 years old. The property maintains is integrity of location, setting, feeling, design, materials, workmanship, and association. Although the old arched windows and doors have been bricked in, they are still visible and continue to be important defining elements of the buildings. As stated before, the winery is a contributing element within the West End Preservation District. The buildings are a focal point of the neighborhood, and continue to be associated with the industrial and architectural history of Santa Rosa.

View of the north and west elevations of the DeTurk Winery, ca. 1880. A gabled roof distillery is located to the north of the winery, and the men standing in front of the complex are employees of DeTurk. Isaac DeTurk is pictured third from the left. Photo courtesy of the Healdsburg Wine Library, Healdsburg, CA.

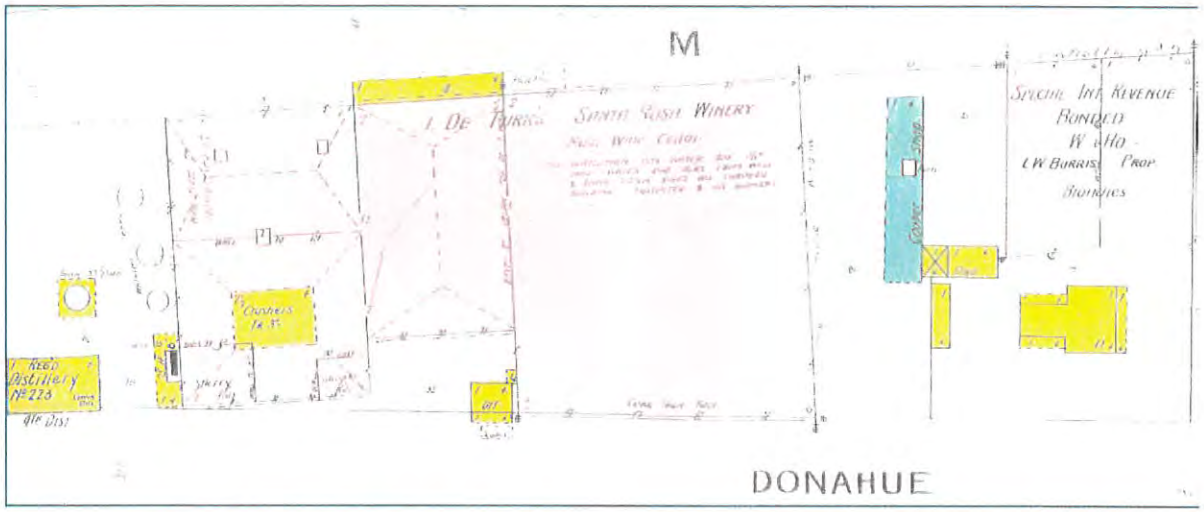
View of the west elevation of the DeTurk Winery, where bottles are being loaded onto carts, ca.1880. A gabled roof office building is located in front of the brick winery. Photo courtesy of the Healdsburg Wine Library, Healdsburg, CA.



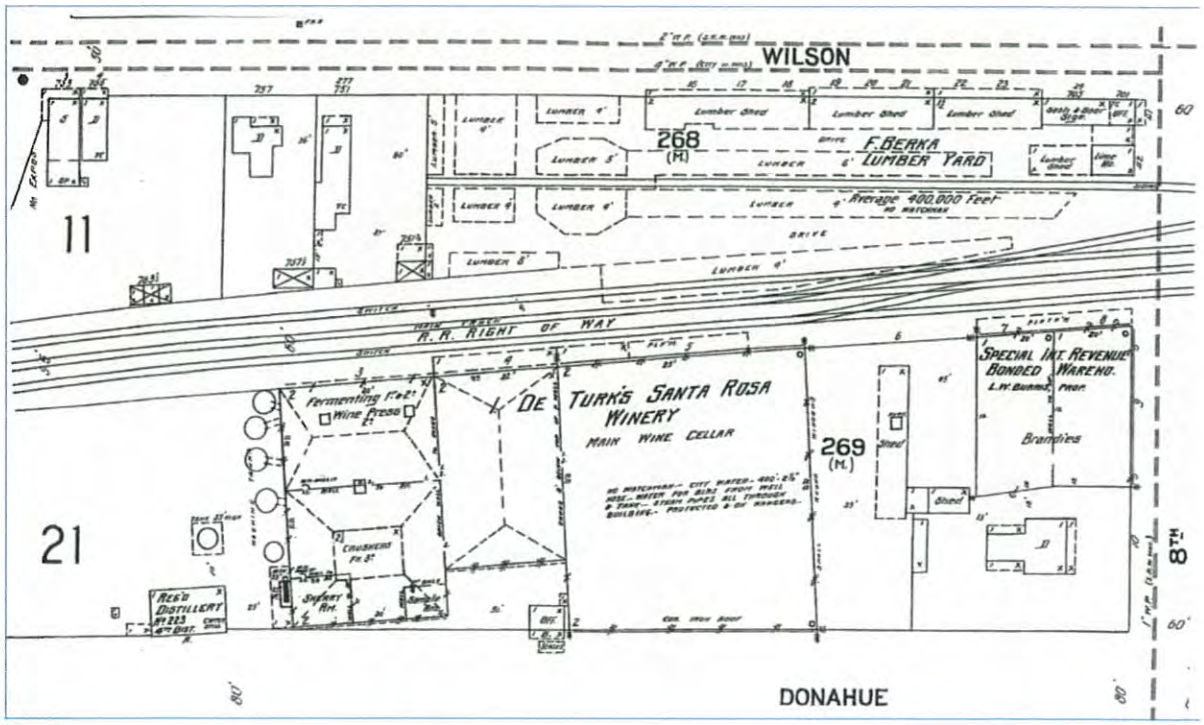
Sanborn Insurance Map, 1885. Depicted is the DeTurk Winery (Wine Vaults, Wine Ware Rooms, Fermenting Rooms), and ancillary buildings (Cooper Shop, Superintendents Dwelling, etc.). U.S. Bonded Warehouse and northern distillery building not yet constructed.



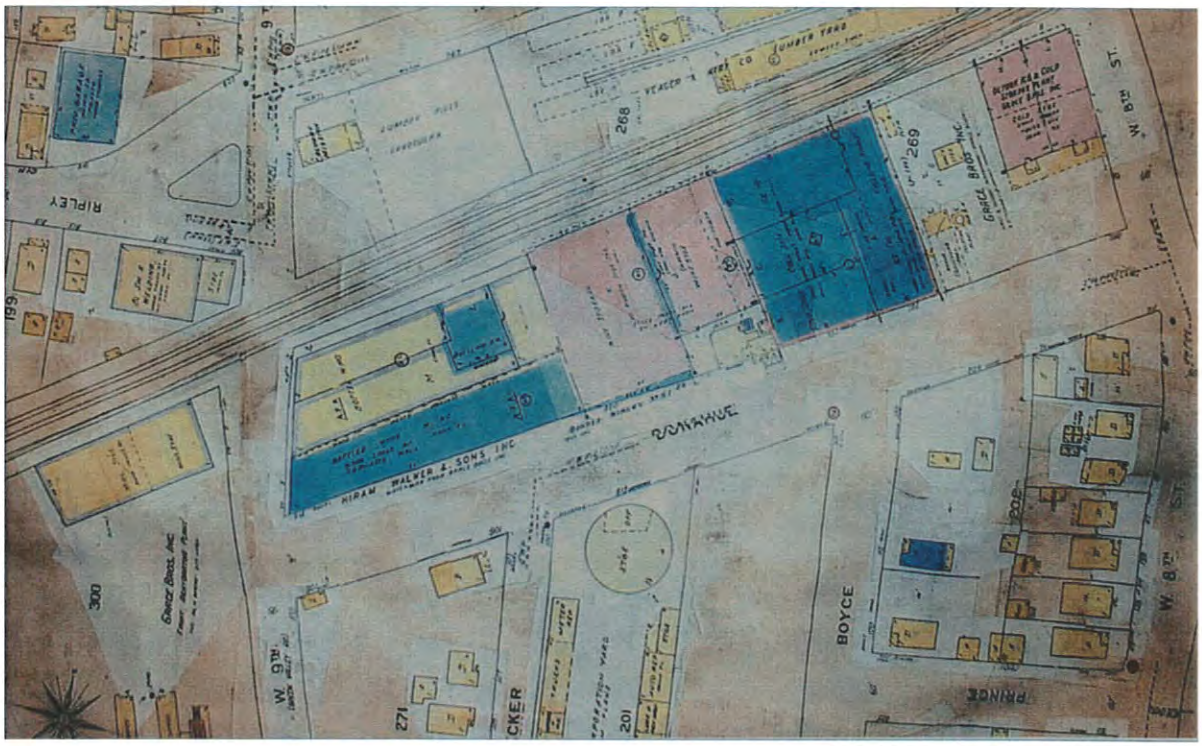
Sanborn Insurance Map, 1888. Depicted is the DeTurk Winery, the U.S. Bonded Warehouse (south section) and the Registered Distillery building.



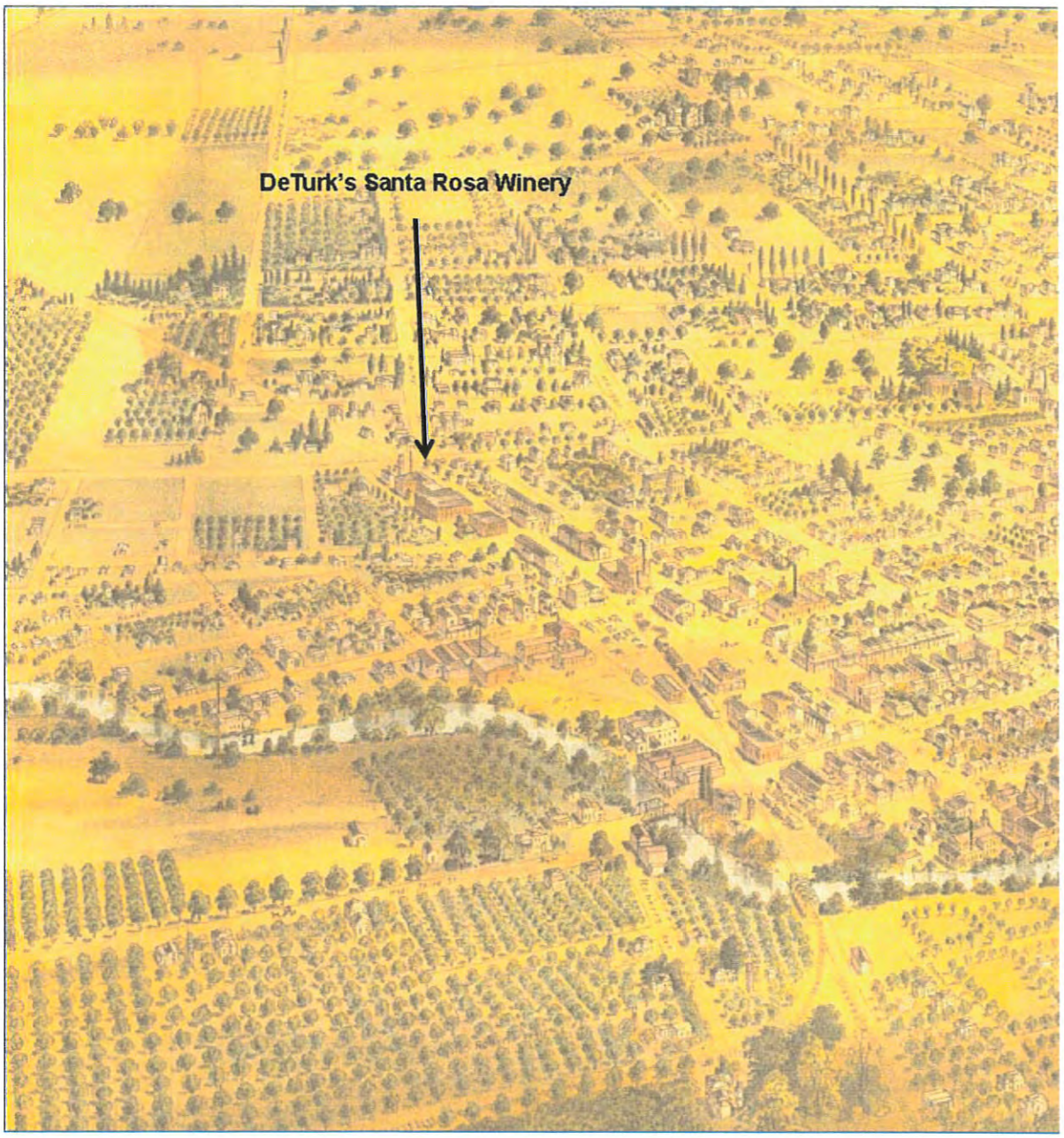
Sanborn Insurance Map, 1893-97. Depicted is the DeTurk Winery, U.S. Bonded Warehouse (proprietor L.W. Burris), and ancillary buildings, including the northern distillery building.



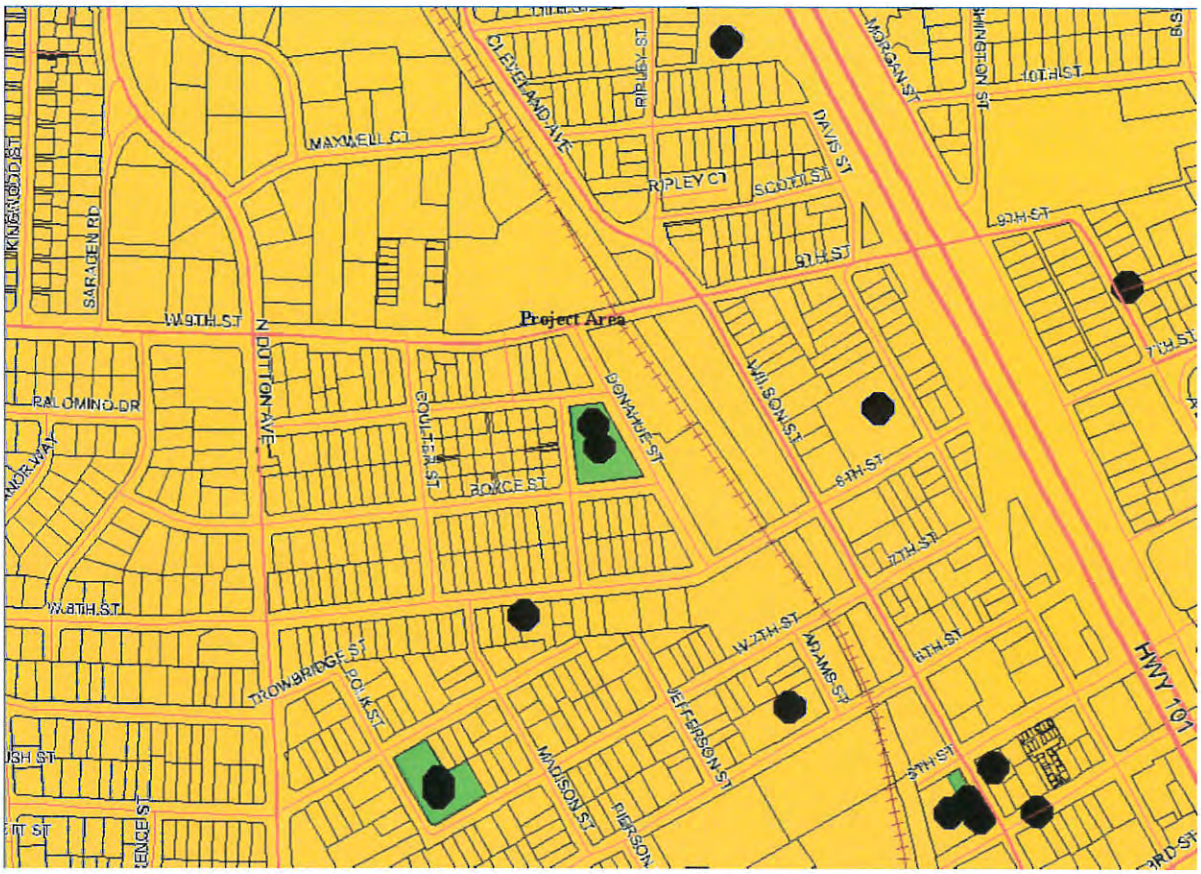
Sanborn Insurance Map, 1904. The winery continued to be operated after Isaac DeTurk's death as DeTurk's Santa Rosa Winery, using the I. DeTurk label.



Sanborn Fire Insurance Map, 1950. In addition to the winery complex, depicted on this map is the cement block addition constructed along the northern elevation of the brick winery. Hiram Walker and Sons, Inc. occupied the new addition, and Grace Brothers Inc. occupied the southern section of the winery and the U.S. Bonded Warehouse. Grace Brothers' operation extended north across West 9th Street, where they had a fruit drying plant. Also depicted on this map is the DeTurk Round Barn, which was owned by the city of Santa Rosa and used as the city's equipment and vehicle yard.



Western portion of the Bird's Eye View of Santa Rosa, 1897. Isaac DeTurk's Santa Rosa winery is located within the industrial landscape which developed along the San Francisco and North Pacific Railroad tracks. To the west of the winery complex is DeTurk's round barn and stables. Downtown Santa Rosa (the commercial center) is located four blocks east of the railroad tracks and is not depicted here.



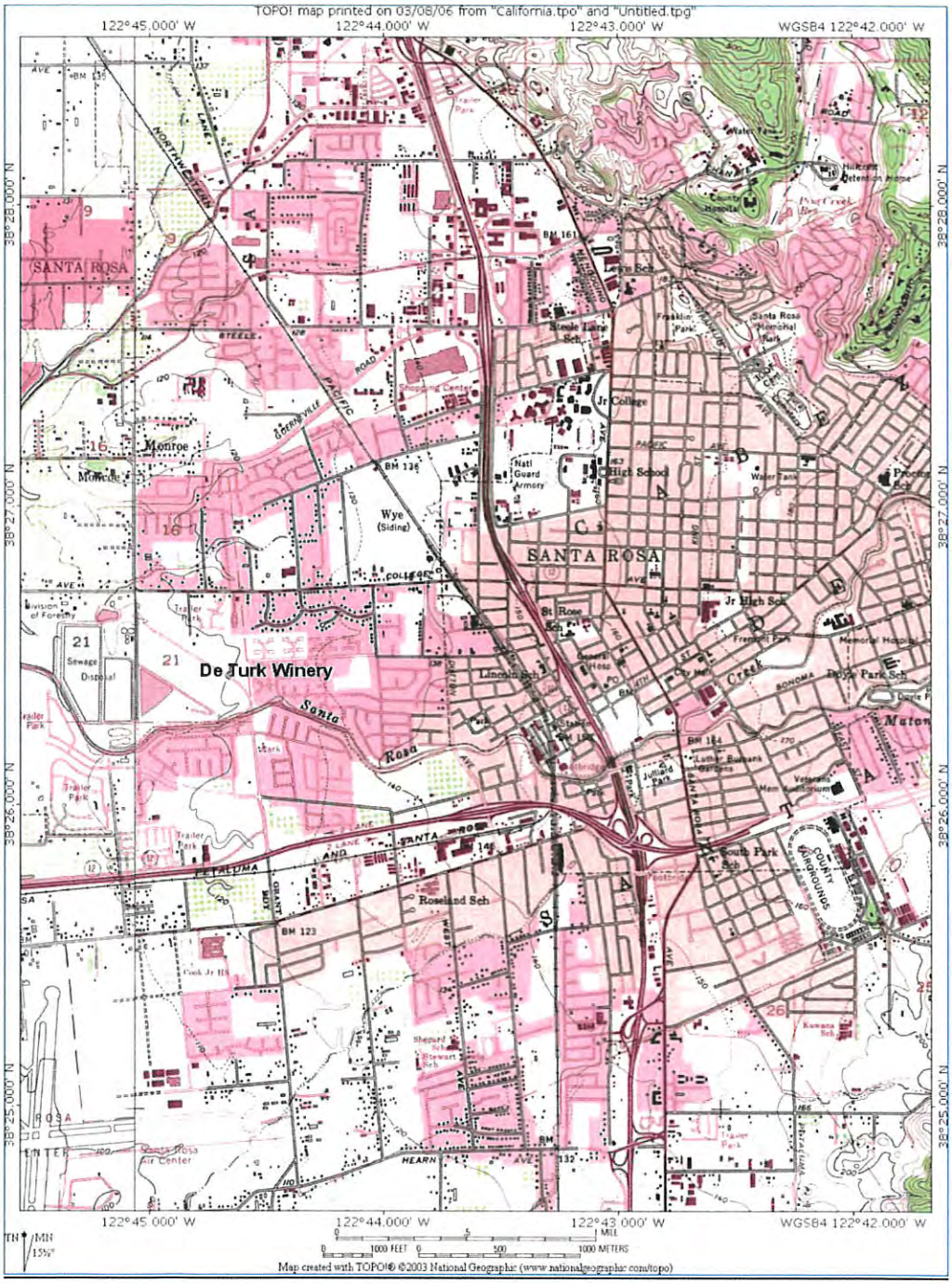
Assessor Parcel Map depicting western Santa Rosa and the project area at 700, 722, 730, 816, 820 Donahue Street, Santa Rosa, 95401 (APN 010-091-001 and 010-091-007). Black dots indicate landmarks. The DeTurk Round Barn is on the National Register and is located across the street from the DeTurk Winery.

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary #
HRI#
Trinomial

Page: 17 of 19
Map Name: Santa Rosa Quadrangle
***Resource Name or #** (Assigned by recorder): DeTurk Winery
***Scale:** 3" = 1 mile
***Date of map:** 1954 (photorevised 1980)



USGS Topographic Map depicting western Santa Rosa and the project area at 700-820 Donahue St. (APN 010-091-001 and 010-091-007).

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"Another Winery." June 15, 1878.
"Destruction of the Winery." March 8, 1879.
"Santa Rosa Winery." June 7, 1879.
"The Santa Rosa Winery." November 15, 1879.

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CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM

ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE
HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO
SAN FRANCISCO
SAN MATEO
SANTA CLATA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
http://www.sonoma.edu/nwic

November 2, 2016 File No.: 16-0650-revised

Susie Murray, City Planner
City of Santa Rosa
Community Development Department
100 Santa Rosa Ave., Rm. 3
Santa Rosa, CA 95404

re: PRJ16-012 / 806 Donahue & 8 W. 9th Street / DeTurk Winery Village

Dear Ms. Susie Murray,

Records at this office were reviewed to determine if this project could adversely affect cultural resources. **Please note that use of the term cultural resources includes both archaeological sites and historical buildings and/or structures. The review for possible historic-era building/structures, however, was limited to references currently in our office and should not be considered comprehensive.**

Previous Studies:

XX There are three studies that include the proposed project area. Study # 32059 (Massey 2006), a project-specific cultural resource study, did not include any field study. Study # 33228 (Beard 2006), a Historic Property Survey Report, whose Architectural Area of Potential Effects (APE) included the proposed project area, although the Archaeological APE did not. Study # 48234 (Clark and Radtkey 2016) conducted a review of proposed project for consistency with preservation ordinances. See recommendations below for resource specific information.

Archaeological and Native American Resources Recommendations:

XX Archaeological recommendations from Massey's study (2006:3-4) include:

1. The project area has a moderate to high sensitivity for prehistoric archaeological sites. Prehistoric sites are known to be present in the immediate vicinity of the project area, although there is no evidence that such a resource is present underneath the standing buildings. If the existing buildings are demolished, a qualified archaeologist should be present during ground-disturbing activities to inspect activities to inspect exposed ground surfaces, identify SHRC-eligible resources, and make recommendations for their disposition.
2. The project area has a moderate sensitivity for historic-era archaeological resources. No historic-era archaeological resources have been recorded in the project area. Archaeological deposits associated with the operation of the winery may be present. Historic maps indicate that the De Turk Wine

Cellar, and the U.S. Bonded Warehouse are the first buildings to have stood in their locations (Bowers 1867, GLO 1859, Reynolds and Proctor 1898). Therefore, it seems unlikely that historic-era remains exist that pre-date these uses. If these existing buildings are demolished, a qualified archaeologist should be present during ground-disturbing activities to inspect exposed ground surfaces, identify SHRC-eligible resources, and make recommendations for their disposition.

3. Encountering Human Remains

   If ground-disturbing activities are to be undertaken in association with the planned project, the possibility of encountering human remains cannot be entirely discounted. Section 7050.5 of the California Health and Safety Code states that it is a misdemeanor to knowingly disturb a human grave. If human graves are encountered, work shall halt in the vicinity and the County Coroner should be notified. At the same time, an archaeologist should be contacted to evaluate the situation. If human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification.

XX We recommend the lead agency contact the local Native American tribe(s) regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at 916/373-3710.

Built Environment Recommendations:

XX The proposed project area contains several recorded buildings. The De Turk Winery Complex (P-49-003727), is comprised of three buildings: The Santa Rosa Wine Cellar/ De Turks Winery, The U.S. Bonded Warehouse (also known as the L.W. Burris Distillery & Cold Storage), and the De Turk S.R. Wine Cellar.

XX The recorded buildings mentioned above are also included in the Office of Historic Preservations Historic Property Directory (April 2012).

The Santa Rosa Wine Cellar/De Turks Winery (Property #s 002212, 002317) with status codes **2S2, 3S,** and **7N**

- **2S2**, meaning this individual property determined eligible for National Register (NR) by a consensus through Section 106 process. Listed in the California Register (CR).
- **3S**, meaning it appears eligible for NR as an individual property through survey evaluation.
- **7N,** meaning it needs to be reevaluated

The U.S. Bonded Warehouse, also known as the L.W. Burris Distillery & Cold Storage (Property # 002315, 002211) with status codes of **2S2**, **3S**, and **7N**

- **2S2**, meaning this individual property determined eligible for National Register (NR) by a consensus through Section 106 process. Listed in the California Register (CR).
- **3S**, meaning it appears eligible for NR as an individual property through survey evaluation.
- **7N,** meaning it needs to be reevaluated

De Turk S.R. Wine Cellar (Property # 002316) with a status code of **3B**

- **3B**, meaning it appears eligible for the NR both individually and as a contributor to a NR eligible district through survey evaluation

_XX_ As part of Beard's study these buildings were determined eligible for the NR (2006:3-4). No further recommendations were made as part of that report.

_XX_ In addition, the proposed project is located within the boundaries of two recorded districts: the North Railroad District (P-49-003727), determined eligible to the NR in Beard (2006:3-4), and the locally recognized West End Preservation District (Bloomfield 1989 and City of Santa Rosa). Clark and Radtkey state that the proposed project will not reduce the significance of the West End Preservation District (2016:2), but make no mention of the NR-determined eligible North Railroad District. Therefore, it is recommended that the proposed project impacts be assessed in relation to the potential to impact the integrity of this district.

_XX_ Additional built environment recommendations from Massey's study (2006:3) include:

1. The three buildings within the study area have been evaluated by Bloomfield as eligible for the California Register of Historical Resources under Criterion 1, association with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. According to CEQA guidelines,

   > where maintenance, repair, stabilization, rehabilitation, restoration, preservation, conservation or construction of the historical resource will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historical Buildings (1995), Weeks and Grimmer, the project's impact on the historical resource shall generally be considered mitigated below a level of significance and thus is not significant (Title 14. California Code of Regulations, Chapter 3, Section 15126.4 (b).

   It is recommended that building renovation be carried out in a manner consistent with these standards.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

For your reference, a list of qualified professionals in California that meet the Secretary of the Interior's Standards can be found at http://www.chrisinfo.org. If archaeological resources are encountered during the project, work in the immediate vicinity of the finds should be halted until a qualified archaeologist has evaluated the situation. If you have any questions please give us a call (707) 588-8455.

Sincerely,

Jillian Guldenbrein
Researcher

IV. DPR 523 FORM: NORTH RAILROAD DISTRICT

State of California — The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

HISTORIC RESOURCES INVENTORY

Ser. No. — —
HABS___ HAER___ Loc___ SHL No.___ NR Status 4
UTM: A 10/524160/4254770 C 10/524320/425422
B 10/524580/4254360 D 10/524020/425474

IDENTIFICATION

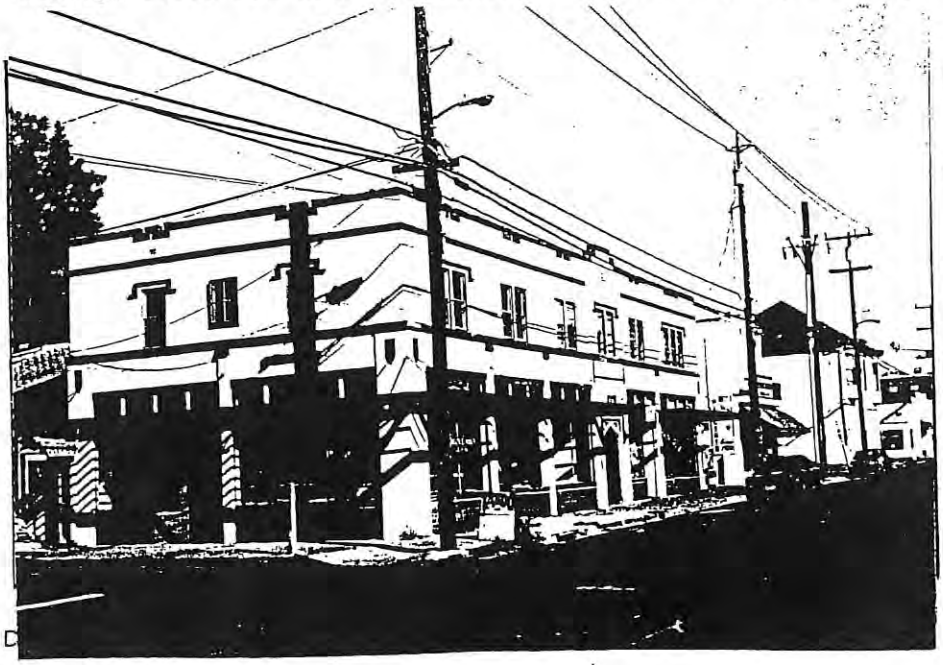
1. Common name: North Railroad District
2. Historic name: Clarks's Addition and Boyce's Addition (portions)
3. Street or rural address: 509-21 Adams, 415 Davis, 802-12 Donahue, 101-25 Fifth, 50 Ninth, 807 Ripley, 99-101 Sixth, 21 W. Seventh, 410-732 Wilson
   City Santa Rosa, CA Zip 95401 County Sonoma
4. Parcel number: Multiple, see list of properties, continuation page 4.
5. Present Owner: Multiple Address:
   City Zip Ownership is: Public Private x
6. Present Use: Specialty stores, warehouses, restaurants, dwellings Original use: Processing, specialty stores, storage, dwellings

DESCRIPTION

7a. Architectural style: No style. Mission Revival. Art Deco.

7b. Briefly describe the present *physical appearance* of the site or structure and describe any major alterations from its original condition:

The North Railroad District is a strip of commercial and industrial buildings along both sides of Wilson Street and the Northwestern Pacific Railroad tracks just north of the Railroad Square National Register District. One- and two-story buildings fill the fronts of their lots and have no side yards except for occasional parking lots alongside. There are 23 contributing buildings, 9 intrusions, and 3 vacant lots. The district's contributing buildings can be divided roughly into four types: stucco-faced commercial buildings, generic warehouses, large masonry industrial buildings, and remnant residences. The nine stucco-faced frame commercial buildings often have tile pent roofs or parapet tops, some have glazed tile splash panels (512 Wilson has especially fine three-dimensional striped tiles), and three visibly incorporate 19th-century buildings (Hotel Battaglia at 509 Adams, a residence-above-grocery/liquor store at 101 Sixth, and a cottage behind 732 Wilson); the five second stories are or were some form of residential. The seven generic warehouses are long one-story buildings of thoroughly utilitarian appearance; roofs are usually of corrupgated metal; sides may be the same, or vertical boards, or masonry; roofs are usually gabled truss structures, but may be behind a wood or stucco



(See continuation page 5.)

8. Construction date: 1875-19(
   Estimated ___ Factual 1925-47
9. Architect Multiple (unknown)
10. Builder Multiple (unknown)
11. Approx. property size (in feet)
    Frontage ___ Depth ___
    or approx. acreage 28
12. Date(s) of enclosed photograph(s)
    July 1989 (028/36)

D

13. Condition: Excellent ___ Good x Fair x Deteriorated ___ No longer in existence ___

14. Alterations: Many within period of significance. Since then a few re-stuccoings, a few new storefronts, and nine new buildings.

15. Surroundings: (Check more than one if necessary) Open land ___ Scattered buildings ___ Densely built-up x
Residential x Industrial x Commercial x Other: ___

16. Threats to site: None known ___ Private development x Zoning x Vandalism x
Public Works project x Other: ___

17. Is the structure: On its original site? x Moved? ___ Unknown? ___

18. Related features: Other districts: Railroad Square, Westside, Ripley Local

SIGNIFICANCE

19. Briefly state historical and/or architectural importance (include dates, events, and persons associated with the site.)

The North Railroad District should become eligible for the National Register in 1997 when its last historic construction or remodeling becomes 50 years old. Meanwhile it should receive local protection. The district's eligibility is under criterion A, events, as one of Santa Rosa's only two commercial-industrial district property types within the commercial context. The commercial strip along Wilson, which achieved nearly its present appearance 1925-1947, is the city's only surviving historic commercial district outside Railroad Square. The adjacent large industrial buildings along the railroad tracks, which inspired the commercial enterprises, were constructed about 1875-1907, giving the district two periods of significance. However the industrial and commercial uses seem always to have been linked. Although the industries were owned by anglos (Isaac De Turk, George Lee, J. Mather), Italians owned the attendant small-scale commercial businesses to such an extent that North Railroad could be considered the commercial arm of the Italian Westside residential neighborhood (see DPR 523 form). Two-thirds of the district's buildings are reasonably intact, in spite of some storefront remodelings and re-stuccoings.

(See continuation page 5.)

