

May 17, 2007

VIA HAND DELIVERY

Zoning Commission for the
District of Columbia
441 4th Street, N.W., Suite 210S
Washington, D.C. 20001

Re: ZC Case No. 07-13 – Randall School PUD and Map Amendment
65 I Street, S.W. (Square 643-S, Lot 801)

Dear Members of the Commission:

At the time of our submission yesterday on the above referenced matter, we were only able to provide you with black and white copies of the project renderings at Attachments C and D. We have since been able to produce color copies and ask that you accept the enclosed color versions as a substitute for those submitted yesterday. We regret any inconvenience this may have caused the Commission.

Respectfully submitted,

HOLLAND & KNIGHT LLP

By: Mary Carolyn Brown
Norman M. Glasgow, Jr.
Mary Carolyn Brown

Attachments

cc: Harriet Tregoning, Director, OP (w/attach., via hand delivery)
Jennifer Steingasser, OP (w/attach., via hand delivery)
Joel Lawson, OP (w/attach., via hand delivery)
Doug Woods, OP (w/attach., via hand delivery)
Roberta Weiner, ANC 6D (w/attach. via mail)

ZONING COMMISSION
District of Columbia
CASE NO. 07-13
EXHIBIT NO. 17
ZONING COMMISSION
District of Columbia
CASE NO. 07-13
EXHIBIT NO. 17

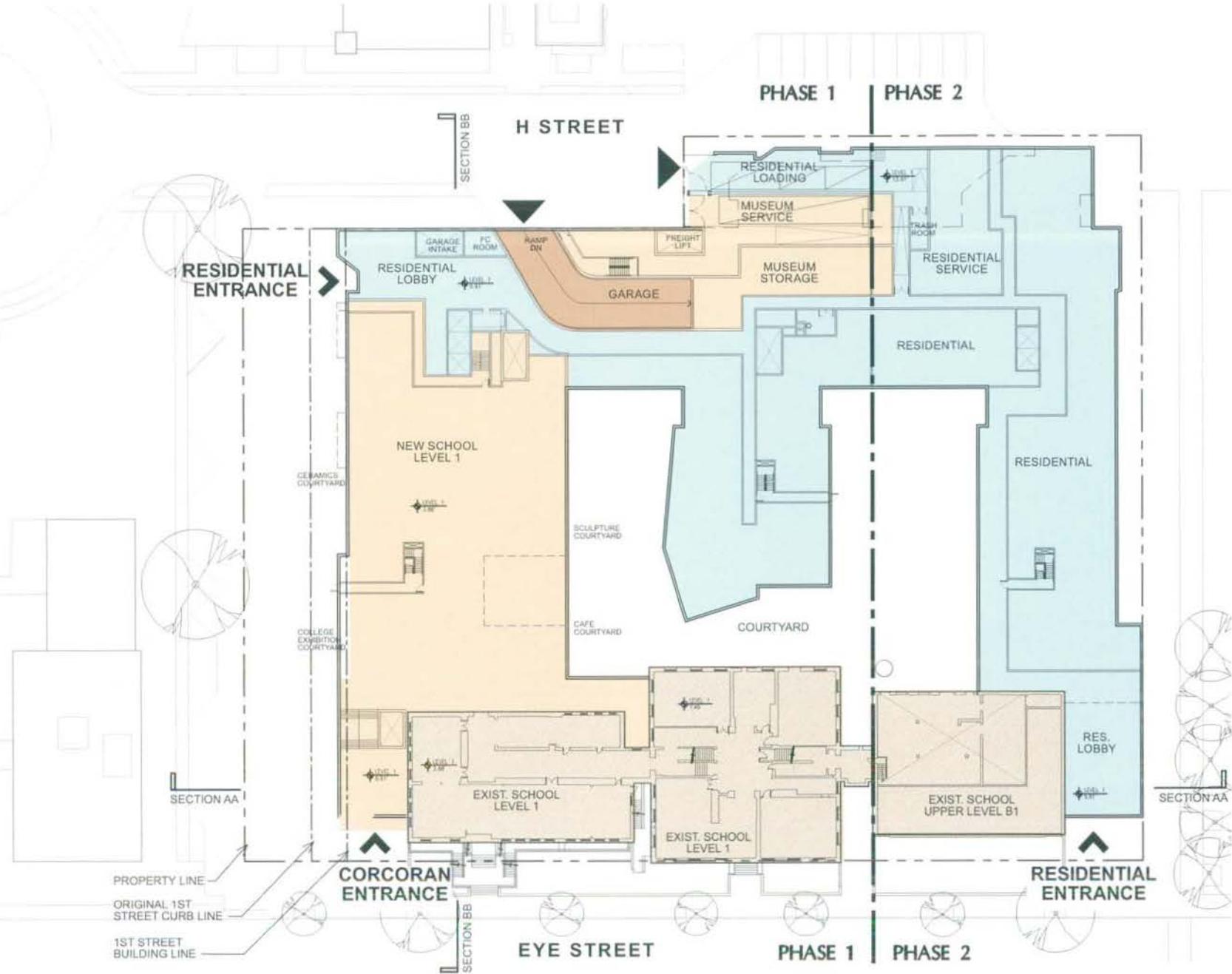
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THE RANDALL SCHOOL

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1" = 60'-0"

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FLOOR PLAN - LEVEL 01

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SOUTHEAST VIEW | 15

OPTION B



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**THE RANDALL SCHOOL
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

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**THE RANDALL SCHOOL
TRANSPORTATION IMPACT STUDY
WASHINGTON, D.C.**

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WASHINGTON, D.C.**

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Section I INTRODUCTION

This report presents the results of a transportation impact study that was prepared in support of a Planned Unit Development application for the MR Randall Capital LLC and the Corcoran Gallery of Arts plans to develop residential and educational uses on the former Randall School property located on Square 643 in southwest Washington D.C. The Randall School is generally located on the north side of I Street, SW between South Capitol Street and Delaware Avenue SW with H Street boarding the site to the north, as shown on Figures I-1 and I-2.

The subject property is the site of the former Randall School and has recently been occupied with a men's shelter and studio space for artists.

MR Randall Capital LLC and the Corcoran Gallery of Arts plan to develop the site with 485 residential units and approximately 100,000 S.F. for college education in arts. Parking would be provided in a three (3) level, 460-space, underground, parking garage. Of the 460 parking spaces, 400 would be designated for the residential units and 60 spaces would be designated for the Corcoran Gallery of Arts. Access to the parking garage and to the loading for the residential building and for the Corcoran would be provided on the north side of the site via H Street SW. The conceptual site plan for all phases of development is shown in Figure I-3.

The Corcoran Gallery of Arts currently has school facilities on 17th Street NW and on 34th Street NW. The Corcoran plans to increase its student enrollment from 500 to 1,000 students between the two existing facilities and the new Randall campus. Approximately 400 undergraduate and graduate students would utilize expanded classrooms for ceramics, fine arts, photography, and other equipment intensive arts. Rooms for student exhibition displays would also be provided at the Randall campus. Student dormitories are not planned at the Randall School facility. A shuttle bus service is envisioned for students and faculty, operating between the main campus on 17th Street and the Randall campus.

Along with the Ballpark, there are several other significant projects planned or under construction south of the site that were considered in the analysis as "pipeline" traffic generators.

For purposes of this traffic study, the proposed residential building and the Corcoran Gallery of Arts Randall campus were assumed to be completed in 2009.

Tasks undertaken in this study included the following:

- I. Review MR Randall Capital LLC's proposed development plans including the Corcoran Gallery of Arts.

2. Field reconnaissance of existing roadway and intersection geometrics, traffic controls, traffic signal phasing/timings, and speed limits.
3. Review the off-street parking and off-street loading for the proposed project.
4. Compilation of existing vehicular and pedestrian traffic at six (6) off-site intersections.
5. Analysis of existing levels of service during the commuter AM and PM peak hours was conducted.
6. Other approved and planned developments in the site vicinity were identified and their traffic impacts were included.
7. Planned roadway improvements in the site vicinity were reviewed.
8. Background future traffic volumes were forecasted for 2009.
9. Background levels of service were calculated at key intersections based on background traffic forecasts, existing traffic controls, and existing intersection geometrics.
10. 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 Waterfront/SEU and Navy Yard Metrorail stations, and (3) experience with other projects in Washington, D.C.
11. Total future traffic AM and PM commuter peak hour volumes were forecasted.
12. Total future levels of service for commuter peak hours were calculated at key intersections based on total future traffic forecasts, future traffic controls, and future intersection geometrics.

