

TRAFFIC AND PEDESTRIAN ENGINEERING EVALUATION
COLUMBUS VILLAGE DEVELOPMENT PROJECT

December 16, 2008

Professional Qualifications

1. I am a licensed professional engineer with training and experience in traffic engineering, highway engineering, and civil engineering. I am a graduate of the City College of New York where I obtained a Bachelor's in Civil Engineering degree in 1972. I am also a graduate of the Polytechnic Institute of Brooklyn where I received a Master of Science in Transportation Planning (MSTP) in 1973 as part of a one year full time Fellowship program sponsored by the USDOT's Federal Highway Administration, and I have completed all requirements except for a dissertation for a Ph.D. in transportation engineering at the Polytechnic Institute of Brooklyn. I am a licensed Professional Engineer in New York, New Jersey, and Pennsylvania. I have approximately 35 years of professional work experience. I have worked as a Civil Engineer for the New York City Transit Authority. I was also a Deputy Director at the New York City Department of Transportation (NYCDOT), Bureau of Traffic Operations. I also worked in NYCDOT's Bureau of Plans and Programs and the Bureau of Planning and Research. I was the project manager for the traffic/transportation/pedestrian elements for numerous large-scale Manhattan environmental impact statements (EIS's) and large-scale site developments including the Jacob Javits Convention Center, Lincoln West, and the Times Square Development Project. I have assisted Manhattan Community Boards in their review of Trump's development over the 72nd Street west side rail yards and the Columbus Center proposals for Columbus Circle. I was the NYCDOT project manager for the Midtown Manhattan Traffic Circulation Study and many other similar NYCDOT sponsored traffic studies. I have extensive experience as a Project Manager for major civil engineering projects in the New York/New Jersey and New York Metropolitan regions. I have also worked as a Principal Investigator for several nationwide USDOT Federal Highway Administration Safety Studies. I have also performed investigations of various highway, roadway, traffic, and work zone incidents including engineering

evaluations, operation and maintenance evaluations. I am a fellow in the Institute of Transportation Engineers and a member of its Expert's Witness Council, a member of the American Society of Civil Engineers, the Society of Automotive Engineers and the National Society of Professional Engineers. My curriculum vitae is available upon request.

Purpose

2. I have performed a preliminary investigation and analysis of the traffic and pedestrian related factors surrounding the subject Columbus Village Development Project, a mixed-use land development project. I was retained to perform a traffic and pedestrian engineering evaluation of the subject land use development by Westsiders for Public Participation, Inc.

Background

3. The subject development project is being developed along the east and west sides of Columbus Avenue between 97th and 100th Streets (775, 795, and 805 Columbus Avenue on the east side; 808 Columbus Avenue on the west side) and on the southeast corner of the intersection of Amsterdam Avenue and 100th Street (801 Amsterdam Avenue), in the Borough of Manhattan, New York City, New York State. The project includes five (5) residential towers with 710 dwelling units, a partial block of retail and community facility uses on Amsterdam Avenue, and three blocks of retail and community facility uses on both sides of Columbus Avenue, including a 57,500 square foot Whole Foods store located at the northwest corner of Columbus Avenue and 97th Street. The total amount of retail space will be over 320,000 square feet. This is the first project in residential Manhattan to offer that much retail space over three (3) contiguous city blocks. It is a three (3)-level shopping mall, with one (1) retail level above ground and two (2) retail levels below ground. The size of the Whole Foods store—to name only one proposed retail tenant—is beyond that of a neighborhood supermarket. As such, it will become a regional destination store with trip rates greater than a typical local retail

store.

As part of the development, a new private service road connecting 97th and 100th Streets located between Columbus Avenue, on the east, and Amsterdam Avenue, on the west, will replace an existing pedestrian walkway. This existing walkway through a formerly park-like area currently provides a safe route for elementary school students walking to/from P.S. 163. P.S. 163 is located on 97th Street between Columbus and Amsterdam Avenues. The new service road will have adverse traffic and pedestrian safety impacts on the residents of buildings with frontage on the road, and also on all residents who use 97th Street and 100th Street for any purpose.

In addition to the above, a community facility building of unknown size has been proposed for the site of an open parking lot located approximately mid-block on the north side of 97th Street between Columbus and Amsterdam Avenues. Good faith assessment of the zoning for this site indicates that a 32-story building can be constructed here under certain circumstances.

Two private schools with unknown student populations have leased a total of 58,400 square feet of second-story community facility space in buildings on the east side of Columbus Avenue. The Ryan Center has leased 23,000 square feet of second-story community facility space at 801 Amsterdam Avenue.