20. Main theme of the historic resource: (If more than one is checked, number in order of importance.)
Architecture ___ Arts & Leisure ___
Economic/Industrial x Exploration/Settlement ___
Government ___ Military ___
Religion ___ Social/Education ___

21. Sources (List books, documents, surveys, personal interviews and their dates).

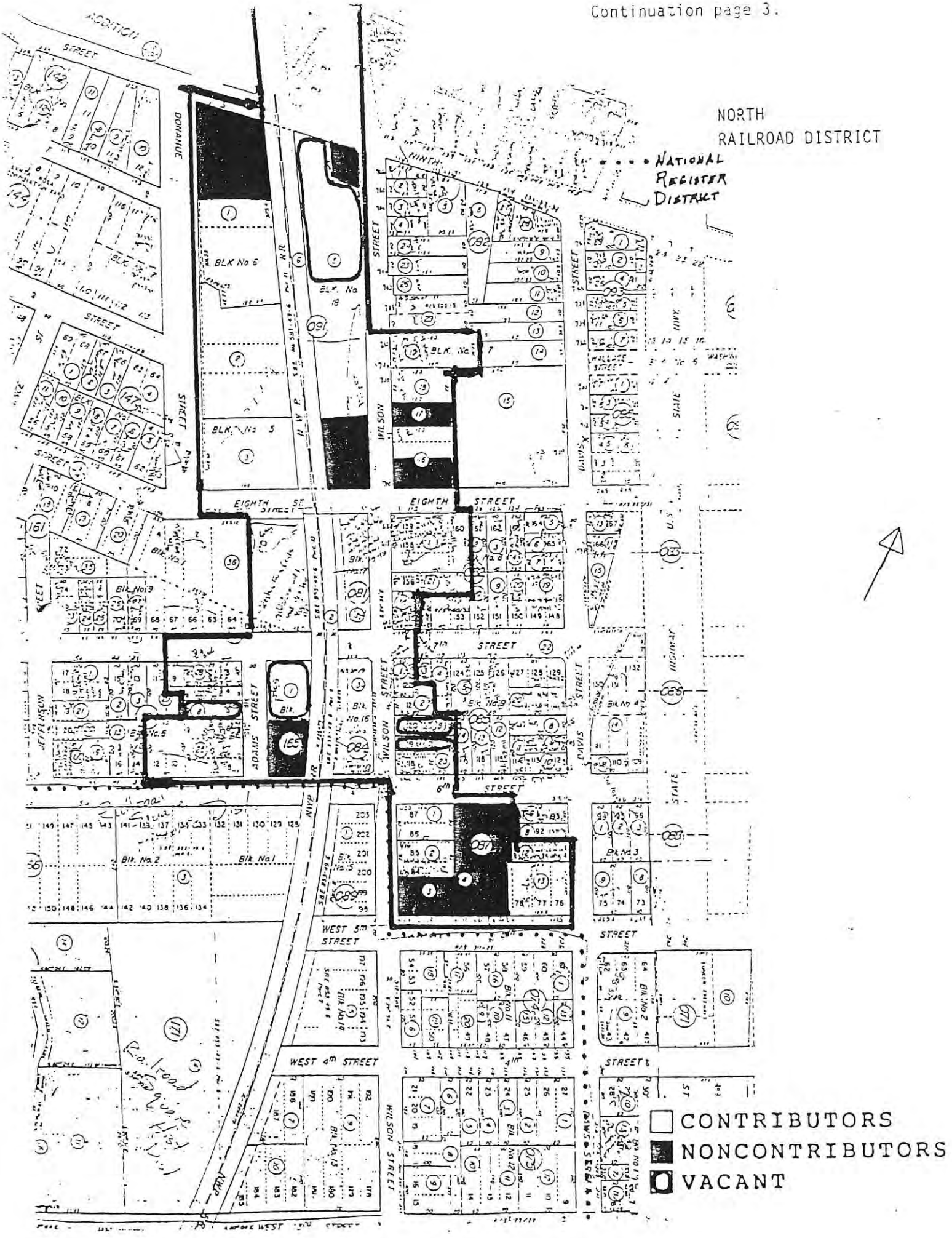
See continuation page

22. Date form prepared July 1989
By (name) Anne Bloomfield History
Organization Anne Bloomfield Architectural /
Address: 2229 Webster St.
City San Francisco, CA Zip 94115
Phone: (415) 922-1063

Locational sketch map (draw and label site and surrounding streets, roads, and prominent landmarks):

NORTH

See continuation page 3.


NORTH
RAILROAD DISTRICT
NATIONAL
REGISTER
DISTRICT
CONTRIBUTORS
NONCONTRIBUTORS
VACANT

City of Sa[illegible]osa
Historical Properties Inventory
PROPERTIES, NORTH RAILROAD DISTRICT

Date: 18-AUG-89
Time: 16:45:19

Historic Name	Address	Style/Type	Construct. Date	Use Code	Parcel #	Rating	Photo	District	Context	Designer	Alteration Memo
LENA'S/BATTAGLIA HOTEL	509 ADAMS ST	MEDITERRANEAN REVIVAL/COMMERC	1947 EX-04	0210	01016425	4D	022/36	NRR	COM		1904 2-ST. LENA HERE SINCE 1913
	515 ADAMS ST	/VACANT		0005	01016408	NC		NRR			
GUIDOTTI,THERESE,HOUSE	519 ADAMS ST	QUEEN ANNE/HOUSE	1893 -94	0010	01016422	4D	022/34-5	NRR	RES		E GUIDOTTI HAD 521ADAM
GUIDOTTI'S CAFE & NIGHTCL	521 ADAMS ST	MEDITERRANEAN REVIVAL/COMMERC	1935	0210	01016428	4D	022/33	NRR	COM		E WAS TOSCANO HOTEL
ROSSI CYCLERY	415 DAVIS ST	COMMERCIAL/COMMERCIAL	1928 -1946	0110	01008712	4D	020/31	NRR	COM		G-STUCCOED
U.S. BONDED WAREHOUSE	802 DONAHUE ST	INDUSTRIAL/INDUST.COMPLEX	1885 -1904	0320	01009103	3,4D	021/26	NRR	IND		E BUILT IN 2 SECTIONS
DE TURK S.R. WINE CELLAR	806 DONAHUE ST	INDUSTRIAL/INDUST.COMPLEX	1876 -1885	0320	01009102	3,4D	021/22F	NRR	IND		G-JUST PAI SEE 801 & 802 DONAHU
DE TURK'S S.R. WINERY	812 DONAHUE ST	INDUSTRIAL/INDUST.COMPLEX	1876 -1885	0320	01009101S	3,4D	021/20FF	NRR	IND		G-LOWER AD
	101 FIFTH ST	APPEARS POST-1945/APARTMENTS	1957 POST	0060	01008703	NC	022/3-4	NRR			
	121 FIFTH ST	APPEARS POST-1945/COMMERCIAL	1946 POST	0007	01008704	NC	022/1-2	NRR	COM		AUTO-RELATED,1935-47
BETTENI BUILDING	125 FIFTH ST	INDUSTRIAL/COMMERCIAL	1941	0814	01008713	4D	022/0	NRR	COM	BOHN,WM. /BLDR	G USED CARS ON CORNER
	50 NINTH ST	BUNGALOW/HOUSE	M'50S	0110	01009105N	NC	021/14	NRR			F-TOTAL RE
CAUTH BROTHERS WELDING	807 RIPLEY ST	INDUSTRIAL/COMMERCIAL	1939	0280	01010121	4D	021/19	NRR	COM		E
SANTA ROSA FLOUR MILL	99 SIXTH ST	INDUSTRIAL/INDUST.COMPLEX	1876 PRE	0352	01008403	4D	022/32	NRR	IND		G-SANDBLAS PETERSON SURVEY
BRONSON, E.G., GROCERY	101 SIXTH ST	COLONIAL REVIVAL/COMMERCIAL	1888 -1893	0202	01008523	4D	022/8	NRR	COM		G-NEW STUC
	8 W NINTH ST	APPEARS POST-1945/OFFICES	1970 S?	0320	01009101N	NC		NRR			
AMERICAN PRODUCE CO. WHSE	21 W SEVENTH ST	INDUSTRIAL/INDUST.COMPLEX	1895		01016136	4D	021/25	NRR	IND		G-NEW BASE ONLY PART OF LOT
	1 W SIXTH ST	APPEARS POST-1945/COMMERCIAL	1957 POST	0112	01016501	NC	022/36A	NRR			
PELLEGRINI POULTRY	410 WILSON ST	MEDITERRANEAN REVIVAL/COMMERC	1935 -37	0213	01008702	4D	022/6	NRR	COM		G-WINDOWS
MODERN BAKERY	422 WILSON ST	MEDITERRANEAN REVIVAL/COMMERC	1920 R1945	0110	01008701	4D	022/5 F	NRR	COM		G-STOREFRO ELECTRIC MOTOR SERV.
	504 WILSON ST	/VACANT		0101	01008517	NC		NRR			
	510 WILSON ST	/VACANT		0101	01008518	NC		NRR			
PAOLINI'S	512 WILSON ST	COMMERCIAL/COMMERCIAL	1925	0113	01008502	4D	022/9-10	NRR	COM		FINE TILE BASE
FORNI'S COMMERCIAL BLDG.	514 WILSON ST	MEDITERRANEAN REVIVAL/COMMERC	1926 -35	0113	01008501	4D	022/11-2	NRR	COM		E
BABBINI'S RESTAURANT	600 WILSON ST	ART DECO/COMMERCIAL	1933	0113	01008214	4D	022/13	NRR	COM		G-STOREFRO
ST VINCENT DE PAUL SOC'TY	610 WILSON ST	APPEARS POST-1945/COMMERCIAL	1980 S?	0202	01008221	NC	022/14	NRR	COM		RESIDENCE THRU 1947
HUNTINGTON PLANING MILL	618 WILSON ST	INDUSTRIAL/COMMERCIAL	1926	0112	01008201	4D	022/15-6	NRR	COM		G-SOME STO
LEE BROS & CO. WAREHOUSE	625 WILSON ST	INDUSTRIAL/INDUST.COMPLEX	1905 -07	0320	01008101	3,4D	022/19	NRR	IND		E PETERSON SURVEY
	700 WILSON ST	APPEARS POST-1945/COMMERCIAL	1970 S?	0110	01009216S	NC	022/17	NRR	COM		
SITE, BERKA LUMBER CO.	701 WILSON ST	APPEARS POST-1945/COMMERCIAL	1960 S?	0110	01009105S	NC	022/18	NRR			
FRANK BERKA LUMBER STORAG	708 WILSON ST	INDUSTRIAL/BARN	1908 -1915	0110	01009216N	4D	022/20-1	NRR	COM		E
	716 WILSON ST	ART DECO/COMMERCIAL	1947 POST	0331	01009217	NC	022/23	NRR			
LAWS & YAEGER LUMBER CO.	717 WILSON ST	INDUSTRIAL/INDUST.COMPLEX	1947	0110	01009105C	4D	022/27	NRR	IND		E
TROMBETTA,ALBERT/COR.HOUS	726 WILSON ST	BUNGALOW/HOUSE	1926	0891	01009218	4D	022/24	NRR	RES		G-PORCH EN
MARK WEST JERSEY DAIRY	732 WILSON ST	COMMERCIAL/COMMERCIAL	1890 R1930	0014	01009219	4D	022/25-6	NRR	COM		G-STORE AD SANTA ROSA SAW

35 Occurances found.

Continuation page 4.

7b. DESCRIPTION (continued):

false front; usually there is a truck-sized opening. Four of the five large masonry industrial buildings are 19th-century brick structures with brick paneling; the other is built of c. 1907 concrete blocks about 1 x 4 ft. in size; all five of this type face directly onto the railroad tracks; they look rather like warehouses, with little ornament, 8,000-26,000 sq. ft. footprints, and a single story over 20 ft. tall, under a truss roof. The two dwellings (519 Adams and 726 Wilson) are remnants of a residnetial district that formerly extended well south from Ripley into the North Railroad area and was gradually converted and/or replaced by commercial buildings (see also dwelling incorporated into 732 Wilson); the two are typical Santa Rosa houses: frame, small, one-story, setback from the street, with minimal styling (Queen Anne and Bungalow), porches, and gable roofs. The district's integrity is limited by some storefront alterations, by conversion of industrial into commercial uses, by eight new buildings and one major remodeling. Also there are vacant spaces used as parking lots for autos, trucks, or miscellaneous industrial equipment.

The list of all properties in the district is on continuation page 4; photographs and identifications of the contributing buildings make up 12 pages, beginning with continuation page 8.

19. SIGNIFICANCE (continued):

The birdseye map of 1876 shows how much industry had sprung up in the five years since the railroad had opened: six or seven sizeable buildings between Sixth and Ninth, including at least part of the present Santa Rosa Flour Mill brick building (99 Sixth, restored/rebuilt after the 1906 earthquake). There were also quite a bit of vacant land and a number of dwellings (for workers?) on the east side of Wilson and on its west side near Ninth. The 1883-84 directory lists two Italian businesses in the district, Onesto Fougoli's saloon and restaurant at Seventh and Wilson and C.L. Gardella's Hotel d'Italia Unita at 1 West Sixth. The 1894 Sanborn map shows that the commercial district had grown beyond these two but still consisted of a few corner stores and some converted dwellings, among a larger number of standard dwellings. The early commercial uses included grocery stores, a saloon, a cooper shop, a winery, a blacksmith shop, and residential hotels. Several present retail buildings replace former lumber yards and planing mills, an industry dependant on the railroad.

The district's earliest surviving building is part of the brick flour mill at the south east corner of the railroad and Seventh St. (99 Sixth St.). As early as 1888 it occupied the entire block to the corner of Sixth and Wilson and was called the Santa Rosa Roller Flouring Mills, proprietor J. Mather. The north half block was a grain warehouse, the south half the mills themselves. In the 1920s and 1930s the mill belonged to the statewide Sperry Flour Co., which by the 1940s was part of the national conglomerate General Mills.

The next oldest buildings are De Turk's Santa Rosa Winery complex. Isaac De Turk had established a vineyard elsewhere in the county in 1862, and early in the 1870s he bought this site, the west side of the tracks on the long block from Eighth to Ninth, where a burned winery had stood. He had two of the present brick buildings (806 and 812 Donahue) constructed by 1885, the south half of the third (802 Donahue) between 1885 and 1888, and the north half by 1904. The 1904 Sanborn map identifies the uses of 806 and 812 Donahue, which actually form a single U plan consisting of one large "Main Wine Cellar"

(see continuation page 6)

19 SIGNIFICANCE (continued):

as the south arm, a truss-roofed slightly setback middle section, and the north arm as two partywall sections with grape crushers on the roof near Donahue and wine presses an ferminting tanks on the main floor on the railroad side. The third brick building (802 Donahue) was a U.S. bonded warehouse (for taxed liquor, i.e. brandy, the usual 19th-century solution to overproduction of wine) and was originally part of the winery. In 1904 the bonded warehouse proprietor was Luther W. Burris, the cashier at Santa Rosa Bank and a witness to De Turk's wil; the property itself was still owned by the winery. De Turk himself was a significant figure in Santa Rosa history. In addition to the winery and its payroll, he built an early fruit dryer, helped finance the local Athenaeum, was a noted trotting horse fancier and breeder (he owned the one of Santa Rosa's two round barns which is across Donahue from the winery), he formed part of the consortium that bought and developed the racing track now the County Fairgrounds, and in the 1890s he was the State Viticultural Commissioner for the Sonoma District. He died in 1896, and the property passed to the cooperative California Wine Association (Calwa). Later it was part of the Grace Brothers Brewery operation, and more recently it was a cold storage plant.

The Lee Brothers Warehouse (625 Wilson) was constructed 1905-1907 for the trucking and warehouse business of Charles E. Lee (Santa Rosa's mayor in 1915) and his brother W. H. Lee. Later it was sold to Sperry Flour, proprietors of the flour mill in the next block (99 Sixth). The building is significant as a very early example of construction out of concrete blocks--these are are least five times the size of today's standard. Most early buildings of this material have crumbled; this one is a rare survivor.

Directly across the tracks from it is another warehouse (21 West Seventh), a generic one of corrugated metal, for a significant Santa Rosa industry, agricultural produce. Built in 1895 for Henry Harris' American Produce Company, it covers even more ground than the Lee Bros. Warehouse. Later uses were the Merritt Fruit and Produce Company's warehouse (1904-1908) and the J. K. Armsby Fruit and Produce Warehouse (1915), and an unnamed grain and feed warehouse (1957). It is notable for its base of typical Santa Rosa masonry: basalt blocks with beaded mortar joints. Other generic warehouse types are the stone-walled Rossi Cyclery (415 Davis, 1941) and the corrugated Kauth Wleding (807 Ripley, 1939).

The remaining industry in the area was Frank Berka's lumber yard, of which only traces remain. A native of Austrian Poland, Berka had come to this country in 1859 at the age of 2. In the 1887 directory he was listed as a lumber merchant at Fourth and Wilson, and in 1890 he build his extant residence at 558 B St. (see St. Rose Local District) and moved his business to Eighth and Wilson. Eventually his wife Polly came to own three of the four corners at that intersection. By 1903 he was advertising "lumber, lath, lime, cement, doors, windows and blinds," and the business continued there well into the 1920s. By the late 1930s other lumber mills or dealers were continuing the business at some of the same locations: Henry Law's Planing Mill and Huntington's Planing Mill and Cabinet Shop at 616 Wilson, and Henry Laws Co. or Laws and Yaeger Lumber Co. at 717. The lumber storage barn or warehouse at 708 Wilson must have been an adjunct to one of these lumber dealers, for no independant occupant on that portion of the block was listed during the district's second period of significance.

The 1883 commercial uses found in the district certainly symbolize filling the needs of Italian immigrant laborers at the mills and the winery: saloon, restaurant, and residential hotel. At one time the hotels in the district were the Italia Unita at 1 West Sixth (demolished), the Battaglia at 509 Adams (incorporated in newer building),

(see continuation page 7)

19. SIGNIFICANCE (continued):

the Toscano at 521 Adams (replaced), and the Venezia at 600 Wilson (demolished). In one year or another, grocers have been found at 769 Wilson (primo Novelli), 101 Sixth (Florindo Trombetta, then Fred Barella), and 522 Wilson (Nate Forni). Saloons, cafes and restaurants have been recorded at 509 and 521 Adams (q.v.), 412 Wilson (Cassani and Delquerra) and 600 Wilson. Other businesses have included the Rossi Cyclery at 415 Davis, Alex Santini's gas station at 101 Fifth, a French laundry and later a used car dealer at 125 Fifth, a welding shop at 807 Ripley, Pellegrini Poultry at 410 Wilson, Silvio Fracchia's bakery at 422 Wilson, Paolini's at 512 Wilson, which began as shoe repair and now sells men's clothing, Nello Barber Shop at 516 Wilson, and some saw filers first at 510 Wilson and later at 732.

The two houses at 519 Adams and 726 Wilson are survivors of a residential group that once included 506, 610, 622 and 732 Wilson, plus several across the street. People also resided in the hotels mentioned above, and in apartments above commercial uses at 101 Sixth, 512, 514 and 600 Wilson; but the main residential areas served by this commercial strip are the surrounding neighborhoods of the Westside District (see DPR 523 form) and the Ripley Local District.

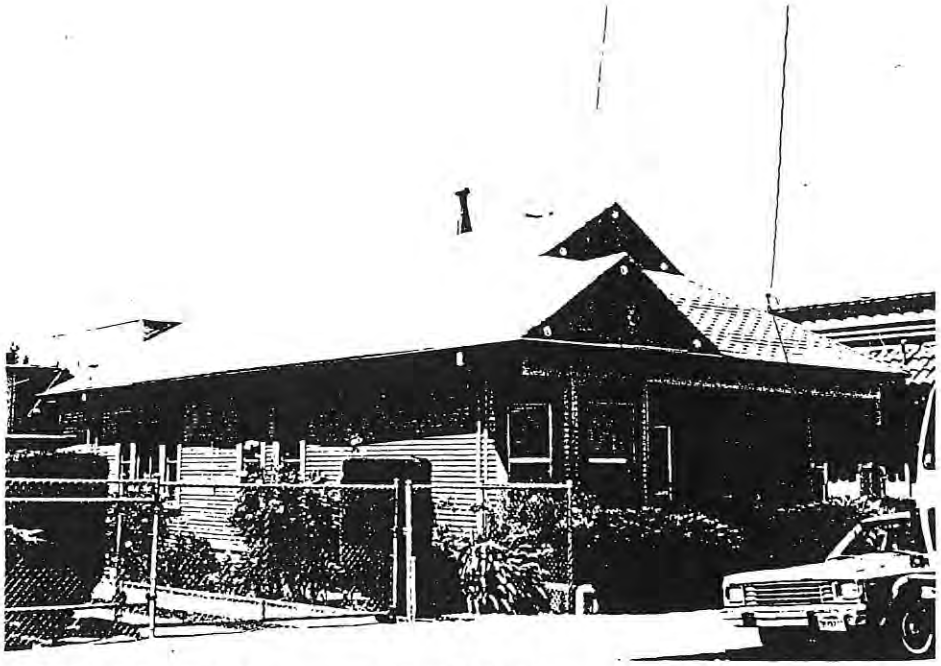
City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

Continuation page 8.

Hist Name : LENA'S/BATTAGLIA HOTEL
Style/Type: MEDITERRANEAN REVIVAL/COMMERCI
Location..: 509 ADAMS ST
Design/Art:
Comments..: LENA HERE SINCE 1913

Parcel: 01016425
Year..: 1947 EX-04
Zoning:
Photo#: 022/36

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0210 Restaurants
Alt./Rest.: 1904 2-ST. HOTEL STILL VISIBLE



Hist Name : GUIDOTTI,THERESE,HOUSE
Style/Type: QUEEN ANNE/HOUSE
Location..: 519 ADAMS ST
Design/Art:
Comments..: GUIDOTTI HAD 521ADAM

Parcel: 01016422
Year..: 1893 -94
Zoning:
Photo#: 022/34-5

District..: NORTH RAILROAD DISTRICT
Context...: RESIDENTIAL BUILDINGS IN SANTA ROSA 1
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0010 SINGLE FAMILY DWELLING
Alt./Rest.: E

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

Hist Name : GUIDOTTI'S CAFE & NIGHTCL
Style/Type: MEDITERRANEAN REVIVAL/COMMERCI
Location..: 521 ADAMS ST
Design/Art:
Comments..: WAS TOSCANO HOTEL

Parcel: 01016428
Year..: 1935

Zoning:
Photo#: 022/33

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0210 Restaurants
Alt./Rest.: E

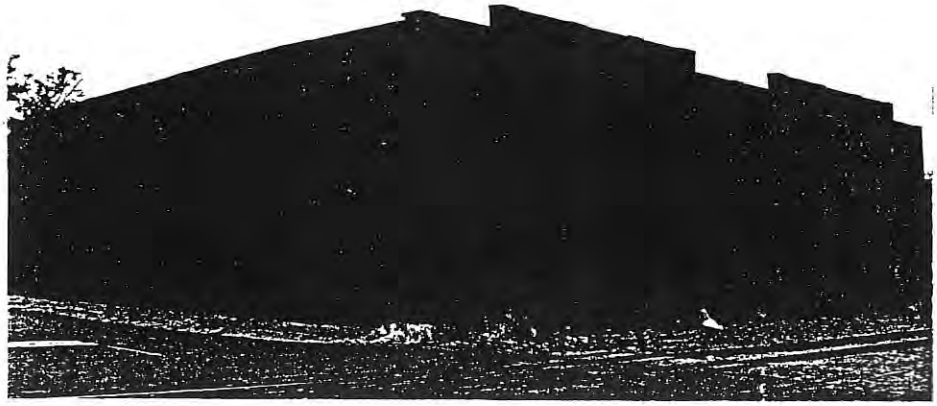
Hist Name : ROSSI CYCLERY
Style/Type: COMMERCIAL/COMMERCIAL
Location..: 415 DAVIS ST
Design/Art:
Comments..:

Parcel: 01008712
Year..: 1928 -1946

Zoning:
Photo#: 020/31

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0110 Single story
Alt./Rest.: G-STUCCOED FRONT

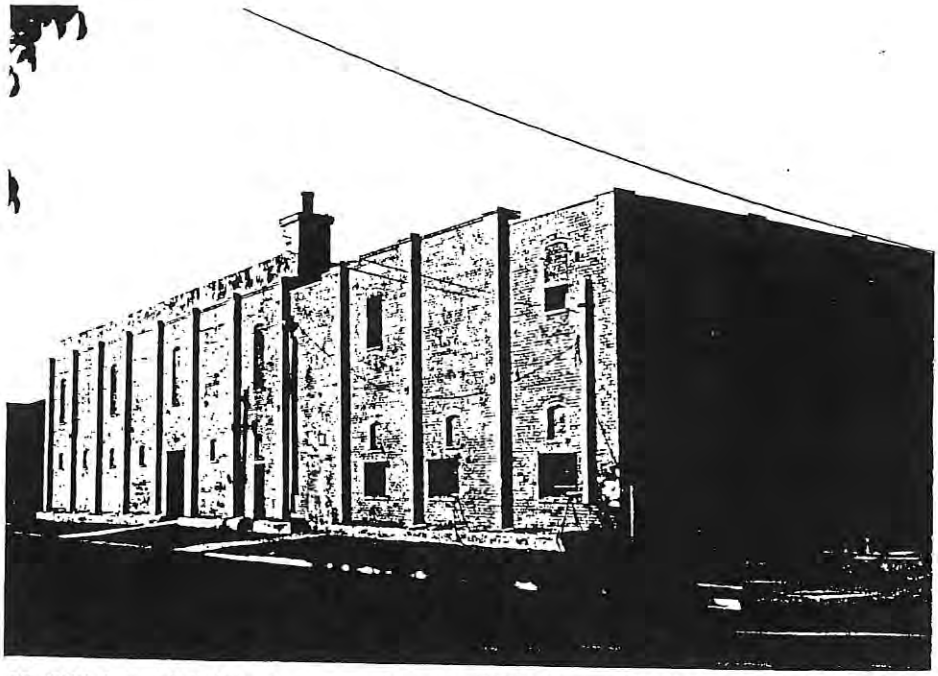
City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT



Hist Name : U.S. BONDED WAREHOUSE
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 802 DONAHUE ST
Design/Art:
Comments..: BUILT IN 2 SECTIONS

Parcel: 01009103
Year..: 1885 -1904
Zoning:
Photo#: 021/26

District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: APPEARLS ELIGIBLE ALONE & IN FUTURE D
Land Use..: 0320 Warehousing - active
Alt./Rest.: E



Hist Name : DE TURK S.R. WINE CELLAR
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 806 DONAHUE ST
Design/Art:
Comments..: SEE 801 & 802 DONAHU

Parcel: 01009102
Year..: 1876 -1885
Zoning:
Photo#: 021/22F

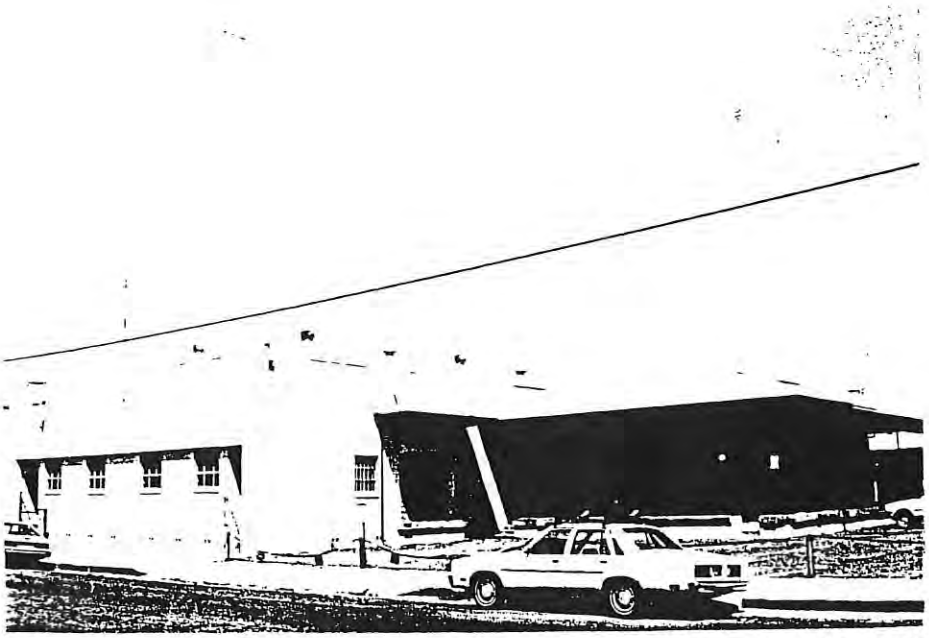
District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: APPEARLS ELIGIBLE ALONE & IN FUTURE D
Land Use..: 0320 Warehousing - active
Alt./Rest.: G-JUST PAINT ON BRICK

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

Hist Name : DE TURK'S S.R. WINERY
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 812 DONAHUE ST
Design/Art:
Comments..:

Parcel: 01009101S
Year..: 1876 -1885
Zoning:
Photo#: 021/20FF

District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: APPEARLS ELIGIBLE ALONE & IN FUTURE D
Land Use..: 0320 Warehousing - active
Alt./Rest.: G-LOWER ADDITION TO WEST



Hist Name : BETTENI BUILDING
Style/Type: INDUSTRIAL/COMMERCIAL
Location..: 125 FIFTH ST
Design/Art: BOHN,WM. /BLDR
Comments..: USED CARS ON CORNER

Parcel: 01008713
Year..: 1941
Zoning:
Photo#: 022/0

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0814 Radio & TV Broadcast site
Alt./Rest.: G

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

Hist Name : KAUTH BROTHERS WELDING
Style/Type: INDUSTRIAL/COMMERCIAL
Location..: 807 RIPLEY ST
Design/Art:
Comments..:

Parcel: 01010121
Year..: 1939

Zoning:
Photo#: 021/19

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0280 Auto & Truck Repairs & accessori
Alt./Rest.: E

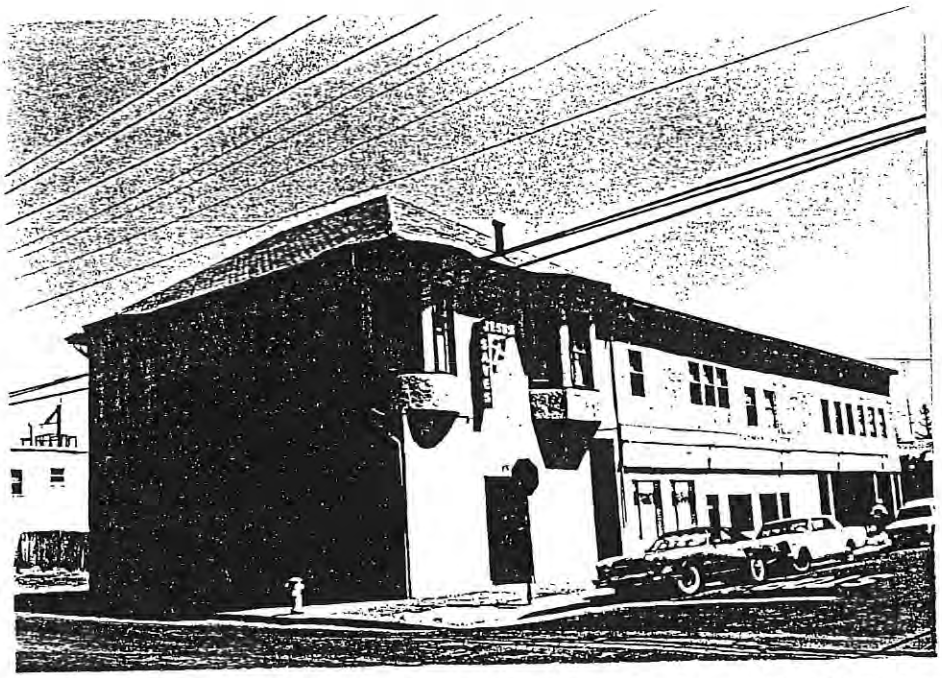
Hist Name : SANTA ROSA FLOUR MILL
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 99 SIXTH ST
Design/Art:
Comments..: PETERSON SURVEY

Parcel: 01008403
Year..: 1876 PRE

Zoning:
Photo#: 022/32

District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0352 Wineries
Alt./Rest.: G-SANDBLASTED, OTHER ALTS.

