

**TRAFFIC IMPACT MEMO
ADDITIONAL CONCEPT PLAN**

**The Dover Transit Center
Water and Queen Streets**

City of Dover, Kent County, Delaware

Prepared for
Kling Stubbins

Prepared by
Orth-Rodgers & Associates, Inc.

January 8, 2007

ORA Job No. 2007 052



Memorandum

Orth-Rodgers & Associates, Inc.
230 South Broad Street • Philadelphia, Pennsylvania 19102
Phone (215) 735-1932 • Fax (215) 735-5954

- U.S. Mail
- Overnight
- Hand delivery
- Fax _____ pages
- Other (email)

TO: KAREN ANDERSON, KLING STUBBINS
CHARLES MCGLOUGHLIN, KLING STUBBINS

FROM: DERRICK KENNEDY

RE: DOVER TRANSIT CENTER

DATE: JANUARY 8, 2008

As requested Orth-Rodgers & Associates (ORA) has reviewed an additional concept plan associated with the proposed Dover Transit Center. Our analysis for the previously proposed concept plans were compiled in a report dated January 30, 2007. That report included an in-depth traffic analysis of the proposed facility and included specific information regarding items such as peak hour trip generation, trip distributions, and vehicular levels of services. It should be noted that although new conceptual plans are being developed, the general characteristics of the proposed site remain the same and most of the technical data found in the January 30, 2007 report remains valid. As such, this memorandum is meant to supplement, not replace, the previously completed efforts.

ORA reviewed two additional concept plans in a December 4, 2007 memorandum. The comments from this memorandum were then incorporated by Kling Stubbins into the development of this new concept plan dated January 7, 2008.

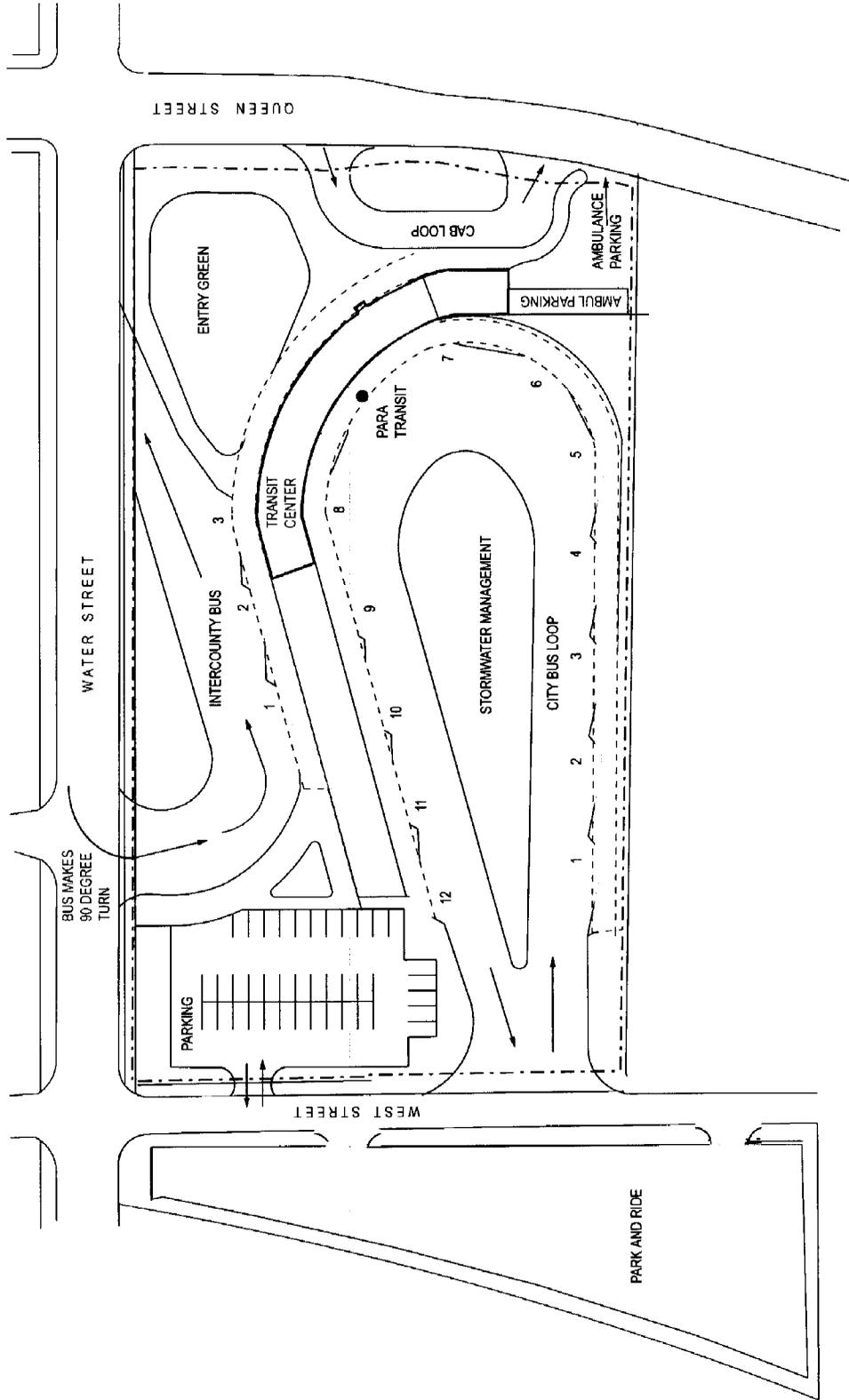
Concept dated January 7, 2008 includes a loop road, which has 12 city bus ports and additional parking for Para transit with bus access on West Street only. There is also a 38 space-parking field located north of the loop road with a single access point on West Street. Also just west of West Street is an additional Park and Ride lot (unspecified number of spaces) with two access points. On Water Street, there is an entrance and exit dedicated to DART's intercounty bus service and Greyhound with 3 bus ports. Along Queen Street, there is a Cab Loop/drop off area with a one-way entrance and one-way exit access along with a third curb-cut for private ambulance service parking.

