The Traffic Group / NDC

Requested Information:

1. Copy of turning radius studies noting various configurations for large delivery trucks (Interest in confirming whether or not a semi-trailer can make a full U turn on site, without backing up, and assuming there was a second access to the lot).
TTG – See early trucks simulation showing WB-67 semi-truck from an early alternative that NDC explored that addresses the city's question about truck turning with a second point of entry/exit. While it is technically possible to have big trucks load on site, Maryland State Highway Administration would likely not support the truck turning in these exhibits because trucks would be crossing the double-yellow line. In addition, there is not enough room for a large truck to maneuver a turn exiting the parking lot and heading east on Ethan Allen Avenue. The cost of a garage structure able to support the weight of the large trucks would not be financially feasible.

1. Results of the option(s) that do not include the slip lane. *TTG – Intersection option prepared by AMT shows the right turn lane next to the thru left turn lane at the new intersection. The TTG plan showing the right turn lane separate creates the pedestrian crossing area without vehicle conflict when the SB Carroll Ave phase is running. TTG is not recommending other alternatives at this time.*

2. Estimate of the size of the new "triangle" park that would be created by the slip lane. *TTG is currently showing 4184 sf of green space with 2052 sf of sidewalk area on the southern end of island. The total Island area shown within the curbed area is 6236 sf.*

   The existing park site within the curbed area including all sidewalks, grass area and parking spaces up to the existing residential property (eastern edge of park) totals approximately 9,030 sf. This does not include the intended bus bay for the NB Carroll Ave Bus. This number does include the sidewalk along Ethan Allen frontage.

3. Preparation of a separate plan that would involve a much smaller "island" with most of the park space in front of the shop buildings. If this isn't possible, could they include some text about this or other information? I'm concerned that if there isn't a model for this when we start working closely with SHA, this alternative option might get overlooked more easily. *TTG is not tasked by NDC to prepare intersection design plans. A proposal can be prepared if NDC would like TTG to prepare the above described alternative.*

Questions:

1. How much of an improvement in traffic is realized if vehicles were prevented from turning left onto Grant Avenue (as compared to keeping the left turn option). *TTG shows a total of 2 movements during the AM Peak Hour and 4 in the Evening Peak Hour. While these turning movements to Grant are low, certainly a No Left Turn Restriction would help traffic flow EB to the East and to the North. EB traffic will flow better without having a vehicle sitting in the left most lane waiting for a gap to access Grant Ave.*

2. Is it possible to update their report to document the impact of having a restaurant in the development rather than just as retail shops (with a different level of projected traffic)? In the traffic group report (p 9, Exhibit 9) Trip Generation for the Junction development shows trip rates for Shopping Center and General Office building. The anchor tenant is a large sit down restaurant. For trip generation for Background Developments (p. 16 Exhibit 9) a different formula is used for a new restaurant which has significantly higher multipliers per ksf. Why is the development restaurant not treated the same way?
   TTG can include this request in the next Revision to the Traffic Impact Study before submitting to MNCPPC.

3. Does the reconfiguration of the intersection include an all-red phase for pedestrians at the Philadelphia/410 intersection in front of the firehouse (like we currently have), or does it assume this would be changed? *TTG model / report currently shows a 10 second all red phase, however as you are aware of the county will increase the all red phase to 28 seconds (county already made the change to 28 seconds in the field) This request will be incorporated in the next Revision to the Traffic Impact Study before submitting to MNCPPC.*

4. In the proposed reconfiguration, what is meant by the "yield condition" for eastbound Ethan Allen Avenue traffic? *The AMT plan included a YIELD in one of their alternatives. Both TTG and AMT have concluded that the intersection design where Ethan Allen was bent to the north and intersected with Carroll Ave. would not work. The concept required that Sycamore and Ethan Allen be stop controlled with a EB slip ramp from EB Carroll Ave to continue East to Ethan Allen. This design doesn't work for capacity and would result in major queues WB Ethan Allen and NB Sycamore Ave.*

5. Would a realigned intersection generate more cut-through traffic in neighborhoods to the south? *TTG – SB Traffic from Carroll Avenue thru the new Intersection can make right turns and left turns to both east and west as they do today under existing conditions. TTG believes there should not be a significant increase in cut thru due to the reconfiguration.*

6. What is the estimated construction cost for recommended intersection reconfigurations? *TTG recollection was that AMT was tasked to prepare the Preliminary Cost Estimate for the relocated intersection. NDC to respond with Status.*

7. Could TTG's model and methodology be used to estimate the actual parking capacity necessary for the underground garage? *TTG – the number of parking spaces is related to the requirements of the local county ordinances and doesn't relate directly to trip generation for the proposed uses. The model shows peak hour In and out volumes that don't establish the amount of parking needed because of parking space turnover during that one hour period.*

TTG Paul Dorr and Glenn Cook Response today 6/27/18.

Map
on for your map.

Grant Ave.

Carroll Ave.

Carroll Ave.

Ethan Allen Ave.

Philadelphia Ave.

POT 15+87.26
N=477,562.1381
E=1,310,367.2155

POT 13+00.00=
POT 20+00.00
N=477,585.2912
E=1,310,603.3431

POT 21+00.00
N=477,593.2829
E=1,310,703.0232

Rebuild
T/S

P

P

P

+50
S 84°23'59.5" W 14

+50

+50
N 85°24'38.5" E

A

A

Avoid WP

WB-67
AASHTO 2011 (US)

68'
80'
5,440 sf

Maneuver
Area

Semi-Trailer
Un-Loading

EXISTING CO-OP

45'
105'
4,830 sf

75'

12'
14'

Loading
Dock

38

37

Down to Parking

COUNTER
CLOCKWISE

Map
on for your map.

Grant Ave.

Carroll Ave.

Philadelphia Ave.

Ethan Allen Ave.

POT 15+37.26
N=477,562.1381
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E=1,310,703.0232

Rebuild
T/S

+50
N 85°24'58.5" E

+50
S 84°23'59.5" W

14

15

A

B

Avoid WP

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Down to Parking

Maneuver
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Dock

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37

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4,830 sf

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CLOCKWISE
MOVEMENT