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

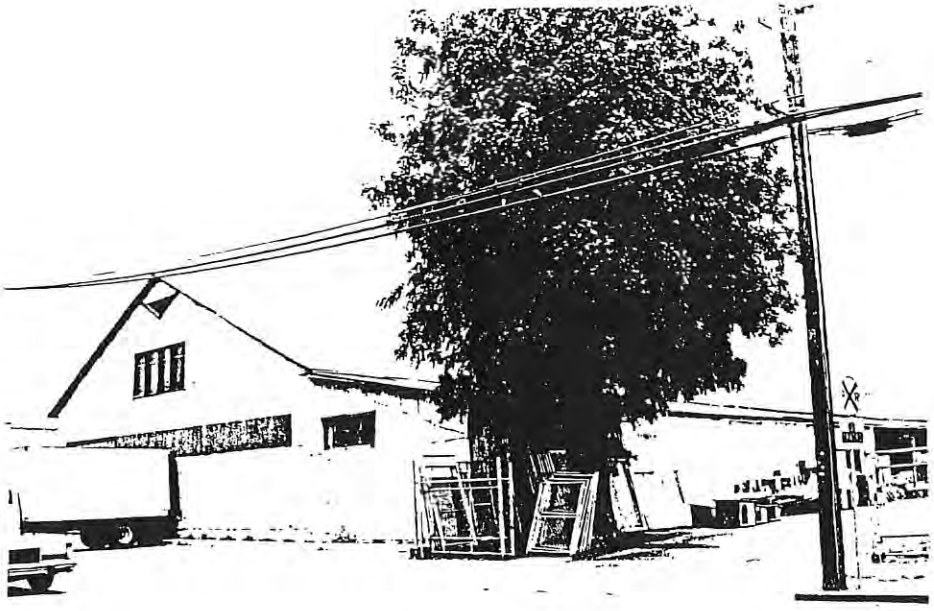


Hist Name : BRONSON, E.G., GROCERY
Style/Type: COLONIAL REVIVAL/COMMERCIAL
Location..: 101 SIXTH ST
Design/Art:
Comments..:

Parcel: 01008523
Year..: 1888 -1893

Zoning:
Photo#: 022/8

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0202 Commercial use - miscellaneous
Alt./Rest.: G-NEW STUCCO BUT RECOGNIZABLE



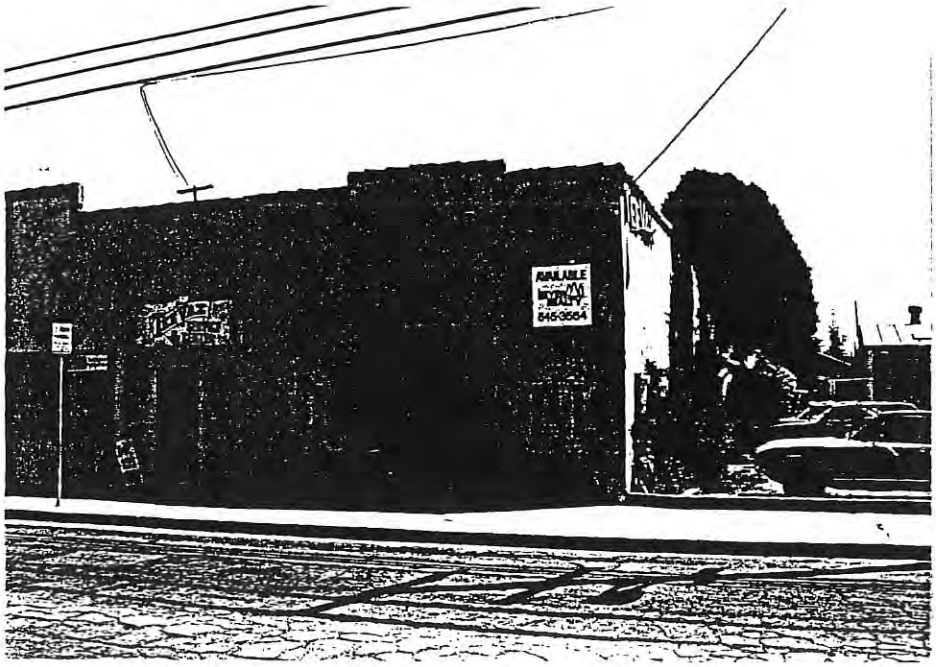
Hist Name : AMERICAN PRODUCE CO. WHSE
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 21 W SEVENTH ST
Design/Art:
Comments..: ONLY PART OF LOT

Parcel: 01016136
Year..: 1895

Zoning:
Photo#: 021/25

District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0000
Alt./Rest.: G-NEW BASE ON W 7TH. SIGNAGE

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

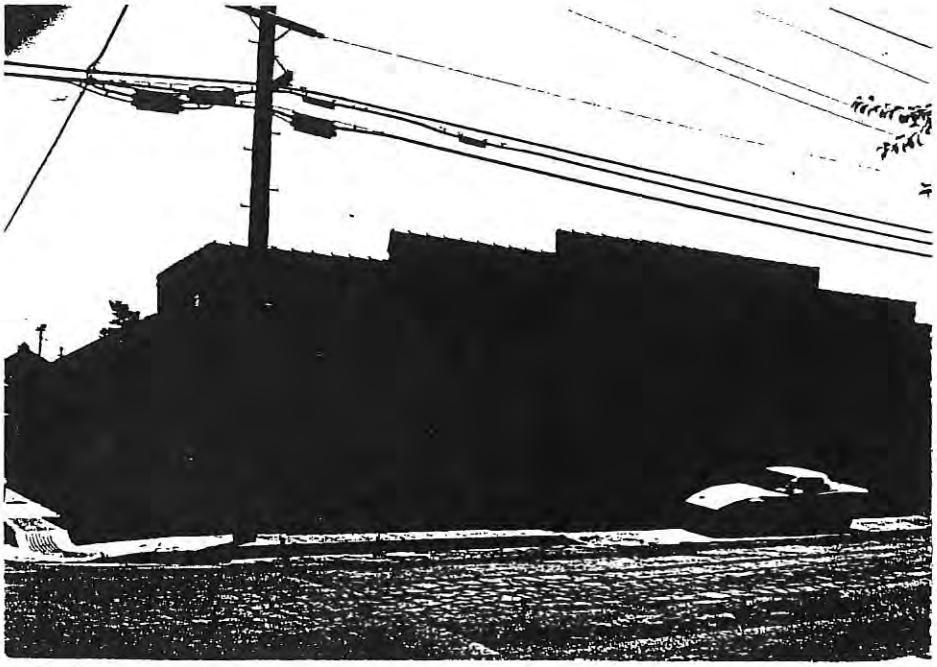


Hist Name : PELLEGRINI POULTRY
Style/Type: MEDITERRANEAN REVIVAL/COMMERCI
Location..: 410 WILSON ST
Design/Art:
Comments..:

Parcel: 01008702
Year..: 1935 -37

Zoning:
Photo#: 022/6

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0213 Cocktail lounge - bars
Alt./Rest.: G-WINDOWS BLOCKED



Hist Name : MODERN BAKERY
Style/Type: MEDITERRANEAN REVIVAL/COMMERCI
Location..: 422 WILSON ST
Design/Art:
Comments..: ELECTRIC MOTOR SERV.

Parcel: 01008701
Year..: 1920 R1945

Zoning:
Photo#: 022/5 F

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0110 Single story
Alt./Rest.: G-STOREFRONTS CHANGED SOME

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

Hist Name : PAOLINI'S
Style/Type: COMMERCIAL/COMMERCIAL
Location..: 512 WILSON ST
Design/Art:
Comments..: FINE TILE BASE

Parcel: 01008502
Year..: 1925

Zoning:
Photo#: 022/9-10

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0113 Store with res. unit or units
Alt./Rest.:

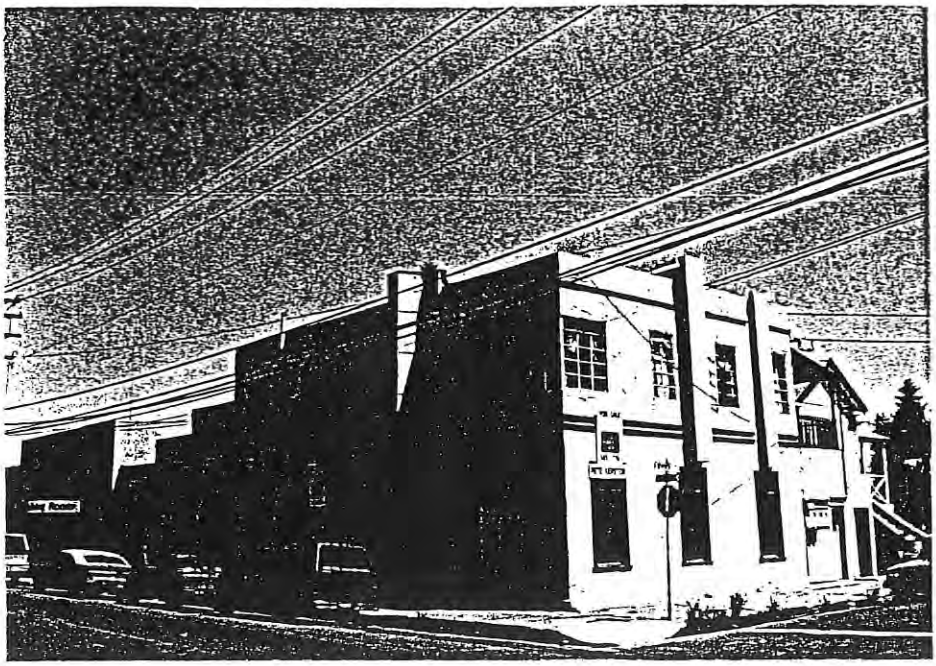
Hist Name : FORNI'S COMMERCIAL BLDG.
Style/Type: MEDITERRANEAN REVIVAL/COMMERCI
Location..: 514 WILSON ST
Design/Art:
Comments..:

Parcel: 01008501
Year..: 1926 -35

Zoning:
Photo#: 022/11-2

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0113 Store with res. unit or units
Alt./Rest.: E

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT



Hist Name : BABBINI'S RESTAURANT
Style/Type: ART DECO/COMMERCIAL
Location..: 600 WILSON ST
Design/Art:
Comments..:

Parcel: 01008214
Year..: 1933

Zoning:
Photo#: 022/13

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0113 Store with res. unit or units
Alt./Rest.: G-STOREFRONTS A LITTLE

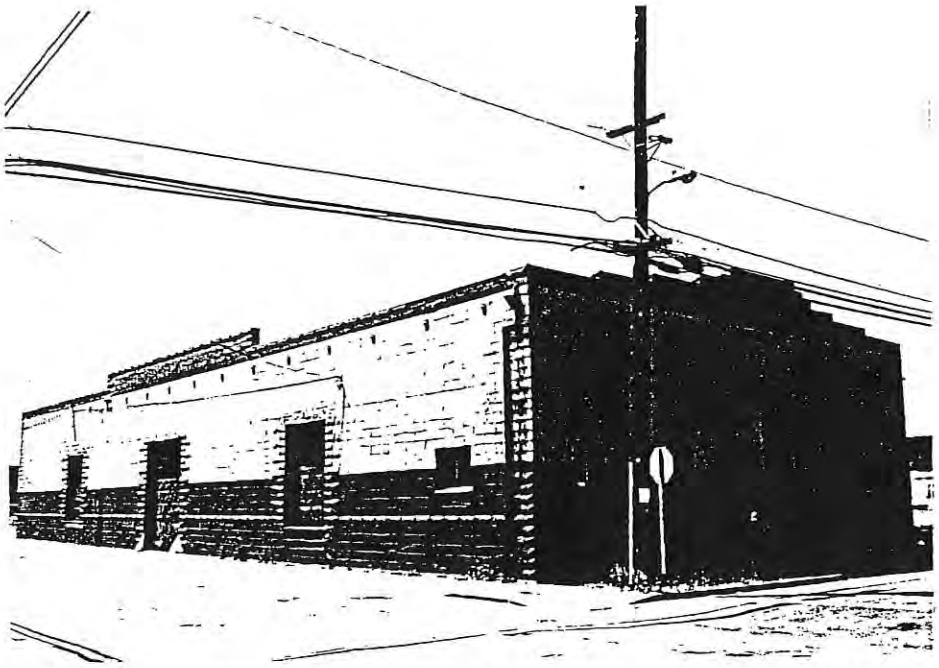
Hist Name : HUNTINGTON PLANING MILL
Style/Type: INDUSTRIAL/COMMERCIAL
Location..: 618 WILSON ST
Design/Art:
Comments..:

Parcel: 01008201
Year..: 1926

Zoning:
Photo#: 022/15-6

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0112 Multiple Stores in one building
Alt./Rest.: G-SOME STOREFRONT

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

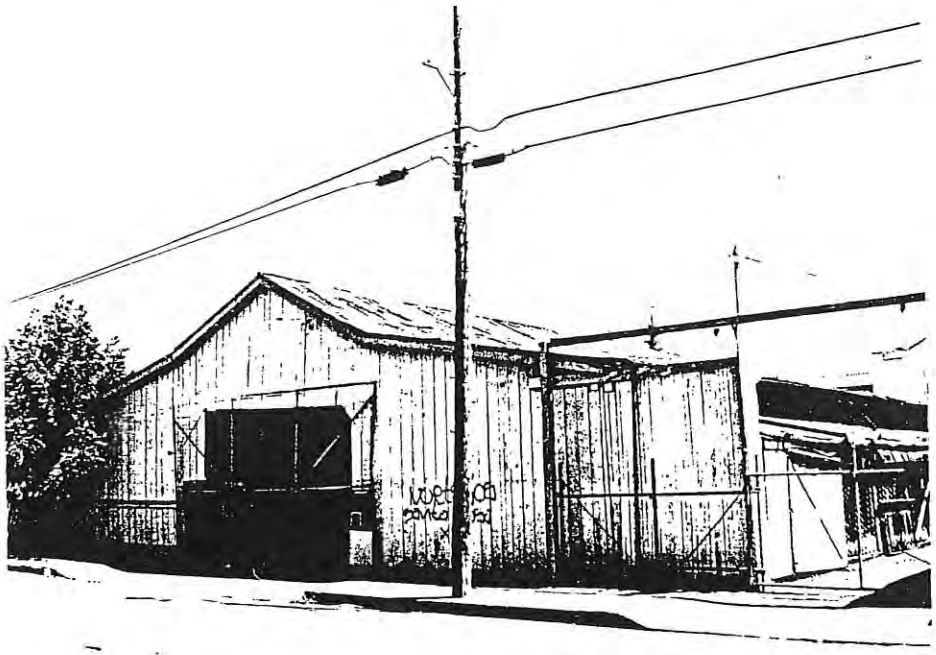


Hist Name : LEE BROS & CO. WAREHOUSE
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 625 WILSON ST
Design/Art:
Comments..: PETERSON SURVEY

Parcel: 01008101
Year..: 1905 -07

Zoning:
Photo#: 022/19

District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: APPEARLS ELIGIBLE ALONE & IN FUTURE D
Land Use..: 0320 Warehousing - active
Alt./Rest.: E



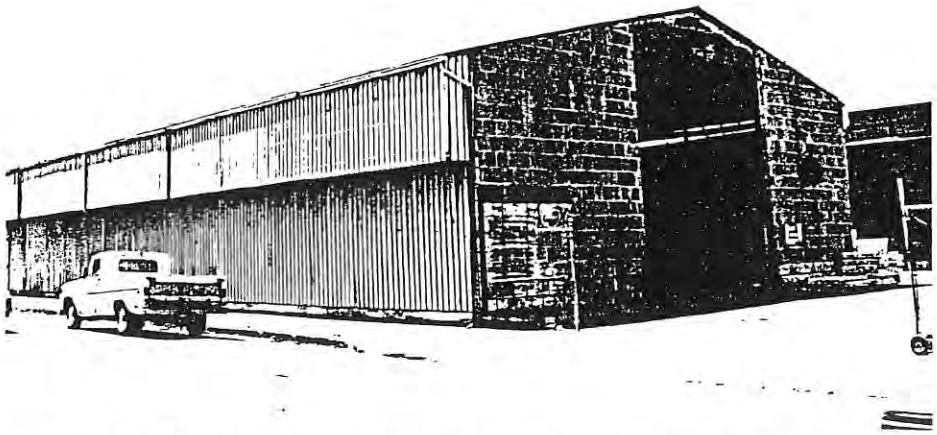
Hist Name : FRANK BERKA LUMBER STORAG
Style/Type: INDUSTRIAL/BARN
Location..: 708 WILSON ST
Design/Art:
Comments..:

Parcel: 01009216N
Year..: 1908 -1915

Zoning:
Photo#: 022/20-1

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0110 Single story
Alt./Rest.: E

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

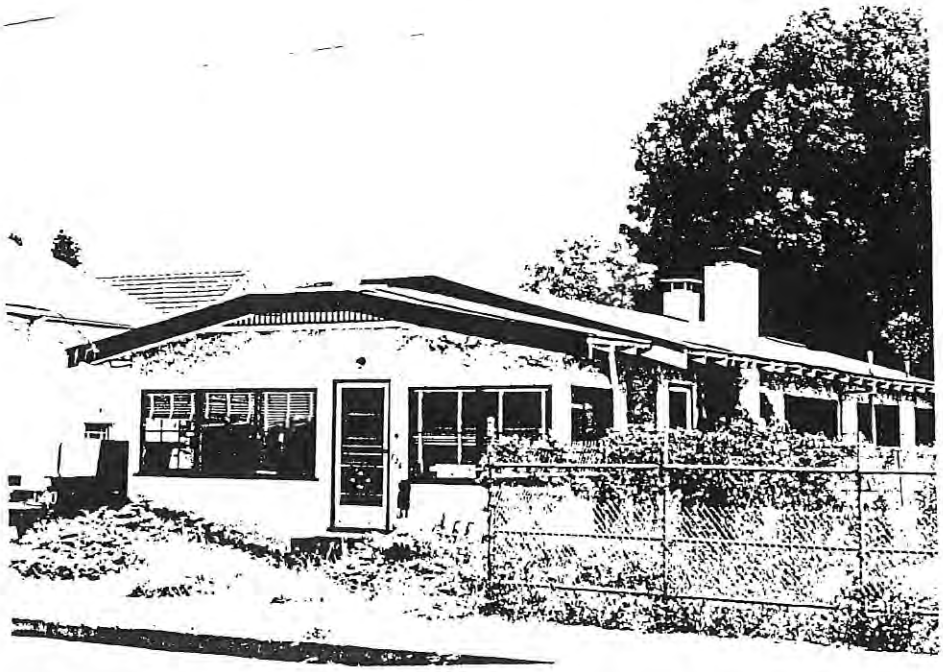


Hist Name : LAWS & YAEGER LUMBER CO.
Style/Type: INDUSTRIAL/INDUST.COMPLEX
Location..: 717 WILSON ST
Design/Art:
Comments..:

Parcel: 01009105C
Year..: 1947

Zoning:
Photo#: 022/27

District..: NORTH RAILROAD DISTRICT
Context...: MAJOR INDUSTRIES: AGRICULTURE & RAILR
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0110 Single story
Alt./Rest.: E



Hist Name : TROMBETTA,ALBERT/COR.HOUS
Style/Type: BUNGALOW/HOUSE
Location..: 726 WILSON ST
Design/Art:
Comments..:

Parcel: 01009218
Year..: 1926

Zoning:
Photo#: 022/24

District..: NORTH RAILROAD DISTRICT
Context...: RESIDENTIAL BUILDINGS IN SANTA ROSA 1
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0891 Parking Lots - no fee
Alt./Rest.: G-PORCH ENCLOSED

City of Santa Rosa
Historical Properties Inventory
CONTRIBUTORS, NORTH RAILROAD DISTRICT

Hist Name : MARK WEST JERSEY DAIRY
Style/Type: COMMERCIAL/COMMERCIAL
Location..: 732 WILSON ST
Design/Art:
Comments..: SANTA ROSA SAW

Parcel: 01009219
Year..: 1890 R1930

Zoning:
Photo#: 022/25-6

District..: NORTH RAILROAD DISTRICT
Context...: COMMERCIAL BUILDINGS IN SANTA ROSA 19
Rating....: CONTRIB TO DIST THAT MAY BECOME ELIGI
Land Use..: 0014 SFD W/SECONDARY USE(I.E.BARBER S
Alt./Rest.: G-STORE ADDED TO HOUSE 1929-34

Traffic and Parking Study for the DeTurk Winery Village Project

Prepared for the City of Santa Rosa

Submitted by
W-Trans

September 27, 2016

TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
Balancing Functionality and Livability since 1995
w-trans.com

Table of Contents

Executive Summary

The DeTurk Winery Village project is proposed to provide 185 apartments together with a 20,000 square foot fitness facility and child care center and a 5,000 square foot leasing office. The proposed housing units are expected to generate 72 trips during the evening peak hour, though compared to full use of the existing 75,000 square foot buildings, the net change is a 45-trip reduction in p.m. peak hour trips. Trips associated with any current uses on the project site were excluded from consideration, and under these conditions, with project-generated trips added to the study intersection of Wilson Street-Cleveland Avenue/West 9th Street the impact is still expected to be less-than-significant. Furthermore, because the project has a net negative trip generation, there is no proportional share payment toward the planned future signalization of this intersection.

Access to alternative modes from the project site is generally very good. The SMART bike path is immediately east of the site and the network of sidewalks will be complete upon the construction of sidewalks along the project's frontage on Donahue Street as part of the project. The project should provide adequate bicycle parking and/or storage as required by the City's code.

The project proposes two driveways, with one each on West 9th Street and Donahue Street. Both driveways have adequate sight lines and are expected to operate acceptably.

The proposed parking supply for the project at 174 spaces is adequate to meet requirements as set forth in Assembly Bill (AB) 744. This legislation enacts reduced parking standards for housing projects that provide for low or very-low income residents when the site has adequate access to transit. Due to the proximity to the SMART rail station, this project qualifies for the density bonus provisions of AB 744 and the parking supply as proposed is adequate to meet the applicable requirements.

However, because the supply is less than the projected demand based on standard industry rates, consideration was given to the potential impact any excess parking would have on the adjacent neighborhood. Parking occupancy surveys were performed on five dates, three of which were chosen to coincide with events at the DeTurk Round Barn event center. On the basis of the data obtained, it is anticipated that the available supply of parking near the project site is not adequate to accommodate all the excess demand that may be generated. There are approximately 41 available spaces in the public supply that would be available during peak parking occupancy and the project would generate a demand of 86 vehicles that would need to park in the public supply. The site's excess parking demand could be addressed through application of parking demand strategies such that even on event days there would be adequate parking supply in the neighborhood to meet the anticipated demand.

Introduction

This report presents an analysis of the potential traffic impacts that would be associated with development of the proposed DeTurk Winery Village Project to be located on Donahue Street between West 8th and 9th Streets in the City of Santa Rosa. The traffic study was completed in accordance with the criteria established by the City of Santa Rosa, and is consistent with standard traffic engineering techniques.

Prelude

The purpose of a traffic impact study is to provide City staff and policy makers with data that they can use to make an informed decision regarding the potential traffic impacts of a proposed project, and any associated improvements that would be required in order to mitigate these impacts to a level of insignificance as defined by the City's General Plan or other policies. Vehicular traffic impacts are typically evaluated by determining the number of new trips that the proposed use would be expected to generate, distributing these trips to the surrounding street system based on existing travel patterns or anticipated travel patterns specific to the proposed project, then analyzing the impact the new traffic would be expected to have on critical intersections or roadway segments. Impacts relative to access for pedestrians, bicyclists, and to transit are also addressed.

Project Profile

The proposed project is a new 185-unit mid-rise apartment complex including 15 affordable units. The existing site currently hosts 75,000 square feet of specialty retail and general light industrial space. The proposed project plans to retain 20,000 square feet of existing commercial space for a 12,500 square foot gym and 7,500 square feet of commercial space. The project site is located on Donahue Street between West 8th and 9th Streets. Two new driveways would provide access to the proposed apartment complex, including one each on Donahue Street and one on West 9th Street. The project site is located on Donahue Street between West 8th and 9th Streets, as shown in Figure 1.

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Traffic and Parking Study for the DeTurk Winery Village Project

Figure 1 – Study Area, Lane Configuration, and Traffic Volumes

W-Trans

Transportation Setting

Operational Analysis

Study Area and Periods

The study area consists of the intersection of Wilson Street/West 9th Street as well as the project frontages on Donahue Street, West 8th Street, and West 9th Street.

Operating conditions during the p.m. peak period were evaluated to capture the highest potential impacts for the proposed project as well as the highest volumes on the local transportation network. The p.m. peak hour occurs between 4:00 and 6:00 p.m. and typically reflects the highest level of congestion during the homeward bound commute.

Study Intersection

Wilson Street-Cleveland Avenue/West 9th Street is a four-legged, all-way stop-controlled intersection located just east of the SMART railroad tracks. Drivers southbound on Cleveland Avenue have the option of using Ripley Street as a shorter route to get to westbound West 9th Street. This intersection is planned to be signalized in the future.

The location of the study intersection and the existing lane configuration and control are shown in Figure 1.

Study Roadways

Donahue Street has a posted speed limit of 25 miles per hour (mph), one lane in each direction, and on-street parking on both sides.

West 9th Street has a posted speed limit of 30 mph, one travel lane in each direction, and a two-way left-turn lane (TWLTL) in the vicinity of Donahue Street. Parking is currently allowed on the south side of the street east of the SMART tracks.

West 8th Street has a posted speed limit of 25 mph, one travel lane in each direction, and on-street parking on both sides of the street.

Alternative Modes

Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, curb ramps, curb extensions, and various streetscape amenities such as lighting, benches, etc. In general, a network of sidewalks, crosswalks, pedestrian signals, and curb ramps provide access for pedestrians in the vicinity of the proposed project site; however, sidewalk gaps, obstacles, and barriers can be found along some of the roadways connecting to the project site. Existing gaps and obstacles along the connecting roadways impact convenient and continuous access for pedestrians and present safety concerns in those locations where appropriate pedestrian infrastructure would address potential conflict points.

Continuous sidewalk coverage is provided along the proposed project frontages on West 9th Street, bordering the northern portion of the site, and West 8th Street, bordering the southern end. Sidewalk gaps exist along Donahue Street, bordering the west side of the site, with only a small segment of sidewalk near the northern end. There are

curb ramps on the southeast and southwest corners of West 9th Street/Donahue Street and on the northwest and northeast corners of West 8th Street/Donahue Street. There are no marked crosswalks at either of these intersections. There are crosswalks on both West 9th Street and West 8th Street which connect to the SMART multi-use path, east of the project site.

Bicycle Facilities

The *Highway Design Manual*, California Department of Transportation (Caltrans), 2012, classifies bikeways into three categories:

- **Class I Multi-Use Path** – a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross flows of motorized traffic minimized.
- **Class II Bike Lane** – a striped and signed lane for one-way bike travel on a street or highway.
- **Class III Bike Route** – signing only for shared use with motor vehicles within the same travel lane on a street or highway.

Guidance for Class IV Bikeways is provided in *Design Information Bulletin Number 89: Class IV Bikeway Guidance (Separated Bikeways/Cycle Tracks)*, Caltrans, 2015.

- **Class IV Bikeway** – also known as a separated bikeway, a Class IV Bikeway is for the exclusive use of bicycles and includes a separation between the bikeway and the motor vehicle traffic lane. The separation (or, "buffer") may include, but is not limited to, grade separation, flexible posts, inflexible physical barriers, or on-street parking.

In the project area, Class II bicycle lanes exist on West 9th Street in both directions between Donahue Street and Stony Point Road. The SMART Class I multi-use path is located east of the project site, bordering the railroad tracks, and extends from West 8th Street to College Avenue. The City of Santa Rosa *2010 Bicycle and Pedestrian Master Plan* identifies an additional Class III bicycle route planned for Wilson Street, just east of the project site, between 9th Street and 3rd Street. As part of the proposed project a Class II bike lane is proposed on West 9th Street between Donahue Street and the SMART tracks in the eastbound direction; parking will be eliminated to make way for the new bike lane. There are also plans to extend the SMART multi-use path so that it runs from the City of Larkspur to the City of Cloverdale.

Table 1 – Bicycle Facility Summary

Status Facility	Class	Length (miles)	Begin Point	End Point
Existing				
West 9th Street	II	1.10	Stony Point Road	Railroad Tracks
SMART Multi-Use Path	I	0.48	West 8th Street	College Avenue
Planned				
Wilson Street	III	0.44	3rd Street	9th Street
West 9th Street (eastbound)*	II	0.35	Donahue Street	Railroad Tracks
West 9th Street	III	0.25	Railroad Tracks	A Street
SMART Multi-Use Path	I	6.64	River Road	Bellevue Avenue

Note: *Westbound Class II bike lane currently exists
Source: *Santa Rosa Bicycle and Pedestrian Master Plan*, City of Santa Rosa, 2010

Transit Facilities

Santa Rosa CityBus provides fixed route bus service in the City of Santa Rosa. CityBus Local Routes 3 and 17 provide loop service to destinations throughout the City and stops within walking distance to the project site. Route 3 operates Monday through Friday with approximately one-half hour headways between 6:30 a.m. and 8:00 p.m. Saturday service operates with approximately one-hour headways between 8:00 a.m. and 7:30 p.m. Sunday service operates with approximately one-hour headways between 11:00 a.m. and 5:00 p.m. Route 17 operates Monday through Friday with approximately one-hour headways between 6:00 a.m. and 8:00 p.m. Saturday service operates with approximately one-hour headways between 7:00 a.m. and 8:00 p.m. Sunday service operates with approximately one-hour headways between 9:30 a.m. and 4:30 p.m.

Two bicycles can be carried on most CityBus buses. Bike rack space is on a first come, first served basis. Additional bicycles are allowed on CityBus buses at the discretion of the driver.

Dial-a-ride, also known as paratransit, or door-to-door service, is available for those who are unable to independently use the transit system due to a physical or mental disability. Santa Rosa's paratransit is designed to serve the needs of individuals with disabilities within Santa Rosa and the greater Santa Rosa area.

Sonoma–Marin Area Rail Transit (SMART) is set to provide fixed loop rail service throughout Sonoma and Marin Counties. A SMART stop will be located in Railroad Square, approximately one-third of a mile south of the project site. Service is planned to begin by the end of 2016, although routes and schedules are not currently available.

Reimagining CityBus

The City of Santa Rosa is currently going through the development of a redesign of the CityBus system through its "Reimagining CityBus" project. A draft report and new transit map have been reviewed by City Council and are undergoing revisions for the final redesign. Draft plans indicate that service through the project area will change. Routes 3, 10, 11, and 15 would travel near the proposed project site. These routes would provide access to the Northside Transfer Center, the Downtown Transit Mall, and the Coddingtown Mall. It is anticipated that the transit routes serving the site will provide adequately for site residents.

Capacity Analysis

Intersection Level of Service Methodologies

Level of Service (LOS) is used to rank traffic operation on various types of facilities based on traffic volumes and roadway capacity using a series of letter designations ranging from A to F. Generally, Level of Service A represents free flow conditions and Level of Service F represents forced flow or breakdown conditions. A unit of measure that indicates a level of delay generally accompanies the LOS designation.

Since the study intersection will be signalized in the future, it was analyzed using the signalized methodology published in the *Highway Capacity Manual* (HCM), Transportation Research Board, 2000. This source contains methodologies for various types of intersection control, all of which are related to a measurement of delay in average number of seconds per vehicle. The signalized methodology is based on factors including traffic volumes, green time for each movement, phasing, whether or not the signals are coordinated, truck traffic, and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this LOS methodology. For purposes of this study, delays were calculated using optimized signal timing. The criteria for signalized intersection service levels are summarized in Table 2.

Table 2 – Signalized Intersection Level of Service Criteria	
LOS A	Delay of 0 to 10 seconds. Most vehicles arrive during the green phase, so do not stop at all.
LOS B	Delay of 10 to 20 seconds. More vehicles stop than with LOS A, but many drivers still do not have to stop.
LOS C	Delay of 20 to 35 seconds. The number of vehicles stopping is significant, although many still pass through without stopping.
LOS D	Delay of 35 to 55 seconds. The influence of congestion is noticeable, and most vehicles have to stop.
LOS E	Delay of 55 to 80 seconds. Most, if not all, vehicles must stop and drivers consider the delay excessive.
LOS F	Delay of more than 80 seconds. Vehicles may wait through more than one cycle to clear the intersection.

Reference: *Highway Capacity Manual*, Transportation Research Board, 2000

Traffic Operation Standards

The City of Santa Rosa's adopted Level of Service (LOS) Standard is contained in *Santa Rosa General Plan 2035*. Standard TD-1 states that the City will try to maintain a Level of Service (LOS) D or better along all major corridors. Exceptions to meeting this standard are allowed where attainment would result in significant environmental degradation; where topography or environmental impacts make the improvement impossible; or where attainment would ensure loss of an area's unique character.

While a corridor level of service is applied by the City in its analysis of the entire City as part of the environmental documentation supporting the General Plan, this type of analysis only provides relevant data when performed on a much longer segment than the one included as the study area for the project. Therefore, although the City's standard does not specify criteria for intersections, for the purposes of this study a minimum operation of LOS D for the overall operation of signalized intersections was applied.

Existing Conditions

The Existing Conditions scenario provides an evaluation of current operation based on existing traffic volumes during the p.m. peak period. This condition does not include project-generated traffic volumes. Volume data was collected August 18, 2015.

Under existing conditions, the intersection is operating acceptably at LOS B during the p.m. peak hour, with an average delay of 13.1 seconds per vehicle. Existing traffic volumes are shown in Figure 1, and a copy of the Level of Service calculation is provided in Appendix A.

Project Description

The proposed project is a new 185-unit mid-rise apartment complex including 15 affordable units that would replace 75,000 square feet of specialty retail and general light industrial space. As part of the project 25,000 square feet of commercial space would be retained for a 20,000 square foot gym and a 5,000 square foot leasing office. The project site is located on Donahue Street between West 8th and 9th Streets. Two new driveways would provide access to the proposed apartment complex, including one each on Donahue Street and on West 9th Street. The proposed project site plan is shown in Figure 2.