Sources of data for this analysis included; ITE; the Washington Metropolitan Area Transit Authority (WMATA); DDOT; the Office of Planning; the MR Randall Capital LLC development team; the Corcoran Gallery of Art; traffic counts conducted by Wells & Associates; and files of Wells & Associates.

The conclusions of this traffic impact study are as follows:

1. **The proposed Randall School project on Square 643 is located within a connected street network for both pedestrians and vehicles. The proximity to the Waterfront/SEU and Navy Yard Metrorail stations, Metrobus service, the planned Corcoran Gallery of Arts shuttle, and the urban street grid helps reduce the demand for private automobile use.**
2. **Heavy commuter traffic along the South Capitol Street corridor contributes to vehicle delays on the main line and at the cross streets in the study area.**
3. **Most of the study intersections currently operate at overall acceptable levels of service during the AM and PM peak hours with the exception of the M Street intersections with the north and southbound South Capitol Street ramps.**
4. **M Street is the east-west corridor serving the SW and SE DC waterfront areas. Substantial development is planned in the vicinity that will substantially increase future traffic volumes on M Street and South Capitol Street.**
5. **Major roadway improvements planned along South Capitol Street will greatly improve vehicular access in the study area and will enhance the pedestrian and bicycle environment.**
6. **The pipeline developments in the study area would generate a total of 2,142 AM peak hour trips and 2,490 PM peak hour trips upon completion.**
7. **The Randall School project in Square 643, including 485 residential condominiums and the Corcoran Gallery of Arts, 400-student education facility, will generate approximately 100 AM peak hour vehicle-trips and 156 PM peak hour vehicle-trips at full build out and occupancy.**
8. **The study intersections would operate at overall acceptable levels of service during both the AM and PM peak hours with the exception of the M Street intersections with South Capitol Street. Some of the minor street approaches would operate at unacceptable levels of service during peak hours which is typical for an urban, minor street approach.**

9. *The Randall School project would provide 460 parking spaces in an underground garage; 400 spaces would be allotted to the residential condominiums and 60 spaces would be allotted for the Corcoran Gallery of Arts.*
10. *The Randall School site would provide sufficient loading dock accommodations. There may be times when the service facilities will need to be managed to make sure all tenants are accommodated.*

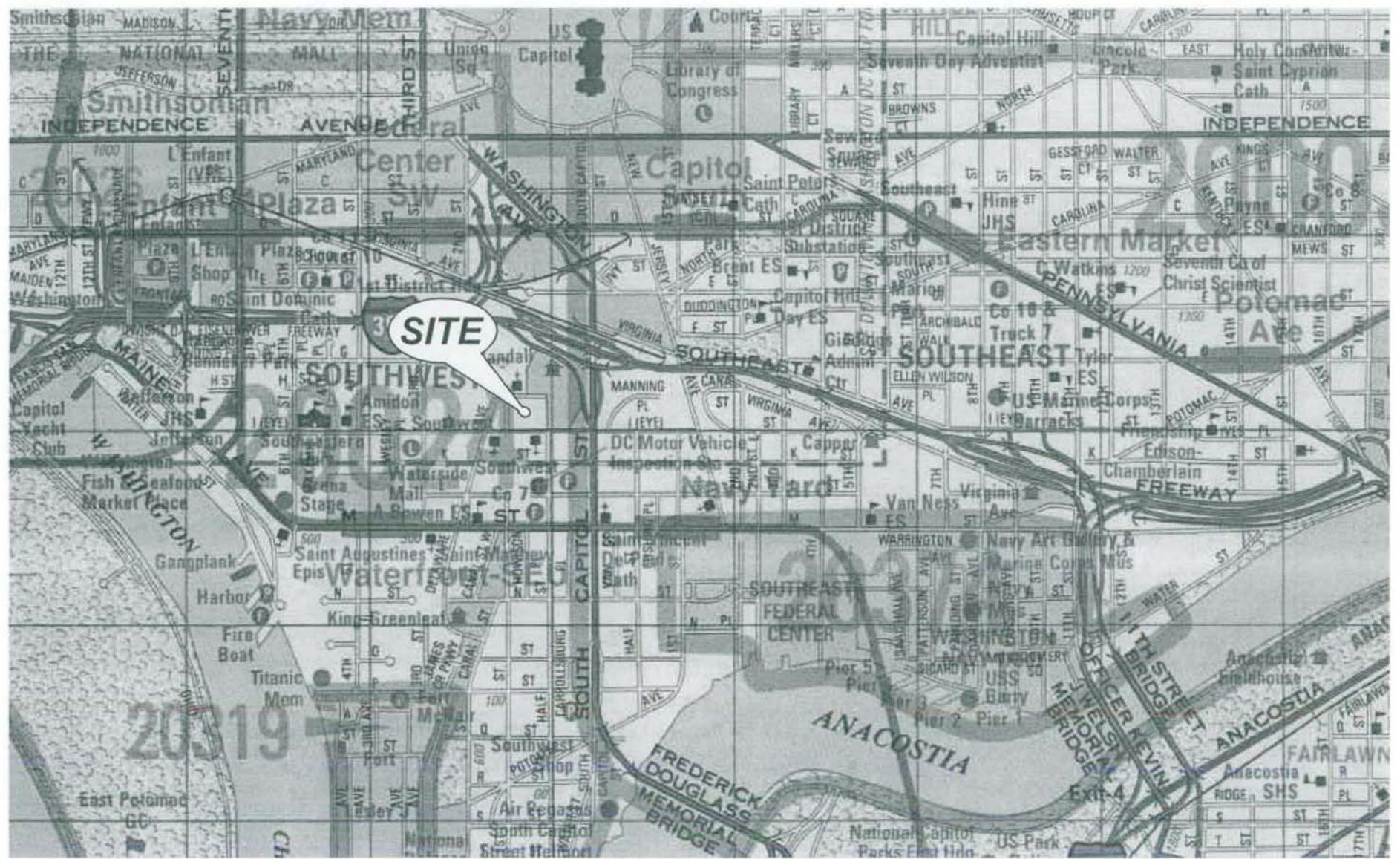


Figure 1-1
Regional Site Location

The Randall School
Washington, D.C.

