

1616 Rhode Island Avenue

DO NOT
REPLACE
THIS
STAMP
WITH
ANY
OTHER
STAMP

**APPLICATION TO THE DISTRICT OF COLUMBIA ZONING COMMISSION FOR
MODIFICATION OF AN APPROVED PLANNED UNIT DEVELOPMENT
CASE NO. 02-51A**

Rhode Island Associates Limited Partnership

May 31, 2006

**ZONING COMMISSION
District of Columbia**

CASE NO. 02-51A

EXHIBIT NO. 40

**ZONING COMMISSION
District of Columbia
CASE NO. 02-51A
EXHIBIT NO. 40A1**

TABLE OF CONTENTS

	Page
DEVELOPMENT TEAM.....	i
APPLICATION – ZONING COMMISSION FORM 6	ii
LIST OF EXHIBITS	iii
I. INTRODUCTION	1
II. PUD	4
A. PUD Site.....	4
B. Project Site	5
C. Existing Zoning.....	5
D. Previous Zoning Commission Approvals	6
III. PROJECT DESIGN AND DESCRIPTION	6
A. Project Description.....	6
B. Effect of Modification.....	7
IV. PLANNING ANALYSIS.....	8
A. Land Use Impact.....	8
B. Zoning Impact.....	8
C. Environmental Impact.....	9
D. Facilities Impact.....	9
E. Traffic Impact.....	9
V. EVALUATION STANDARDS.....	10
A. Intent and Purposes of the Zoning Regulations.....	11
B. Intent and Purposes of the PUD Process.....	12
C. Intent and Purposes of the Original PUD Approval and First Modification.....	13
D. Impact Upon Surrounding Area.....	13
E. Benefits and Amenities.....	13
VI. THE PROJECT IS CONSISTENT WITH THE COMPREHENSIVE PLAN.....	14
A. Compliance with Major Themes.....	15
B. Generalized Land Use Map.....	18
C. Compliance with Comprehensive Plan Major Elements.....	18
VII. CONCLUSION.....	22

DEVELOPMENT TEAM

APPLICANT: Rhode Island Associates Limited Partnership
c/o Gould Property Company
1725 DeSales Street, NW, Suite 900
Washington, D.C. 20036

ARCHITECTS: STUDIOS Architecture DCPC
1625 M Street, N.W.
Washington, D.C. 20036

**TRANSPORTATION
CONSULTANT:** Wells & Associates
1420 Spring Hill Road Suite 600
McLean, VA 22102

LAND USE COUNSEL: Pillsbury Winthrop Shaw Pittman
2300 N Street, N.W.
Washington, D.C. 20037

ZONING COMMISSION OF THE DISTRICT OF COLUMBIA

APPLICATION TO MODIFY A PREVIOUSLY APPROVED PLANNED UNIT DEVELOPMENT

Before filling out this form, please see the instructions on the reverse side.
Print or type all information unless otherwise indicated.

In accordance with the provisions of Chapter 24 of the Zoning Regulations, request is hereby made to modify a previously approved PUD, details of which are as follows:

Square No.
182

Lot Nos.
82, 83

Address or description of the premises: 1616 Rhode Island Avenue, N.W.

Area of the Site: 32,726 square feet or acres.

Baist Atlas No. 1, Page 14.

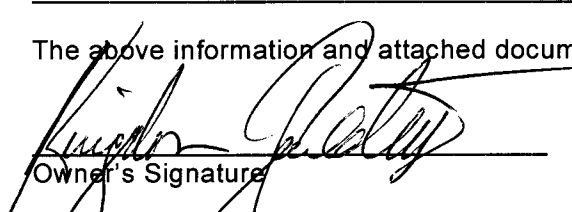
Brief description of the proposal: Mixed use, academic, residential and office development consisting of an existing building with a height of 106 feet and a proposed building with a maximum height of 104 feet. The FAR for the entire PUD will be 8.5 (3.05 residential FAR, 5.45 commercial FAR).

Date of consolidated or final approval: 12/15/89 Case No. 01-04M-20F/98-1M/88-3C

Zoning Commission Order No.: 638 – 638G

Concurrent change of zoning requested (check one): Yes X No

The above information and attached documents are true to the best of my knowledge.


Owner's Signature

5/26/06
Date

Rhode Island Associates Limited Partnership
Owner's Printed Name

Guy Martin
Studios, Inc.
Name of Architect

(202) 736-5900
Telephone Number

1625 M Street, N.W.
Washington, D.C.
Address

20036
Zip Code

Person to be notified of all actions:

Phil T. Feola, Esq.
Name

(202) 663-8789
Telephone Number

Pillsbury Winthrop Shaw Pittman
2300 N Street, N.W.
Washington, D.C.
Address

20037
Zip Code

LIST OF EXHIBITS

<u>Description</u>	<u>Exhibit</u>
Plans, including Landscape Plan, Circulation Plan, and Elevations	A
Zoning Analysis Map, showing the property outlined in red	B
Transportation Impact Analysis	C
Portion of the Comprehensive Plan Generalized Land Use Map	D
Surveyor's Plat	E
History of PUD Approvals	F
Comparison of Modified Proposal to Original	G

STATEMENT OF APPLICANT
FOR A
MODIFICATION TO AN APPROVED PUD

I. Introduction

This statement and the attached documents are submitted in support of the application of Rhode Island Associates Limited Partnership (“**Partnership**”), pursuant to Chapter 24 of the Zoning Regulations, for modifications to an approved mixed-use (residential/commercial) Planned Unit Development (“**PUD**”) for property located in Square 182 (Lots 82 and 83) on the south side of Rhode Island Avenue, between 16th and 17th Streets, N.W.

The Applicant previously submitted a modification application on April 12, 2005, and simultaneously requested a time extension for the PUD. The Zoning Commission (“**Commission**”) held a public hearing on the application on December 1, 2006, and indicated that it wanted to re-evaluate whether there had been a substantial change in material facts since the original approval of the PUD that might undermine that approval. See 11 DCMR Section 2408.10(b). The Commission denied the Applicant’s proposed modification and asked that the Applicant take a “fresh look” at the project. Based on the comments received at the hearing, the Partnership focused its attention on creating a project that would comport with surrounding structures in the Dupont Circle area. To this end, the Partnership believes it has designed a building that reflects the character of the Dupont Circle area and the variety of institutions in the neighborhood. See Plans attached as Exhibit A.

Particular energy has been spent on understanding the nature and character of the more attractive and notable buildings that contribute to the eclectic and unique feeling of Dupont Circle. The Applicant seeks to create a building which reflects the institutional character of the area while also taking into account the fact that the site is located between two high-density buildings and is on the edge of the Downtown. The site is small and presents constraints for the design of viable and functional office floorplates. There is a need to infill this site and complete the block with appropriate urban design, programming and use. The Applicant has reviewed a variety of land uses for the site and, as previously detailed, believes that office use is the most appropriate given the site's location, physical constraints and challenges.

A review of both the adjacent properties and the surrounding area shows typical building types to be largely institutional – embassies, universities, associations, non-profit organizations and unions. Many of these are converted mansions and others are purpose-built for their occupants. Though the standard of design and construction is mixed, the Applicant looked to the high quality examples for purposes of this design exercise.

The new project design for 1616 Rhode Island Avenue is intended to read as an institutional or educational building in keeping with the many similar embassies and educational facilities in the immediate vicinity. It is also intended to fill its mid-block site in a way that is compatible with its abutting neighbors, the University of California and the headquarters building of the Human Rights Campaign. The University of California building has a more traditional design featuring a round corner tower terminating in a steel cornice. The Human Rights Campaign building is an early modern design originally built for the B'nai Brith organization and recently renovated. In revising the PUD, the design team responded to the site's context with a number of strategies.

The first response was to decrease the number of floors from 10 to 9. This reduced the overall height and scale of the building and allowed taller floor-to-floor heights, which is in keeping with the institutional and educational buildings and users.

The second response was to achieve a scale compatible with the surrounding buildings in Dupont Circle. The design does this through the articulation of the façades, using the following elements:

- Two bay window projections, which break down the façade in scale and relate to the frequent use of bay windows in the Dupont Circle area;
- A recess at the two upper floors, which further breaks down the scale and lowers the apparent height of the building. Together with the tall first floor, this will create a traditional base/shaft/top rhythm in the façade; and
- This upper floor setback also aligns with a major horizontal architectural line across all three buildings that face Rhode Island Avenue in this block – the cornice of the Courtyard Hotel at 16th Street, the base of the two story upper element of the University of California and the top of the Human Rights Campaign at 17th Street.

The design team recognized that the western corner of the site would be highly visible, even though it is a mid-block site because of the geometry of Rhode Island Avenue. Instead of a round turret that would mark a street intersection or grid change, the design uses a wrapping glass window bay that turns the corner. This design element marks the main entrance and relates to the glass walls of the Human Rights Campaign building at the corner of 17th Street. Throughout the building façade, the design team has increased the proportion of masonry to glass, striving to achieve a balance between the older (bearing wall with punched windows)

structures in the general area and the more recent curtain wall structures in the immediate surrounding area.

The deep “parking” zone, i.e. sidewalk area, in front of the site offers an opportunity to extend the landscaped surroundings of Scott Circle and the recent plantings of the Human Rights Campaign. Overall, the redesigned PUD will complete this very visible block of Rhode Island Avenue, filling in the gap and knitting the existing structures into the urban landscape.

The requested modification to the approved PUD consists of a new architectural design and a change in use from commercial hotel to commercial office use for the second of two buildings previously approved. The overall floor area ratio (“FAR”) for the PUD will be 8.5.

Submitted in support of this application are a completed application form and architectural drawings. The Applicant further requests that the records in Cases No. 01-04M-20F/98-12M/88-32C be incorporated into the record of this modification request. As set forth below, this statement and attached documents meet the filing requirements for a modification of a Planned Unit Development under Chapter 24 of the District of Columbia Zoning Regulations.

II. PUD

A. PUD Site

The PUD site is located on the south side of Rhode Island Avenue N.W., between 16th Street to the east and 17th Street to the west at 1616 Rhode Island Avenue, N.W. (Square 182, Lots 82 and 83). The total land area of the PUD site is 32,726 square feet. The PUD site has

approximately 230 feet of frontage along Rhode Island Avenue and abuts a 10 foot wide alley on its east (which is further widened by a 5 foot setback provided by the PUD to a height of 14 feet), a 20 foot wide alley on its south side, and a 10 foot wide alley on its west side (which is further widened by a 2.5 foot setback provided by the PUD to a height of 15 feet).

B. Project Site

The Project Site, Lot 82, is the western one-half of the PUD site. It is approximately 15,394 square feet in area and is currently used as a surface parking lot. It is bounded by a public alley and the Human Rights Campaign headquarters office building (90 feet in height/6.0 FAR) to the west and the University of California building (106 feet in height/8.5 FAR) to the east.

The area surrounding the Project Site contains a wide variety of land uses. Major office development is located to the south of the Project Site while a mix of office, hotel, residential and recreational facilities, at moderate and high densities, are located to the east, west and north. Immediately to the south of the Project Site is the Sumner-Magruder School office complex, built to a height of 100 feet. Directly to the north across Rhode Island Avenue is a hotel and U.S. Reservation No. 62.

C. Existing Zoning

The existing zoning in the vicinity of the site, as shown on the Zoning Map, Exhibit B, is C-4, SP-2 and SP-1.

The C-4 Zone District, the zoning of the PUD site and the property abutting the site to the south, is designed for the Downtown core that comprises the retail and office centers of both the District and the

metropolitan area. The C-4 Zone District permits high density commercial, residential and mixed-use development. The maximum permitted FAR is 10.0 with a 130 foot building height, if the street abutting the site is at least 110 feet wide.

The SP Zone is intended to act as a buffer between adjoining commercial and residential areas and to ensure that new development is compatible in use, scale and design with the transitional function of the zone. These areas are designed to preserve and protect areas adjacent to commercial districts, including buildings of historic and architectural merit. The SP-1 Zone District permits a maximum FAR of 4.0, of which no more than 2.5 FAR can be used for non-residential use. The height limit in the SP-1 Zone District is 65 feet. The SP-2 Zone District permits a maximum 6.0 FAR, with no more than 3.5 FAR for non-residential uses. The height limit in the SP-2 Zone District is 90 feet.

D. Previous Zoning Commission Approvals

A brief history of previous Zoning Commission approvals for the PUD site is included in Exhibit F.

III. Project Design and Description

A. Project Description

The Partnership now proposes to modify the PUD in order to develop the remainder of the PUD site with a commercial office building instead of a commercial hotel building. The Plans describing this proposal are attached as Exhibit A.

The building, proposed to be located on the western half of the site, will be occupied by office use. The building will consist of nine (9) stories with approximately 129,680 square feet of gross floor area. It will have approximately 90 parking spaces in an underground garage accessed via a driveway from Rhode Island Avenue. Its loading area will be accessed from the 20 foot wide alley on the property's southern boundary.

The maximum height of the building is proposed to be 104 feet and the total FAR for the entire PUD will be 8.5; the FAR of the proposed building will be 8.4. In addition to the benefits area residents and future employees will derive from the PUD, the community will benefit from the Project's superior architectural design and the PUD's proposed mixed uses (residential, academic, office). The PUD also includes a number of additional amenities which will benefit the residents and workers in the proposed buildings and the community.

B. Effect of the Modification

The modified proposal continues to provide a mixed-use project on the PUD site. The Project as modified would continue to be consistent with the Comprehensive Plan designation of "High Density Commercial" for this property. The FAR of the entire PUD will be 8.5: the residential FAR will be 3.05, and the commercial FAR will be 5.45.

<u>PUD</u> (Proposed Building and University of California Building)	
Total FAR	8.5
Residential FAR	3.05
Commercial FAR	5.45

The building height of the proposed modification has been reduced by a story to 104 feet. The percentage of lot occupancy for the entire PUD proposed in the modified plans is 96%. The number of on-site parking spaces exceeds the number of spaces required by the Zoning Regulations. There are approximately 90 spaces proposed in this modification request.

IV. Planning Analysis

A. Land Use Impact

The proposed building will be located mid-block between two existing buildings. It will assume the site of an existing surface parking lot, which currently interrupts the fabric of the streetscape. The proposed building will complete the Rhode Island Avenue streetscape between 16th and 17th Streets and increase activity along the avenue with its ground floor activity. The height and massing of the building is consistent with the other buildings on the block, which have heights ranging from 90 feet to 106 feet and FARs between 6.0 and 8.5.

The PUD site is located in the southeastern portion of the Dupont Circle Overlay District and is only a few blocks removed from the Downtown Development Overlay District, which favors a balanced mixture of uses. With the addition of the proposed office building, the block will truly embody a diversity of uses – residential, office and hotel.

B. Zoning Impact

The PUD approved in 1989 rezoned the site to the C-4 Zone District. Maintaining

this zoning classification is consistent with the Comprehensive Plan, as discussed in more detail below.

C. Environmental Impact

There will be no adverse environmental impacts resulting from the construction of the proposed building: the increased use in water and sanitary services that result from construction of this building will have an inconsequential effect on the District's delivery systems. The site is currently served by all major utilities. The requisite erosion control procedures stipulated by the District will be implemented during construction of the Project.

D. Facilities Impact

The proposed building will not have an adverse impact on the public facilities on which it will rely for service. The building is only blocks away from the Dupont and Farragut North Metro Stations and is located near bus stops for the S1, S2, S4, G2, N2, N4, N6, D1, D3, D6, L2, 42, and 80 Metrobus lines. Additionally, the building will provide 90 parking spaces, which equates to one parking space for every 1,440 square feet of office space.

E. Traffic Impact

As detailed in the Traffic and Transportation Analysis prepared by Wells and Associates, Exhibit C, the project will not have a significant impact on area traffic. There is already a curb cut at the site and the existing parking lot has the capacity to serve approximately 70 cars. The proposed office building will generate 78 A.M. peak

hour trips and 69 P.M. peak hour trips in addition to what the existing surface parking lot currently generates. These additional trips will not have a significant impact on the intersections included in the traffic study. The site of the proposed office building minimizes its effect on area traffic: it is located in the vicinity of several major roadways and is easily accessible by public transportation.

The PUD site is located along Rhode Island Avenue and within the vicinity of 16th Street, 17th Street, M Street and Massachusetts Avenue, all of which are major corridors in the District of Columbia. Rhode Island Avenue, 17th Street and M Street are classified by the District Department of Transportation as minor arterial roadways, while 16th Street and Massachusetts Avenue are classified as principal arterial roadways. Id., at 5. The traffic that is generated by the office building will be distributed among these roadways, minimizing the effect the office building will have on area traffic.

The traffic impact is further minimized given that the site is served by several Metrobus lines and is within walking distance of the Dupont Circle and Farragut North Metro Stations. Thirteen different Metrobus lines have stops within only a few blocks of the project site, including routes on the D, G, N, and S lines. Id., at 6. The Farragut North and Dupont Circle Metro Stations are within three blocks of the site. Id. The availability of public transportation near the PUD will make it a viable transportation option for many of the individuals who will be employed at the site.

The Applicant is also proposing 90 parking spaces for the office building, which far exceeds the 57 space requirement imposed by the Zoning Commission when it approved the first modification of the PUD (see Exhibit G, p. 4). The 90 parking spaces

will adequately accommodate the uses in the Project.

V. Evaluation Standards

The Project as proposed meets the standards of the PUD Regulations, Chapter 24 of 11 D.C.M.R (Zoning). A PUD must be consistent with District plans, it may not be used to circumvent the Zoning Regulations, and it must provide “present or future occupants of the planned unit development with a living or working environment and amenities superior to those that could be achieved by applying the provisions of this title.” 11 DCMR Section 2400.7(c).

A. Intent and Purposes of the Zoning Regulations

The Project, as proposed, is in accordance with the intent and purposes of the Zoning Regulations. The modification is in accordance with Conclusions of Law Nos. 2 and 3 of Order No. 638, and Nos. 2 and 3 of Order No. 638-F.

“The development of the PUD, as modified, carries out the purposes of Chapter 24 to encourage the development of well-planned residential, institutional, commercial and mixed-use developments, which will offer a variety of building types with more attractive and efficient overall planning and design not achievable under matter-of-right development.” (Zoning Commission Order No. 638, Conclusion of Law No. 2.)

“The development of this PUD is compatible with city-wide goals, plans and programs and is sensitive to environmental protection and energy conservation.” (Zoning Commission Order No. 638, Conclusion of Law No. 3.)

“Approval of this PUD modification and change of zoning is not inconsistent with the

Comprehensive Plan.” (Zoning Commission Order No. 638-F, Conclusion of Law No. 3.)

B. Intent and Purposes of the PUD Process

The proposed development meets the PUD standards of Chapter 24 of the Zoning Regulations. The objective of the PUD process is to encourage high-quality development that provides public benefits and project amenities by allowing applicants greater flexibility in planning and design than may be possible under conventional zoning procedures. The subject application will achieve the goals of the PUD process by providing high-quality development at the subject site with significant public benefits to the neighborhood and the District as a whole.

The provision of this building will improve the urban design, architecture, and site planning of this mid-block location. This PUD modification continues to break the streetscape vertically thereby creating a richer, varied texture on Rhode Island Avenue. It will complete the streetscape on the south side of Rhode Island Avenue tying together the 16th and 17th Street corners of the block. The modification will enhance the character of the area, ensure a vibrant active streetscape, and provide environmental benefits and significant job opportunities, all of which are goals of the PUD regulations.

In the original application, the Zoning Commission concluded that “The Planned Unit Development process is an appropriate means of controlling the development of the subject site, because control of the use of the site is essential to assure compatibility with the neighborhood and achieve the goals and policies of the city.” The PUD will be a mixed-use project offering attractive and efficient development of the site. Moreover, it

will be fully compatible with the neighborhood, as discussed below.

C. Intent and Purposes of the Original PUD and First Modification Approval

The project is in accordance with the intent and purposes of the Original PUD and the First Modification. The proposed modification will result in the construction of an architecturally superior building on Rhode Island Avenue, a major thoroughfare in the Nation's Capital.

D. Impact Upon the Surrounding Area

The Project has been designed to respect, maintain, and enhance the existing attributes of the surrounding community. Additionally, the Project has been developed to minimize any potential adverse traffic and parking impacts. The modified use of the property will neither cause an adverse impact on the street network due to traffic nor create a parking problem in the neighborhood.

The new design reduces the height of the building and the number of stories, so that the proposed height and density are consistent with the other building in the Square. As discussed previously, the buildings located in the immediate vicinity of the site show a similar pattern of height and density with heights of up to 106 feet and FARs of up to 8.5. The proposed Project has a height of 104 feet and a FAR of 8.4. Thus, the proposed project is in keeping with the existing character of the Dupont Circle area.

E. Benefits and Amenities

The Applicant has committed to providing the community with a number of benefits and amenities in connection with this PUD and in some cases, it has already provided them, including the following:

- \$150,000 to the Ross Elementary School;
- Local Small and Disadvantaged Business Enterprises Agreement;
- First Source Employment Agreement;
- \$10,000 to the DuPont Circle Community Resource Center;
- \$100,000 to be provided as a Affordable Housing Contribution;
- \$25,000 to Stead Park (DCCA);
- \$25,000 to Historic DuPont Circle Main Streets;
- \$25,000 to Scott Circle; and
- “Green” Building Package.

In addition to these benefits and amenities, it is the Applicant’s belief that the University of California has established a mentoring program with the Ross Elementary School, demonstrating yet another benefit the PUD has brought to the area.

VI.

The Project is Consistent with the Comprehensive Plan

The modified PUD is consistent with, and in fact, fosters the goals and policies stated in the elements of the District of Columbia Comprehensive Plan, D.C. Law 5-76, 10

DCMR (Planning and Development) §100 et seq. (1998), particularly those within the Land Use Element.

The purposes of the District of Columbia Comprehensive Plan Act are to:

(1) Define the requirements and aspirations of District residents, and accordingly influence social, economic and physical development; (2) Guide executive and legislative decisions and matters affecting the District and its citizens; (3) Promote economic growth in jobs for District residents; (4) Guide private and public development in order to achieve District and community goals; (5) Maintain and enhance the natural and architectural assets of the District; and (6) Assist in conservation, stabilization and improvement of each neighborhood and community in the District.

(D.C. Code §1-245(b)(2004 Supp.).)

The proposed Project advances these purposes by maintaining and enhancing the natural and architectural assets of the District and assisting in the conservation, stabilization and improvement of its neighborhood and community.

A. Compliance with Major Themes

Major themes adopted as part of the Comprehensive Plan are applicable to the proposed modification as follows:

1. Stabilizing the District's Neighborhoods

The Comprehensive Plan (“**Plan**”) calls for protecting, stabilizing and improving the District’s neighborhoods. The Plan recognizes that commercial and institutional uses can be integral to city neighborhoods and contribute to their character. The proposed modification will replace an existing surface parking lot with a commercial office building, which will unite the block, bring jobs to the neighborhood, and activate the streetscape – all of which will stabilize the area.

2. Increasing the Quantity and Quality of Employment Opportunities in the District

A major theme of the Comprehensive Plan is to promote economic development to spur quality job opportunities for District citizens. An important component of the economic development of the District is attracting employers to the City. The proposed office building will aid in attracting new employers to the District or allowing existing District employers to expand their current facilities. The proposed building is conveniently located near public transportation and is proximately located to both downtown and Dupont Circle. In addition to the employment opportunities the actual construction of the building will bring, an office building presents numerous employment opportunities for area residents that the existing surface parking lot fails to offer. The Applicant has already entered into a First Source Employment Agreement and a Local Small and Disadvantaged Business Enterprises Agreement to ensure that local residents and businesses will benefit from the PUD.

3. Respecting and Improving the Physical Character of the District

The site of the proposed building is underutilized and has been serving as a surface parking lot for the past several years. The proposed plans will improve the pedestrian experience in the neighborhood and the landscaping will connect existing buildings to unify a block that currently has no sense of cohesion. The landscaping will line the public sidewalk and complement the building's design.

In keeping with the District's high standards for new construction, the Applicant proposes a premier design for its office building. The Dupont Circle neighborhood is home to an eclectic array of building styles, including rowhouses, large apartment

buildings, and significant office buildings. The proposed design respects the quality of the existing structures and will enhance the character of Rhode Island Avenue between 16th and 17th Streets.

4. Preserving and Ensuring Community Input

The Applicant will work with representatives of the community through the public hearing in this case.

5. Reaffirming and Strengthening the District's Role as the Economic Hub of the National Capital Region

The proposed building promotes the efficient use of the District's infrastructure, which is a theme of economic growth that is central to the Comprehensive Plan. The proposed site is located near several bus lines and the Dupont Circle and Farragut North Metro Stations. It is located on Rhode Island Avenue, a major gateway to the District from neighboring Prince Georges County and is a half block from 16th Street, a major gateway to the District from Montgomery County. It is proximately located to Connecticut and New Hampshire Avenues, which also stretch to the outlying suburbs. Construction of this office building would reinforce the District's location at the center of the region's Metrorail and roadway network.

6. Promoting Enhanced Public Safety

The proposed Project would eliminate an existing surface parking lot. Incorporating an office building into the streetscape in place of the surface parking lot will increase the activity at the site, eliminate the potential for loitering, and add more "eyes and ears" to informally monitor the area.

B. Generalized Land Use Map

The modified project continues to be consistent with its designation as “High Density Commercial” on the Comprehensive Plan’s Generalized Land Use Map. This designation calls for promoting appropriate commercial development, including office use, which is consistent with this proposal.

C. Compliance with Comprehensive Plan Major Elements

The Comprehensive Plan also contains 11 major elements. The proposed project furthers the objectives and policies of several of these elements as follows:

1. Land Use Element

The PUD site is currently zoned for high density commercial use and described in the Comprehensive Plan as appropriate for high density commercial use. The Comprehensive Plan states that this use category allows for a mix of employment, retail, office, cultural, and entertainment centers. The Plan’s policies to encourage commercial use include the following:

- “Promote appropriate commercial development, including centers for retail and office uses, to serve the needs of the economy of the District, to provide a focus for the expansion of housing, and employment that the District will have to accommodate in the future because of its urban center role within the region, and to expand employment opportunities in the region for District residents.” (10 DCMR § 1108.1(a)).

With regard to the Dupont Circle Special Treatment Area, the Plan suggests requiring “a scale of development consistent with the nature and character of the Dupont Circle area in height and bulk.” (10 DCMR § 1131.2(a)). The building that the Applicant proposes in this

application has been reduced in both height and scale since the Applicant's modification request in 2005. The current proposal is consistent with existing development and will blend with its neighboring buildings.

2. Central Employment Area

The PUD site is located within the boundaries of the Central Employment Area ("CEA"), which is defined in the Comprehensive Plan as the core area of the District of Columbia where the greatest concentration of employment is encouraged. The proposed use of Lot 82 as an office building is consistent with the objectives of the CEA since it will bring employment opportunities to the area.

3. Economic Development Element

The District's overall economic development goals are to "generate a high-performance economy, create job opportunities for District residents, expand the revenue base through a strong, growing citizen-business-government partnership, and develop a program that moves from economic development planning through implementation and completion of projects." 10 DCMR § 200.5. The proposed modification to the PUD is consistent with and fosters the following goals and policies enumerated under the Economic Development Element of the District of Columbia's Comprehensive Plan:

- "Provide direction and active support to the creation of an economic development entity that would stimulate well-planned economic activity centers along major commercial corridors, at selected Metrorail stations, at currently underused commercially and industrially zoned sites, and at the neighborhood level." (10 DCMR § 206.2(a));

- “[E]xpand the occupational skills and job opportunities for District residents, particularly unemployed, the underemployed, the economically disadvantaged, and youth preparing to enter the labor force in the coming years.” (10 DCMR § 207.2);

The proposed building will be located in an underutilized site along Rhode Island Avenue that is currently occupied by a surface parking lot. The project will provide job opportunities for District residents and the building’s location along several public transportation lines will make those opportunities available to residents throughout the District. Construction of the proposed building will complete the PUD and will make use of an underutilized location along a major roadway, consistent with the economic development element of the Comprehensive Plan.

4. Housing Element

The Comprehensive Plan provides the following goals with regard to the production of new housing:

- “Encourage the private sector to provide new housing to meet the needs of present and future District residents at locations consistent with District land-use policies and objectives...” (10 DCMR § 302.1(a)).

The PUD, as a whole, has dedicated approximately 100,000 square feet to residential units. The Applicant has also offered to contribute \$100,000 to affordable housing initiatives in the District, which is consistent with the Plan’s objective to “provide for the housing needs of low and moderate-income residents.” 10 DCMR § 303.1(a).

5. Transportation

A key component of the transportation element is to provide “appropriate, energy-efficient, cost-effective, and convenient public transportation services within the District...”

10 DCMR § 501.1. A stated policy in achieving this objective is to:

- “Enhance the efficiency of the transportation system and improve mobility for people and goods by planning and developing optimum connections between the various modes operating in this metropolitan area.” (10 DCMR § 502.2(g)).

Constructing an office building will attract more individuals to the PUD site given the opportunity for employment. Because the site is located within walking distance of two Metro Stations, near several bus lines, and along a major roadway, the infrastructure for ensuring efficient mobility of potential employees is already in place.

6. Urban Design Element

The Comprehensive Plan asserts the following as goals, policies and objectives for future development:

- “Design buildings to include the use of appropriate arrangements of building materials, height, scale, massing, and buffering that complement the immediate region.” (10 DCMR § 708.2(b));
- “Encourage the planting and maintenance of street trees as the single most important streetscape element along commercial and residential streets to provide shade, design continuity, spatial relief, and a juxtaposition of the natural and built environments.” (10 DCMR § 709.2 (j)); and
- “Encourage in-fill development to be complementary to the established character of the area. In-fill development in stable areas should not create sharp changes in physical pattern which might lead to deterioration.” (10 DCMR § 711.2(a)).

The proposed Project exhibits the characteristics of exemplary urban design and architecture. Construction of this building will eliminate the void that currently exists between the Human Rights Campaign and the University of California. The Applicant is proposing a height and density that is consistent with surrounding buildings and the building materials the Applicant proposes will be of superior quality. Finally, the Applicant's proposal includes creating a park-like setting along the building's frontage for the benefit of employees and members of the community.

VII. Conclusion

For the foregoing reasons, the Partnership submits that the modified PUD plans meet the standards of Chapter 24 of the Zoning Regulations; are consistent with the purposes and intent of the Zoning Regulations and Map; will enhance the health, welfare, safety and convenience of the citizens of the District of Columbia; are not inconsistent with the Comprehensive Plan; satisfy the requirements for approval of a consolidated PUD; provide significant public benefits; and advance important goals and policies of the District of Columbia.

Accordingly, we respectfully request that the Zoning Commission schedule the application for modification to this PUD for public hearing.

