

Ms. Michael Antonellis
Town Planner
Lancaster Town Offices
701 Main Street
Lancaster, Massachusetts 01523

December 23, 2019

Ref. T0852.03

Re: Capital Commerce Center – Lancaster, Massachusetts
IPOD District Traffic Analysis – Response to Peer Review Comments

Dear Mr. Antonellis:

TEC, Inc. (TEC), behalf of Capital Group Properties (the “Applicant”), is pleased to provide the enclosed response to transportation peer review comments on the Capital Commerce Center Project IPOD District, located along McGovern Boulevard in Lancaster, Massachusetts. The following information is supplied to address the several peer review comments generated by Green International Affiliates, Inc. (GIA) during review of the IPOD District Traffic Analysis Letter dated October 2, 2019. The **bold** text is from GIA’s memorandum, and the regular text is TEC’s response.

1. **The proposed project as outlined in the Special Permit Application and Project Narrative defines the proposed site as containing 1,647,800 square feet (SF) of industrial space, 500 multi-family residential units, a hotel containing 120 rooms, retail space of 16,300 SF, and 86,400 SF of an indoor sports facility. All of the traffic assumptions were based on this use breakdown. While we did not review the DEIR, other submittals by the proponent, such as the DEIR, contain different usage breakdowns, including a decrease in the size of the industrial park and an increase in the size of the retail space. The proponent should clarify the intended uses for the site, and the trip generation should be revised to accurately reflect the proposed plan.**

The IPOD District Traffic Analysis Letter submitted to the Lancaster Planning Board on October 2, 2019 outlines the traffic components related to only those parts of the development defined in the IPOD District. Therefore, the other associated retail uses along Lunenburg Road; including Dunkin Donuts and Mobil Gas, were not summarized. TEC and the Applicant recognize that the square footage shown in the IPOD submission is approximately 80,000 SF higher than as reported in the DEIR for the industrial park area. Therefore, the trip generation calculations as provided are more conservative than the DEIR. The square footages reported in the IPOD submission documents will be updated in the project’s FEIR and subsequent site plan review level traffic impact assessments. Overall, the small discrepancy in the industrial square footage has no substantial effect on the overall project impact.

2. **The proposed use regulations for the IPOD state that “The Planning Board must find that there is no material impact to the neighborhood”. The IPOD District Traffic Analysis Letter prepared by TEC for the Capital Commerce Center does not attempt to measure the impact of traffic on the neighborhood. The only analysis provided**

within the Traffic Analysis letter consisted of an internal Site Driveway and did not evaluate any impacts on surrounding roadways or intersections outside of the site, including the intersections where the Site Driveways intersect with Lunenburg Road. It is our opinion that without this “external” analysis a determination on material impacts to the neighborhood cannot be made with respect to traffic.

A detailed analysis of the intersection of McGovern Boulevard / Lunenburg Road is provided as part of the project's DEIR. Further analysis of this intersection, and other study area intersections, will be evaluated during the project's site plan review processes with the Lancaster Planning Board. The Applicant has committed to complete a full traffic impact assessment for each major phase of site plan review, which will not be segmented and will address the entirety of impacts through that point of site plan review. The Applicant's subsequent detailed traffic studies will review the appropriateness and timing of the conceptual traffic mitigation identified within the DEIR.

- 3. The IPOD District Traffic Analysis Letter states that the traffic generated by the proposed site plan will not exceed 20 trips per acre, as required under the Zoning code 220-8-7 which defines IPOD use regulations. The letter states that “Over the 401.8-Acre site, the project is anticipated to generate 19.92 trips per acre in compliance with Section 220-8.7(E)(3)(g) of the Town of Lancaster Zoning Bylaw.” However, the Traffic Analysis Letter also calculates the trips generated by the site as 8,142 trips. This results in 20.26 trips per acre which exceeds the amount allowed within the zoning bylaw. In addition, any change in use will have an impact on this ratio. Clarification is required and this ratio should be revised to accurately reflect the correct trip generation and any changes in the proposed site plan.**

TEC acknowledges that the ‘External Trips’ column provided in Table 1 of the IPOD District Traffic Analysis Letter was miscalculated and should read 8,006 vehicle trips (4,003 entering and 4,003 exiting). Over the 401.8-acre site, the total trips per acre is calculated correctly at 19.92 trips per acre.

