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January 27, 2012

Via E-Mail & Hand Delivery

Manalapan Township Planning Board
120 Route 522
Manalapan, NJ 07726

Attn: Eleanor Ruggiero
Administrative Officer

**Re: Northwest Nine, L.P.
Proposed Change to OP-10 Zone District
Traffic Impact Study – Review #1
Block 18, Lot 9.21
Manalapan Township, Monmouth County, NJ
Our File: HMAP0018.23**

Dear Mrs. Ruggiero:

Our office is in receipt of the following plans and documents submitted as part of the above referenced request to modify the OP-10 Zone District:

- Proposed Zone Change Traffic Report, prepared by Karl A. Pehnke, P.E., PTOE, of Langan Engineering and Environmental Services, Inc., undated and unsigned (Traffic Report);
- "Office Park Concept Plan", prepared by Langan Engineer & Environmental Services, undated and unsigned;
- "Retail Concept Plan", prepared by Langan Engineer & Environmental Services, undated and unsigned; and
- Correspondence, dated December 22, 2011, from Sonnenblick, Parker & Selvers.

Based on our review of the above from a traffic impact standpoint, we offer the following for the Board's consideration:

- 1) The OP-10 Zone District is located at the northwest corner of the existing signalized intersection of US Route 9, Ryan Road and Symmes Drive. The zone district primarily encompasses a +/- 37 acre parcel known as Block 18, Lot 9.21, which is predominantly vacant, but does contain the Symmes Drive municipal commuter lot, which holds three hundred (300) commuter parking spaces. There is one additional parcel, Block 18, Lot 9.10, which is 30,000 square feet (sf) and contains Vespia's Tires, also located in this zone district. The zone district has frontage along US Route 9 and Symmes Drive. US Route 9 is a divided four-lane, principal arterial highway with a speed limit of 50 MPH. Symmes Drive is a municipal roadway, classified as a collector road and has a speed limit of 35 MPH.





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- 2) The owner of Block 18, Lot 9.21, Northwest Nine, L.P., a Steiner Equities affiliate, has submitted a proposal for the construction of 105,000 sf of floor area for retail and restaurant uses, distributed within five (5) buildings. The floor area for the anchor tenants would range from 25,000 to 50,000 sf. In order for this proposal to move forward, the OP-10 Zone District must be amended to allow commercial uses, whereas currently, commercial uses such as retail stores and restaurants are not permitted. Alternatively, the owner indicates that the site can provide for the construction of 326,000 sf of floor area for office use, which is currently permitted in the zone. Accordingly, on behalf of the owner, Langan Engineering has submitted a Traffic Report that analyzes the traffic impact the development of this parcel with 105,000 sf of retail and restaurant uses (Commercial) will have on the surrounding roadways and intersections and compares that to it being developed with 326,000 sf of office space (Office) or if no development would to occur at this time (No-Build).
- 3) The Traffic Report provides expected levels of service and with associated delays for the 2016 No-Build, 2016 Build Commercial, 2016 Build Office and 2016 Build Commercial with Mitigation for the weekday PM and Saturday peak periods in the Table entitled "Manalapan Square Level of Service and Delays". Based on our review of the findings presented, it appears that the expected 2016 Build Commercial with Mitigation level of service and delays are comparable to the expected 2016 No-Build level of service and delays. However, it should be noted that the Traffic Report identifies the need for a traffic signal to be installed at the intersection of Symmes Drive with the proposed site driveway and the existing Manalapan Epicenter access driveway. In addition, the Traffic Report also indicates that mitigation would be required at the existing signalized intersection of US Route 9, Ryan Road, and Symmes Drive. The specific improvements required to both intersections to mitigate the adverse impacts associated with the proposed development site generated trips as necessary to achieve the improved operating conditions will need to be provided as part of any site plan application.





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- 4) As noted in the Traffic Report, it is estimated that the following new trips will be generated by the development of the site by the conceptual office and commercial:

USE	AM Peak Hour			PM Peak Hour			Sat Peak Hour		
	In	Out	Total	In	Out	Total	In	Out	Total
326,000 sf Office	425	58	483	75	368	444	52	44	96
105,700 sf Commercial	97	62	159	200	208	406	293	155	324
Difference	-328	+4	-324	+125	-160	-38	+241	+227	+468

Data provided by Institute of Transportation Engineers, Trip Generation, 8th Edition.