Respectfully submitted,

PILLSBURY WINTHROP SHAW PITTMAN



Phil Feola



Christine Roddy

CERTIFICATE OF SERVICE

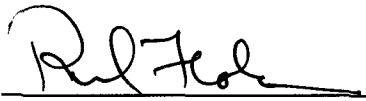
I hereby certify that the foregoing Application for a Modification to An Approved Planned Unit Development was sent by first class mail on May 31, 2006 to:

Arthur Jackson
Office of Planning
801 North Capitol Street; NE
4th Floor|
Washington, DC 20001

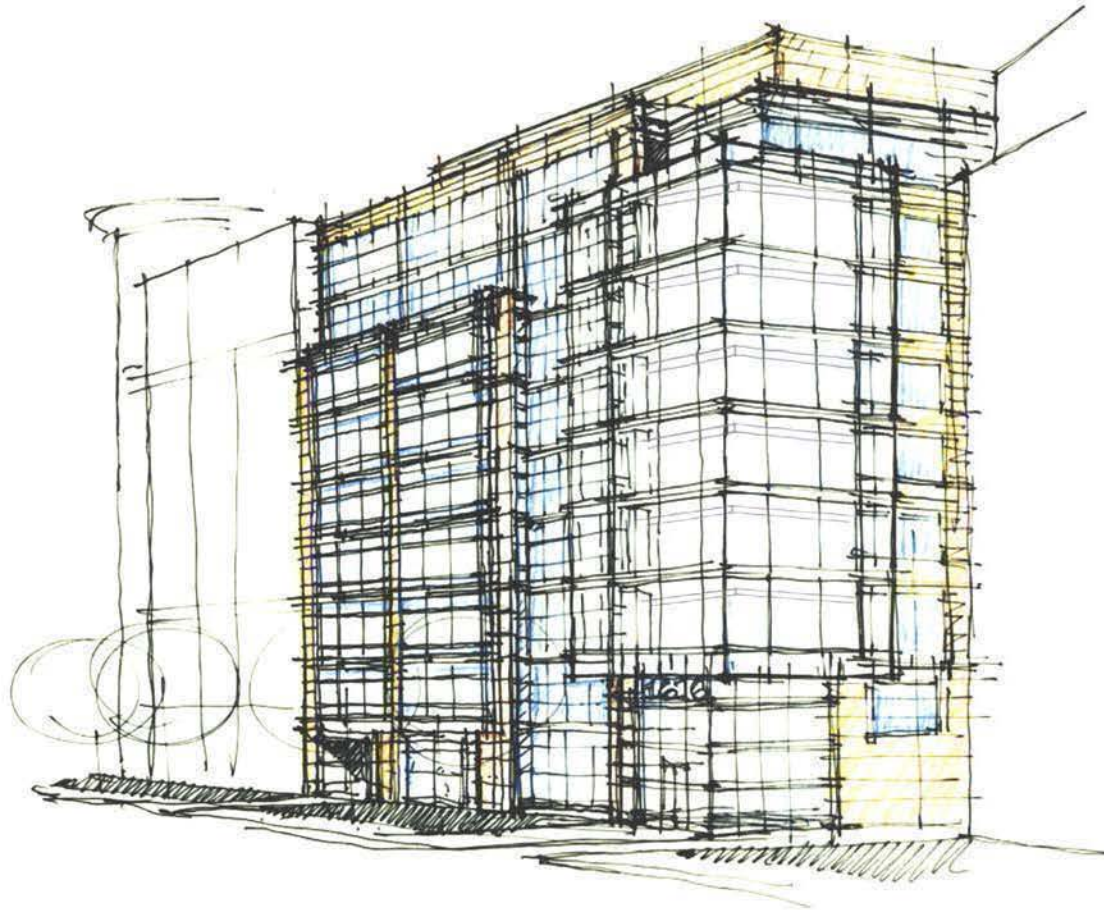
ANC 2B
#9 Dupont Circle, NW
Washington, DC 20036

Stephen Gell, Esq.
1101 30th Street, NW
Suite 500
Washington, DC 20007

University of California
c/o Richard L. Aguglia, Esq.
Hunton & Williams
1900 K Street; NW
Washington, DC 20006

By: 
Phil Feola

A



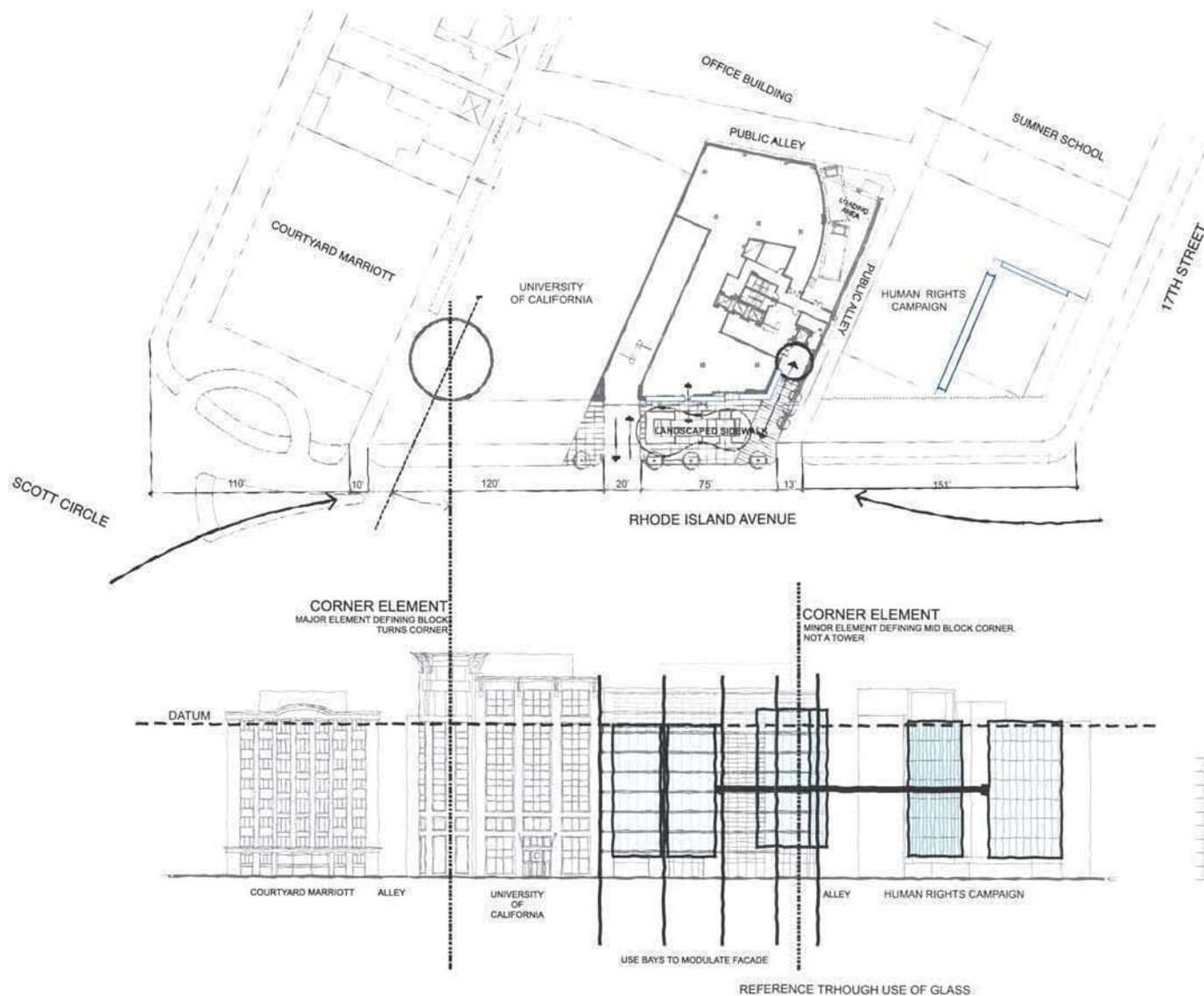
1616 Rhode Island Ave.

Gould Property Company

Stage One Planned Unit Development Application

5/12/06

STUDIOS
architecture



FAR SUMMARY

Use Group	Floor	Area (sf.)
OFFICE/ RETAIL	Ground	11,684
OFFICE USE	2nd	14,471
OFFICE USE	3rd	15,116
OFFICE USE	4th	15,117
OFFICE USE	5th	15,117
OFFICE USE	6th	14,735
OFFICE USE	7th	14,735
OFFICE USE	8th	14,142
OFFICE USE	9th	14,145
		129,263



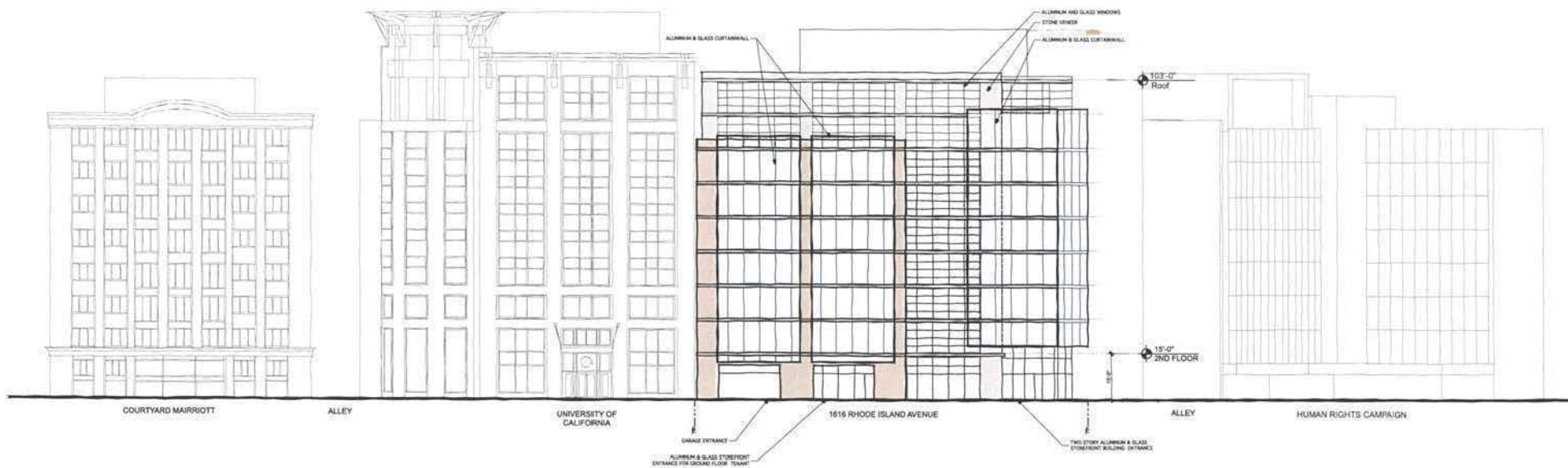
1616 Rhode Island Ave.

Concept Diagrams

Gould Property Company

5/12/06

STUDIOS
architecture



1616 Rhode Island Ave.

Gould Property Company

Rhode Island Avenue Elevation

5/12/06

STUDIOS
architecture



1616 Rhode Island Ave.

Gould Property Company

Perspective on Rhode Island Avenue

5/12/06

STUDIOS
architecture



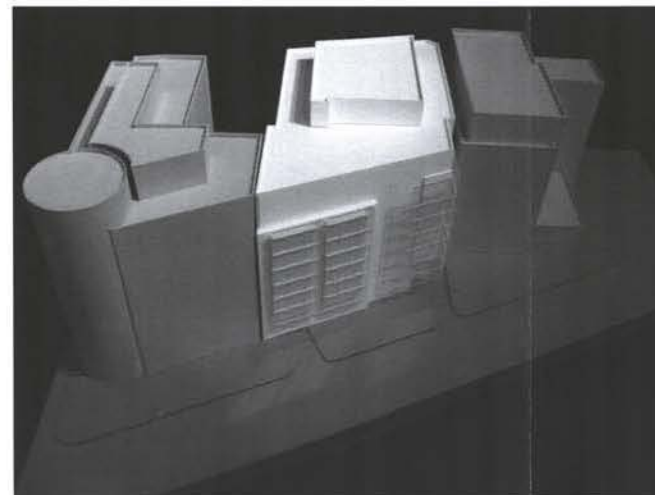
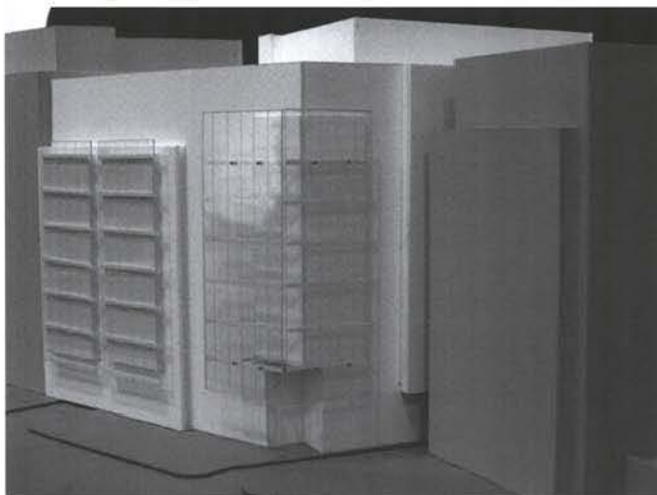
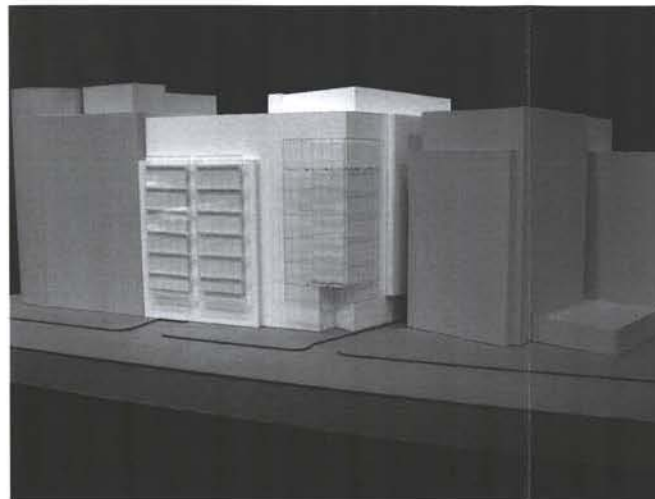
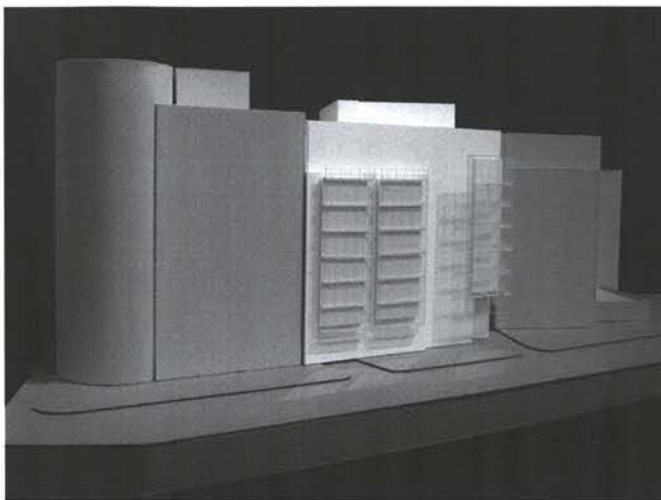
1616 Rhode Island Ave.

Perspective from Rhode Island Avenue

Gould Property Company

5/12/06

STUDIOS
architecture



1616 Rhode Island Ave.

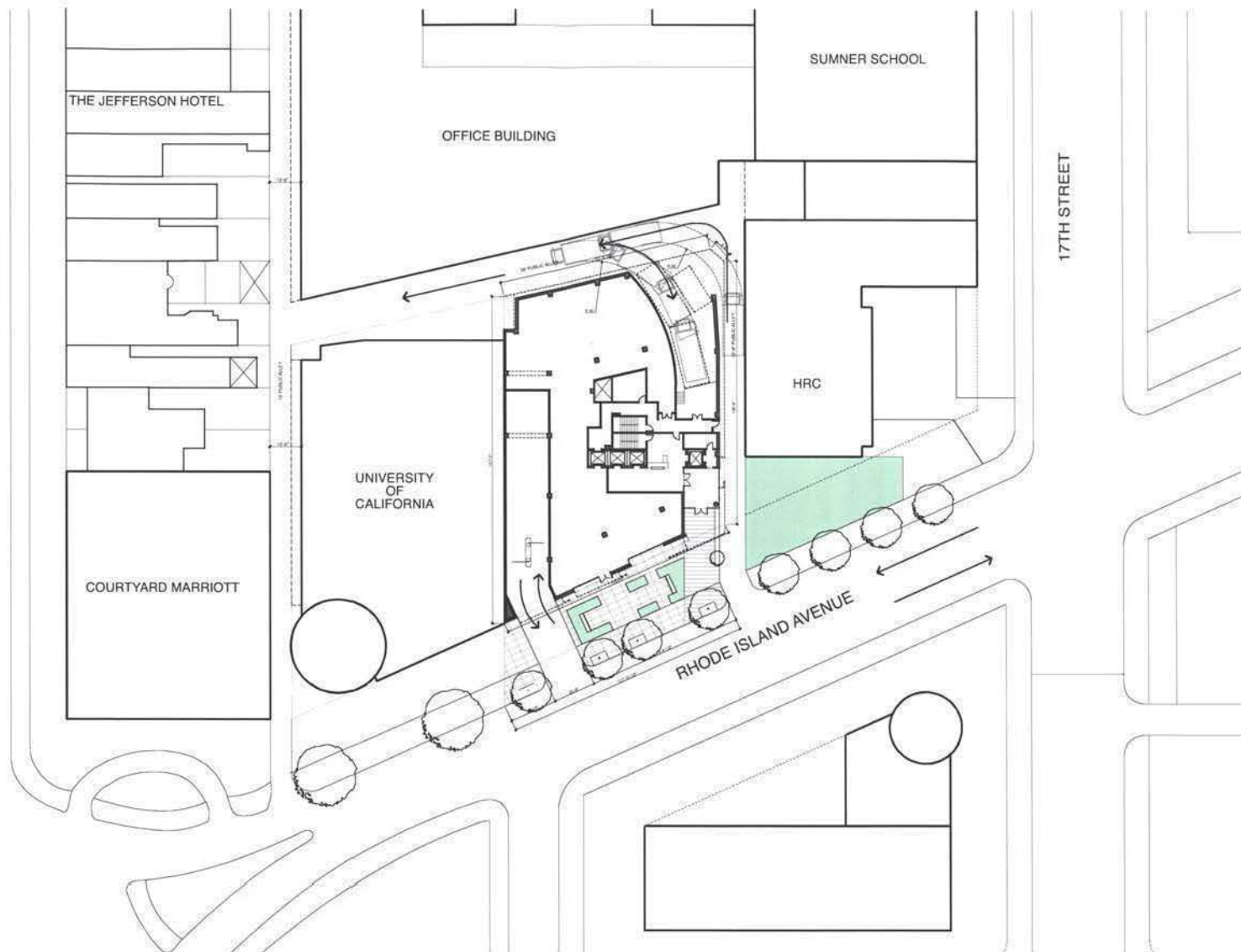
Gould Property Company

Model Photographs

5/12/06

STUDIOS
architecture

16TH STREET



1616 Rhode Island Ave.

General Site and Circulation

Gould Property Company

5/30/06

STUDIOS
architecture



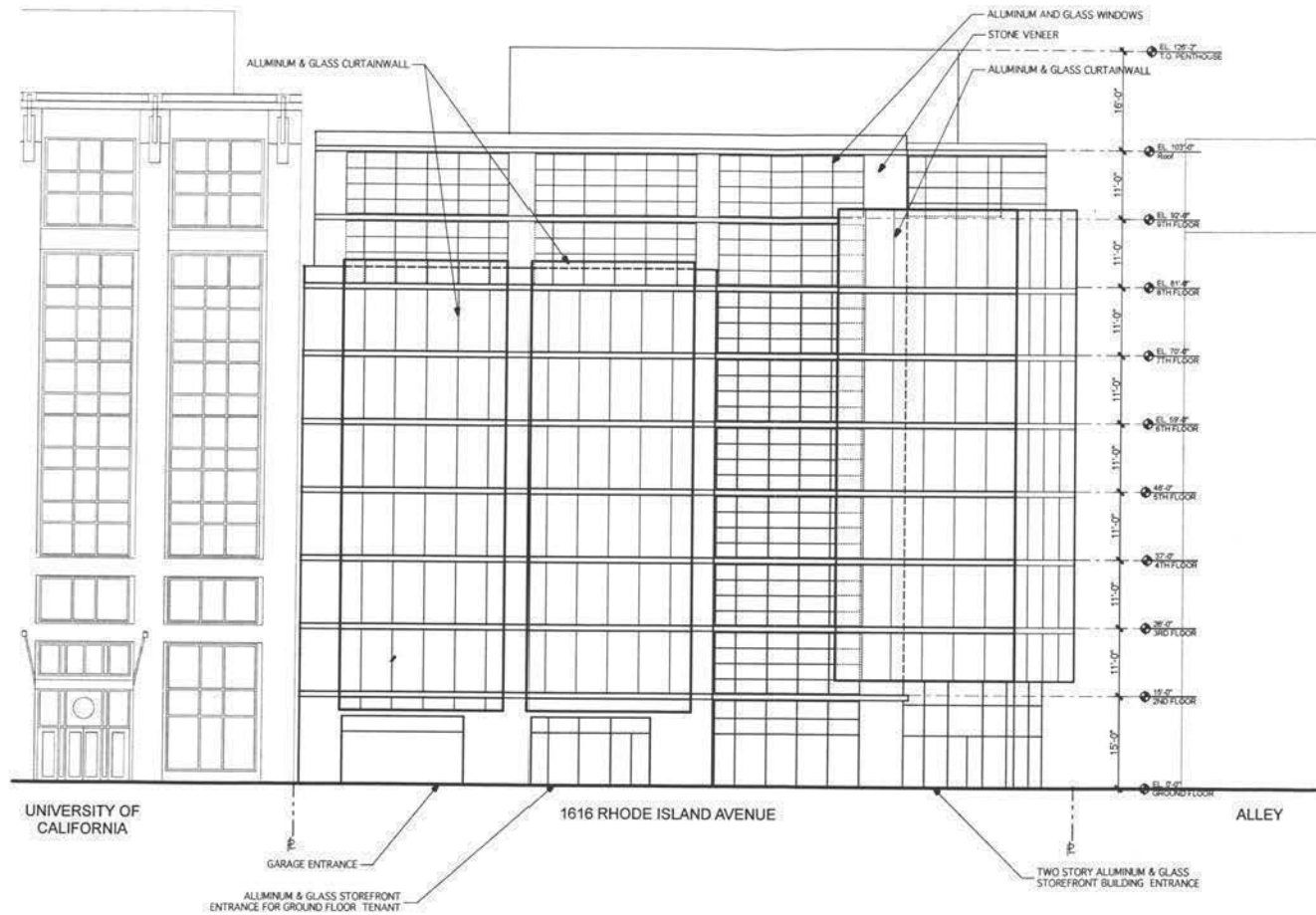
1616 Rhode Island Ave.

View from Scott Circle

Gould Property Company

5/12/06

STUDIOS
architecture



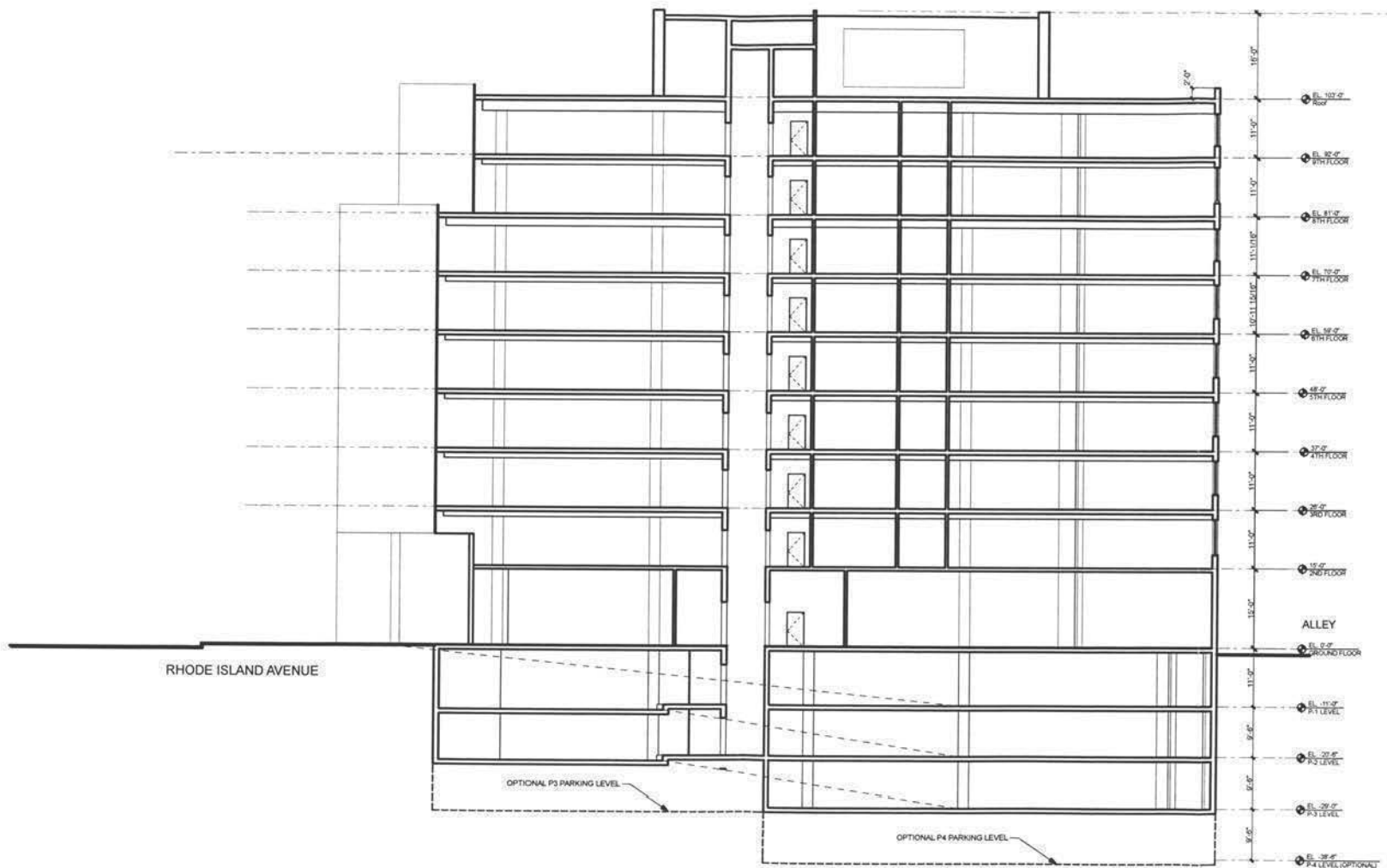
1616 Rhode Island Ave.

Gould Property Company

North Elevation (Rhode Island Avenue)

5/16/06

STUDIOS
architecture



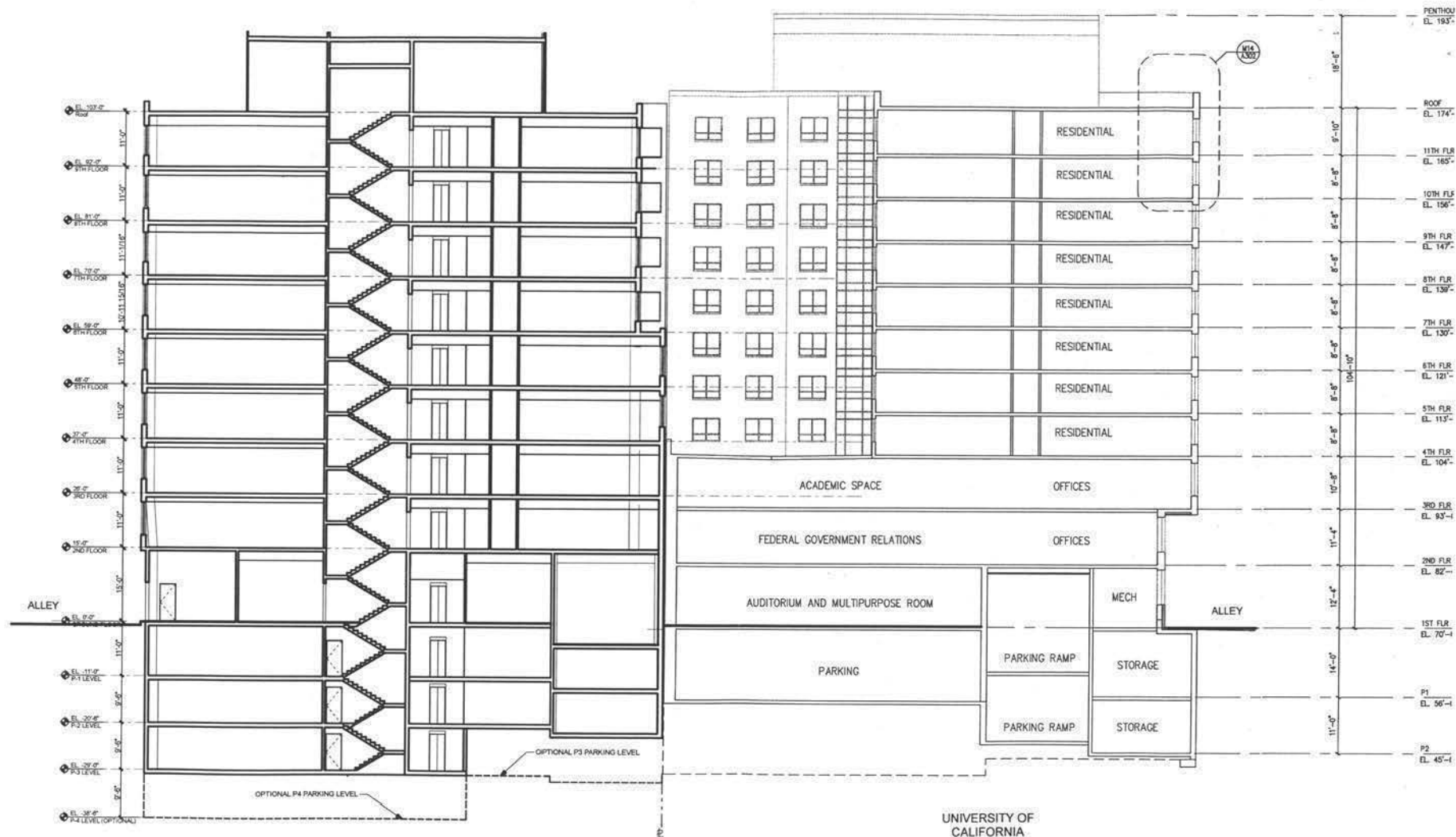
1616 Rhode Island Ave.

