

BAUGHMAN COMPANY, P.A.
ENGINEERING, SURVEYING & PLANNING
316/262-7271 • FAX 316/262-0149 • 315 ELLIS • WICHITA, KANSAS 67211

May 8, 2001

Mr. Robert L. Wandel
Kansas Dept. of Transportation
Bureau of Design
Docking State Office Building
10th and Topeka
Topeka, KS 66612

FILE COPY

**RE: Mel Hambelton Addition
Kellogg (U.S. 54) and 119th St. West,
Wichita, Sedgwick County, Kansas**

Dear Mr. Wandel,

Based on a phone conversation between yourself and Brent Wooten, I am submitting to you a request to re-address the acceptance of drainage for the above referenced property. The property is located on the Southeast corner of the intersection of Kellogg and 119th St. West. The proposed drainage plan that was submitted to Mr. Benny Tarverdi depicted a detention facility with a stormwater pump system directing the discharge to the Kellogg right-of-way. Although the drainage does naturally flow to the southeast at this time, the progression of the drainage pattern is such that the runoff is captured by a drainage channel and directed to the existing box culvert that crosses the highway. Our office has been working with the City of Wichita and Professional Engineering Consultants (P.E.C.) regarding the proposed improvements to Kellogg. The proposed stormwater discharge line will be constructed along the east property line of the Mel Hambelton site, extending into the KDOT right-of-way, and then directed easterly to the existing RCBC. The City of Wichita requested that the stormwater discharge pipe be extended along the Kellogg right-of-way to the box culvert, in order to avoid discharging additional runoff into right-of-way ditches, which are already poorly graded and hold water following a rainfall event. The alignment of the discharge pipe is being coordinated with P.E.C., and based on preliminary plans for the Kellogg expansion

Robert L. Wandel
Page 2 of 2

project, the line will be severed and intercepted by the incidental drainage improvements of the proposed east-bound frontage road. Preliminary design criteria for the frontage road improvements allowed for approximately 15 cfs, during a 5-yr rainfall event. This runoff rate was determined by allotting approximately 200 ft of the frontage of this property to flow north and directly into the Kellogg right-of-way. Site specific planning of this property has redirected this area south into the proposed detention facility, and subsequently discharged by means of the pump station. Utilizing the detention facility we have restricted peak discharge under all rainfall events to approx. 5 cfs, thus reducing the necessary capacity of the drainage improvements. The remainder of the discharge line is an interim solution and will be vacated upon the construction of the Kellogg expansion.

Please find enclosed the following supplemental information.

1. Excerpt from the preliminary design plans for area adjacent to the Mel Hambelton property. (obtained from P.E.C)
2. Hydrology calculations for stormwater sewer improvements along proposed eastbound frontage road. (obtained from P.E.C)
3. Ariel photograph showing design drainage basins. (obtained from P.E.C)
4. Copy of Mel Hambelton Addition Drainage Plan as submitted to the City of Wichita.

If you have any questions, or need further clarification of the proposed drainage system, please contact me at (316) 262-7271, or by fax at (316) 262-0149.

Thank You,

Sincerely,
Baughman Company, P.A.



Brian L. Glenn, P.E.
Drainage Engineer

Encl.: 4

cc: N. Brent Wooten, P.E.

Hydrology, Inlet Interception and Flooded Width Calculations

Node No. 337 to 349

Drainage area		Inlet		Hydrology (Q=CIA)							Gutter Flow and Inlet Interception						
No.	Acres	No.	Station	Route	C	Tc	I	Q (cfs)	L Slope	Pvmt. Slope	W	D	Q _{approach}	Q _{in}	Q _{bypass}		
337	0.56	337	3+101	119th st	0.69	15 min	4.56	1.76	0.40%	2%	8.00	0.31	1.75	1.70	0.05		
338	0.79	338	3+077	119th st	0.69	15 min	4.56	2.49	Sump	2%	7.67	0.30	2.45	2.45	0.00		
MH		339	13+988	Ft. Rd. Rt.				0.00				0.00			0.00		
340	0.67	340	14+040	Ft. Rd. Rt.	0.69	15 min	4.56	2.11	0.51%	2%	7.94	0.30	2.11	1.92	0.19		
341	0.77	341	14+085	Ft. Rd. Rt.	0.69	15 min	4.56	2.42	0.51%	2%	8.93	0.32	2.61	2.23	0.38		
342	0.78	342	14+126	Ft. Rd. Rt.	0.69	15 min	4.56	2.45	0.51%	2%	9.32	0.33	2.83	2.25	0.58		
343	0.74	343	14+168	Ft. Rd. Rt.	0.69	15 min	4.56	2.33	0.51%	2%	9.49	0.34	2.93	2.40	0.53		
344	0.69	344	14+205	Ft. Rd. Rt.	0.69	15 min	4.56	2.17	0.51%	2%	9.13	0.33	2.73	2.30	0.43		
345	0.65	345	14+237	Ft. Rd. Rt.	0.69	15 min	4.56	2.05	0.51%	2%	8.68	0.32	2.48	2.15	0.33		
346	0.56	346	14+266	Ft. Rd. Rt.	0.69	15 min	4.56	1.76	0.51%	2%	7.90	0.30	2.09	1.91	0.18		
347	1.04	347	14+299	Ft. Rd. Rt.	0.69	15 min	4.56	3.27	Sump	2%	10.00	0.35	3.45	3.45	0.00		
348	0.32	348	14+330	Ft. Rd. Rt.	0.69	15 min	4.56	1.01	0.56%	2%	3.75	0.22	1.01	1.01	0.00		
RCB		349	14+395	Ft. Rd. Rt.				0.00				0.00			0.00		

