Appendix C-6: Proposed Refinements Transit-Oriented Development Studies

Durham-Orange Light Rail Transit Project



October 2018



MEMORANDUM

To: GoTriangle

From: Brad Lonberger, GB Arrington, Scott Polikov, Tony Sease

Re: Station Area Recommendations Update

Date: 4/10/17

Preferred alternatives for station areas have been reviewed and concepts for various stations have been examined resulting in these recommendations for specific stations as follow-up to recommendations provided on January 25, 2017.

Alston Avenue – Assuming that the location is preferred to have tracks crossing the intersection of Grant and Pettigrew, the current location of the station being closer to the intersection is preferred. This allows a pedestrian plaza to be located at the intersection and, given the alignment, does not impose any additional loss of developable area than is already imposed by the track alignment.

Leigh Village – Considering the revised street network plan, currently being refined as part of the concept, the station for Leigh Village does not need to move. However, the location of the road network and parking is being moved and this recommended change is based on preservation of existing stream beds and reducing the need for multiple crossings of the natural flows.

Ninth Street – A desirable outcome in shifting the Ninth Street Station platform location to the east is to place the eastern access to the platform closer to Broad Street. A western access to the platform could still be located on Ninth Street/Erwin Road, but a new platform access would be located to the east improving pedestrian access to the Broad Street at-grade crossing of the NCRR, and placing it closer to the Broad Street/Swift Avenue bridge over Highway 147. This shift would effectively expand the pedestrian shed to the east without impacting the western portion.

Gateway – The development concept has been evaluated for the development impact assuming either station location. Assuming that the ideal location for detention/drainage and parking are maintained the development impact would be significant within the 1 block range of the station location. If the station remains the same, some updates will be required for the concept plan. It is clear from these numbers that the ability to move the station further north, into the site, will support greater development potential within a closer range of the station.

As a third option, we considered the potential for keeping the alignment of the current plans and moving the station further north. We do not see how a station can be integrated into this third option without being restricted by design protocol that was given to us by GoTriangle. Further evaluation is needed by GoTriangle and engineers in order to determine if this option is viable.

For the stations/alignment conditions for the first two considerations, the following lists correspond to the concept plans and the potential development based on station location.



Existing station within 400' of Station (Square Feet):

No development (drainage/parking only)

Proposed station within 400' of Station (Square Feet):

- 224,000 SF Urban Hotel
- 376,000 SF General Office
- 84,000 SF Ground Floor Retail
- 308,000 SF High Density Rental Multi-Family





Existing station within ¼ Mile of Station (Square Feet):

- 1,201,000 SF General Office
- 84,000 SF Ground Floor Retail
- 308,000 SF High Density Rental Multi-Family
- 144,000 SF Affordable Multi-Family
- 90,000 SF Medium Density Rental Multi-Family
- 20,000 SF Live/Work Multi-Family
- 40 Units Attached Single Family
- 224,000 SF Urban Hotel

Proposed station within ¼ Mile of Station (Square Feet):

- 1,677,000 SF General Office
- 329,100 SF Ground Floor Retail
- 308,700 SF High Density Rental Multi-Family
- 260,000 SF Affordable Multi-Family
- 955,100 SF Medium Density Rental Multi-Family
- 20,000 SF Live/Work Multi-Family
- 60 Units Attached Single Family
- 224,000 SF Urban Hotel
- 150,000 SF Medical Office
- 112,000 SF Laboratory Office
- 180,000 SF Medium Density Hotel



MEMORANDUM

To: Patrick McDonough, Geoff Green, Durham Staff From: Brad Lonberger, GB Arrington, Tony Sease

Re: Patterson Place Station Location

Date: 8/31/17

GoTriangle, Durham and D-O LRT design team require input on pros and cons for the two options for the Patterson Place station in order to decide on the ideal location. Without assumptions, the following details describe the potential for outcomes with each location.

In general, redevelopment of suburban auto-oriented retail into TOD has proven to be challenging in the short, intermediate and often the long term for many places. More times than not, transit plus public policy has not been able to reshape these places into a TOD. Portland's Gateway station which opened in 1986 is an example, despite being the point where three LRT lines intersect, a TOD demonstration project and all the public policy and planning the region could bring to the station area it remains very un-TOD like. For Patterson Place, all the highway accessibility implies a transition to TOD will be particularly challenging here as well. For some time cars will define this submarket, especially with an 8-to 10-year timeframe for D-O LRT opening.



Plan provided to illustrate two options for Patterson Place rail station



During the workshop in February, the Gateway Team considered options with the understanding of the following:

- Site constraints of the line sloping downward to grade from the elevated section further west;
- Ownership by an active developer, versus fractured ownership, site constraints, and long-term leases on parcels.
- Sites around New Hope Creek and potential of Low-Impact Development (LID) techniques to manage run-off mitigation to not cause any further issues with the creek.

As with the Gateway station, one of the keys to success of the proposed station location will be careful attention to urban design and street layout to enable the creation of development parcels that celebrate their orientation to the station rather than separate the station from development as conventional LRT design often does.

Station Location	Pros	Cons
Current Station Location	Station is at grade in this location	Two owners (Kroger's back faces the station)
	Single Owner that controls the access to and from the station, down internal private streets. Also controls most of the parcel south of the station where land is not developed.	Current development pattern requires infill approach to try to build up development
	West of Southwest Durham Dr (helps with runoff diversion from New Hope Creek)	Requires reconstruction of existing roadways
	Moves the station west enough to be within closer reach of development at the I-40/15-501 intersection	
Proposed Station Location	Station is at grade in this location	Moves the station further east (by one block) from the intersection of I-40/15-501
	Single Owner with minimum existing development	Requires reconstruction of existing roadways
	West of Southwest Durham Dr (helps with runoff diversion from New Hope Creek)	
	Moves station into a greenfield/infill location, allowing for larger format redevelopment without retail encumbrances.	



In our opinion, the relocated station option works best for TOD. Strategically locating the station on a greenfield site provides the best opportunity to create a dense, walkable transit-oriented environment surrounding the station. In turn, that can serve as a longer term catalyst to redevelop Patterson Place in a transit supportive manner. The risk for the current station location is that much of the immediate station environment is likely to be automobile-oriented for some time to come.