Gould Property Company

Building Section

5/16/06

STUDIOS
architecture



1616 RHODE ISLAND
AVENUE

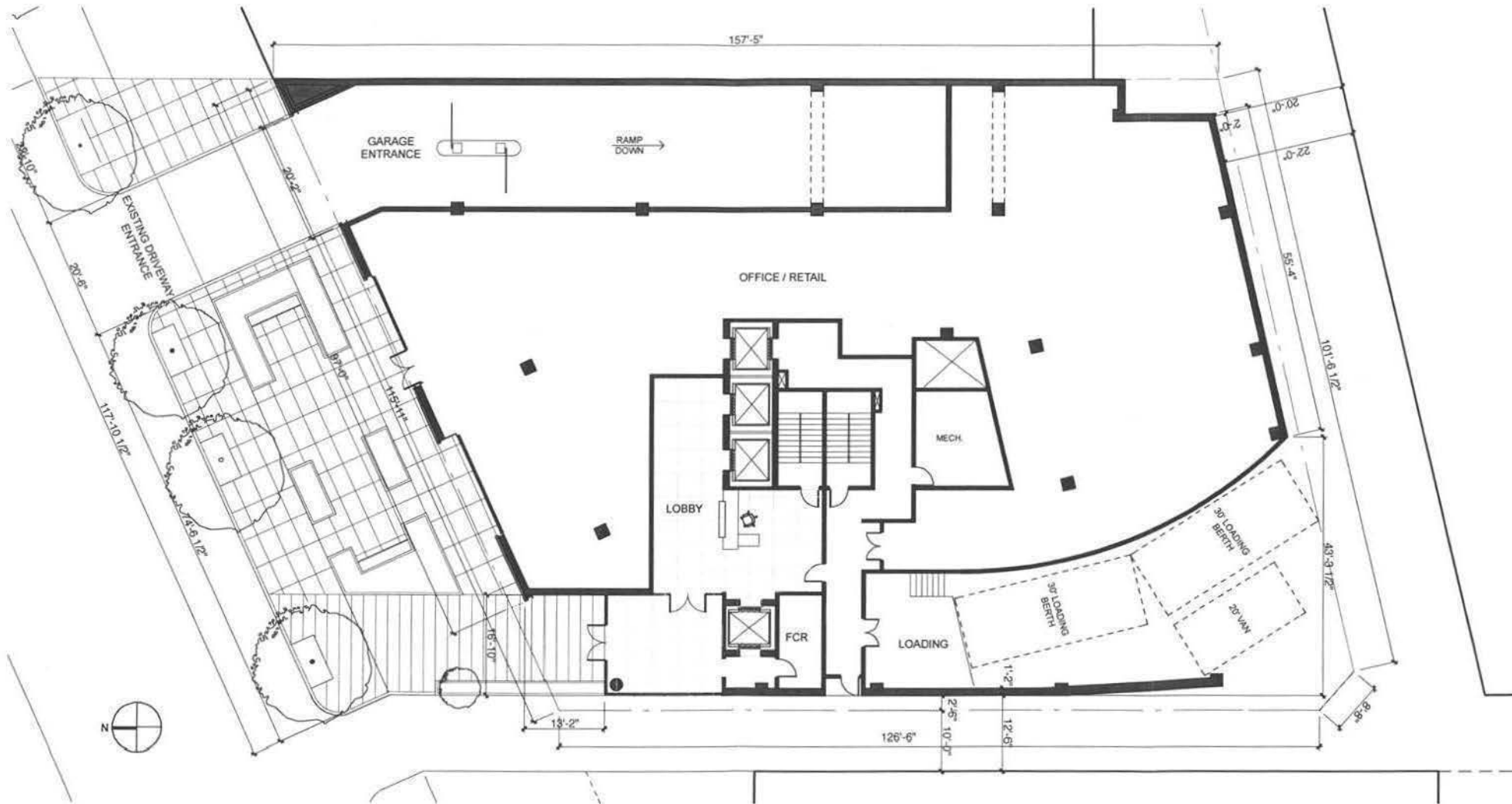
1616 Rhode Island Ave.

Building Section (East West)

Gould Property Company

5/16/06

STUDIOS
architecture



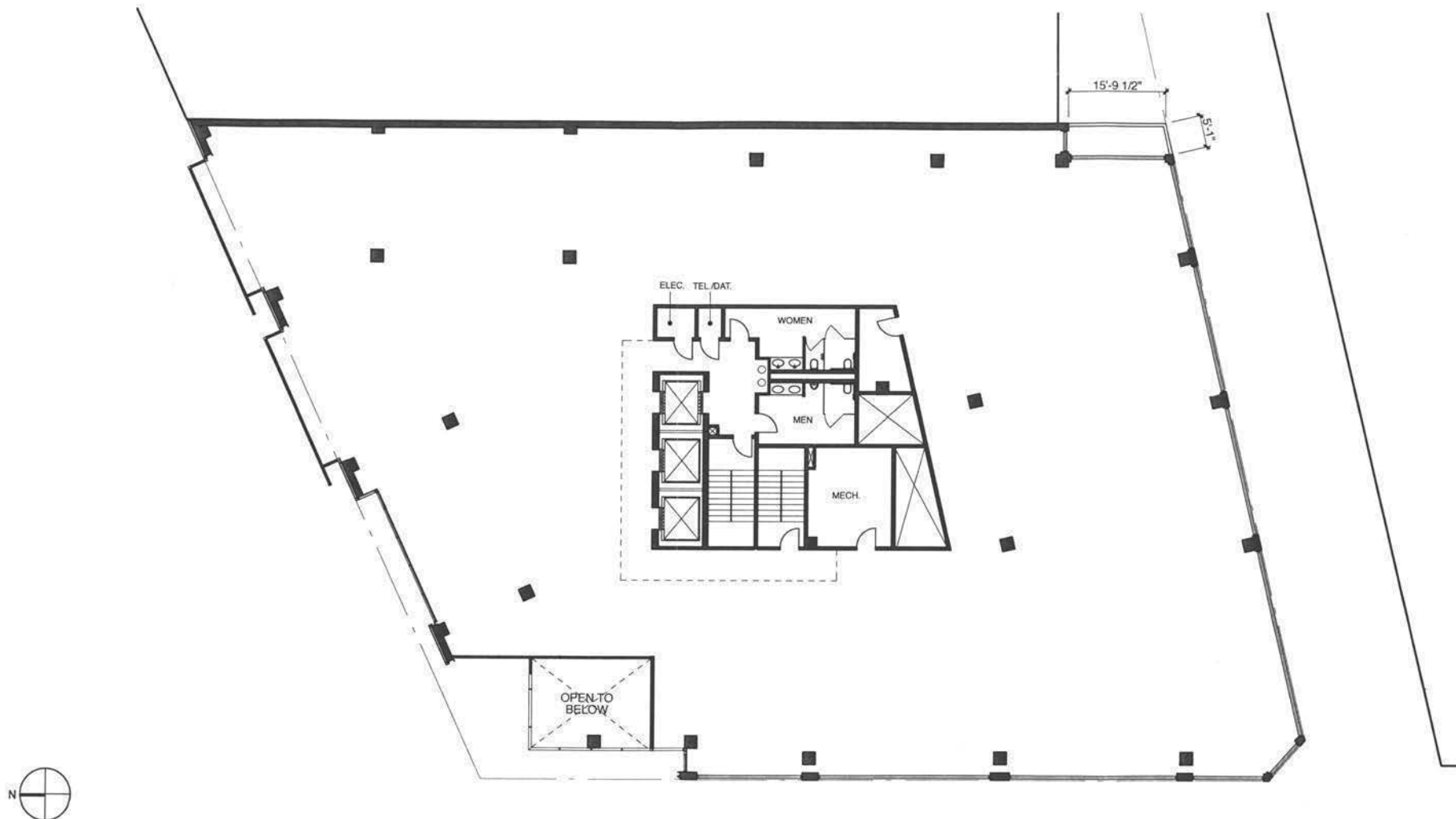
1616 Rhode Island Ave.

Gould Property Company

Ground Floor & General Landscape Plan

5/26/06

STUDIOS
architecture



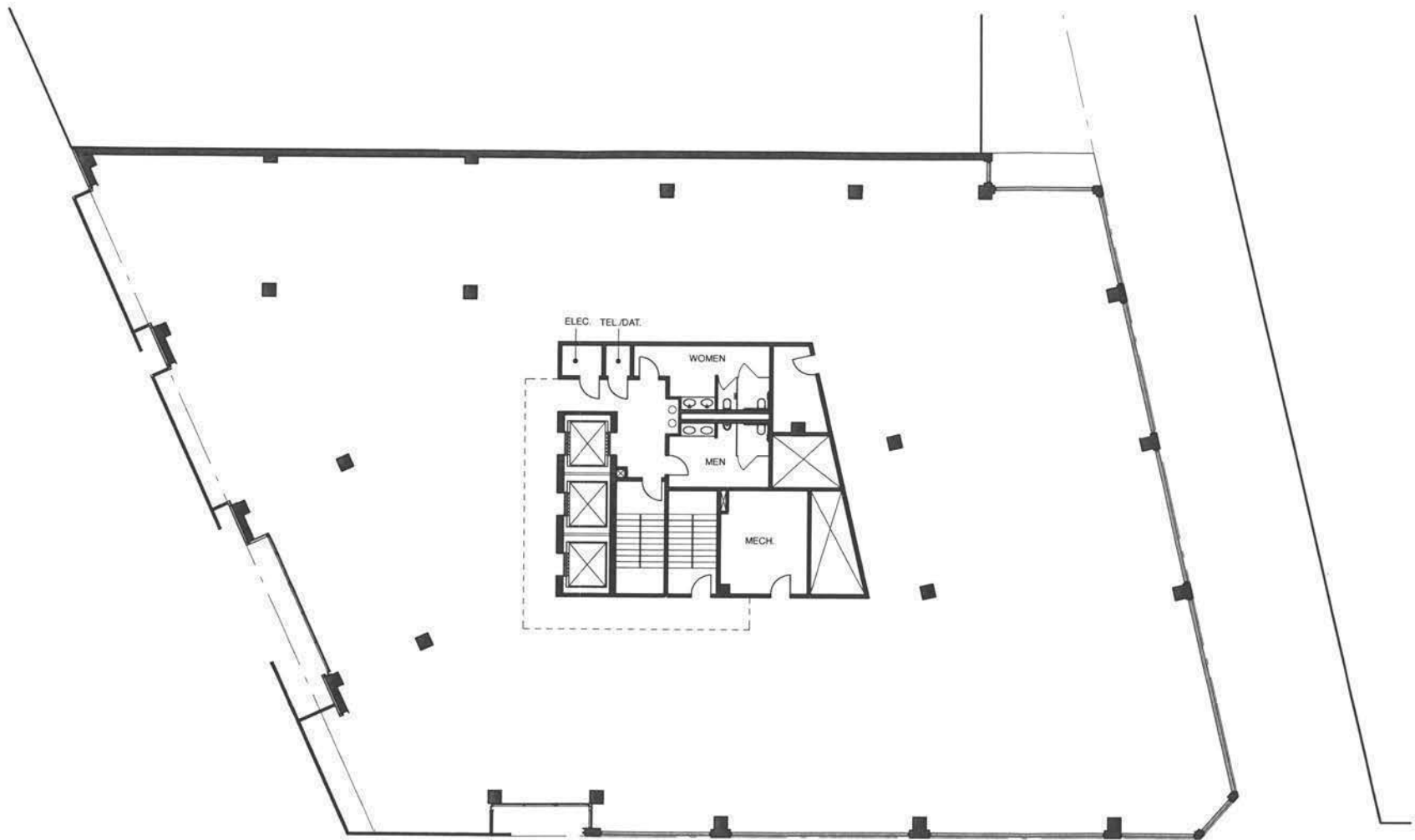
1616 Rhode Island Ave.

Gould Property Company

Second Floor

5/16/06

STUDIOS
architecture



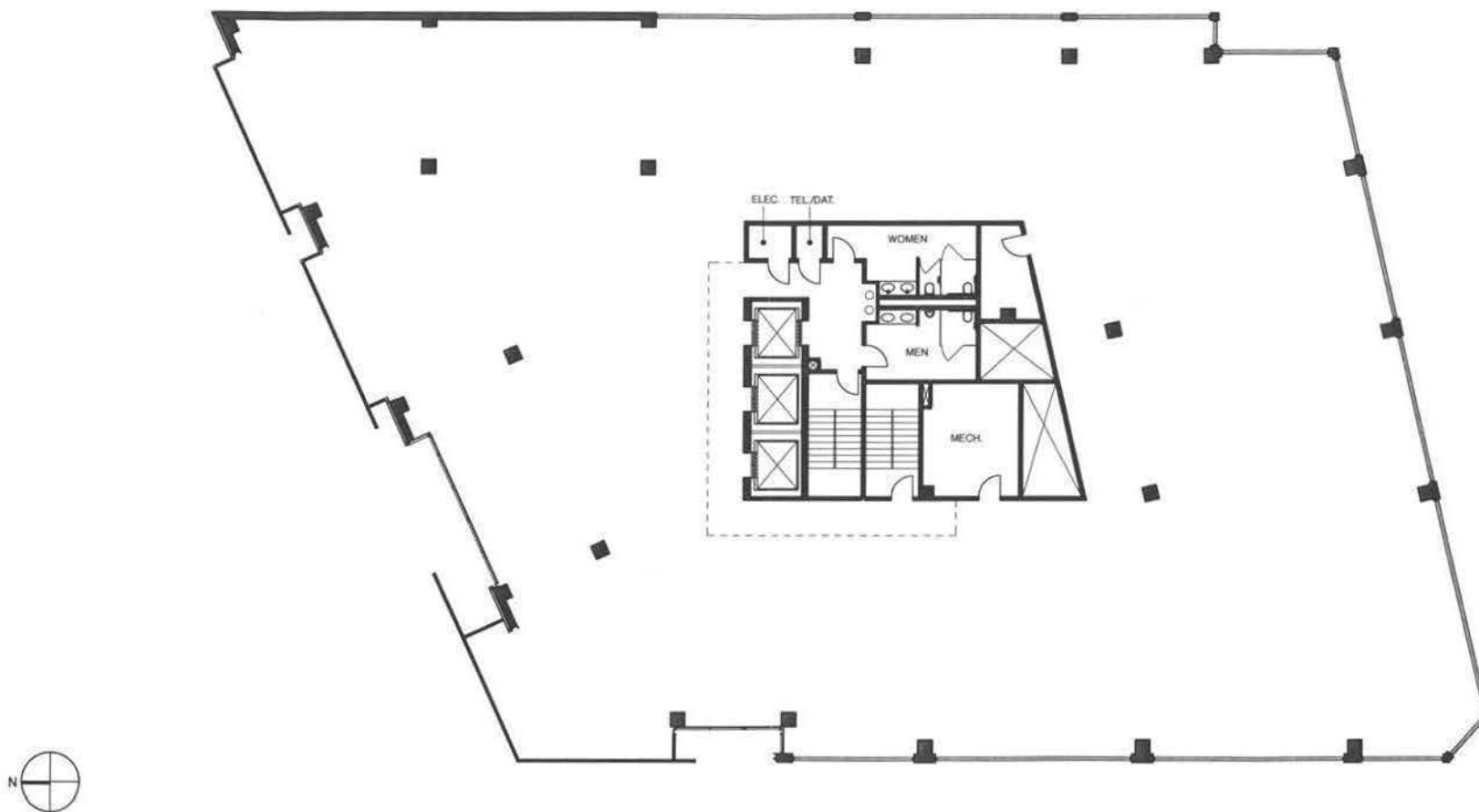
Third Floor

1616 Rhode Island Ave.

Gould Property Company

5/16/06

STUDIOS
architecture



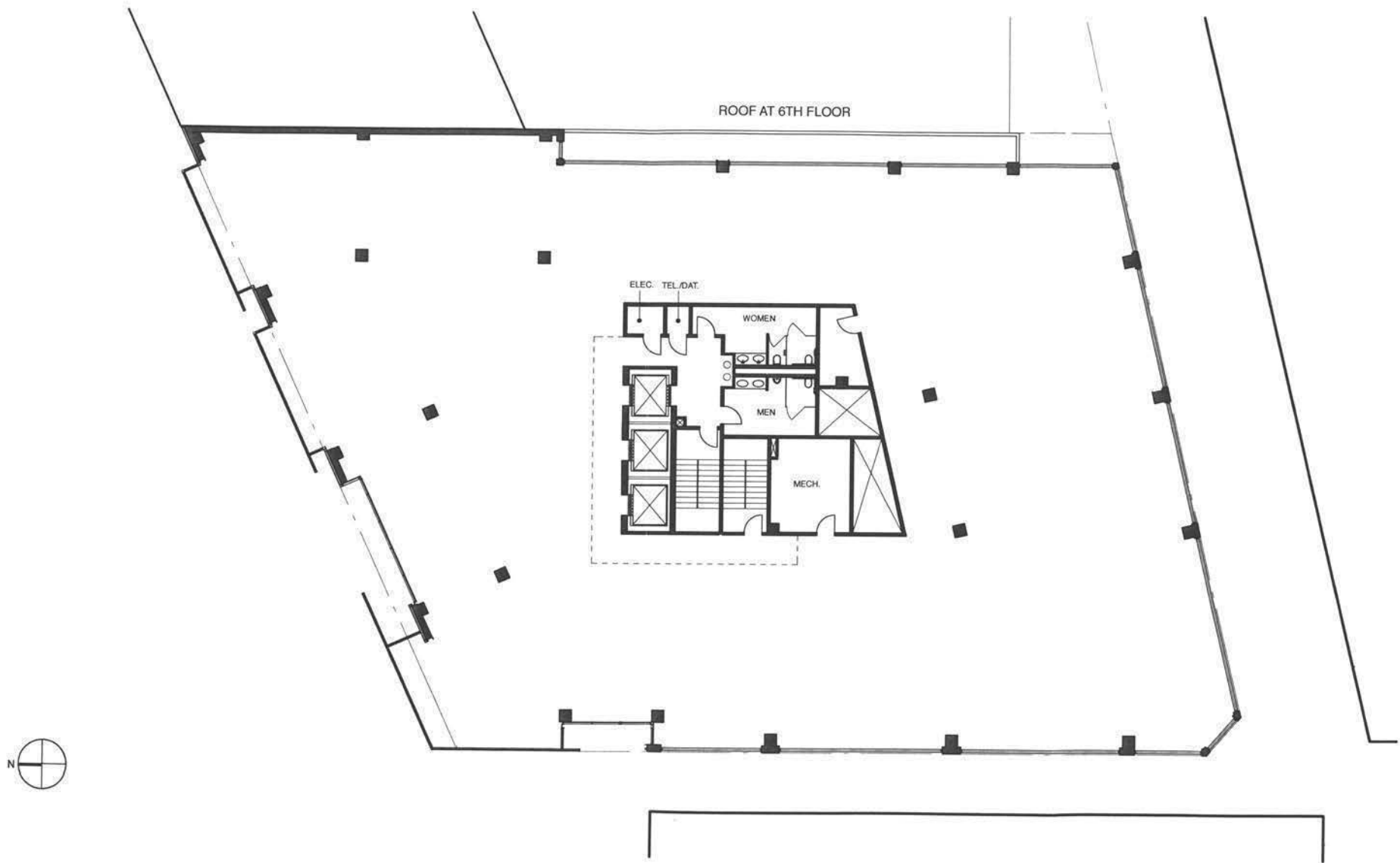
1616 Rhode Island Ave.

Fourth and Fifth Floors

Gould Property Company

5/16/06

STUDIOS
architecture



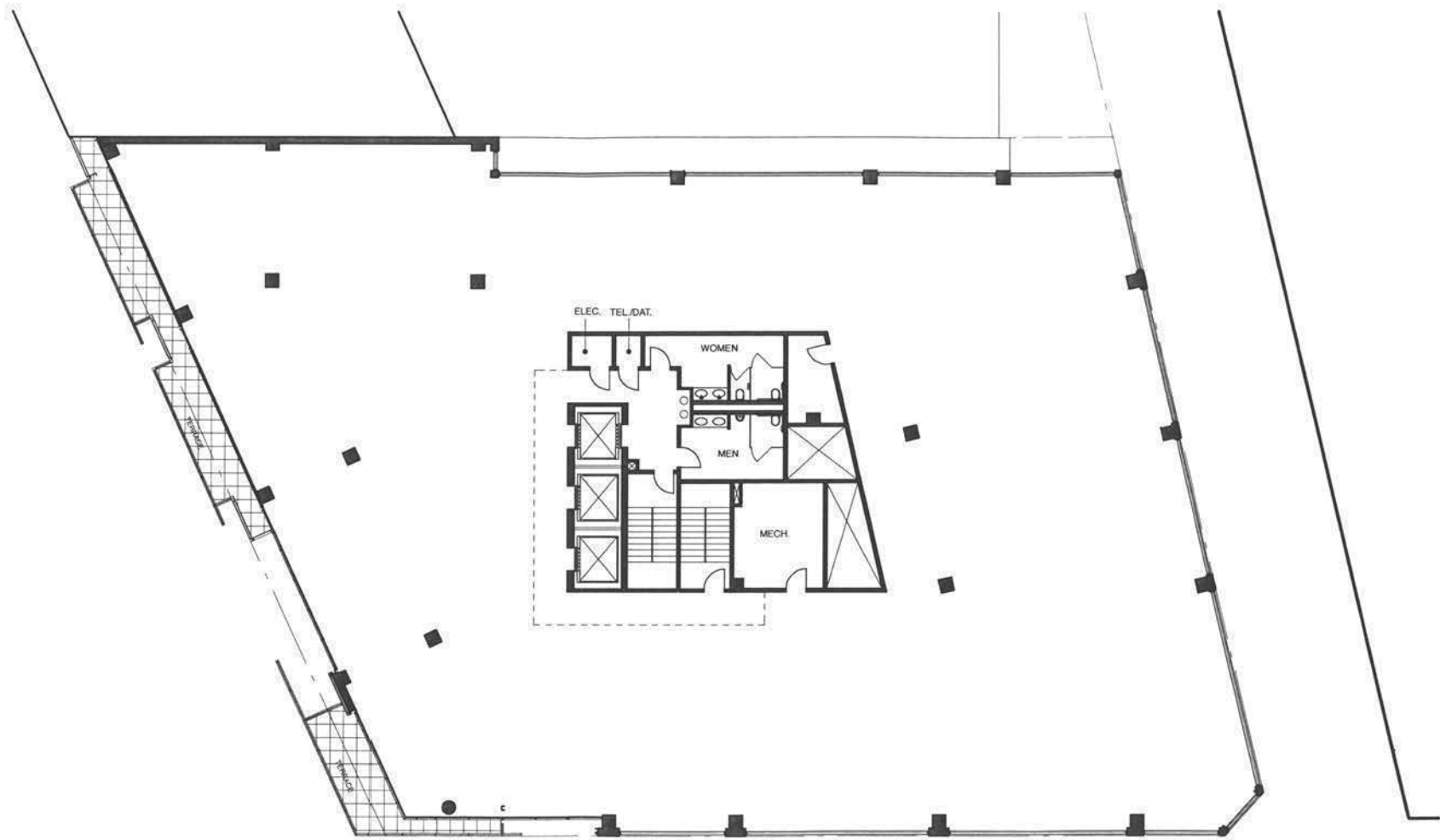
1616 Rhode Island Ave.

Sixth and Seventh Floor

Gould Property Company

5/16/06

STUDIOS
architecture



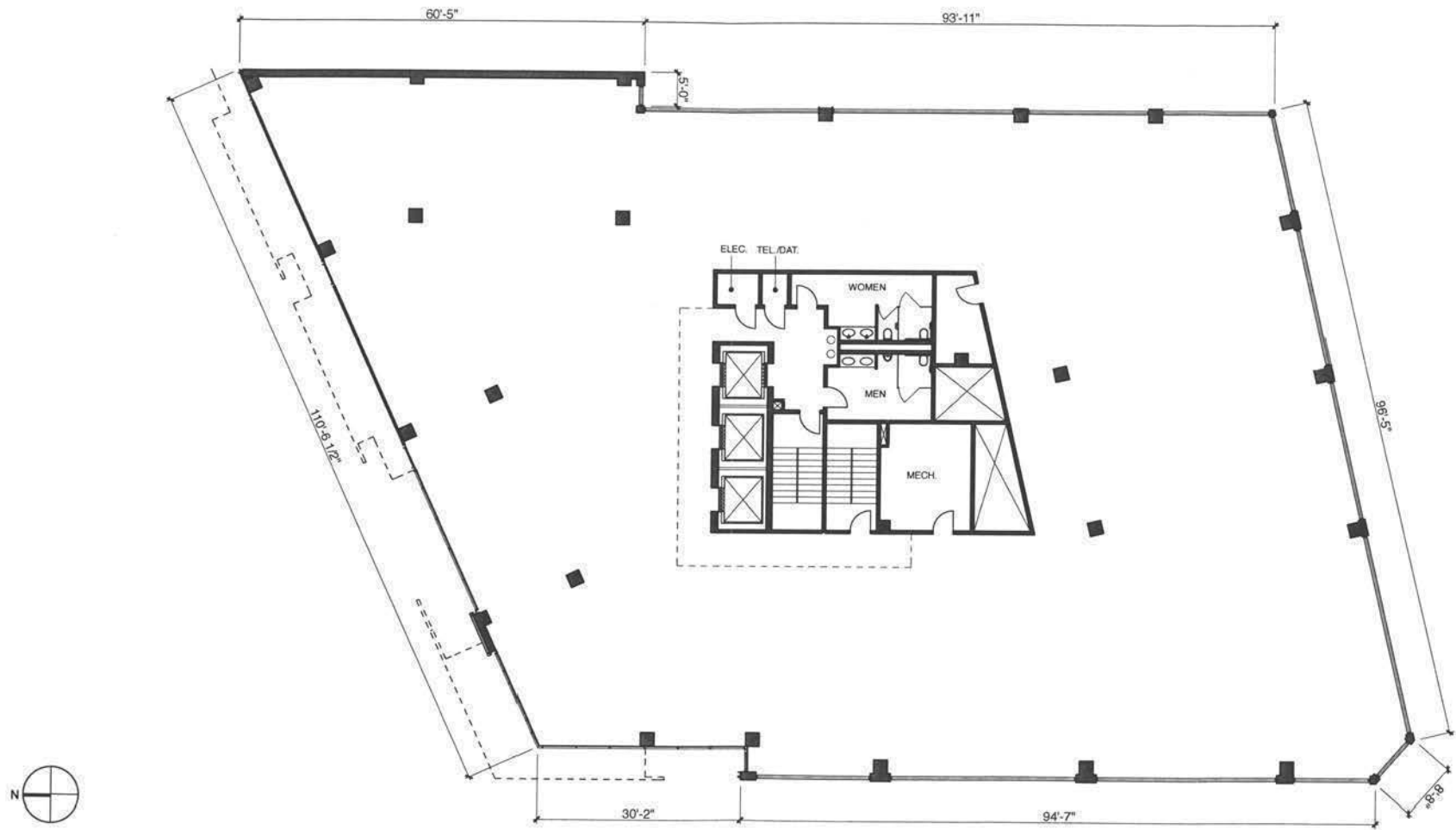
1616 Rhode Island Ave.

Gould Property Company

Eighth Floor

5/26/06

STUDIOS
architecture



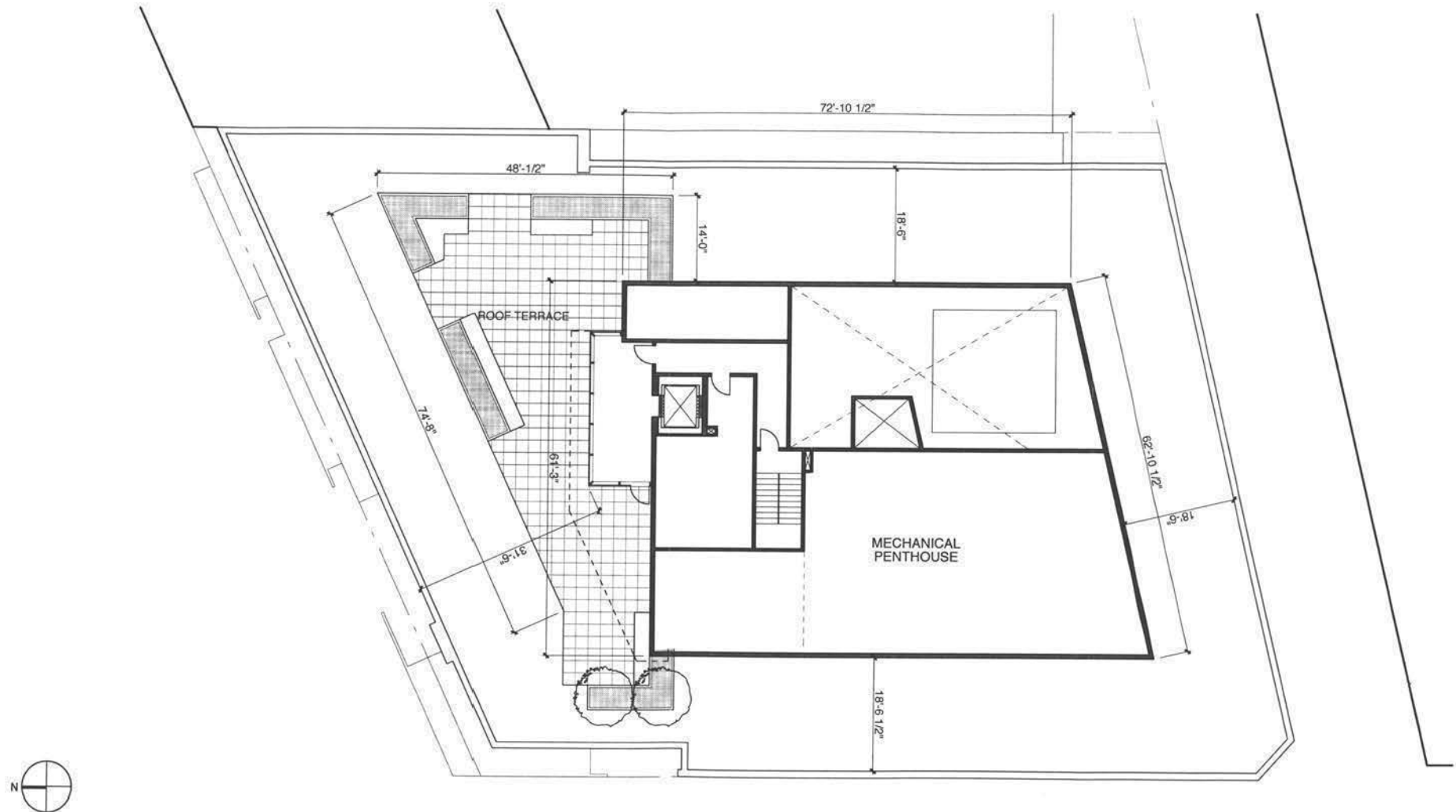
1616 Rhode Island Ave.