Flow arrows
indicate existing
drainage pattern





BAUGHMAN COMPANY, P.A.

ENGINEERING, SURVEYING & PLANNING

316/262-7271 • FAX 316/262-0149 • 315 ELLIS • WICHITA, KANSAS 67211

May 10, 2001

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MAY 10 2001

CITY - ENGINEERING

Vicky Huang, P.E.
Department of Engineering
City Hall - 7th Floor
455 N. Main
Wichita, KS 67202

Re: Mel Hambelton Addition
119th St. W. and Kellogg (U.S. 54)

Dear Vicky,

Please find enclosed a copy of a response letter sent to the Kansas Department of Transportation, regarding the denial of the proposed drainage plan for the above referenced project. Our office has been in contact with Robert L. Wandel of KDOT and we have discussed the project and asked that KDOT reconsider the acceptance of drainage from the proposed detention pond pump station.

We have expressed that in the development of the drainage plan, we had been in contact with both your office and P.E.C. regarding the proposed Kellogg expansion project. As shown on the supplemental exhibits submitted to KDOT, we are reducing the drainage areas that P.E.C. had accounted for in the preliminary drainage design. Also, by redirecting the drainage through the detention facility and limiting the discharge by means of the pump station, we are effectively reducing the peak discharge, from approximately 15 cfs to 5 cfs.

During a later phone conversation, Mr. Wandel has requested a letter from both your office and from P.E.C. stating the acceptance of the proposed drainage system. Mr. Wandel also requested that your office confirm the requirement of extending the discharge pipe along the KDOT right-of-way to the existing RCBC.

Vicky Huang
Page 2 of 2

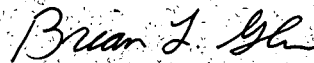
I have drafted a letter (hardcopy and MS-Word format on diskette), for your review and if acceptable, please forward to Mr. Wandel, at the following address:

Mr. Robert L. Wandel
Kansas Dept. of Transportation
Bureau of Design
Docking State Office Building
10th and Topeka
Topeka, KS 66612

If you have any questions, or need any clarifications please do not hesitate to contact me at 262-7271.

Thank you.

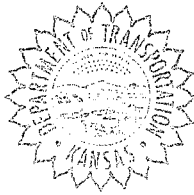
Sincerely,
Baughman Company, P.A.



Brian L. Glenn, P.E.

cc: file
N Brent Wooten, P.E.

STATE OF KANSAS



KANSAS DEPARTMENT OF TRANSPORTATION

WICHITA METRO OFFICE

3200 East 45th Street N

Wichita, Kansas 67220-1432

P h. (316) 744-1271 FAX (316) 744-3064

TTY (785) 296-3585

Bill Graves
Governor

E. Dean Carlson
Secretary of Transportation

Charles Luedders, P.E.
District Engineer

Benny P. Tarverdi, P.E.
Metro Engineer

Kathryn A. Wickam, P.E.
Field Engineering Administrator

Erik S. Anderson, P.E.
Construction Engineer

Donald R Snyder, P.E., Const. Engr.
2431 South Young
Wichita, Kansas 67215-1226
Ph. (316) 942-1489 FAX (316) 942-0450

May 4, 2001

Brian L. Glenn, P.E.
Baughman Company
315 Ellis
Wichita, Kansas 67211

Dear Mr. Glenn,

The proposed drainage plan for Mel Hambelton Addition at US-54 & 119th Street West has been denied as submitted.

Enclosed is a copy of a letter from the Bureau of Design with their comments.

Sincerely,

Benny P. Tarverdi, P.E.