Discussion

4. The development project will have undocumented, unstudied and unquantified adverse traffic and pedestrian safety impacts at a number of newly introduced vehicle/pedestrian conflict points. These conflict points, which will inhibit and interfere with the efficient functioning of school traffic and student pedestrians, police and fire department traffic and emergency services, as well as residential traffic and pedestrians, have been identified as follows:

- Five (5) locations of off-street truck loading docks:

808 Columbus Avenue

1. 97th Street, west of Columbus Avenue (Whole Foods)

2. 100th Street, west of Columbus Avenue (use unknown)
795 Columbus Avenue
3. located directly on the avenue (use unknown)
805 Columbus Avenue
4. 100th Street, east of Columbus Avenue (use unknown)
801 Amsterdam Avenue
5. 100th Street east of Amsterdam Avenue (use unknown)

- One (1) location of on-street truck loading:

775 Columbus Avenue (for a 17,000 square foot Duane Reade), probably on 97th Street east of Columbus Avenue, directly across the street from the existing on-street truck loading for Rite Aid. Additional retail tenants of 775 Columbus Avenue will have unknown loading points and impacts.

- Three (3) locations of underground parking, of which the extent and use is unknown:

1. 808 Columbus Avenue, with entrances from both 97th Street and 100th Street.
2. 775 Columbus Avenue, with one entrance from 97th Street east of Columbus Avenue
3. 801 Amsterdam Avenue with one entrance from 100th Street east of Amsterdam Avenue

- One (1) private service road west of Columbus Avenue, connecting 97th Street and 100th Street, and creating a three (3)-block stretch of unregulated traffic, as well as new unregulated intersections with both 97th Street and 100th Street.

5. The dual off-street truck loading docks and adjacent trash compactor to the Whole Foods store is of particular importance due to its location. The driveway/curb cut to these off-street truck loading docks is located on the north side of 97th Street to the west of Columbus Avenue between Columbus and Amsterdam Avenues. The Whole Foods store is located within the 808 Columbus Avenue site. The location of this off-street loading dock is unusual and atypical due to the following significant safety factors:

The off-street docks and trash compactor location requires long tractor-trailer vehicles and other vehicles to back into the loading docks. In order to do this, the trucks will require a clear and unobstructed path to stop and drive in reverse across a 50-foot wide sidewalk. This street is used by school buses and parents to pick-up/drop-off students to the nearby P.S. 163 located further west on the north side of 97th Street. As a result, there is a large volume of traffic and double-parked vehicles on the street. In addition, many pedestrians use the wide sidewalk. However, even more importantly, P.S. 163 students use it.

The tractor-trailer reverse movement into the truck docks requires a minimum turning radius. These minimum radius standards are set forth in the American Association of State Highway and Transportation Officials (AASHTO) design manuals. These reverse movement paths and the clear and unobstructed space required for these maneuvers have not been studied or presented for evaluation by NYCDOT or other city agencies.

Further, there has been no comprehensive safety plan presented which demonstrates that these reverse tractor-trailer maneuvers on a one-way residential street can be performed safely.

The off-street truck loading dock on 97th Street will be located in close proximity to the driveway on 97th Street into the new underground parking garage at 808 Columbus Avenue, as well as to the new intersection created by the new private service road between 97th and 100th Streets. Note that there is a mirror condition of all three factors on 100th Street at the site of 808 Columbus Avenue.

Conditions at new off-street loading docks at 795 Columbus Avenue, 805 Columbus Avenue (located on 100th Street) and 801 Amsterdam Avenue (located on 100th Street) are unknown. The dock at 801 Amsterdam Avenue is adjacent to a driveway into a new underground parking garage.

6. West 97th Street is a one-way westbound street. Between Columbus and Amsterdam Avenue it contains the following significant uses and activities:

- Four off-street parking garages,
- The Ryan Health Center,

- Public School 163, and school bus unloading and loading as well as parent drop-offs and pick-ups,
- A Chabad school,
- On-street trailer loading for an Associated Supermarket.
- On Fridays, a Farmers Market occupies the north side of West 97th Street. The police post “No Parking–Friday” signs, “6AM-2PM”.
- The Holy Name Church School, located on the corner of West 97th Street and Amsterdam Avenue, closes West 97th Street between Amsterdam Avenue and Broadway at dismissal time, for use as a play field, and for street fairs.
- The street is a continuation of a Central Park transverse road and is heavily used by vehicles traveling from the East Side of Manhattan to the Westside Highway.
- A fifty (50)-foot wide sidewalk is located on the north side of 97th Street.

This photograph of school buses queued on West 97th Street waiting for P.S. 163 student dismissals is provided for reference.