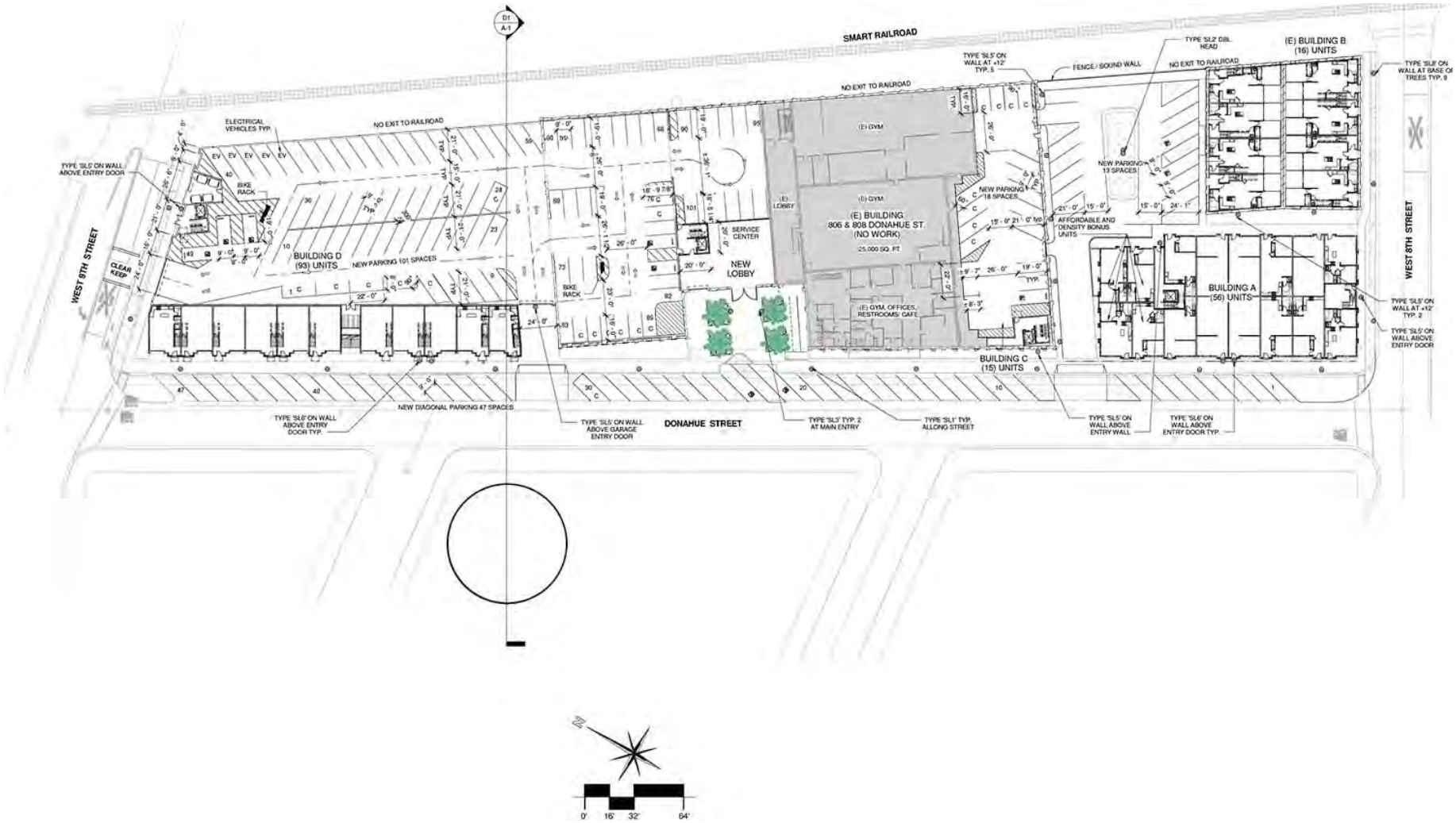
Trip Generation

The anticipated trip generation for the proposed project was estimated using standard rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 9th Edition, 2012 for "Mid-Rise Apartment" (ITE LU #223) as the development will be four stories and any residential building with three to 10 stories is considered "Mid-Rise". Since the existing turning movement counts reflect trips generated by the existing 24,000 square foot gym, the trips that would be associated with the proposed 20,000 square foot gym have already been captured, and no further trips were included in the analysis. Additionally, because the site is currently occupied by a building with 25,000 square feet of commercial space and 50,000 square feet of light industrial space, the trip generation of existing uses to be eliminated was considered. Standard rates for "Specialty Retail Center" (ITE LU #826) and "General Light Industrial" (ITE LU #110) were applied to the existing land uses.

Table 3 – Trip Generation Summary

Land Use	Units	PM Peak Hour			
		Rate	Trips	In	Out
Existing					
General Light Industrial	50 ksf	0.97	-49	-6	-43
Specialty Retail Center	25 ksf	2.71	-68	-30	-38
Total			117	36	81
Proposed					
Mid-Rise Apartment	185 du	0.39	72	42	30
Total			**-45**	**6**	**-51**

Notes: ksf = 1,000 square feet ; du = dwelling unit



Source: O'Malley Wilson Westphal 8/16

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Traffic and Parking Study for the DeTurk Winery Village Project

Figure 2 – Site Plan

Trip Distribution

The pattern used to allocate the net change in project trips to the street network was based on previous work done for projects in the area and is shown in Table 4. Consideration was given to future plans to signalize West 9th Street/Wilson Street and install all-way stop controls at West 8th Street/Wilson Street and the potential impact these improvements would have on the routes drivers would choose for trips to and from the project site. Given the limited delays that would be experienced along the assumed routes as well as the use of routes that result in the greatest impact due to project traffic, thereby providing a conservative analysis, no adjustments were made to reflect these planned future improvements.

Table 4 – Trip Distribution Assumptions

Route	Percent	PM Trips
W 9th St (east of Donahue St)	25%	-11
W 9th St (west of Wilson St)	25%	-11
Cleveland Ave (north of W 9th St)	30%	-14
Wilson St (south of W 8th St)	20%	-9
TOTAL	**100%**	**-45**

Intersection Operation

Existing plus Project Conditions

Because the existing space may not have been fully occupied when the counts were obtained, all 72 peak hour project trips were added to the existing volumes and deductions for existing land uses were not applied in evaluating "plus Project" conditions. The study intersection is expected to operate at LOS B under existing p.m. peak hour conditions and is expected to continue operating at LOS B, with only a slight increase in delay, with the addition of project-generated trips. These results are summarized in Table 5. Project traffic volumes are shown in Figure 1.

Table 5 – Existing and Existing plus Project Peak Hour Intersection Levels of Service

Study Intersection	Existing Conditions		Existing plus Project	
	Delay	LOS	Delay	LOS
1. Wilson St-Cleveland Ave/West 9th St	13.1	B	13.8	B

Notes: Delay is measured in average seconds per vehicle; LOS = Level of Service

Finding – The study intersection is expected to continue operating acceptably at the same level of service upon the addition of project-generated traffic.

Equitable Share

The City of Santa Rosa has identified long-term improvement plans to signalize the intersection of Wilson Street-Cleveland Avenue/West 9th Street. As part of funding for these improvements, the City has developed an equitable share program where it collects fees from developers proportionate to the traffic generated by the development. This calculation was applied to determine the project's equitable share of the cost of these improvements.

During the p.m. peak hour, the proposed project is expected to generate a net negative 45 trips. Because the project results in a net negative trip generation, new trips would be added to the intersection during the p.m. peak

hour, so the proportional share of the costs to construct a traffic signal at Wilson Street-Cleveland Avenue/West 9th Street attributable to this development is zero percent. However, contribution to the planned signalization of this intersection is at the discretion of the City and additional project impacts, other than trip generation, may require the proposed project to contribute funds.

Alternative Modes

Pedestrian Facilities

Given the proximity to downtown Santa Rosa to the east and SMART train station to the south, to the proposed site, it is reasonable to assume that some project residents will want to walk, bicycle, and/or use transit to reach the project site.

Project Site – Sidewalks exist along the project frontages of West 9th Street and West 8th Street. There are gaps in the sidewalk network along the project frontage on Donahue Street. The proposed project plans include continuous sidewalk coverage along Donahue Street. There are four intersections in the vicinity of the proposed project site: West 9th Street/Donahue Street, Decker Street/Donahue Street, Boyce Street/Donahue Street, West 8th Street/Donahue Street. There are currently no marked pedestrian crosswalks along Donahue Street or at the intersections within the project vicinity. However, the current site plan indicates new marked crosswalks on Donahue Street at the intersections with West 9th Street and West 8th Street.

Finding – With the planned improvements, pedestrian facilities serving the project site will be adequate.

Bicycle Facilities

Existing bicycle facilities, including bike lanes on West 9th Street and the SMART multi-use path, together with shared use of minor streets provide adequate access for bicyclists.

Bicycle Storage

The City of Santa Rosa's Municipal Code, Chapter 20-36, requires one bicycle parking space be four units if there is no private garage or private storage space for bike storage. The current site plan includes two bike racks but does not indicate the number of spaces provided or if private storage is available.

Finding – Bicycle facilities serving the project site are expected to be adequate. However, the current site plan does not indicate the number of bicycle spaces being provided.

Recommendation – The proposed project site plan should include adequate bicycle storage and clearly indicate the number of spaces being provided and provide additional spaces should there be a shortage.

Transit

Existing transit routes are adequate to accommodate project-generated transit trips. Existing stops are within acceptable walking distance of the site.

Finding – Transit facilities serving the project site are expected to be adequate.

Access and Circulation

Site Access

The project would be accessed via three driveways; two on Donahue Street and one on West 9th Street. Movements at the West 9th driveway will be restricted to right-turns only through installation of a median. Additionally, the project plans include "keep clear" pavement markings at the entrance of this driveway to ensure that the driveway is still accessible if the gate arms at the railroad crossing are down and cars waiting to cross develop a queue that would otherwise block drivers from accessing this entrance.

Sight Distance

Sight distances at the proposed driveways were field measured. Although sight distance requirements are not technically applicable to urban driveways, the criterion for public road major approach stopping distance was applied for evaluation purposes. Based on a design speed of 30 mph, the minimum stopping sight distance needed on West 9th Street is 200 feet. The minimum stopping sight distance needed on Donahue Street is 150 feet for a posted speed limit of 25 mph. Based on field measurements, sight distance is more than adequate in both directions at both project driveways.

Circulation

To provide a conservative evaluation of impacts on the intersection of West 9th Street/Wilson Street, it was assumed that the majority of project trips would use West 9th Street for trips to and from the site. However, the existing circulation network within the neighborhood is a grid system that provides multiple paths drivers could use traveling to and fro the site. As a result, it is anticipated that trips would be more dispersed, resulting in a more even distribution of traffic and reduced impacts on any one street.

Parking

The project was analyzed to determine whether the proposed parking supply would be sufficient for the anticipated parking demand generated by the planned 185-unit apartment complex and 20,000 square foot commercial space, including an existing 12,500 square foot gym and 7,500 square feet of additional retail space.. The project site as proposed would provide a total of 174 standard parking spaces for the apartment complex, including 132 off-street spaces and 42 spaces on the street. The 42 on-street spaces would be provided on Donahue Street, bordering the west side of the project site, and be limited to two–hour parking Monday through Friday between 8:00 a.m. and 6:00 p.m.; parking would be unrestricted on nights and weekends.

City Requirements

City of Santa Rosa parking supply requirements are based on the Santa Rosa Municipal Code, Chapter 20-36; Parking and Loading Standards. The proposed project site also falls within the Downtown Station Area Plan (DSAP) planning area and the Railroad Corridor subarea. The Municipal Code identifies specific parking requirements for development that falls within the DSAP plan area and its subsequent subareas. The City code requires 1.5 parking spaces per unit for apartments within the Railroad Corridor subarea and 1.0 space per unit for affordable housing within the DSAP. The project includes 170 market-rate units and 15 affordable housing units. Based on these requirements, the proposed project would be required to provide 270 parking spaces for the housing component. The 20,000 square feet of commercial space would require 34 spaces based on a standard of one space per 300 square feet, with the 50 percent mixed-used deduction applied. The total required supply under the City's Code is therefore 304. With a planned supply of 174 spaces, parking would not meet the City's requirements and experience a deficit of130 spaces.

Assembly Bill 744

Assembly Bill (AB) 744 sets a maximum parking ratio for housing developments that provide for low or very low-income individuals of 0.5 spaces per bedroom units. In order to attain the density bonus for affordable housing, there must be a transit stop within one-half mile and there must be unobstructed access to that transit stop. The proposed project is within one-half mile of the planned SMART Train Station located in Downtown Santa Rosa's Railroad Square.

The proposed project includes 185 units with 115 one-bedroom units and 70 two-bedroom units. Using the 0.5 parking spaces per bedroom for the proposed 185 units, the proposed project would be required to provide 128 parking spaces. The proposed 7,500 square feet of commercial space would require one space per 300 square feet, or 25 spaces, under AB 744 guidelines. The 12,500 square foot gym would require 17 spaces based on previously approved parking requirements for the existing gym. The total required parking supply of 170 spaces is less than the planned supply of 174 parking spaces; the project is therefore proving four more parking spaces than required under applicable law as determined by AB 744.

Table 6 provides a summary of parking spaces required under the City's code and AB 744.

Table 6 – Parking Requirements Summary			
Source	**Units**	**Rate**	**Spaces Required**
City Code			
Multi-family Residential	185 du	1.5 per market-rate unit, 1.0 per affordable housing unit	270
Commercial	20 ksf	1.0 per 300 sf, with a 50% reduction for mixed use	34
Total per City Code			**304**
AB 744			
Multi-family residential	115 one-bdrm, 70 two-bdrm	0.5 per bedroom	128
Gym	12.5 ksf	N/A*	17
Commercial	7.5 ksf	1.0 per 300 sf	25
Total per AB 744			**170**
Parking Proposed	**Location**		**Spaces Proposed**
	Off-Street		132
	On-Street		42
Total Parking Proposed			**174**

Notes: du = dwelling unit; ksf = 1,000 square feet; bdrm = bedroom
*Previously approved parking reduction applied

ITE Parking Generation

Parking demand was also estimated using standard rates published by ITE in *Parking Generation*, 4th Edition, 2010. The parking demand of the residential component of the project was estimated using the published standard rates for Low/Mid-Rise Apartments (ITE LU#221). The expected parking demand for the proposed apartments is 228 spaces on weekdays and 209 spaces on weekends. Based on ITE rates, and assuming that the commercial space would need 34 spaces as indicated in City Code, the project has a projected total demand for 262 parking spaces. With a planned supply of 174 spaces, there would be a parking deficit of 88 spaces.

Parking Occupancy

Since the project as proposed would provide less parking than estimated based on application of standard parking generation rates, and to address concerns expressed by neighbors, parking occupancy counts were taken within the surrounding neighborhood streets to determine there is available supply within existing public on-street spaces to accommodate any additional parking demand from the project. Part of the reason for the residents' concern is that the project site is located across from the DeTurk Round Barn, which is a popular event venue in the City that can generate high parking demand on days when events occur, especially on weekends.

Dates and time for data collection were coordinated with City staff, and were subsequently conducted on July 9, 14, 20, and 27, and August 6, 2016 from 2:00 p.m. to 8:00 p.m. Events at the DeTurk Round Barn were held during three of the counts, as follows:

- Saturday July 9th – 150 guests
- Thursday, July 14th – 100 guests
- Saturday, August 6th – 130 guests

In order to determine the supply of on-street spaces, the length of available curb space for parking was measured and the resulting number of parking spaces estimated. There are approximately 185 public on-street spaces available within the area inventoried, not including spaces on the east side of Donahue Street that will become part of the project's proposed supply. Parking count locations are shown in Figure 3 and a copy of the occupancy counts is provided in Appendix B.

The peak parking occupancy for each block inventoried was determined for weekdays with no events and for weekends/event days. During an average weekday, without an event, parking occupancy was about 55 to 60 percent overall, though some blocks were fully occupied or nearly so. While total occupancy was higher, at 67 to 78 percent, on days when events were occurring, there were still a substantial number of empty spaces during all 30 hours over which data was collected. The peak parking demands for each block occurred after 4:00 p.m. on each day counted. Table 7 summarizes the peak parking occupancy for each parking area, though the maximum parking demand for the entire study area is not the sum of the peak demand for each area as the peak varied from area to area.

Table 7 – Parking Occupancy Summary

Street/Lot Block	**Parking Supply**	**Peak Parking Occupancy**			
		Weekday (No Events)		**Weekend/Events**	
		#	**%**	**#**	**%**
Donahue St (west side only)					
8th St – Boyce	11	11	**100%**	8	73%
Boyce St – Decker St	15	12	80%	15	**100%**
Decker St – 9th St	6	3	50%	6	**100%**
Decker St	38	25	66%	36	**95%**
Boyce St					
Coulter St – Donahue St	20	18	**95%**	20	**100%**
Prince St – Donahue St	17	13	76%	17	**100%**
West 8th St					
Coulter St – Prince St	19	14	74%	19	**100%**
Prince St – Donahue St	22	19	**86%**	16	73%
Donahue St – Railroad tracks	6	4	67%	6	**100%**
Prince St					
Boyce St – Decker	15	11	73%	15	**100%**
West 8th St – Boyce St	16	5	31%	15	**94%**
Total	**185**				

The times of day during the six-hour surveys when the peak occurred for the entire study area are indicated in Table 8.

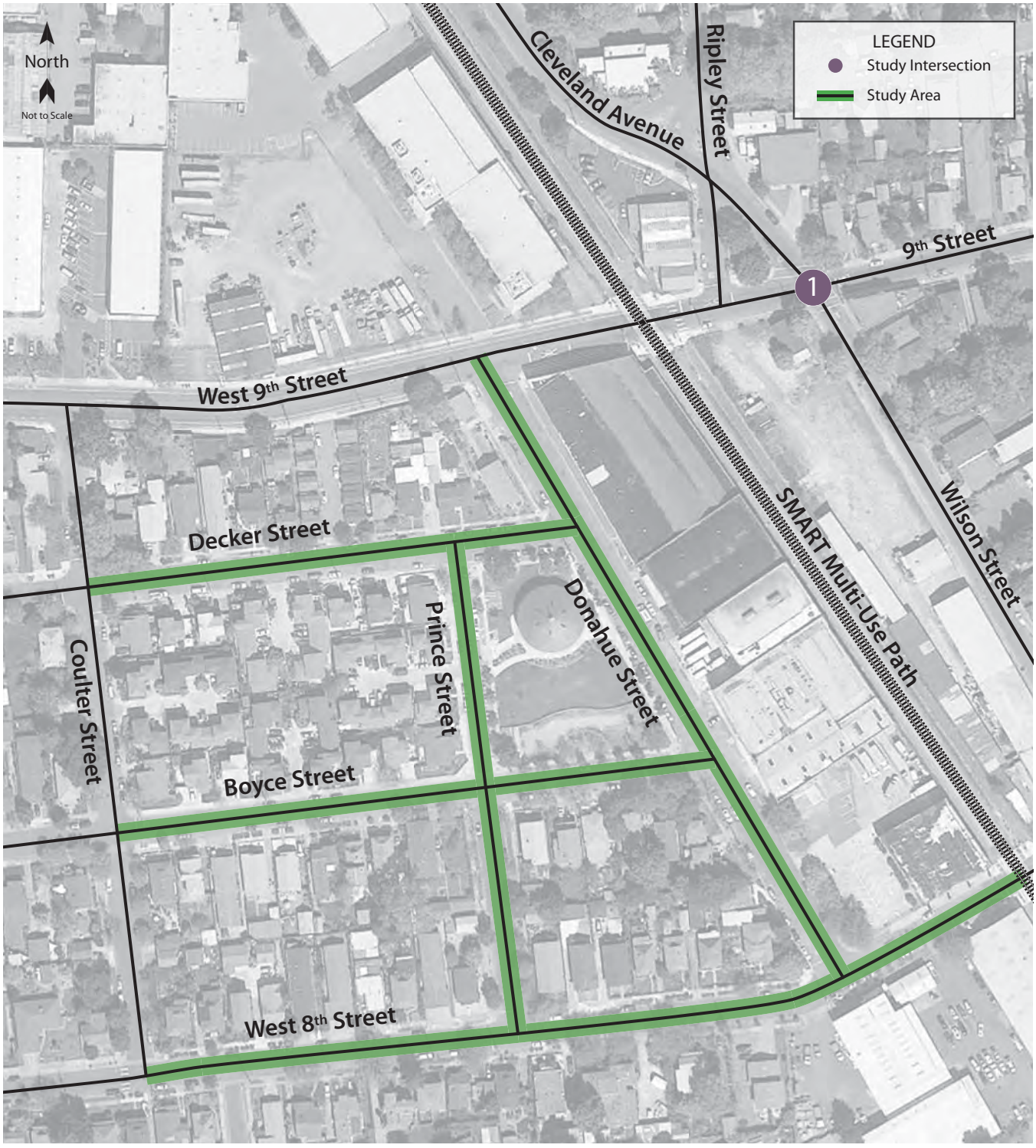

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Figure 3 – Parking Count Locations

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Table 8 – Time of Day for Peak Parking Demand					
Date	**Day**	**Time of Peak Demand**	**Occupied Spaces**	**Occupancy Rate**	**Notes**
July 9	Saturday	3:45 p.m.	138	75%	150-person event
July 14	Thursday	6:30 p.m.	144	78%	100-person event
July 20	Wednesday	6:15 p.m.	110	59%	
July 27	Wednesday	5:00 p.m.	100	54%	
August 6	Saturday	7:00 p.m.	125	67%	130-person event

The highest peak parking demand experienced was on Thursday, July 14, with 144 spaces occupied; this equates to a 78 percent occupancy rate for the entire neighborhood. With a total supply of approximately 185 parking spaces, there would be about 41 spaces still open at this time. The proposed project is planning to provide 174 parking spaces on-site and has a projected peak demand of 260 spaces which occurs on weekdays. The project would need access to an additional 86 spaces to accommodate these additional vehicles anticipated based on the peak theoretical parking demand. Since only 41 spaces are expected to be available when peak parking demand occurs within the neighborhood's public parking supply, there would not be sufficient public on-street parking to accommodate additional parking demand that may be experienced by the project and an additional 45 spaces would be required to meet peak demand.

Parking Demand Management

Unbundled Parking

In order to decrease parking demand and provide cost savings to tenants, the proposed project includes plans to provide unbundled parking. This makes parking a separate option in tenants' lease agreements and allows residents to choose if they want to lease a parking space or not. Typically residential parking spaces are bundled into the lease amounts, so residents may not realize the high cost of building, operating, and maintaining parking. Further, adding parking as a separate line item will help tenants understand the cost savings associated with reducing their parking needs. This parking demand strategy is estimated to reduce parking demand by 10 to 15 percent based on the Metropolitan Transportation Commission (MTC)'s *Reforming Parking Policies to Support Smart Growth*. Applied to the 228 space demand projected for the residential component, application of this technique would be expected to reduce by demand by up to 34 spaces, leaving only 11 of the 45-space shortfall to be addressed.

Car-Share

Car-sharing can reduce the need for automobile ownership by allowing residents to have on-demand access to shared vehicles on an as-needed basis. The proposed project includes plans to provide five vehicles on-site to be shared by residents. According to MTC, car-sharing is estimated to reduce parking demand by 3 to 5 percent. Assuming a reduction on the low end of this scale, the car-share would result in a 7-space reduction in the parking demand or up to 11 spaces on the high end. If car-sharing meets the high-end of the projected reductions, the remaining shortfall may be addressed.

Finding – The planned and existing parking supply is adequate to meet parking requirements as established under state law. However, using standard rates in ITE's *Parking Generation* rates and occupancy counts it is projected that there would be a deficiency of up to 45 spaces. Parking demand could be reduced through application of parking demand management techniques such as using unbundled parking and providing vehicles for a car-share program. With these programs the projected parking demand could be adequately met.

Recommendation – The project should include parking demand management techniques such as unbundled parking and a car-share program to reduce parking demand.

Conclusions and Recommendations

Conclusions

- The proposed project would be expected to result in a decrease in trip generating potential compared to existing uses, with a net negative of 45 trips during the p.m. peak hour.

- The project's impact on existing operation of Wilson Street-Cleveland Avenue/West 9th Street is less-than-significant, with LOS B operation projected upon adding trips associated with the proposed 185-unit apartment project.

- Bicycle facilities serving the project site are adequate. The proposed project includes plans to provide an eastbound bike lane on West 9th Street between Donahue Street and the railroad tracks.

- Pedestrian facilities will be adequate upon the completion of sidewalks along the proposed project frontages and installation of marked crosswalks across the stop-controlled Donahue Street approaches to West 9th Street and West 8th Street.

- Access to the site will be provided by two driveways on Donahue Street and one driveway on West 9th Street. The West 9th Street driveway will be restricted to right-turns only by a center median. A "keep clear" pavement marking will be provided at this driveway to ensure that the driveway is still accessible if the gate arms at the railroad crossing are down and cars waiting to cross develop a queue that would otherwise block drivers from accessing this entrance.

- The proposed driveways on West 9th Street and Donahue Street have adequate sight distance for the posted speed limits.

- Based on the equitable share calculation, the project developer would not be required to contribute to the cost of signalizing the Wilson Street-Cleveland Avenue/West 9th Street intersection due to the project having a net negative trip generation. However, contribution to this signal is at the discretion of the City, and other project impacts may result in the project developer being allocated a fee payment.

- The planned and existing parking supply is sufficient to meet the parking as required under state law, but is expected to be inadequate to meet projected peak parking demand. A shortfall of up to 45 spaces during peak demand conditions is projected.

Recommendations

- The proposed project site plan should include adequate bicycle storage and clearly indicate the number of spaces being provided and provide additional spaces should there be a shortfall.

- Parking Demand Management techniques should be applied as necessary to reduce parking demand by up to 45 spaces.

Study Participants and References

Study Participants

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Assistant Planner	Shannon Baker
Editing/Formatting/Graphics	Angela McCoy
Report Review	Dalene J. Whitlock, PE, PTOE

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SRO377

Appendix A

Level of Service Calculations

PM Peak Hour - Existing Conditions
Focused Traffic Analysis for the DeTurk Winery Village Project
City of Santa Rosa

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Base Volume Alternative)

Intersection #1 Cleveland Ave/W 9th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.521
Loss Time (sec):	0	Average Delay (sec/veh):	13.1
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Cleveland Ave						W 9th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module: >> Count Date: 18 Aug 2015 << 4:30 - 5:30 pm												
Base Vol:	34	148	18	42	242	1	43	166	41	37	147	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	148	18	42	242	1	43	166	41	37	147	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	36	158	19	45	259	1	46	178	44	40	157	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	158	19	45	259	1	46	178	44	40	157	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	158	19	45	259	1	46	178	44	40	157	65
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.74	0.09	0.14	0.85	0.01	0.17	0.67	0.16	0.15	0.60	0.25
Final Sat.:	95	412	50	86	497	2	100	385	95	88	350	145
Capacity Analysis Module:												
Vol/Sat:	0.38	0.38	0.38	0.52	0.52	0.52	0.46	0.46	0.46	0.45	0.45	0.45
Crit Moves:		****				****	****			****		
Delay/Veh:	12.0	12.0	12.0	14.2	14.2	14.2	13.0	13.0	13.0	12.7	12.7	12.7
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.0	12.0	12.0	14.2	14.2	14.2	13.0	13.0	13.0	12.7	12.7	12.7
LOS by Move:	B	B	B	B	B	B	B	B	B	B	B	B
ApproachDel:	12.0			14.2			13.0			12.7		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.0			14.2			13.0			12.7		
LOS by Appr:	B			B			B			B		
AllWayAvgQ:	0.5	0.5	0.5	0.9	0.9	0.9	0.7	0.7	0.7	0.6	0.6	0.6

Note: Queue reported is the number of cars per lane.

PM Peak Hour - Existing plus Project Conditions
Focused Traffic Analysis for the DeTurk Winery Village Project
City of Santa Rosa

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #1 Cleveland Ave/W 9th St

Cycle (sec):	100	Critical Vol./Cap.(X):	0.555
Loss Time (sec):	0	Average Delay (sec/veh):	13.8
Optimal Cycle:	0	Level Of Service:	B

Street Name:	Cleveland Ave						W 9th St					
Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0	0	1! 0	0	0	1! 0	0	0	1! 0	0	0	1! 0
Volume Module: >> Count Date: 18 Aug 2015 << 4:30 - 5:30 pm												
Base Vol:	34	148	18	42	242	1	43	166	41	37	147	61
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	34	148	18	42	242	1	43	166	41	37	147	61
Added Vol:	0	0	0	0	0	13	9	8	0	0	11	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	34	148	18	42	242	14	52	174	41	37	158	61
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
PHF Volume:	36	158	19	45	259	15	56	186	44	40	169	65
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	36	158	19	45	259	15	56	186	44	40	169	65
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	36	158	19	45	259	15	56	186	44	40	169	65
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.17	0.74	0.09	0.14	0.81	0.05	0.19	0.66	0.15	0.14	0.62	0.24
Final Sat.:	92	399	49	81	467	27	111	371	87	82	352	136
Capacity Analysis Module:												
Vol/Sat:	0.40	0.40	0.40	0.55	0.55	0.55	0.50	0.50	0.50	0.48	0.48	0.48
Crit Moves:		****			****			****				****
Delay/Veh:	12.4	12.4	12.4	15.1	15.1	15.1	13.9	13.9	13.9	13.4	13.4	13.4
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	12.4	12.4	12.4	15.1	15.1	15.1	13.9	13.9	13.9	13.4	13.4	13.4
LOS by Move:	B	B	B	C	C	C	B	B	B	B	B	B
ApproachDel:	12.4			15.1			13.9			13.4		
Delay Adj:	1.00			1.00			1.00			1.00		
ApprAdjDel:	12.4			15.1			13.9			13.4		
LOS by Appr:	B			C			B			B		
AllWayAvgQ:	0.5	0.5	0.5	1.0	1.0	1.0	0.8	0.8	0.8	0.7	0.7	0.7

Appendix B

Parking Occupancy Counts

Date: July 9, 2016 Saturday

	Donahue St 8th-Boyce	Occup. %	Donahue St Boyce-Decker	Occup. %	Donahue St Decker-9th	Occup. %	Decker St Coulter-Donahue	Occup. %	Boyce St Coulter-Prince	Occup. %	Boyce St Prince-Donahue	Occup. %	W 8th St Coulter-Prince	Occup. %	W 8th St Prince-Donahue	Occup. %	W 8th St Donahue-RR	Occup. %	Prince St Boyce-Decker	Occup. %	Prince St 8th-Boyce	Occup. %	Total	%
Supply	**22**		**30**		**13**		**38**		**19**		**17**		**19**		**22**		**6**		**15**		**16**		185	
2:00 PM	6	27%	15	50%	5	38%	20	53%	12	63%	8	47%	15	79%	15	68%	5	83%	12	80%	7	44%	107	58%
2:15 PM	6	27%	13	43%	6	46%	21	55%	15	79%	6	35%	16	84%	15	68%	5	83%	8	53%	4	25%	103	56%
2:30 PM	7	32%	8	27%	5	38%	21	55%	13	68%	8	47%	18	95%	15	68%	5	83%	8	53%	6	38%	104	56%
2:45 PM	5	23%	10	33%	6	46%	25	66%	14	74%	10	59%	15	79%	14	64%	5	83%	6	40%	6	38%	106	57%
3:00 PM	4	18%	12	40%	7	54%	27	71%	14	74%	10	59%	15	79%	13	59%	5	83%	5	33%	10	63%	111	60%
3:15 PM	5	23%	13	43%	7	54%	25	66%	14	74%	13	76%	14	74%	12	55%	5	83%	6	40%	11	69%	113	61%
3:30 PM	7	32%	12	40%	7	54%	27	71%	15	79%	14	82%	15	79%	12	55%	6	100%	11	73%	8	50%	121	66%
3:45 PM	9	41%	11	37%	7	54%	28	74%	13	68%	16	94%	18	95%	13	59%	6	100%	11	73%	11	69%	130	70%
4:00 PM	10	45%	11	37%	7	54%	29	76%	13	68%	15	88%	17	89%	15	68%	6	100%	12	80%	9	56%	130	70%
4:15 PM	10	45%	11	37%	8	62%	29	76%	16	84%	17	100%	18	95%	14	64%	4	67%	11	73%	9	56%	133	72%
4:30 PM	10	45%	11	37%	8	62%	29	76%	16	84%	16	94%	15	79%	14	64%	3	50%	11	73%	8	50%	127	69%
4:45 PM	10	45%	12	40%	8	62%	33	87%	17	89%	15	88%	16	84%	16	73%	3	50%	12	80%	9	56%	136	74%
5:00 PM	10	45%	12	40%	8	62%	33	87%	18	95%	16	94%	16	84%	16	73%	3	50%	11	73%	9	56%	137	74%
5:15 PM	8	36%	12	40%	8	62%	36	95%	19	100%	15	88%	16	84%	15	68%	3	50%	11	73%	9	56%	138	75%
5:30 PM	8	36%	12	40%	8	62%	33	87%	17	89%	16	94%	15	79%	15	68%	2	33%	11	73%	9	56%	132	72%
5:45 PM	7	32%	12	40%	8	62%	34	89%	16	84%	16	94%	15	79%	14	64%	1	17%	13	87%	8	50%	131	71%
6:00 PM	7	32%	12	40%	8	62%	34	89%	15	79%	16	94%	15	79%	15	68%	0	0%	13	87%	10	63%	132	71%
6:15 PM	6	27%	12	40%	8	62%	34	89%	16	84%	15	88%	15	79%	15	68%	0	0%	15	100%	9	56%	132	72%
6:30 PM	7	32%	11	37%	8	62%	34	89%	13	68%	15	88%	15	79%	15	68%	0	0%	14	93%	10	63%	129	70%
6:45 PM	7	32%	10	33%	8	62%	34	89%	14	74%	15	88%	15	79%	15	68%	0	0%	13	87%	9	56%	128	69%
7:00 PM	6	27%	9	30%	8	62%	34	89%	13	68%	16	94%	17	89%	15	68%	1	17%	13	87%	9	56%	130	70%
7:15 PM	6	27%	9	30%	8	62%	32	84%	13	68%	14	82%	18	95%	14	64%	0	0%	13	87%	9	56%	125	67%
7:30 PM	6	27%	10	33%	8	62%	32	84%	12	63%	13	76%	18	95%	14	64%	0	0%	12	80%	10	63%	123	67%
7:45 PM	6	27%	11	37%	8	62%	33	87%	12	63%	13	76%	18	95%	14	64%	0	0%	12	80%	10	63%	125	67%
Max	10	45%	15	50%	8	62%	36	95%	19	100%	17	100%	18	95%	16	73%	6	100%	15	100%	11	69%	138	75%