Bob Raymond

Bob Raymond
Utility Coordinator

BPT:BR:jmr

Enclosures

Kansas Department of Transportation

MEMO TO: Chuck Luedders, P.E.
District V Engineer

ATTENTION: Robert G. Kuhn, R.L.S.
Construction Specialist

FROM: Jim L. Kowach, P.E.
Chief, Bureau of Design

BY: Corky Armstrong, P.E. *CA*
Road Design Engineer

DATE: April 24, 2001

SUBJECT: US-54 and 119th Street
Sedgwick County
Mel Hambelton Addition

RECEIVED
APR 26 2001
METRO ENGINEER
WICHITA OFFICE

REC'D / ED

APR 25 2001

District 5
Hutchinson, KS

We have reviewed the drainage information submitted for the Mel Hambelton Addition to the city of Wichita and have the following comments:

1. The plan proposes to redirect drainage that is currently flowing to the southeast by pumping it in a north/northeast direction to an existing drainage structure under US-54 highway. We are opposed to redirecting the runoff to the US-54 drainage structure. The existing drainage pattern should be maintained.
2. Current plans to improve US-54 to the east eliminate the access to the highway at the entrance locations shown on the drainage plan and reconfigure the south frontage road to a one-way, eastbound roadway.
3. Future improvements to US-54 will likely result in the construction of an interchange with retaining walls at 119th Street. This will limit locations available for the discharge line to be placed within the highway right-of-way should the proposed drainage plan be approved.

The proposed plan should be revisited in light of both current US-54 plans and the proposed future improvements to the US-54 corridor. If you have questions about these improvements, please contact Bob Wandel at (785) 296-4139.

We are retaining the information submitted for future reference.

LCA:js

cc: Robert L. Wandel, Road Design Leader

May 10, 2001

Mr. Robert L. Wandel
Kansas Dept. of Transportation
Bureau of Design
Docking State Office Building
10th and Topeka
Topeka, KS 66612

**RE: Mel Hambelton Addition
119th St. W. and Kellogg (U.S. 54)**

Dear Mr. Wandel,

In response to your request, we are submitting to you this letter as confirmation of our review and acceptance of the "Drainage Plan" submitted to our office. As a condition of the platting requirements, we requested that Baughman Co., P.A. obtain approval from the Dept. of Transportation prior to the recording of the "Mel Hambelton Addition" plat.

The right-of-way drainage ditches, in the immediate area, have minimal grade and presently are inadequate for present drainage conditions. We have requested that the pump station discharge line be extended to the existing box culvert that crosses Kellogg. A portion of this line will be abandoned and removed at the time of construction of the Kellogg improvement project. The remainder of the discharge line will be accepted into the proposed stormwater sewer improvements with the proposed eastbound frontage road.

If you have any questions please contact me at the City of Wichita, Dept. of Engineering at (316) 268-4501.

Sincerely,

Vicky Huang, P.E.
Subdivision Engineer
City of Wichita



Professional Engineering Consultants, P.A.

RECEIVED

May 10, 2001

MAY 11 2001

CITY - ENGINEERING

Brian L. Glenn, P.E.
Baughman Company, P.A.
315 Ellis
Wichita, KS. 67211

Re: West Kellogg Freeway Final PSE Tyler and Maize Interchanges
PEC Project No. 32-97362-5-042
Mel Hambelton Additon

Dear Mr. Glenn,

I have reviewed the drainage plan for the Mel Hambelton Addition and the letter you sent to KDOT on May 8, 2001 and agree with your assessment of the situation. By redirecting the 200' frontage, which we had designed to drain to the eastbound frontage road SWS system, the peak discharge into the storm sewer system on Kellogg for the 5 yr. storm is reduced from approximately 15cfs to 5cfs.

Also by storing the on site drainage for the major storm, the peak flow to the RCB under Kellogg has been reduced.

Provided the system is constructed as designed PEC does not have any objections to the proposed drainage improvements on the Mel Hambelton site.

If you need additional information please advise.

Sincerely,

PROFESSIONAL ENGINEERING CONSULTANTS, P.A.

W. David Hubbard, P.E.
Project Manager

cc: Carl Gipson

DIRECTORS:

- D.E. MALTBE, P.E.
- R.D. PLETCHER, P.E.
- M.O. SCHOMAKER, P.E.
- G.D. SCHOCK, P.E.
- J.H. BAILEY, P.E., Ph.D.
- D.I. NORTON, P.E.
- B.E. REMSBERG, P.E.
- G.K. GREENWOOD, P.E.
- D.E. HAGER, P.E.

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DIRECTORS:

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- J.B. GEORGE, P.E.
- W.G. BRITSON, P.E.

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designers@pec1.com

OFFICES IN:

- WICHITA
- TOPEKA
- LAWRENCE



Department of Public Works

May 10, 2001

Mr. Robert L. Wandel
Kansas Dept. of Transportation
Bureau of Design
Docking State Office Building
10th and Topeka
Topeka, KS 66612

**RE: Mel Hambelton Addition
119th St. W. and Kellogg (U.S. 54)**

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If you have any questions please contact me at the City Engineer's Office of City of Wichita at (316) 268-4236.

Sincerely,

Vicky Huang, P.E.
Subdivision Engineer
City of Wichita

Engineering Division

Cc: Brian Glenn, P.E., Baughman Co., P.A.
City Hall • 7th Floor • 455 North Main • Wichita, Kansas 67202-1620

T 316.268.4501 **F** 316.268.4114

www.wichitagov.org