Ninth Floor

Gould Property Company

5/16/06

STUDIOS
architecture



1616 Rhode Island Ave.

Gould Property Company

Penthouse

5/16/06

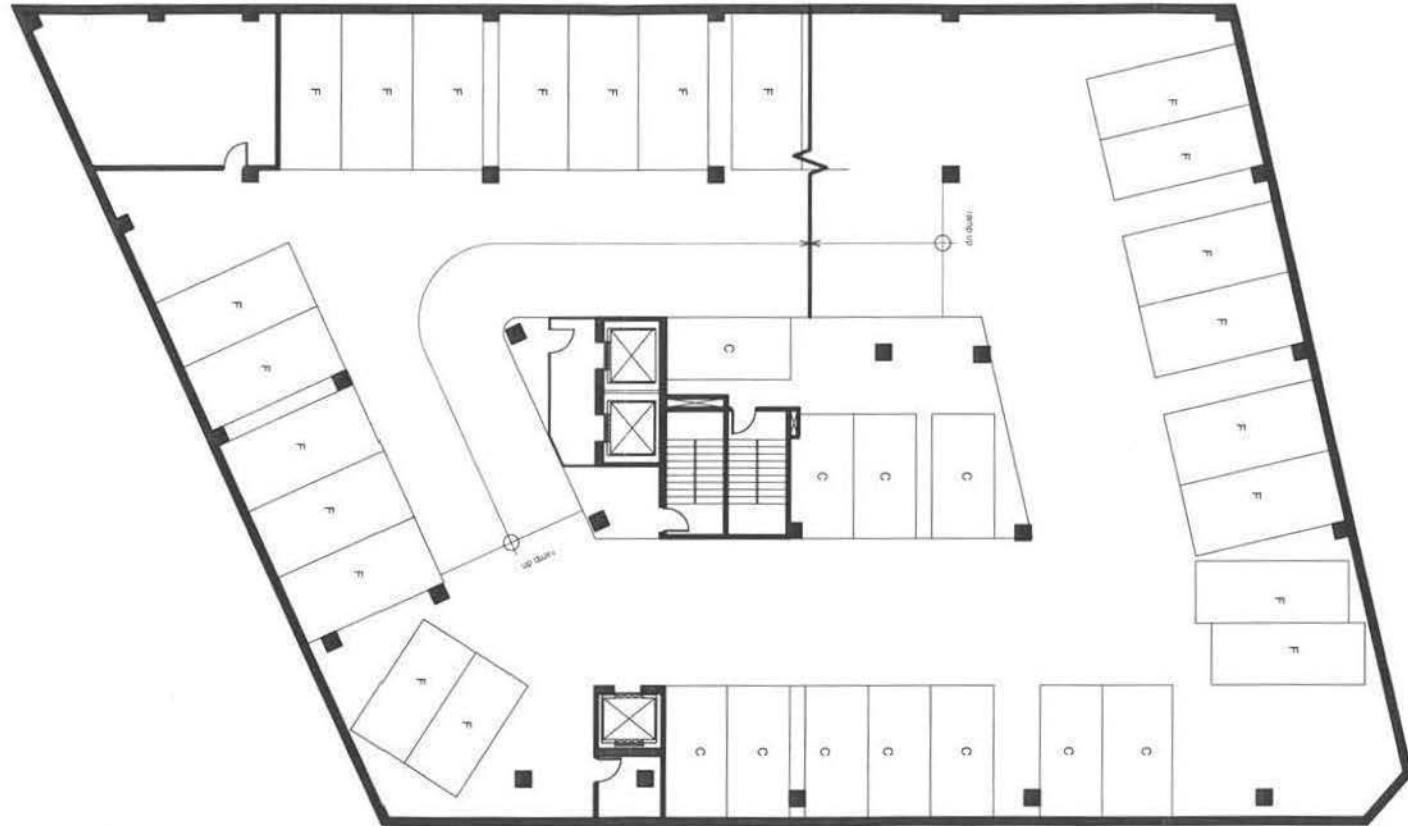
STUDIOS
architecture



1616 Rhode Island Ave.

Gould Property Company

P1 Parking



1616 Rhode Island Ave.

P2 Parking (optional P3)

Gould Property Company

5/16/06

STUDIOS
architecture

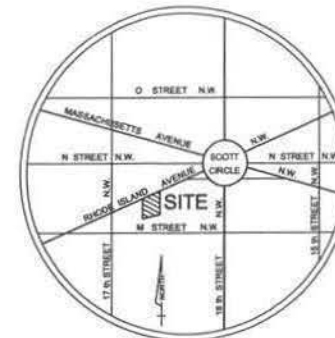
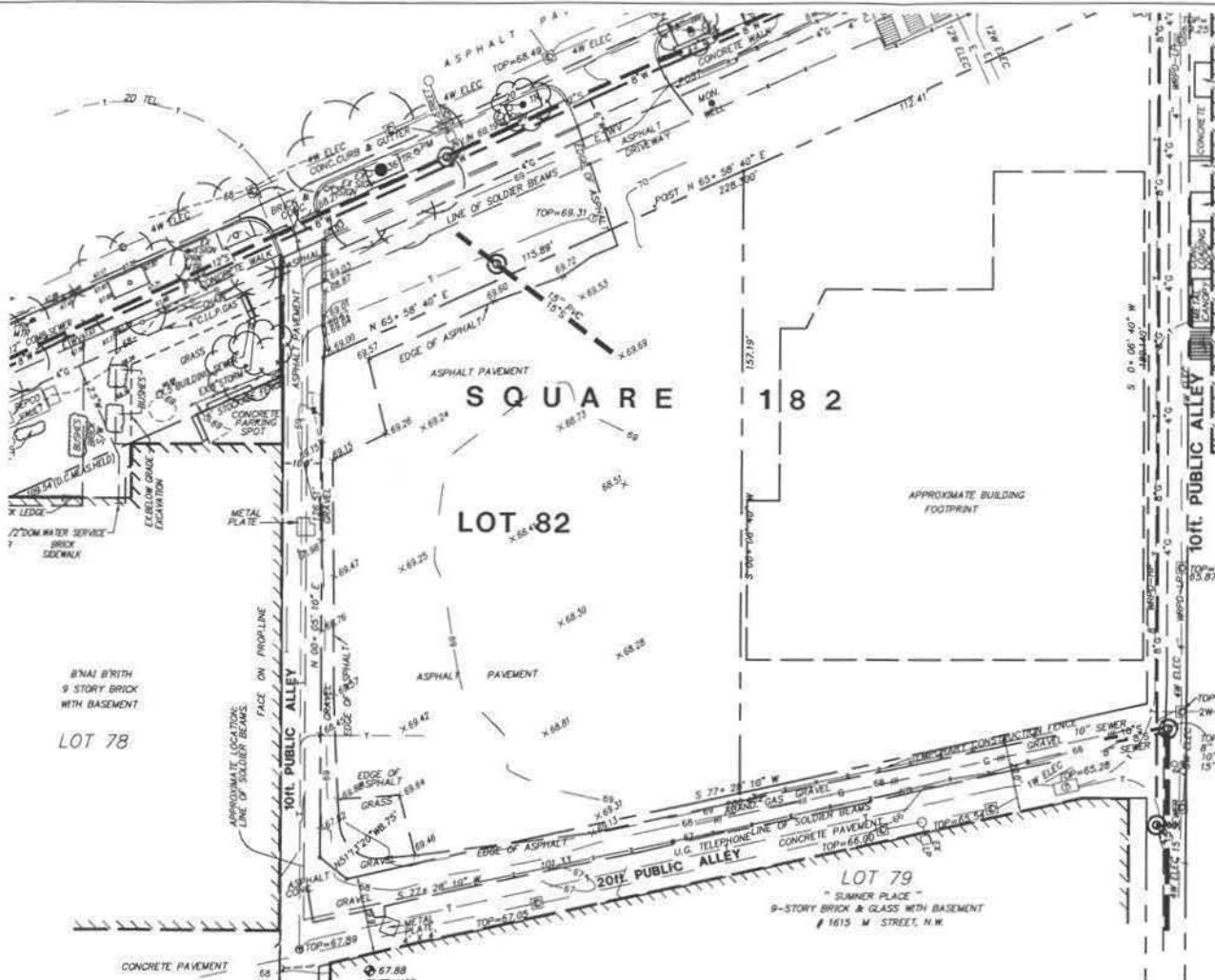
1616 Rhode Island Ave.

Gould Property Company

P3 Parking (optional P4)

5/16/06

STUDIOS
architecture



VICINITY MAP

EXISTING	LEGEND	PROPOSED
	ELECTRIC LINE & STRUCTURE	
	TELEPHONE LINE & STRUCTURE	
	LIGHT POLE, STREET LIGHT	
	SANITARY LINE & MH	
	CLEAN OUT	
	TRENCH DRAIN	
	STORM INLET & MH	
	STORM LINE	
	GAS LINE & VALVE	
	WATER LINE & MH	
	WATER STRUCTURES	
	WOOD FENCE	
	CONTOURS	
	SPOT ELEVATIONS	
	FACE OF BUILDING	
	CONCRETE SIDEWALK	
	CURB & GUTTER	
	HEADER CURB	
	EDGE OF PAVEMENT	
	PAVEMENT MARKING	
	RETAINING WALL	
	DOWN SPOUT	
	STORM STRUCTURE NUMBER	
	TREE DRIP LINE	
	LIMIT OF DISTURBANCE	
	EXPANSION JOINT	
	CONSTRUCTION JOINT	

**Edwards
and Kelcey**
ENGINEERS
ARCHITECTS
PLANNERS
CONSTRUCTORS

Planning, Engineering, Surveying
& Landscape Architecture
11860 Sunrise Valley Drive Suite 200
Reston, Virginia 20191
(T) 703.391.7800
(F) 703.264.0595
www.ekcorp.com

ARCHITECTS:
STUDIOS ARCHITECTURE
1625 M Street, NW
Washington, DC 20036
(T) 202.736.5900

1616 RHODE ISLAND, NW
WASHINGTON DC

Sheet Title:

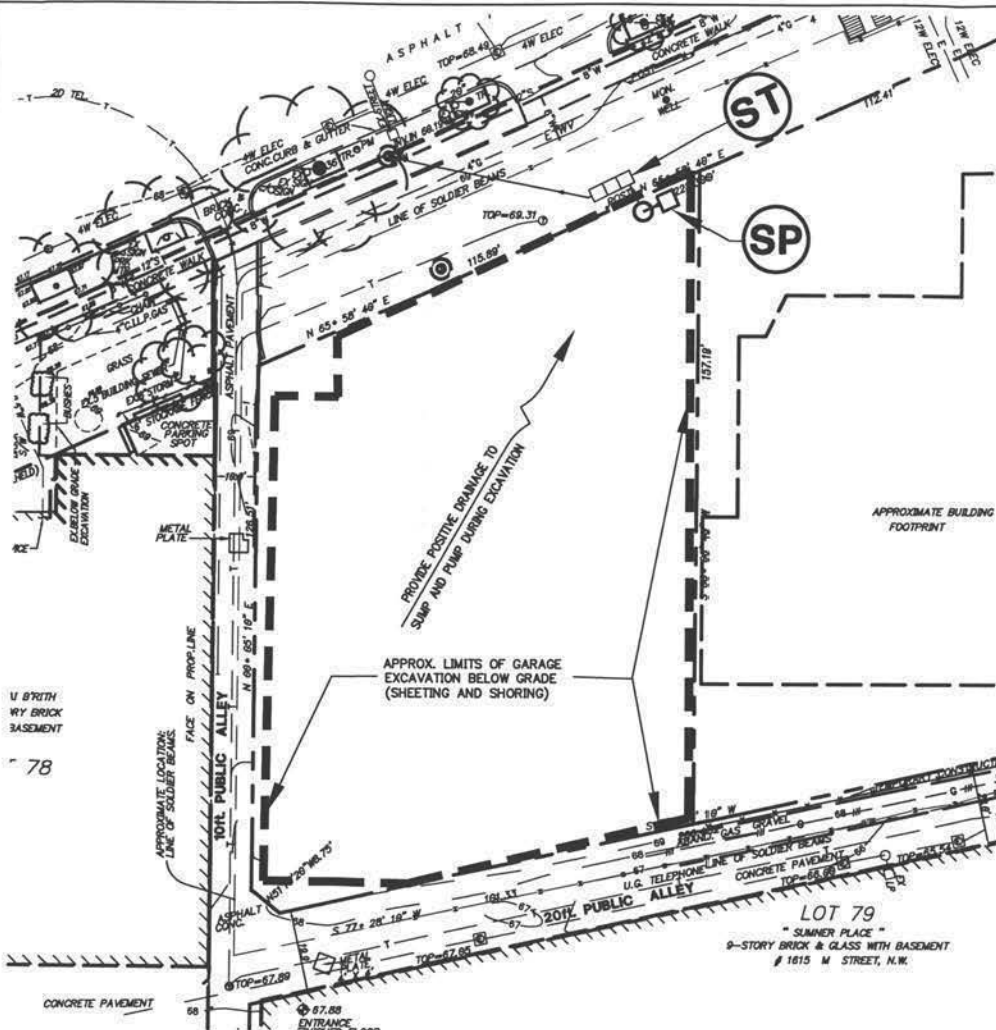
EXISTING
CONDITION

Scale: 1" = 30'

Date: 04-21-06

Job No:
060058450

Sheet No:
C.01



CONSTRUCTION AND STABILIZATION SEQUENCE:

1. INSTALL SEDIMENT AND EROSION CONTROL MEASURES INCLUDING STABILIZED CONSTRUCTION ENTRANCE, WASH RACK, INLET PROTECTION, SILT FENCE, AS INDICATED ON THE SHEET.
2. SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AND APPROVED BY THE INSPECTOR PRIOR TO COMMENCING ANY OTHER LAND DISTURBING ACTIVITIES.
3. REMOVE ITEMS AS INDICATED ON DEMOLITION PLAN.
4. INSTALL SITE IMPROVEMENTS AS INDICATED ON CONSTRUCTION DOCUMENTS FOR THE PROPOSED BUILDING.
5. AT THE COMPLETION OF CONSTRUCTION AND AFTER THE INSPECTOR'S APPROVAL, ALL TEMPORARY SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE REMOVED.

NOTE:

CONTRACTOR TO PROVIDE CHAIN LINK FENCE AT PERIMETER OF THE EXCAVATION AREA.

INSTALL SILT FENCE AT PERIMETER TO REMAIN IN PLACE UNTIL BELOW GRADE EXCAVATION HAS BEGUN, UNLESS OTHERWISE APPROVED BY THE INSPECTOR.

DUST CONTROL NOTES:

1. THE CONTRACTOR SHALL CONDUCT OPERATIONS AND MAINTAIN THE PROJECT SITE AS TO MINIMIZE THE CREATION AND DISPERSION OF DUST. DUST CONTROL SHALL BE USED THROUGHOUT THE WORK AT THE SITE.
2. THE CONTRACTOR MUST PROVIDE CLEAN WATER, FREE FROM SALT, OIL AND OTHER DELETERIOUS MATERIAL TO BE USED FOR ON-SITE DUST CONTROL.
3. THE CONTRACTOR SHALL SUPPLY WATER SPRAYING EQUIPMENT CAPABLE OF ACCESSING ALL WORK AREAS.
4. THE CONTRACTOR SHALL IMPLEMENT STRICT DUST CONTROL MEASURES DURING ACTIVE CONSTRUCTION PERIODS ON-SITE. THESE CONTROL MEASURES WILL USUALLY CONSIST OF WATER APPLICATIONS THAT SHALL BE APPLIED A MINIMUM OF ONCE PER DAY DURING DRY WEATHER OR MORE OFTEN AS REQUIRED TO PREVENT DUST EMISSIONS.
5. FOR WATER APPLICATION TO UNDISTURBED SOIL SURFACES, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF TANK, SPRAY BAR, PUMP WITH DISCHARGE PRESSURE GAUGE.
 - B. ADJUST SPRAY BAR HEIGHT, NOZZLE SPACING AND SPRAY PATTERN TO PROVIDE COMPLETE COVERAGE OF GROUND WITH WATER.
 - C. DISPOSE WATER THROUGH NOZZLES ON SPRAY BAR AT 20 PSI (13.8 K PA) MINIMUM. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
6. FOR WATER APPLICATION TO SOIL SURFACES DURING DEMOLITION AND/OR EXCAVATION, THE CONTRACTOR SHALL:
 - A. APPLY WATER WITH EQUIPMENT CONSISTING OF A TANK, PUMP WITH DISCHARGE GAUGE, HOSES AND MIST NOZZLES.
 - B. LOCATE TANK AND SPRAYING EQUIPMENT SO THAT THE ENTIRE EXCAVATION AREA CAN BE MISTED WITHOUT INTERFERING WITH DEMOLITION AND/OR EXCAVATION EQUIPMENT OR OPERATIONS. KEEP AREAS DAMP WITHOUT CREATING NUISANCE CONDITIONS SUCH AS PONDING.
 - C. APPLY WATER SPRAY IN A MANNER TO PREVENT MOVEMENT OF SPRAY BEYOND SITE BOUNDARIES.

LEGEND



CONSTRUCTION DATES:

- * EXACT BEGINNING AND END OF CONSTRUCTION IS TO BE ESTABLISHED BY THE OWNER.

TOTAL DISTURBED AREA

AREA = 18033 SF

NOTE:

THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGN OF SHEETING AND SHORING AND SUPPORT OF EXISTING UTILITIES AND ADJACENT STRUCTURES. SHORING, BRACING, AND UNDERPINNING DESIGNED BY THE CONTRACTOR'S STRUCTURAL ENGINEER LICENSED IN THE DISTRICT OF COLUMBIA SHALL BE PROVIDED AS NECESSARY TO ENSURE THEIR SUPPORT.

SEDIMENT CONTROL APPROVAL:

PLAN NUMBER:

THIS APPROVAL IS FOR GRADING AND SEDIMENT CONTROL ONLY. PERMITEE/ CONTRACTOR IS REQUIRED TO CONSTRUCT DESIGN FEATURE SHOWN HEREON. HE SHALL NOTIFY THIS OFFICE AT NUMBER LISTED BELOW AT LEAST 24 HOURS BEFORE START OF GRADING ACTIVITY, AND WITHIN TWO WEEKS AFTER COMPLETION OF PROJECT FOR FINAL INSPECTION.

DATE _____

EROSION AND SEDIMENT CONTROL BRANCH

FOR FURTHER INFORMATION, PLEASE CALL:
GOVERNMENT OF THE DISTRICT OF COLUMBIA
DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH ADMINISTRATION
WATERSHED PROTECTION DIVISION

51 N. STREET, N.E. 5TH FLOOR
WASHINGTON, D.C. 20002
FAX NO. (202) 535-1364
TEL. NO. (202) 535-2240

**Edwards
and Kelcey**
ENGINEERS
ARCHITECTS
PLANNERS
CONSTRUCTORS

Planning, Engineering, Surveying
& Landscape Architecture
11860 Sunrise Valley Drive Suite 200
Reston, Virginia 20191
(T) 703.391.7600
(F) 703.264.0595
www.ekcorp.com

ARCHITECTS:
STUDIOS ARCHITECTURE
1625 M Street, NW
Washington, DC 20036
(T) 202.736.5900

1616 RHODE ISLAND, NW
WASHINGTON DC

Sheet Title:

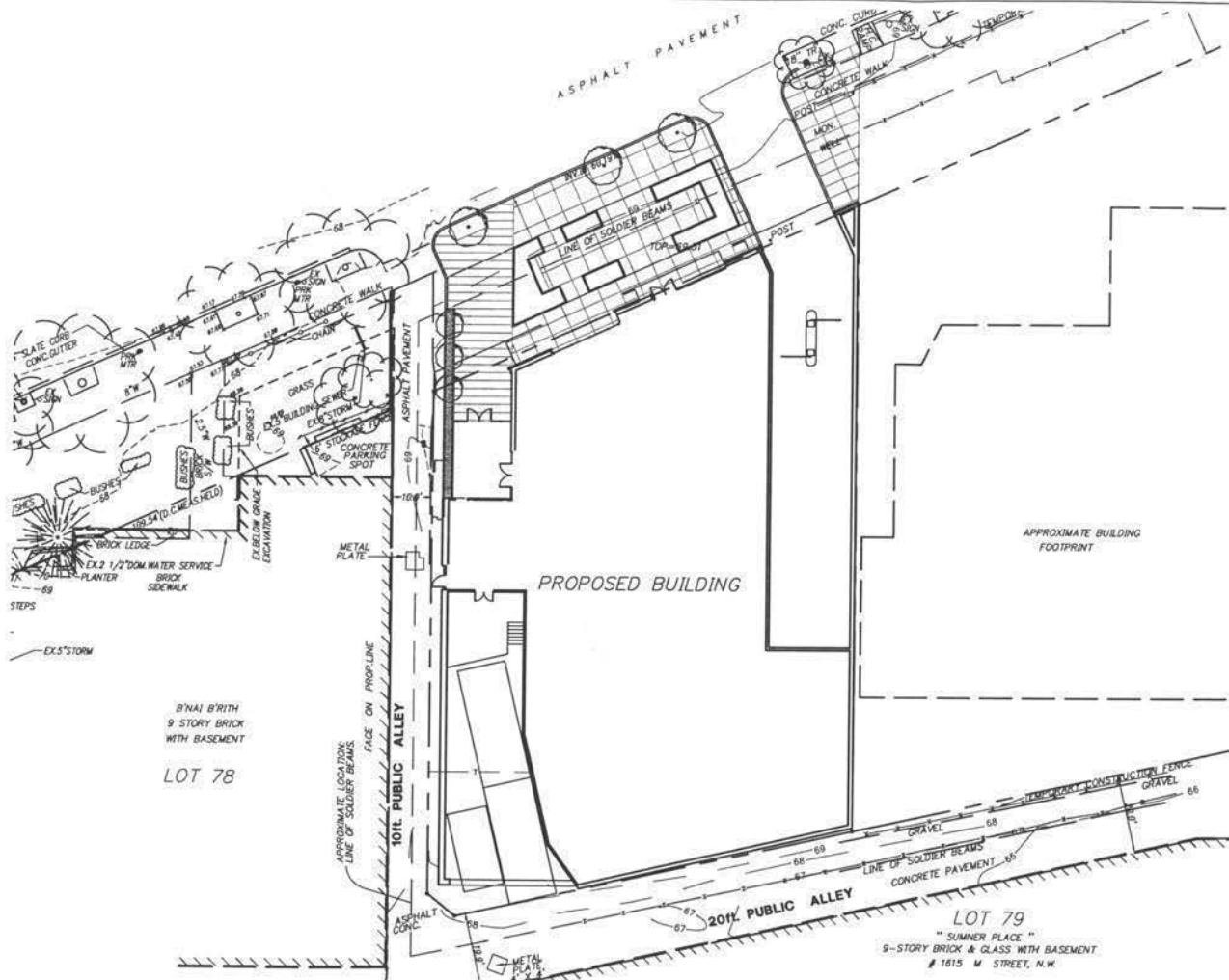
**SEDIMENT AND
EROSION CONTROL
PLAN**

Scale: 1 : 30

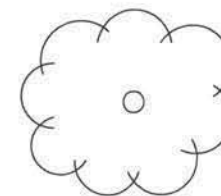
Date: 04-21-06

Job No:
060058450

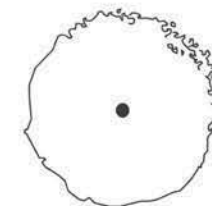
Sheet No:
C.02



PLANTING LEGEND:



EXISTING TREE



PROPOSED TREE

**Edwards
Kelcey**
ENGINEERS
ARCHITECTS
PLANNERS
CONSTRUCTORS

Planning, Engineering, Surveying
& Landscape Architecture
11860 Sunrise Valley Drive Suite 200
Reston, Virginia 20191
(T) 703.391.7600
(F) 703.264.0595
www.ekcorp.com

ARCHITECTS:
STUDIOS ARCHITECTURE
1625 M Street, NW
Washington, DC 20036
(T) 202.736.5900

1616 RHODE ISLAND, NW
WASHINGTON DC

Sheet Title:

SITE PLAN

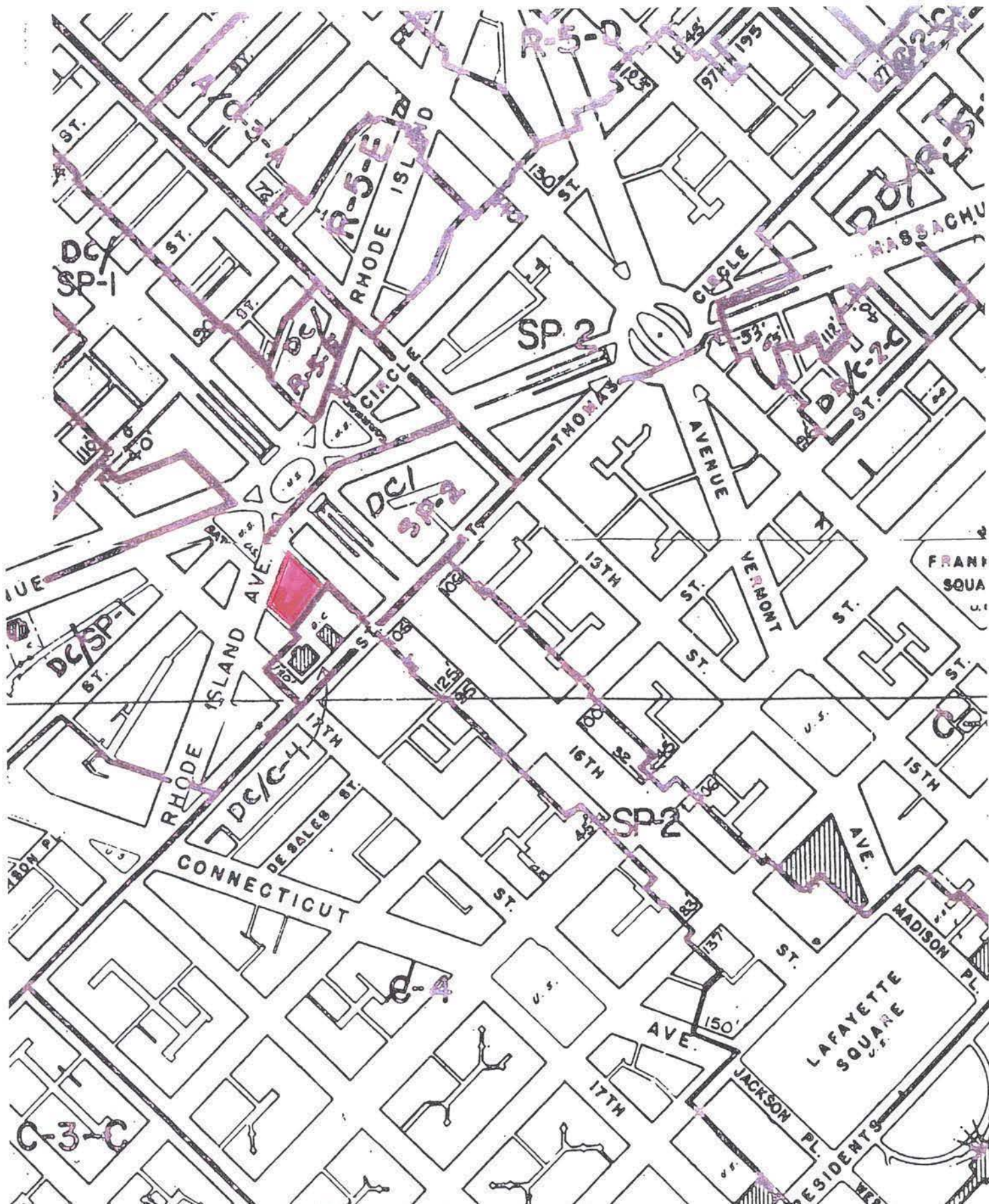
Scale: 1 : 30

Date: 04-21-06

Job No:
060058450

Sheet No:
C.03

B



C

**1616 RHODE ISLAND AVENUE
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

Prepared for:
Gould Properties

Prepared by:
Wells & Associates, LLC

May 30, 2006

**1616 RHODE ISLAND AVENUE
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

TABLE OF CONTENTS

	<u>Page</u>
Section 1	
Introduction	I
Section 2	
Background Data	6
Overview	6
Study Scope	6
Public Road Network.....	6
Existing Traffic Counts.....	7
Public Transportation Facilities and Services.....	7
Curb Parking	8
Bicycle Facilities	8
Section 3	
Analysis.....	13
Overview	13
Existing Levels of Service.....	13
Trip Distribution Analysis	14
Background Traffic Growth.....	16
Background Traffic Forecasts	16
Background Future Levels of Service	16
Site Trip Generation Analysis	16
Site Traffic Assignments.....	18
Total Future Traffic Forecasts.....	18
Total Future Levels of Service.....	18
Parking Requirements	18
Loading Requirements	18
Section 4	
Conclusions	26

**1616 RHODE ISLAND AVENUE
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

LIST OF FIGURES

<u>Figure</u>	<u>Title</u>	<u>Page</u>
1-1	Site Location	4
1-2	Site Plan	5
2-1	Intersection Lane Use and Traffic Control	9
2-2	Existing Vehicular Traffic Counts.....	10
2-3	Existing Pedestrian Traffic Counts.....	11
2-4	Existing Metro Bus and Rail Service	12
3-1	Background Future Peak Hour Traffic Forecasts.....	20
3-2	Site-Generated Traffic Assignments and Directional Distribution.....	21
3-3	Total Future Peak Hour Traffic Forecasts	22
3-4	Truck Access, Egress, and Circulation.....	23
3-5	Truck Access, Egress, and Circulation.....	24
3-6	Truck Access, Egress, and Circulation.....	25

LIST OF TABLES

<u>Table</u>	<u>Title</u>	<u>Page</u>
3-1	Intersection Levels of Service	15
3-2	Site Trip Generation Analysis.....	17

**1616 RHODE ISLAND AVENUE
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

LIST OF APPENDICES

- A. Existing Vehicular Traffic Counts
- B. Existing Pedestrian Traffic Counts
- C. Existing Levels of Service
- D. Background Future Levels of Service
- E. Total Future Levels of Service

Section I

INTRODUCTION

This report presents the results of a traffic impact analysis of a new office building that Gould Properties proposes to build on the site of an existing surface parking lot at 1616 Rhode Island Avenue, in the northwest section of Washington, D.C., as shown on Figure I-1.

The proposed nine-story, 129,680 square foot office building would be located on the south side of Rhode Island Avenue, approximately mid-block between 17th Street and Scott Circle, as shown on Figure I-2. The subject site is improved with a 40-space surface parking lot.

The proposed office building would be served by approximately 90 parking spaces (or 0.69 spaces per 1,000 S.F.) on three underground levels. The garage driveway would be located across Rhode Island Avenue from Bataan Street, at the approximate location of the driveway to the existing surface parking lot.

For purposes of this traffic analysis, this development was assumed to be completely built and occupied three years hence, by 2009.

Tasks undertaken in this study included the following:

1. Review Gould Properties' proposed development plans and other background data.
2. A field reconnaissance of existing roadway and intersection geometrics, traffic controls, traffic signal phasing/timings, and speed limits.
3. Counts of existing vehicular and pedestrian traffic at three (3) key intersections.
4. Analysis of existing levels of service at these intersections.
5. Background future traffic volumes were forecasted for project buildout.
6. Background levels of service were calculated at key intersections based on background traffic forecasts, existing traffic controls, and existing intersection geometrics.

7. The number of AM and PM peak hour trips that would be generated by the proposed project were estimated based on: (1) Institute of Transportation Engineers (ITE) trip generation rates, (2) the proximity of the project to the nearest Metro station, and (3) experience with other comparable projects in Washington, D.C.
8. Total future traffic volumes were forecasted for 2009.
9. Total future levels of service were calculated at key intersections based on total future traffic forecasts, existing traffic controls, and existing intersection geometrics.
10. The adequacy of the proposed number of parking spaces and loading berths were evaluated.

Sources of data for this analysis included traffic counts conducted by Wells & Associates, ITE, the Washington Metropolitan Area Transit Authority (WMATA), the District of Columbia Office of Planning, the District Department of Transportation (DDOT), Studios Architecture, and Gould Properties.