- 4. The trip generation described in the letter does not accurately reflect the trip generation calculations in the appendix. The letter should be revised to include the correct trip generation total and also include a discussion of any pass-by credits that were used to develop the trips per acre calculation. One of the requirements as defined in the MassDOT Traffic Analysis guidelines, for pass-by credits is that the total pass-by volume may not exceed 15% of adjacent street traffic. The proponent did not quantify the amount of adjacent street (Lunenburg Street) traffic, therefore this credit cannot be verified with the information provided.**

TEC reviewed the trip generation calculations as provided in the Appendix and verified that they represent the same calculations depicted in Table 1 of the of the IPOD District Traffic Analysis Letter, with exception to the miscalculation identified in Comment 3 above. Overall, this error did not change the overall trip generation totals provided in the Appendix. The IPOD District is anticipated to generate 8,370 vehicle trips per day with 364 of these trips shared on-site; resulting in 8,006 external (primary plus pass-by) vehicle trips per day. No credit for pass-by trips was taken in this calculation and therefore the 15% ‘rule’ noted does not apply. Further analysis of pass-by trips for each particular phase

will be reviewed as part of a full traffic impact assessment for each phase of site plan review.

- 5. The trip generation calculations utilize an internal capture credit that reduces the number of trips due to the mixed-use nature of the site. Mixed uses that include residential, retail and commercial uses will realistically result in this phenomenon occurring. However, this credit relies heavily on the residential uses within the site. Any change in the amount of residential use will have a significant impact on this trip credit and could result in an increase in overall trips. The proponent has stated within the Project Narrative that they are amenable to removing all residential components of the site plan. The proponent should clarify their intentions with regard to the residential use and update any trip generation calculations accordingly. In the event that the residential use is removed, the site will no longer be in compliance with the Zoning bylaw 220-8.7 (B)(6) which states that residential uses shall comprise not less than 25% and not more than 75% of the gross floor area planned within any integrated plan.**

The residential use and its corresponding development percentage on the site are required under the IPOD Zoning Bylaw 220-8.7 (B)(6). Although the Applicant has considered the reduction and/or removal of this land use from the site, as well as the Planning Board, the removal of this use can only occur by amendment to the Bylaw. Therefore, all traffic impact analyses for Town and State review have been documented with the residential component on-site.

The Applicant understands that the removal of residential from the site, upon approval by the Town's governing authority, will significantly reduce the internal capture credit for the trip generation. Concurrently, the residential area comprises approximately 33% of the overall IPOD District trip generation and therefore the removal of the residential on-site will likewise significantly reduce the overall trip generation. Furthermore, many alternative land uses would generate less traffic than the proposed residential structures. Should the Town approve zoning to eliminate the requirement for a residential component, the Applicant will coordinate with the Planning Board on any other changes to the site's building program and associated traffic impacts. As stated during the Planning Board public hearing on December 9, 2019, the Applicant is willing to work with the Town on an acceptable condition of approval related to this topic.

- 6. The traffic analysis provided by the proponent to determine that the Level of Service will not exceed "C" as required under the IPOD Zoning by-laws Section 220-8.7(E)(3)(g) was completed at the internal driveway that provides access to building N. Again, this is not the point of primary access from the major town way (Lunenburg Road). Furthermore, the traffic analysis was completed for the AM and PM weekday peak hours, however, the trip generation shows that the peak hour with the highest volume of traffic occurs during the Saturday Midday peak hour. The proponent should provide traffic analysis for this scenario.**

An individual traffic impact analysis for the IPOD District uses was not conducted separately by the Applicant; however, a capacity and queue analysis has been completed by the Applicant as part of the project's DEIR for the intersection of McGovern Boulevard

/ Lunenburg Road under 2026 Build with Mitigation conditions. These conditions are shown following the introduction of auxiliary turn lanes and a traffic signal at the intersection under full build conditions. Note that the analysis provided in the DEIR included the full DEIR trip generation; including the expanded retail area adjacent to Lunenburg Road. Table 1 provides a summary of the intersection's capacity and queue analysis for the intersection of McGovern Boulevard / Lunenburg Road provided in the DEIR. Note that all movements at the intersection of McGovern Boulevard / Lunenburg Road are anticipated to operate at acceptable levels-of-service (LOS C or better) during each analysis scenario.