WELLS & ASSOCIATES, LLC
TRANSPORTATION, and PARKING CONSULTANTS

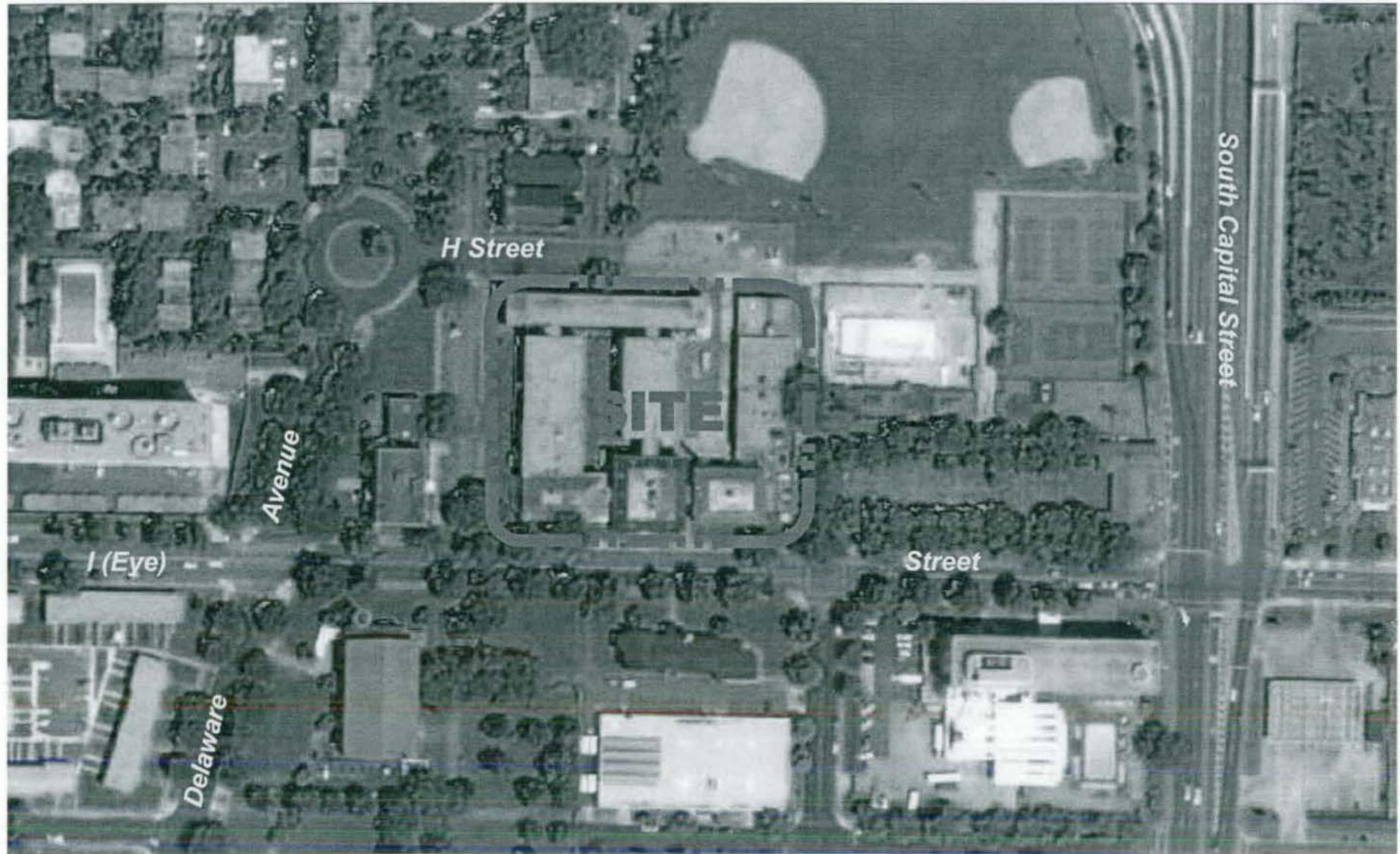


Figure 1-2
Aerial Image

The Randall School
Washington, D.C.

AM PEAK HOUR
PM PEAK HOUR
000/000



WELLS & ASSOCIATES, LLC
TRAFFIC, TRANSPORTATION, and PARKING CONSULTANTS

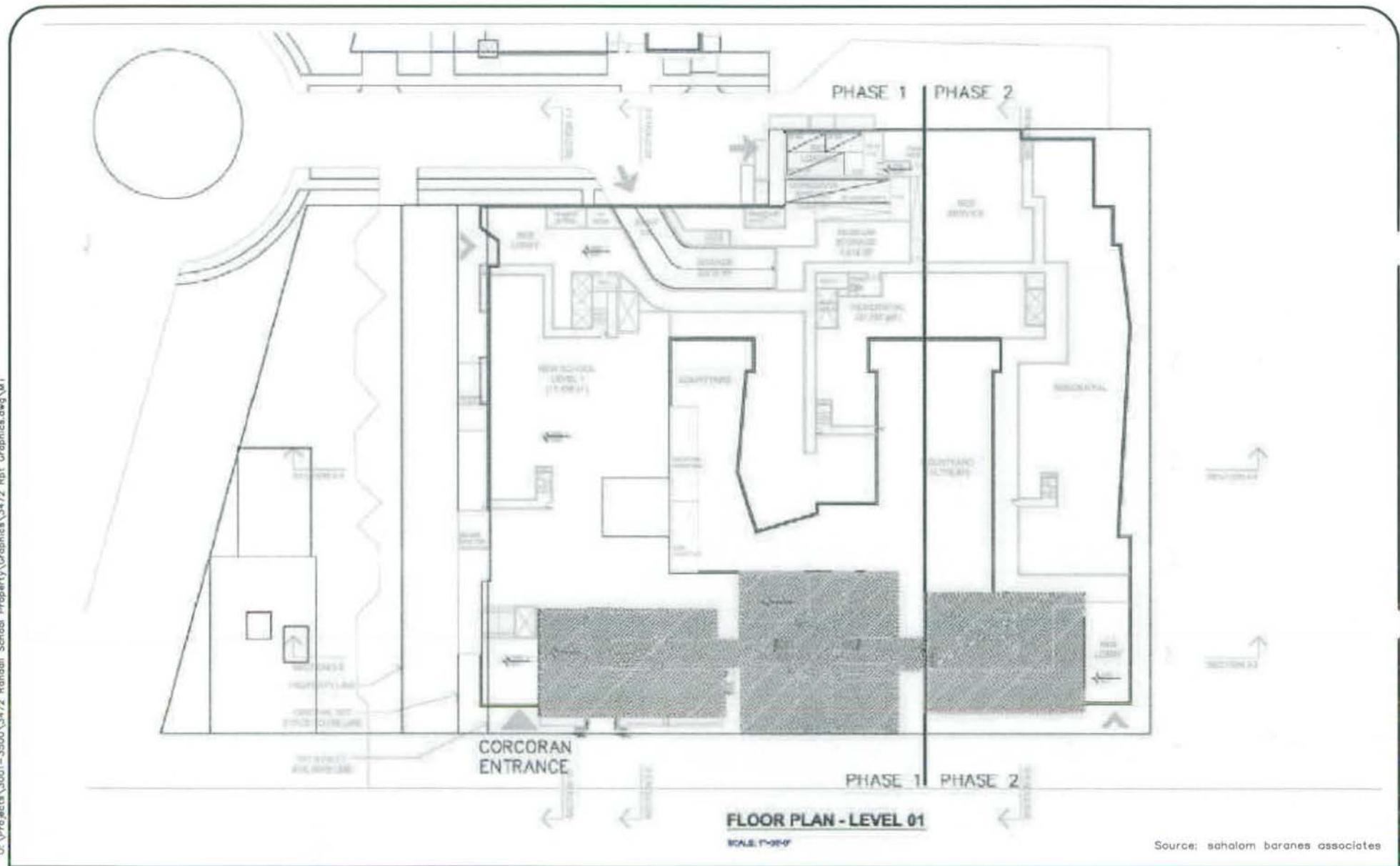


Figure 1-3
Coceptional Site Plan

The Randall School
Washington, D.C.

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Section 2 BACKGROUND DATA

Study Scope

The traffic study scope was selected based on the intersections that would potentially be most affected by the proposed development. This study includes the following intersections:

1. Delaware Avenue SW / I (Eye) Street SW,
2. Half Street SW / I (Eye) Street SW,
3. South Capitol Street / I (Eye) Street,
4. Delaware Avenue SW / M Street SW,
5. Half Street SW / M Street SW
6. South Capitol Street / M Street (local lanes only),

This study evaluates the transportation impacts of the following approved and planned pipeline developments in the vicinity of the site. The development programs associated with each pipeline project were determined by information from the Office of Planning and DDOT's Anacostia Waterfront Initiative and they include the following:

1. 20 M Street (office),
2. Square 0699N Phase I – Ist & L Street SE (residential),
3. Jefferson at 70 Eye Street – Phase I (residential),
4. 100 M Street SE (office and retail),
5. USDOT Headquarters (office and retail),
6. Monument Ballpark – Square 700-701 (hotel, office, residential, and retail),
7. 1325 South Capitol Street (residential and retail), and
8. 100 V Street SW (office).

Public Road Network

Regional access to The Randall School (MR Randall Capital LLC residential and Corcoran Gallery of Art) site is provided by I-295, I-395, South Capitol Street, and M Street SW/SE. Local access is provided from H Street SW via Delaware Avenue SW and M or I (Eye) Streets SW. Existing intersection lane use and traffic control at key intersections in the site vicinity are shown on Figure 2-1.

Planned Improvements

Street improvements along South Capitol Street are on a fast track to be completed by spring 2008. The improvements are described below.

Improvements to South Capitol Street include removal of the elevated viaduct north of the Frederick Douglass Memorial Bridge such that South Capitol Street intersects Potomac Avenue, P, O and N Streets at new at-grade, signalized intersections. The proposed cross-section of South Capitol Street within the 130' right-of-way from Potomac Avenue to N Street will include two 11' lanes and a 13' curb lane in both directions. The north and south traffic will be divided by an 18' median. Left turn lanes will not be provided and left turns will be restricted during peak hours. On street parking may be permitted during off-peak hours, but will be restricted during peak commuter peak periods.

Long-term improvements for South Capitol Street also include a new traffic oval at the Potomac Avenue intersection; however, this planned improvement will occur beyond the timeline contained in this traffic study. Similarly, removal of the grade-separation at South Capitol and M Street has been proposed as a long-term improvement. No firm plans for such an improvement currently exist and a timeline is unknown therefore it was not considered in the analysis.

