

MKEC ENGINEERING CONSULTANTS, INC.

Kansas City Oklahoma City Wichita

March 16, 2007

Mr. Scott C. Lindebak, P.E.
City of Wichita
Department of Public Works
455 N. Main – 7th Floor
Wichita, Kansas 67202

Reference: Greenwich Business Center – Drainage Plan
Wichita, Kansas
MKEC Project Number 05039

Dear Scott:

The attached January 2007 Drainage Report incorporates the revisions to the January 2006 drainage report for Greenwich Business Center in response to your emails dated February 22, 2006 and March 02, 2006. Each of the comments are restated below and followed with a response.

February 22, 2006 email

1. I believe you are still working on the drainage plan for Greenwich Business Center and we have the two additional comments based on the revised plan that was submitted on January 6, 2006. It appears that the outfall to the detention facilities for the northeast and east watershed need to be revised to not exceed existing conditions for the events in addition to the 100-year 24-hr storm. Please let me know if you have any questions.

Multi-stage structures have been designed to control all storm events for both of these watersheds.

March 02, 2006

1. How are lots 1-4, Block 1; Lots 1, 14-16, Blk 3 being served by stormwater sewer? The Greenwich road plan along the western edge is not being designed to accommodate any runoff from the development. Therefore, requiring GBC to handle their own drainage.

A stormwater sewer system will be extended north to pick up drainage from lots 1-4, Blk 1. The proposed 5X10 RCB has been designed to handle the runoff from these lots.

2. How is this plat picking up the drainage from Regency Park Second Addition? The existing CMPs do not drain currently because the inverts are lower than the adjacent ground. The development should extend a system north from the proposed 5X10 RCB to pick up this runoff

The RCB will be extended to the north to pick up the drainage from the proposed RCPs under Greenwich Road.

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3. A 20' drainage easement should be shown on the plat along the west line of Lots 1-4, Blk 1; shared between lots 9-15, Blk 1; shared between lots 15 & 16, Blk 1 south line of lot 17, Blk 3; east line of lots 1 & 2, Blk 2; east line of lots 4 and a portion of lot 3, Blk 2; between lots 9 & 10, Blk 3; and along the west line of lots 10-14, Blk 3. (Based on plat dated 10/19/2005)

The additional easements are shown on the Drainage Plan and Utility Plan.

4. It appears the plan does not include a stormwater sewer in Carmine immediately south of 29th Street. How is Lot 1 & 4 draining to the proposed detention ponds? The development should either show a proposed ditch between the two lots that connect to the detention facility within Reserve B or Pipe the drainage to the pond. We are requesting a reserve be shown on the plat if the developer proposed a ditch. Basins Q, R & S should revise the north boundary limits to include the entire lots.

A stormwater sewer line was added to the plan along the north property line of lot 4, Blk 2. A majority of the runoff from lots 1 & 4 Blk 2 will drain to the proposed pond via this line.

Additional changes to the January 2006 drainage report include the following;

- West Watershed;
 - Curve numbers have been adjusted to reflect a 72% impervious land use for the areas within Regency Park, Greenwich Business Center, and C & C Reality.
 - A new rating curve for the existing 2-6'x3' RCB under K-96 was developed using HY-8. The HY-8 model shows that the box experiences outlet control.
 - The ponds size and outlet structures within Greenwich Business Center and C & C Reality, were modified to account for the change in curve numbers and the rating curve for the existing 2-6'-3' RCB. The post-project discharge as under K-96 is approximately the same as shown in the January 2006 Drainage Report.
- Northeast Watershed;
 - The proposed weir was adjusted to reduce the post-project runoff from the watershed to a level under existing conditions for all storm events.
- East Watershed;
 - Three linear detention facilities were designed within Greenwich Business Center to control the runoff from the property.
 - Detention for C & C Reality will still exist along K-96. However, a multi-stage weir will be constructed in front of the existing 2-48" RCP to control the discharge from the site for all storm events.

Thank you for your review of this drainage plan. Please let me know if there are any other issues that need to be resolved.

Sincerely,

MKEC ENGINEERING CONSULTANTS, INC.



Adam Koster, E.I.T.