7. West 100th Street is a one-way eastbound street between Amsterdam Avenue and Columbus Ave. Both the fire department (11th Battalion) and the police department (24th Precinct) have buildings on West 100th Street. The fire department and the police department use the street to park employee vehicles. These vehicles are parked in a unique manner with two rows of parking along both curbs in a tandem parking fashion with both head-in and parallel parking in an unconventional arrangement. A survey of the block midday on a weekday (11/18/08) found an oversupply of employee parked vehicles. Vehicles were parked in front of hydrants and were boxing in and blocking hydrants. This photograph illustrating these parking conditions is provided for reference. Additional photographs are available upon request.



8. A letter from Peter Rosenberg of Stellar Management to Sheldon J. Fine, the Chairman of Manhattan Community Board 7, dated May 25, 2007 referred to and attached a “traffic study” by the office of Sam Schwartz. However, the attached 4-page document by Sam Schwartz Company was entitled “Technical Memorandum”. The

document was undated and was not signed. It is unknown who prepared the Technical Memo and whether or not the person(s) that prepared it was a licensed engineer. The four (4)-page Technical Memo did not have any attached data, appendices, graphics, tables, figures, computations, analysis or evaluation. The four (4)-page Memo refers to Exhibit 4 “Costas Kondylis and Partners, LLP” but does not define what this document is and Exhibit 4 was not attached. The Memo does not refer to Exhibits 1-3. Therefore, it was unknown how Exhibit 4 fits into the list of Exhibits and if there are in fact any additional exhibits.

The Memo referred to an attached drawing entitled “Proposed Curb Cut Locations, Sam Schwartz, PLLC”. However, this document was not attached. The Memo refers to “Data Collection” which included vehicular and pedestrian counts and street geometry. This data was not provided. The dates of the pedestrian counts are not stated in the Memo. The Memo claims both traffic and pedestrian analysis were performed. However, no analysis of any type whatsoever was included. School traffic, school bus pick-ups and drop-offs, parent pick-ups and drop-offs, vehicle queues and double parked vehicles were not even mentioned in the Memo. School trips and student pick-ups and drop-offs on Columbus Avenue to/from the two new private schools proposed for Columbus Village were not even referred to in the Memo. Trip generation rates were referred to but no trip rates were cited in the Memo. The Memo contained no calculations or analysis of any type. Elementary school children pedestrian flows were not referred to in the Memo. Police and fire vehicles on 100th Street were not referred to in the Memo. The Memo’s conclusions are not supported by any data, computations, or analysis of any type whatsoever.

Basically, the Memo’s conclusions were unsubstantiated “net opinions” with no basis for the opinions. The document was clearly a “Technical Memo” and not a “Traffic Study” as it was purported to be by Mr. Rosenberg of Stellar Management. In any event, the Memo does not comply with the minimum requirements to be classified as a Traffic Impact Study, as defined by industry standards, such as the Institute of Traffic Engineers (ITE), and would not meet the minimum requirements required by NYCDOT to perform a reasonable and adequate evaluation of the project’s impacts, or what would typically be performed as part of an Environmental Impact Statement (EIS).

9. In addition to the above, in a letter from Jeffrey L. Braun, Esq., of Kramer Levin Noftalis & Frankel, LLP to Jack Lester, Esq., dated November 12, 2008, Mr. Braun stated that at the request of the PWV Coordinating Committee, which was organized by Manhattan Community Board 7, his clients hired Sam Schwartz Co., LLC to conduct “a comprehensive study of the entire site and to evaluate potential impacts on traffic.” The referred Technical Memo undated and unsigned by Sam Schwartz Co., LLC, was not even a basic minimal Traffic Impact Study let alone a comprehensive one. It is not even titled a traffic impact study. It is a Technical Memo. As an example, the Technical Memo did not address the new private street running between 97th Street and 100th Street. It did not even mention it in the Memo and provided no projected data, forecasts or impacts that the street would create. Further, 100th Street contains numerous double parked and tandem parked official police and fire vehicles on both sides of this one-way eastbound street. The impact of an unplanned for and unmapped street’s intersection mid-block on 100th Street was not analyzed or evaluated. 97th Street, a one-way westbound street, has an elementary school located on the north side of the street and has numerous daily school buses and parents that queue up on the street double-parked. As a result, these basic traffic and pedestrian safety considerations were not assessed or evaluated.

10. The NYC Administrative Code, in Title 19 – Transportation, under Section 19-103 Permits, states the following:

“a. In addition to any of the requirements specified in this subchapter and except as hereinafter specifically provided, all permits issued by the commissioner pursuant to this subchapter shall be subject to the provisions of this section and any rules promulgated pursuant thereto. All applications for permits shall be submitted to the commissioner in such form and shall contain such information as the commissioner shall prescribe.

“b. Each permit shall be subject to such reasonable conditions as the commissioner may determine are necessary to protect public safety and to safeguard the interests of the city.”