Existing Traffic Counts

Existing AM and PM peak period vehicular and pedestrian traffic counts were conducted on Thursday, December 14, 2006, from 7:00 AM until 10:00 AM and from 4:00 PM until 7:00 PM by Wells & Associates at six (6) of the study intersections listed above.

The vehicular traffic counts are presented on Figure 2-2; the pedestrian traffic counts are presented on Figure 2-3. These counts are presented in Appendix A. The resulting AM peak hour is 7:45-8:45 AM and the resulting PM peak hour is 4:00-5:00 PM.

Figure 2-3 indicates that South Capitol Street south of I (Eye) Street carries 3,922 AM peak hour vehicle-trips and 3,746 PM peak hour vehicle-trips. Approximately 57 percent of all AM peak hour trips travel in the northbound direction toward downtown Washington; 43 percent travel in the southbound direction away from the DC urban core. As would be expected of a commuter corridor the pattern is opposite during the PM peak; approximately 64 percent of all PM peak hour trips travel in the southbound direction and 36 percent travel in the northbound direction.

I (Eye) Street west of South Capitol Street carries 724 AM peak hour vehicle-trips and 870 PM peak hour vehicle-trips. Approximately 37 percent of all AM peak hour trips travel in the eastbound direction and 63 percent travel west. Approximately 78 percent of all PM peak hour trips travel in the eastbound direction and 22 percent travel in the westbound direction.

M Street west of South Capitol Street presently carries 2,422 AM peak hour vehicle-trips and 1,962 PM peak hour vehicle-trips. Approximately 27 percent of all AM peak hour trips travel in the eastbound direction and 73 percent travel west. Approximately 62 percent of all PM peak hour trips travel in the eastbound direction and 38 percent travel in the westbound direction.

Delaware Avenue south of I (Eye) Street SW currently carries 97 AM peak hour vehicle-trips and 186 PM peak hour vehicle-trips. Approximately 59 percent of all AM peak hour trips travel in the northbound direction and 54 percent travel south. Approximately 32 percent of all PM peak hour trips travel in the northbound direction and 68 percent travel in the southbound direction.

Half Street south of I (Eye) Street currently carries 273 AM peak hour vehicle-trips and 366 PM peak hour vehicle-trips. Approximately 46 percent of all AM peak hour trips travel in the northbound direction and 54 percent travel south. Approximately 32 percent of all PM peak hour trips travel in the northbound direction and 68 percent travel in the southbound direction.

The highest numbers of pedestrians were observed at the South Capitol Street/M Street intersection where 82 pedestrians crossed during the vehicular AM peak hour and at the Half Street/M Street SW intersection where 161 pedestrians crossed during the PM peak hour. At the I (Eye) Street / Half Street intersection, eight (8) pedestrians crossed Half Street during the AM peak hour and five (5) pedestrians crossed Half Street during the PM peak hour, while seven (7) and 22 pedestrians were observed crossing I (Eye) Street during the AM and PM vehicular peak hours.

Public Transportation Facilities and Services

The Waterfront/SEU Metro station is located with at the corner of M Street and 4th Street SW and the Navy Yard Metro station is located at the corner of M and Half Streets SE, both served by the Metrorail Green line. A transfer to the Orange, Yellow and Blue lines is possible two stops away at the L'Enfant Plaza station. Virginia Rail Express (VRE) commuter service is also located at L'Enfant Plaza. The Red line Metrorail transfer is four stops away at the Gallery Place-Chinatown station. Maryland Rail Commuter (MARC) service is located at Union Station.

The MR Randall Capital LLC and Corcoran Gallery of Art project is served by the V7, V8, V9, A42, A46, A48, P1 and P2 lines which run along M Street. Other bus lines located within several blocks of the site include the P6, V5, 70, 71, and A6.

Off-Street Parking

The Randall School development plan includes 485 residential condominium apartments, a 99,843 S.F. school that is anticipated to have 400 students. The proposed, three (3) level, underground parking garage for The Randall School will have 460 parking spaces; 400 for the residential and 60 for the Corcoran School of Art + Design.

Off-Street Loading

The Randall School project will provide a total of one (1) 55 feet deep loading berth, one (1) 30 feet deep berth and two (2) 20 feet service areas for both the residential and schools use. The loading area is located on the north side of the project and would be accessed from H Street SW, as shown on Figure I-3. There may be times when the service facilities will need to be managed to make sure all tenants are accommodated.



Figure 2-1
Lane Use and Traffic Control

← Represents One Travel Lane





Figure 2-2
Existing Peak Hour Vehicular Traffic Counts

AM PEAK HOUR
PM PEAK HOUR
000/000

North

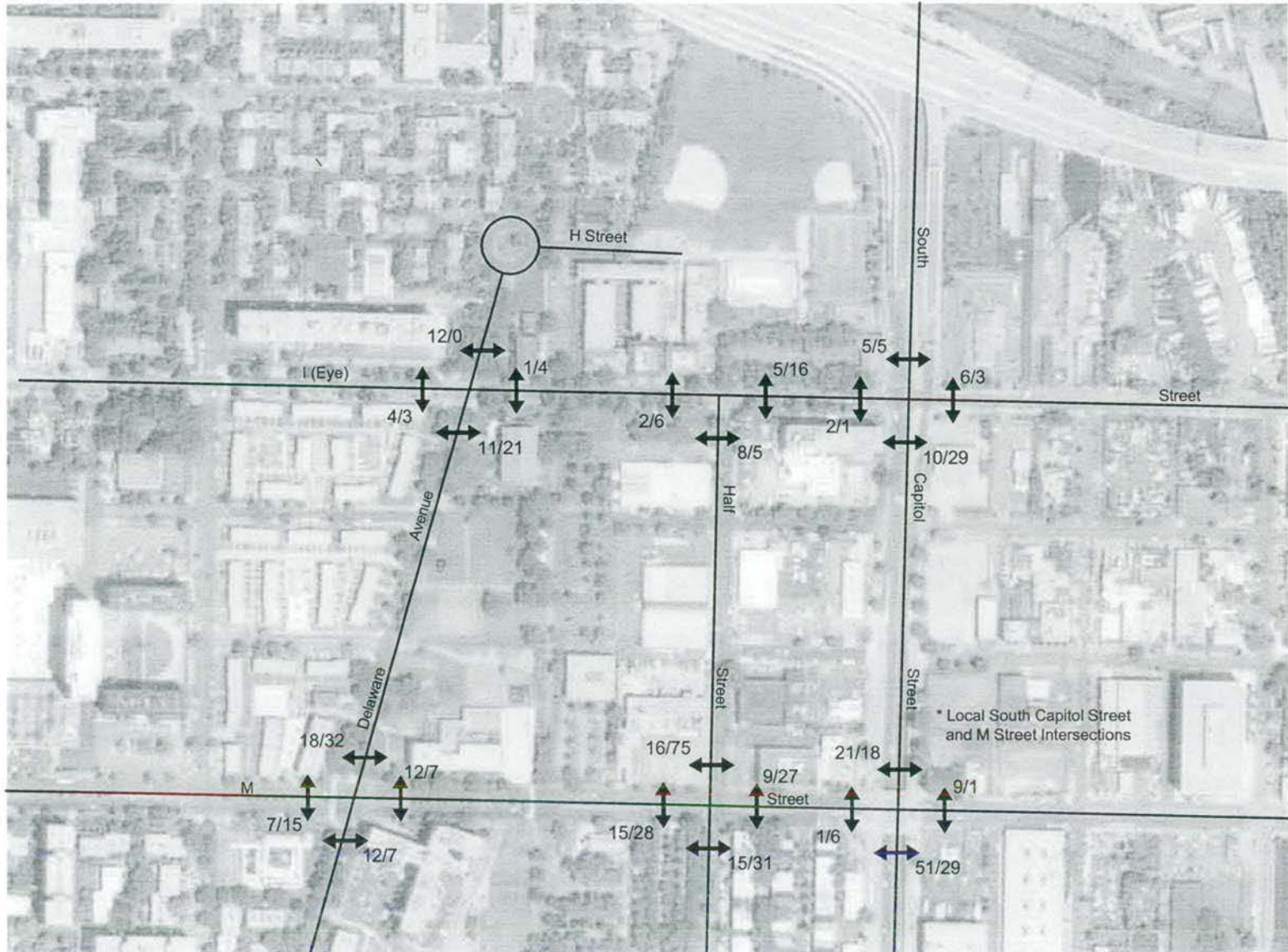


Figure 2-3
Existing Peak Hour Pedestrian Traffic

AM PEAK HOUR
PM PEAK HOUR
000/000

North

Section 3 ANALYSIS

Existing Levels of Service

Existing peak hour levels of service were estimated based on: the existing lane usage and traffic control shown on Figure 2-1; the existing vehicular and pedestrian traffic counts shown on Figures 2-2 and 2-3, respectively; existing traffic signal phasing/timings; and the Synchro intersection capacity analysis software. The results are presented in Appendix B and summarized in Table 3-1.