Date: July 14, 2016 Thursday

	Donahue St	Occup.	Donahue St	Occup.	Donahue St	Occup.	Decker St	Occup.	Boyce St	Occup.	Boyce St	Occup.	W 8th St	Occup.	W 8th St	Occup.	W 8th St	Occup.	Prince St	Occup.	Prince St	Occup.		
	8th-Boyce	%	Boyce-Decker	%	Decker-9th	%	Coulter-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Donahue-RR	%	Boyce-Decker	%	8th-Boyce	%	Total	%
Supply	**22**		**30**		**13**		**38**		**19**		**17**		**19**		**22**		**6**		**15**		**16**		185	
2:00 PM	9	41%	16	53%	4	31%	19	50%	7	37%	4	24%	14	74%	10	45%	4	67%	8	53%	3	19%	84	45%
2:15 PM	8	36%	13	43%	4	31%	18	47%	5	26%	4	24%	12	63%	9	41%	4	67%	9	60%	3	19%	77	41%
2:30 PM	7	32%	15	50%	4	31%	16	42%	6	32%	4	24%	13	68%	10	45%	4	67%	10	67%	2	13%	78	42%
2:45 PM	7	32%	16	53%	4	31%	16	42%	6	32%	6	35%	12	63%	9	41%	4	67%	11	73%	2	13%	80	43%
3:00 PM	8	36%	16	53%	4	31%	16	42%	6	32%	5	29%	12	63%	10	45%	4	67%	10	67%	2	13%	79	43%
3:15 PM	6	27%	11	37%	3	23%	17	45%	6	32%	6	35%	11	58%	10	45%	4	67%	10	67%	2	13%	76	41%
3:30 PM	7	32%	14	47%	2	15%	19	50%	6	32%	6	35%	11	58%	9	41%	4	67%	10	67%	2	13%	79	43%
3:45 PM	8	36%	14	47%	4	31%	22	58%	7	37%	5	29%	12	63%	10	45%	3	50%	9	60%	2	13%	83	45%
4:00 PM	8	36%	14	47%	4	31%	24	63%	6	32%	5	29%	12	63%	10	45%	2	33%	10	67%	2	13%	84	46%
4:15 PM	6	27%	14	47%	3	23%	27	71%	7	37%	6	35%	11	58%	10	45%	1	17%	10	67%	2	13%	86	46%
4:30 PM	8	36%	15	50%	3	23%	24	63%	7	37%	7	41%	13	68%	10	45%	1	17%	10	67%	2	13%	87	47%
4:45 PM	9	41%	18	60%	2	15%	24	63%	6	32%	9	53%	13	68%	11	50%	1	17%	12	80%	2	13%	93	50%
5:00 PM	9	41%	22	73%	2	15%	27	71%	7	37%	10	59%	14	74%	12	55%	1	17%	13	87%	2	13%	103	56%
5:15 PM	7	32%	17	57%	2	15%	25	66%	8	42%	14	82%	13	68%	12	55%	1	17%	13	87%	2	13%	101	55%
5:30 PM	13	59%	23	77%	4	31%	27	71%	11	58%	14	82%	13	68%	12	55%	0	0%	13	87%	3	19%	113	61%
5:45 PM	14	64%	26	87%	10	77%	32	84%	11	58%	17	100%	13	68%	13	59%	0	0%	13	87%	8	50%	132	72%
6:00 PM	14	64%	25	83%	10	77%	29	76%	15	79%	17	100%	11	58%	15	68%	0	0%	13	87%	10	63%	135	73%
6:15 PM	14	64%	29	97%	11	85%	30	79%	16	84%	17	100%	10	53%	14	64%	0	0%	13	87%	14	88%	141	76%
6:30 PM	14	64%	30	100%	13	100%	31	82%	13	68%	17	100%	10	53%	14	64%	0	0%	15	100%	15	94%	144	78%
6:45 PM	16	73%	21	70%	12	92%	30	79%	13	68%	14	82%	10	53%	14	64%	0	0%	12	80%	15	94%	133	72%
7:00 PM	14	64%	19	63%	12	92%	31	82%	15	79%	15	88%	10	53%	13	59%	0	0%	11	73%	15	94%	133	72%
7:15 PM	14	64%	19	63%	12	92%	31	82%	16	84%	13	76%	10	53%	13	59%	0	0%	13	87%	13	81%	132	71%
7:30 PM	14	64%	15	50%	11	85%	29	76%	15	79%	12	71%	11	58%	12	55%	0	0%	13	87%	10	63%	122	66%
7:45 PM	8	36%	16	53%	9	69%	31	82%	12	63%	9	53%	11	58%	10	45%	0	0%	13	87%	9	56%	112	60%
Max	16	73%	30	100%	13	100%	32	84%	16	84%	17	100%	14	74%	15	68%	4	67%	15	100%	15	94%	143.5	78%

Date: July 20, 2016 Wednesday **Name:**

	Donahue St	Occup.	Donahue St	Occup.	Donahue St	Occup.	Decker St	Occup.	Boyce St	Occup.	Boyce St	Occup.	W 8th St	Occup.	W 8th St	Occup.	W 8th St	Occup.	Prince St	Occup.	Prince St	Occup.		
	8th-Boyce	%	Boyce-Decker	%	Decker-9th	%	Coulter-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Donahue-RR	%	Boyce-Decker	%	8th-Boyce	%	Total	%
Supply	**22**		**30**		**13**		**38**		**19**		**17**		**19**		**22**		**6**		**15**		**16**		185	
2:00 PM	6	27%	16	53%	4	31%	17	45%	10	53%	6	35%	13	68%	11	50%	3	50%	8	53%	2	13%	83	45%
2:15 PM	5	23%	15	50%	4	31%	16	42%	9	47%	5	29%	14	74%	12	55%	3	50%	7	47%	2	13%	80	43%
2:30 PM	5	23%	13	43%	3	23%	16	42%	11	58%	6	35%	12	63%	15	68%	3	50%	9	60%	2	13%	85	46%
2:45 PM	5	23%	15	50%	3	23%	15	39%	11	58%	5	29%	11	58%	13	59%	3	50%	10	67%	2	13%	82	44%
3:00 PM	6	27%	13	43%	3	23%	15	39%	10	53%	5	29%	11	58%	13	59%	3	50%	9	60%	2	13%	79	43%
3:15 PM	6	27%	14	47%	3	23%	14	37%	10	53%	6	35%	11	58%	12	55%	3	50%	9	60%	2	13%	79	43%
3:30 PM	8	36%	15	50%	3	23%	15	39%	11	58%	7	41%	11	58%	12	55%	3	50%	10	67%	2	13%	84	46%
3:45 PM	9	41%	13	43%	3	23%	17	45%	11	58%	6	35%	11	58%	14	64%	3	50%	10	67%	2	13%	87	47%
4:00 PM	10	45%	16	53%	3	23%	16	42%	13	68%	5	29%	11	58%	14	64%	2	33%	10	67%	2	13%	88	47%
4:15 PM	10	45%	16	53%	3	23%	17	45%	11	58%	6	35%	11	58%	14	64%	2	33%	8	53%	2	13%	86	46%
4:30 PM	10	45%	17	57%	3	23%	18	47%	12	63%	7	41%	11	58%	14	64%	2	33%	8	53%	3	19%	90	49%
4:45 PM	12	55%	17	57%	3	23%	19	50%	13	68%	6	35%	12	63%	14	64%	2	33%	8	53%	3	19%	93	50%
5:00 PM	14	64%	15	50%	2	15%	19	50%	13	68%	7	41%	12	63%	15	68%	2	33%	7	47%	3	19%	94	51%
5:15 PM	16	73%	18	60%	2	15%	19	50%	14	74%	9	53%	11	58%	17	77%	3	50%	8	53%	3	19%	102	55%
5:30 PM	17	77%	20	67%	2	15%	19	50%	13	68%	12	71%	12	63%	19	86%	1	17%	6	40%	3	19%	105	57%
5:45 PM	14	64%	21	70%	2	15%	18	47%	14	74%	12	71%	10	53%	17	77%	0	0%	8	53%	2	13%	100	54%
6:00 PM	13	59%	23	77%	2	15%	19	50%	15	79%	12	71%	9	47%	17	77%	0	0%	9	60%	3	19%	103	56%
6:15 PM	15	68%	24	80%	2	15%	20	53%	16	84%	13	76%	10	53%	18	82%	0	0%	9	60%	3	19%	110	59%
6:30 PM	11	50%	19	63%	2	15%	22	58%	18	95%	9	53%	9	47%	18	82%	0	0%	9	60%	4	25%	105	57%
6:45 PM	10	45%	20	67%	2	15%	25	66%	17	89%	8	47%	9	47%	19	86%	0	0%	7	47%	4	25%	105	57%
7:00 PM	12	55%	18	60%	1	8%	24	63%	15	79%	8	47%	10	53%	15	68%	0	0%	10	67%	3	19%	101	54%
7:15 PM	11	50%	16	53%	1	8%	24	63%	17	89%	8	47%	11	58%	18	82%	0	0%	8	53%	3	19%	103	56%
7:30 PM	11	50%	16	53%	1	8%	24	63%	17	89%	8	47%	9	47%	18	82%	0	0%	9	60%	3	19%	102	55%
7:45 PM	10	45%	14	47%	1	8%	25	66%	18	95%	8	47%	10	53%	18	82%	0	0%	9	60%	4	25%	105	57%
Max	17	77%	24	80%	4	31%	25	66%	18	95%	13	76%	14	74%	19	86%	3	50%	10	67%	4	25%	109.5	59%

Date: July 27, 2016 Wednesday

	Donahue St Occup.		Donahue St Occup.		Donahue St Occup.		Decker St Occup.		Boyce St Occup.		Boyce St Occup.		W 8th St Occup.		W 8th St Occup.		W 8th St Occup.		Prince St Occup.		Prince St Occup.			
	8th-Boyce	%	Boyce-Decker	%	Decker-9th	%	Coulter-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Donahue-RR	%	Boyce-Decker	%	8th-Boyce	%	Total	%
Supply	**22**		**30**		**13**		**38**		**19**		**17**		**19**		**22**		**6**		**15**		**16**		185	
2:00 PM	8	36%	14	47%	5	38%	15	39%	5	26%	6	35%	10	53%	12	55%	3	50%	7	47%	2	13%	74	40%
2:15 PM	8	36%	14	47%	5	38%	13	34%	5	26%	5	29%	10	53%	10	45%	4	67%	8	53%	2	13%	71	38%
2:30 PM	7	32%	13	43%	5	38%	15	39%	5	26%	8	47%	10	53%	10	45%	4	67%	8	53%	2	13%	75	40%
2:45 PM	8	36%	12	40%	5	38%	15	39%	5	26%	9	53%	8	42%	10	45%	4	67%	9	60%	2	13%	75	40%
3:00 PM	9	41%	14	47%	5	38%	15	39%	5	26%	8	47%	9	47%	11	50%	4	67%	9	60%	2	13%	77	42%
3:15 PM	7	32%	15	50%	5	38%	17	45%	5	26%	8	47%	9	47%	10	45%	4	67%	9	60%	2	13%	78	42%
3:30 PM	5	23%	16	53%	5	38%	18	47%	5	26%	8	47%	9	47%	11	50%	4	67%	10	67%	2	13%	80	43%
3:45 PM	6	27%	15	50%	5	38%	17	45%	6	32%	8	47%	9	47%	9	41%	4	67%	11	73%	2	13%	79	43%
4:00 PM	7	32%	16	53%	5	38%	16	42%	8	42%	8	47%	9	47%	11	50%	3	50%	11	73%	3	19%	83	45%
4:15 PM	11	50%	19	63%	5	38%	16	42%	7	37%	7	41%	10	53%	11	50%	2	33%	10	67%	3	19%	84	45%
4:30 PM	16	73%	19	63%	4	31%	15	39%	8	42%	8	47%	10	53%	11	50%	1	17%	10	67%	3	19%	86	46%
4:45 PM	19	86%	19	63%	4	31%	18	47%	10	53%	9	53%	9	47%	10	45%	2	33%	9	60%	3	19%	91	49%
5:00 PM	22	100%	21	70%	3	23%	19	50%	13	68%	8	47%	9	47%	13	59%	2	33%	10	67%	3	19%	100	54%
5:15 PM	21	95%	19	63%	2	15%	18	47%	15	79%	8	47%	9	47%	14	64%	2	33%	9	60%	3	19%	99	54%
5:30 PM	20	91%	19	63%	2	15%	19	50%	14	74%	8	47%	9	47%	13	59%	2	33%	10	67%	3	19%	99	53%
5:45 PM	15	68%	22	73%	2	15%	18	47%	17	89%	6	35%	12	63%	14	64%	0	0%	9	60%	2	13%	98	53%
6:00 PM	15	68%	18	60%	2	15%	19	50%	18	95%	6	35%	9	47%	13	59%	0	0%	10	67%	2	13%	95	51%
6:15 PM	14	64%	23	77%	2	15%	19	50%	18	95%	8	47%	9	47%	12	55%	0	0%	10	67%	2	13%	98	53%
6:30 PM	15	68%	18	60%	2	15%	19	50%	17	89%	10	59%	10	53%	13	59%	0	0%	9	60%	3	19%	99	53%
6:45 PM	12	55%	12	40%	2	15%	20	53%	17	89%	8	47%	11	58%	15	68%	0	0%	9	60%	3	19%	96	52%
7:00 PM	9	41%	15	50%	2	15%	23	61%	17	89%	6	35%	10	53%	13	59%	0	0%	9	60%	3	19%	94	51%
7:15 PM	7	32%	16	53%	1	8%	22	58%	16	84%	6	35%	10	53%	13	59%	0	0%	9	60%	4	25%	92	50%
7:30 PM	5	23%	15	50%	1	8%	21	55%	16	84%	6	35%	12	63%	12	55%	0	0%	9	60%	5	31%	92	50%
7:45 PM	4	18%	15	50%	1	8%	22	58%	15	79%	5	29%	11	58%	12	55%	0	0%	9	60%	4	25%	88	48%
Max	22	100%	23	77%	5	38%	23	61%	18	95%	10	59%	12	63%	15	68%	4	67%	11	73%	5	31%	100	54%

Date: August 6, 2016 Saturday **Name:**

	Parking Lot	Occup.	Parking Lot	Occup.	Donahue St	Occup.	Donahue St	Occup.	Donahue St	Occup.	Decker St	Occup.	Boyce St	Occup.	Boyce St	Occup.	W 8th St	Occup.	W 8th St	Occup.	W 8th St	Occup.	Prince St	Occup.	Prince St	Occup.		
	A	%	B	%	8th-Boyce	%	Boyce-Decker	%	Decker-9th	%	Coulter-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Coulter-Prince	%	Prince-Donahue	%	Donahue-RR	%	Boyce-Decker	%	8th-Boyce	%	Total	%
Supply	**26**		**13**		**22**		**30**		**13**		**38**		**20**		**17**		**19**		**22**		**6**		**15**		**16**		186	
2:00 PM	1	4%	2	15%	6	27%	12	40%	3	23%	20	53%	12	60%	11	65%	14	74%	10	45%	3	50%	7	47%	3	19%	91	49%
2:15 PM	1	4%	1	8%	6	27%	10	33%	3	23%	19	50%	11	55%	9	53%	16	84%	11	50%	4	67%	7	47%	6	38%	93	50%
2:30 PM	1	4%	1	8%	6	27%	11	37%	3	23%	21	55%	13	65%	9	53%	16	84%	11	50%	4	67%	8	53%	5	31%	97	52%
2:45 PM	1	4%	1	8%	7	32%	11	37%	3	23%	19	50%	12	60%	9	53%	18	95%	11	50%	3	50%	8	53%	6	38%	97	52%
3:00 PM	1	4%	1	8%	7	32%	12	40%	3	23%	21	55%	12	60%	9	53%	19	100%	12	55%	4	67%	9	60%	6	38%	103	56%
3:15 PM	1	4%	1	8%	5	23%	10	33%	3	23%	21	55%	12	60%	10	59%	18	95%	10	45%	4	67%	9	60%	6	38%	99	53%
3:30 PM	1	4%	1	8%	7	32%	7	23%	3	23%	22	58%	12	60%	10	59%	19	100%	10	45%	4	67%	10	67%	6	38%	102	55%
3:45 PM	1	4%	1	8%	8	36%	9	30%	3	23%	23	61%	13	65%	10	59%	19	100%	10	45%	4	67%	10	67%	6	38%	105	57%
4:00 PM	1	4%	1	8%	8	36%	9	30%	3	23%	27	71%	13	65%	10	59%	16	84%	9	41%	4	67%	10	67%	6	38%	105	57%
4:15 PM	1	4%	1	8%	8	36%	10	33%	3	23%	27	71%	15	75%	10	59%	17	89%	8	36%	3	50%	11	73%	6	38%	108	58%
4:30 PM	1	4%	1	8%	7	32%	11	37%	7	54%	26	68%	13	65%	9	53%	16	84%	7	32%	3	50%	11	73%	7	44%	105	56%
4:45 PM	1	4%	1	8%	3	14%	14	47%	8	62%	28	74%	13	65%	12	71%	17	89%	6	27%	3	50%	11	73%	8	50%	111	60%
5:00 PM	1	4%	1	8%	2	9%	16	53%	9	69%	29	76%	17	85%	13	76%	17	89%	6	27%	2	33%	11	73%	9	56%	118	63%
5:15 PM	1	4%	1	8%	2	9%	14	47%	9	69%	28	74%	16	80%	12	71%	17	89%	7	32%	2	33%	11	73%	10	63%	116	62%
5:30 PM	1	4%	1	8%	2	9%	14	47%	9	69%	27	71%	17	85%	11	65%	17	89%	7	32%	2	33%	11	73%	9	56%	114	61%
5:45 PM	1	4%	1	8%	2	9%	14	47%	9	69%	27	71%	16	80%	11	65%	17	89%	7	32%	2	33%	11	73%	9	56%	113	61%
6:00 PM	1	4%	2	15%	2	9%	14	47%	9	69%	30	79%	18	90%	12	71%	16	84%	6	27%	0	0%	13	87%	9	56%	117	63%
6:15 PM	1	4%	2	15%	2	9%	14	47%	8	62%	31	82%	17	85%	14	82%	16	84%	5	23%	0	0%	12	80%	10	63%	117	63%
6:30 PM	1	4%	2	15%	2	9%	14	47%	9	69%	30	79%	17	85%	13	76%	15	79%	7	32%	0	0%	12	80%	10	63%	117	63%
6:45 PM	1	4%	2	15%	4	18%	14	47%	8	62%	31	82%	17	85%	13	76%	15	79%	6	27%	0	0%	12	80%	10	63%	117	63%
7:00 PM	1	4%	2	15%	5	23%	13	43%	8	62%	31	82%	20	100%	13	76%	19	100%	7	32%	0	0%	12	80%	10	63%	125	67%
7:15 PM	1	4%	1	8%	4	18%	13	43%	8	62%	31	82%	19	95%	13	76%	19	100%	7	32%	0	0%	12	80%	9	56%	123	66%
7:30 PM	1	4%	1	8%	4	18%	13	43%	9	69%	31	82%	18	90%	13	76%	19	100%	7	32%	0	0%	12	80%	9	56%	122	66%
7:45 PM	1	4%	1	8%	2	9%	14	47%	9	69%	31	82%	18	90%	13	76%	18	95%	6	27%	0	0%	12	80%	9	56%	120	64%
	Lot A was closed until 5																											
Hours:					**Miles:**																							
Max	1	4%	2	15%	8	36%	16	53%	9	69%	31	82%	20	100%	14	82%	19	100%	12	55%	4	67%	13	87%	10	63%	125	67%

Deturk Type SL1 - Street Light

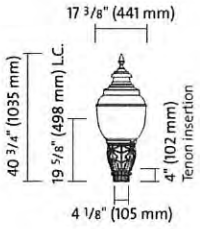
Reliable efficiency, designed for performance

SERENADE DSX
URBAN LUMINAIRE

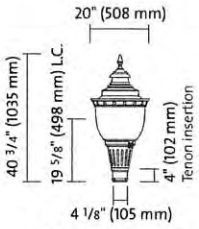
Project:
Location:
Catalogue:
Type of Luminaire:
Applicant: Lamps: Qty:
Notes:

PHILIPS LUMEC SERENADE SERIES
URBAN LUMINAIRE

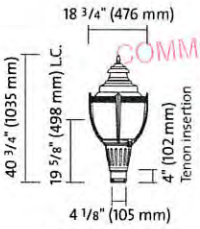
Philips Lumec's Serenade Series is a beautiful staple of elegance and subtlety with a mighty and brilliant heart. It can be used to accentuate any environment no matter how harsh the prevailing conditions might be. The Serenade is a straightforward, no-nonsense luminaire, designed for performance and reliability.



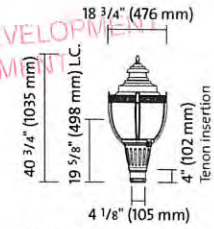
S55-SFOK
EPA: 2.25 sq. ft
Weight: 58 lbs (26.31 kg)



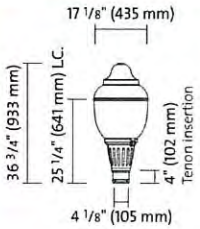
S55-SFX-CR55
EPA: 2.50 sq. ft
Weight: 63 lbs (28.58 kg)



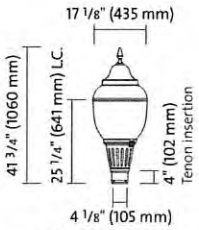
S55C1-SFX
EPA: 2.60 sq. ft
Weight: 62 lbs (28.12 kg)



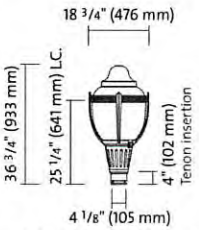
S55C2-SFX-CPTC-CUC
EPA: 2.57 sq. ft
Weight: 62 lbs (28.12 kg)



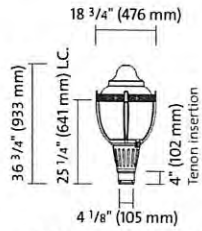
S56-SFX
EPA: 2.02 sq. ft
Weight: 67 lbs (30.39 kg)



S56-SFX-FN10
EPA: 2.02 sq. ft
Weight: 67 lbs (30.39 kg)



S56C1-SFX-BSC
EPA: 2.37 sq. ft
Weight: 67 lbs (30.39 kg)



S56C2-SFX-CUC
EPA: 2.34 sq. ft
Weight: 71 lbs (32.31 kg)

Benefits

- Glass globe with no exterior prism.
- Cut-off optical system having as low as 1% uplight with DSX optics.
- Superior efficiency & lighting uniformity, available with metal halide (MH) and high-pressure sodium (HPS) lamp sources as well as induction lamps (QL) and LED.
- Toolfree access & IP66 sealed optical chamber.

PHILIPS LUMEC

Lamps / LED

LED = Philips Lumileds Luxeon R, CRI = 70, CCT = 4000K (+/- 350K)
System (LED + driver) Rated life = 100,000 hrs[1]
LED light engine technical information for S55, S56, S55C1, S56C1, S55C2, S56C2

Lamp	Typical delivered lumens	Typical system wattage[2] (w)	Typical current @ 120V (A)	Typical current @ 208V (A)	Typical current @ 240V (A)	Typical current @ 277V (A)	LED current (mA)	HID equivalent[3]	Luminaire efficacy rating (Lm/W)	BUG rating
35W32LED4K-R-LE2	3468	36	0.29	0.17	0.16	0.15	350	70 -100	96.3	B1-U2-G1
35W32LED4K-R-LE3	3439	36	0.29	0.17	0.16	0.15	350	70 -100	95.5	B1-U2-G2
35W32LED4K-R-LE4	3520	36	0.29	0.17	0.16	0.15	350	70 -100	97.8	B1-U2-G1
35W32LED4K-R-LE5	3694	36	0.29	0.17	0.16	0.15	350	70 -100	102.6	B3-U2-G1
55W32LED4K-R-LE2	4916	53	0.40	0.23	0.21	0.19	530	100 - 150	92.8	B1-U3-G1
55W32LED4K-R-LE3	4880	53	0.40	0.23	0.21	0.19	530	100 - 150	92.1	B1-U3-G2
55W32LED4K-R-LE4	4984	53	0.40	0.23	0.21	0.19	530	100 - 150	94.0	B1-U3-G2
55W32LED4K-R-LE5	5232	53	0.40	0.23	0.21	0.19	530	100 - 150	98.7	B3-U3-G1
55W48LED4K-R-LE2	5105	55	0.38	0.22	0.23	0.21	350	100 - 150	92.8	B2-U3-G2
55W48LED4K-R-LE3	5064	55	0.38	0.22	0.23	0.21	350	100 - 150	92.1	B2-U3-G2
55W48LED4K-R-LE4	5172	55	0.38	0.22	0.23	0.21	350	100 - 150	94.0	B1-U3-G2
55W48LED4K-R-LE5	5429	55	0.38	0.22	0.23	0.21	350	100 - 150	98.7	B3-U3-G1
80W48LED4K-R-LE2	7192	79	0.63	0.36	0.34	0.31	530	150 - 175	91.0	B2-U3-G2
80W48LED4K-R-LE3	7132	79	0.63	0.36	0.34	0.31	530	150 - 175	90.3	B2-U3-G2
80W48LED4K-R-LE4	7287	79	0.63	0.36	0.34	0.31	530	150 - 175	92.2	B2-U3-G2
80W48LED4K-R-LE5	7649	79	0.63	0.36	0.34	0.31	530	150 - 175	96.8	B3-U3-G2

Optical System / LED

Prismatic globe

IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with globe having an inner prismatic surface permanently sealed onto the lower part of the heat sink.

LE2: Asymetrical
LE3: Asymetrical
LE4: Asymetrical
LE5: Symmetrical (square)

> LE2/LE3/LE4/LE5 available in acrylic and borosilicate.
> House shield available in option (HS)

Prismatic globe

IP66 rated optical system, composed of individual pre-oriented lens to achieve desired distribution, assembled with globe having an inner prismatic surface permanently sealed onto the lower part of the heat sink.

LEH2: Asymmetrical : Extensive
LEH3: Asymmetrical : Extensive

> LEH2/LEH3 available in acrylic and borosilicate.
> House shield available in option (HS)

Voltage

120 / 208 / 240 / 277 / 347 / 480

Optical System /QL

(Lamps included)

DSX Optics

Optical system made of a hydroformed reflector sealed on a prismatic globe.

DSX5: Symmetrical : Cutoff

> House shield available in option (HS)

Voltage

120 / 208 / 240 / 277

Lamps / QL

Wattage	DSX5
55 QL	✓
85 QL	✓

✓ : Available

High frequency generator for induction lamp (4000K).
Instant start. Operating range 50-60 Hz or DC.
Lamp minimum starting temperature -40F (-40 °C).

1 L70 = 100,000 hrs (at ambient temperature = 25°C and forward current = 700 mA)
2 System wattage includes the lamp and the LED driver.
3 Equivalence should always be confirmed by a photometric layout.
* Photometry available on Philips Lumec's web site www.philips.com/lumec.

Note: Due to rapid and continuous advances in LED technology, LED luminaire data is subject to change without notice and at the discretion of Philips.

* Photometry available on Philips Lumec's web site www.philips.com/lumec.

Lamps / HID

	GL				ACDR			
Wattage	DSX3	DSX5	DSH3	DSH5	DSX3	DSX5	DSH3	DSH5
50 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
70 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
100 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
150 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
175 MH, mogul	✓	✓	✓	✓	✓	✓	✓	✓
200 MH, mogul	✓	✓	✓	✓	N/A	N/A	N/A	N/A
250 MH, mogul	✓	✓	✓	✓	N/A	N/A	N/A	N/A
35 HPS, medium	✓	✓	✓	✓	✓	✓	✓	✓
50 HPS, mogul	✓	✓	✓	✓	✓	✓	✓	✓
70 HPS, mogul	✓	✓	✓	✓	✓	✓	✓	✓
100 HPS, mogul	✓	✓	✓	✓	✓	✓	✓	✓
150 HPS, mogul	✓	✓	✓	✓	✓	✓	✓	✓
200 HPS, mogul	✓	✓	✓	✓	N/A	N/A	N/A	N/A
250 HPS, mogul	✓	✓	✓	✓	N/A	N/A	N/A	N/A

✓ : Available N/A : Not available

CosmoPolis™ / new generation of ceramic metal halide lamp

	GL				ACDR			
Wattage	DSX3	DSX5	DSH3	DSH5	DSX3	DSX5	DSH3	DSH5
50 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
70 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
100 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓

✓ : Available

Master Color Elite

	GL				ACDR			
Wattage	DSX3	DSX5	DSH3	DSH5	DSX3	DSX5	DSH3	DSH5
50 MH, medium	✓	✓	✓	✓	✓	✓	✓	✓
70 MH, medium	✓	✓	✓	✓	N/A	N/A	N/A	N/A

✓ : Available N/A : Not available

Optical System / HID

(Lamps not included)

DSX Optics

Optical system made of a hydroformed reflector sealed on a prismatic globe.

DSX3: Asymmetrical / Cutoff

DSX5: Symmetrical / Cutoff

> House shield available in option (HS)

DSH Optics

Optical system made of a hydroformed reflector sealed on a prismatic globe.

DSH3: Asymmetrical / Extensive Non-Cutoff

DSH5: Symmetrical / Extensive Non-Cutoff

> House shield available in option (HS)

* Photometry available on Philips Lumec web site www.philips.com/lumec.

Voltage

HID [1]: 120 / 208 / 240 / 277 / 347 / 480
CosmoPolis™: 120 / 208 / 240 / 277
Master Color Elite: 208 / 240 / 277

[1] Multi-top ballast also available.

Luminaire Options

HS House shield
BC Block connector
TN3 Adaptor to fit over a 3" (76 mm) O.D. by 4" (102 mm) long tenon
TN3.5 Adaptor to fit over a 3 1/2" (89 mm) O.D. by 4" (102 mm) long tenon
FNC Copper-colored painted finial
FS Fusing (consult factory)
PH8 Photoelectric cell

S55C1/S55C2/S56C1/S56C2

BS Brass decorative band
BSC Brass decorative band, protected by a polyester clear coat
CU Copper decorative bands, located on the ring gard
CUC Copper decorative band, protected by a polyester clear coat

S55/S55C1/S55C2

CPT Copper cupola
CPTC Copper cupola, protected by a polyester clear coat
BST Brass decorative cupola
BSTC Brass decorative cupola, protected by a polyester clear coat

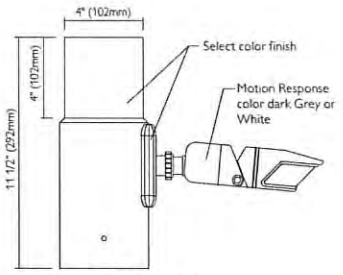
S55

CR55 Decorative crown

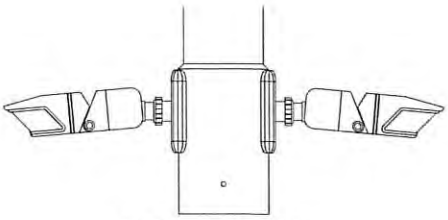
Luminaire Options (continued)

Motion Response:

Tenon mount motion response provides 270° coverage on an adjustable knuckle. The coverage equals to up to 6 times the sensor height. It is an option offered jointly with the Dynadimmer OVR option, that can bring the light up to 100% when the motion response is triggered. It is available in a single or double mounting option. Finish options for the motion response device are white or dark gray. Finish options for the tenon must be specified to match the luminaire and pole. The tenon mount is fully rotatable 360°. This option is available for a 4" OD x 4" long tenon. See instruction sheet for time setting functionality (12 second to 16 minute turn off options) and for mounting instructions.



MR4PG1 or MR4PW1



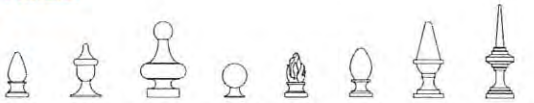
MR4PG2 or MR4PW2

Mountings:

(Consult the Pole Guide for details and the complete line of mountings)

CRA **CRC** **CRD** **CRE** **CRF**

Finials:



FN1 **FN2** **FN3** **FN4** **FN9** **FN9** **FN10** **FN11**

Adaptors

SFX **SFOK**

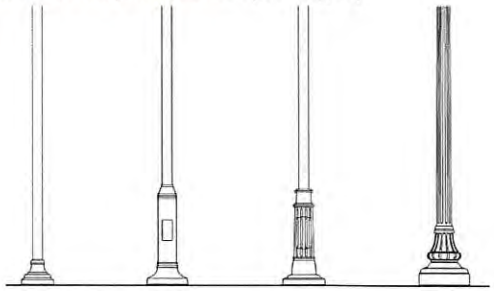
Finishes

(Consult Philips Lumec's Color Chart for complete specifications)

The specially formulated Lumital powder coat finish is available in a range of many standard colors.

Poles and Pole options

(Consult the Pole Guide for details and the complete line of poles)



APR4-LBC3 **RA61** **R80-TBC1** **RTA40**

Luminaire ordering sample

Luminaire	Lamp	Globe/Lens	Optical system	Voltage	Adaptor	Options	Mounting & Configuration	Pole	Finish
S55	90W49LED4K	GL	LE3	120	SFOK	FN10	CRA-1A	RTA40	BKTX

Ordering Guide (Accessories) - Motion Response*

Must be ordered as a separate line item

example: ACC-120-MR4PGI-BKTX

Accessory
ACC

Voltage
120: 120V
277: 277V

Motion Response Module*
MR4PG1: Single Grey
MR4PG2: Double Grey
MR4PW1: Single White
MR4PW2: Double White

Finish
(Consult Philips Lumec's Color Chart for complete specifications)

*OVR option is required for Motion Response Accessory

Maintenance

1. Access to internal component

The luminaire's hood can be opened by simply opening the latch located on the technical ring. The hood can then be pivoted along a hinge incorporated in the technical ring. For ease of maintenance, a retaining mechanism holds the globe at a 90° angle from the technical ring.

2. Access to lamp

A simple quarter-turn of the sealed optic shutter provides easy access to the lamp. Quick-disconnect terminals between the lamp and the ballast tray ensure safe and easy lamp replacement.