Table 1: Capacity and Queue Analysis Summary (DEIR Table 7.12)

Intersection / Lane Group	V/C	2026 Build w/ Mitigation		
		Delay	LOS	Queue
Lunenburg Road / McGovern Boulevard				
Weekday Morning Peak Period				
McGovern Boulevard EBL	0.71	18.2	B	39/97
McGovern Boulevard EBR	0.69	18.0	B	<25/38
Lunenburg Road NBL	0.40	7.1	A	<25/55
Lunenburg Road NBT	0.34	4.3	A	44/100
Lunenburg Road SBT	0.66	12.5	B	102/201
Lunenburg Road SBR	0.46	7.0	A	<25/<25
Overall Intersection	0.48	9.9	A	-
Weekday Evening Peak Period				
McGovern Boulevard EBL	0.83	20.0	C	104/235
McGovern Boulevard EBR	0.54	15.8	B	<25/41
Lunenburg Road NBL	0.36	8.7	A	27/57
Lunenburg Road NBT	0.73	10.0	A	169/316
Lunenburg Road SBT	0.60	14.7	B	93/172
Lunenburg Road SBR	0.29	5.4	A	<25/<25
Overall Intersection	0.55	12.5	B	-
Saturday Midday Peak Period				
McGovern Boulevard EBL	0.88	32.8	C	127/308
McGovern Boulevard EBR	0.59	17.3	B	<25/48
Lunenburg Road NBL	0.41	9.9	A	<25/47
Lunenburg Road NBT	0.40	7.2	A	64/110
Lunenburg Road SBT	0.71	16.5	B	123/208
Lunenburg Road SBR	0.29	5.2	A	<25/<25
Overall Intersection	0.50	15.9	B	-

Other DEIR study area intersections along Lunenburg Road to the north and south of the project site have traditionally acceptable levels of service and involve MassDOT-funded improvements.

- The traffic analysis for the PM peak hour does not appear to show the correct number of trips traveling past the site driveway. Based on a removal of 40% of all residential trips for building N as described in the report, there should still be approximately 271 incoming trips and 466 outgoing trips that are traveling past the driveway for building N. The traffic analysis only shows 236 incoming trips and 428 outgoing trips. This discrepancy should be explained within the report or revised to reflect the accurate traffic volumes. The proponent should be advised that pass-by credits cannot be taken for any internal intersections.

TEC recognizes GIA's Comment #6 denoting that traffic analyses to determine that the Level of Service will not exceed "C" as required under the IPOD Zoning by-laws was meant for locations such as the intersection of McGovern Boulevard / Lunenburg Road. TEC's response to Comment #6 notes that the intersection of McGovern Boulevard / Lunenburg Road provided in the DEIR. Note that all movements at the intersection of McGovern Boulevard / Lunenburg Road are anticipated to operate at acceptable levels-of-service (LOS C or better) during each analysis scenario. Further evaluation of internal site intersections along McGovern Boulevard will be evaluated as part of a full traffic impact assessment for each major phase of site plan review.

- 8. While more minor, the traffic analysis for the AM peak hour does not appear to show the correct number of trips traveling past the site driveway or out of the site driveway. The outgoing trips should be revised from 32 to 33 trips, and the trips that are traveling past the driveway should be revised to accurately reflect the remaining trips occurring during the AM peak hour that are not utilizing the other driveways for building N.**

As previously stated, further evaluation of internal site intersections along McGovern Boulevard will be evaluated as part of a full traffic impact assessment for each major phase of site plan review.

- 9. The Project Narrative for the proposed Capital Commerce Center outlines a number of mitigation commitments with regard to traffic. At this time, the Traffic Analysis Letter prepared by The Engineering Corp has not evaluated the impacts of this mitigation. As a result, we cannot comment on the efficacy of these improvements at this time.**

As highlighted by GIA in its peer review letter, the focus of the traffic analysis and subsequent review at the IPOD master plan stage is very limited based on the regulations. It is the intent of the Applicant to generate specific traffic impact assessments at each major building stage of the development during the site plan review. Each traffic impact assessment will not be segmented during each individual Site Plan approval so to show the entire impact of the project at that time. Transportation mitigation will be specifically proposed at each individual building stage of the development during the site plan review and will be based on the conceptually proposed mitigation measures identified within the DEIR.