The conclusions of this traffic impact study are as follows:

- 1. The three intersections in the study area currently operate at level of service (LOS) "D" or better during both the AM and PM peak hours. All approaches to each of the signalized intersections also operate at LOS "D" or better during both the AM and PM peak hours.***
- 2. Rhode Island Avenue and M Street currently operate at bicycle level of service (BLOS) "E", according to the April 2005 District of Columbia Bicycle Master Plan. 16th and 17th Street currently operate at BLOS "D".***
- 3. 1616 Rhode Island Avenue will add 78 new AM peak hour trips and 69 new PM peak hour trips, to the public street system upon project completion.***
- 4. The net additional trips that would be generated by the proposed office building would have no significant impact on the signalized intersections in the study area. Motorists on southbound Bataan Street would utilize gaps created by upstream and downstream signals to turn onto Rhode Island Avenue.***
- 5. The 90 parking spaces in the three-level, underground garage would adequately accommodate the 1616 Rhode Island Avenue office project.***
- 6. 1616 Rhode Island Avenue provides two 30-foot deep loading berths, as required.***

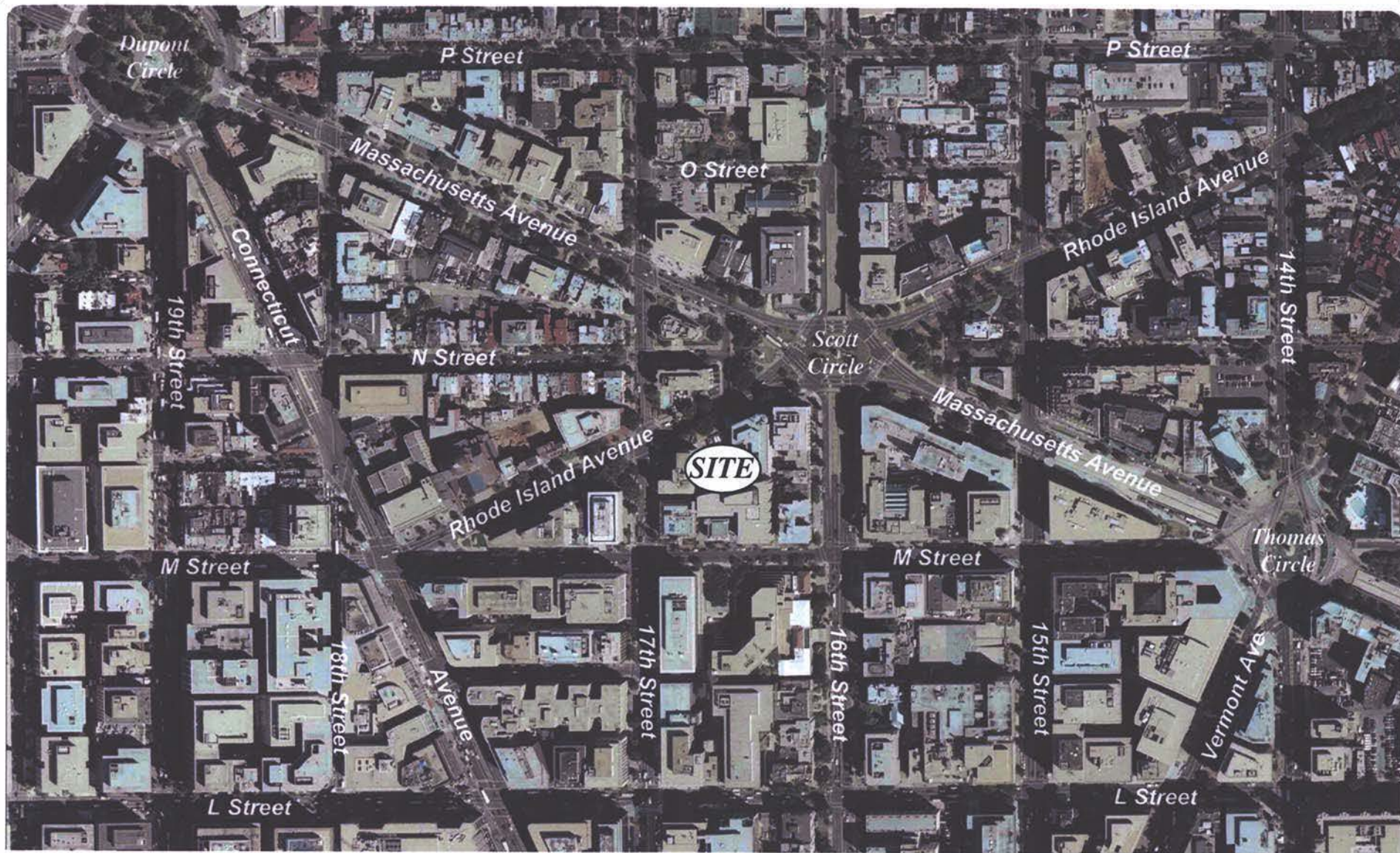


Figure 1-1
Site Location



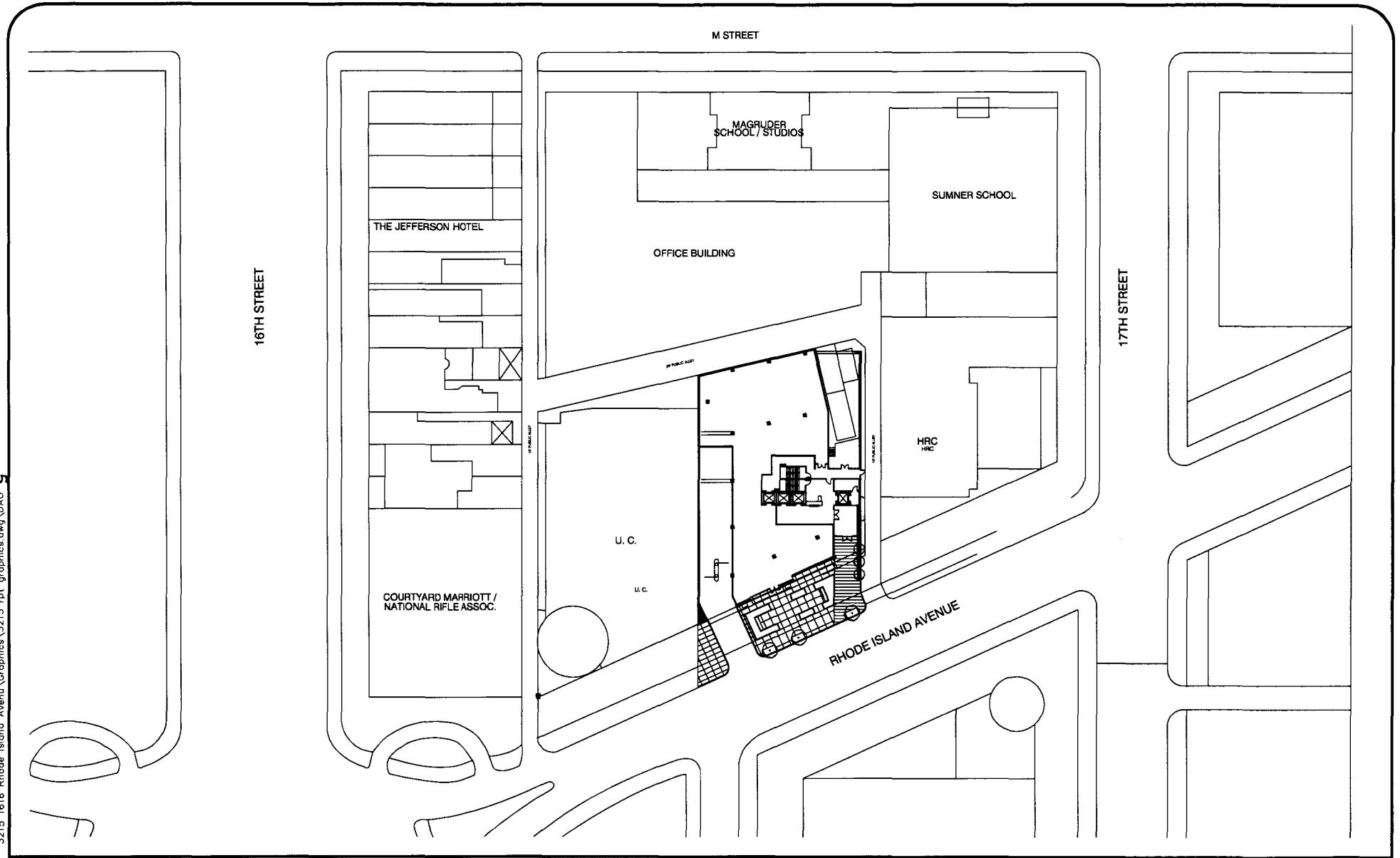


Figure 1-2
Site Plan

Plan Provided By: Studios Architecture



Section 2

BACKGROUND DATA

Overview

This section presents the general study scope and background data regarding the public road network, existing vehicular and pedestrian traffic counts, public transportation facilities and services, curb parking, and bicycle facilities.

Study Scope

This traffic study includes the following intersections:

1. Rhode Island Avenue/17th Street,
2. Rhode Island Avenue/Bataan Street, and
3. Rhode Island Avenue/Scott Circle.

Level of service (LOS) “D” is considered the minimum acceptable level of service in urban areas such as Washington, D.C.

Public Road Network

Overview. The subject site is served by a connected network of arterial, collector, and local streets. Existing intersection lane use and traffic control at key intersections in the site vicinity are shown on Figure 2-1.

In the site vicinity, Rhode Island Avenue, 17th Street, and M Street are classified by DDOT as Minor Arterials. 16th Street and Massachusetts Avenue are classified as Principal Arterials. Bataan Street is a local street.

Rhode Island Avenue is a five-lane street with metered, curb parking on the north and south sides during off-peak hours. On-street parking is prohibited during the commuter peak hours of 7:00 to 9:30 AM and 4:00 to 6:30 PM. During peak hours, Rhode Island Avenue operates with three westbound lanes and two eastbound lanes. Traffic signals are located on Rhode Island Avenue at 17th Street and Scott Circle.

17th Street operates one-way southbound with five travel lanes from 7:00 to 9:30 AM, Monday through Friday. During other hours, 17th Street operates two-ways, with on-street parking restrictions during the commuter PM peak hours.

Existing Traffic Counts

Vehicular Traffic Counts. Existing AM and PM peak period vehicular traffic counts were conducted on Thursday, April 6, 2006, by Wells & Associates at the following intersections:

1. Rhode Island Avenue/17th Street,
2. Rhode Island Avenue/Bataan Street/Site Driveway, and
3. Rhode Island Avenue/Scott Circle.

The results are included in Appendix A and summarized on Figure 2-2.

Rhode Island Avenue, between 17th Street and Scott Circle, carried 12,600 vehicles per day (vpd) in 2002, according to DDOT. 17th Street, south of Rhode Island Avenue, carried 20,000 vpd.

The morning peak hour generally occurred at 8:45 to 9:45 AM, and the afternoon peak hour generally occurred at 5:30 to 6:30 PM. Figure 2-2 indicates that Rhode Island Avenue, along the site frontage, carried 1,264 trips during the AM peak hour, and 1,283 trips during the PM peak hour. The east/west directional splits are 13 percent/87 percent during the AM peak hour, and 50 percent/50 percent during the PM peak hour.

The existing commercial parking lot generated 25 AM peak hour trips and 31 PM peak hour trips on the survey day.

Pedestrian Traffic Counts. Existing AM and PM peak period pedestrian traffic counts also were conducted on Thursday, April 6, 2006, by Wells & Associates at the intersections listed above. The results are included in Appendix B and summarized on Figure 2-3.

Public Transportation Facilities and Services

The subject site is served by numerous Metrobus lines and the Farragut North and Dupont Circle Metro stations, as shown on Figure 2-4. Metrobus line G2 operates on P Street, two blocks north of the subject site. Metrobus lines S1, S2, and S4 operate on 16th Street, one block east of the subject site. The D1, D3, D6, L2, and 80 lines operate on K Street, three blocks south of the subject site. Metrobus lines 42, N2, N4, and N6 operate on Connecticut Avenue and 18th Street, one and a half blocks west of the subject site.

The Farragut North Metro station is located approximately three blocks (or 1,375 feet) southwest of the subject site, on L Street at Connecticut Avenue. The Dupont Circle Metro station is located approximately three blocks (or 1,800 feet) northwest of the site on 19th Street at Connecticut Avenue.

Curb Parking

Parking is permitted on both sides of Rhode Island Avenue, between 17th Street and Scott Circle, during off-peak hours. Parking is prohibited on both sides of Rhode Island Avenue during the commuter peak hours from 7:00 to 9:30 AM and from 4:00 to 6:30 PM.

The north side of Rhode Island Avenue has four (4), one (1) hour metered parking spaces from 9:30 AM to 4:00 PM. The south side of Rhode Island Avenue has nine (9), two (2) hour metered parking spaces from 9:30 AM to 4:00 PM.

Parking is permitted on both sides of 17th Street, between M Street and N Street, during off-peak hours. Parking is prohibited on both sides of 17th Street south of Rhode Island Avenue and on the west side north of Rhode Island Avenue during the commuter peak hours from 7:00 to 9:30 AM and from 4:00 to 6:30 PM.

The west side of 17th Street from M Street to N Street has 13, two (2) hour metered parking spaces from 9:30 AM to 4:00 PM. The east side of 17th Street, north of Rhode Island Avenue has five (5), two (2) hour metered parking spaces from 7:00 AM and 6:30 PM. The east side of 17th Street, south of Rhode Island Avenue has six (6), two (2) hour metered parking spaces and parking space for two (2) tour buses from 9:30 AM and 4:00 PM.

Parking is permitted on the east side of Bataan Street between Massachusetts Avenue and Rhode Island Avenue with a total of nine (9) spaces; four (4) spaces are reserved for Zipcar and the remaining spaces have no restriction.

Bicycle Facilities

Massachusetts Avenue northwest of Scott Circle, and Rhode Island Avenue northeast of Scott Circle, are signed bicycle routes, according to the April 2005 District of Columbia Bicycle Master Plan.

Rhode Island Avenue and M Street currently operate at bicycle level of service (BLOS) "E", according to the Plan. 16th and 17th Street currently operate at BLOS "D".

New bike lanes are proposed on Rhode Island Avenue, along the subject site frontage, and on N Street, west of Scott Circle. Separated, on-road bicycle facilities are proposed on 17th and M Streets.

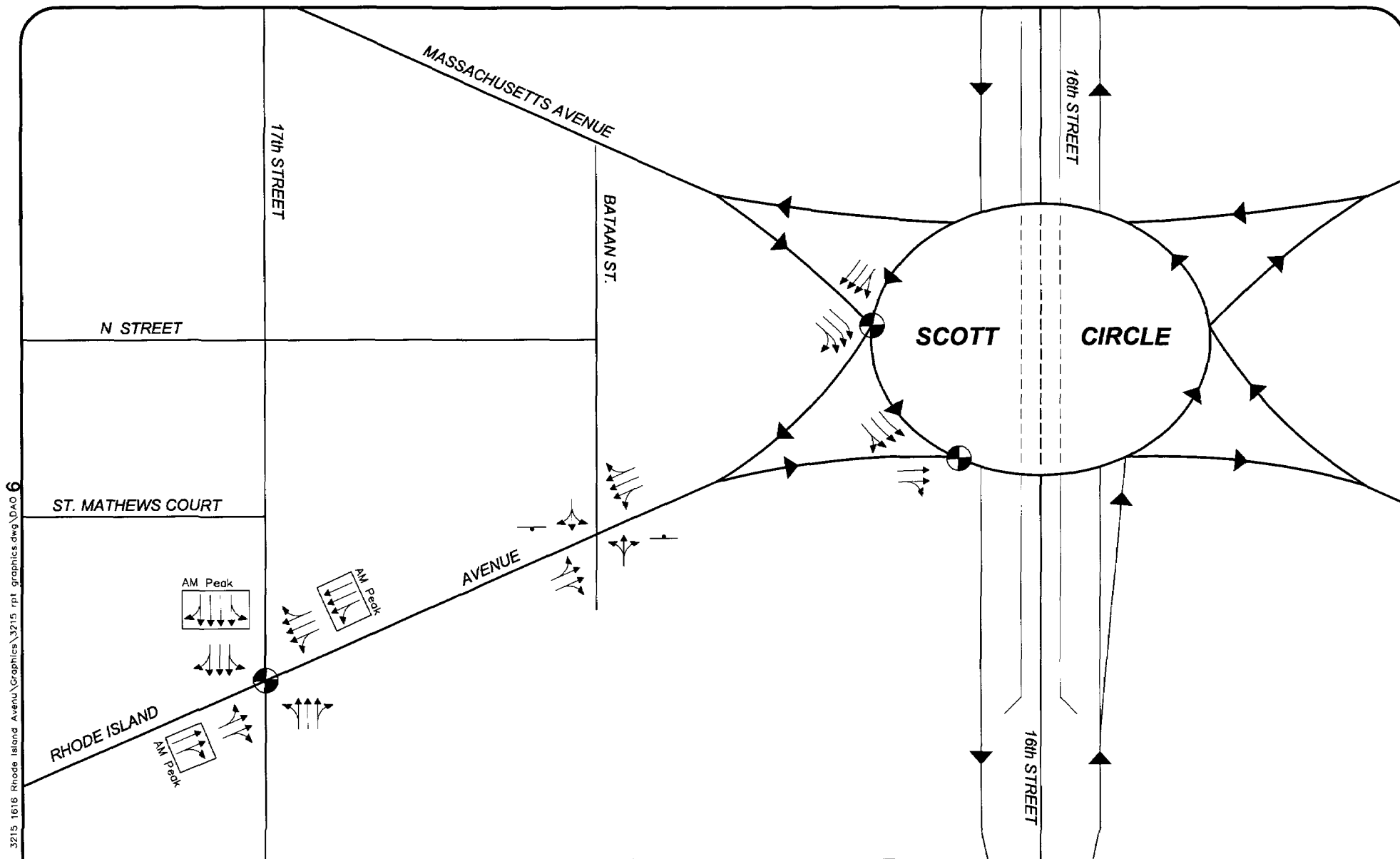


Figure 2-1
Existing Lane Use and Traffic Control

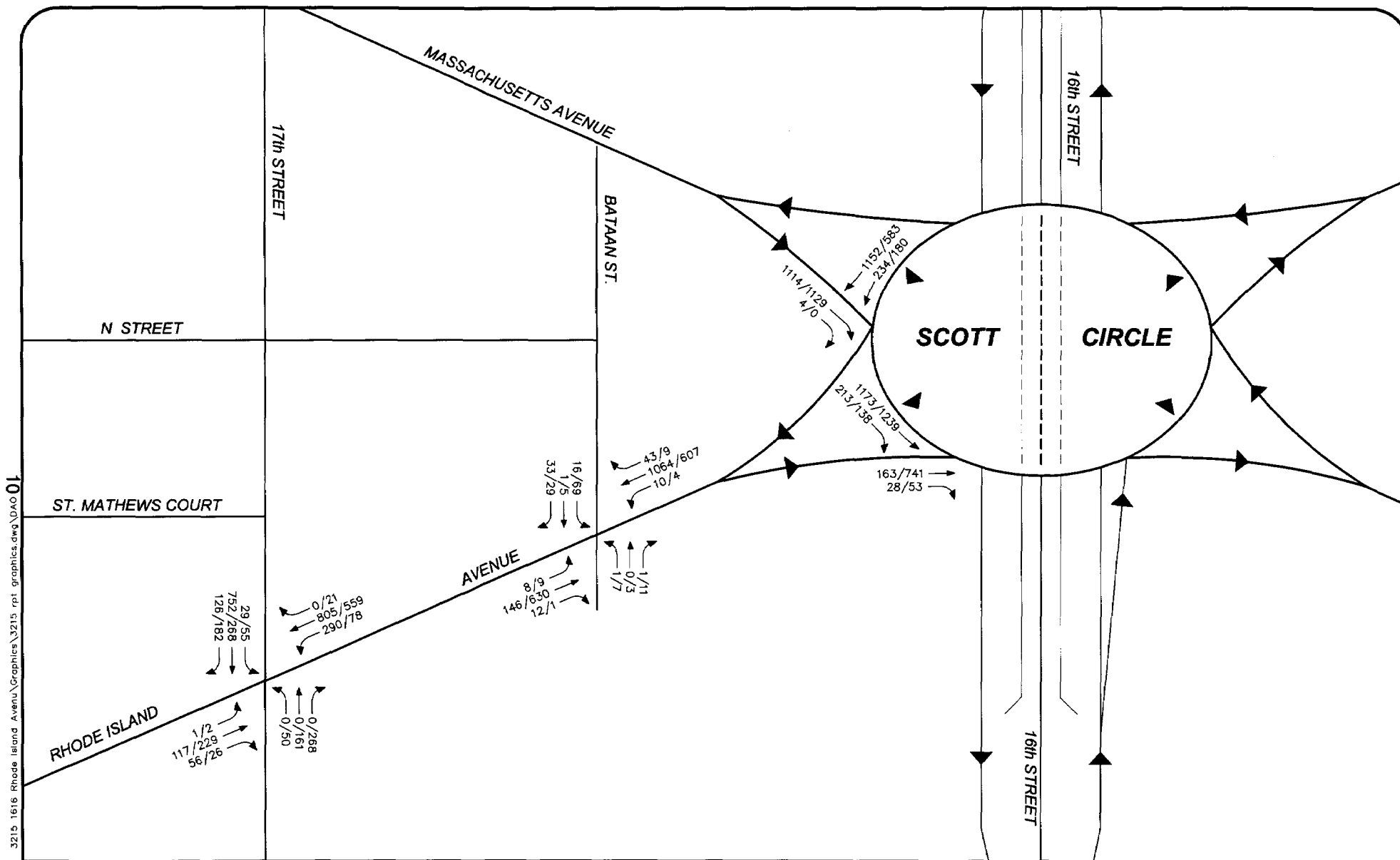


Figure 2-2
Existing Peak Hour Traffic Volumes

PEAK HOUR
PEAK HOUR



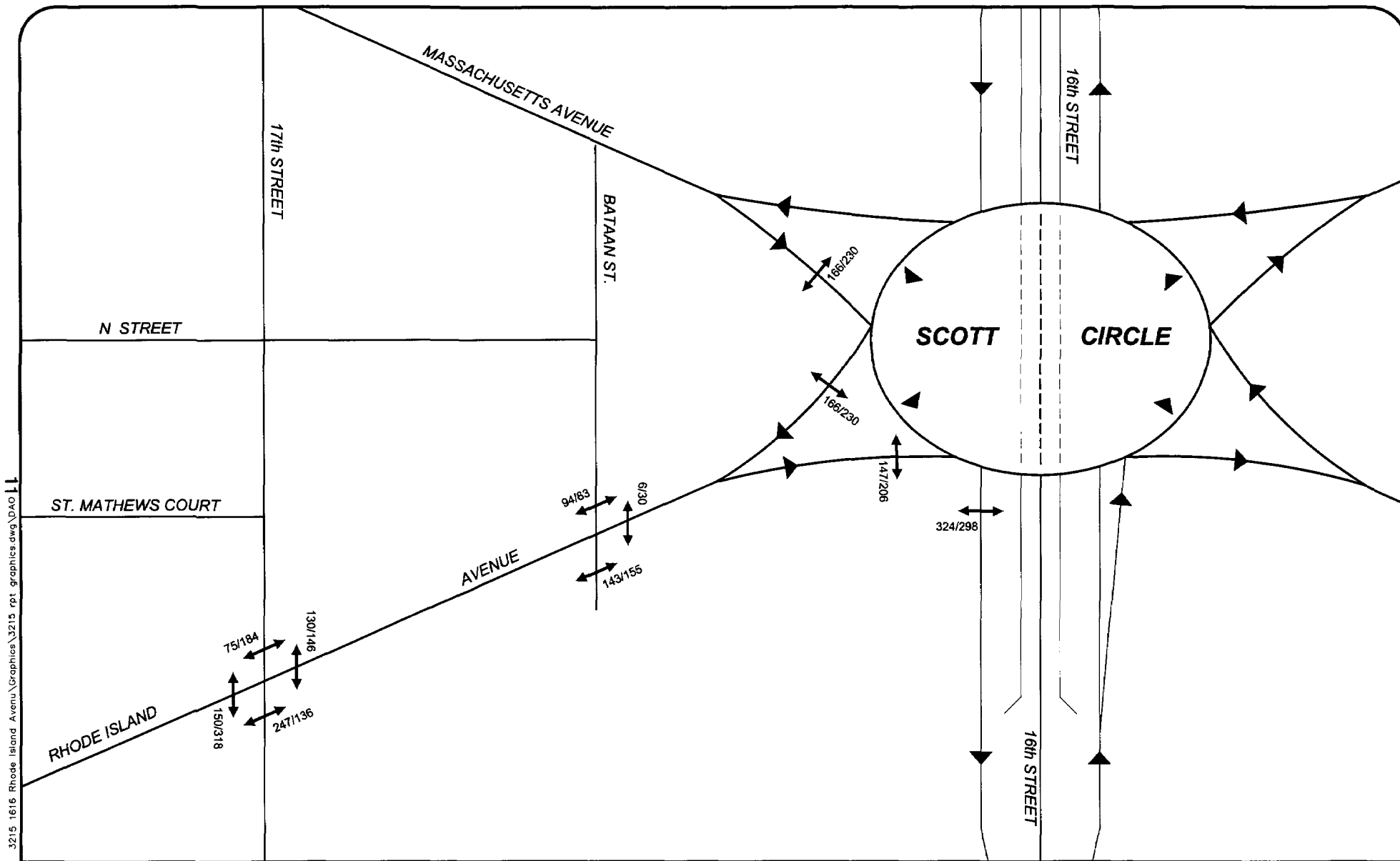
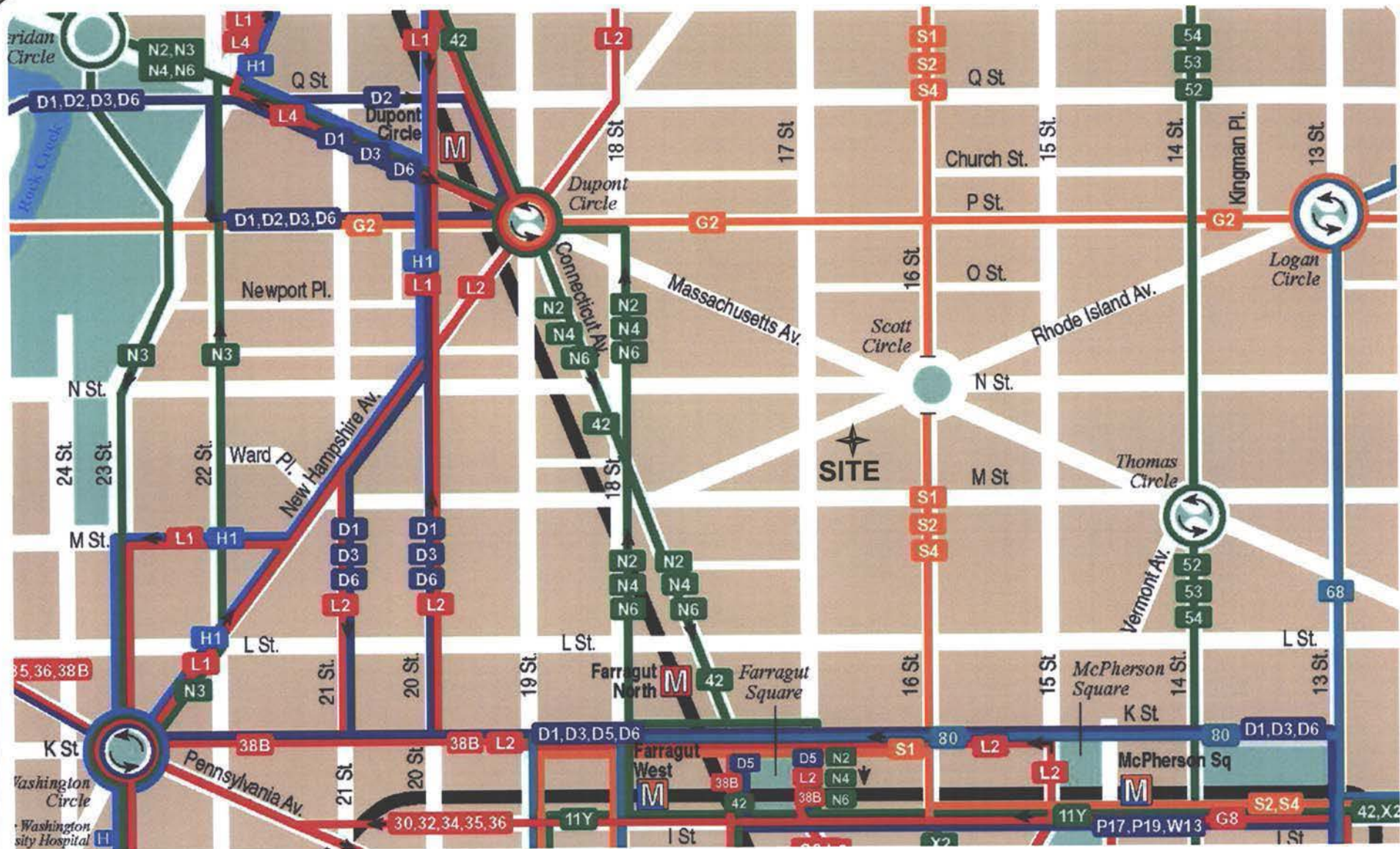


Figure 2-3
Pedestrian Counts

AM PEAK HOUR
PM PEAK HOUR



North



Source: WMATA



Figure 2-4
Existing Metro Bus and Rail Service

Section 3 ANALYSIS

Overview

This section presents analyses of existing and future traffic conditions, without and with the proposed re-development of the subject site, and evaluations of the parking and loading requirements.

Existing Levels of Service

Existing peak hour levels of service were estimated at the three key intersections in the study area based on the existing lane usage and traffic control shown on Figure 2-1, existing vehicular traffic counts shown on Figure 2-2, existing pedestrian traffic counts shown on Figure 2-3, and the Synchro intersection capacity analysis model. The results are presented in Appendix C and summarized in Table 3-1.

Table 3-1 indicates that each of the three intersections in the study area currently operate at level of service (LOS) "D" or better during both the AM and PM peak hours. All approaches to each of the signalized intersections also operate at LOS "D" or better during both the AM and PM peak hours.

Trip Distribution Analysis

The distribution of peak hour trips that would be generated by the proposed office building at 1616 Rhode Island Avenue was determined based on existing traffic counts. Below are the estimated directions of approach:

To/From	<u>AM</u>		<u>PM</u>	
	Inbound	Outbound	Inbound	Outbound
17th Street, North	25%	0%	16%	5%
Massachusetts Avenue via Bataan Street	32%	10%	37%	15%
16th Street, Rhode Island Avenue, and Massachusetts Avenue via Scott Circle	38%	35%	24%	47%
17th Street, South	0%	30%	15%	11%
Rhode Island Avenue, West	<u>5%</u>	<u>25%</u>	<u>8%</u>	<u>22%</u>
Total	100%	100%	100%	100%

Table 3-1
1616 Rhode Island Avenue
Intersection Level of Service (1,2,3)

Intersection	Control	Approach	Existing, 2006		Background, 2009		Total Future, 2009	
			AM	PM	AM	PM	AM	PM
1. Rhode Island Avenue & 17th Street NW * 17th Street is one-way southbound from 7:00-9:30 AM	Signalized	EB	B (18.6)	B (19.8)	B (18.1)	B (19.4)	B (18.2)	B (19.0)
		WB	A (7.1)	A (3.0)	A (7.5)	A (2.9)	A (7.9)	A (3.5)
		NB	NA	B (14.0)	NA	B (14.5)	NA	B (14.9)
		SB	<u>B (14.6)</u>	<u>B (14.6)</u>	<u>B (15.1)</u>	<u>B (15.1)</u>	<u>B (15.2)</u>	<u>B (15.6)</u>
		Overall	B (11.1)	B (11.1)	B (11.5)	B (11.3)	B (11.8)	B (11.6)
2. Rhode Island Avenue & Bataan St NW/Parking Lot Total Future Rhode Island Avenue & Bataan St NW/Site Garage	Unsignalized	EBL	A [0.6]	A [0.4]	A [0.6]	A [0.4]	NA	NA
		WBL	A [0.1]	A [0.3]	A [0.1]	A [0.3]	NA	NA
		NBLTR	B [10.7]	C [21.2]	B [10.7]	C [21.8]	NA	NA
		SBLTR	C [18.5]	D [31.9]	C [19.1]	D [34.3]	NA	NA
		EBL	NA	NA	NA	NA	A [1.2]	A [0.4]
		EBL	NA	NA	NA	NA	A [1.3]	A [0.5]
		NBLTR	NA	NA	NA	NA	C [15.3]	D [31.7]
		SBLTR	NA	NA	NA	NA	E [40.6]	F [51.0]
3. Massachusetts Avenue & Scott Circle	Signalized	SEB	B (13.6)	A (5.4)	B (14.5)	A (5.7)	B (15.1)	A (5.7)
		SWB	<u>C (31.4)</u>	<u>D (44.1)</u>	<u>C (30.4)</u>	<u>D (43.5)</u>	<u>C (29.7)</u>	<u>D (43.6)</u>
		Overall	C (23.4)	C (21.0)	C (23.3)	C (21.0)	C (23.3)	C (21.0)
4. Rhode Island Avenue & Scott Circle/16th S	Signalized	EB	D (36.9)	D (45.1)	D (37.0)	D (45.8)	D (38.8)	D (46.1)
		SEB	<u>B (18.1)</u>	<u>B (19.4)</u>	<u>B (14.7)</u>	<u>C (20.4)</u>	<u>B (13.2)</u>	<u>C (21.0)</u>
		Overall	C (20.3)	C (28.8)	B (17.4)	C (29.7)	B (16.4)	C (30.4)

Notes:

¹ Based on as Synchro version 6

² Numbers in brackets, [], represent control delay in seconds per vehicle for unsignalized intersections.