South Capitol Street carries heavy amounts of regional traffic during the commuter peak hours; the peak flows are northbound (inbound) in the AM and southbound (outbound) in the PM. Vehicle queues are experienced in the peak directions along South Capitol Street, however, these queues are largely isolated to the South Capitol Street mainline. This analysis considers the operation of the South Capitol local ramps at the grade-separated M Street intersection. It also considers the at-grade South Capitol and I (Eye) Street intersection.

As shown in Table 3-1, the South Capitol Street intersection with I (Eye) Street operates at overall LOS "C" during the AM peak hour and at LOS "D" during the PM peak hour. The eastbound approach of I (Eye) Street at South Capitol Street currently operates at LOS "F" during both the AM and PM peak hours. The westbound approach of I (Eye) Street operates at LOS "D" during both the AM and PM peak hours.

The eastbound approach of M Street at the South Capitol southbound ramp operates at LOS "E" during the AM peak hour and at LOS "F" during the PM peak hour. The southbound South Capitol Street local lanes intersection with M Street SW operates at an overall LOS "C" during the AM peak hour and at LOS "E" during the PM peak hour. The northbound approach of the South Capitol Street northbound ramp at M Street currently operates at LOS "F" during the AM peak hour and the westbound M Street approach operates at LOS "F" during the PM peak hour. The northbound South Capitol Street local lanes intersection with M Street currently operates at an overall LOS "F" during both the AM and PM peak hours.

These delays at the South Capitol Street intersections with I (Eye) Street and with M Street are attributable to the congestion on South Capitol Street caused by commuter traffic flows. The northbound and southbound movements receive the majority of the green time (approximately 70 to 74 percent) during the signal cycle length.

The eastbound and westbound I (Eye) Street approaches at the Delaware Avenue SW intersection currently operate at LOS "A" during the AM and PM peak hours. The northbound Delaware Avenue approach operates at LOS "D" and LOS "E" during the AM and PM peak hours, while the southbound approach operates at LOS "D" during both the AM and PM peak hours. Overall, this intersection operates at LOS "A" during the AM peak hour and at LOS "B" during the PM peak hour. Field observations indicate that I (Eye) Street receives the majority of the green time during the traffic signal cycle length.

Each approach of the Half Street intersections with I (Eye) Street and with M Street currently operate at LOS "D" or better during both the AM and PM peak hours.

The eastbound and westbound M Street approaches at the Delaware Avenue SW intersection currently operate at LOS "A" during the AM and PM peak hours, while the Delaware Avenue intersections operate at LOS "D". Field observations indicate that M Street receives the majority of the green time during a the traffic signal cycle length.

Other Development Trip Generation

The number of peak hour trips that will be generated by the eight (8) pipeline projects were generated based on ITE trip rates and WMATA mode splits percentages. As shown in Table 3-2, it is estimated that these projects will generate a total of 2,142 AM peak hour trips and 2,490 PM peak hour trips, upon completion and full occupancy. This analysis does not include trips generated by a ballpark event.

Other Development Project Traffic Assignments

The trips shown in Table 3-2 were assigned to the public road network based on the information obtained from their respective traffic studies and traffic pattern changes expected with roadway improvements. A summation of the pipeline development traffic is shown on Figure 3-1.

Background Traffic Growth

Annual background traffic growth was estimated at 2 percent per year compounded for three (3) years for project buildout, consistent with other studies conducted in the area. This growth rate was applied to all the movements at all intersections. The background traffic growth is shown on Figure 3-2.

Background Traffic Forecasts

Background peak hour traffic forecasts, without The Randall School site project, were estimated based on existing traffic counts, traffic generated by the pipeline projects, historic background traffic growth and planned roadway improvements. The resulting background traffic forecasts are shown on Figure 3-3.

Background Future Levels of Service

Future peak hour levels of service, without The Randall School project, were estimated based on: the existing lane usage and traffic control shown on Figure 2-1; the background traffic forecasts shown on Figure 3-3; the Synchro intersection capacity analysis software; and existing signal timing and phasing. Planned roadway improvements described in this section were assumed. The results are presented in Appendix C, and are summarized in Table 3-1.

As discussed previously, South Capitol Street carries heavy amounts of regional traffic during the commuter peak hours; the peak flows are northbound (inbound) in the AM and southbound (outbound) in the PM. Vehicle queues are experienced in the peak directions along South Capitol Street, however, these queues are largely isolated to the South Capitol Street mainline. Delays at the South Capitol Street intersections with I (Eye) Street and with M Street are attributable to the congestion on South Capitol Street caused by commuter traffic flows.

As shown in Table 3-1, overall the South Capitol Street intersection with I (Eye) Street would operate at LOS "D" during the AM peak hour and at LOS "E" during the PM peak hour, based on existing signal timing and phasing. The eastbound approach of I (Eye) Street at South Capitol Street would operate at LOS "F" during both the AM and PM peak hours and the westbound approach would operate at LOS "E" during both peak hours. With signal timing modifications, the intersection would continue to operate at overall LOS "D" during the AM peak hour and would improve to an overall LOS "D" during the PM peak hour. Consistent with existing signal timings the majority of the green time was allocated to South Capitol Street traffic.

The eastbound approach of M Street at the South Capitol southbound ramp would operate at LOS "E" during the AM peak hour and at LOS "F" during the PM peak hour. The southbound South Capitol Street local lanes intersection with M Street SW would operate at an overall LOS "C" during the AM peak hour and at LOS "E" during the PM peak hour. The approach of the South Capitol Street northbound ramp at M Street would operate at LOS "F" during the AM peak hour and the westbound M Street approach would operate at LOS "F" during the PM peak hour. The northbound South Capitol Street local lanes intersection with M Street would operate at an overall LOS "F" during both the AM and PM peak hours. Modifying the existing signal timings at both of the southbound and northbound South Capitol Street intersections with M Street would improve the overall vehicle delays at the intersection and also on M Street, during the PM peak hour.

The eastbound and westbound I (Eye) Street approaches at the Delaware Avenue SW intersect would operate at LOS "A" or "B" during the AM and PM peak hours. The northbound Delaware Avenue approach would operate at LOS "D" and LOS "E" during the AM and PM peak hours, while the southbound approach operates at LOS "D" during both the AM and PM peak hours. Overall this intersection operates at LOS "A" during the AM peak hour and at LOS "B" during the PM peak hour. As discussed previously, field observations indicate that I (Eye) Street receives the majority of the green time during the traffic signal cycle. Modifying the existing signal timings would improve the northbound Delaware Avenue approach from a LOS "E" to a LOS "D" during the PM peak hour.

As shown in Table 3-1, the northbound turning movements on Half Street at I (Eye) Street would operate at LOS "C" during the AM peak hour and at LOS "F" during the PM peak hour, under STOP control. Vehicles would utilize gaps in traffic flow created by the traffic signals at Delaware Avenue and South Capitol Street to turn onto I (Eye) Street. Both the eastbound and westbound I (Eye) Street approaches would operate at LOS "A" during the AM and PM peak hours.

The M Street intersections with Delaware Avenue SW and with Half Street SW would operate at LOS "A" during both the AM and PM peak hours. The north and/or southbound approaches at both intersections would operate at LOS "D" during the AM and PM peak hours, while the M Street approaches would operate at LOS "A". As discussed previously, the majority of the green time during the traffic signal cycle is given to M Street.

Site Trip Generation Analysis

The numbers of trips that will be generated by The Randall School project were forecasted based on: (1) ITE trip generation rates, (2) the proximity of the project to the Waterfront/SEU and Navy Yard Metrorail stations, (3) anticipated shuttle bus service for the Corcoran School of Art and Design, and (4) experience with other comparable projects in Washington, D.C. The development plan includes 485 residential units and a 400-student university, art school. The trip generation calculations are shown in Table 3-3.