As the above quote indicates, driveway curb cut permits and new intersection permits are subject to reasonable conditions by the commissioner of NYCDOT necessary to protect public safety. In order to perform this reasonable protection of public safety review and evaluation, a reasonable, adequate and comprehensive traffic impact study (TIS), in conformance with generally accepted industry standards such as the above-mentioned Institute of Transportation Engineers (ITE) and as typically required by NYCDOT is required. Such a reasonable, adequate, and comprehensive TIS has not been performed in this matter.

Conclusions

11. Based on the foregoing analysis and evaluation, my professional opinions are as noted above and as follows:

- An analysis and evaluation of the Whole Foods truck loading docks and trash compaction location has not been presented. The adequacy of this location for its intended uses has not been demonstrated. No data, analysis, study or evaluation has been performed. The adequacy of reverse truck turning movement radii as per AASHTO minimum standards has not been demonstrated.

- The multiple truck loading/unloading conflict points will inhibit safe and efficient traffic and pedestrian flows without an active and self-enforcing operating mitigation plan.

- The tractor-trailer and truck back-in and pull-out movements across the active sidewalk on West 97th Street that carry daily flows of elementary school children is inherently unsafe and requires a permanent mitigation plan that is not subject to site tenants or agreements.

- Retail tenants change, landlord/tenant agreements change, store and commercial property staffing levels and financial/economic circumstances change. However, elementary school children flows will not change, and thus an ironclad, permanent, active, self-enforcing, and comprehensive safety design program is required.

- The new private service road behind 808 Columbus Avenue between 100th and

97th Streets requires careful study and analysis, and a safe traffic design and traffic plan. The direction of the private service road has not been determined. Control of access to the road and the use of the road by traffic such as passenger vehicles, delivery vehicles, emergency vehicles, taxis, etc., have not been addressed.

- The introduction of a mid-block street crossing by a private service road creating a new intersection with a school route in close proximity to the Whole Foods truck docks with a 50-foot sidewalk on 97th Street has not been addressed.

- The location of stop signs, crosswalks, intersection safe stopping sight distance design and the impacts on police and fire department vehicles and police and fire department employee vehicles on 100th Street have not been addressed. Additionally, access to the private service road is located near both the new off-street truck loading docks and the driveways into the new underground parking garage at 808 Columbus Avenue on both 97th Street and 100th Street.

- Impacts of new off-street loading docks at 795 Columbus Avenue, 805 Columbus Avenue (located on 100th Street) and 801 Amsterdam Avenue (located on 100th Street) have not been addressed.

- Impacts of new underground parking garages at 775 Columbus Avenue (entrance on 97th Street) and 801 Amsterdam Avenue (entrance on 100th Street) have not been addressed.

- Without a safe and efficient remediation and mitigation plan, the actual and potential unaddressed identified hazards will interfere with the efficient functioning of school bus and parent traffic, elementary school children travel patterns, and pedestrian travel patterns.

- The Technical Memo submitted by Sam Schwartz Co. was not a traffic impact study and did not assess, analyze, evaluate or address any of the serious traffic and pedestrian safety issues discussed above. As a glaring example, the 808 Columbus Avenue off-street truck loading docks to the Whole Foods site on West 97th Street, were not addressed. There are many fully qualified traffic and transportation engineering firms located in New York City, including Sam Schwartz Co., that are fully capable and qualified to perform the needed and required study and analysis, provided they are given an adequate, complete, and comprehensive scope of work and associated budget by the

developer.

- The NYC Administrative Code requires reasonable conditions necessary to protect public safety. These conditions have not been met by this project at this time. In particular, the operation of the off-street truck loading docks to the Whole Foods site at 808 Columbus Avenue currently requires a self-enforcing safety plan.

- The multiple development projects will increase vehicular traffic, pedestrian traffic (including elementary school children), and delivery vehicles. They will also increase demand for on-street parking spaces. There has been no documentation, projections, forecasts and assessment of the anticipated traffic and pedestrian related impacts that this project will cause. The anticipated size and frequency of delivery vehicles, the methods used to back delivery vehicles into off-street truck docks, the impacts of new mid-block intersections, driveways, and parking garage entrances and exits, the impacts on elementary school children and school pupil transportation, and the loss of on-street parking, the impact of off-street parking garages, the alteration of traffic patterns and the impact on police and fire services have not been addressed.

- As a result of the lack of data and projections, and the projected impacts that this project will cause, it is recommended that a truly comprehensive, reasonable, and adequate traffic impact study be conducted in conformance with commonly accepted traffic engineering industry standards as customarily required by NYCDOT and by CEQR to assess such projects, with a particular emphasis placed upon the many traffic and pedestrian safety related issues. These issues include those discussed above as well as any other issues that will be identified as the data is collected, projections are made, and impacts are assessed.

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