Based on the analysis presented in the January 2007 report, and review of the latest January 7, 2008 concept plan, ORA has identified various items for consideration. In general, our findings offer proven design practices that should be considered early in the planning process and incorporated into the site plan where possible.

Concept dated January 7, 2008 – Comments

1. General Comment
 - Compared to other alternatives, this concept does the best job of separating different modes of transportation (bus/ambulance/cab/parking).
2. Bus Access
 - A beneficial component of this concept is that no bus access is planned on Queen Street. Since Queen Street has the highest amount of traffic of all frontage roads, it would be the most difficult access point for busses, particularly for busses turning left. Also of note is the redesign of the city bus loop road so that both the entering and exiting movements are made as a single driveway location. Utilizing West Street and Water Street for bus traffic appears to be the best option.

- The Intercounty/Greyhound access driveways on Water Street will likely operate with left and right-turns in and right-turns out only. This seems to be a desirable design, because the busses will then be able to head east on Water Street without having to turn at the intersection of Queen and Water.
 - Some consideration should be given towards minimizing the total number of “curb cuts” along the site’s frontage. Along West Street, there are four driveways (two on each side) which are offset. We recommend redesigning the two Park and Ride parking lot access driveways to align with the parking lot driveway and Bus Loop Driveway on the east side of West Street. This change will help separate and distinguish the bus access and parking lot access, it will reduce the number of conflict points for motorists as well as pedestrians and it will reduce the potential of having motorists enter or exit at the wrong locations.
3. Ambulance Parking/Access & Cab Loop
- Access to the Ambulance parking is provided via a third driveway on Queen Street, just south of a Cab Loop entrance and exit driveway. We recommend eliminating this third “curb-cut” and provide an internal access to the Ambulance parking lot from the Cab Loop area.
 - The Cab Loop along Queen Street shows two access points, one separate entering and one separate exiting driveway just south of Water Street. It should be noted that the northern most entrance access point would be located close to the signalized intersection of Queen and Water Streets. Turning left into this access point may be difficult due to queues associated with the traffic signal. It is our recommendation that the north entrance driveway be right-turn in only with the south exit driveway allowing left and right-turns. It should be noted that left-turning traffic may experience increased delays at this location. However, considering that this is a loop road for cabs and ambulances (no busses), we do not expect any significant queuing to be caused by this access.
4. Parking Lot Access and Design
- Since the proposed parking lot on the east side of West Street is shown with a single access point and less on-site parking compared to other concept plans, a one-way flow with angled parking may produce more parking spaces.
 - Consideration should be given towards defining how these lots will operate and who will be able to park in each of those lots. For example, the lot on the east side of West Street could be gated and reserved for DART employees, while the lot on the west side of West Street could be open to the public.
 - For the Park and Ride lot on the west side of West Street, a marked crosswalk should be provided for pedestrians crossing from the southwest corner of Water/West Streets to the southeast corner of Water/West Streets. Consideration should also be given to how pedestrians will cross West Street to get to the Transit Center if they are parked on the southern end of the lot, as it is unlikely a pedestrian will walk all the way to the north to utilize the above mentioned crosswalk. Possible recommendations could be for a mid-block pedestrian crosswalk along West Street.



scale 1"=70'-0"
 Dover Transit Center
 Dover DE