The Corcoran Gallery of Arts plans to expand its student population from 500 to 1,000 students over the next three to four years. Approximately, 400 students are anticipated to utilize The Randall School campus. Student dormitories are not planned for The Randall School campus. The Corcoran has plans to provide a shuttle service from its main campus on 17th Street NW to and from The Randall School campus for students and faculty. This shuttle service along with the metrorail and metrobus provide transportation choices for students and faculty other than the private automobile.

Table 3-3 shows that the project would generate 100 (18 in and 82 out) AM peak hour trips, and 156 (90 in and 66 out) PM peak hour trips. These estimates assume that approximately 40 percent of all residents and 80 percent of students would use Metro or some other non-auto mode during peak hours.

Site Traffic Assignments

The site-generated traffic volumes were assigned to the public road network based on previously-approved traffic impact studies, existing traffic counts, and knowledge of future roadway improvements. The resulting site traffic assignments are shown on Figure 3-4.

Total Future Traffic Forecasts

The site traffic assignments in Figure 3-4 were added to the future background traffic volumes shown on Figure 3-3 to yield the total future traffic forecasts shown on Figure 3-5.

Total Future Levels of Service

Future peak hour levels of service, with The Randall School, were estimated based on: the existing lane usage and traffic control shown on Figure 2-1; the total future traffic forecasts shown on Figure 3-5; the Synchro intersection capacity analysis software; and existing signal timing and phasing. The results are presented in Appendix D, and are summarized in Table 3-1.

As discussed previously, South Capitol Street carries heavy amounts of regional traffic during the commuter peak hours; the peak flows are northbound (inbound) in the AM and southbound (outbound) in the PM. Vehicle queues are experienced in the peak directions along South Capitol Street, however, these queues are largely isolated to the South Capitol Street mainline. Delays at the South Capitol Street intersections with I (Eye) Street and with M Street are attributable to the congestion on South Capitol Street caused by commuter traffic flows.

As shown in Table 3-1, with modified signal timings to optimize the operation, the South Capitol Street intersection with I (Eye) Street would continue to operate at an overall LOS "D" during both the AM and PM peak hours. Redistributing green time from South Capitol Street to I (Eye) Street could reduce delays on the side street. Of the peak hour trips on the eastbound approach, approximately 13 percent of the AM peak hour trips and five (5) percent of the PM peak hour trips are attributed to The Randall School.

The northbound turning movements on Half Street would operate at LOS "D" during the AM peak hour and at LOS "F" during the PM peak hour, under STOP control. Vehicles would utilize gaps in traffic flow created by the traffic signals at Delaware Avenue and South Capitol Street to turn onto I (Eye) Street. Both the eastbound and westbound I (Eye) Street approaches would operate at LOS "A" during the AM and PM peak hours.

As shown in Table 3-1, the I (Eye) Street / Delaware Avenue intersection and the M Street intersections with Delaware Avenue, Half Street, and with the south and northbound South Capitol ramps would continue to operate at levels of service similar to background levels, during both the AM and PM peak hours. Signal timing modifications can optimize capacity operations at each of the signalized intersection during the PM peak hour.

Table 3-1
The Randal School
Intersection Level of Service Summary (1) (2) (3)

Intersection	Intersection Control	Critical Movement	Existing		Background		Total Future	
			AM	PM	AM	PM	AM	PM
			EB	A(3.8)	A(9.6)	A(3.9)	B(11.5)	A(4.0)
I (Eye) Street/ Delaware Ave.	Signal	WB	A(4.9)	A(3.7)	A(5.2)	A(3.9)	A(5.3)	A(4.2)
		NB	D(41.3)	E(59.5)	D(41.7)	E(64.1)	D(42.6)	E(76.2)
		SB	D(36.3)	D(36.9)	D(36.3)	D(37.1)	D(48.8)	E(61.8)
		Overall	A(8.2)	B(15.2)	A(8.3)	B(16.8)	B(12.7)	C(22.2)
Background Mitigation	Signal	EB				B(15.4)		B(18.0)
		WB				A(5.2)		A(5.6)
		NB				D(46.8)	N/A	D(50.0)
		SB				C(33.3)		D(43.1)
		Overall				B(17.6)		C(21.1)
Eye Street/ Half Street S.W.	Stop Sign	EB	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]	A[0.0]
		WB	A[2.4]	A[5.1]	A[2.5]	A[5.7]	A[2.5]	A[5.6]
		NB	C[18.2]	D[32.6]	C[22.0]	F[50.9]	D[25.3]	F[73.4]
		SB						
		Overall						
Eye Street/ S. Capitol St.	Signal	EB	F(127.3)	F(263.2)	F(269.5)	F(300.7)	F(504.5)	F(312.5)
		WB	D(54.1)	D(40.8)	E(62.9)	E(65.6)	E(63.5)	E(65.2)
		NB	B(20.0)	A(9.3)	C(28.5)	B(12.0)	C(28.5)	B(12.0)
		SB	B(12.5)	B(12.2)	B(17.9)	B(15.4)	B(17.9)	B(15.3)
		Overall	C(26.9)	D(52.7)	D(40.6)	E(57.8)	E(56.9)	E(61.0)
Background Mitigation	Signal	EB			F(221.2)	F(228.6)	F(423.7)	F(233.1)
		WB			E(58.6)	D(51.8)	E(59.1)	D(51.6)
		NB			C(31.1)	B(14.8)	C(31.1)	B(14.8)
		SB			B(18.9)	B(19.4)	B(18.9)	B(19.2)
		Overall			D(39.1)	D(49.4)	D(53.0)	D(51.0)
M Street S.W./ Delaware Ave.	Signal	EB	A(2.9)	A(3.8)	A(3.2)	A(4.1)	A(3.2)	A(4.2)
		WB	A(94.2)	A(3.2)	A(4.5)	A(3.4)	A(4.5)	A(3.4)
		NB	D(48.1)	D(47.5)	D(48.9)	D(50.0)	D(48.9)	D(50.6)
		SB	D(44.8)	D(44.9)	D(44.8)	D(44.9)	D(44.8)	D(45.0)
		Overall	A(5.9)	A(5.6)	A(6.0)	A(6.3)	A(6.1)	A(6.5)
M Street S.W./ Half Street S.W.	Signal	EB	A(5.0)	A(7.3)	A(5.4)	A(8.0)	A(5.4)	A(8.1)
		WB	A(8.1)	A(7.5)	A(8.5)	A(8.1)	A(8.5)	A(8.1)
		SB	D(37.5)	D(40.4)	D(37.9)	D(41.2)	D(39.2)	D(42.2)
		Overall	A(8.3)	A(9.2)	A(8.5)	A(9.8)	A(8.6)	A(9.9)
M Street S.W./ Local S. Capitol SB	Signal	EB	E(62.5)	F(112.8)	E(68.7)	F(118.9)	E(68.7)	F(118.9)
		WB	A(0.5)	A(3.9)	A(0.9)	A(3.9)	A(0.9)	A(3.8)
		NB	N/A	N/A	N/A	N/A	N/A	N/A
		SB	C(31.7)	C(30.2)	D(43.2)	C(34.9)	D(43.2)	C(34.9)
		Overall	C(20.5)	E(65.2)	C(24.4)	E(65.7)	C(24.4)	E(65.4)
Background Mitigation	Signal	EB				F(87.8)	F(87.7)	
		WB				A(3.3)	A(3.3)	
		NB				N/A	N/A	
		SB				C(33.6)	C(33.6)	
		Overall				D(49.9)	D(49.7)	
M Street S.E./ Local S. Capitol NB	Signal	EB	A(0.8)	A(2.8)	A(2.2)	A(3.6)	A(2.2)	A(3.6)
		WB	D(40.0)	F(460.2)	D(43.6)	F(604.1)	D(43.6)	F(607.5)
		NB	F(146.4)	B(20.0)	F(197.4)	C(22.1)	F(198.1)	C(22.2)
		SB	N/A	N/A	N/A	N/A	N/A	N/A
		Overall	F(90.5)	F(283.6)	F(107.5)	F(345.5)	F(107.9)	F(346.8)
Background Mitigation	Signal	EB				A(2.9)	A(2.9)	
		WB				F(312.1)	F(314.3)	
		NB				C(31.1)	C(31.2)	
		SB				N/A	N/A	
		Overall				F(181.6)	F(182.7)	
H Street/ Site Driveway	Stop Sign	NBL	NA		NA		A[8.9]	
			NA		NA		A[8.8]	

Notes: (1) Analysis done using Synchro 6.0.