- 5) From the table above, the development of 105,700 sf of floor area for commercial use is anticipated to generate less new trips during the weekday AM peak hour, an equal amount of new trips during the weekday PM peak hour, and an increase in new trips during the Saturday peak hour; when compared to a 326,000 sf office park. It should be noted that it appears the OP-10 Zone District could support a medical-dental office park with a total of approximately 175,000-200,000 sf of floor area, while still providing sufficient off-street parking in accordance with Manalapan Township Development Regulations Section 95-9.2. Medical-dental offices are a permitted use in the OP-10 Zone District. For comparison purposes, it is estimated that a 175,000 sf medical-dental office park would generate 403, 605 and 779 new vehicle trips during the weekday AM, PM and Saturday peak hours, respectively.
- 6) The number of estimated new trips identified above does not include the amount of those trips that are considered "Pass-by" or "Captured". "Pass-by" or "Captured" trips are those where the vehicle is already on the adjacent roadway network or traveling to or from a nearby use and makes a stop at the site in question. The Institute of Transportation Engineers (ITE) indicates that as much as 60% of the new trips generated by a retail use are those which can be considered a "Pass-By" or "Captured" trip. Considering the commercially developed nature of the US Route 9 corridor in this vicinity and that US Route 9 is a major route for commuter traffic, it is reasonable to assume that a significant percentage of the new trips generated by a retail use developed in this zone district or at this site could be considered "Pass-By" or "Captured" vehicles, consistent with the recommendations of ITE. Alternatively, all the trips generated by an office use are generally considered all to be new trips, where such use is the primary reason for the trip destination.





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- 5) Any developer of the subject parcel will need to comply with Manalapan Township Development Regulations Chapter 95-8.8 E. Level-of-Service Standard and the requirements as set forth by the New Jersey Department of Transportation (NJDOT) as outlined in the latest New Jersey State Highway Access Management Code relative to the off-site traffic mitigation. An access permit will be required from the NJDOT for any driveways proposed to connect to US Route 9. In addition, approval will be needed from the NJDOT for proposed modifications to the signalized intersection of US Route 9, Ryan Road, and Symmes Drive and the installation of a new traffic signal at the intersection of Symmes Drive. A traffic signal warrant analysis will need to be performed in accordance with the latest Manual on Uniform Traffic Control Devices for the new signal.

- 7) The anticipated signalized intersection of the conceptual site driveway with Symmes Drive and the existing Manalapan Epicenter access driveway is a distance of approximately 1,000 feet away from the existing US Route 9, Ryan Road, and Symmes Drive signalized intersection. Based upon the NJDOT Traffic Signal Spacing criteria in Appendix D of the NJ Highway Access Management Code, the minimum required spacing between traffic signals along a roadway with a posted speed limit of 35 MPH, should be no less than 1,540 feet. It is apparent that the installation of a traffic signal at this intersection of Symmes Drive with the proposed site driveway and the existing Manalapan Epicenter access driveway would not satisfy the spacing criteria referenced above. This proposed new traffic signal installation would require review and approval from the NJDOT and coordination with the existing adjacent US Route 9 traffic signal would be necessary. Because of the proximity of the conceptual signal with the existing signal at US Route 9, a queue analysis and Synchro Traffic Simulation would likely be required as part of the development plan approval process to verify acceptable coordination between the two traffic signals and adequate storage in the approach lanes.

- 8) The technical appendix in the Traffic Report should be provided that includes the manual turning movement count data, the data used to develop the anticipated trip distribution patterns, and all of the Level of Service and Capacity Analyses performed and utilized to develop the Manalapan Square Levels of Service with Delays table, which appears in the report.





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Conclusion

The Traffic Report submitted by Langan Engineering reveals that the development of this site with commercial uses as proposed is not anticipated to exacerbate the levels of service on the surrounding roadways and intersections, provided the required mitigation improvements are completed if acceptable to the NJDOT; compared to the no-build and office use build out condition in the year 2016 for the weekday and Saturday studied peaks hours. Ultimately, it appears the development of the OP-10 Zone District, whether it is a general office, professional office, retail or restaurant use, will require improvements to the surrounding roadway network and intersections to mitigate the increase in traffic that the development will incur. It is recommended that any amendment to the township development regulations to allow a retail or restaurant use to be permitted in the OP-10 Zone be drafted in a manner to limit the amount of floor area that can be provided for a retail or restaurant use to ensure that the traffic generation would be consistent to that of general or professional office uses that are already permitted in this zone.

Should you have any questions or require additional information, please do not hesitate to contact this office.

Very truly yours,

CME Associates

Gregory R. Valesi, PE, PP, CME
Planning Board Engineer

GRV:JW:KC:mrm

cc: Ron Cucchiaro, Esq.
Richard Cramer, PP
Gerrald Sonnenblick, Esq., Sonnenblick, Parker & Selvers
Northwest Nine, L.P.
Karl A. Pehnke, P.E. PTOE, Langan Engineering