³ Numbers in parenthesis, (), represent control delay in seconds per vehicle for signalized intersections.

Background Traffic Growth

No approved but unbuilt (or pipeline) projects were identified in the immediate study area. A one (1) percent per year background traffic growth rate was used to account for general regional traffic growth and other projects that may be built within the next three years in the District of Columbia outside of the study area. This rate was compounded for three years for project buildout (2009). This growth rate was applied to all movements at each study area intersection.

Background Traffic Forecasts

Background peak hour traffic forecasts, without re-development of 1616 Rhode Island Avenue, were estimated based on existing traffic counts, and background traffic growth, as shown on Figure 3-1.

Background Future Levels of Service

Future peak hour levels of service, without re-development of 1616 Rhode Island Avenue, were estimated at the three key intersections in the study area for the year of project buildout (2009) based on the intersection lane usage and traffic control shown on Figure 2-1; the background traffic forecasts shown on Figure 3-1; and the Synchro intersection capacity analysis model.

The results are presented in Appendix D, and are summarized in Table 3-1. Table 3-1 indicates that all intersections and approaches would continue to operate at LOS "D" or better during both the AM and PM peak hours in 2009 without re-development of 1616 Rhode Island Avenue.

Site Trip Generation Analysis

The number of trips that will be generated by the proposed office building at 1616 Rhode Island Avenue were estimated based on: (1) Institute of Transportation Engineers (ITE) trip generation rates, (2) the proximity of the project to the Farragut North and Dupont Circle Metro stations, and (3) experience with other comparable projects in Washington, D.C.

It is estimated that the proposed 129,680 S.F. office building would generate 103 AM peak hour trips, and 100 PM peak hour trips, as shown in Table 3-2. The existing commercial parking lot currently generates 25 AM peak hour trips and 31 PM peak hour trips. The proposed office building, thus, would generate 78 net additional trips during the AM peak hour and 69 net additional trips during the PM peak hour.

Table 3-2
1616 Rhode Island Avenue
Site-Trip Generation Analysis

Land Use	Size	Units	Land Use Code	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
<u>Existing Vehicle Trips</u>				23	2	25	10	21	31
<u>ITE Vehicle-Trips (1)</u>									
Office	128,680	S.F.	710	202	27	229	38	185	223
<u>ITE Person-Trips (2)</u>									
				222	30	252	42	204	245
<u>1616 Rhode Island Ave Vehicle Trips (3)</u>									
				91	12	103	17	83	100
<u>Net Additional Trips</u>				68	10	78	7	62	69

Notes: (1) Based on Trip Generation, 7th Edition, Institute of Transportation Engineers.

(2) Assumptions:

Office

Non-auto mode split: 0%

Average vehicle occupancy 1.10

(persons per vehicle)

(3) Assumptions:

Office

Non-auto mode split: 50%

Average vehicle occupancy 1.20

(persons per vehicle)

Non-auto mode splits were adapted from the U.S. Census 2000

Data Summary File 3 and the Development-Related Ridership Survey II,

Washington Metropolitan Area Transit Authority, December 1989.

Site Traffic Assignments

The site-generated traffic volumes were assigned to the public road network according to the directional distribution described above. The resulting site traffic assignments are shown on Figure 3-2.

Total Future Traffic Forecasts

These site traffic assignments were added to the future background traffic volumes shown on Figure 3-1 to yield the total future traffic forecasts shown on Figure 3-3.

Total Future Levels of Service

Future peak hour levels of service with re-development of 1616 Rhode Island Avenue were estimated at the key intersections in the study area based on the lane usage and traffic controls shown on Figure 2-1; the total future traffic forecasts shown on Figure 3-3; and the Synchro intersection capacity analysis model. The results are presented in Appendix E and summarized in Table 3-1.

Table 3-1 indicates that the net additional trips that would be generated by the proposed office building would have no significant impact on the signalized intersections in the study area. The signalized intersections and all approaches to those intersections would continue to operate at LOS "D" or better during both the AM and PM peak hours.

Southbound traffic on Bataan Street, which is controlled by a stop sign at Rhode Island Avenue, theoretically would operate near or at capacity at LOS "E" and "F" during the AM and PM peak hours, respectively. In practice, the nearby traffic signals at 17th Street and Scott Circle would create gaps in traffic along Rhode Island Avenue, which would allow motorists to turn from Bataan Street onto Rhode Island Avenue without undue delay. The 1616 Rhode Island Avenue driveway is forecasted to operate at LOS "C" during the AM peak hour and at LOS "D" during the PM peak hour.

Parking Requirements

The parking requirement for a 129,680 S.F. office building within the underlying C-4 zone is one (1) space for each additional 1,800 S.F. of gross floor area in excess of 2,000 S.F., according to Chapter 21 of the *District of Columbia Municipal Regulations*. The proposed office building, therefore, would require 71 parking spaces.

The proposed office building would be served by approximately 90 parking spaces (or 0.69 spaces per 1,000 S.F.), which is 19 (or 27 percent) more spaces than required by regulation. The proposed parking supply would adequately accommodate the parking requirements for the proposed office building.

Loading Requirements

The loading requirement is a minimum of two (2) 30-foot deep loading berths and one (1) service/delivery loading space for office buildings ranging from 100,000 to 200,000 S.F. in size, within the underlying C-4 zone, according to Chapter 22 of the *District of Columbia Municipal Regulations*.

The loading dock area will be located at the southwest corner of the proposed office building with access from the existing alley system. The trucks would back into the appropriate loading areas, as shown on Figure 3-4.

The loading/delivery/service facilities provided for this development would adequately meet the project and D.C. minimum zoning requirements



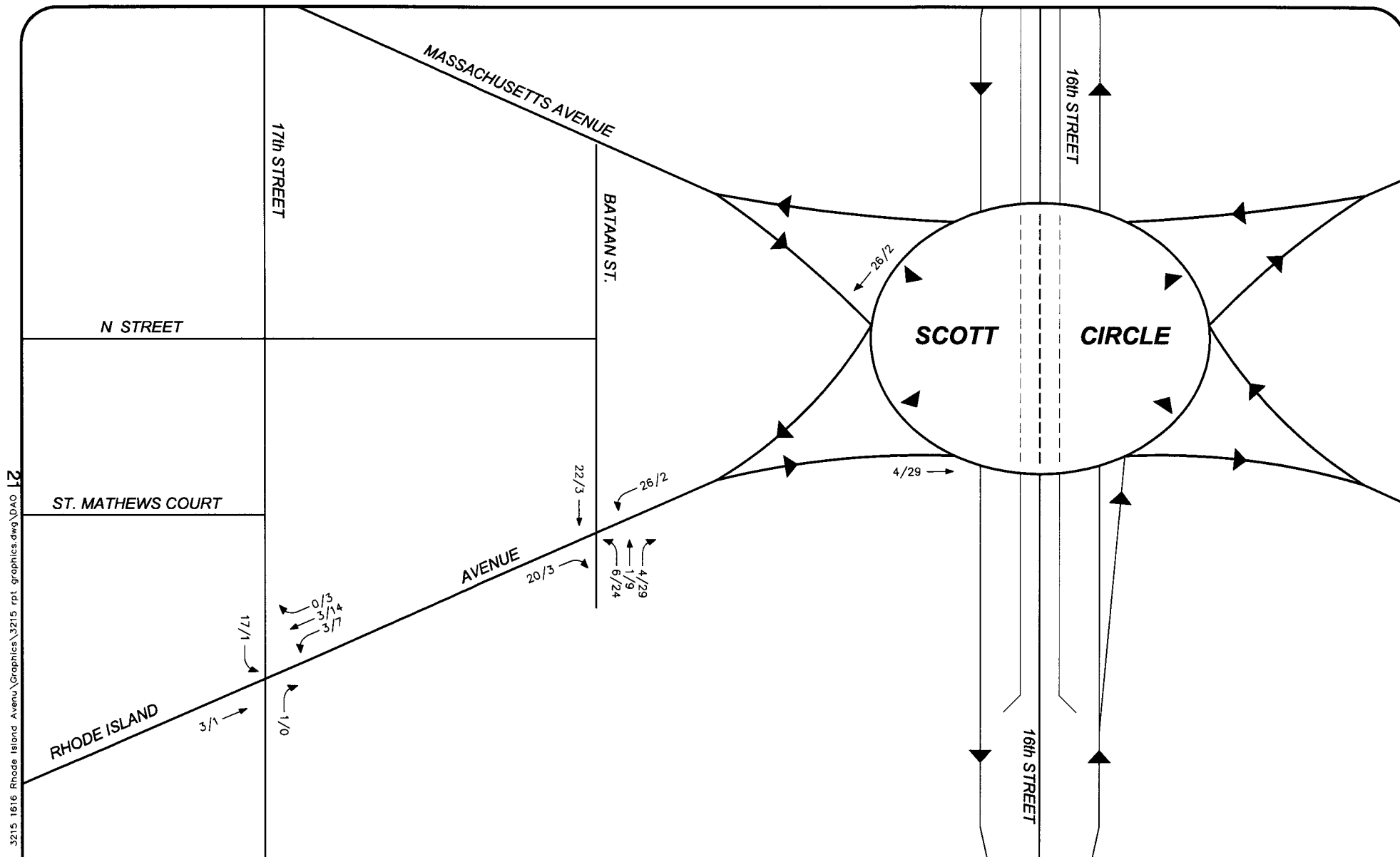


Figure 3-2
Site-Generated Traffic Assignments

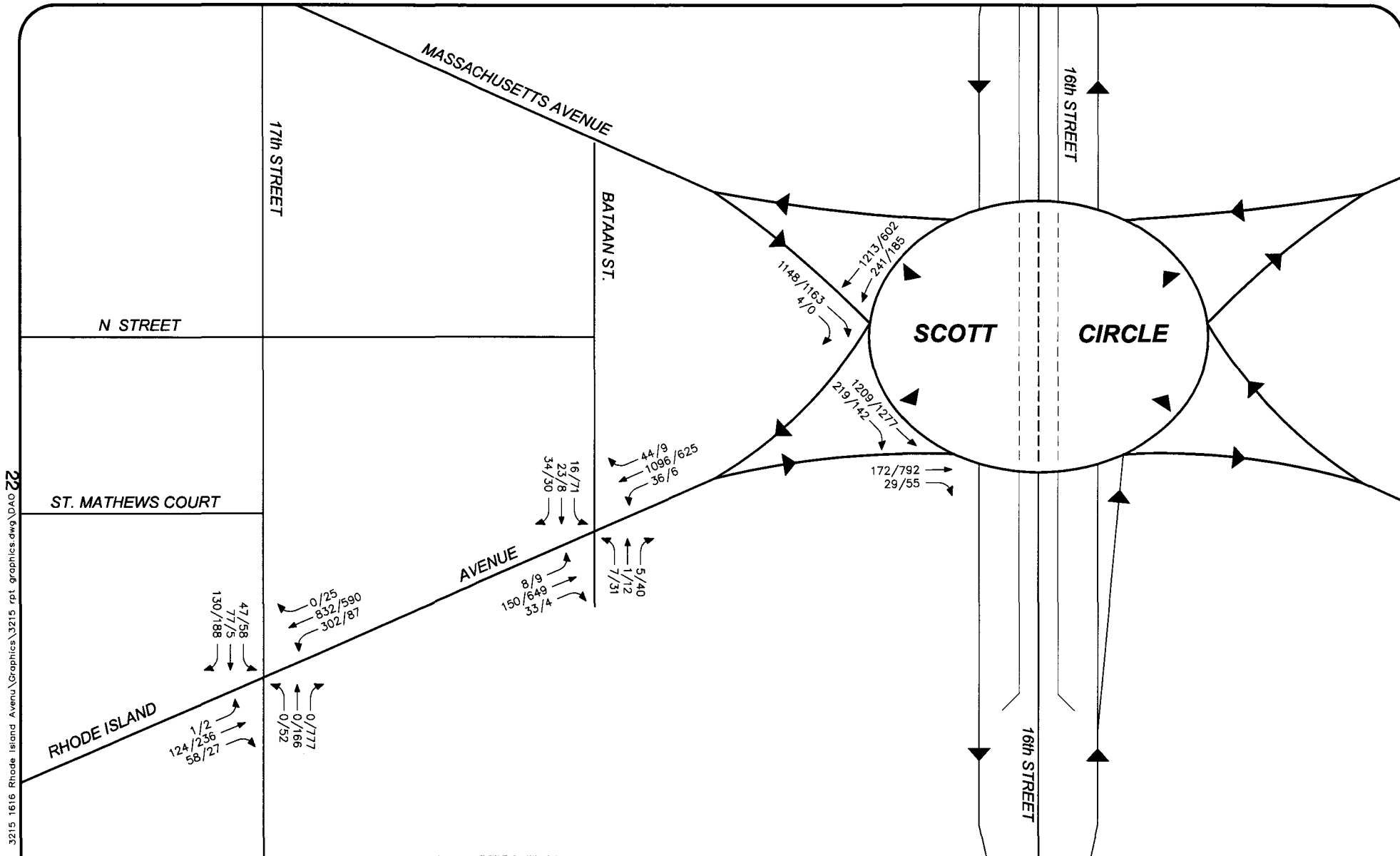


Figure 3-3
Total Future Peak hour Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000
North

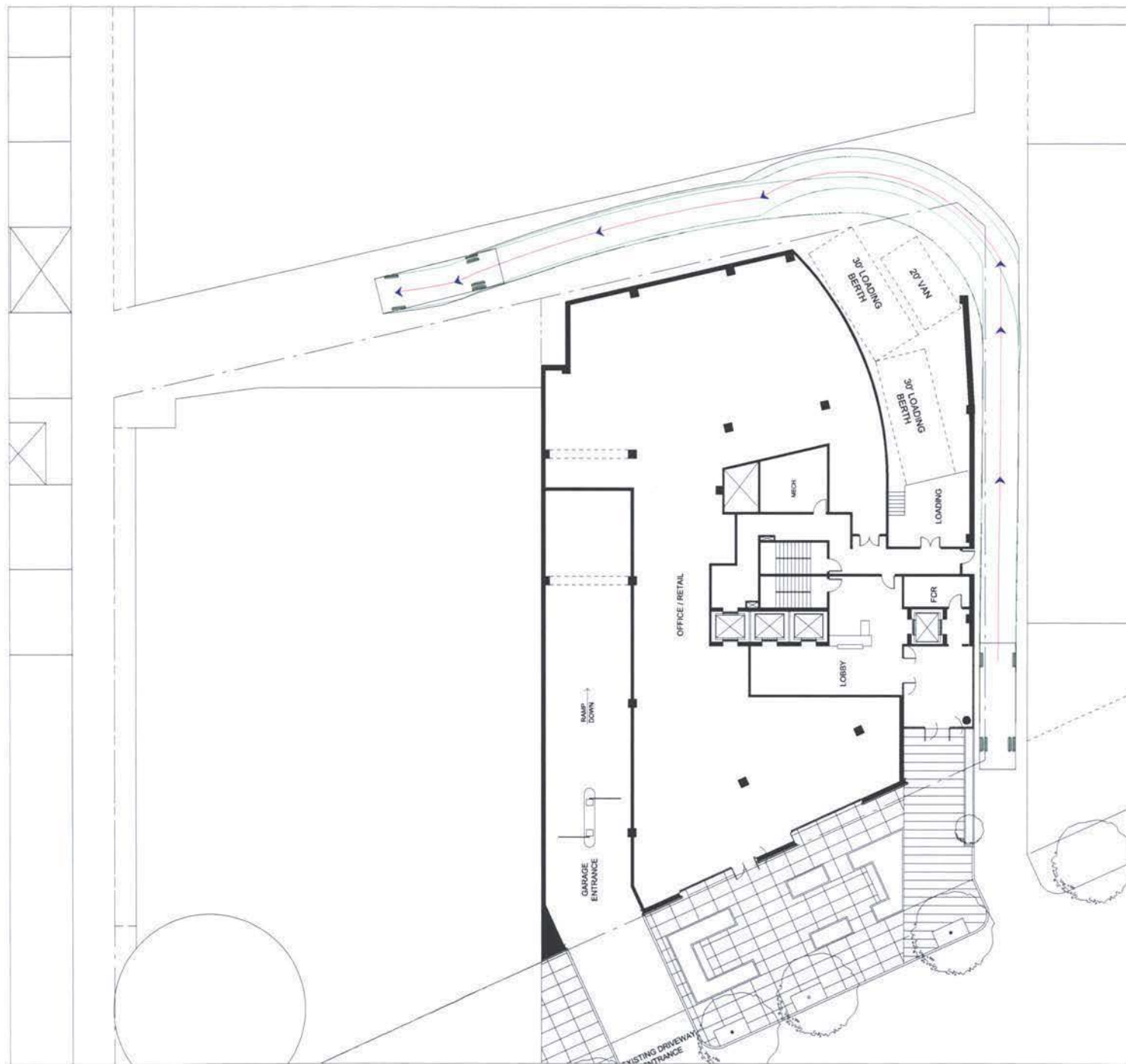


Figure 3-4
Single Unit Truck Docking

1616 Rhode Island Avenue
Washington, D.C.

Single Unit Truck - Detail
Not To Scale

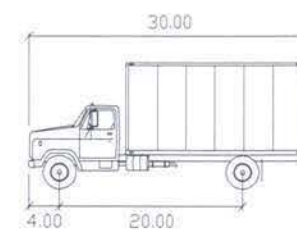




Figure 3-5
Single unit truck Docking
1616 Rhode Island Avenue
Washington, D.C.

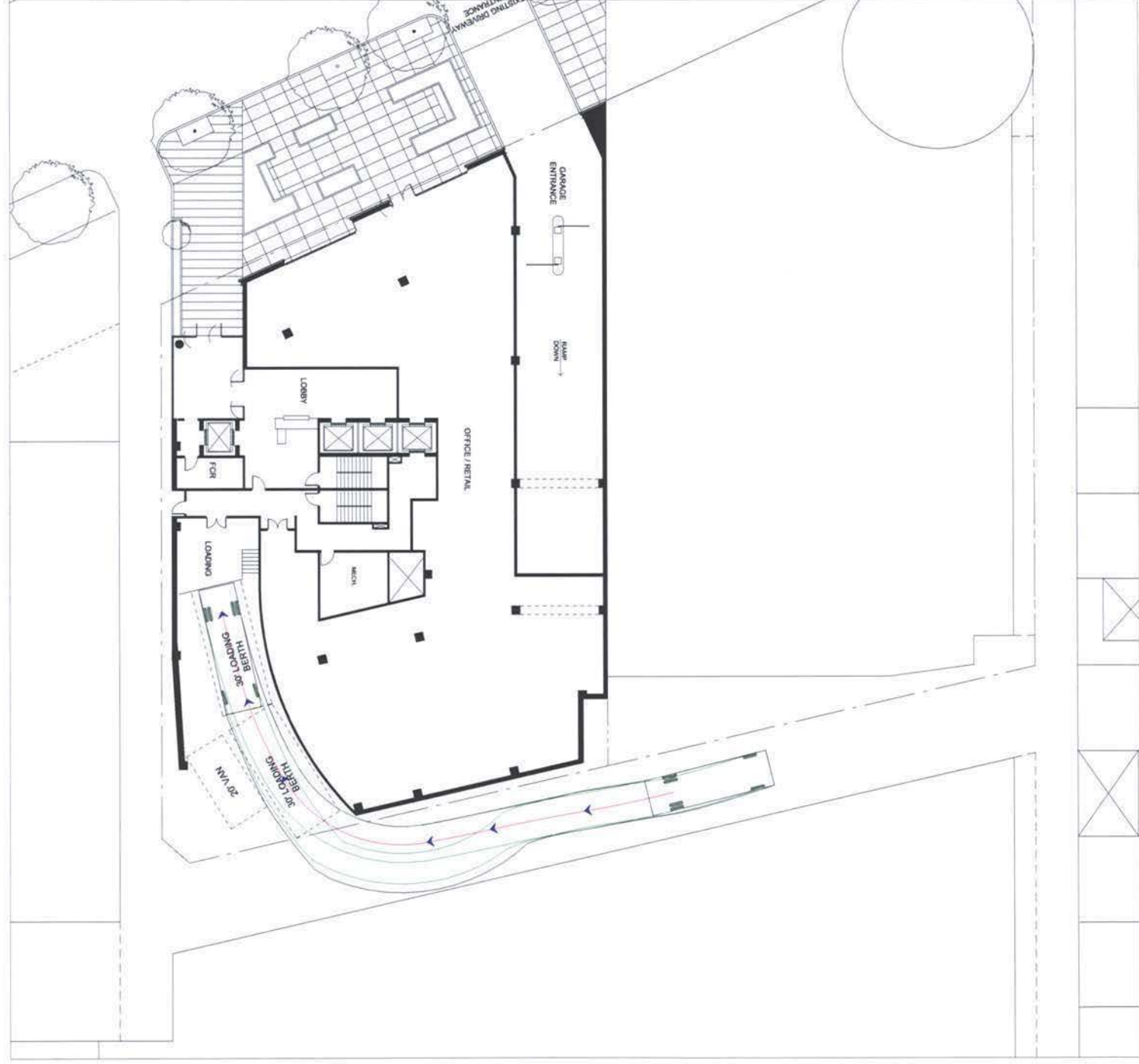
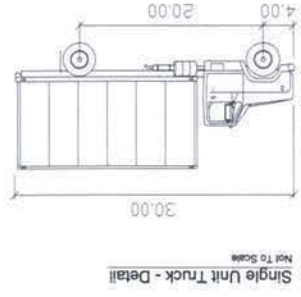
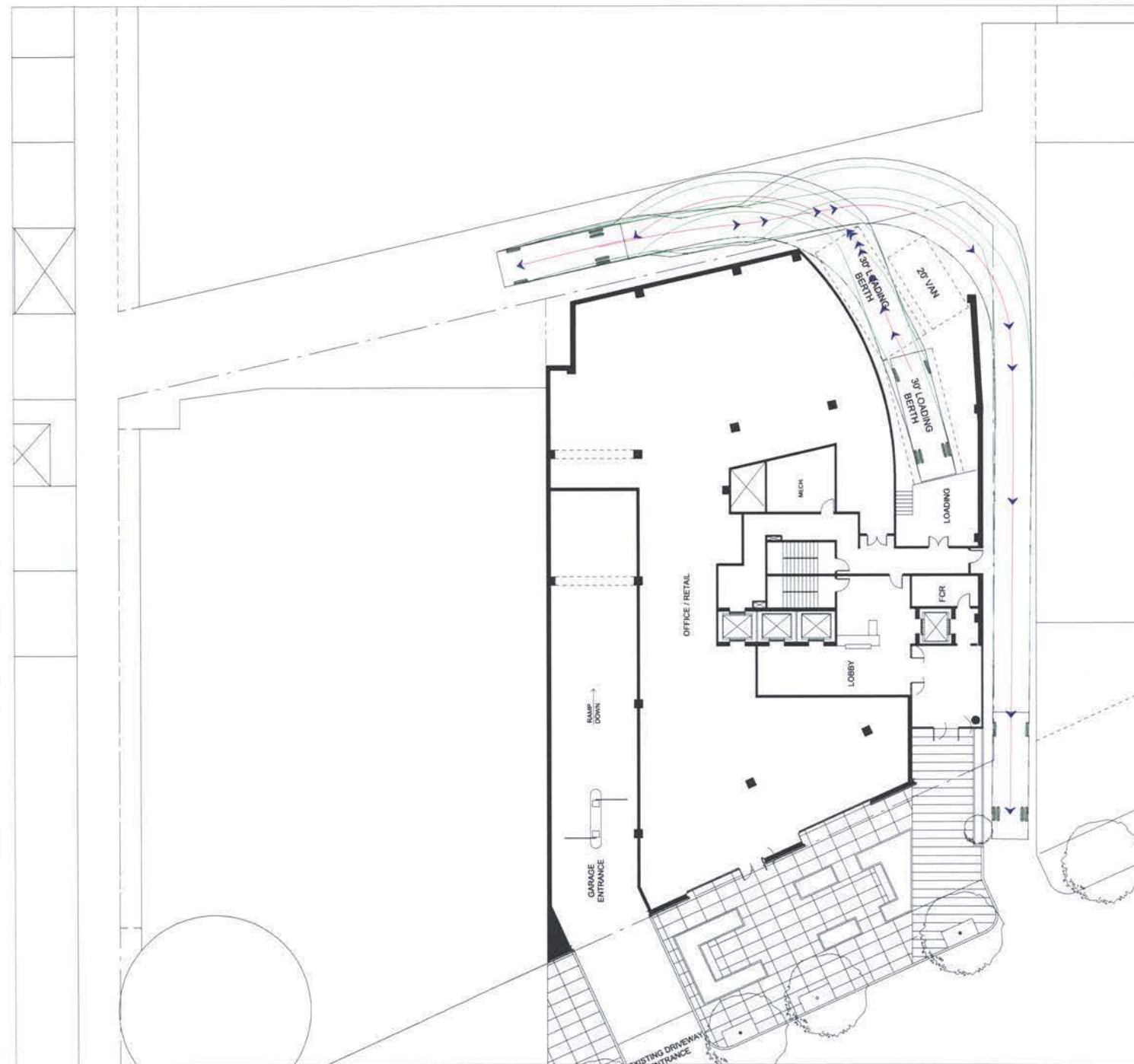
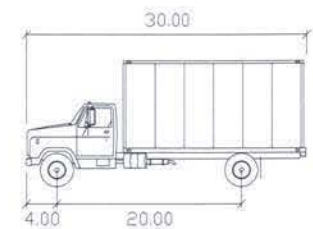




Figure 3-6
Single unit truck Docking
1616 Rhode Island Avenue
Washington, D.C.



Single Unit Truck - Detail
Not To Scale



Section 4

CONCLUSIONS

The conclusions of this traffic impact study are as follows:

1. The three intersections in the study area currently operate at level of service (LOS) "D" or better during both the AM and PM peak hours. All approaches to each of the signalized intersections also operate at LOS "D" or better during both the AM and PM peak hours.
2. Rhode Island Avenue and M Street currently operate at bicycle level of service (BLOS) "E", according to the April 2005 District of Columbia Bicycle Master Plan. 16th and 17th Street currently operate at BLOS "D".
3. 1616 Rhode Island Avenue will add 78 new AM peak hour trips and 69 new PM peak hour trips, to the public street system upon project completion.
4. The net additional trips that would be generated by the proposed office building would have no significant impact on the signalized intersections in the study area. Motorists on southbound Bataan Street would utilize gaps created by upstream and downstream signals to turn onto Rhode Island Avenue.
5. The 90 parking spaces in the three-level, underground garage would adequately accommodate the 1616 Rhode Island Avenue office project.
6. The loading/delivery/service facilities provided for this development would adequately meet the project and D.C. minimum zoning requirements.