(2) Numbers in parentheses indicate average delay in seconds per vehicle for signalized intersections.

(3) Numbers in brackets indicate average delay in seconds per vehicle for stop sign controlled intersections.

Table 3-2

Corcoran School of Art & Design
Pipeline Project Trip Generation^{1,2}

Background Development	Land Use	Land Use Code	Size	Units	AM Peak Hour			PM Peak Hour		
					In	Out	Total	In	Out	Total
<u>20 M Street SE</u>										
Office	710	180,633	S.F.		18	88	106	66	33	99
<u>Square 0699N Phase I (1st & L Street SE)</u>										
Residential	230	250	D.U.		7	33	40	31	16	47
<u>Jefferson at 70 Eye Street (Phase I)</u>										
Residential	220	449	D.U.		17	83	100	80	39	119
<u>100 11 Street SE</u>										
Office	710	225,000	S.F.		111	15	126	20	97	117
Retail	820	15,000	S.F.		18	11	29	49	53	102
					129	26	155	69	150	219
<u>US Department of Transportation Headquarters³</u>										
Office	710	5,500	Employees		462	35	497	47	422	469
Retail	820	13,500	S.F.		9	6	15	24	26	50
					471	41	512	71	448	519
<u>Monument Ballpark - Square 700 & 701⁴</u>										
Residential	220	330	D.U.		13	52	65	41	21	62
Office	710	288,285	S.F.		220	30	250	36	188	224
Retail	820	60,000	S.F.		58	37	95	164	177	341
Hotel	310	196	Rooms		40	26	66	30	38	68
					331	145	476	271	424	695
<u>1325 South Capitol Street</u>										
Residential	220	250	D.U.		11	46	57	46	24	70
Retail	820	3,300	S.F.		1	1	2	4	5	9
					12	47	59	50	29	79
<u>100 V Street, SW</u>										
Office	710	1,100,000	S.F.		611	83	694	121	592	713
Total Background Development					1,596	546	2,142	759	1,731	2,490

Notes:

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

(2) Non-auto mode splits were adapted from the U.S. Census 2000 Data Summary File 3

	20 M St	Sq 0699N	Jefferson	100 M St Off	100 M St Ret	1325 S Cap Res	1325 S Cap Ret	100 V St
Non-auto mode split:	0%	0%	0%	0%	0%	0%	0%	0%
Average vehicle occupancy (persons per vehicle)	1.15	1.15	1.15	1.15	1.15	1.15	1.15	1.15
	20 M St	Sq 0699N	Jefferson	100 M St Off	100 M St Ret	1325 S Cap Res	1325 S Cap Ret	100 V St
Non-auto mode split:	60%	58%	49%	60%	36%	49%	28%	0%
Average vehicle occupancy (persons per vehicle)	1.30	1.30	1.30	1.30	1.30	1.15	1.60	1.30

(3) US DOT Trip Generation was taken from "United States Department of Transportation Traffic Impact Statement", Gorove-Slade Associates, March 14, 2003

(4) Monument Ballpark Trip Generation was taken from "Monument Ballpark – Square 700 & 701 Transportation Impact Study" Wells & Associates, December 12, 2006