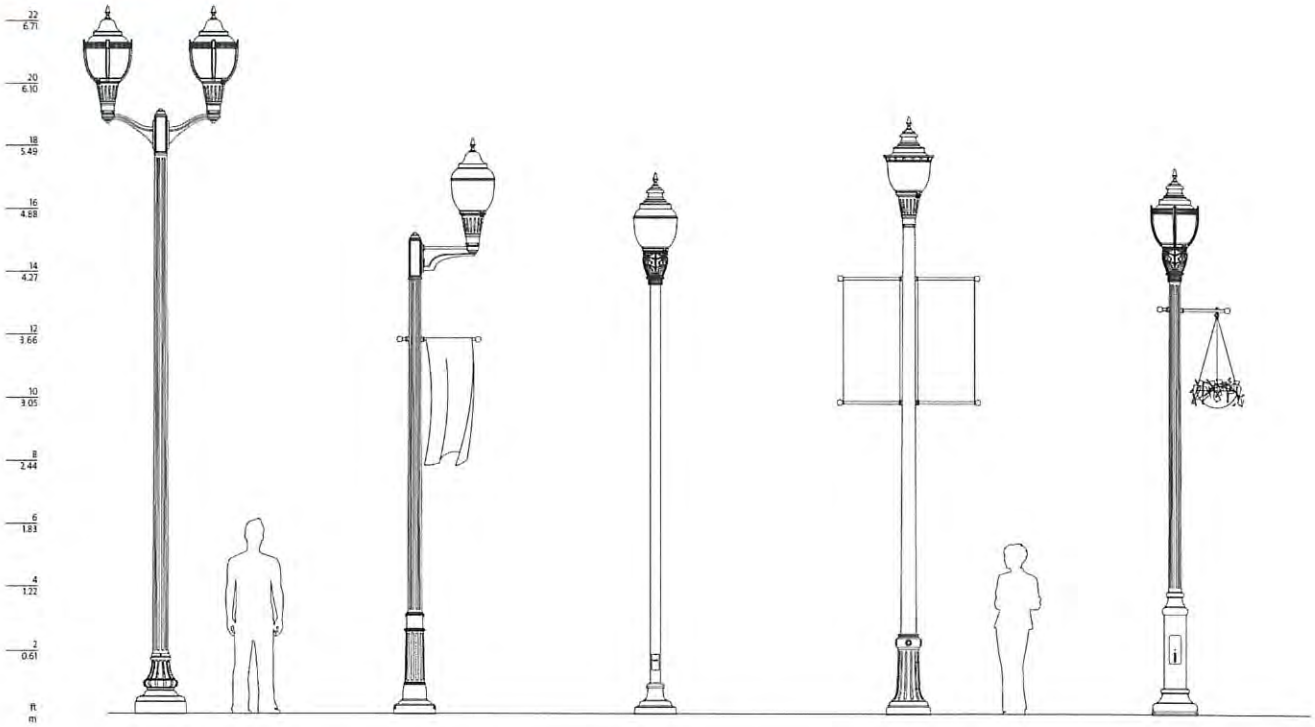
3. Access to ballast

The toolfree drop-in unitized ballast tray is slipped into the post top box which rests on the optical support plate. Here again, the use of quick-disconnect terminals ensures safe and easy ballast maintenance.

4. Access to PH8

Once the ballast tray is removed, tool-free access to the photoelectric cell (PH8) is then possible. Orienting the cell is also an easy step to achieve by simply turning the luminaire's technical ring in the desired position.

Assembly examples



Luminaire:
S56C2-SFX-FN10
Mounting: **CRF-2**
Pole: **RTA50**

Luminaire:
S56-SFX-FN10
Mounting: **CRC-1A**
Pole: **RTA800BA**

Luminaire:
S55-SFOK-FN10
Pole: **APR4-LBC3**

Luminaire:
S55-SFX-CR55-FN10
Pole: **RTA126-BA**

Luminaire:
S55C1-SFOK-FN10
Pole: **RTA61-PS**

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Phone: 855-486-2216

Imported by: Philips Lighting,
a division of Philips Electronics Ltd.
281 Hillmount Rd,
Markham, ON Canada L6C 2S3
Tel. 800-668-9008

Deturk Type SL2 - Inner Courtyard Parking area

PHILIPS

GARDCO

Site & Area

PureForm

21" housing

Project:

Location:

Cat.No:

Type:

Qty:

Notes:

Philips Gardco PureForm luminaires combine LED performance excellence and advanced LED thermal management technology with a distinct purity of style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing. PureForm is defined by its high performance, sleek low profile design and rugged construction.

Ordering guide

example: P21-APD-A1-1-5M-130LA-NW-120-NP-PCB

Prefix	Controls	Arm	Mounting	Optical System[8]	Wattage	Color Temp	Voltage	Finish	Options
P21 –	–	–	–	–	–	–	–	–	
P21- PureForm 21" fixture	**—** Standard luminaire **DIM** 0-10V Dimming **APD**[1] Automatic Profile Dimming **APD-MRO**[2] APD with Motion Response Override pole mounted sensor **APD-MRI**[3] APD with Motion Response Override luminaire mounted sensor **MRI**[3] Motion Response at 50% low, luminaire mount sensor **MR50**[2] Motion Response at 50% low, pole mounted sensor **Wireless Controls** (Remote wireless controller available. See p.2 for details) **LLC2**[1,4,5] #2 lens for 8' mounting heights **LLC3**[1,4,5] #3 lens for 9-20' mounting heights **LLC4**[1,4,5] #4 lens for 21-40' mounting heights	**A1**[6] Standard 9" Arm **A2**[6] Short 5" Arm **A3**[6] Decorative Arm **MA** Mast Arm Fitter (requires 2 3/8" O.D. Mast Arm)	**1** Standard **2** 2@180 **2@90** 2@90 **3** 3@90 **3@120** 3@120 **4** 4@90 **W** Wall Mount **WS**[7] Wall mount including surface conduit rear entry permitted	**Standard Optic Position** **2** Type 2 **3** Type 3 **4** Type 4 **5M** Type 5 Medium **5W** Type 5 Wide **BLC** Backlight Ctrl **2BL** Type 2 with backlight (less shield) **LCL**[9] LEED Corner Cutoff Optics **LCR**[9] LEED Corner Cutoff Optics **Optics Rotated Left (90°)**[10] **2-90** Type 2 **3-90** Type 3 **4-90** Type 4 **BLC-90** Backlight Ctrl **2BL-90** Type 2 with backlight (less shield) **Optic Rotated Right (270°)**[10] **2-270** Type 2 **3-270** Type 3 **4-270** Type 4 **BLC-270** Backlight Ctrl **2BL-270** Type 2 with backlight (less shield)	**350mA** **55LA** **70LA** **90LA** **530mA** **80LA** **105LA** **130LA** **640mA** **165LA**[11] **700mA** **110LA** **140LA** **180LA** **800mA** **200LA**[11]	**CW** Cool White 5,700K 70CRI (nominal) **NW** Neutral White 4,000K 70CRI (nominal) **WW** Warm White 3,000K 80CRI (nominal)	**120** 120V **208** 208V **240** 240V **277** 277V **347** 347V **480** 480V **UNV** 120-277V 50hz/60hz **HVU** 347-480V 50hz/60hz	**BRP** Bronze Paint **BLP** Black Paint **WP** White Paint **NP** Natural Paint **OC** Optional Color Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) **SC** Special color Specify, must supply color chip. Requires factory quote.	**TL** Tool-Less entry and driver removal hardware **TB** Terminal Block **F**[12] Fusing **LF** In-Line/In-Pole Fusing **PC**[4,5,13] Receptacle with Photocell (Includes PCR5) **PCB**[4,5,13] Photocell Button **PCR5**[4,5,14,15] Photocell Receptacle only with 2 dimming connections **PCR7**[4,5,15,16] Photocell Receptacle only with 2 dimming and 2 auxiliary connections **EHHS** External Houseside Shield **PTF2** Pole Top Fitter for 2 3/8"- 3" Tenon **PTF3** Pole Top Fitter for 3"- 3 1/2" Tenon **PTF4** Pole Top Fitter for 3 1/2"- 4" Tenon **SPA1-2** Square Pole Adapter for use with A1 or A2 Arms **SPA3**[6] Square Pole Adapter for use with A3 Arms **DL**[17] Diffusing Lens **CLR**[17] Clear Glass Lens **POLY**[17] Polycarbonate Lens (1 year warranty on lens) **BD** Bird Deterrant Spike Kit – consist of 25 injection molded plastic bird deterrent spikes (field installed only).

1. Available 120–277V only (UNV, 120, 208, 240 & 277).
2. Available 120V or 277V only. MR50 and APD-MRO require one motion sensor per pole, ordered separately. See page 2 for Accessories.
3. Available 120V or 277V only. Wattages 180LA and 200LA require outboarded sensor enclosure mounted to the arm of the luminaire (A1 arm only).
4. Not available with A3 Arm Style.
5. LLC2/LLC3/LLC4 wireless controls not configurable with PC/PCB/PCR5/PCR7 Options. See pages 6-7 for more info.
6. Arm Styles mount to a round pole with no adapter. If mounting to a square pole, specify Square Pole Adapter option: SPA1-2 for A1/A2 arms, or SPA3 for A3 arms.
7. Available with A1 or A2 Arms only. Not available in P21-MR50, or P21-APD-MRO.
8. Luminaire door frame and optic assembly provided standard without glass lens. Specify CLR option for clear glass lens.
9. Available with 130LA or 200LA only.
10. See page 8–9 for information on optical rotation prior to ordering.
11. 200LA and 165LA not available in 347V or 480V.
12. Available with A1 arm or with MA mounting only. Provide specific input voltage.
13. Not configurable with 480V. Voltage must be specified.
14. Works with 3-pin or 5-pin NEMA photocell/dimming device.
15. If ordered with DIM, APD, MRI, MR50, APD-MRI, APD-MRO, dimming will not be connected to NEMA receptacle.
16. Works with 3-pin or 5-pin NEMA photocell/dimming device and auxiliary connections are not connected (for future use only).
17. Option reduces performance.

P21 PureForm LED area luminaire

21" housing

PureForm Accessories (order separately)

MS-A-120V

120V Input Area Motion Sensor

For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

MS-A-277V

277V Input Area Motion Sensor

For MR50 (Motion Response) or APD-MRO (Automatic Profile Dimming with Motion Response Override)

Note: Motion Sensors are ordered separately, with one (1) motion sensor required per pole location for MR50 or APD-MRO luminaires. See Luminaire Configuration Information on page 5 for more details. Area motion sensor color is Arctic White. MRI and APD-MRI luminaires include an integral motion sensor.

PureForm Wireless Controls Accessories (for wall or pole mount)[1,2,3,4]

LLCR2-(F)

Standalone wall or pole wireless controller with #2 Lens.

LLCR3-(F)

Standalone wall or pole wireless controller with #3 Lens.

LLCR4-(F)

Standalone wall or pole wireless controller with #4 Lens.

1. When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size)
2. 120-277V only.
3. Must specify finish (F=Specify matching finish)
4. Luminaire configuration must include 0-10V Dimming 'P21-DIM' option when Wireless Controls Accessories are specified

LED Wattage and Lumen Values

				Type 2				Type 2BL				Type 3			
Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts[5]	Lumen Output[5,6]	Efficacy (LPW)	BUG Rating	Average System Watts[5]	Lumen Output[5,6]	Efficacy (LPW)	BUG Rating	Average System Watts[5]	Lumen Output[5,6]	Efficacy (LPW)	BUG Rating
55LA	48	350	4000K	54	5,327	99	B1-U0-G1	54	5,981	111	B3-U0-G3	54	5,330	98	B1-U0-G1
70LA	64	350	4000K	69	7,350	107	B1-U0-G1	69	8,252	120	B3-U0-G3	69	7,354	107	B1-U0-G2
90LA	80	350	4000K	88	9,370	106	B1-U0-G2	89	10,521	119	B3-U0-G3	89	9,375	106	B1-U0-G2
80LA	48	530	4000K	78	7,656	98	B1-U0-G2	79	8,596	109	B3-U0-G3	79	7,660	97	B1-U0-G2
105LA	64	530	4000K	103	10,521	102	B1-U0-G2	103	11,814	114	B3-U0-G3	103	10,527	102	B1-U0-G2
130LA	80	530	4000K	127	13,490	106	B1-U0-G2	128	15,147	118	B4-U0-G4	128	13,498	105	B1-U0-G2
165LA	80	640	4000K	162	15,651	97	B2-U0-G2	162	17,425	107	B4-U0-G4	162	15,691	97	B1-U0-G2
110LA	48	700	4000K	108	9,735	90	B1-U0-G2	108	10,931	101	B3-U0-G3	108	9,740	90	B1-U0-G2
140LA	64	700	4000K	137	13,287	97	B2-U0-G2	138	14,918	108	B4-U0-G4	138	13,294	96	B1-U0-G2
180LA	80	700	4000K	176	16,723	95	B2-U0-G2	177	18,777	106	B4-U0-G4	177	16,732	94	B2-U0-G3
200LA	80	800	4000K	205	18,514	90	B2-U0-G2	206	20,788	101	B4-U0-G4	206	18,524	90	B2-U0-G3

				Type 4				Type 5M				Type 5W			
Ordering Code	Total LEDs	LED Current (mA)	Color Temp.	Average System Watts[5]	Lumen Output[5,6]	Efficacy (LPW)	BUG Rating	Average System Watts[5]	Lumen Output[5,6]	Efficacy (LPW)	BUG Rating	Average System Watts[5]	Lumen Output[5,6]	Efficacy (LPW)	BUG Rating
55LA	48	350	4000K	54	5,279	98	B1-U0-G1	54	6,059	112	B2-U0-G0	53	6,506	122	B3-U0-G1
70LA	64	350	4000K	69	7,284	106	B1-U0-G2	69	8,360	122	B3-U0-G1	70	8,966	128	B3-U0-G2
90LA	80	350	4000K	88	9,286	105	B1-U0-G2	88	10,657	121	B3-U0-G1	86	11,437	133	B4-U0-G2
80LA	48	530	4000K	78	7,588	97	B1-U0-G2	79	8,708	111	B3-U0-G1	82	9,341	115	B3-U0-G2
105LA	64	530	4000K	103	10,428	101	B1-U0-G2	103	11,967	116	B3-U0-G1	108	12,839	119	B4-U0-G2
130LA	80	530	4000K	127	13,370	105	B1-U0-G2	128	15,344	120	B3-U0-G1	134	16,470	123	B4-U0-G2
165LA	80	640	4000K	162	15,389	90	B1-U0-G2	162	17,663	109	B4-U0-G1	164	19,319	118	B4-U0-G2
110LA	48	700	4000K	108	9,648	96	B1-U0-G2	108	11,073	102	B3-U0-G1	110	12,115	108	B4-U0-G2
140LA	64	700	4000K	137	13,168	94	B1-U0-G2	138	15,112	110	B4-U0-G1	146	16,272	110	B4-U0-G2
180LA	80	700	4000K	176	16,574	95	B2-U0-G2	177	19,021	108	B4-U0-G1	179	20,401	114	B5-U0-G3
200LA	80	800	4000K	206	18,349	89	B2-U0-G3	206	21,058	102	B4-U0-G2	206	22,079	106	B5-U0-G3

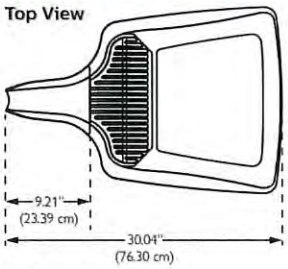
5. Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
6. Lumen values based on photometric tests performed in compliance with IESNA LM-79.

P21 PureForm LED area luminaire

21" housing

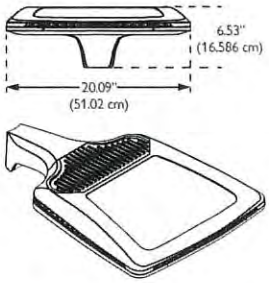
Dimensions – Standard Arm (A1)

Top View



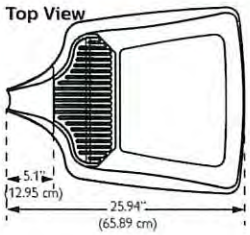
Side View

End View

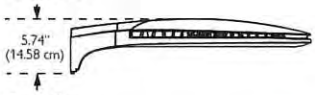


Dimensions – Short Arm (A2)

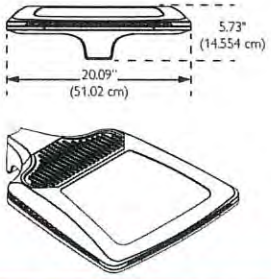
Top View



Side View

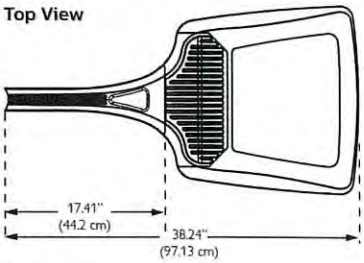


End View



Dimensions – Decorative Arm (A3)

Top View

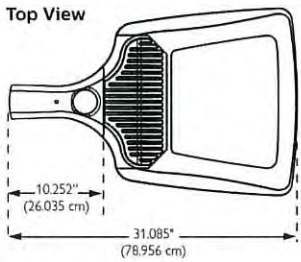


Side View

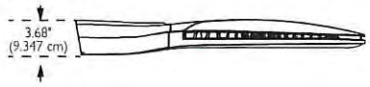
End View

Dimensions – Mast Arm (MA)

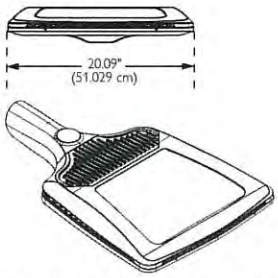
Top View



Side View

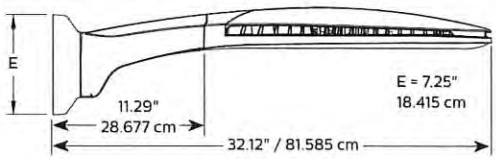


End View

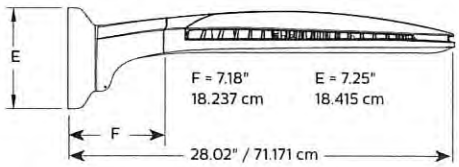


Dimensions – Wall Mount

With A1 Standard Arm



With A2 Short Arm



Single Luminaire Weight

Mounting	Approx.Weight
A1	38 lbs / 17.237 kg
A2	37 lbs / 16.783 kg
A3	41.5 lbs / 18.824 kg
MA	38 lbs / 17.237 kg
W or WS	39 lbs / 17.69 kg

Effective Projected Area (ft^2/m^2)

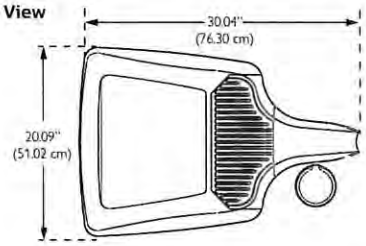
Mounting	Single	Twin @ 180	3/4
A1	0.35 / 0.033	0.70 / 0.066	1.25 / 0.117
A2	0.30 / 0.028	0.60 / 0.056	1.10 / 0.103
A3	0.50 / 0.047	1.0 / 0.093	1.70 / 0.158
MA	0.35 / 0.033	N/A	N/A

P21 PureForm LED area luminaire

21" housing

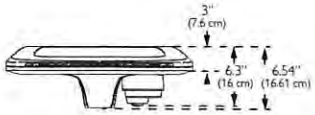
Dimensions – PureForm with wireless controls (luminaire mounted controller)

Top View



Side View

End View



Luminaire Configuration Information

P21

Philips Gardco PureForm LED standard luminaire providing constant wattage and constant light output when power to the luminaire is energized.

P21-DIM

Philips Gardco PureForm LED luminaire provided with 0 -10V dimming for connection to a control system provided by Philips or by others.

P21-APD

Philips Gardco PureForm LED luminaire with Automatic Profile Dimming. Luminaire is provided with a programmable LED Driver, programmed to go to 50% power, 50% light output two (2) hours prior to night time mid-point and remain at 50% for six (6) hours after night time mid-point. Mid-point is continuously recalculated by the programmable LED Driver based on the average mid-point of the last two full night cycles. Short duration cycles, and power interruptions are ignored and do not affect the determination of mid-point.

P21-APD is available in 120V – 277V input only.

P21-APD Dimming Profile:

100%	2 hours	6 hours	100%
	50%	50%	
Power On	Mid Point		Power Off

The P21-APD offers many of the advantages of a sophisticated control system, including an average energy savings of at least 33% versus constant wattage, constant light output systems, without the need for a control system.

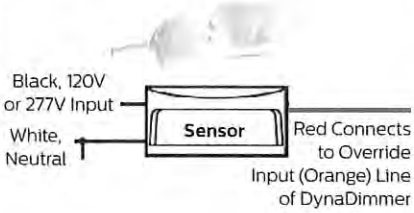
P21-MR50

Philips Gardco PureForm LED luminaire with motion response, providing a 50% power reduction on low and a commensurate reduction in light output. The power and light output reduction is accomplished utilizing the Philips DynaDimmer module, programmed for a constant 50% power. Power supplied by the motion sensor connected to the override line on the DynaDimmer takes the luminaire to high setting, 100% power and light output, when motion is detected. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

This configuration is not available for use with wall mounted luminaires.

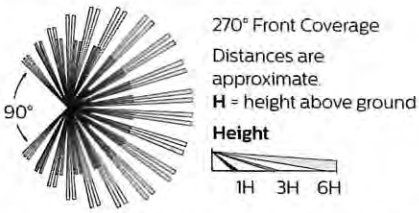
P21-MR50 is available in 120V–277V input only to the luminaire. Motion sensors require single voltage 120V or 277V input.

The Area PIR motion sensor is the WattStopper EW-200-120-W (120V Input - MSA-120V) or the WattStopper EW-200-277-W (277V Input - MSA-277V.) One motion sensor per pole is required and is ordered separately. Area sensors require single voltage 120V or 277V input.



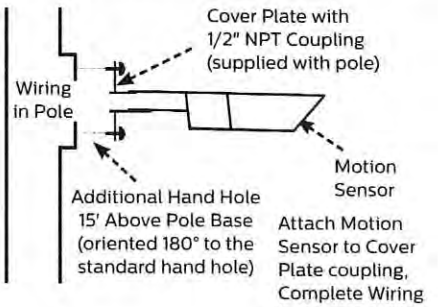
The area motion detector provides coverage equal to up to 6 times the sensor height above ground, 270° from the front-center of the sensor.

Area PIR Motion Sensor Coverage Pattern:



Motion response requires that the pole include an additional hand hole 15 feet above the pole base, normally oriented 180° to the standard hand hole. For Philips Gardco poles, order the pole with the Motion Sensor Mounting (MSM) option which includes the hand hole and a special hand hole cover plate for the sensor with a 1/2" NPT receptacle centered on the hand hole cover plate into which the motion sensor mounts. Once the motion sensor is connected to the hand hole cover plate, then wiring connections are completed in the pole. The plate (complete with motion sensor attached and wired) is then mounted to the hand hole. **If poles are supplied by others, the customer is responsible for providing suitable mounting accommodations for the motion sensor in the pole.**

Mounting to a Philips Gardco Pole:



P21 PureForm LED area luminaire

21" housing

Luminaire Configuration Information (Continued)

P21-APD-MRO

Philips Gardco PureForm LED luminaire with Automatic Profile Dimming, with Motion Response Override. The P21-APD-MRO combines the benefits of both automatic profile dimming and motion response, using the Philips DynaDimmer module. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for the P21-APD. If motion is detected during the time that the luminaire is operating at 50%, the luminaire returns to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes, and is field adjustable from 5 minutes up to 15 minutes.

This configuration is not available for use with wall mounted luminaires.

Notes:

P21-APD-MRO is available in 120V through 277V input only to luminaire. The motion sensor requires either 120V or 277V input to the motion sensor.

The P21-APD-MRO has the same pole requirements and utilizes the same motion sensors as the P21-MR50. The motion sensor mounts and wires identically as well. The P21APD-MRO utilizes the identical dimming profile as shown for the P21-APD.

By combining the benefits of automatic profile dimming and motion response, the P21-APD-MRO assures maximum energy savings, and insures that adequate light is present if motion is detected.

All motion sensors utilized consume 0.0 watts in the off state.

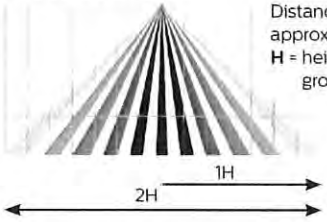
P21-MRI

Luminaires with Motion Response and an integral motion sensor include a programmable LED driver and an integral programmable motion sensor. The motion sensor is set to a constant 50%. When motion is detected, the luminaire goes to 100%. The luminaire remains on high until no motion is detected for the motion sensor duration period, after which the luminaire returns to low. Duration period is factory set at 5 minutes. Available with 120V or 277V (UNIV) only.

Luminaires include a passive infrared (PIR) motion sensor, WattStopper FSP-211 equipped with an FSP-L3 lens, capable of detecting motion within 20 feet of the sensor, 180° around the luminaire, when placed at a 20 foot mounting height, or mounted on a wall. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts.

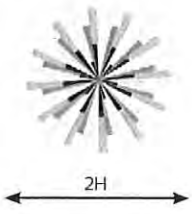
The approximate motion sensor coverage pattern is as shown below.

Side Coverage Pattern



Distances are approximate.
H = height above ground

Top Coverage Pattern



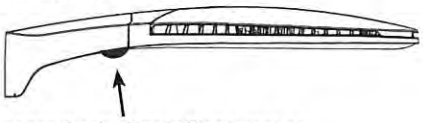
FSP-211 Sensor - Bottom View

P21-APD- MRI

Luminaires with Integral Motion Sensor - P21-APD- MRI: Luminaires with Automatic Profile Dimming and Motion Response Override combine the benefits of both automatic profile dimming and motion response. APD-MRI luminaires utilize a programmable LED driver. The luminaire will dim to 50% power, 50% light output, per the dimming profile shown for APD luminaires (see page 4). If motion is detected during the time that the luminaire is operating at 50%, the luminaire goes to 100% power and light output. The luminaire remains on high until no motion is detected for the duration period, after which the luminaire returns to low. Duration period is factory set at 15 minutes.

APD-MRI luminaires are available with 120V or 277V (UNIV) input voltages only.

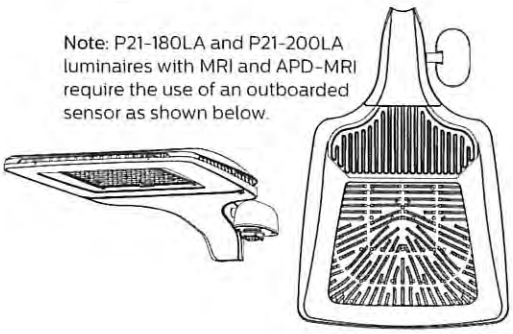
APD-MRI luminaires use the identical motion sensor as MRI luminaires. See motion sensor details for P21-MRI.



Approximate Sensor Placement on P21-MRI and P21-APD-MRI luminaires.

Sensor - Bottom View

Note: P21-180LA and P21-200LA luminaires with MRI and APD-MRI require the use of an outboarded sensor as shown below.



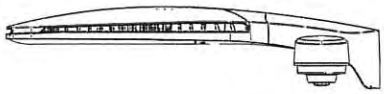
P21 PureForm LED area luminaire

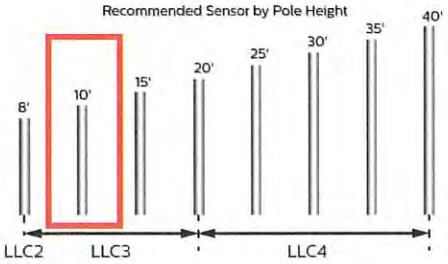
21" housing

Luminaire Configuration Information – PureForm with wireless controls

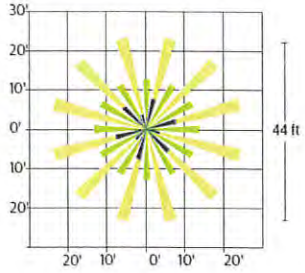
P21-LLC2/3/4 Luminaire Mounted Controller

Controller attached to luminaire and Includes radio, photocell and motion sensor with #2, 3, or 4 lens for 8-40' mounting heights.

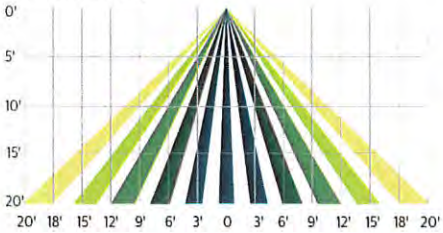


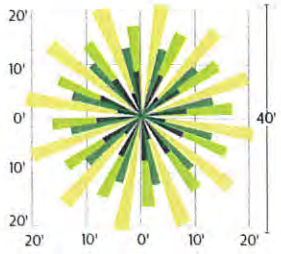


LLC2/LLCR2 (for pole or remote mount only)

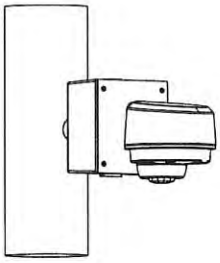


LLC3/LLCR3 (for luminaire, pole, or remote mount)





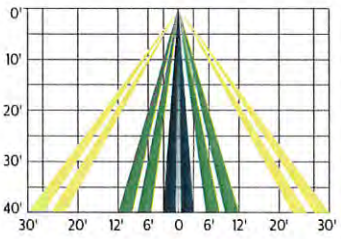
LLCR2/3/4 Pole Mounted Controller

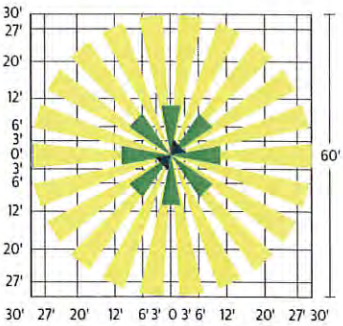


In this configuration, the wireless controller will be mounted to the pole at a fifteen foot mounting height. The number of luminaires on each pole, as well as the specific wattage chosen, will determine how many controllers will be required.

When using the wireless remote accessory option (LLCR-F) in a pole mount application, specify pole option (CL=Coupling Internal Thread, 3/4" size). Confirm required orientation of luminaire and wireless controller. Indicate height above pole base and orientation to handhold. Recommended min pole height is 18ft, with option (CL) 15ft above pole base. Other heights are possible when choosing the appropriate sensor lens type. See pole specification sheets for more information.

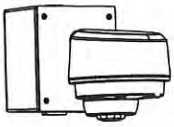
LLC4/LLCR4 (for luminaire, pole, or remote mount)



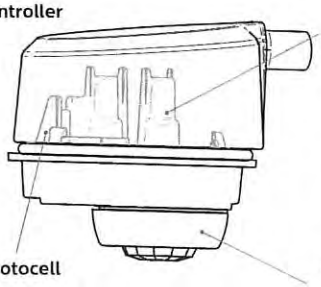


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

P21 PureForm LED area luminaire

21" housing

Luminaire Configuration Information (PureForm with wireless controls)

Gateway

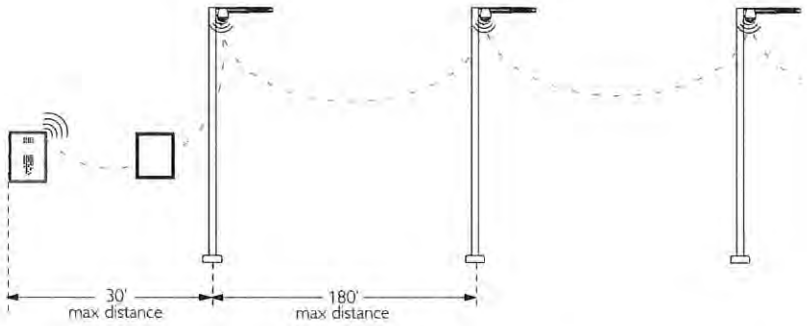
Overview: One gateway is included with the wireless controls system. The gateway opens up communication with the wireless radios installed with the PureForm luminaires (or pole), allowing you to control your fixtures straight from the web. One gateway can communicate with up to 800 fixtures. Typically one unit is required per parking lot.

Installation: Gateway has 4 blind threaded holes on the back side that accept 10-32 screws. Mount spacing is 10.41" across and 14.19" vertical.

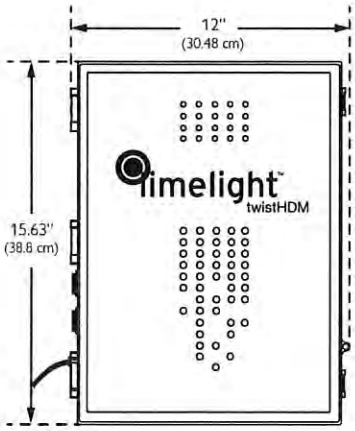
Requirements: The gateway must be mounted in a secure on-site location. The gateway requires 120V. Distance of gateway to the first radio varies upon application; contact factory. Strong internet connection required.

Specifications:

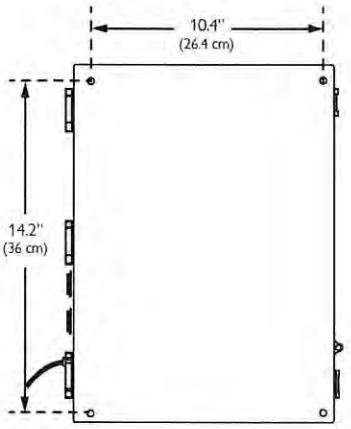
- High density RF Mesh coordinator
- Ethernet or wireless internet connection to server
- Proprietor of software "rules of operation"
- Watertight Ethernet connections
- Highly protected, long life ac/dc power supply
- Single board, ARM compliant 520Mhz Intel computer.
- Operating Temperature -20°C to 55°C
- Tamper proof housing



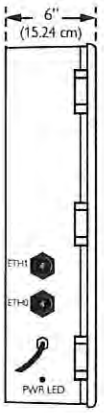
Front View



Back View



Side View



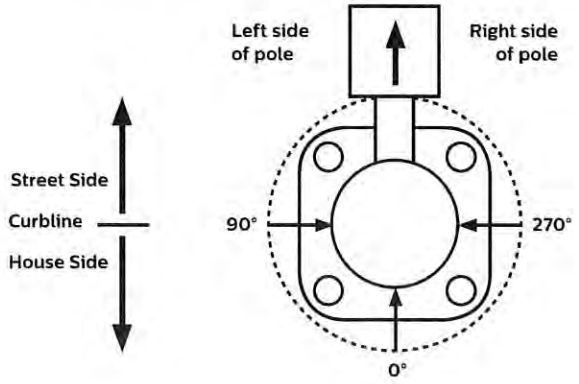
P21 PureForm LED area luminaire

21" housing

Asymmetric Optical Orientation Information

Standard Optic Position

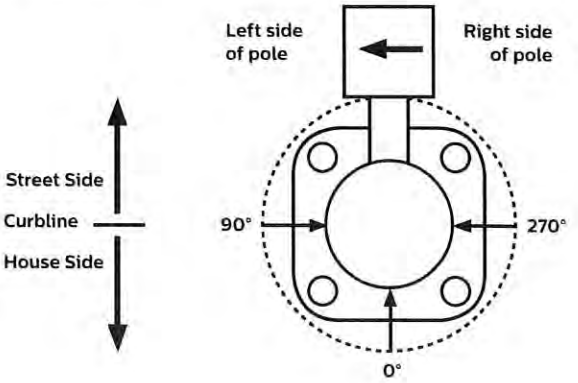
Luminaires ordered with asymmetric optical systems in the standard optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Optic Rotated Left (90°) Optic Position

Luminaires ordered with asymmetric optical systems in the Optic Rotated Left (90°) optic position will have the optical system oriented as shown below:

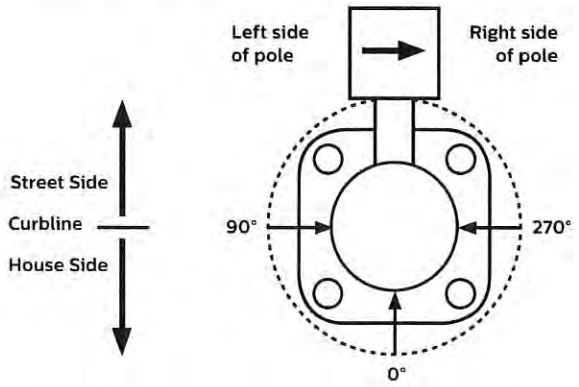


Note: The hand hole will normally be located on the pole at the 0° point.