Appendix A

Existing Vehicular Traffic Counts



Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT:		1616 Rhode Island Avenue							DATE:		4/6/2006				SOUTHBOUND ROAD:				Scott Circle			
W & A JOB NO.:		3215							DAY:		Thursday				NORTHBOUND ROAD:				Exit to 16th Street			
INTERSECTION:		Rhode Island Ave. & Scott Circle							WEATHER:		Clear				WESTBOUND ROAD:				Scott Circle			
LOCATION:		Washington.DC							COUNTED BY:		Jorge				EASTBOUND ROAD:				Rhode Island Avenue			
										INPUTED BY:		agen										
Time Period	Turning Movements																Total	PHF	Time Period			
	Southbound Scott Circle				Westbound Scott Circle				Northbound Exit to 16th Street				Eastbound Rhode Island Avenue							North & South	East & West	
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total						
AM																						
7:00-7:15	0	19	121	140	0	0	0	0	0	0	0	0	2	16	0	18	140	18	158	7:00-7:15		
7:15-7:30	0	28	168	196	0	0	0	0	0	0	0	0	3	28	0	31	196	31	227	7:15-7:30		
7:30-7:45	0	33	228	261	0	0	0	0	0	0	0	0	8	26	0	34	261	34	295	7:30-7:45		
7:45-8:00	0	40	299	339	0	0	0	0	0	0	0	0	8	24	0	32	339	32	371	7:45-8:00		
8:00-8:15	0	30	269	299	0	0	0	0	0	0	0	0	8	26	0	34	299	34	333	8:00-8:15		
8:15-8:30	0	40	316	356	0	0	0	0	0	0	0	0	2	41	0	43	356	43	399	8:15-8:30		
8:30-8:45	0	30	291	321	0	0	0	0	0	0	0	0	4	27	0	31	321	31	352	8:30-8:45		
8:45-9:00	0	61	299	360	0	0	0	0	0	0	0	0	5	30	0	35	360	35	395	8:45-9:00		
9:00-9:15	0	46	296	342	0	0	0	0	0	0	0	0	6	40	0	46	342	46	388	9:00-9:15		
9:15-9:30	0	54	285	339	0	0	0	0	0	0	0	0	8	42	0	50	339	50	389	9:15-9:30		
9:30-9:45	0	52	293	345	0	0	0	0	0	0	0	0	9	51	0	60	345	60	405	9:30-9:45		
9:45-10:00	0	44	279	323	0	0	0	0	0	0	0	0	11	41	0	52	323	52	375	9:45-10:00		
3 Hour Totals		0	477	3,144	3,621	0	0	0	0	0	0	0	74	392	0	466	3,621	466	4,087			
1 Hour Totals																						
7:00-8:00	0	120	816	936	0	0	0	0	0	0	0	0	21	94	0	115	936	115	1,051	0.71	7:00-8:00	
7:15-8:15	0	131	964	1,095	0	0	0	0	0	0	0	0	27	104	0	131	1,095	131	1,226	0.83	7:15-8:15	
7:30-8:30	0	143	1,112	1,255	0	0	0	0	0	0	0	0	26	117	0	143	1,255	143	1,398	0.88	7:30-8:30	
7:45-8:45	0	140	1,175	1,315	0	0	0	0	0	0	0	0	22	118	0	140	1,315	140	1,455	0.91	7:45-8:45	
8:00-9:00	0	161	1,175	1,336	0	0	0	0	0	0	0	0	19	124	0	143	1,336	143	1,479	0.93	8:00-9:00	
8:15-9:15	0	177	1,202	1,379	0	0	0	0	0	0	0	0	17	138	0	155	1,379	155	1,534	0.96	8:15-9:15	
8:30-9:30	0	191	1,171	1,362	0	0	0	0	0	0	0	0	23	139	0	162	1,362	162	1,524	0.96	8:30-9:30	
8:45-9:45	0	213	1,173	1,386	0	0	0	0	0	0	0	0	28	163	0	191	1,386	191	1,577	0.97	8:45-9:45	
9:00-10:00	0	196	1,153	1,349	0	0	0	0	0	0	0	0	34	174	0	208	1,349	208	1,557	0.96	9:00-10:00	
AM Peak 8:45-9:45																						
8:45-9:45	0	213	1,173	1,386	0	0	0	0	0	0	0	0	28	163	0	191	1,386	191	1,577	0.97	AM Peak 8:45-9:45	
PM																						
4:00-4:15	0	32	240	272	0	0	0	0	0	0	0	0	13	109	0	122	272	122	394		4:00-4:15	
4:15-4:30	0	33	253	286	0	0	0	0	0	0	0	0	13	107	0	120	286	120	406		4:15-4:30	
4:30-4:45	0	40	248	288	0	0	0	0	0	0	0	0	13	124	0	137	288	137	425		4:30-4:45	
4:45-5:00	0	27	253	280	0	0	0	0	0	0	0	0	13	113	0	126	280	126	406		4:45-5:00	
5:00-5:15	0	42	295	337	0	0	0	0	0	0	0	0	10	143	0	153	337	153	490		5:00-5:15	
5:15-5:30	0	40	302	342	0	0	0	0	0	0	0	0	5	163	0	168	342	168	510		5:15-5:30	
5:30-5:45	0	31	329	360	0	0	0	0	0	0	0	0	9	184	0	193	360	193	553		5:30-5:45	
5:45-6:00	0	21	315	336	0	0	0	0	0	0	0	0	15	176	0	191	336	191	527		5:45-6:00	
6:00-6:15	0	44	318	362	0	0	0	0	0	0	0	0	14	184	0	198	362	198	560		6:00-6:15	
6:15-6:30	0	42	277	319	0	0	0	0	0	0	0	0	15	197	0	212	319	212	531		6:15-6:30	
6:30-6:45	0	33	267	300	0	0	0	0	0	0	0	0	3	152	0	155	300	155	455		6:30-6:45	
6:45-7:00	0	28	257	285	0	0	0	0	0	0	1	1	8	167	0	175	286	175	461		6:45-7:00	
3 Hour Totals		0	413	3,354	3,767	0	0	0	0	0	0	1	1	131	1,819	0	1,950	3,768	1,950	5,718		
1 Hour Totals																						
4:00-5:00	0	132	994	1,126	0	0	0	0	0	0	0	0	52	453	0	505	1,126	505	1,631	0.96	4:00-5:00	
4:15-5:15	0	142	1,049	1,191	0	0	0	0	0	0	0	0	49	487	0	536	1,191	536	1,727	0.88	4:15-5:15	
4:30-5:30	0	149	1,098	1,247	0	0	0	0	0	0	0	0	41	543	0	584	1,247	584	1,831	0.90	4:30-5:30	
4:45-5:45	0	140	1,179	1,319	0	0	0	0	0	0	0	0	37	603	0	640	1,319	640	1,959	0.89	4:45-5:45	
5:00-6:00	0	134	1,241	1,375	0	0	0	0	0	0	0	0	39	666	0	705	1,375	705	2,080	0.94	5:00-6:00	
5:15-6:15	0	136	1,264	1,400	0	0	0	0	0	0	0	0	43	707	0	750	1,400	750	2,150	0.96	5:15-6:15	
5:30-6:30	0	138	1,239	1,377	0	0	0	0	0	0	0	0	53	741	0	794	1,377	794	2,171	0.97	5:30-6:30	
5:45-6:45	0	140	1,177	1,317	0	0	0	0	0	0	0	0	47	709	0	756	1,317	756	2,073	0.93	5:45-6:45	
6:00-7:00	0	147	1,119	1,266	0	0	0	0	0	0	1	1	40	700	0	740	1,267	740	2,007	0.90	6:00-7:00	
PM Peak 5:30-6:30																						
5:30-6:30	0	138	1,239	1,377	0	0	0	0	0	0	0	0	53	741	0	794	1,377	794	2,171	0.97	PM Peak 5:30-6:30	

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: 1616 Rhode Island Avenue		DATE: 4/6/2006		SOUTHBOUND ROAD: Bataan Street																	
W & A JOB NO.: 3215		DAY: Thursday		NORTHBOUND ROAD: Parking Entrance																	
INTERSECTION: Rhode Island Ave. & Bataan St.		WEATHER: Clear		WESTBOUND ROAD: Rhode Island Avenue																	
LOCATION: Washington,DC		COUNTED BY: Shirley		EASTBOUND ROAD: Rhode Island Avenue																	
		INPUTED BY: aqan																			
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound Bataan Street				Westbound Rhode Island Avenue				Northbound Parking Entrance				Eastbound Rhode Island Avenue							North & South	East & West
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
7:00-7:15	3	0	5	8	1	198	4	203	1	0	0	1	2	29	1	32	9	235	244		7:00-7:15
7:15-7:30	2	0	6	8	2	198	2	202	0	0	0	0	0	28	1	29	8	231	239		7:15-7:30
7:30-7:45	3	0	9	12	5	257	0	262	0	0	0	0	0	26	1	27	12	289	301		7:30-7:45
7:45-8:00	4	1	9	14	7	252	1	260	0	0	0	0	1	26	4	31	14	291	305		7:45-8:00
8:00-8:15	3	0	3	6	6	261	5	272	0	0	0	0	4	36	1	41	6	313	319		8:00-8:15
8:15-8:30	5	0	2	7	4	256	1	261	0	0	0	0	2	37	5	44	7	305	312		8:15-8:30
8:30-8:45	7	0	5	12	11	287	3	301	0	0	0	0	3	29	1	33	12	334	346		8:30-8:45
8:45-9:00	14	0	6	20	13	283	3	299	1	0	1	2	2	32	1	35	22	334	356		8:45-9:00
9:00-9:15	7	1	3	11	15	238	3	256	0	0	0	0	5	48	1	54	11	310	321		9:00-9:15
9:15-9:30	6	1	7	14	5	227	4	236	2	0	1	3	5	46	4	55	17	291	308		9:15-9:30
9:30-9:45	11	0	5	16	4	257	4	265	1	0	0	1	0	56	0	56	17	321	338		9:30-9:45
9:45-10:00	2	0	7	9	4	229	2	235	0	0	0	0	3	49	4	56	9	291	300		9:45-10:00
3 Hour Totals	67	3	67	137	77	2,943	32	3,052	5	0	2	7	27	442	24	493	144	3,545	3,689		
1 Hour Totals																					
7:00-8:00	12	1	29	42	15	905	7	927	1	0	0	1	3	109	7	119	43	1,046	1,089	0.89	7:00-8:00
7:15-8:15	12	1	27	40	20	968	8	996	0	0	0	0	5	116	7	128	40	1,124	1,164	0.91	7:15-8:15
7:30-8:30	15	1	23	39	22	1,026	7	1,055	0	0	0	0	7	125	11	143	39	1,198	1,237	0.97	7:30-8:30
7:45-8:45	19	1	19	39	28	1,056	10	1,094	0	0	0	0	10	128	11	149	39	1,243	1,282	0.93	7:45-8:45
8:00-9:00	29	0	16	45	34	1,087	12	1,133	1	0	1	2	11	134	8	153	47	1,286	1,333	0.94	8:00-9:00
8:15-9:15	33	1	16	50	43	1,064	10	1,117	1	0	1	2	12	146	8	166	52	1,283	1,335	0.94	8:15-9:15
8:30-9:30	34	2	21	57	44	1,035	13	1,092	3	0	2	5	15	155	7	177	62	1,269	1,331	0.93	8:30-9:30
8:45-9:45	38	2	21	61	37	1,005	14	1,056	4	0	2	6	12	182	6	200	67	1,256	1,323	0.93	8:45-9:45
9:00-10:00	26	2	22	50	28	951	13	992	3	0	1	4	13	199	9	221	54	1,213	1,267	0.94	9:00-10:00
AM Peak 8:15-9:15	33	1	16	50	43	1,064	10	1,117	1	0	1	2	12	146	8	166	52	1,283	1,335	0.94	AM Peak 8:15-9:15
PM																					
4:00-4:15	7	0	12	19	5	122	1	128	3	0	1	4	0	94	4	98	23	226	249		4:00-4:15
4:15-4:30	9	0	18	27	2	149	0	151	3	0	2	5	2	95	5	102	32	253	285		4:15-4:30
4:30-4:45	10	0	16	26	5	124	0	129	0	0	1	1	1	119	2	122	27	251	278		4:30-4:45
4:45-5:00	4	0	11	15	5	157	0	162	6	0	0	6	1	107	0	108	21	270	291		4:45-5:00
5:00-5:15	14	0	11	25	5	126	1	132	4	0	2	6	0	121	3	124	31	256	287		5:00-5:15
5:15-5:30	5	0	13	18	7	136	3	146	2	0	0	2	0	137	1	138	20	284	304		5:15-5:30
5:30-5:45	11	1	16	28	4	147	0	151	4	1	2	7	1	164	0	165	35	316	351		5:30-5:45
5:45-6:00	6	0	20	26	3	168	3	174	5	0	3	8	0	145	4	149	34	323	357		5:45-6:00
6:00-6:15	7	0	15	22	1	128	1	130	1	0	0	1	0	152	4	156	23	286	309		6:00-6:15
6:15-6:30	5	4	18	27	1	164	0	165	1	2	2	5	0	169	1	170	32	335	367		6:15-6:30
6:30-6:45	6	0	13	19	5	175	0	180	3	0	2	5	0	128	7	135	24	315	339		6:30-6:45
6:45-7:00	10	0	17	27	1	120	0	121	4	0	3	7	0	179	1	180	34	301	335		6:45-7:00
3 Hour Totals	94	5	180	279	44	1,716	9	1,769	36	3	18	57	5	1,610	32	1,647	336	3,416	3,752		
1 Hour Totals																					
4:00-5:00	30	0	57	87	17	552	1	570	12	0	4	16	4	415	11	430	103	1,000	1,103	0.95	4:00-5:00
4:15-5:15	37	0	56	93	17	556	1	574	13	0	5	18	4	442	10	456	111	1,030	1,141	0.98	4:15-5:15
4:30-5:30	33	0	51	84	22	543	4	569	12	0	3	15	2	484	6	492	99	1,061	1,160	0.95	4:30-5:30
4:45-5:45	34	1	51	86	21	566	4	591	16	1	4	21	2	529	4	535	107	1,126	1,233	0.88	4:45-5:45
5:00-6:00	36	1	60	97	19	577	7	603	15	1	7	23	1	567	8	576	120	1,179	1,299	0.91	5:00-6:00
5:15-6:15	29	1	64	94	15	579	7	601	12	1	5	18	1	598	9	608	112	1,209	1,321	0.93	5:15-6:15
5:30-6:30	29	5	69	103	9	607	4	620	11	3	7	21	1	630	9	640	124	1,260	1,384	0.94	5:30-6:30
5:45-6:45	24	4	66	94	10	635	4	649	10	2	7	19	0	594	16	610	113	1,259	1,372	0.93	5:45-6:45
6:00-7:00	28	4	63	95	8	587	1	596	9	2	7	18	0	628	13	641	113	1,237	1,350	0.92	6:00-7:00
PM Peak 5:30-6:30	29	5	69	103	9	607	4	620	11	3	7	21	1	630	9	640	124	1,260	1,384	0.94	PM Peak 5:30-6:30

Wells & Associates, LLC

McLean, Virginia

Existing Traffic Count

PROJECT: 1616 Rhode Island Avenue				DATE: 4/6/2006				SOUTHBOUND ROAD: 17th Street NW													
W & A JOB NO.: 3215				DAY: Thursday				NORTHBOUND ROAD: 17th Street NW													
INTERSECTION: Rhode Island Ave. & 17th Street				WEATHER: Clear				WESTBOUND ROAD: Rhode Island Avenue													
LOCATION: Washington,DC				COUNTED BY: Jesi Loren & Carmen				EASTBOUND ROAD: Rhode Island Avenue													
				INPUTED BY: agan																	
Time Period	Turning Movements																Total	PHF	Time Period		
	Southbound 17th Street NW				Westbound Rhode Island Avenue				Northbound 17th Street NW				Eastbound Rhode Island Avenue							North & South	East & West
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
7:00-7:15	14	51	5	70	0	150	25	175	1	2	0	3	7	18	1	26	73	201	274	7:00-7:15	
7:15-7:30	30	88	12	130	1	140	33	174	0	0	0	0	4	11	0	15	130	189	319	7:15-7:30	
7:30-7:45	28	101	8	137	0	213	49	262	0	0	0	0	7	8	0	15	137	277	414	7:30-7:45	
7:45-8:00	33	104	5	142	0	179	57	236	0	0	0	0	10	19	0	29	142	265	407	7:45-8:00	
8:00-8:15	21	133	4	158	0	214	45	259	0	0	0	0	2	11	0	13	158	272	430	8:00-8:15	
8:15-8:30	28	147	11	186	0	200	50	250	0	0	0	0	4	15	0	19	186	269	455	8:15-8:30	
8:30-8:45	34	177	4	215	0	219	85	304	0	0	0	0	11	22	0	33	215	337	552	8:30-8:45	
8:45-9:00	33	177	10	220	0	202	79	281	0	0	0	0	12	20	0	32	220	313	533	8:45-9:00	
9:00-9:15	34	207	10	251	0	202	73	275	0	0	0	0	20	37	0	57	251	332	583	9:00-9:15	
9:15-9:30	25	191	5	221	0	182	53	235	0	0	0	0	13	38	1	52	221	287	508	9:15-9:30	
9:30-9:45	26	123	1	150	0	209	47	256	8	10	2	20	16	17	0	33	170	289	459	9:30-9:45	
9:45-10:00	21	78	4	103	4	163	38	205	11	24	4	39	7	36	1	44	142	249	391	9:45-10:00	
3 Hour Totals	327	1,577	79	1,983	5	2,273	634	2,912	20	36	6	62	113	252	3	368	2,045	3,280	5,325		
1 Hour Totals																					
7:00-8:00	105	344	30	479	1	682	164	847	1	2	0	3	28	56	1	85	482	932	1,414	0.85	7:00-8:00
7:15-8:15	112	426	29	567	1	746	184	931	0	0	0	0	23	49	0	72	567	1,003	1,570	0.91	7:15-8:15
7:30-8:30	110	485	28	623	0	806	201	1,007	0	0	0	0	23	53	0	76	623	1,083	1,706	0.94	7:30-8:30
7:45-8:45	116	561	24	701	0	812	237	1,049	0	0	0	0	27	67	0	94	701	1,143	1,844	0.84	7:45-8:45
8:00-9:00	116	634	29	779	0	835	259	1,094	0	0	0	0	29	68	0	97	779	1,191	1,970	0.89	8:00-9:00
8:15-9:15	129	708	35	872	0	823	287	1,110	0	0	0	0	47	94	0	141	872	1,251	2,123	0.91	8:15-9:15
8:30-9:30	126	752	29	907	0	805	290	1,095	0	0	0	0	56	117	1	174	907	1,269	2,176	0.93	8:30-9:30
8:45-9:45	118	698	26	842	0	795	252	1,047	8	10	2	20	61	112	1	174	862	1,221	2,083	0.89	8:45-9:45
9:00-10:00	106	599	20	725	4	756	211	971	19	34	6	59	56	128	2	186	784	1,157	1,941	0.83	9:00-10:00
AM Peak 8:30-9:30	126	752	29	907	0	805	290	1,095	0	0	0	0	56	117	1	174	907	1,269	2,176	0.93	AM Peak 8:30-9:30
PM																					
4:00-4:15	31	70	11	112	8	92	22	122	45	18	5	68	7	52	1	60	180	182	362		4:00-4:15
4:15-4:30	27	49	11	87	5	120	26	151	45	33	6	84	5	49	0	54	171	205	376		4:15-4:30
4:30-4:45	33	63	12	108	4	105	24	133	61	23	4	88	7	50	0	57	196	190	386		4:30-4:45
4:45-5:00	43	62	12	117	1	132	9	142	33	28	3	64	16	42	1	59	181	201	382		4:45-5:00
5:00-5:15	43	77	14	134	3	127	13	143	55	27	8	90	5	47	0	52	224	195	419		5:00-5:15
5:15-5:30	48	79	12	139	3	121	22	146	57	18	17	92	9	51	0	60	231	206	437		5:15-5:30
5:30-5:45	42	80	22	144	3	117	25	145	61	47	11	119	4	51	1	56	263	201	464		5:30-5:45
5:45-6:00	41	55	19	115	6	143	17	166	53	36	12	101	8	57	0	65	216	231	447		5:45-6:00
6:00-6:15	50	75	20	145	3	141	23	167	75	46	8	129	4	48	0	52	274	219	493		6:00-6:15
6:15-6:30	59	73	8	140	4	138	18	160	67	36	18	121	7	62	1	70	261	230	491		6:15-6:30
6:30-6:45	32	65	8	105	8	137	20	165	73	43	12	128	7	62	1	70	233	235	468		6:30-6:45
6:45-7:00	21	69	12	102	1	119	24	144	66	45	11	122	6	58	4	68	224	212	436		6:45-7:00
3 Hour Totals	470	817	161	1,448	49	1,492	243	1,784	691	400	115	1,206	85	629	9	723	2,654	2,507	5,161		
1 Hour Totals																					
4:00-5:00	134	244	46	424	18	449	81	548	184	102	18	304	35	193	2	230	728	778	1,506	0.98	4:00-5:00
4:15-5:15	146	251	49	446	13	484	72	569	194	111	21	326	33	188	1	222	772	791	1,563	0.93	4:15-5:15
4:30-5:30	167	281	50	498	11	485	68	564	206	96	32	334	37	190	1	228	832	792	1,624	0.93	4:30-5:30
4:45-5:45	176	298	60	534	10	497	69	576	206	120	39	365	34	191	2	227	899	803	1,702	0.92	4:45-5:45
5:00-6:00	174	291	67	532	15	508	77	600	226	128	48	402	26	206	1	233	934	833	1,767	0.95	5:00-6:00
5:15-6:15	181	289	73	543	15	522	87	624	246	147	48	441	25	207	1	233	984	857	1,841	0.93	5:15-6:15
5:30-6:30	192	283	69	544	16	539	83	638	256	165	49	470	23	218	2	243	1,014	881	1,895	0.96	5:30-6:30
5:45-6:45	182	268	55	505	21	559	78	658	268	161	50	479	26	229	2	257	984	915	1,899	0.96	5:45-6:45
6:00-7:00	162	282	48	492	16	535	85	636	281	170	49	500	24	230	6	260	992	896	1,888	0.96	6:00-7:00
PM Peak 5:45-6:45	182	268	55	505	21	559	78	658	268	161	50	479	26	229	2	257	984	915	1,899	0.96	PM Peak 5:45-6:45

Wells & Associates, LLC

McLean, Virginia

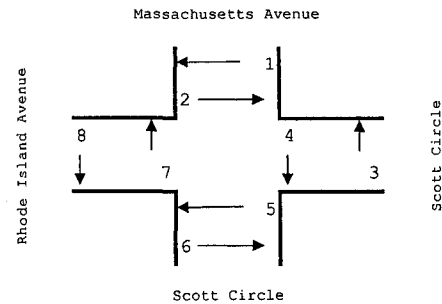
Existing Traffic Count

PROJECT: 1616 Rhode Island Avenue				DATE: 4/6/2006				SOUTHBOUND ROAD: Massachusetts Avenue													
W & A JOB NO.: 3215				DAY: Thursday				NORTHBOUND ROAD: Scott Circle													
INTERSECTION: Massachusetts Ave.& Scott Cir.				WEATHER: Clear				WESTBOUND ROAD: Scott Circle													
LOCATION: Washington, DC				COUNTED BY: Daryl				EASTBOUND ROAD: Rhode Island Avenue													
				INPUTED BY: agan																	
Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Massachusetts Avenue				Westbound Scott Circle				Northbound Scott Circle				Eastbound Rhode Island Avenue				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
7:00-7:15	1	109	0	110	0	161	23	184	0	0	0	0	0	0	0	0	110	184	294		7:00-7:15
7:15-7:30	1	169	0	170	0	181	34	215	0	0	0	0	0	0	0	0	170	215	385		7:15-7:30
7:30-7:45	1	219	0	220	0	254	39	293	0	0	0	0	0	0	0	0	220	293	513		7:30-7:45
7:45-8:00	1	281	0	282	0	248	51	299	0	0	0	0	0	0	0	0	282	299	581		7:45-8:00
8:00-8:15	2	252	0	254	0	282	48	330	0	0	0	0	0	0	0	0	254	330	584		8:00-8:15
8:15-8:30	1	280	0	281	0	271	61	332	0	0	0	0	0	0	0	0	281	332	613		8:15-8:30
8:30-8:45	1	259	0	260	0	316	60	376	0	0	0	0	0	0	0	0	260	376	636		8:30-8:45
8:45-9:00	0	274	0	274	0	308	61	369	0	0	0	0	0	0	0	0	274	369	643		8:45-9:00
9:00-9:15	2	301	0	303	0	257	52	309	0	0	0	0	0	0	0	0	303	309	612		9:00-9:15
9:15-9:30	0	245	0	245	0	269	73	342	0	0	0	0	0	0	0	0	245	342	587		9:15-9:30
9:30-9:45	0	263	0	263	0	257	58	315	0	0	0	0	0	0	0	0	263	315	578		9:30-9:45
9:45-10:00	1	254	0	255	0	213	41	254	0	0	0	0	0	0	0	0	255	254	509		9:45-10:00
3 Hour Totals	11	2,906	0	2,917	0	3,017	601	3,618	0	0	0	0	0	0	0	0	2,917	3,618	6,535		
1 Hour Totals																					
7:00-8:00	4	778	0	782	0	844	147	991	0	0	0	0	0	0	0	0	782	991	1,773	0.76	7:00-8:00
7:15-8:15	5	921	0	926	0	965	172	1,137	0	0	0	0	0	0	0	0	926	1,137	2,063	0.88	7:15-8:15
7:30-8:30	5	1,032	0	1,037	0	1,055	199	1,254	0	0	0	0	0	0	0	0	1,037	1,254	2,291	0.93	7:30-8:30
7:45-8:45	5	1,072	0	1,077	0	1,117	220	1,337	0	0	0	0	0	0	0	0	1,077	1,337	2,414	0.95	7:45-8:45
8:00-9:00	4	1,065	0	1,069	0	1,177	230	1,407	0	0	0	0	0	0	0	0	1,069	1,407	2,476	0.96	8:00-9:00
8:15-9:15	4	1,114	0	1,118	0	1,152	234	1,386	0	0	0	0	0	0	0	0	1,118	1,386	2,504	0.97	8:15-9:15
8:30-9:30	3	1,079	0	1,082	0	1,150	246	1,396	0	0	0	0	0	0	0	0	1,082	1,396	2,478	0.96	8:30-9:30
8:45-9:45	2	1,083	0	1,085	0	1,091	244	1,335	0	0	0	0	0	0	0	0	1,085	1,335	2,420	0.94	8:45-9:45
9:00-10:00	3	1,063	0	1,066	0	996	224	1,220	0	0	0	0	0	0	0	0	1,066	1,220	2,286	0.93	9:00-10:00
AM Peak 8:15-9:15																					
4	1,114	0	1,118	0	1,152	234	1,386	0	0	0	0	0	0	0	0	0	1,118	1,386	2,504	0.97	AM Peak 8:15-9:15
PM																					
4:00-4:15	0	217	0	217	0	127	38	165	0	0	0	0	0	0	0	0	217	165	382		4:00-4:15
4:15-4:30	0	249	0	249	0	146	32	178	0	0	0	0	0	0	0	0	249	178	427		4:15-4:30
4:30-4:45	0	233	0	233	0	124	35	159	0	0	0	0	0	0	0	0	233	159	392		4:30-4:45
4:45-5:00	0	235	0	235	0	158	37	195	0	0	0	0	0	0	0	0	235	195	430		4:45-5:00
5:00-5:15	0	268	0	268	0	127	37	164	0	0	0	0	0	0	0	0	268	164	432		5:00-5:15
5:15-5:30	0	276	0	276	0	130	48	178	0	0	0	0	0	0	0	0	276	178	454		5:15-5:30
5:30-5:45	0	290	0	290	0	154	38	192	0	0	0	0	0	0	0	0	290	192	482		5:30-5:45
5:45-6:00	0	285	0	285	0	166	43	209	0	0	0	0	0	0	0	0	285	209	494		5:45-6:00
6:00-6:15	0	278	0	278	0	133	51	184	0	0	0	0	0	0	0	0	278	184	462		6:00-6:15
6:15-6:30	0	241	0	241	0	157	52	209	0	0	0	0	0	0	0	0	241	209	450		6:15-6:30
6:30-6:45	0	194	0	194	0	167	35	202	0	0	0	0	0	0	0	0	194	202	396		6:30-6:45
6:45-7:00	0	156	0	156	0	83	15	98	0	0	0	0	0	0	0	0	156	98	254		6:45-7:00
3 Hour Totals	0	2,922	0	2,922	0	1,672	461	2,133	0	0	0	0	0	0	0	0	2,922	2,133	5,055		
1 Hour Totals																					
4:00-5:00	0	934	0	934	0	555	142	697	0	0	0	0	0	0	0	0	934	697	1,631	0.95	4:00-5:00
4:15-5:15	0	985	0	985	0	555	141	696	0	0	0	0	0	0	0	0	985	696	1,681	0.97	4:15-5:15
4:30-5:30	0	1,012	0	1,012	0	539	157	696	0	0	0	0	0	0	0	0	1,012	696	1,708	0.94	4:30-5:30
4:45-5:45	0	1,069	0	1,069	0	569	160	729	0	0	0	0	0	0	0	0	1,069	729	1,798	0.93	4:45-5:45
5:00-6:00	0	1,119	0	1,119	0	577	166	743	0	0	0	0	0	0	0	0	1,119	743	1,862	0.94	5:00-6:00
5:15-6:15	0	1,129	0	1,129	0	583	180	763	0	0	0	0	0	0	0	0	1,129	763	1,892	0.96	5:15-6:15
5:30-6:30	0	1,094	0	1,094	0	610	184	794	0	0	0	0	0	0	0	0	1,094	794	1,888	0.96	5:30-6:30
5:45-6:45	0	998	0	998	0	623	181	804	0	0	0	0	0	0	0	0	998	804	1,802	0.91	5:45-6:45
6:00-7:00	0	869	0	869	0	540	153	693	0	0	0	0	0	0	0	0	869	693	1,562	0.85	6:00-7:00
PM Peak 5:15-6:15																					
0	1,129	0	1,129	0	583	180	763	0	0	0	0	0	0	0	0	0	1,129	763	1,892	0.96	PM Peak 5:15-6:15

Appendix B

Existing Pedestrian Traffic Counts

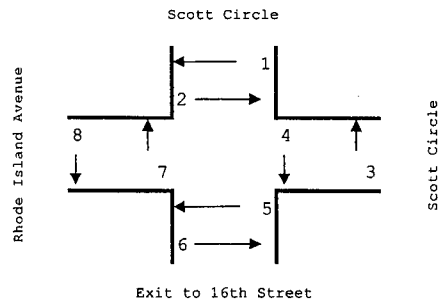
Project Name: 1416 Rhode Island Avenue
 Project Number: 2219
 Location: Washington, DC
 Intersection: Massachusetts Ave. & Scott Cir.
 Weather: Clear
 Date: 8/6/2006
 Surveyor: Daryl



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
Time Period	From:	SE	NE	SW	SE	SW	NW	NW	NE	Total	1 & 2	3 & 4	5 & 6	7 & 8
	To:	NE	SE	SE	SW	NW	SW	NE	NW					
AM PEAK														
7:00	8:00	21	24	0	0	118	25	21	36	245	45	0	143	57
7:15	8:15	35	33	0	0	167	42	34	43	354	68	0	209	77
7:30	8:30	58	40	0	0	196	54	43	56	447	98	0	250	99
7:45	8:45	83	44	0	0	212	71	52	69	531	127	0	283	121
8:00	9:00	108	43	0	0	228	84	70	76	609	151	0	312	146
8:15	9:15	124	44	0	0	238	87	71	80	644	168	0	325	151
8:30	9:30	121	45	0	0	235	89	73	74	637	166	0	324	147
8:45	9:45	106	50	0	0	221	86	67	69	599	156	0	307	136
9:00	10:00	89	49	0	0	194	77	54	62	525	138	0	271	116
PM PEAK														
4:00	5:00	103	72	0	0	74	115	39	56	459	175	0	189	95
4:15	5:15	120	88	0	0	95	135	44	65	547	208	0	230	109
4:30	5:30	135	85	0	0	115	135	54	79	603	220	0	250	133
4:45	5:45	145	95	0	0	138	161	60	93	692	240	0	299	153
5:00	6:00	138	101	0	0	142	179	71	101	732	239	0	321	172
5:15	6:15	122	96	0	0	134	177	79	93	701	218	0	311	172
5:30	6:30	136	98	0	0	141	184	110	78	747	234	0	325	188
5:45	6:45	145	85	0	0	130	168	136	70	734	230	0	298	206
6:00	7:00	153	80	0	0	130	141	125	59	688	233	0	271	184

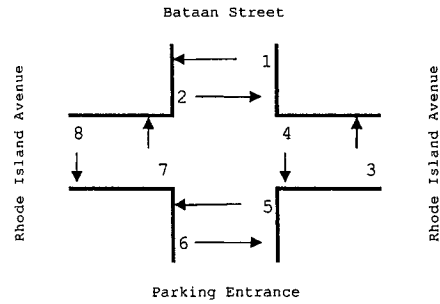
Project Name: 1816 Rhode Island Avenue
 Project Number: 2215
 Location: Washington, DC
 Intersection: Rhode Island Ave. & Scott Circle
 Weather: Clear
 Date: 4/6/2006
 Surveyor: Jorge



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
Time Period	From:	SE	NE	SW	SE	SW	NW	NW	NE	Total	1 & 2	3 & 4	5 & 6	7 & 8
	To:	NE	SE	SE	SW	NW	SW	NE	NW					
AM PEAK														
7:00	8:00	21	24	0	0	118	25	21	36	245	45	0	143	57
7:15	8:15	35	33	0	0	167	42	34	43	354	68	0	209	77
7:30	8:30	58	40	0	0	196	54	43	56	447	98	0	250	99
7:45	8:45	83	44	0	0	212	71	52	69	531	127	0	283	121
8:00	9:00	108	43	0	0	228	84	70	76	609	151	0	312	146
8:15	9:15	124	44	0	0	238	87	71	80	644	168	0	325	151
8:30	9:30	121	45	0	0	235	89	73	74	637	166	0	324	147
8:45	9:45	106	50	0	0	221	86	67	69	599	156	0	307	136
9:00	10:00	89	49	0	0	194	77	54	62	525	138	0	271	116
PM PEAK														
4:00	5:00	103	72	0	0	74	115	39	56	459	175	0	189	95
4:15	5:15	120	88	0	0	95	135	44	65	547	208	0	230	109
4:30	5:30	135	85	0	0	115	135	54	79	603	220	0	250	133
4:45	5:45	145	95	0	0	138	161	60	93	692	240	0	299	153
5:00	6:00	138	101	0	0	142	179	71	101	732	239	0	321	172
5:15	6:15	122	96	0	0	134	177	79	93	701	218	0	311	172
5:30	6:30	136	98	0	0	141	184	110	78	747	234	0	325	188
5:45	6:45	145	85	0	0	130	168	136	70	734	230	0	298	206
6:00	7:00	153	80	0	0	130	141	125	59	688	233	0	271	184

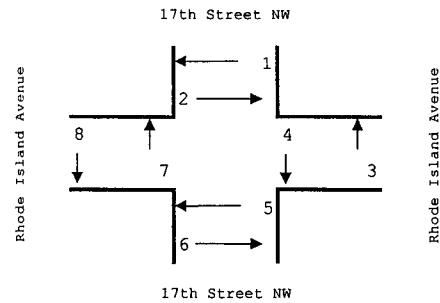
Project Name: 1414 Rhode Island Avenue
 Project Number: 1215
 Location: Washington, DC
 Intersection: Rhode Island Ave. & Bataan St.
 Weather: Clear
 Date: 4/6/2000
 Surveyor: Shirley