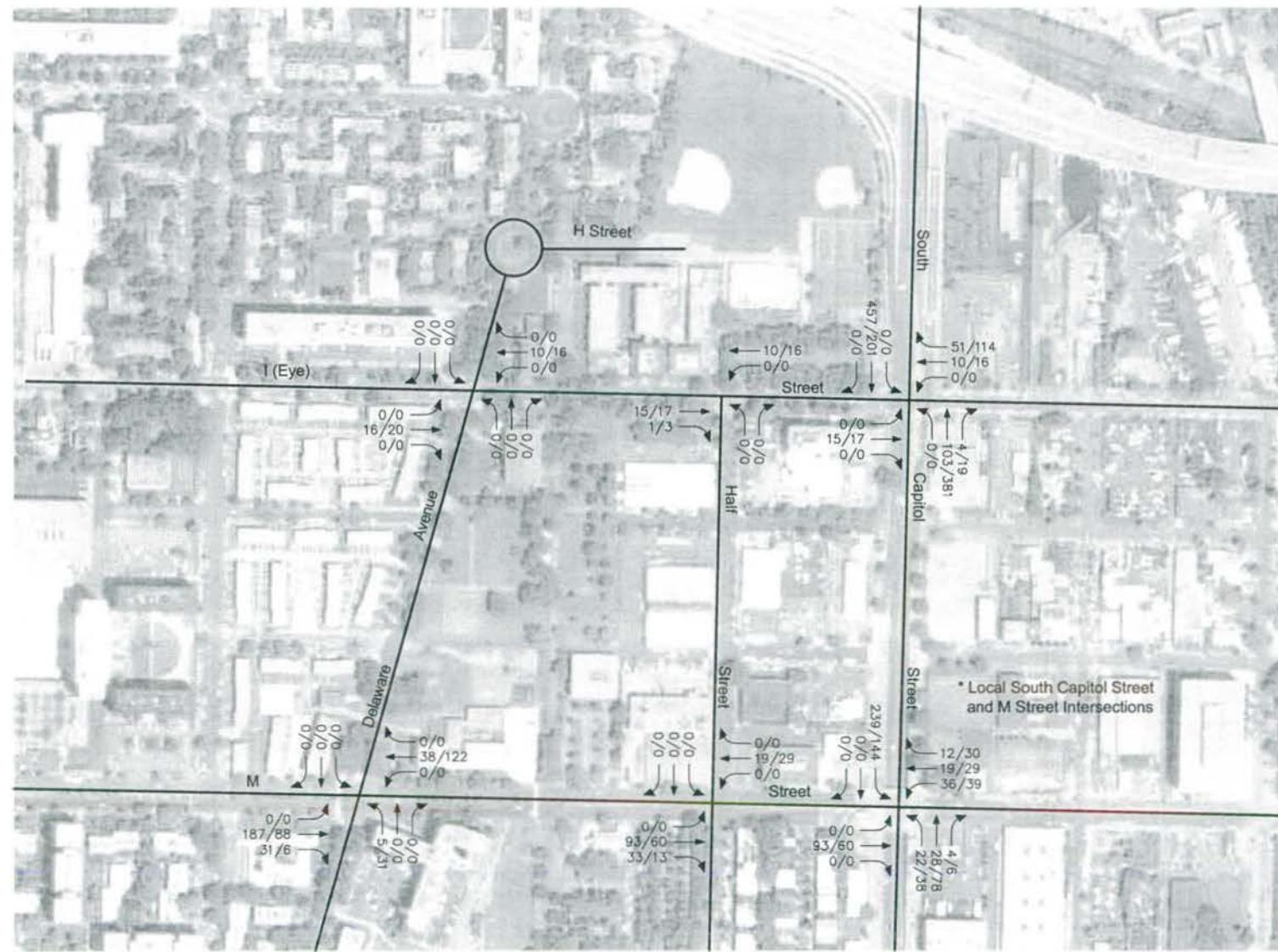


Figure 3-1
Other Development Peak Hour Traffic Assignments

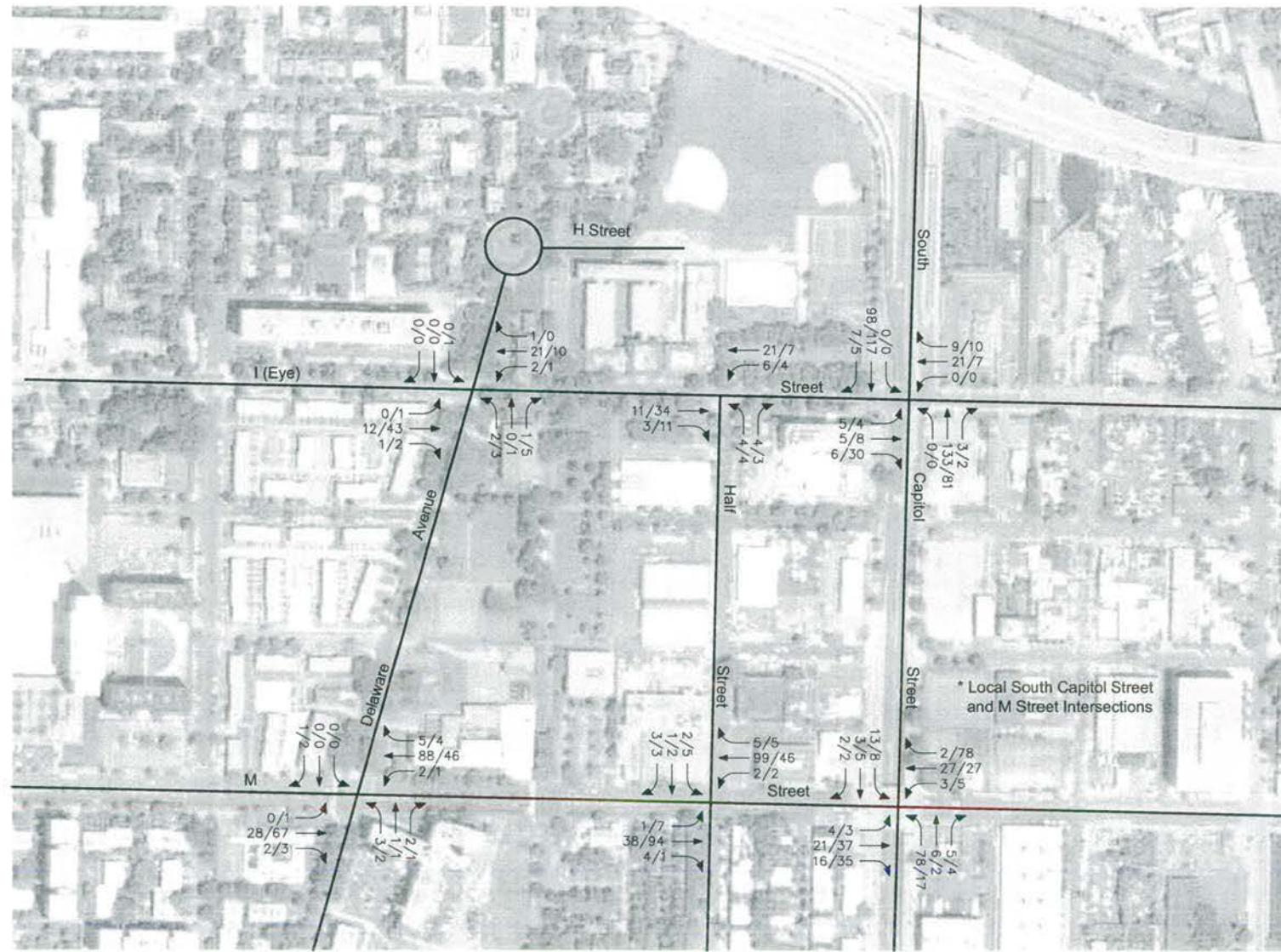


Figure 3-2
Background Traffic Growth

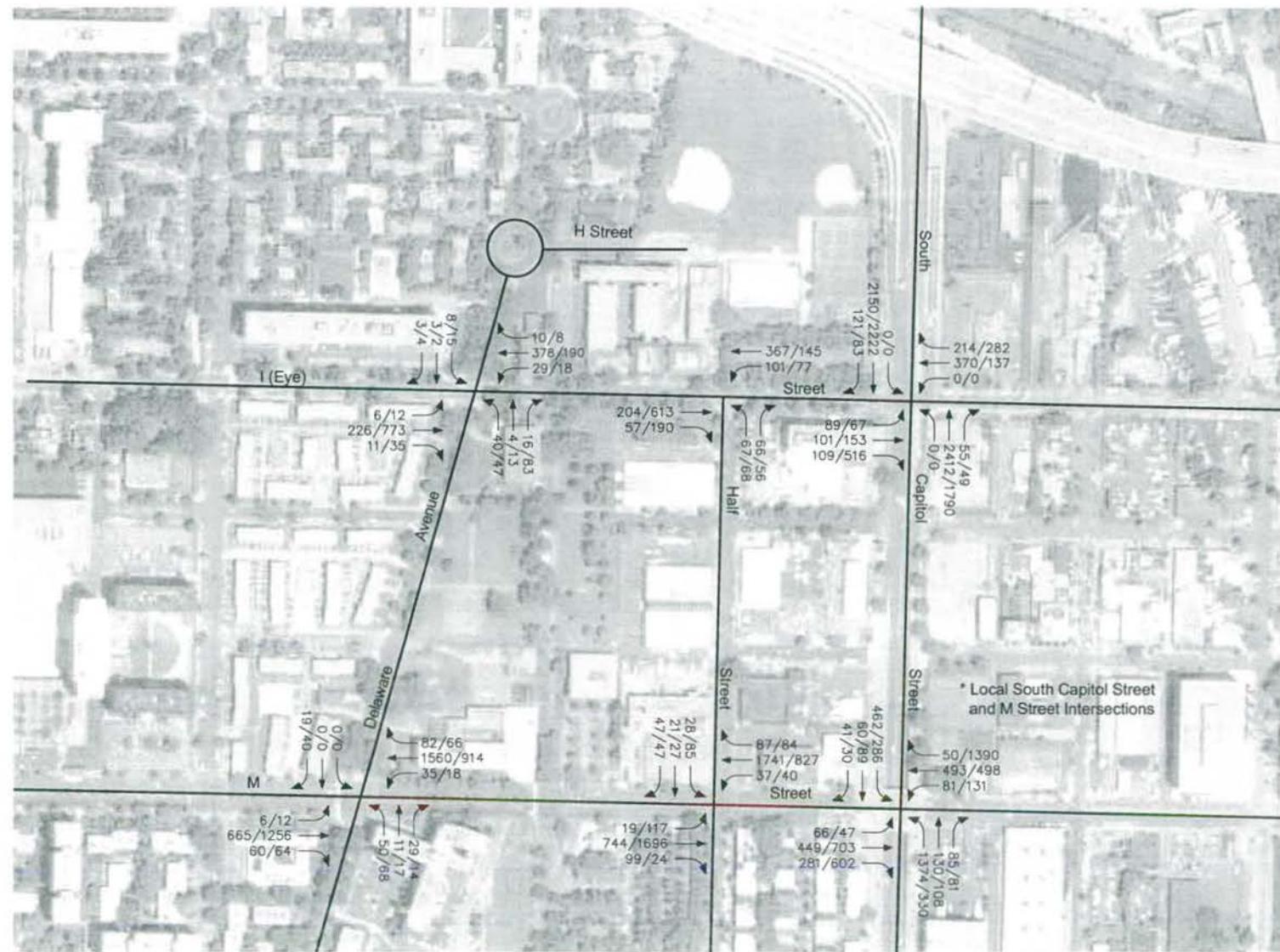


Figure 3-3
Background Future Peak Hour Traffic Forecasts

AM PEAK HOUR
PM PEAK HOUR
000/000



SECTION 4 CONCLUSIONS

The conclusions of this traffic impact study are as follows:

1. The proposed Randall School project on Square 643 is located within a connected street network for both pedestrians and vehicles. The proximity to the Waterfront/SEU and Navy Yard Metrorail stations, Metrobus service, the planned Corcoran Gallery of Arts shuttle, and the urban street grid helps reduce the demand for private automobile use.
2. Heavy commuter traffic along the South Capitol Street corridor contributes to vehicle delays on the main line and at the cross streets in the study area.
3. Most of the study intersections currently operate at overall acceptable levels of service during the AM and PM peak hours with the exception of the M Street intersections with the north and southbound South Capitol Street ramps.
4. M Street is the east-west corridor serving the SW and SE DC waterfront areas. Substantial development is planned in the vicinity that will substantially increase future traffic volumes on M Street and South Capitol Street.
5. Major roadway improvements planned along South Capitol Street will greatly improve vehicular access in the study area and will enhance the pedestrian and bicycle environment.
6. The pipeline developments in the study area would generate a total of 2,142 AM peak hour trips and 2,490 PM peak hour trips upon completion.
7. The Randall School project in Square 643, including 485 residential condominiums and the Corcoran Gallery of Arts, 400-student education facility, will generate approximately 100 AM peak hour vehicle-trips and 156 PM peak hour vehicle-trips at full build out and occupancy.
8. The study intersections would operate at overall acceptable levels of service during both the AM and PM peak hours with the exception of the M Street intersections with South Capitol Street. Some of the minor street approaches would operate at unacceptable levels of service during peak hours which is typical for an urban, minor street approach.