Asymmetric Optical Orientation Information

Optic Rotated Right (270°) Optic Position:

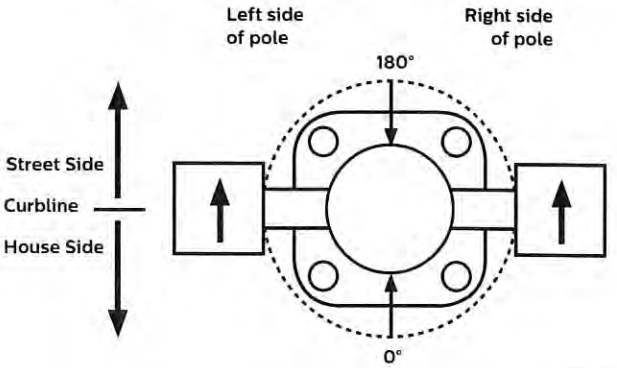
Luminaires ordered with asymmetric optical systems in the Optic Rotated Right (270°) optic position will have the optical system oriented as shown below:



Note: The hand hole will normally be located on the pole at the 0° point.

Twin Luminaire Assemblies With Rotated Optical Systems

Twin luminaire assemblies installed with rotated optical systems are an excellent way to direct light toward the interior of the site (Street Side) without additional equipment. It is important, however, that care be exercised to insure that luminaires are installed in the proper location.



Luminaires with Optic Rotated Right (270°) are installed on the LEFT Side of Pole

Luminaires with Optic Rotated Left (90°) are installed on the RIGHT Side of Pole

Note: The hand hole location will depend on the drilling configuration ordered for the pole.

P21 PureForm LED area luminaire

21" housing

Specifications

Housing

The PureForm features a die cast aluminum housing, and mounts directly to a pole or wall. The low profile rounded form reduces the effective projected area of the luminaire significantly. PureForm luminaires supplied with A1, A2 and A3 arms are provided with arms firmly attached to the main luminaire housing body. As a result, the luminaires provide the functionality, strength and installation ease of an integral arm luminaire. Mast arm mount luminaires are provided with the mast arm mounting assembly firmly attached to the main luminaire housing body.

IP Rating

PureForm luminaires have a rating of IP66.

Vibration Resistance

PureForm carries a 3G vibration rating that conforms to standards set forth by ANSI C136.31. Testing includes vibration to 3G acceleration in three axes, all performed on the same luminaire.

Electrical

Luminaires are equipped with an LED driver that accepts 120V through 277V, or 347V through 480V, 50hz to 60hz, input. Driver output is based on the LED wattage selected. Component-to-component wiring within the luminaire will carry no more than 80% of rated current and is listed by UL for use at 600 VAC at 302°F / 150°C or higher. Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. Power factor is not less than 90%. Luminaire consumes 0.0 watts in the off state. All motion sensors utilized consume 0.0 watts in the off state. Surge protector standard. 10KA per ANSI/IEEE C62.41.2.

LED Performance

LED Thermal Management

The Philips Gardco PureForm LED provides die cast aluminum integral thermal radiation fins to provide the excellent thermal management so critical to long LED system life.

Wireless Controls

The wireless controls system includes: gateway, controller (with wireless radio, motion response, and photocell), and commissioning/training. This intelligent web-based system operates through a high density mesh (HDM) wireless technology. Wireless radios with motion response and photocell sensors are integrated with PureForm luminaires, and enable the fixtures to communicate via the ZigBee protocol. The gateway is a mini computer that connects to the internet, and is located in a secure location. The central database channels communication to and from the gateway, allowing data to be viewed or managed through the web-based graphical user interface (GUI). See pages 6-7 for details and technical information.

Optical Systems

The advanced LED optical systems provide IES Types 2, 3, 4 and 5 distributions, as well as a Backlight Control optic. Special LEED corner cutoff optics are also available, both as LCR (right) and LCL (left.) All optical systems feature unitized lens optic construction.

Types 2, 3, 4, BLC and LCR/LCL optical systems utilize an innovative redirecting reflector to complement the performance of the LED optic. The redirecting reflector system utilizes 95% specular reflective material to maximize reflected light forward. Reflector facets minimize aperture brightness when viewed from the rear of the luminaire.

PureForm luminaires are provided standard without a glass lens, for maximized performance. A glass lens is available as an option, resulting in reduced performance. All PureForm luminaires provide full cutoff performance.

Listings

All luminaires bear UL or CUL (where applicable) Wet Location labels.PureForm LED P21 luminaires (with the exception of 55LA at 277V) are DesignLights Consortium qualified.

Finish

Each standard color luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) textured polyester powdercoat finish. Standard colors include bronze (BRP), black (BLP), white (WP), and natural aluminum (NP). Consult factory for specs on optional or custom colors.

Warranty

Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays feature a 5 year limited warranty covering the LED arrays. LED Drivers also carry a 5 year limited warranty. Motion sensors are covered by warranty for 5 years by the motion sensor manufacturer. See Warranty Information on www.sitelighting.com for complete details and exclusions. Polycarbonate lenses carry a 1 year warranty.

Predicted Lumen Depreciation Data[1]

Ambient Temperature °C	Driver (mA)	Calculated L_{70} Hours[1,2]	L_{70} Per TM-21[2,3]	Lumen Maintenance % @ 60,000 hours
Up to 40 °C	Up to 800mA	> 154,000 Hours	> 51,400 Hours	91%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L70 is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L70 hours limited to 6 times actual LED test hours.

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

Deturk Type SL3 - Main Entry area bollard

PHILIPS

GARDCO

Bollards

Dome/bevel top louver

BRM830/831/833
BRM834/835/837

Project:

Location:

Cat No:

Type:

Quantity:

Notes:

Philips Gardco dome and bevel top louver LED bollards provide uniform illumination, superior spacing and solid vandal resistance. Rugged extruded and cast construction with silicone seals and gasketing assure years of durability. Our advanced stack-louver LED technology and motion response provide maximized light output energy savings.

Ordering guide

Example: BRM830-42-CWL-NW-360-UNIV-BRP-SPR

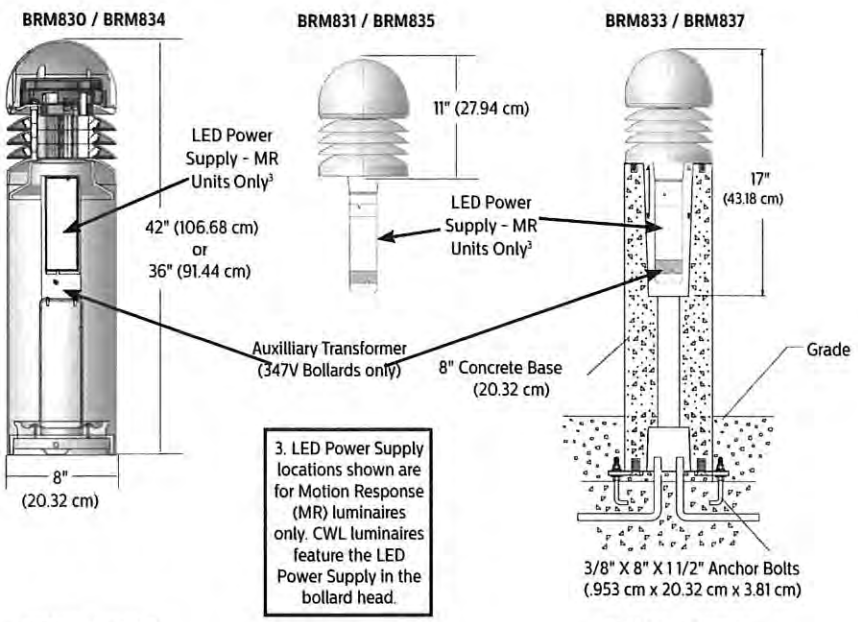
Prefix	Height	LED Control[4]	LED Selection	Lighted Coverage	Voltage	Finish	Options
BRM830 Dome top with cast aluminum base **BRM831**[1] Dome top head only **BRM833** Dome top with natrual concrete base **BRM833B** Dome top with beige concrete base **BRM33G** Dome top with grey concrete base **BRM834** Bevel top with cast aluminum base **BRM835**[1] Bevel top head only **BRM837** Bevel top with natural concrete base **BRM837B** Bevel top with beige concrete base **BRM837G** Bevel top with grey concrete base	**42** 42" **36**[2] 36" **11**[3] 11"	**MR** Motion Response - LEDs stay on low level (8W) when no motion is present and increase to full light output (41W) when motion detected. **CWL** Constant Wattage Full Light Output - full light output only (41W). No motion sensor included.	**CW** 6500K, 75 CRI **NW** 4500K, 75 CRI **WW** 3000K, 75 CRI **Solid Colors** **LA**[5] Amber **LR**[5] Red **LG**[5] Green **LB**[5] Blue	**360** 360° lighted louvers **180** 180° lighted louvers (provides reduced backside light)	**347**[6] **UNIV** (120-277V)	**BLP** Black Paint **WP** White Paint **BRP** Bronze Paint **NP** Natural Aluminum Paint **OC** Optional Color Specify optional color or RAL. ex: OC-LGP or OC-RAL7024. **SC** Special Color Specify. Must supply color chip. Requires factory quote.	**SPR** Surge Protection for 120-277V input meeting ANSI C62.41.2 **SPRH** Surge Protection for 347V input meeting ANSI C62.41.2

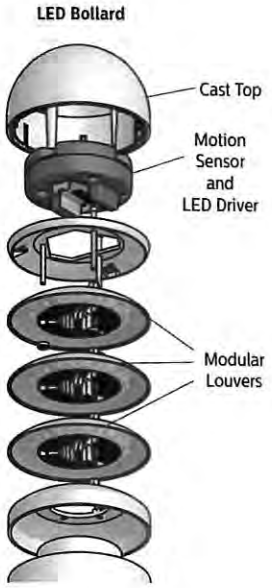
1. Not available in 347V.
2. BRM830 and BRM834 only.
3. 11" height option to be selected only for "head only" units - BRM831 and BRM835.
4. A variation of LED wattage (+/- 8%) may occur due to LED manufacturer's forward volt specification and ambient temperature.)
5. Consult factory for lead times.
6. 347V bollards require and include a step-down transformer in bollard. Not available in BRM831 or BRM835.

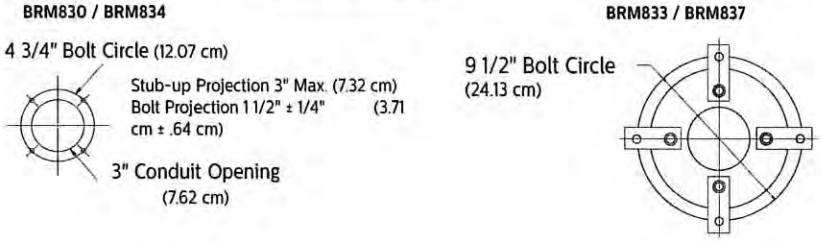
BRM830/831/833/834/835/837 LED bollard

Dome or bevel top louver

Dimensions







NOTE: Factory supplied template must be used when setting anchor bolts. Philips Gardco will not honor any claim for incorrect anchorage placement from failure to use factory supplied templates.

BRM830/831/833/834/835/837 LED bollard

Dome or bevel top louver

Specifications

Upper Housing

Diecast aluminum dome top secures to one-piece louvered casting with three (3) concealed tamper resistant screws.

Lower Housing

BRM830 / BRM834: Luminaire features a cylindrical .125" (.318 cm) wall 6063-T5 extruded aluminum base housing. Bottom section has a welded-in cast ring for attachment to base assembly with four (4) hex head set screws.

BRM831 / BRM835: Louver head assembly is affixed to ballast mounting bracket which is suitable for insertion into architectural elements (by others).

BRM 833 / BRM837: Luminaire includes a pre-cast concrete base constructed with steel molds and wire reinforcing. Base is acid-etched to provide a smooth textured aggregate finish.

LED Performance

PREDICTED LUMEN DEPRECIATION DATA[4]		
Ambient Temperature °C	Driver mA	L_{70} Hours[5]
15 °C	350	112,000
25 °C	350	90,000
40 °C	350	65,000

4. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
5. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output.

Optical System

Philips Gardco LED Bollards feature the advanced Gardco stacked louver LED technology, assuring maxmimized light output. Each individual louver is replaceable if needed or desired.

Anchorage

BRM830 / BRM834: Base assembly consists of a cast aluminum platform and ballast mounting bracket. Assembly is secured and leveled to the mounting foundation with four (4) 3/8" X 8" x 1 1/2" (.953 cm x 20.32 cm x 3.81 cm) anchor bolts on a 4 3/4" (12.07 cm) bolt circle.

BRM 831 / BRM835: Mounting plate is cast aluminum with slots to accept anchor bolts (by others) at 90° on a 6 1/4" (15.88 cm) diameter bolt circle. A 4 1/2" (11.43 cm) diameter opening is required to house LED Power Supply for Motion Response (MR) units.

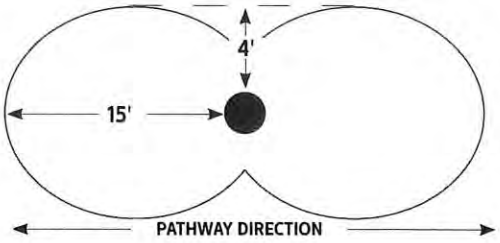
BRM833 / BRM837: Base assembly consists of four (4) galvanized steel base tabs fastened to pre-cast concrete base. Assembly is secured and leveled to the mounting foundation with four (4) 3/8" X 8" X 1 1/2" (.953 cm x 20.32 cm x 3.81 cm) anchor bolts on a 9 1/2" (24.13 cm) bolt circle. Base is designed for 5" (12.7 cm) direct burial.

Electrical

For CWL bollards, the LED power supply is located within the bollard head. For Motion Response (MR) bollards the LED power supply is located within the bollard shaft. Bollards accept from 120 Volts through 277 Volts, 50hz to 60 hz, input. Bollards with 347V input require and include a step-down transformer (placed within the bollard shaft) to provide proper input voltage to the LED power supply. The LED driver is located in the upper dome. LED power supplies and LED drivers are replaceable. LEDs provided as specified.

Luminaires ordered with Motion Response include a microwave motion sensor. The motion sensor is completely and safely concealed within the LED Bollard head to avoid potential vandalism to the sensor. LEDs operate on Low Level (8 watts) when no motion is present. LEDs increase to full light output (41 watts) when motion is detected. Motion Response system permits adjustments for time on high level and motion sensitivity.

Approximate Motion Sensor Detection Pattern:



Bollard orientation is adjustable in 120° increments. Consult LED Bollard Motion Response installation instruction sheets for more detailed information concering bollard placement and sensor performance.

Luminaire Finish

Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured textured powdercoat finish

Labels

All luminaires bear UL or CUL (where applicable) Wet Location labels.

Warranty

5 year limited warranty. See philips.com/luminaires for complete details and exclusions.

Philips Lighting, North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

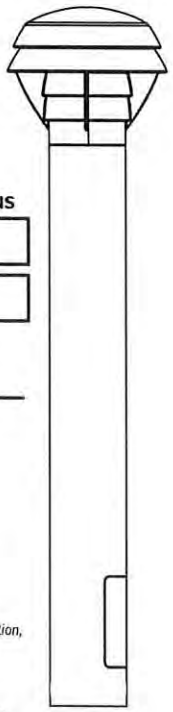
Job:
Type:
Notes:

Deturk Type SL4 - Patio level full cutoff bollard

Bollard LED

Round Full Cutoff Bollard
BR840 Series, Including Motion Response

The Philips Gardco LED Bollard family features the round full cutoff bollard, the BR840 series. This sleek series features LEDs concealed below cast louvers to provide down lighting for landscape and pathway applications. The BR840 series features 4" diameter extruded aluminum shafts. Available mountings include the standard shaft, with a welded cast base mounted firmly to anchor bolts. The BR840 series also is available with a galvanized steel base tenon reinforced shaft (BR842) for applications requiring additional support, such as schools. BR840 series bollards provide full cutoff performance.



PREFIX	HEIGHT	LED CONTROL	LED SELECTION	LIGHTED COVERAGE / LED WATTAGE	VOLTAGE	FINISH	OPTIONS

Enter the order code into the appropriate box above. Note: Gardco reserves the right to refuse a configuration. Not all combinations and configurations are valid. Refer to notes below for exclusions and limitations. For questions or concerns, please consult the factory.

PREFIX

BR840	Standard Shaft	**42" 36" 30"**
BR841	Head Only	**7.1"**
BR842	School Bollard Reinforced Shaft with Galvanized Steel Tenon	**42" 36" 30"**

HEIGHT

LED CONTROL

CWL Constant Wattage Full Light Output
Full wattage and light output only.

DIM 0 - 10V Dimming
Dimming controls by others. The dimming driver utilized permits dimming control via a potentiometer (by others) or via 0 - 10V control (by others.) Consult installation instructions for more information.

MR Motion Response
Featuring two (2) integral Passive Infrared (PIR) sensors. In the absence of motion, luminares operate at 20% of normal power and light output (80% dimmed.) See page 3 for more information on Motion Response luminaires.

LED SELECTION

CW *5,700°K , 75CRI*
NW *4,000°K , 75CRI*
WW *3,000°K , 75CRI*

LIGHTED COVERAGE / LED WATTAGE

360° lighted louvers - 14 LEDs

360 -10	10 watts at 225mA
360 -18	18 watts at 350mA
360 -26	26 watts at 500mA

Note: A variation of LED wattage (+/- 8%) may occur due to LED manufacturer's forward volt specification and ambient temperature.

180° lighted louvers - 7 LEDs[1,2] *(Provides reduced backside light.)*

180 -10	10 watts at 450mA
180 -18	18 watts at 700mA

1. 180° achieved by populating half of LEDs.
2. 180° distributions include an internal house side shield to limit the amount of backlight.

VOLTAGE

120
208
240
277
UNIV *120V through 277V, 50hz to 60hz input.*

FINISH

BRP	Bronze Paint
BLP	Black Paint
WP	White Paint
NP	Natural Aluminum Paint
OC	Optional Color Paint *Specify RAL designation as ex: OC-RAL7024.*
SC	Special Color Paint *Specify. Must supply color chip.*

OPTIONS

PCB[3,4] Button Photocontrol
SPR Surge Protection for 120V through 277V Input meeting ANSI C62.41.2

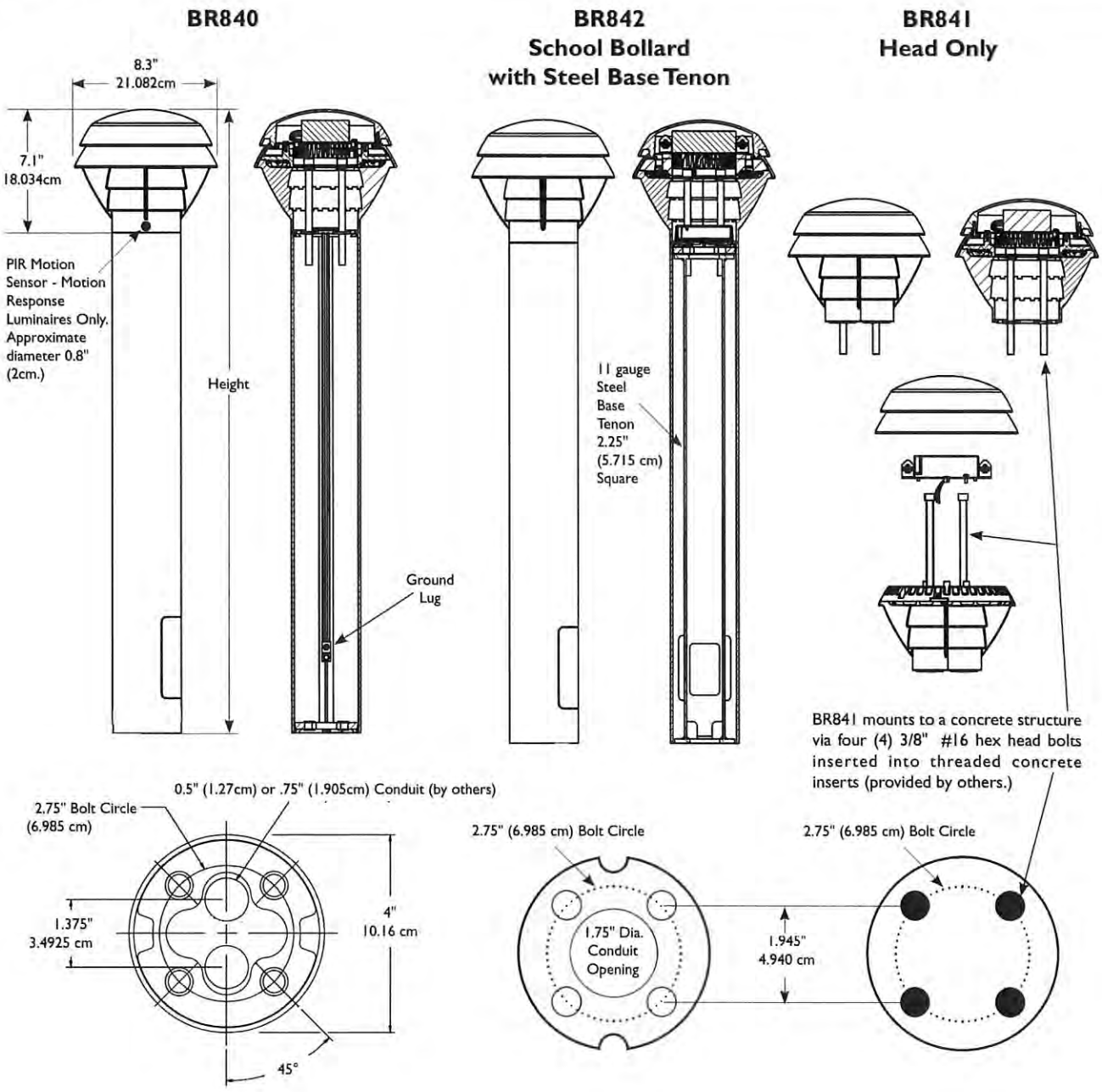
3. Not available in BR841.
4. Must provide specific input voltage.

PHILIPS GARDCO

Bollard LED

Round Full Cutoff Bollard
BR840 Series, Including Motion Response

DIMENSIONS



NOTE: Factory supplied template must be used when setting anchor bolts. Philips Gardco will not honor any claim for incorrect anchorage placement from failure to use factory supplied templates.

Bollard LED

Round Full Cutoff Bollard
BR840 Series, Including Motion Response

SPECIFICATIONS

UPPER HOUSING: Die cast aluminum upper housing featuring shielding louvers to provide down light.

LOWER HOUSING:

BR840 :The lower housing assembly consists of a .140" wall by 4" diameter high strength 6063-T6 extruded aluminum section incorporating a flush, weather-tight gasketed hand hole cover.

BR41 : Louver head assembly is suitable for attachment to architectural elements (by others).

BR842 :The lower housing assembly consists of a .140" wall by 4" diameter high strength 6063-T6 extruded aluminum section, incorporating a flush, weather-tight gasketed hand hole cover, for placement over the galvanized steel tenon support structure. Tenon support structure is made from a .12" thick wall, 11 gauge steel, 2.25" square tube, welded to top and bottom round steel support plates. The steel tenon support structure includes an opening aligned with the aluminum shaft hand hole to permit wiring. The entire steel tenon support structure is hot dipped galvanized after fabrication.

LED PERFORMANCE:

PREDICTED LUMEN DEPRECIATION DATA[4]		
Ambient Temperature °C	Driver mA	L_{70} Hours[5]
25 °C	225	230,000
	350	220,000
	450 / 500	165,000
	700	150,000
40 °C	225	212,000
	350	188,000
	450 / 500	150,000
	700	137,000

4. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
5. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output.

OPTICAL SYSTEM: Philips Gardco LED Bollards feature advanced Philips Gardco LED technology, assuring maxmimized light output. LED arrays are replaceable.

ANCHORAGE:

BR840: Base assembly consists of an internal welded cast ring section that provides for mounting to the foundation with four (4) 3/8" X 8" X 1½" anchor bolts on a 2¾" bolt circle.

BR841:The luminaire head mounts to a concrete structure utilizing four (4) 3/8" #16 hex head bolts inserted into threaded concrete inserts (provided by others) on a 2¾" bolt circle.

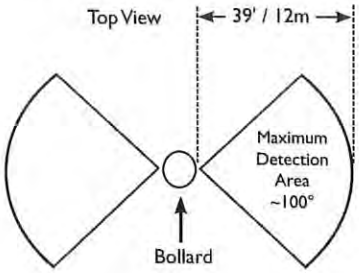
BR842:A high strength steel mounting tenon, hot-dip galvanized after fabrication, is secured to the concrete footing with (4) 3/8" x 8" x 1 1/2" anchor bolts on a 2¾" bolt circle.

IP RATING: IP66 is the rating for the optical compartment.

ELECTRICAL: The LED power supply is located within the bollard head. Bollards accept from 120 Volts through 277 Volts, 50hz to 60 hz, input. supply. The LED driver is located in the upper dome. LED drivers are replaceable. LEDs provided as specified. Power factor is not less than 90%. Luminaires consume 0.0 watts in the off state.

MOTION RESPONSE LUMINAIRES: Each Motion Response (MR) luminaire includes two (2) Panasonic EKMB1203112 Passive Infrared (PIR) sensors to detect motion. When motion is not detected for a 5 minute period, luminaires automatically dim to 20% power and light, gradually over a 2 minute period. Once Motion is detected, luminaires immediately ramp to full power and light output until motion is not detected for a 5 minute period.

PIR sensors are able to detect motion in the approximate patterns shown below:



Note: Motion sensors rely on specific zonal crossings to detect motion. It is possible for a person to directly approach the bollard motion sensor without crossing between zones until 15 feet from the motion sensor. The actual motion detection distance may vary based on specific application characteristics.

LUMINAIRE FINISH: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured textured powdercoat finish

LABELS: All luminaires bear UL or CUL (where applicable) Wet Location labels.

WARRANTY: Philips Gardco luminaires feature a 5 year limited warranty. Philips Gardco LED luminaires with LED arrays or modules feature a 5 year limited warranty covering the LED arrays or modules. LED drivers carry a 5 year limited warranty. See Warranty Information on www.sitelighting.com for complete details and exclusions.

FULL CUTOFF PERFORMANCE: Full cutoff performance means a luminaire distribution where zero candela intensity occurs at an angle at or above 90° above nadir . Additionally, the candela per 1000 lamp lumens does not numerically exceed 100 (10 percent) at a vertical angle of 80° above nadir. This applies to all lateral angles around the luminaire.

Philips Lighting
North America Corporation
200 Franklin Square Drive
Somerset, NJ 08873
Tel. 855-486-2216

Imported by: Philips Lighting,
A division of Philips Electronics Ltd.
281 Hillmount Rd,
Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

Deturk Type SL5 - Wall sconce at driveway to inner court parking area

PHILIPS

GARDCO

Wall Mount

LED wall sconce 121

Project:

Location:

Cat No:

Type:

Qty:

Notes:

Philips Gardco LED wall sconce 121 offers distinction through its styling, powerful optical design, array of distributions, and impressive selection of control possiblilities. Designed to add an element of style to your application by pairing straight lines with rounded edges, the form of the 121 is timeless, yet contemporary, and will complement a wide assortment of architectural styles and designs, while delivering high light levels and functional distributions. 121 sconces are available in Type 2, 3, and 4 distributions, and provide output of up to 10,103 lumens. Energy saving control options help to increase energy savings and offer California Title 24 compliance. Emergency Battery Backup option available for path-of-egress and is integral to the luminaire.

Ordering guide

example: 121-32L-700-NW-G3-3-120-IMRI2-BZ

Prefix	Number of LEDs	Drive Current	LED Color - Generation	Distribution	Emergency	Voltage	Options: Controls	Options: Electrical	Finish
121									
121 LED wall sconce	**16L** 16 LEDs (1 modules)	**530** 530mA **650** 650mA[1] **700** 700mA **1000** 1000mA **1200** 1200mA[2]	**CW-G3** Cool White 5700K, 70CRI Generation 3 **NW-G3** Neutral White 4000K, 70CRI Generation 3 **WW-G3** Warm White 3000K, 70CRI Generation 3	**2** Type 2 **3** Type 3 **4** Type 4	**EBPC** Emergency Battery Pack Cold Weather[3,4] Leave blank to omit an emergency option	**UNV** 120-277V **HVU** 347-480V **120** 120V **208** 208V **240** 240V **277** 277V **347** 347V **480** 480V	**DD** 0-10V Dimming Driver[5] **DCC** Dual Circuit Control[6,7,8] **DynaDimmer:** Automatic Profile Dimming **CS50** Safety 50% Dimming[5,6] **CM50** Median 50% Dimming[5,6] **CE50** Economy 50% Dimming[5,6] **DA50** All Night 50% Dimming[5,6] **Photoelectric Systems** **PCB** Photocontrol Button[9,10,11] **Infrared Motion Response Systems** **IMRI2** Integral with #2 lens[3,5] **IMRI3** Integral with #3 lens[3,5] **Wireless Controls (luminaire mounted)** **LLC2** Module with #2 lens[5,6] **LLC3** Module with #3 lens[5,6]	**Fusing** **F1** Single (120, 277, 347VAC)[10] **F2** Double (208, 240, 480VAC)[10] **F3** Canadian Double Pull (208, 240, 480VAC)[10]	**Textured** **BK** Black **WH** White **BZ** Bronze **DGY** Dark Gray **MGY** Medium Gray **Customer specified** **RAL** Specify optional color or RAL (ex: OC-LGP or OC-RAL7024) **CC** Custom color (Must supply color chip for required factory quote)
	32L 32 LEDs (2 modules)	**530** 530mA **650** 650mA[1] **700** 700mA **1000** 1000mA							

1. Only available with EBPC
2. Only available with 16 LEDs
3. Available in 120V or 277V only
4. EBPC available only in 530mA or 650mA
5. Not available with 1.2A drive current
6. Available in 120V thru 277V and UNV only
7. DCC available only in 530mA with 32 LED
8. Not available with EBPC
9. Not available with DCC
10. Voltage must be specified
11. Not available in 480V

121 LED wall sconce

Wall mount

Luminaire Accessories (order separately)

Mounting Accessories	
Wall Mount	
WS	Wall Mounted Box for Surface Conduit

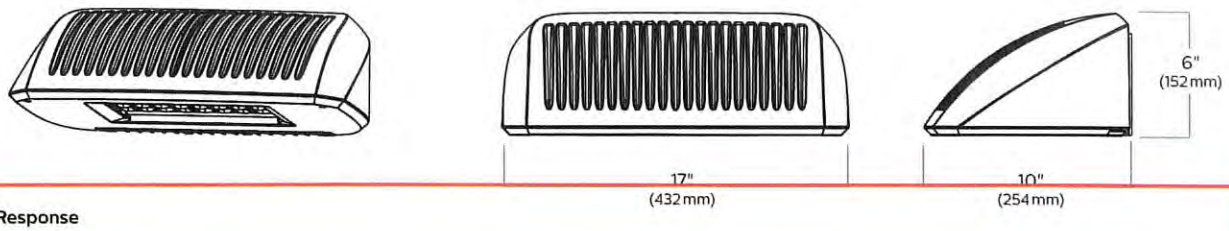
Controls Accessories	
Wireless controls remote mount module	
LLCR2-(F)	#2 lens - specify finish in place of (F)
LLCR3-(F)	#3 lens - specify finish in place of (F)

Wireless controls remote controller accessory

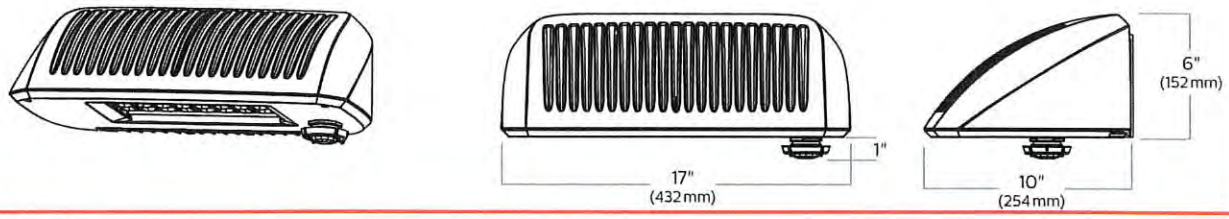
Wireless controls system offers a remote radio/sensor module that allows connectivity to Wireless system gateway. Remote module can be mounted to wall or pole with j-box supplied. May be specified by choosing one of two different lenses to accommodate a variety of mounting heights/sensor detection ranges. Must specify option DD on luminaires that are planned to be used with remote mount controllers. See page 4 for Wireless Controls details.