Separate from the IPOD master plan review, the Applicant proposes a comprehensive transportation mitigation program in the vicinity of the site to improve vehicular, bicycle, and pedestrian operations and safety. The primary improvements include the reconstruction of the Lunenburg Road / McGovern Boulevard intersection. In addition, the Proponent seeks to significantly improve multi-modal accommodations for bicycles and pedestrians along McGovern Boulevard to service not only the Capital Commerce Center Project; but other existing and future developments in the vicinity of the Lunenburg Road intersection with McGovern Boulevard. The Project's DEIR provides a detailed description of the Project's off-site mitigation. A summary of the overall mitigation package is provided in Table 2.

Table 2: Off-Site Mitigation Summary (DEIR Table 7.14)

Project Segment	Jurisdiction	Responsible Party for Construction	Construction Timeline
Lunenburg Road / Fort Pond Road – Temporary Traffic Signal	Town of Lancaster	Capital Group Properties	TBD (based on warrant)
Main Street / Seven Bridge Road Intersection – Traffic Signal Optimization	Town of Lancaster	Capital Group Properties	TBD (Project Milestones)
Main Street / Lunenburg Road Intersection – Traffic Signal Optimization	Town of Lancaster	Capital Group Properties	TBD (Project Milestones)
Lunenburg Road / McGovern Boulevard Reconstruction (non above-ground traffic signal)	Town of Lancaster	Capital Group Properties	2020/2021
Lunenburg Road / McGovern Boulevard Traffic Signal Activation	Town of Lancaster	Capital Group Properties	TBD (based on warrant)
McGovern Boulevard	Town of Lancaster	Capital Group Properties	Segmented During Master Plan Construction
Route 2 WB Interchange 35 Deceleration Lane Improvements	MassDOT	Capital Group Properties	2020/2021

The scope of the mitigation is still being evaluated by the Applicant, MassDOT, and the Town and will be further refined with each traffic impact assessment for each phase of site plan review.

- The mitigation included in the Project Narrative includes a five-foot sidewalk along each side of the internal McGovern Boulevard and bicycle accommodations in the form of shared-use lane markings and signage again on the internal roadway. The proponent also states that additional pedestrian crossings will be provided across McGovern Boulevard within the site. The site plan should be updated to show the proposed locations of the sidewalks and the proposed crossings. At a minimum, the mitigation description should state where the proposed crossings will be located. Other actions both for internal locations as well as external will need to be defined going forward.**

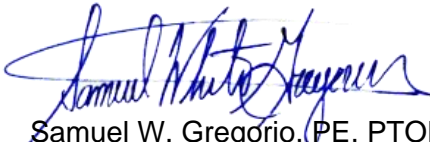
The IPOD master plan as provided provides an overview of the lane uses and general building locations on-site is not intended to show detailed depictions of on-site and off-site improvements that are currently being scopes with the Town and MassDOT. Detailed versions of the off-site and on-site mitigation will be developed during the Town's site plan review process for each phase and with MassDOT as part of the MEPA state-review process. Full detailed plans for the intersection of McGovern Boulevard / Lunenburg will be generated for review with the Town once an overall scope of master plan is approved.

11. The site plan provided identifies 2,397 surface parking spaces for the entire site, along with 316 trailer parking spaces for the industrial use and 355 loading docks. The parking criteria outlined in Zoning Bylaws 220-23 states that the minimum number of spaces for a Manufacturing, processing, assembly, packaging, storage use shall be “not fewer than one space per 300 square feet gross floor area”. This is the use that is most similar to the industrial use provided within the site plan. However, this would result in a parking requirement of 5,493 spaces for just this use. The proponent should clarify how they will meet the parking requirement outlined in Zoning Bylaw 220-23, and why a reduction in parking may be appropriate for their proposed uses.

The Applicant will review the site-specific parking needs with the Planning Board as part of the site plan approval process for each major building phase. The Applicant's DEIR includes a detailed parking demand assessment that identifies the anticipated parking demand for the overall site based on industry-accepted parking data and analyses while minimizing environmental impacts.

Please do not hesitate to contact us if you have any questions concerning our responses at 978-794-1792. Thank you for your consideration.

Sincerely,
TEC, Inc.
“The Engineering Corporation”



Samuel W. Gregorio, PE, PTOE, RSP₁
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