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
Time Period	From:	SE	NE	SW	SE	SW	NW	NW	NE	Total	1 & 2	3 & 4	5 & 6	7 & 8
	To:	NE	SE	SE	SW	NW	SW	NE	NW					
AM PEAK														
7:00	8:00	53	19	1	4	71	11	4	4	167	72	5	82	8
7:15	8:15	47	12	1	4	71	12	4	4	155	59	5	83	8
7:30	8:30	51	8	2	4	72	13	3	3	156	59	6	85	6
7:45	8:45	61	11	3	2	88	18	2	5	190	72	5	106	7
8:00	9:00	63	13	4	2	103	23	0	3	211	76	6	126	3
8:15	9:15	80	17	4	4	126	27	0	4	262	97	8	153	4
8:30	9:30	79	15	3	3	119	24	0	4	247	94	6	143	4
8:45	9:45	72	19	2	3	115	24	1	1	237	91	5	139	2
9:00	10:00	70	25	1	3	104	22	1	2	228	95	4	126	3
PM PEAK														
4:00	5:00	36	37	21	19	41	89	7	8	258	73	40	130	15
4:15	5:15	26	44	21	12	48	123	5	7	286	70	33	171	12
4:30	5:30	32	64	17	18	45	137	8	5	326	96	35	182	13
4:45	5:45	35	76	18	23	45	133	6	4	340	111	41	178	10
5:00	6:00	40	77	11	24	41	132	5	2	332	117	35	173	7
5:15	6:15	44	78	11	24	42	117	6	2	324	122	35	159	8
5:30	6:30	37	67	14	17	40	120	3	3	301	104	31	160	6
5:45	6:45	28	55	17	13	35	120	5	5	278	83	30	155	10
6:00	7:00	20	48	23	13	35	120	6	5	270	68	36	155	11

Project Name: 1616 Rhode Island Avenue
 Project Number: 2215
 Location: Washington, DC
 Intersection: Rhode Island Ave. & 17th Street
 Weather: Clear
 Date: 9/7/2000
 Surveyor: Josh, Luis & Steven



Hourly Pedestrian Count

		1	2	3	4	5	6	7	8					
Time Period	From:	SE	NE	SW	SE	SW	NW	NW	NE	Total	1 & 2	3 & 4	5 & 6	7 & 8
	To:	NE	SE	SE	SW	NW	SW	NE	NW					
AM PEAK														
7:00	8:00	50	26	8	20	53	3	12	27	199	76	28	56	39
7:15	8:15	41	24	4	20	59	5	9	42	204	65	24	64	51
7:30	8:30	39	19	3	28	62	6	8	42	207	58	31	68	50
7:45	8:45	44	20	7	37	106	12	23	68	317	64	44	118	91
8:00	9:00	45	23	27	45	147	16	38	71	412	68	72	163	109
8:15	9:15	47	26	32	83	183	19	47	81	518	73	115	202	128
8:30	9:30	47	28	40	90	226	21	50	100	602	75	130	247	150
8:45	9:45	40	25	40	90	188	17	43	80	523	65	130	205	123
9:00	10:00	38	26	23	78	142	17	38	82	444	64	101	159	120
PM PEAK														
4:00	5:00	35	32	37	29	47	70	76	76	402	67	66	117	152
4:15	5:15	31	43	31	33	49	75	81	79	422	74	64	124	160
4:30	5:30	35	62	33	37	56	73	94	106	496	97	70	129	200
4:45	5:45	36	71	35	48	63	72	114	122	561	107	83	135	236
5:00	6:00	42	75	38	67	85	76	137	140	660	117	105	161	277
5:15	6:15	58	87	58	63	74	56	141	137	674	145	121	130	278
5:30	6:30	74	84	75	59	66	72	131	134	695	158	134	138	265
5:45	6:45	84	100	101	45	51	85	180	138	784	184	146	136	318
6:00	7:00	94	109	105	24	36	86	227	150	831	203	129	122	377

1616 Rhode Island Avenue
Transportation Impact Study
Washington, D.C

Appendix C

Existing Levels of Service

1616 Rhode Island Ave
1: Rhode Island Avenue NW & 17th Street NW

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑↑						↑↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.91						0.81	
Frpb, ped/bikes		0.89			1.00						0.96	
Flpb, ped/bikes		1.00			0.93						0.99	
Frt		0.95			1.00						0.98	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		2698			4211						6322	
Flt Permitted		1.00			0.80						1.00	
Satd. Flow (perm)		2698			3418						6322	
Volume (vph)	0	117	56	290	805	0	0	0	0	29	752	126
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	127	61	315	875	0	0	0	0	32	817	137
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	27	0
Lane Group Flow (vph)	0	188	0	0	1190	0	0	0	0	0	959	0
Confl. Peds. (#/hr)			247	247						130		150
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		41.3			41.3						50.7	
Effective Green, g (s)		41.3			41.3						50.7	
Actuated g/C Ratio		0.41			0.41						0.51	
Clearance Time (s)		4.0			4.0						4.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1114			1412						3205	
v/s Ratio Prot		0.07										
v/s Ratio Perm					c0.35						0.15	
v/c Ratio		0.17			0.97dl						0.30	
Uniform Delay, d1		18.5			26.4						14.3	
Progression Factor		1.00			0.15						1.00	
Incremental Delay, d2		0.1			3.0						0.2	
Delay (s)		18.6			7.1						14.6	
Level of Service		B			A						B	
Approach Delay (s)		18.6			7.1			0.0			14.6	
Approach LOS		B			A			A			B	
Intersection Summary												
HCM Average Control Delay		11.1			HCM Level of Service					B		
HCM Volume to Capacity ratio		0.54										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)					8.0		
Intersection Capacity Utilization		60.5%			ICU Level of Service					B		
Analysis Period (min)		15										
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

1616 Rhode Island Ave
3: Rhode Island Avenue NW & Bataan Street NW

Existing AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	146	12	10	1064	43	1	0	1	16	1	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	159	13	11	1157	47	1	0	1	17	1	36
Pedestrians								143			94	
Lane Width (ft)								8.0			10.0	
Walking Speed (ft/s)								4.0			4.0	
Percent Blockage								8			7	
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (ft)		253			233							
pX, platoon unblocked	0.75						0.75	0.75		0.75	0.75	0.75
vC, conflicting volume	1297			315			769	1645	229	1393	1628	503
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	729			315			25	1193	229	858	1170	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	100	100	89	99	95
cM capacity (veh/h)	610			1157			566	119	718	154	123	760
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	88	92	300	578	336	2	54					
Volume Left	9	0	11	0	0	1	17					
Volume Right	0	13	0	0	47	1	36					
cSH	610	1700	1157	1700	1700	633	321					
Volume to Capacity	0.01	0.05	0.01	0.34	0.20	0.00	0.17					
Queue Length 95th (ft)	1	0	1	0	0	0	15					
Control Delay (s)	1.2	0.0	0.4	0.0	0.0	10.7	18.5					
Lane LOS	A		A			B	C					
Approach Delay (s)	0.6		0.1			10.7	18.5					
Approach LOS						B	C					
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			42.2%	ICU Level of Service					A			
Analysis Period (min)			15									

5: Massachusetts Avenue NW & Scott Circle NW

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑									↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frt		1.00									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5083									5043	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5083									5043	
Volume (vph)	0	1114	4	0	0	0	0	0	0	234	1152	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1211	4	0	0	0	0	0	0	254	1252	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	1215	0	0	0	0	0	0	0	0	1499	0
Turn Type										Perm		
Protected Phases											8	
Permitted Phases		6								8		
Actuated Green, G (s)		55.4									36.6	
Effective Green, g (s)		55.4									36.6	
Actuated g/C Ratio		0.55									0.37	
Clearance Time (s)		4.0									4.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		2816									1846	
v/s Ratio Prot												
v/s Ratio Perm		c0.24									0.30	
v/c Ratio		0.43									0.81	
Uniform Delay, d1		13.1									28.6	
Progression Factor		1.00									1.00	
Incremental Delay, d2		0.5									2.8	
Delay (s)		13.6									31.4	
Level of Service		B									C	
Approach Delay (s)		13.6			0.0			0.0			31.4	
Approach LOS		B			A			A			C	
Intersection Summary												
HCM Average Control Delay			23.4			HCM Level of Service				C		
HCM Volume to Capacity ratio			0.58									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)			8.0			
Intersection Capacity Utilization			55.3%			ICU Level of Service			B			
Analysis Period (min)			15									
c Critical Lane Group												

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations		↑↑							↑↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0							4.0	4.0
Lane Util. Factor		0.95							0.97	1.00
Frt		0.98							1.00	0.85
Flt Protected		1.00							0.95	1.00
Satd. Flow (prot)		3462							3433	1583
Flt Permitted		1.00							0.95	1.00
Satd. Flow (perm)		3462							3433	1583
Volume (vph)	0	163	28	0	0	0	0	0	1173	213
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	177	30	0	0	0	0	0	1275	232
RTOR Reduction (vph)	0	18	0	0	0	0	0	0	181	0
Lane Group Flow (vph)	0	189	0	0	0	0	0	0	1094	232
Turn Type									Perm	
Protected Phases		4								6
Permitted Phases									6	
Actuated Green, G (s)		9.8							82.2	82.2
Effective Green, g (s)		9.8							82.2	82.2
Actuated g/C Ratio		0.10							0.82	0.82
Clearance Time (s)		4.0							4.0	4.0
Vehicle Extension (s)		3.0							3.0	3.0
Lane Grp Cap (vph)		339							2822	1301
v/s Ratio Prot		c0.05								0.15
v/s Ratio Perm									c0.32	
v/c Ratio		0.56							0.39	0.18
Uniform Delay, d1		43.0							2.3	1.9
Progression Factor		0.81							8.85	1.13
Incremental Delay, d2		2.0							0.4	0.3
Delay (s)		36.9							20.9	2.4
Level of Service		D							C	A
Approach Delay (s)		36.9			0.0		0.0		18.1	
Approach LOS		D			A		A		B	
Intersection Summary										
HCM Average Control Delay		20.3							HCM Level of Service	C
HCM Volume to Capacity ratio		0.41								
Actuated Cycle Length (s)		100.0							Sum of lost time (s)	8.0
Intersection Capacity Utilization		45.5%							ICU Level of Service	A
Analysis Period (min)		15								
c Critical Lane Group										

1616 Rhode Island Ave
1: Rhode Island Avenue NW & 17th Street NW

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕↕			↕↕↕			↕↕↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.91			0.91			0.91	
Frpb, ped/bikes		0.97			0.99			0.84			0.87	
Flpb, ped/bikes		1.00			0.98			0.98			0.99	
Frft		0.98			1.00			0.92			0.95	
Flt Protected		1.00			0.99			0.99			0.99	
Satd. Flow (prot)		3052			4394			3459			3689	
Flt Permitted		0.95			0.85			0.84			0.83	
Satd. Flow (perm)		2906			3771			2907			3085	
Volume (vph)	2	229	26	78	559	21	50	161	268	55	268	182
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	249	28	85	608	23	54	175	291	60	291	198
RTOR Reduction (vph)	0	0	0	0	0	0	0	120	0	0	31	0
Lane Group Flow (vph)	0	279	0	0	716	0	0	400	0	0	518	0
Confl. Peds. (#/hr)	184		136	136		184	318		146	146		318
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		40.3			40.3			51.7			51.7	
Effective Green, g (s)		40.3			40.3			51.7			51.7	
Actuated g/C Ratio		0.40			0.40			0.52			0.52	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1171			1520			1503			1595	
v/s Ratio Prot												
v/s Ratio Perm		0.10			0.19			0.14			0.17	
v/c Ratio		0.24			0.47			0.27			0.32	
Uniform Delay, d1		19.7			22.0			13.5			14.0	
Progression Factor		1.00			0.13			1.00			1.00	
Incremental Delay, d2		0.1			0.2			0.4			0.5	
Delay (s)		19.8			3.0			14.0			14.6	
Level of Service		B			A			B			B	
Approach Delay (s)		19.8			3.0			14.0			14.6	
Approach LOS		B			A			B			B	
Intersection Summary												
HCM Average Control Delay		11.1										
HCM Volume to Capacity ratio		0.39										
Actuated Cycle Length (s)		100.0							8.0			
Intersection Capacity Utilization		71.0%										
Analysis Period (min)		15										
c Critical Lane Group												

1616 Rhode Island Ave
3: Rhode Island Avenue NW & Bataan Street NW

Existing PM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕↕			↕			↕	
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	9	630	1	4	607	9	7	3	11	69	5	29
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	685	1	4	660	10	8	3	12	75	5	32
Pedestrians								155			83	
Lane Width (ft)								8.0			8.0	
Walking Speed (ft/s)								4.0			4.0	
Percent Blockage								9			5	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)		266			233							
pX, platoon unblocked	0.87			0.98			0.88	0.88	0.98	0.88	0.88	0.87
vC, conflicting volume	753			841			1123	1621	498	1132	1617	308
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	413			818			786	1353	468	796	1348	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			96	97	98	62	95	96
cM capacity (veh/h)	947			734			190	114	490	198	115	899
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	352	343	169	330	175	23	112					
Volume Left	10	0	4	0	0	8	75					
Volume Right	0	1	0	0	10	12	32					
cSH	947	1700	734	1700	1700	245	243					
Volume to Capacity	0.01	0.20	0.01	0.19	0.10	0.09	0.46					
Queue Length 95th (ft)	1	0	0	0	0	8	56					
Control Delay (s)	0.4	0.0	0.3	0.0	0.0	21.2	31.9					
Lane LOS	A		A			C	D					
Approach Delay (s)	0.2		0.1			21.2	31.9					
Approach LOS						C	D					
Intersection Summary												
Average Delay			2.8									
Intersection Capacity Utilization			45.4%			ICU Level of Service			A			
Analysis Period (min)			15									

										
Movement	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	  								  	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0								4.0	
Lane Util. Factor	0.94								0.91	
Frt	1.00								1.00	
Flt Protected	0.95								0.99	
Satd. Flow (prot)	4990								5026	
Flt Permitted	0.95								0.99	
Satd. Flow (perm)	4990								5026	
Volume (vph)	1129	0	0	0	0	0	0	180	583	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1227	0	0	0	0	0	0	196	634	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	1227	0	0	0	0	0	0	0	826	0
Turn Type	Perm									
Protected Phases									8	
Permitted Phases	6							8		
Actuated Green, G (s)	72.1								19.9	
Effective Green, g (s)	72.1								19.9	
Actuated g/C Ratio	0.72								0.20	
Clearance Time (s)	4.0								4.0	
Vehicle Extension (s)	3.0								3.0	
Lane Grp Cap (vph)	3598								1000	
v/s Ratio Prot										
v/s Ratio Perm	c0.25								0.16	
v/c Ratio	0.34								0.83	
Uniform Delay, d1	5.2								38.4	
Progression Factor	1.00								1.00	
Incremental Delay, d2	0.3								5.7	
Delay (s)	5.4								44.1	
Level of Service	A								D	
Approach Delay (s)	5.4		0.0			0.0			44.1	
Approach LOS	A		A			A			D	
Intersection Summary										
HCM Average Control Delay			21.0		HCM Level of Service				C	
HCM Volume to Capacity ratio			0.45							
Actuated Cycle Length (s)			100.0		Sum of lost time (s)				8.0	
Intersection Capacity Utilization			43.1%		ICU Level of Service				A	
Analysis Period (min)			15							
c Critical Lane Group										

											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER	
Lane Configurations		  							  		
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0							4.0	4.0	
Lane Util. Factor		0.95							0.97	1.00	
Flt		0.99							1.00	0.85	
Flt Protected		1.00							0.95	1.00	
Satd. Flow (prot)		3504							3433	1583	
Flt Permitted		1.00							0.95	1.00	
Satd. Flow (perm)		3504							3433	1583	
Volume (vph)	0	741	53	0	0	0	0	0	1239	138	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	805	58	0	0	0	0	0	1347	150	
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	23	0	
Lane Group Flow (vph)	0	857	0	0	0	0	0	0	1324	150	
Turn Type									custom		
Protected Phases		4								6	
Permitted Phases									6		
Actuated Green, G (s)		27.9							64.1	64.1	
Effective Green, g (s)		27.9							64.1	64.1	
Actuated g/C Ratio		0.28							0.64	0.64	
Clearance Time (s)		4.0							4.0	4.0	
Vehicle Extension (s)		3.0							3.0	3.0	
Lane Grp Cap (vph)		978							2201	1015	
v/s Ratio Prot		c0.24								0.09	
v/s Ratio Perm									c0.39		
v/c Ratio		0.88							0.60	0.15	
Uniform Delay, d1		34.4							10.5	7.1	
Progression Factor		1.05							1.81	1.73	
Incremental Delay, d2		8.9							1.2	0.3	
Delay (s)		45.1							20.2	12.6	
Level of Service		D							C	B	
Approach Delay (s)		45.1			0.0		0.0		19.4		
Approach LOS		D			A		A		B		
Intersection Summary											
HCM Average Control Delay		28.8		HCM Level of Service					C		
HCM Volume to Capacity ratio		0.69									
Actuated Cycle Length (s)		100.0		Sum of lost time (s)					8.0		
Intersection Capacity Utilization		64.2%		ICU Level of Service					C		
Analysis Period (min)		15									
c Critical Lane Group											

1616 Rhode Island Avenue
Transportation Impact Study
Washington, D.C

Appendix D

Background Future Levels of Service

1616 Rhode Island Ave
1: Rhode Island Avenue NW & 17th Street NW

Background AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑↑						↑↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0						4.0	
Lane Util. Factor		0.95			0.91						0.81	
Frpb, ped/bikes		0.89			1.00						0.96	
Flpb, ped/bikes		1.00			0.93						0.99	
Frt		0.95			1.00						0.98	
Flt Protected		1.00			0.99						1.00	
Satd. Flow (prot)		2700			4213						6322	
Flt Permitted		1.00			0.80						1.00	
Satd. Flow (perm)		2700			3410						6322	
Volume (vph)	0	121	58	299	829	0	0	0	0	30	775	130
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	132	63	325	901	0	0	0	0	33	842	141
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	27	0
Lane Group Flow (vph)	0	195	0	0	1226	0	0	0	0	0	989	0
Confl. Peds. (#/hr)			247	247						130		150
Turn Type				Perm						Perm		
Protected Phases		4			8						6	
Permitted Phases				8						6		
Actuated Green, G (s)		42.1			42.1						49.9	
Effective Green, g (s)		42.1			42.1						49.9	
Actuated g/C Ratio		0.42			0.42						0.50	
Clearance Time (s)		4.0			4.0						4.0	
Vehicle Extension (s)		3.0			3.0						3.0	
Lane Grp Cap (vph)		1137			1436						3155	
v/s Ratio Prot		0.07										
v/s Ratio Perm					c0.36						0.16	
v/c Ratio		0.17			0.98dl						0.31	
Uniform Delay, d1		18.1			26.2						14.9	
Progression Factor		1.00			0.16						1.00	
Incremental Delay, d2		0.1			3.3						0.3	
Delay (s)		18.1			7.5						15.1	
Level of Service		B			A						B	
Approach Delay (s)		18.1			7.5			0.0			15.1	
Approach LOS		B			A			A			B	
Intersection Summary												
HCM Average Control Delay		11.5			HCM Level of Service			B				
HCM Volume to Capacity ratio		0.56										
Actuated Cycle Length (s)		100.0			Sum of lost time (s)			8.0				
Intersection Capacity Utilization		61.2%			ICU Level of Service			B				
Analysis Period (min)		15										
dl Defacto Left Lane. Recode with 1 though lane as a left lane.												
c Critical Lane Group												

1616 Rhode Island Ave
3: Rhode Island Avenue NW & Bataan Street NW

Background AM

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	8	150	12	10	1096	44	1	0	1	16	1	34
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	163	13	11	1191	48	1	0	1	17	1	37
Pedestrians								143			94	
Lane Width (ft)								8.0			10.0	
Walking Speed (ft/s)								4.0			4.0	
Percent Blockage								8			7	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)		253			233							
pX, platoon unblocked	0.74						0.74	0.74		0.74	0.74	0.74
vC, conflicting volume	1333			319			786	1685	231	1431	1667	515
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	759			319			24	1232	231	890	1208	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			100	100	100	88	99	95
cM capacity (veh/h)	590			1153			562	112	716	144	115	754
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	90	95	309	596	346	2	55					
Volume Left	9	0	11	0	0	1	17					
Volume Right	0	13	0	0	48	1	37					
cSH	590	1700	1153	1700	1700	629	310					
Volume to Capacity	0.01	0.06	0.01	0.35	0.20	0.00	0.18					
Queue Length 95th (ft)	1	0	1	0	0	0	16					
Control Delay (s)	1.2	0.0	0.4	0.0	0.0	10.7	19.1					
Lane LOS	A		A			B	C					
Approach Delay (s)	0.6		0.1			10.7	19.1					
Approach LOS						B	C					
Intersection Summary												
Average Delay			0.9									
Intersection Capacity Utilization			42.9%			ICU Level of Service				A		
Analysis Period (min)			15									

5: Massachusetts Avenue NW & Scott Circle NW

												
Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations		↑↑↑									↑↑↑	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0									4.0	
Lane Util. Factor		0.91									0.91	
Frt		1.00									1.00	
Flt Protected		1.00									0.99	
Satd. Flow (prot)		5083									5043	
Flt Permitted		1.00									0.99	
Satd. Flow (perm)		5083									5043	
Volume (vph)	0	1148	4	0	0	0	0	0	0	241	1187	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1248	4	0	0	0	0	0	0	262	1290	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	1252	0	0	0	0	0	0	0	0	1546	0
Turn Type										Perm		
Protected Phases												8
Permitted Phases		6								8		
Actuated Green, G (s)		54.1									37.9	
Effective Green, g (s)		54.1									37.9	
Actuated g/C Ratio		0.54									0.38	
Clearance Time (s)		4.0									4.0	
Vehicle Extension (s)		3.0									3.0	
Lane Grp Cap (vph)		2750									1911	
v/s Ratio Prot												
v/s Ratio Perm		0.25									0.31	
v/c Ratio		0.46									0.81	
Uniform Delay, d1		14.0									27.8	
Progression Factor		1.00									1.00	
Incremental Delay, d2		0.5									2.6	
Delay (s)		14.5									30.4	
Level of Service		B									C	
Approach Delay (s)		14.5			0.0			0.0			30.4	
Approach LOS		B			A			A			C	
Intersection Summary												
HCM Average Control Delay		23.3									C	
HCM Volume to Capacity ratio		0.60										
Actuated Cycle Length (s)		100.0								8.0		
Intersection Capacity Utilization		56.8%								B		
Analysis Period (min)		15										
c Critical Lane Group												

1616 Rhode Island Ave
6: Rhode Island Avenue NW & Scott Circle NW

Background AM

										
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations		↑↑							↑↑	↑
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0							4.0	4.0
Lane Util. Factor		0.95							0.97	1.00
Frt		0.98							1.00	0.85
Flt Protected		1.00							0.95	1.00
Satd. Flow (prot)		3460							3433	1583
Flt Permitted		1.00							0.95	1.00
Satd. Flow (perm)		3460							3433	1583
Volume (vph)	0	168	29	0	0	0	0	0	1209	219
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	183	32	0	0	0	0	0	1314	238
RTOR Reduction (vph)	0	19	0	0	0	0	0	0	179	0
Lane Group Flow (vph)	0	196	0	0	0	0	0	0	1135	238
Turn Type									custom	
Protected Phases		4								6
Permitted Phases									6	
Actuated Green, G (s)		10.0							82.0	82.0
Effective Green, g (s)		10.0							82.0	82.0
Actuated g/C Ratio		0.10							0.82	0.82
Clearance Time (s)		4.0							4.0	4.0
Vehicle Extension (s)		3.0							3.0	3.0
Lane Grp Cap (vph)		346							2815	1298
v/s Ratio Prot		c0.06								0.15
v/s Ratio Perm									c0.33	
v/c Ratio		0.57							0.40	0.18
Uniform Delay, d1		42.9							2.4	1.9
Progression Factor		0.81							6.87	0.87
Incremental Delay, d2		2.1							0.4	0.3
Delay (s)		37.0							17.0	1.9
Level of Service		D							B	A
Approach Delay (s)		37.0			0.0		0.0		14.7	
Approach LOS		D			A		A		B	
Intersection Summary										
HCM Average Control Delay		17.4				HCM Level of Service			B	
HCM Volume to Capacity ratio		0.42								
Actuated Cycle Length (s)		100.0				Sum of lost time (s)			8.0	
Intersection Capacity Utilization		46.7%				ICU Level of Service			A	
Analysis Period (min)		15								
c Critical Lane Group										

1: Rhode Island Avenue NW & 17th Street NW

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕↕			↕↕↕			↕↕↕	
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0			4.0			4.0	
Lane Util. Factor		0.95			0.91			0.91			0.91	
Frpb, ped/bikes		0.97			0.99			0.84			0.87	
Flpb, ped/bikes		1.00			0.98			0.98			0.99	
Frt		0.98			1.00			0.92			0.95	
Flt Protected		1.00			0.99			0.99			0.99	
Satd. Flow (prot)		3052			4395			3461			3691	
Flt Permitted		0.95			0.85			0.83			0.83	
Satd. Flow (perm)		2906			3764			2886			3071	
Volume (vph)	2	236	27	80	576	22	52	166	276	57	276	188
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	257	29	87	626	24	57	180	300	62	300	204
RTOR Reduction (vph)	0	0	0	0	0	0	0	119	0	0	30	0
Lane Group Flow (vph)	0	288	0	0	737	0	0	418	0	0	536	0
Confl. Peds. (#/hr)	184		136	136		184	318		146	146		318
Turn Type	Perm		Perm		Perm		Perm		Perm		Perm	
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2			6		
Actuated Green, G (s)		41.0			41.0			51.0			51.0	
Effective Green, g (s)		41.0			41.0			51.0			51.0	
Actuated g/C Ratio		0.41			0.41			0.51			0.51	
Clearance Time (s)		4.0			4.0			4.0			4.0	
Vehicle Extension (s)		3.0			3.0			3.0			3.0	
Lane Grp Cap (vph)		1191			1543			1472			1566	
v/s Ratio Prot												
v/s Ratio Perm		0.10			c0.20			0.14			c0.17	
v/c Ratio		0.24			0.48			0.28			0.34	
Uniform Delay, d1		19.3			21.6			14.0			14.5	
Progression Factor		1.00			0.13			1.00			1.00	
Incremental Delay, d2		0.1			0.2			0.5			0.6	
Delay (s)		19.4			2.9			14.5			15.1	
Level of Service		B			A			B			B	
Approach Delay (s)		19.4			2.9			14.5			15.1	
Approach LOS		B			A			B			B	
Intersection Summary												
HCM Average Control Delay			11.3			HCM Level of Service				B		
HCM Volume to Capacity ratio			0.40									
Actuated Cycle Length (s)			100.0			Sum of lost time (s)				8.0		
Intersection Capacity Utilization			72.2%			ICU Level of Service				C		
Analysis Period (min)			15									
c Critical Lane Group												

3: Rhode Island Avenue NW & Bataan Street NW

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Volume (veh/h)	9	649	1	4	625	9	7	3	11	71	5	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	705	1	4	679	10	8	3	12	77	5	33
Pedestrians								155			83	
Lane Width (ft)								8.0			8.0	
Walking Speed (ft/s)								4.0			4.0	
Percent Blockage								9			5	
Right turn flare (veh)												
Median type								None			None	
Median storage (veh)												
Upstream signal (ft)		266			233							
pX, platoon unblocked	0.86			0.98			0.87	0.87	0.98	0.87	0.87	0.86
vC, conflicting volume	772			862			1151	1661	508	1162	1657	314
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	422			837			803	1386	477	815	1382	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			96	97	98	60	95	96
cM capacity (veh/h)	934			721			184	108	483	191	109	894
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	WB 3	NB 1	SB 1					
Volume Total	362	354	174	340	180	23	115					
Volume Left	10	0	4	0	0	8	77					
Volume Right	0	1	0	0	10	12	33					
cSH	934	1700	721	1700	1700	237	235					
Volume to Capacity	0.01	0.21	0.01	0.20	0.11	0.10	0.49					
Queue Length 95th (ft)	1	0	0	0	0	8	62					
Control Delay (s)	0.4	0.0	0.3	0.0	0.0	21.8	34.3					
Lane LOS	A		A			C	D					
Approach Delay (s)	0.2		0.1			21.8	34.3					
Approach LOS						C	D					
Intersection Summary												
Average Delay			3.0									
Intersection Capacity Utilization			46.3%			ICU Level of Service			A			
Analysis Period (min)			15									

										
Movement	SBL	SBR	NWL	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0								4.0	
Lane Util. Factor	0.94								0.91	
Flt	1.00								1.00	
Flt Protected	0.95								0.99	
Satd. Flow (prot)	4990								5026	
Flt Permitted	0.95								0.99	
Satd. Flow (perm)	4990								5026	
Volume (vph)	1163	0	0	0	0	0	0	185	601	0
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1264	0	0	0	0	0	0	201	653	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	1264	0	0	0	0	0	0	0	850	0
Turn Type								Perm		
Protected Phases									8	
Permitted Phases	6							8		
Actuated Green, G (s)	71.5								20.5	
Effective Green, g (s)	71.5								20.5	
Actuated g/C Ratio	0.72								0.20	
Clearance Time (s)	4.0								4.0	
Vehicle Extension (s)	3.0								3.0	
Lane Grp Cap (vph)	3568								1030	
v/s Ratio Prot										
v/s Ratio Perm	c0.25								0.17	
v/c Ratio	0.35								0.83	
Uniform Delay, d1	5.4								38.0	
Progression Factor	1.00								1.00	
Incremental Delay, d2	0.3								5.5	
Delay (s)	5.7								43.5	
Level of Service	A								D	
Approach Delay (s)	5.7		0.0			0.0			43.5	
Approach LOS	A		A			A			D	
Intersection Summary										
HCM Average Control Delay		21.0			HCM Level of Service				C	
HCM Volume to Capacity ratio		0.46								
Actuated Cycle Length (s)		100.0			Sum of lost time (s)				8.0	
Intersection Capacity Utilization		44.2%			ICU Level of Service				A	
Analysis Period (min)		15								
c Critical Lane Group										

											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER	
Lane Configurations											
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Total Lost time (s)		4.0							4.0	4.0	
Lane Util. Factor		0.95							0.97	1.00	
Flt		0.99							1.00	0.85	
Flt Protected		1.00							0.95	1.00	
Satd. Flow (prot)		3503							3433	1583	
Flt Permitted		1.00							0.95	1.00	
Satd. Flow (perm)		3503							3433	1583	
Volume (vph)	0	763	55	0	0	0	0	0	1277	142	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Adj. Flow (vph)	0	829	60	0	0	0	0	0	1388	154	
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	21	0	
Lane Group Flow (vph)	0	883	0	0	0	0	0	0	1367	154	
Turn Type									custom		
Protected Phases		4								6	
Permitted Phases									6		
Actuated Green, G (s)		28.5							63.5	63.5	
Effective Green, g (s)		28.5							63.5	63.5	
Actuated g/C Ratio		0.28							0.64	0.64	
Clearance Time (s)		4.0							4.0	4.0	
Vehicle Extension (s)		3.0							3.0	3.0	
Lane Grp Cap (vph)		998							2180	1005	
v/s Ratio Prot		c0.25								0.10	
v/s Ratio Perm									c0.40		
v/c Ratio		0.89							0.63	0.15	
Uniform Delay, d1		34.2							11.1	7.4	
Progression Factor		1.07							1.80	1.71	
Incremental Delay, d2		9.4							1.3	0.3	
Delay (s)		45.8							21.2	12.9	
Level of Service		D							C	B	
Approach Delay (s)		45.8			0.0		0.0		20.4		
Approach LOS		D			A		A		C		
Intersection Summary											
HCM Average Control Delay		29.7		HCM Level of Service					C		
HCM Volume to Capacity ratio		0.71									
Actuated Cycle Length (s)		100.0		Sum of lost time (s)					8.0		
Intersection Capacity Utilization		65.9%		ICU Level of Service					C		
Analysis Period (min)		15									
c Critical Lane Group											