Dimensions

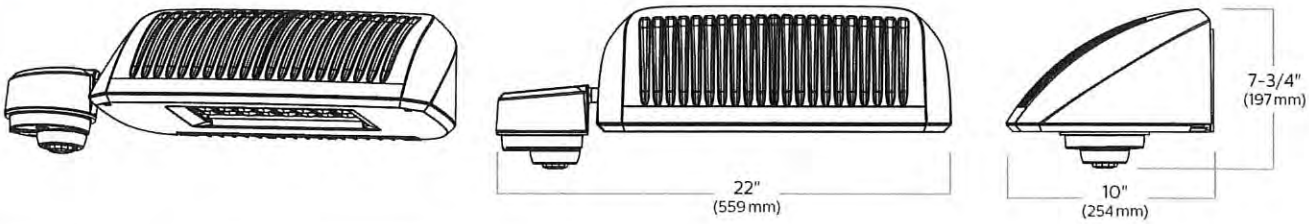
Standard Luminaire



Motion Response



Wireless Controls



Luminaire Weights	
LED wall sconce 121	**Weight**
Luminaire	15.0 lbs
Luminaire - EBPC (EM battery pack)	18.5 lbs
Luminaire - Integrated Wireless Controls	17.0 lbs

121 LED wall sconce

Wall mount

LED Wattage and Lumen Values

Ordering Code	LED Qty	LED Current (mA)	Color Temp.[1]	Average System Watts[2]	Type 2			Type 3			Type 4		
					Lumen Output[2,3]	BUG Rating	Efficacy (LPW)	Lumen Output[2,3]	BUG Rating	Efficacy (LPW)	Lumen Output[2,3]	BUG Rating	Efficacy (LPW)
121-16L-530-NW-G3	16	530	4000K	28	2818	B1-U0-G0	100	2607	B1-U0-G1	93	2614	B1-U0-G1	93
121-16L-700-NW-G3	16	700	4000K	38	3698	B1-U0-G1	96	3421	B1-U0-G1	89	3430	B1-U0-G1	89
121-16L-1000-NW-G3	16	1000	4000K	55	4802	B1-U0-G1	88	4442	B1-U0-G1	81	4454	B1-U0-G1	81
121-16L-1200-NW-G3	16	1200	4000K	66	5364	B2-U0-G1	82	4962	B1-U0-G1	76	4975	B1-U0-G2	76
121-32L-530-NW-G3	32	530	4000K	52	5921	B2-U0-G1	114	5477	B1-U0-G2	105	5491	B1-U0-G2	106
121-32L-700-NW-G3	32	700	4000K	70	7534	B2-U0-G1	107	6969	B1-U0-G2	99	6988	B1-U0-G2	100
121-32L-1000-NW-G3	32	1000	4000K	107	10103	B2-U0-G1	95	9346	B2-U0-G2	88	9371	B2-U0-G2	88

LED Wattage and Lumen Values (Emergency Mode)[4]

Ordering Code	LED Qty	LED Current (mA)	Color Temp.[1]	Avg. System Watts		Lumen Outputs					
						Type 2		Type 3		Type 4	
				Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode	Normal Mode	Emergency Mode
121-16L-530-NW-G3-EBPC (Normal Mode)	16	530	4000K	28	14	2818	1353	2607	1252	2614	1255
121-16L-650-NW-G3-EBPC (Normal Mode)	16	650	4000K	37	14	3510	1353	3248	1252	3256	1255
121-32L-530-NW-G3-EBPC (Normal Mode)	32	265	4000K	28	14	2808	1764	2597	1632	2604	1636
121-32L-650-NW-G3-EBPC (Normal Mode)	32	325	4000K	32	14	3497	1764	3235	1632	3244	1636

1. Contact outdoorlighting.applications@philips.com for details on cool or warm white color temperatures.
2. Wattage and lumen output may vary by +/- 8% due to LED manufacturer forward volt specification and ambient temperature. Wattage shown is average for 120V through 277V input. Actual wattage may vary by an additional +/- 10% due to actual input voltage.
3. Lumen values based on photometric tests performed in compliance with IESNA LM-79.
4. For emergency EBPC option, publish values are based on initial lumens.

Luminaire options

DD: 0-10V dimming driver with leads supplied through back of luminaire (for secondary dimming controls by others).

Dynadimmer Automatic Profile Dimming: Automatic dimming profiles (CS50/CM50/CE50) offer safety, median, or economy settings, for shorter or longer duration. Dimming profiles provide flexibility towards energy savings goals while optimizing light levels during specific dark hours. 50% dimming is standard. DA50 offers 50% instantaneous dimming all night (during all dark hours). 75% and 25% dimming is also available if different light levels are required (contact Technical Support for details).

Profile	Dimming		
	Schedule	Duration	Level
Economy	9 PM - 6 AM	9 hours	50%
Median	10 PM - 6 AM	8 hours	50%
Safety	11 PM - 6 AM	7 hours	50%
Reactive 50	all night	dynamic	

IMRI2, IMRI3: Infrared Motion Response Integral (IMRI). IMRI module is mounted integral to the luminaire door and is available with two different sensor lens types to accommodate various mounting heights and occupancy detection ranges (see charts for approximate detection patterns). Motion response for option IMRI is set/operates in the following fashion: The motion sensor is set to a constant 25%. When motion is detected by the PIR sensor, the luminaire returns to 100% light output. Dimming on low is factory set to 25% with 5 minute default in "full power" prior to dimming back to low. When no motion is detected for 5 minutes, the motion response system reduces the wattage by 75%, to 25% of the normal constant wattage reducing the light level. IMRI can also be specified with automatic profile dimming for the added benefit of a combined dimming profile with sensor detection, where the PIR sensor will override the dimming profile when occupancy is detected. Passive infrared (PIR) motion sensor, WattStopper FSP-211, equipped with lens choice specified. Available in 120V or 277V input only. Motion sensor off state power is 0.0 watts. The FSP-211 can also be reprogrammed with WattStopper's FS1R-100 remote programming tool accessory.

DCC: Dual Circuit Control permits separate switching of 32L models only, where a quantity of (2) 16 LED modules are controlled independently by use of two sets of leads, one for each module.

Wireless Controls: Controller radio/sensor module attached to luminaire (included with LLC2 and LLC3 option) and includes radio, photocell and motion sensor. Also available with remote pod accessory where pod is mounted separate from luminaire to pole or wall (see accessories and Wireless Controls information page 4).

F1: Fusing Single (for 120, 277 or 347VAC)

F2: Fusing Double (for 208, 240 or 480VAC)

F3: Fusing Canadian Double Pull (for 208, 240 or 480VAC)

EBPC: Emergency battery pack is cold weather rated down to -20C (-4F) and integral to the luminaire , allowing for a consistent look between emergency and non-emergency sconces. A separate surface mount accessory box is not required. Dual light engines (32L) are wired in parallel, both operating in emergency mode to meet various redundancy lamp requirements. Also available with single light engine (16L). Secondary driver with relay immediately detects AC power loss and powers luminaire for a minimum of 90 minutes from the time power is lost.

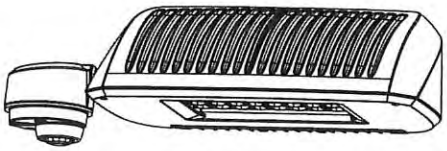
121 LED wall sconce

Wall mount

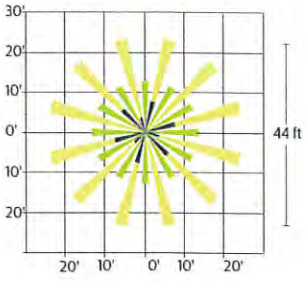
Infrared Motion Response and Wireless Controls Sensor Coverage Patterns

LLC2/3 Luminaire Mounted Controller

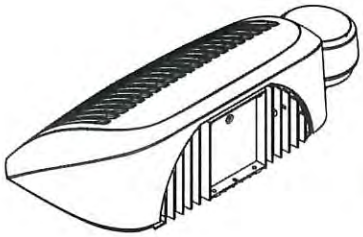
Controller attached to luminaire and Includes radio, photocell and motion sensor with #2 or #3 lens for 8-20' mounting heights.

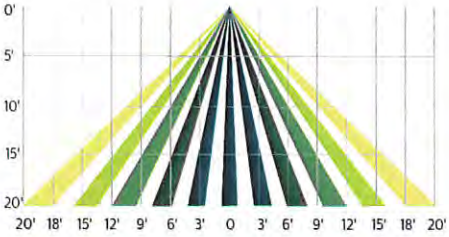


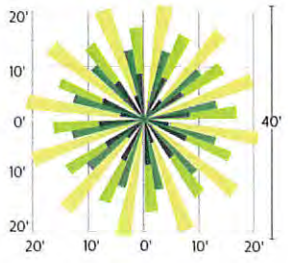
IMRI2/LLC2/LLCR2



IMRI3/LLC3/LLCR3

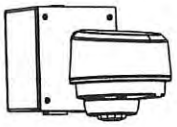




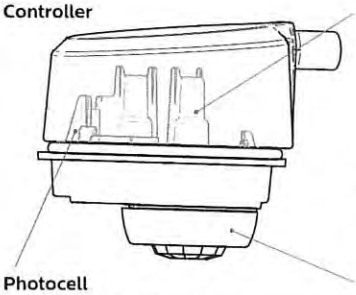


Remote Mount Wireless Controller

Used to extend the communication on site, to extend motion response and add other luminaires that are not pole mounted. Consult factory for more information.



Controller



Wireless Radio

- 1.8 Watts max (no load draw)
- Operating voltage 120-277 VAC RMS
- Communicates using the ZigBee protocol
- Carries out dimming commands from Gateway
- Reports ambient light readings to 1500 Ft-Cd
- Transmission Systems Operating within the band 2400-2483.5Mhz
- ROHS Compliant

Photocell

- Ambient light photocell on every wireless radio that averages the light levels of up to 5 controllers for an accurate reading and optimal light harvesting activity.
- Reports ambient light readings to 1500 Fc.

Motion Response

- Detects motion through passive infrared sensing technology with three different lens configurations
- Motion sensor coverage can be adjusted from a narrow to a wide detection range, which helps reduce false triggers to further increase energy savings.
- Sensing profiles can be updated to adapt to activity levels in the environment, such as occupancy level, wind, and mounting height

121 LED wall sconce

Wall mount

Luminaire Configuration Information – Sconce with wireless controls

Gateway

Overview: The gateway opens up communication with the wireless radios installed on equipped luminaires (or pole), allowing you to control your fixtures straight from the web. One gateway can communicate with up to 800 fixtures. Typically one unit is required per parking lot.

Installation: Gateway has 4 blind threaded holes on the back side that accept 10-32 screws. Mount spacing is 10.41" across and 14.19" vertical.

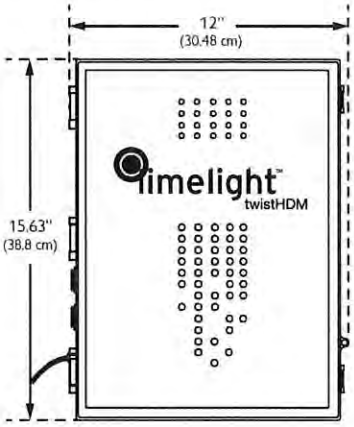
Requirements: The gateway must be mounted in a secure on-site location. The gateway requires 120V. Distance of gateway to the first radio varies upon application; contact factory. Strong internet connection required.

Specifications:

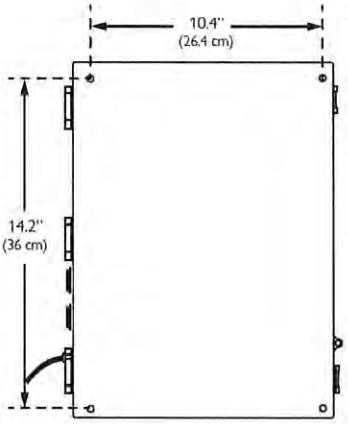
- High density RF Mesh coordinator
- Ethernet or wireless internet connection to server
- Proprietor of software "rules of operation"
- Watertight Ethernet connections
- Highly protected, long life ac/dc power supply
- Single board, ARM compliant 520Mhz Intel computer.
- Operating Temperature -20°C to 55°C
- Tamper proof housing

Gateway Dimensions

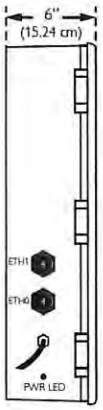
Front View



Back View



Side View



121 LED wall sconce

Wall mount

Specifications

Housing

Main body cast housing and back plate made of a low copper die cast Aluminum alloy for a high resistance to corrosion, 0.100" (2.5mm) minimum thickness. Hinged door allows access to driver and LED compartment.

Mounting

Mounting is completed through integral back plate that features a separate recessed feature for hook and lock quick mount plate that secures with two set screws from bottom of luminaire. Mounting plate is located in the center of the luminaire width and 3.5" above the luminaire bottom (lens down position). Luminaire ships fully assembled, ready to install.

Light Engine

Composed of 4 main components: Heat Sink / LED Module / Optical System / Driver. Electrical components are RoHS compliant. IP66 sealed light engines. LEDs tested by ISO 17025-2005 accredited lab in accordance with IESNA LM-80 guidelines extrapolations in accordance with IESNA TM-21. Metal core board ensures greater heat transfer and longer lifespan.

Heat Sink

Integral door/heat sink design made of low copper die cast Aluminum alloy for a high resistance to corrosion.

LED Module

Composed of high performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000K nominal (+/- 275K), CRI 70 Min. Available in other color temperatures including Cool White, 5700K and Warm White, 3000K.

Hardware

All exposed screws are stainless and/or corrosion resistant and captive.

Optical System

The advanced LED optical systems provide IES Types 2, 3, 4. Composed of high performance UV stabilized optical grade polymer refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. System is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Dark sky compliant with 0% uplight and U0 per IESNA TM-15.

Driver

High power factor of 90% min. Electronic driver, operating range 50/60 Hz. Auto adjusting universal voltage input from 120 to 277 VAC or 347 to 480 VAC rated for both application line to line or line to neutral, Class I, THD of 20% max. The current supplying the LEDs will be reduced by the driver if the driver experiences internal overheating as a protection to the LEDs and the electrical components. Output is protected from short circuits, voltage overload and current overload. Automatic recovery after correction. Standard built in driver surge protection of 2.5kV (min).

Surge Protection

Each luminaire is provided as standard with surge protector (Philips designed SP1) tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE C62.41.2 Scenario I Category C High Exposure 10kV/5kA waveforms for Line Ground, Line Neutral and Neutral Ground, and in accordance with U.S. DOE (Department of Energy) MSSLC (Municipal Solid State Street Lighting Consortium) Model Specification for LED Roadway Luminaires Appendix D Electrical Immunity High Test Level 10kV / 5kA.

Wiring (supplied by others)

Splices must be made in the junction box.

Finish

Five standard colors offered in textured black, white, bronze, dark gray and medium gray. Color in accordance with the AAMA 2604 standard. Application of polyester powder coat paint 2.5 mils minimum. The thermosetting resins provides a discoloration resistant finish in accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. RAL and custom color matching available.

LED Products Manufacturing Standard

The electronic components sensitive to electrostatic discharge (ESD) such as light emitting diodes (LEDs) are assembled in compliance with EC61340-5-1 and ANSI/ESD S20.20 standards so as to eliminate ESD events that could decrease the useful life of the product.

LED Useful Life

Luminaire Useful Life accounts for LED lumen maintenance. Refer to IES files for energy consumption and delivered lumens for each option. Based on ISTMT in situ thermal testing in accordance with UL1598 and UL8750, LED LM-80/TM-21, expected to reach 100,000 + hours with >L70 lumen maintenance @ 25°C.

Certifications and Compliance

cULus Listed for Canada and USA suitable for wet locations when mounted downward facing. cULus Listed for Canada and USA suitable for damp locations when inverted upward facing when mounted in covered ceiling application. Emergency Battery Pack option is tested and listed to UL924 and CSA C22.2 No. 141-10 DesignLights Consortium qualified on models as listed on DLC QPL. Luminaire is rated for operation in ambient temperature of -40°C (-40°F) up to +40°C (+104°F)[4].

Limited Warranty

5-year limited warranty. See philips.com/warranties for details and restrictions. Visit our eCatalog or contact your local sales representative for more information.

LED Performance

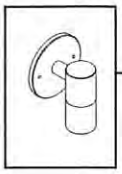
Predicted lumen depreciation data[1]				
Ambient Temperature (°C)	Driver mA	Calculated L_{70} hours[1,2]	L_{70} per TM-21[2,3]	Lumen Maintenance % @ 60,000 hours
25°C	up to 1200 mA	>100,000	>42,000	88%

1. Predicted performance derived from LED manufacturer's data and engineering design estimates, based on IESNA LM-80 methodology. Actual experience may vary due to field application conditions.
2. L_{70} is the predicted time when LED performance depreciates to 70% of initial lumen output.
3. Calculated per IESNA TM21-11. Published L_{70} hours limited to 6 times actual LED test hours.
4. 32L rated for 30°C at 1000mA.

Philips Lighting North America Corporation
200 Franklin Square Drive, Somerset, NJ 08873
Tel. 855-486-2216

Philips Lighting Canada Ltd.
281 Hillmount Rd, Markham, ON, Canada L6C 2S3
Tel. 800-668-9008

Deturk Type SL6 - Wall fixture at Apt unit entry



BKSSL SOLID STATE LIGHTING

the power of dimming with adjust-e-lume® TECHNOLOGY

EL CAPITAN™

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

Example	- EC	- LED	- e65	- SP	- A7	- BLW	- 12	- 11	- B	

Material

- **Blank** - Aluminum
- **B** - Brass
- **S** - Stainless Steel

Series

- **EC** - El Capitan Series™

Source

- **LED** - **'e'** Technology with Integral Dimming Driver (See Specifications for Dimming)
  Designed for use with remote 12VAC BKSSL® transformers. Requires magnetic Low Voltage dimmer.

LED Type

- **e64** - 7WLED/2.7k
- **e65** - 7WLED/3k
- **e66** - 7WLED/4k
- **e74** - 7WLED/Amber

Optics*

- **NSP** - Narrow Spot (Red Indicator)
- **SP** - Spot (Green Indicator)
- **MFL** - Medium Flood (Yellow Indicator)
- **WFL** - Wide Flood (Blue Indicator)

Adjust-e-Lume® Output Intensity *(Choose factory setting)*

A9 (Standard), **A8, A7, A6, A5, A4, A3, A2, A1**

Finish

Aluminum Finish

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White (Gloss)	WHP	WHW
Aluminum	SAP	—
Verde	—	VER

Brass Finish

Machined	MAC
Polished	POL
Mitique™	MIT

Stainless Finish

Machined	MAC
Polished	POL
Brushed	BRU *Interior use only.*

Premium Finish

ABP	Antique Brass Powder	CMG	Cascade Mountain Granite	RMG	Rocky Mountain Granite
AMG	Aleutian Mountain Granite	CRI	Cracked Ice	SDS	Sonoran Desert Sandstone
AQW	Antique White	CRM	Cream	SMG	Sierra Mountain Granite
BCM	Black Chrome	HUG	Hunter Green	TXF	Textured Forest
BGE	Beige	MDS	Mojave Desert Sandstone	WCP	Weathered Copper
BPP	Brown Patina Powder	NBP	Natural Brass Powder	WIR	Weathered Iron
CAP	Clear Anodized Powder	OCP	Old Copper	*Also available in RAL Finishes See submittal SUB-1439-00*	

Lens Type

- **12** - Soft Focus Lens
- **13** - Rectilinear Lens

Shielding

- **11** - Honeycomb Baffle*

Cap Style

- **A** - 45°
- **B** - 90°
- **C** - Flush
- **D** - 45° less Weep Hole *(Interior Use Only)*
- **E** - 90° less Weep Hole *(Interior Use Only)*
- **F** - 90° cutoff with Flush Lens

**Accommodates up to 2 Lens/Shielding media*

DRIVER DATA

Input Volts	InRush Current	Operating Current	Dimmable	Operation Ambient Temperature
12VAC/DC 50/60Hz	250mA (non-dimmed)	700mA	Magnetic Low Voltage Dimmer	-10°F-130°F

LM79 DATA

BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)
e64	2700K	7.0	80
e65	3000K	7.0	80
e66	4000K	7.0	80
e74	Amber (590nm)	7.0	~

L70 DATA

Minimum Rated Life (hrs.) 70% of initial lumens(L70)
50,000
50,000
50,000
50,000

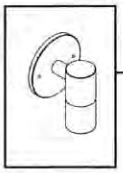
*OPTICAL DATA

Beam Type	Angle	e66 CBCP	Visual Indicator
Narrow Spot	13°	6889	Red Dot
Spot	15°	5225	Green Dot
Medium Flood	23°	1984	Yellow Dot
Wide Flood	31°	1300	Blue Dot

B-K LIGHTING

40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

RELEASED	DRAWING NUMBER
06-06-16	SUB000942



BKSSL SOLID STATE LIGHTING

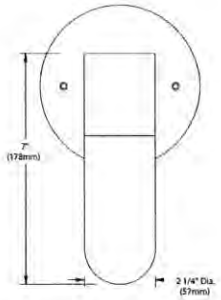
the power of dimming with adjust-e-lume® TECHNOLOGY

EL CAPITAN™

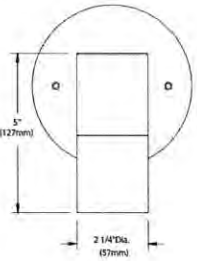
PROJECT:	
TYPE:	

FRONT VIEW

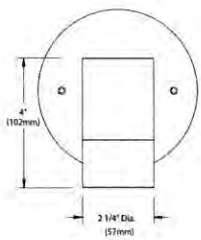
"A/D" CAP



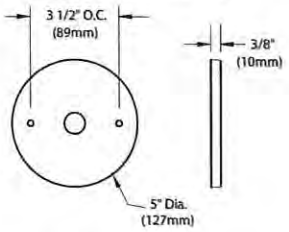
"B/E/F" CAP



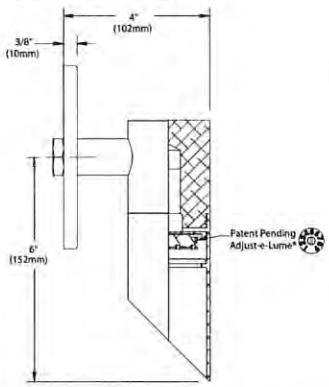
"C" CAP

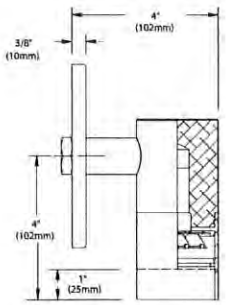


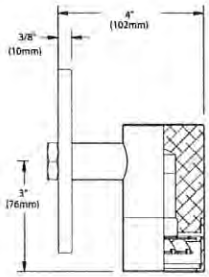
CANOPY DETAIL



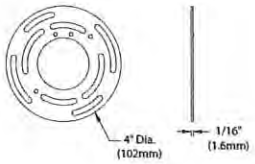
SIDE VIEW





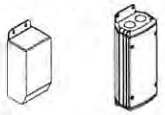


UNIVERSAL RING



Accessories *(Configure separately)*

Remote options:



TR Series UPMRM™

All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™
Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials
Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 316).

Body
Fully machined from solid billet. Unibody design provides enclosed, water-proof wireway and integral heat sink for maximum component life. High temperature, silicone 'O' Ring provides water-tight seal.

Cap
Fully machined. Accommodates [1] lens or louver media. Choose from 45° cutoff ('A' or 'D'), 1" deep bezel with 90° cutoff ('B' or 'E'), flush lens ('C') cap styles, or 1" deep cutoff with flush mounted lens ('F'). 'A' and 'B' caps include weephole for water and debris drainage. 'D' and 'E' caps exclude weep-hole and are for interior use only.

Lens
Shock resistant, tempered, glass lens is factory adhered to fixture cap and provides hermetically sealed optical compartment. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL®
Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components. Integral, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <1A (non-dimmed). Conforms to Safety Std. C22.2 No. 250.13-12.

Dimming
Line voltage dimmable via magnetic low voltage dimmer. For use with low voltage dimmer with dedicated neutral conductor. For purposes of dimming: Remote magnetic transformer with BKSSL® Power of 'e' technology loads should be loaded to 25% of the transformer VA (watts) rated value.

Optics
Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood (WFL) = Blue.

Adjust-e-Lume® (Pat. Pending)
Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Installation
5" dia., machined canopy with stainless steel universal mounting ring permits mounting to 4" octagonal junction box (by others). Suitable for uplight or downlight installation.

Remote Transformer
For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers.

Wiring
Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware
Tamper-resistant, stainless steel hardware. Canopy mounting screws are additionally black oxide treated for additional corrosion resistance.

Finish
StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty
5 year limited warranty.

Certification and Listing
ITL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. Suitable for indoor or outdoor use. Suitable for use in wet locations. RoHs compliant. Made in USA.

c UL us LISTED RoHS MADE IN USA

**Teflon is a registered trademark of DuPont Corporation.*
**Energy Star is a registered trademark of the United States Environmental Protection Agency.*

B-K LIGHTING
40429 Brickyard Drive • Madera, CA 93636 • USA
559.438.5800 • FAX 559.438.5900
www.bklighting.com • info@bklighting.com

RELEASED	DRAWING NUMBER
06-06-16	SUB000942

adjust-e-lume®
TECHNOLOGY

Select OptiKit™ for desired distribution

RED	Narrow Spot (NSP)
GREEN	Spot (SP)
YELLOW	Medium Flood (MFL)
BLUE	Wide Flood (WFL)

Set adjust-e-lume® Dial to desired output

Distance from lamp	Narrow Spot	4K	3K	2.7K
20'		17.2	15.3	15.0
16'		26.9	23.9	23.4
12'		47.8	42.6	41.6
8'		107.6	95.8	93.6
4'		430.6	383.2	374.6
	4' 2' 0' 2' 4'			

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Spot	4K	3K	2.7K
20'		13.1	11.6	11.4
16'		20.4	18.2	17.8
12'		36.3	32.3	31.6
8'		81.6	72.7	71.0
4'		326.6	290.6	284.1
	8' 6' 4' 2' 0' 2' 4' 6' 8'			

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Medium Flood	4K	3K	2.7K
20'		5.0	4.4	4.3
16'		7.8	6.9	6.7
12'		13.8	12.3	12.0
8'		31.0	27.6	27.0
4'		124.0	110.4	107.9
	10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'			

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Distance from lamp	Wide Flood	4K	3K	2.7K
20'		3.3	2.9	2.8
16'		5.1	4.5	4.4
12'		9.0	8.0	7.9
8'		20.3	18.1	17.7
4'		81.3	72.3	70.7
	14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'			

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

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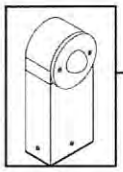

BKSSL SOLID STATE LIGHTING

the power of dimming with adjust-e-lume® TECHNOLOGY

BOLLARD STAR™

PROJECT:	
TYPE:	Deturk Type SL8 : Roof top garden low level bollard
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

BS	LED						
BS	- LED	- e100	- A5	- BZW	- A	- 12	- T

Example: BS - LED - e100 - A5 - BZW - A - 12 - T

Series
BS - Bollard Star™ Pathlight

Source
LED - **'e'** Technology with Integral Driver (See Specifications for Dimming)
Designed for use with remote 12VAC BKSSL® transformers. Requires magnetic Low Voltage dimmer

LED Type

e100 - 5WLED/2.7K
e101 - 5WLED/3K
e102 - 5WLED/4K
e103 - 5WLED/Amber

Adjust-e-Lume® Output Intensity *(Choose factory setting)*
A9 (Standard), **A8, A7, A6, A5, A4, A3, A2, A1**

Finish

Aluminum Finish

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White (Gloss)	WHP	WHW
Aluminum	SAP	—
Verde	—	VER

Premium Finish

ABP	Antique Brass Powder	CMG	Cascade Mountain Granite	RMG	Rocky Mountain Granite
AMG	Aleutian Mountain Granite	CRI	Cracked Ice	SDS	Sonoran Desert Sandstone
AQW	Antique White	CRM	Cream	SMG	Sierra Mountain Granite
BCM	Black Chrome	HUG	Hunter Green	TXF	Textured Forest
BGE	Beige	MDS	Mojave Desert Sandstone	WCP	Weathered Copper
BPP	Brown Patina Powder	NBP	Natural Brass Powder	WIR	Weathered Iron
CAP	Clear Anodized Powder	OCP	Old Copper	*Also available in RAL Finishes See submittal SUB-1439-00*	

Style
A - Short (68° Cutoff)
B - Long (90° Cutoff)

Overall Height
12", 18", 24", or 30"
(Specify in inches)

Transformer Options
T - Integral TRe20 Electronic Transformer *(105-300 VAC. 50/60 Hz. Non-Dimming)*

DRIVER DATA

Input Volts	InRush Current	Operating Current	Dimmable	Operation Ambient Temperature
12VAC/DC 50/60Hz	<250mA (non-dimmed)	700mA	Magnetic Low Voltage Dimmer	-22°F-194°F (-30°C - 90°C)

LM79 DATA

BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)
e100	2700K	5.0	80
e101	3000K	5.0	80
e102	4000K	5.0	80
e103	Amber (590nm)	5.0	~

L70 DATA

Minimum Rated Life (hrs.) 70% of initial lumens(L70)
50,000
50,000
50,000
50,000

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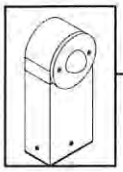
RELEASED 06-06-16

DRAWING NUMBER SUB001265



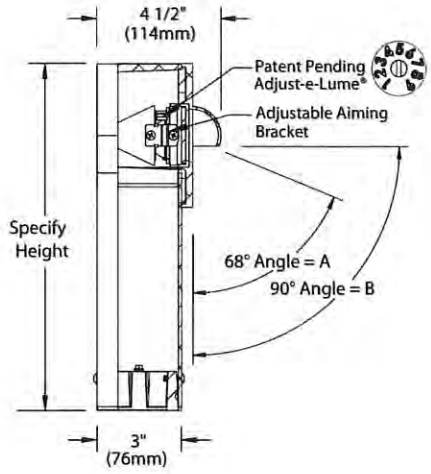
BKSSL SOLID STATE LIGHTING

the power of dimming with adjust-e-lume® TECHNOLOGY

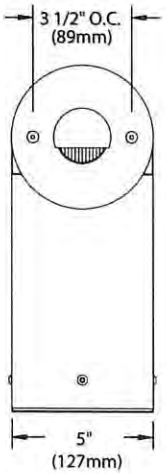
BOLLARD STAR™

PROJECT:	
TYPE:	

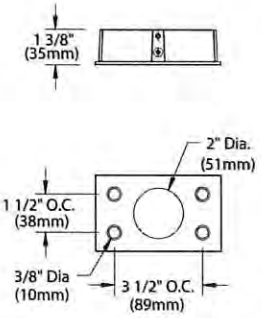
SIDE VIEW



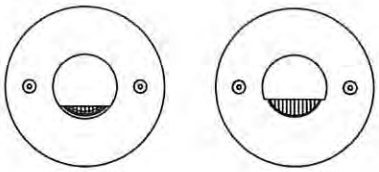
FRONT VIEW



ANCHOR BASE



FACEPLATE OPTIONS



"A" Faceplate
(68° Angle)

"B" Faceplate
(90° Angle)

Accessories *(Configure separately)*

Remote Transformers:

TR Series | Power Pipe ™ | UPMRM™

All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™
Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced on site. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials
Furnished in Copper-Free Aluminum (Type 360).

Housing
Half-round top is cast construction with machined finish. Sidewalls are machined extrusion with [4] machined mounting holes.

Faceplate
Cast construction with machined finish. Countersunk holes provide for flush hardware mounting with [2] tamper-resistant, stainless steel mounting screws.

Lens
Shock resistant, heat-treated, glass lens is factory adhered to faceplate and provides hermetically sealed optical compartment. Rectilinear pattern provides wide lateral distribution and long forward throw.

BKSSL®
Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components. Integral, constant current driver. 12VAC/VDC input. 50/60Hz. Proprietary input control scheme achieves power factor correction and eliminates inrush current. Output, over-voltage, open-circuit, and short circuit protected. Inrush current limited to <1A. Conforms to Safety Std. C22.2 No. 250.13-12.

Dimming
Line voltage dimmable via magnetic low voltage dimmer. For use with low voltage dimmer with dedicated neutral conductor. For purposes of dimming: Remote magnetic transformer with BKSSL® Power of 'e' technology loads should be loaded to 25% of the transformer VA (watts) rated value.

Adjust-e-Lume® (Pat. Pending)
Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Cutoff and Aiming
Choice of 90° or 68° optical cutoff for mounting heights well below typical visual glare angles. Adjustable optical bracket provides up to 24° vertical aiming.

Installation
Cast anchor base with 2"dia. slip conduit hole and [4] 3/8" dia. anchor bolt holes (hardware by others). Anchor base provided with hard-coat (Type III) black anodize finish for maximum corrosion resistance. Available in standard increments to facilitate fixture elevation above grade.

Transformer
For use with 12VAC BKSSL remote transformer or magnetic transformers only. B-K Lighting cannot guarantee performance with third party manufacturers' transformers. Also available with optional integral, TRe20 electronic transformer. 105-300VAC primary voltage. 50/60Hz. Non Dimming. 20VA maximum load.

Wiring
Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware
Tamper-resistant, stainless steel hardware. Faceplate and base screws are additionally black oxide treated for additional corrosion resistance.

Finish
StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating.

Warranty
5 year limited warranty.

Certification and Listing
ITL tested to IESNA LM-79. UL Listed. Certified to CAN/CSA/ANSI Standards. IP66 Rated. RoHs compliant. Suitable for indoor or outdoor use. Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP66 Rated. Made in USA.

c UL us LISTED RoHS MADE IN USA

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